One Gloucestershire
Transforming Care, Transforming Communities

NHS

FIT FOR THE FUTURE

Pre Consultation Business Case
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Contents

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1 Executive Summary

1.1 Strategic Statement

We, the health and social care organisations in Gloucestershire have committed to working together as an Integrated Care System (ICS) to improve the health of local people through supporting them to take more control of their own health, with a greater focus on prevention and self-care (people looking after themselves when they can), and ensuring we deliver the right care, in the right place at the right time.

Prioritising Self Care and Prevention means that we are using our data to understand the health needs of local people, and working to improve long term health and wellbeing. Health and wellbeing is influenced by more than just health services, so as an ICS we work as an active partner in the public sector to improve health through better housing, better education, better employment, better transport and keeping people safe.

Evidence and experience tells us that people can find it harder to improve their own health or to access our services when they have other challenges in their lives. These include living with deprivation, disability, or a mental health condition. Our commitment is that we will ensure our services are easier to access for people with health inequalities, both ensuring our services recognise and deliver parity of esteem for mental health and provide additional support when people need it.

Delivering the right care in the right place at the right time means that when care can be delivered at home or close to home, it will be. When people need to come to a centre to get care, our aim is to minimise the distance needed to travel to get there, as it can be hard to get around our county particularly with a long term health condition.

Sometimes however, we will need to prioritise achieving a better health outcome over trying to minimise travel for people. Health care for some conditions is increasingly high tech and needs expensive equipment and highly trained staff to keep pace with the best in the world. When specialist care is needed our aim is to increasingly deliver this through 'Centres of Excellence', centralised services where we can consolidate skills and equipment to provide the very best care. Sometimes these centres may be outside Gloucestershire, but where possible as an ICS we will develop our specialist services so we can provide specialist care in our county.

Underpinning all of this is our strong commitment to listen to what matters to people, and to join up our data and information to understand how to meet local needs in the best way. Through our broader ICS engagement programme we have heard that the care experience is better the more we can plan around individuals and carers' needs (personalisation) and when we use new ways to help support care, like using digital technology, to help plan and manage more care journeys. We have heard that travel and access concerns people, but that generally people are prepared to travel a little further to access better health outcomes where it is clearly demonstrated that this will be achieved.

The NHS has made significant improvements in recent years (see Appendix 1, our long term plan response for more details of our achievements and goals across all of our programmes) but continuing to improve health outcomes, health care and ways of working is a challenge in the context of the resources we have available and the growing needs of our local population. Living within our means to make the best use of every Gloucestershire pound means a commitment to work together to put the patient first in everything we do, developing our workforce, and streamlining our services and organisations where possible to ensure everything we deliver is as efficient as it can possibly be.

Key Points

- **Gloucestershire Health and Care organisations work together as an Integrated Care System, known as an ICS**
- **We are working together to**
    1. **Support self-care and prevention**
    2. **Use our data to better support personalisation of care**
    3. **Deliver parity of Esteem for mental health**
    4. **Support people with health inequalities when they need to access care**
    5. **Deliver care close to home where we can**
    6. **Centralise specialist services where this will improve health outcomes**
    7. **Listen to people and take their views into account**
    8. **Develop our workforce**
    9. **Live within our means, using every Gloucestershire pound wisely**
- **The Fit for the Future programme operates in the context of these system objectives**

1.2 System and Programme Vision

Our ICS goal is to turn the NHS Long Term Plan into action for the benefit of local people and our dedicated workforce. We know that expectations of healthcare, the demands on health services and the incredible progress made in development of staff skills, medicine and technology mean that we need to continue to adapt to support healthy lives and transform care to meet the needs of people into the future.

Our ICS Vision

To improve health and wellbeing of our population, we believe that by all working better together - in a more joined up way, and using the strengths of individuals, carers and local communities - we will transform the quality of support and care we provide to all local people.

Our Fit for the Future Programme is one of the ways we are working to move our strategic aims into reality. To date, we have been working to develop our ideas on two work streams:

- Developing a joined up responsive offer for community based urgent care
- Developing the '*centres of excellence'* model of care for hospital services

This PCBC document sets out our proposals for developing proposals for *Centres of Excellence* for hospital based care within the hospitals operated by Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT). Developing our proposed 'centres of excellence' model means that when patients have serious illness or injury that requires specialist care, we want to ensure that they receive treatment in centres with the right specialist staff, skills and equipment.

Our vision is to develop a single hospital on two sites, linked by the A40 'corridor', providing the very best care, experience, safety and outcomes for local people. In line with our ICS priorities we are proposing to deliver our services locally (closer to home) where possible and centralise services where this can deliver better health outcomes.

The hospital's two sites have sometimes been seen as a problem but we now believe they present us with a huge opportunity, to develop our vision of *Centres of Excellence* providing

outstanding specialist care where more patients can be treated, waiting times are lower, patient experience is improved and patient outcomes are amongst the best. We want to maximise the opportunities of our two-site configuration by developing a more planned care and a more emergency care site. We do not envisage a full separation of emergency and planned care, sometimes referred to as a 'hot/cold split', so the clinical model proposed in this PCBC retains a 24/7 Emergency Department (ED) at Gloucestershire Royal Hospital, a 7-day 8am to 8pm ED and 8pm to 8am Minor Injury & Illness Unit (MIIU) at Cheltenham General Hospital, and 24/7 Intensive Treatment Units (ITU) on both sites. As we develop this model of care we think many patients and families who currently have to travel to more remote specialist centres could in the future be treated in the county.

Key Points

- **The Fit for the Future programme is an ICS programme designed to deliver on some parts of our ICS strategic vision, those that relate to community urgent care and the development of specialist hospital services**
- **This PCBC is concerned with the development of specialist hospital services, referred to as '*Centres of Excellence*'**
- **The *Centres of Excellence* vision is to develop the hospitals operated by GHNHSFT as a single hospital on two sites, with one site delivering more planned care and the other more emergency care**
- **Our proposals will prioritise delivering services locally (closer to home) where possible and centralising services where this can deliver better health outcomes**
- **We aim to deliver more specialist care in our county so less people have to travel out of county for their care**
- **We have publicly committed to the future of the Accident and Emergency (A&E) Department in Cheltenham. The service will remain consultant led and there will be no change to the opening hours**

1.3 Why we think that change is needed

Our strategic statement set out at 1.1 above is a summary of our ICS strategic response to the triple challenges facing health and care services delivery as described in the NHS Five Year Forward view, the health and wellbeing gap, the care and quality gap and the finance and efficiency gap.

The *Centres of Excellence* proposals are specifically looking to address the issues arising from the historic configuration of hospital services across Cheltenham General Hospital (CGH) and Gloucestershire Royal hospital (GRH). GHNHSFT operates from two main hospital sites, 8 miles apart. Since merging to form a single Trust in 2002 a number of services have been centralised to one of the two sites e.g. paediatrics and trauma to GRH and ophthalmology, oncology and urology to CGH.

Many adult medical and surgical specialties have continued to be delivered on both sites. This is increasingly creating pressures for workforce, quality and safety as resources become ever more stretched to cope with increasing demand. At times, this means services can be compromised in terms of their potential to develop the same standard of specialist care across both sites. In some cases this means people have to travel to hospitals in other counties to access specialist services, for example Bristol, Birmingham and Oxford. We

believe reconfiguring our services more efficiently across the two sites will deliver improvements against the care and quality gap.

We aim to address the health and wellbeing gap by increasing the quality and health outcomes that our hospital services deliver, increasing the specialist services offer in our county and supporting the identified health needs of our population (see detailed case for change set out at section 5).

Proposals will support the finance and efficiency gap through the potential to repatriate patients going out of county, improving the efficiency of services across the hospital and reducing our reliance on expensive agency and locum staff.

Details of the patient, staff, efficiency and effectiveness benefits can be found in Appendix 35 which directly or indirectly support our ICS objectives set out in our response to the NHS LTP (Appendix 1) including:

- Ensuring people with specialist health conditions can access outstanding hospital care
- Delivering high quality, joined up services with the right care, staff skills and equipment in the right place
- Delivering care that is fit for the future through the development of outstanding specialist hospital care in the future across the CGH and GRH sites
- Developing and supporting our workforce and meeting the challenge of recruiting and keeping enough staff with the right skills and expertise.

Key Points

- **Existing service configurations are not optimal in every case, and are a product of history rather than design**
- **We have an opportunity to design more sustainable services for the future, developing more specialist services locally to meet the needs of our local population**
- **Our proposals are designed to improve our system performance against the three gaps: care & quality, health & wellbeing and finance & efficiency**

1.4 Working together to identify proposals

In Section 6 of this PCBC we describe the process we used to develop our proposed solutions (options). The solutions appraisal process identified shortlisted options; all were selected as they had the potential to provide additional benefits to our patient population in terms of outcomes and quality of care. Some small detriments in patient access were identified, but it was the assessment of the multi-disciplinary groups working together at the solutions appraisal workshops that all of the options taken forward onto our shortlist would represent an overall improvement for patients in Gloucestershire in comparison to the current model of care.

The solutions appraisal took account of the equality and travel impact assessments to ensure that all of the proposals took account of the impact on people from all backgrounds and with different protected characteristics living in our county. A structured, clinically-led process was used to develop potential solutions that are affordable, clinically viable and deliverable.

A summary of the process we have followed is below:

- **Preparatory work –** Developing appraisal criteria to assess emerging proposals for change through engagement workshops, engagement feedback and process of co-production with criteria working group that included lay and clinical representation
- **Step 1: Developing a longlist:** a longlist was developed separately by the three clinical Workstreams: Image-Guided Interventional Surgery, General Surgery, Emergency & Acute Medicine
- **Step 2: Applying the Hurdle Criteria:** The clinical work stream groups reviewed the draft longlist solutions against the Hurdle Criteria and provide recommendations about any solution which did not meet the hurdle criteria, along with supporting evidence
- **Step 3: Group into clinically viable models:** the three work stream solutions proposed were combined to eliminate any combinations of solutions that did not form 'clinically viable' models – this was done by the *Centres of Excellence* Clinical Advisory Group
- **Step 4: Meaningfully Distinctive options:** the 29 possible variants were consolidated to form a medium list of options that differed sufficiently from each other to be compared and evaluated. Eight options were taken forward for evaluation at solutions appraisal.
- **Step 5: Solutions Appraisal Workshop:** The workshops took the medium list and established a hierarchy (the *Short List)* and the rationale for them, allowing further detailed analysis to be undertaken for the decision making body to take account of in deciding which option (the *Preferred Option)* or options are taken forward to public consultation.
- **Step 6:** The South West Clinical Senate undertook the Clinical Review Panel (CRP) on 20/08/20 and the report of the findings were a key element of the NHSE&I Stage 2 Assurance process in relation to Test 3; as a result there were changes to our short-list for consultation.

Key Points

- **We have undertaken a comprehensive incremental process to develop options, long listing and medium listing resulting in a short list which is set out in this PCBC**
- **We have adapted our proposals following external (NHSE&I & South West Clinical Senate) review**
- **Options proposed remain subject to public consultation**

1.5 Our preferred options

The options appraisal process identified a number of shortlisted options, all of which were considered to provide additional benefits to our patient population in terms of outcomes and quality of care. Listed below are the change proposals that form our shortlist. These options are described in detail in this Pre Consultation Business Case (PCBC).

Fixed proposals that are common to all models:

- Formalise the reconfiguration of Trauma and Orthopaedics (currently a pilot)
- Formalise the reconfiguration of Gastroenterology (currently a pilot)
- Retain the current configuration of Elective Upper Gastrointestinal surgery (GI) (centralised at GRH)
- Centralise the acute medical take to GRH

- Centralise emergency general surgery to GRH
- Centralise general surgery day cases to CGH
- 24/7 Image Guided Interventional Surgery (IGIS) hub and vascular surgery to GRH with IGIS spoke at CGH
- Establish an enhanced 'deteriorating patient' model delivered by an Acute Care Response and Intensive Treatment Unit teams for 24/7 care of patients in CGH

Proposals that still have variable options:

- Centralise elective colorectal to CGH **OR** Centralise elective colorectal to GRH

The combination of the fixed proposals and the variable proposals creates two separate configuration options ("Models"), which are described in detail.

The next stage is to take these proposals to public consultation.

1.6 Finance, workforce and resources

This PCBC provides detailed activity, workforce and finance analysis for both configuration options ("Models"); and these proposals have met the requirements of the Stage 2 NHSE&I assurance process.

1.7 Coronavirus (COVID 19)

The proposals contained within this PCBC were developed, publically engaged on and submitted in draft to the South West Clinical Senate and NHSE&I prior to the COVID-19 pandemic. As a consequence of the pandemic the FFTF programme was paused from the end of March to early June 2020.

The proposed service changes are to deliver our case for change over the medium to long-term and we have therefore, in agreement with the Regulator, excluded the short-term impact of COVID-19 from our baseline data, staffing models, resource requirements and finances. That being said the context for our proposals has changed as a result of the pandemic and we have ensured this is visible within our PCBC, whilst at the same time not being relied on as the "new normal" (and the uncertainty surrounding a further surge or when pre-COVID 19 activity levels would return). To achieve this, COVID-19 specific text will be identified using the following format.

Coronavirus (COVID-19)

A summary of the COVID-19 temporary changes can be found in Section 3.5.

1.8 Proposed public consultation

Unlike all the other sections of this PCBC, the Coronavirus (COVID-19) pandemic is not simply context for our proposals but a significant material factor in the development of our plans. At the time of writing (October 2020), restrictions are still in place with the potential for further measures including advice for individuals to keep distance from people outside of their own household, avoid being face-to-face with people if they are outside of their household and avoiding crowded spaces.

In addition to these there also remains a significant proportion of the population who continue to restrict their contact outside their homes and this has included accessing NHS services. As a result of these the traditional approach to consultation that aims to maximise face-to-face consultation, activities will need to be restricted or modified and our plans include greater use of online consultation.

Key Points

- **Our options contain some proposals that seek to formalise current pilot reconfigurations[1], and some that consolidate specialties on one site where they currently operate across two**
- **These proposals have been approved and assured and it is our intention that they go to public consultation in October 2020**
- **Some of our service proposals are reliant on enabling areas of work to facilitate the new proposed configuration of services**

[1] For the avoidance of doubt the term "pilot" refers only to the reconfiguration of Trauma & Orthopaedics inpatient services and Gastroenterology

2 Purpose of the document

2.1 Document Purpose

The purpose of the pre-consultation business case (PCBC) is to present and summarise the extensive work completed to date through the *Centres of Excellence* work stream of the Gloucestershire Fit for the Future (FFTF) programme, with the following purposes in mind:

- To describe our emerging proposals for service change, and to enable decision makers to decide whether there is a case to launch a public consultation
- To build alignment between the NHS and local authority by describing the case for change and:-
    - Demonstrate -that all options, benefits and impact on service users have been considered
    - Demonstrate - that the planned consultation will seek the views of patients and members of the public who may potentially be impacted by the proposals
- To inform the necessary assurance process that our proposals against the government's four tests of service change, and NHS England's fifth test of service change and best practice checks for planning service change and consultation
- To test whether proposals are compatible with our shared system strategy

It should be noted that (as highlighted above) this PCBC is specifically concerned with the *Centres of Excellence* work stream which considers the configuration of hospital services across Gloucestershire Hospitals Trust, specifically between GRH and CGH. This PCBC is not concerned with the developments in Community Urgent Care or for the Forest of Dean Hospital; separate proposals for these two aspects of the FFTF Programme will be developed and presented to decision makers as required. Following any public consultation a Decision Making Business Case (DMBC) would be developed taking into account the feedback from the consultation and will need to be approved prior to implementation proceeding.

2.2 Intended Audiences and their Decision Making Roles

This PCBC is written by the Gloucestershire Fit for the Future Programme for the following audiences:

- The Governing Body of Gloucestershire Clinical Commissioning Group (CCG) which will decide whether there is a case to launch a public consultation. The CCG is the legally accountable Consulting Authority so has final responsibility for approving next steps.
- The Board of the Gloucestershire Integrated Care System (ICS), who will be asked to provide their support to the case and ensure that the proposals are compatible with our shared system strategy
- The Board of Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT) who will be invited to confirm organisational level support for the proposed changes to clinical services (formal approval of the case in terms of finance, workforce and implementation plans will occur at Full Business Case stage, post consultation)
- NHS England and Improvement (NHSE&I) whom have assured that the Fit for the Future Programme has followed appropriate processes for planning service change and consultation. NHSE&I's recommendations will influence decisions made by the CCG's Governing Body about next steps. The CCG will not proceed to public consultation without assurance from NHSE&I.

- The Gloucestershire Health Overview and Scrutiny committee (HOSC) who will scrutinise the proposals in line with their responsibilities. HOSC will be asked if they wish to have a summarised version of this PCBC and our public consultation materials but all documents will be made available to members if requested.

This PCBC was reviewed by the South West Clinical Senate to examine the clinical appropriateness and feasibility of the case put forward; a report of their findings has been submitted to the ICS/Programme and to NHSE&I and our responses to the report and the NHSE&I Stage 2 Assurance meeting is included in this version of the PCBC. The CCG has decided to proceed to consultation and a public-facing consultation document has been drafted following formal scrutiny of the planned consultation process and draft consultation documentation by local authority elected members and NHSE&I. For the purposes of transparency, the final draft of this PCBC will be made available publicly, but the document is not written with a public audience in mind.

2.3 Document Status

Until published this is a confidential document for discussion purposes and any application for disclosure under the Freedom of Information Act 2000 should be considered against the potential exemptions contained in s.22 (Information intended for future publication), s.36 (Prejudice to effective conduct of public affairs) and s.43 (Commercial interests). Prior to any envisaged disclosure under the Freedom of Information Act the parties should discuss the potential impact of releasing such information as is requested.

The material set out in this document is for discussion purposes. The involved NHS bodies understand and will comply with their statutory obligations when seeking to make decisions that will have an impact on the provision of care services. The case set out does not represent a commitment to any particular course of action on the part of the organisations involved. The aim is to support continuing discussion and formal public consultation.

Key Points

- **This document is a Pre Consultation Business Case (PCBC) for the *Centres of Excellence* work stream of the Gloucestershire Fit for the Future (FFTF) programme**
- **It describes our emerging proposals for service change, and its' purpose is to enable decision makers to decide whether there is a case to launch a public consultation**
- **The proposals in it are subject to consultation; post consultation a Decision Making Business Case (DMBC) must be written, taking into account feedback obtained from the consultation process and approved before implementation can proceed**

3 Introduction to the System

3.1 One Gloucestershire Integrated Care System

The One Gloucestershire Integrated Care System (ICS), a partnership between local NHS and care organisations, is committed to turning the NHS Long Term Plan into action for the benefit of local people and our dedicated workforce. Our expectations of healthcare, the demands on health services and the incredible progress made in development of staff skills, medicine and technology mean that we need to continue to adapt to support healthy lives and transform care to meet the needs of people into the future.

Our Vision

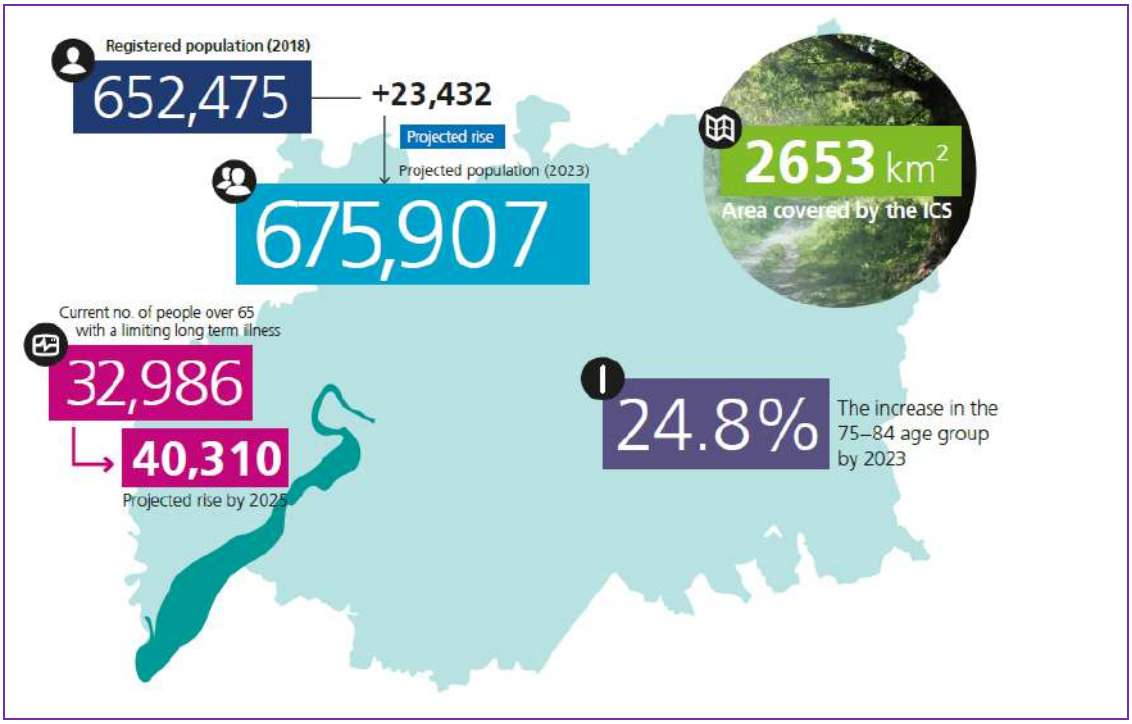
To improve health and wellbeing of our population, we believe that by all working better together - in a more joined up way, and using the strengths of individuals, carers and local communities - we will transform the quality of support and care we provide to all local people.

Our Integrated Care System priorities are:

- Place a far greater emphasis on personal responsibility, prevention and self-care, supported by additional investment in helping people to help themselves
- Place a greater emphasis on joined up community based care and support, provided in patients' own homes and in the right number of community centres, supported by specialist staff and teams when needed
- Continue to bring together specialist services and resources into *Centres of Excellence* that deliver a greater separation of emergency and planned care and, where possible reduce the reliance on inpatient care (and consequently the need for bed based services) across our system by repurposing the facilities we have in order to use them more efficiently and effectively in future – the focus of this PCBC
- Develop new roles and ways of working across our system to make best use of the workforce we have, and bring new people and skills into our delivery system to deliver patient care
- Have a continued focus on ensuring parity of esteem for mental health.

3.2 Local Health Context

An overview of the demographics and financial challenges that our county faces is set out overleaf. Our proposals set out in this case are aimed to support our system to improve health outcomes for our population in line with our assessment of local health needs.



The three leading causes of death for our population are cancer (27.9%), cardiovascular disease (26.8%) and respiratory disease (14.2%). Age is the leading risk; however, the burden of disease in these categories is associated with four additional key risk factors: poor diet, physical inactivity, smoking and excess alcohol consumption.

Poor mental and emotional wellbeing also have a key part to play. Gloucestershire is broadly in line with national and regional benchmarks for alcohol related admissions to hospital, levels of physical activity and adult excess weight, although some districts have worse rates than the county as a whole, notably in the west of the county in the Forest of Dean, Gloucester and Tewkesbury. Smoking rates in Gloucestershire are steadily declining and are lower than comparators. Whilst healthy life expectancy for women is almost two years better than for their regional counterparts, the average for Gloucestershire men is lower than for the South West as a whole.

Our ageing population, changing patterns of disease (more people living with multiple long-term conditions) and rising public and patient expectations mean that fundamental changes are required to the way in which care is delivered in our county. We will more fully involve individuals in their own health and care by making shared decision-making a reality by intensively training our clinicians to give people the support and information they need for effective self-management and involving their families and carers to support them in making the changes needed to keep healthy. There is clear evidence that most people want to be more involved in their own health and that, when they are, decisions are better, health outcomes improve and resources are allocated more efficiently.

3.3 Joint Strategic Needs Assessment & Joint Health and Wellbeing Strategy

The Gloucestershire Joint Health and Wellbeing Strategy 2019-2030[2] (JHWS) sets out the plans to address our seven Health and Wellbeing Board priorities:

- Physical activity
- Adverse childhood experiences (ACEs)
- Mental wellbeing
- Social isolation and loneliness
- Healthy lifestyles
- Early years and best start in life
- Housing

As an Integrated Care System (ICS) we recognise that our JHWS is intrinsically linked to our response to the NHS Long-Term Plan (LTP) and the services included within the PCBC should not be seen in isolation from all the other developments that support the delivery of our JHWS and address the issues and challenges identified in our Joint Strategic Needs Assessment 2017 (JSNA)[3] . Our JSNA does highlight that Gloucestershire has an ageing population, with a higher and growing number and proportion of older people and this is developed as part of our Case for Change (section 5).

A copy of our LTP response can be found in Appendix 1 but some key highlights where we have delivered significant progress that link directly to the JHWS and JSNA include:

- Mental Health Trailblazer work supporting children's and young people's mental through Mental Health Support Teams working with and in education.
- Early implementer site for personalised care supporting people to have greater control and choice around their care and services.
- Clinical programmes transformation including continuing to reshape Musculoskeletal services and take a prevention focused approach to Diabetes
- Continuing our work on cultural commissioning and social prescribing with excellent results showing improvement in the health and well-being of people who have used the services.
- Use of population health management case finding to proactively identify and support people who have the greatest need, for example, our Complex Care @ Home service supporting people to stay well and avoid future urgent care admissions.
- Formation and strengthening of Primary Care Networks and Integrated Locality Partnership: our place-based working is moving rapidly within increasingly empowered places supporting the improvements that make most difference to their population.
- Achieving integration through the formation of Gloucestershire Health and Care NHS Foundation Trust to align and work alongside our places to support integrated primary and community services.

[2] Gloucestershire Joint Health and Wellbeing Strategy 2019-2030 can be found in Appendix 19

[3] Gloucestershire Joint Strategic Needs Assessment (2017) can be found in Appendix 20

3.4 Local Services Context

The One Gloucestershire Integrated Care System (ICS) Partnership members are NHS Gloucestershire Clinical Commissioning Group, Gloucestershire Hospitals NHS Foundation Trust, Gloucestershire County Council, South Western Ambulance Service Foundation Trust and Gloucestershire Health and Care Services NHS Foundation Trust.

3.4.1 *Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT)*

Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT) is one of the largest hospital trusts in the country and provides high quality acute and specialist health care for a population of more than 850,000 people. It is the second largest employer in Gloucestershire, with more than 7,400 employees. Patients are cared for by more than 2,250 registered nurses and midwives and 850 doctors. In addition, it employs more than 500 estates staff, 250 healthcare scientists and 400 health professionals, such as physiotherapists and speech therapists. GHNHSFT delivers services from two main sites that complement each other:

- Gloucestershire Royal Hospital (GRH).
- Cheltenham General Hospital (CGH).

Some services run on both sites while other specialist services are focused at just one to optimise the use of specialist staff, skills and equipment. Services are also provided from a range of other locations across the county and beyond.

3.4.2 *South Western Ambulance Service NHS Foundation Trust (SWASFT)*

South Western Ambulance Service NHS Foundation Trust (SWASFT) provides a wide range of Emergency and Urgent Care services and employs more than 4,000 staff and has 96 ambulance stations, three clinical control rooms, six air ambulance bases and two Hazardous Area Response Teams (HART). In the context of urgent care in Gloucestershire, South Western Ambulance Service NHS Foundation Trust provide the 999 phone service, and hear and treat, see and treat and ambulance dispatch services.

3.4.3 *Gloucestershire Health and Care NHS Foundation Trust*

Gloucestershire Health and Care NHS Foundation Trust was formed in October 2019 by the merger of 2gether NHS Foundation Trust and Gloucestershire Care Service NHS Trust, to provide joined up physical health, mental health and learning disability services.

The Trust provides nursing, physiotherapy reablement and adult care in community settings, operates the county's seven community hospitals and runs health visiting, school nursing and speech and language therapy services for children. It also provides specialist services including sexual health, heart failure, community dentistry, diabetes, IV therapy, tissue viability and community equipment. The Trust employs around 2,700 people including nursing, medical, dental, allied health professionals, support staff, administrative and clerical workers. It also works in close partnership with around 800 social care staff from Gloucestershire County Council.

3.4.4 *NHS Gloucestershire Clinical Commissioning Group (GCCG)*

GCCG came into existence on 1 April 2013. It is a membership-based organisation that includes all general medical practices in Gloucestershire and is overseen by a constitution. The geographical area covered by the 76 practice members is coterminous with that covered by Gloucestershire County Council, covering 271,207 hectares with a registered population of around 630,000 which is further divided into District Councils. GCCG has a

wide remit which includes service transformation, quality assurance, consultation and involvement, medicines stewardship and integration between commissioning for health and commissioning for social care.

Our local system provides some excellent quality care as reflected in our CQC assessments, but there are areas where we can do better. In particular we have to respond to a range of performance, financial and workforce challenges that are impacting on our health and care system and it is vital therefore that we are both ambitious and realistic about the future as we consider our opportunities for future service delivery models.

3.4.5 *Gloucestershire County Council (GCC)*

GCC is responsible for a population of 628,000 residents, has 53 councillors and employs 3,155 staff. In its latest strategy GCC has set out a long term vision setting out priorities for: children's wellbeing and safeguarding; education and skills; health, care and prevention; communities and localities; transport, economy and infrastructure; highways, and; council leadership.

3.5 Coronavirus (COVID 19)

3.5.1 *Introduction*

The proposals contained within this PCBC were developed, publically engaged on and submitted in draft to the South West Clinical Senate and NHSE&I prior to the COVID-19 pandemic. As a consequence of the pandemic the FFTF programme was paused from the end of March to early June 2020.

The proposed service changes are to deliver our case for change (see section 5) over the medium to long-term and we have therefore, in agreement with the Regulator, excluded the short-term impact of COVID-19 from our baseline data, staffing models, resource requirements and finances. That being said the context for our proposals has changed as a result of the pandemic and we need to ensure this is visible within our PCBC, whilst at the same time not being relied on as the "new normal" (and the uncertainty surrounding a further surge or when pre-COVID 19 activity levels would return). To achieve this, COVID-19 specific text will be identified using the following format:

Coronavirus (COVID-19)

Fit for the Future is the mechanism for agreeing permanent service change and it is modelled based on 'normal/ pre-COVID-19' rather than COVID 19 demand. The remainder of this section summarises the main COVID-19 changes.

3.5.2 *Temporary Service Changes*

In response to the COVID-19 pandemic, Gloucestershire Hospitals NHS Foundation Trust implemented a number of temporary service changes aimed at separating as much as possible services caring for COVID and non-COVID patients. The objectives of these changes were to:

- limit the risk of transmission of the virus to patients and staff;
- enable clinicians to restore many of the services paused in response to the pandemic so that the amount of cancer surgery, planned care and specialist diagnostic activity was increased, especially to those patients who are most vulnerable,

- give confidence to our local population that both hospitals are safe places to visit.

These service changes were implemented as emergency (temporary) changes in line with the Memorandum of Understanding (MOU) agreed with Gloucestershire Health Overview and Scrutiny Committee (HOSC). The MOU allows changes to be implemented for 6-months, with a review at the end of month 3.

3.5.2.1 Incident Response (Phase 1) Service Changes

HOSC members were notified on 26th March 2020 of the intention to implement a number of service changes in response to Phase 1 of the Pandemic and received confirmation the changes had been implemented on 1st April.

- Emergency General Surgery centralised to GRH on 1st April 2020
- Changes to Minor Injury and Illness provision across the County - The Vale, Dilke & Tewkesbury Minor Injury Units were closed on 22 March 2020 with opening hours reduced at the other MIIUs in the County. MIIUs are provided by Gloucestershire Health and Care
- Extensive service re-prioritisation alongside the incident including:
    - Re-prioritisation of services to support management of COVID patients
    - Extensive service delivery moved to virtual channels, such as digital outpatients
    - Primary Care virtual service delivery and COVID patients managed through primary care hubs
    - Use of Independent Sector beds to support hospital discharge and flow
    - Direct delivery of input and support to care homes (redeployed staff) including PPE training
    - Development of Bronze cells and system wide incident response

At a meeting of Gloucestershire HOSC on 14th July, the first 3-months of the Emergency General Surgery and MIIU temporary changes were reviewed and extended for a further three months to September 2020.

3.5.2.2 Recovery (Phase 2) Service Changes

This list below summarises the phase two response and associated service changes implemented on 9th June:

- All 999 and undifferentiated GP referrals centralised at GRH. This includes centralising the Acute Medical Take to GRH.
- CGH Emergency Department (ED) facility to be a Minor Injury and Illness Unit (MIIU), open 7-days a week, 8am to 8pm.
- CGH MIIU is supported by a Consultant led Ambulatory Emergency Care (AEC), service open Monday to Friday, 8am to 6pm, to see differentiated GP referrals and patients previously discharged.
- The Acute Stroke Unit (ASU) to CGH. The Hyper Acute Stroke Unit (HASU) will remain at GRH, and Stroke Rehab at The Vale Community Hospital.
- The Intensive Care Unit (ICU) at CGH designated as a non-COVID unit.
- A greater proportion of non-COVID-19 Cardiac patients transfer to the Cardiac Care Unit (CCU) at CGH.

- Continued use of Private Sector capacity (Winfield and Nuffield) for non COVID planned care (subject to national agreement beyond June).
- Benign Gynaecology day case activity to CGH.
- Urology 999 front door pathways to GRH, planned and non-COVID pathways remain at CGH supported by a Urology Assessment Unit (UAU).
- Vascular emergency and elective inpatient pathways to GRH, the day case venous service remains at CGH.
- Radiology services at CGH will focus on outpatient care for our vulnerable patients and support a largely non-Covid bed base and Ambulatory Emergency Care.
- New PTS contract with Medipatrol for Inter-site transfers

The three month review period for all COVID-19 temporary service changes by HOSC as part of the ICS proposed winter plan for 2020/21 took place in September 2020 and they were extended to March 2021.

Key Points

- **The One Gloucestershire ICS is committed to turning the NHS Long Term Plan (LTP) into action for the benefit of local people and our dedicated workforce.**
- **The services included within the PCBC should not be seen in isolation from all the other developments that support the delivery of our LTP**
- **We recognises that our Joint Health & Wellbeing Strategy is intrinsically linked to our response to the NHS Long-Term Plan (LTP)**
- **Our proposals pre-date the Coronavirus (COVID-19) pandemic and are designed to deliver sustainable change for the long-term**
- **We recognise that the Coronavirus (COVID-19) pandemic has altered the context (locally and nationally) and our PCBC seeks to address this where appropriate.**
- **There is now some overlap between the emergency/temporary service changes enacted as part of our Covid-19 response and these Fit for the Future proposals, but they are not the same.**

4 Introduction to the Programme

4.1 Fit for the Future

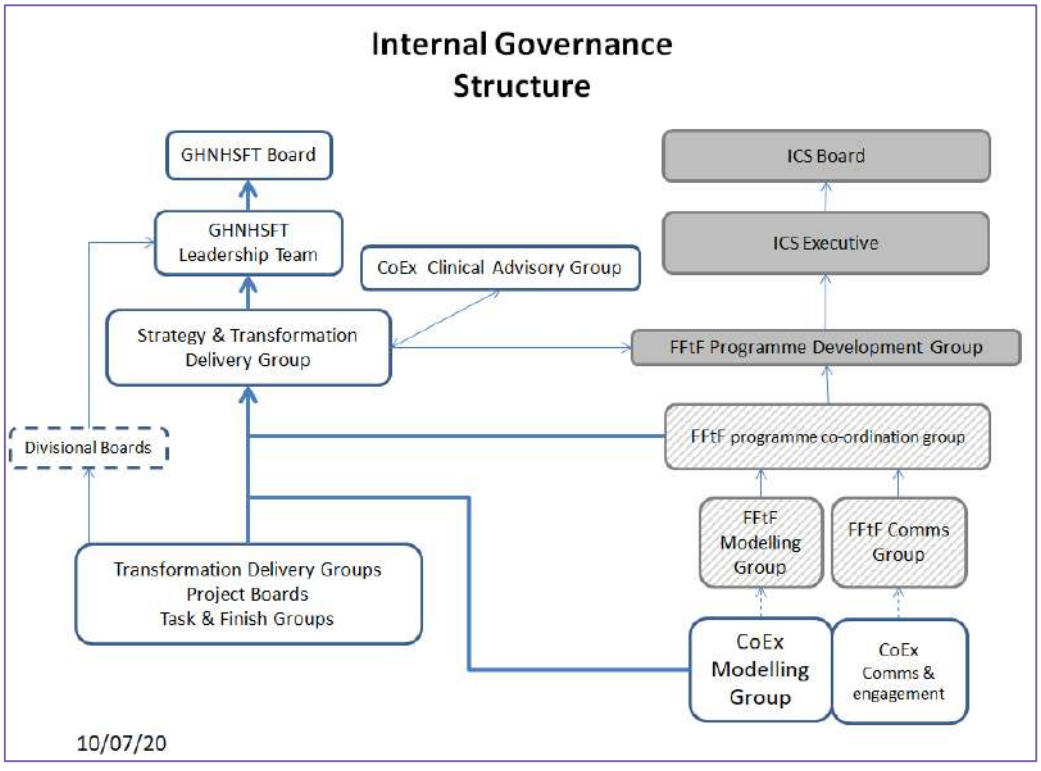
As part of our response to the NHS Long Term Plan and commitment to the public in Gloucestershire, when patients have serious illness or injury that requires specialist care, we believe they should receive treatment in centres with the right specialist staff, skills and equipment by delivering care that is fit for the future. Our *Fit for the Future Programme* (previously called "One Place"), includes looking at how we can develop outstanding specialist hospital care in the future across the Cheltenham General and Gloucestershire Royal hospital sites; our "*Centres of Excellence*".

4.1.1 *Programme structures and membership*

Centres of Excellence is a clinical programme overseen by Gloucestershire Hospitals NHS Foundation Trust. The *Centres of Excellence* Delivery Group provides programme management and oversight and includes executive leads for strategy, medicine, nursing, finance and workforce and clinical division Chiefs of Service alongside GP and lay representation from the wider ICS. There is an Advisory Group made up of all the Trust's multi-disciplinary clinical and operational leads which acts as a clinical reference group for the programme.

Each clinical Workstream has its own 'Transformation Delivery Group', predominantly made up of consultants, nurses, therapists and scientists, with project and operational management support. The 'TDGs' report into their respective Divisional Boards as well as to the *Centres of Excellence* Delivery Group.

The Delivery Group is accountable to the GHNHSFT Board via Trust Leadership Team. It is also responsible to the ICS Delivery Board as a key component of the Fit for the Future programme, overseen by the Programme Development Group. These governance arrangements are depicted below:



4.2 Centres of Excellence

4.2.1 *What is a centre of excellence in this context?*

The Fit for the Future Programme refers to *Centres of Excellence* for planned and emergency care respectively.

Across the UK and the world, doctors recognise that an element of separation between planned and emergency care services can improve care for everyone.

4.2.2 *What does Centres of Excellence mean for Gloucestershire?*

Our vision is for a single hospital on two sites, linked by the A40 'corridor', providing the very best care, experience, safety and outcomes for local people.

To date, the hospital's two sites have sometimes been seen as a problem but we believe they present a huge opportunity to develop our vision of *Centres of Excellence* providing outstanding specialist care where more patients can be treated, waiting times are lower, patient experience is improved and patient outcomes are amongst the best. We would seek to maximise the opportunities of our two-site configuration by developing a more planned care and a more emergency care site. We do not envisage a full hot/cold split, so the clinical models retain a 24/7 front door (ED/ED+MIIU) and ITU on both sites.

Importantly, many patients and families who have to travel to more remote specialist centres could be treated locally in the county. We are committed to strong partnership working between health, social care and other partners in the county.

This vision forms part of the GHNHSFTs five year strategy and is one of ten strategic objectives: *We have established centres of excellence that provide urgent, planned and specialist care to the highest standards and ensure as many Gloucestershire residents as possible receive care within the county.*

4.2.3 *What are the goals for an emergency centre of excellence?*

- Separating facilities for emergency care (from planned care) would ensure that, if you have a life or limb threatening emergency, the right facilities and staff would always be available to give you the best possible chance of survival and recovery.
- Getting it right could improve your chances of survival and recovery, reduce the amount of time you have to spend in hospital and sometimes even avoid a hospital stay altogether.

What the evidence says about this:

- Getting patients to definitive, specialist hospital care can be more important to outcomes than getting them to the nearest hospital for certain conditions, such as stroke, major trauma and heart attacks
- In an emergency, patients should be seen by a senior clinical decision maker as soon as possible. This improves outcomes and reduces length of stay, hospitalisation rates and cost
- Acute assessment units (which co-ordinate tests and input from the different hospital specialist teams) enhance patient safety, improve outcomes and reduce length of stay

Transforming Urgent and Emergency Care Services in England, 2015

4.2.4 *What are the goals for a planned care centre of excellence?*

Having separate facilities for planned care (from emergency care) could **reduce the number of operations that get cancelled** when beds or operating theatres are needed for the most unwell patients who arrive in ED and need urgent operations or treatment.

Working this way could also reduce the risk of hospital acquired infections, for example because you can be screened for infection in advance of your surgery date, and because you are less likely to be moved between wards to make way for emergency patients.

> The **Royal College of Surgeons of England (RCS)** recommends separating elective surgical admissions from emergency admissions, suggesting that this can result in earlier investigation, definitive treatment and better continuity of care, as well as **reducing hospital-acquired infections and length of stay** (particularly medical emergencies) wherever possible.
>
> *https://www.kingsfund.org.uk/publications/reconfiguration-clinical-services/elective-surgical*
>
> ***King's Fund (2014)***

4.3 Scope

4.3.1 *What services would be affected?*

The *Centres of Excellence* approach is concerned with *configuration* of adult acute specialties, i.e. where departments, beds and operating (theatres/day unit) resources are located. The activity baseline covers planned and emergency admissions and day case activity. This is a large-scale change which we are approaching in three phases. This document relates to the first phase.

The first phase of *Centres of Excellence* would affect adult:

- General surgery – emergency and planned upper gastrointestinal (GI) and colorectal including day surgery
- Image-guided interventional surgery (IGIS): interventional radiology, vascular and cardiology procedures
- The acute medical 'take'
- Clinical support for the proposed 'deteriorating patient' model of care
- Also in scope for Phase 1 are the existing 'pilot' reconfigurations of Trauma & Orthopaedics (2017) and Gastroenterology (2018). The preferred option for these services is to remain in their pilot configurations, so no further changes are proposed.

The second phase of *Centres of Excellence* will review critical dependencies and enablers associated with the preferred option(s) for the Phase 1 specialties. This is likely to include:

- Clinical support services
- Care of the elderly, medical cardiology, acute stroke, respiratory
- Other planned services such as gynaecology etc.

Further adult medical/surgical specialties are in phase 3 for consideration in light of specialty strategic aims, critical dependencies, developing clinical models for each hospital site and operational capacity.

The phases **will not necessarily be implemented sequentially**. We are seeking clarity on the preferences for the Phase 1 'sentinel' models before we widen the scope of our clinical model development.

The *Centres of Excellence* specialties/services in-scope, by Phase, are summarised in the table below:

Phase	Women & Children	Surgery	Medicine	Diagnostic & Specialties
1		Colorectal Emergency General Surgery Trauma Orthopaedics Upper GI Vascular surgery	Acute Medical take Interventional cardiology Gastroenterology	Interventional radiology
2		Orthopaedics at GRH*	Care of the Elderly Medical cardiology Respiratory Acute Stroke Nuclear Medicine Renal	*Clinical support services*
3	Gynaecology	Breast ENT/Maxillofacial	Dermatology Diabetes/endocrinology Renal Rheumatology	Clinical Haematology

* Review of any remaining elective orthopaedics on the GRH site that is not linked to services already centralised at GRH, namely trauma and paediatrics.

4.3.2 *Services that would not be affected*

Specialties where the existing configuration supports the *Centres of Excellence* vision and clinical model, and where the impact of any proposed further changes as part of this programme are unlikely to lead to a substantial service variation requiring public consultation[4] are considered 'Out of Scope'. These include: paediatrics, maternity and non-surgical oncology. 'Out of scope' in this context means they are not subject to consideration for reconfiguration within this programme, and therefore do not feature in the activity, finance and workforce baselines. They are however material components of the Trustwide *Centres of Excellence* vision and clinical model and will be treated as critical dependencies in any evaluation of options and subsequent delivery plans. Outpatient clinics are not being considered as primary drivers for configuration and therefore are out of scope of Fit for the Future, but our ICS Outpatient Transformation Programme is focussed on improving efficiency and developing the model of care for outpatients as defined in the NHS Long Term Plan. Feasibility of the models proposed by the Fit for the Future programme will be tested in terms of impact on outpatients and support services.

Coronavirus (COVID-19)

In our initial response to the pandemic service delivery was moved to virtual channels, such as digital outpatients. As part of our Recovery plans there is a focus on maintaining non-face to face activity for outpatients and ongoing follow up pending review.

[4] Gloucestershire Health Overview and Scrutiny Committee (HOSC) has developed a Memorandum of Understanding (2019) which defines what is meant by '*substantial service variation*'

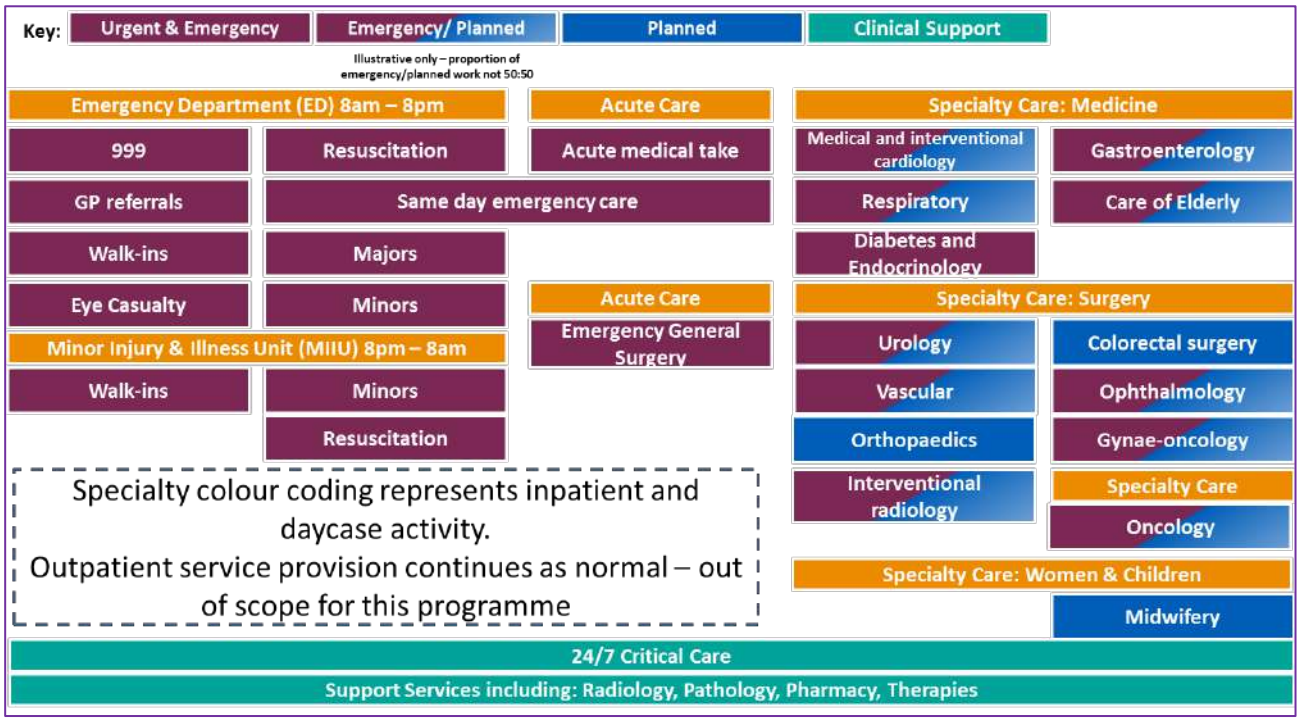
4.4 What is the 'current state' service model?

Sections 4.4.1 to 4.4.4 summarise the current service model from the point of view of site and specialty configurations.

Sections 4.4.5 to 4.4.10 provide more detail on the current configurations for the in-scope services.

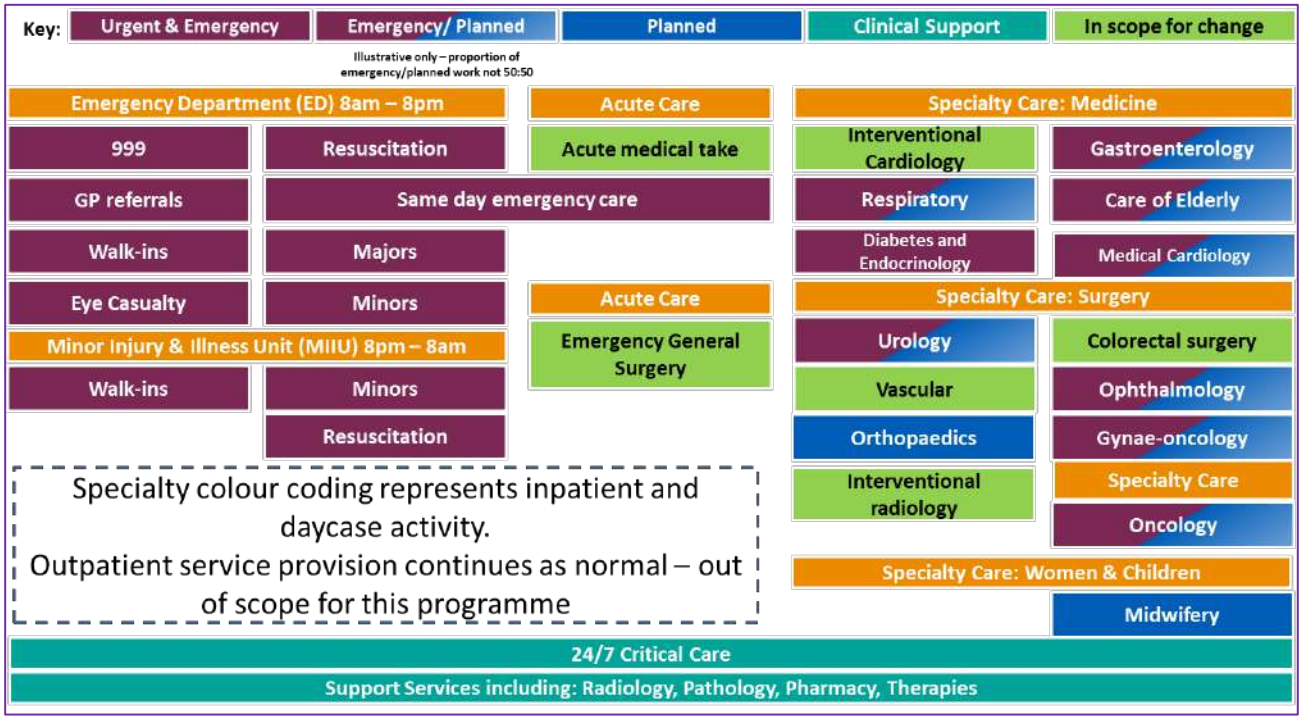
4.4.1 *Cheltenham General Hospital (CGH)*

The diagram below shows the current mix of clinical specialties operating on the CGH site.



4.4.2 *In scope for change - CGH*

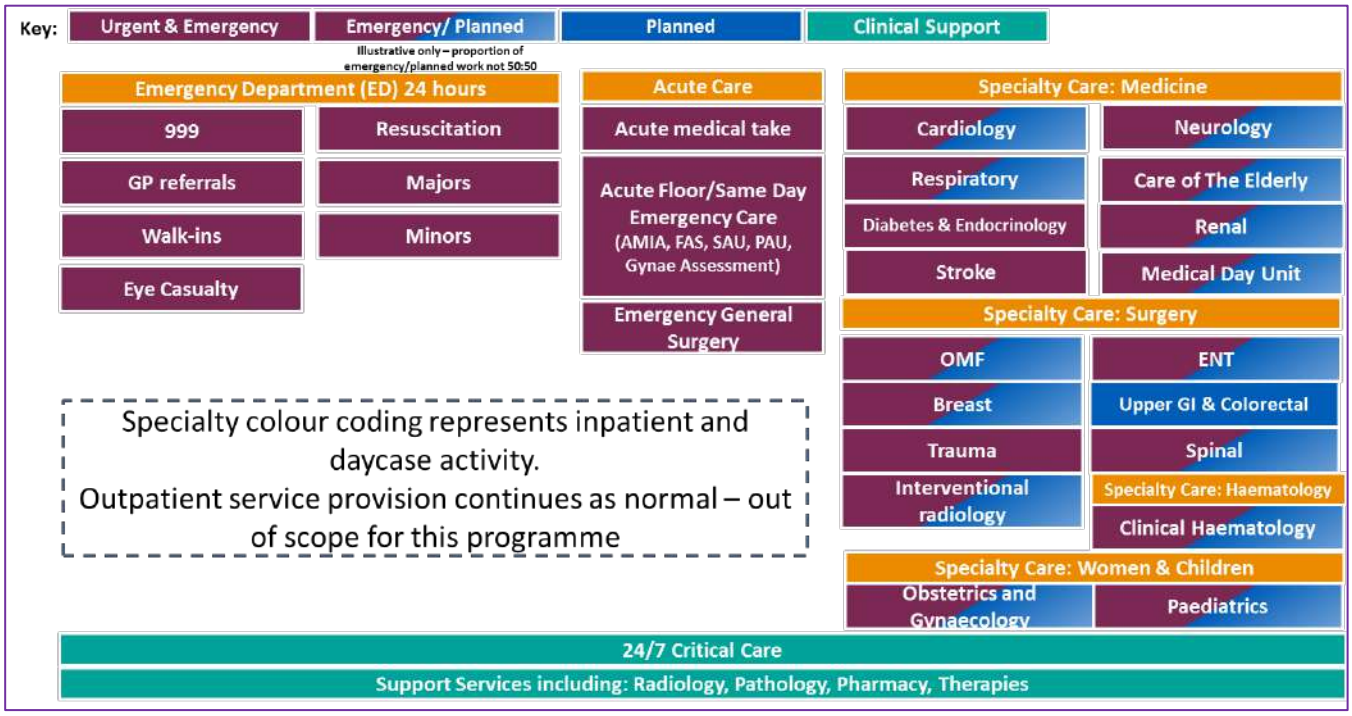
The elements highlighted in green (below) are part of the 'Phase 1' Fit for the Future process and therefore subject to change.



The Trust has made a commitment to retaining urgent and emergency care front door services (ED/MIIU) in CGH as currently configured. Gastroenterology and orthopaedics are not shown being subject to change, as the 'current state' pilot delivery models are the preferred configurations for consultation.

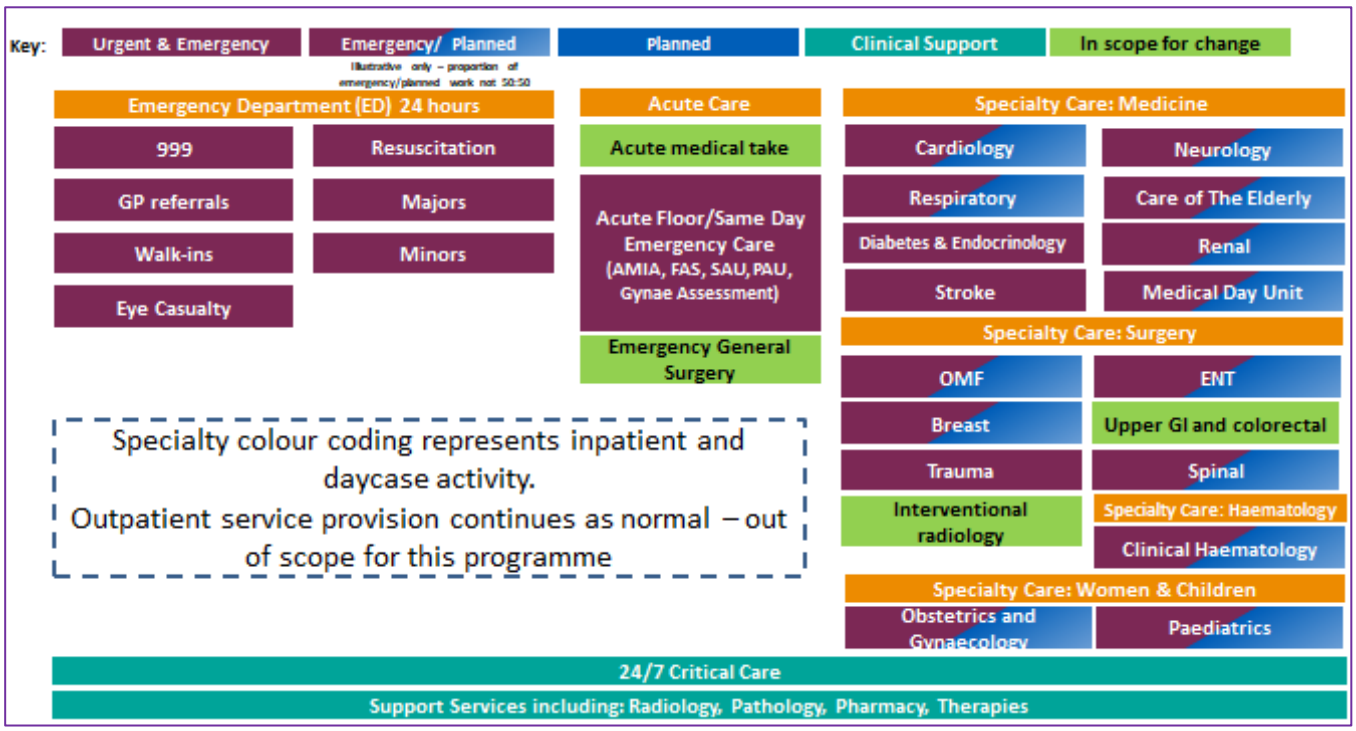
4.4.3 *Gloucestershire Royal Hospital (GRH)*

The diagram below shows the current mix of clinical specialties operating on the GRH site.



4.4.4 *In scope for change -GRH*

The elements highlighted in green (below) are part of the 'Phase 1' Fit for the Future process and therefore subject to change. Trauma is not shown being subject to change, as the 'current state' pilot delivery model is the preferred configuration for consultation.



4.4.5 *General/gastrointestinal surgery current configuration*

General/ gastrointestinal surgery comprises an emergency general surgery service, a planned gastrointestinal service (sometimes referred to as upper GI) and a planned colorectal service (sometimes referred to as lower GI).

Emergency general surgery is currently provided at CGH and GRH.

The planned gastrointestinal service encompasses a tertiary oesophagogastric (OG) unit for Cancer and Bariatric Surgery and is centralised to GRH. The planned colorectal service is one of the busiest colorectal (CR) services in the country and is provided from both sites. Gastrointestinal surgery is a key service within the Trust, and provides planned and unplanned support to many other specialties across both sites.

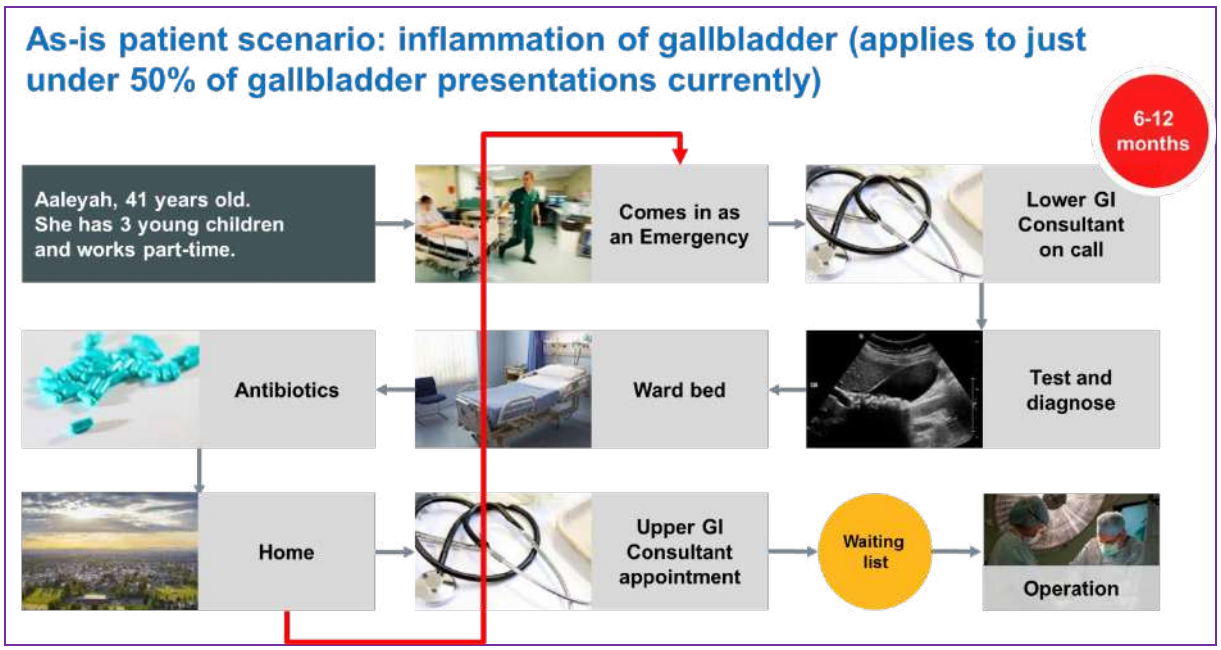
Cheltenham General Hospital (CGH)

- Emergency General Surgery
- Elective Inpatients: Lower Gastrointestinal (Colorectal)
- Daycases
- Outpatients

Gloucestershire Royal Hospital (GRH)

- Emergency General Surgery
- Elective Inpatients: Lower Gastrointestinal (Colorectal)
- Elective Inpatients: Upper Gastrointestinal
- Daycases
- Outpatients

The image below shows Aaleyah's experience when she come to hospital as an emergency with inflammation of the gallbladder.



4.4.6 *Image-guided interventional surgery (IGIS) current configuration*

In Phase 1 we introduce the concept on an 'Image Guided Interventional Surgery Hub'. Although an asset for many clinical specialties, the feasibility and modelling is focussed specifically on the following clinical areas:

- Interventional radiology (IR)
- Interventional cardiology
- Interventional vascular surgery

Cheltenham General Hospital is currently the Arterial Centre for the Regional Vascular Network, and is also the base for county's cardiac catheter laboratories. There are some IR and CT facilities in GRH, as shown in the table below:

Gloucestershire Royal Hospital

Interventional Radiology
- Interventional Room x 1
- CT scanner x 1

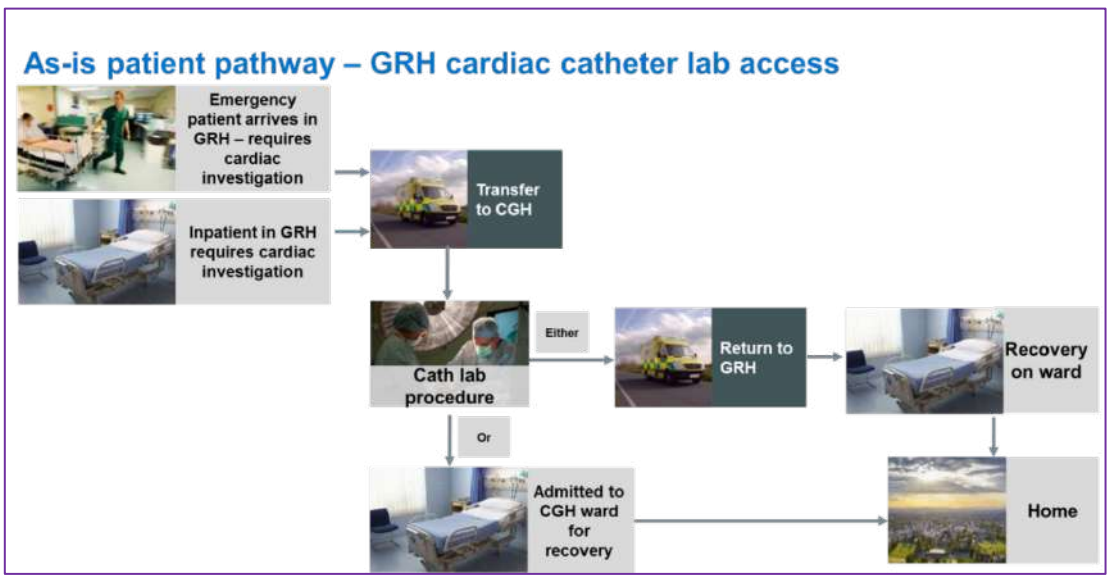
Cheltenham General Hospital

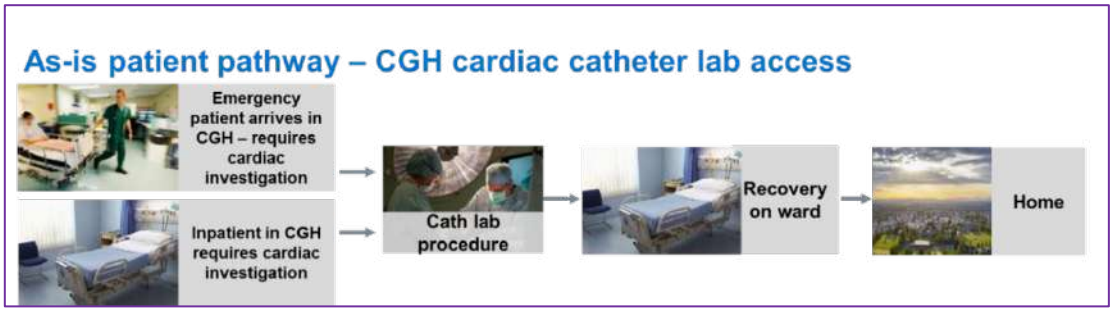
Interventional Radiology
- Interventional Room x 1
- CT scanner x 1

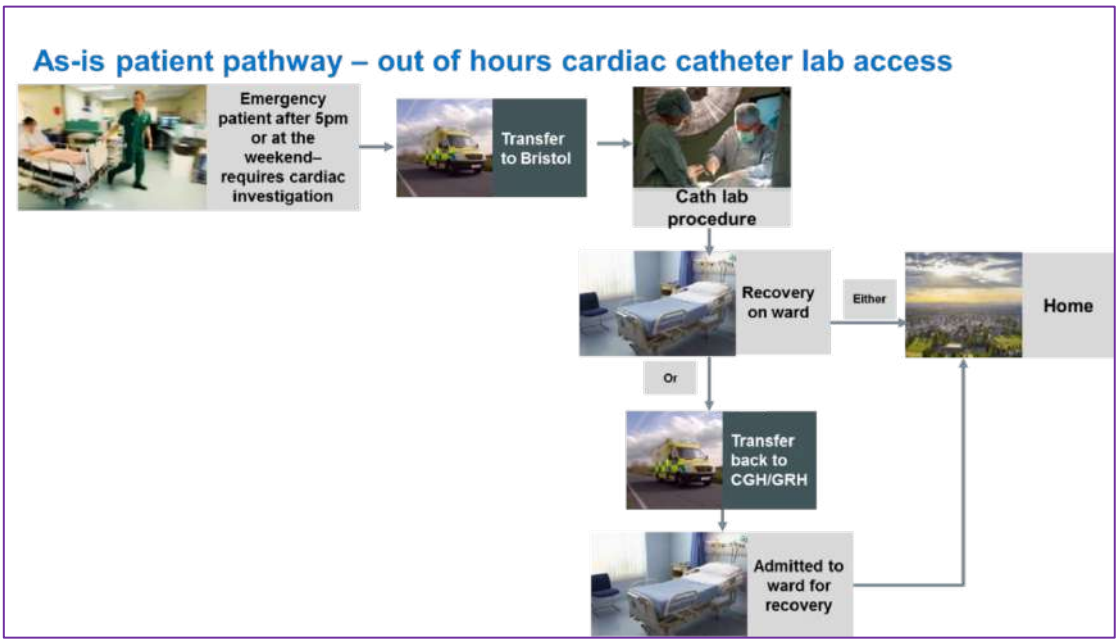
Interventional Cardiology
- Catheter Lab x 2

Vascular Surgery
- Hybrid Theatre x 1 (shared)

The diagrams below show current state pathways for cardiac catheter lab access, for patients: 1) Admitted to GRH; 2) Admitted to CGH, and 3) Out of hours patients travelling out-of-county.







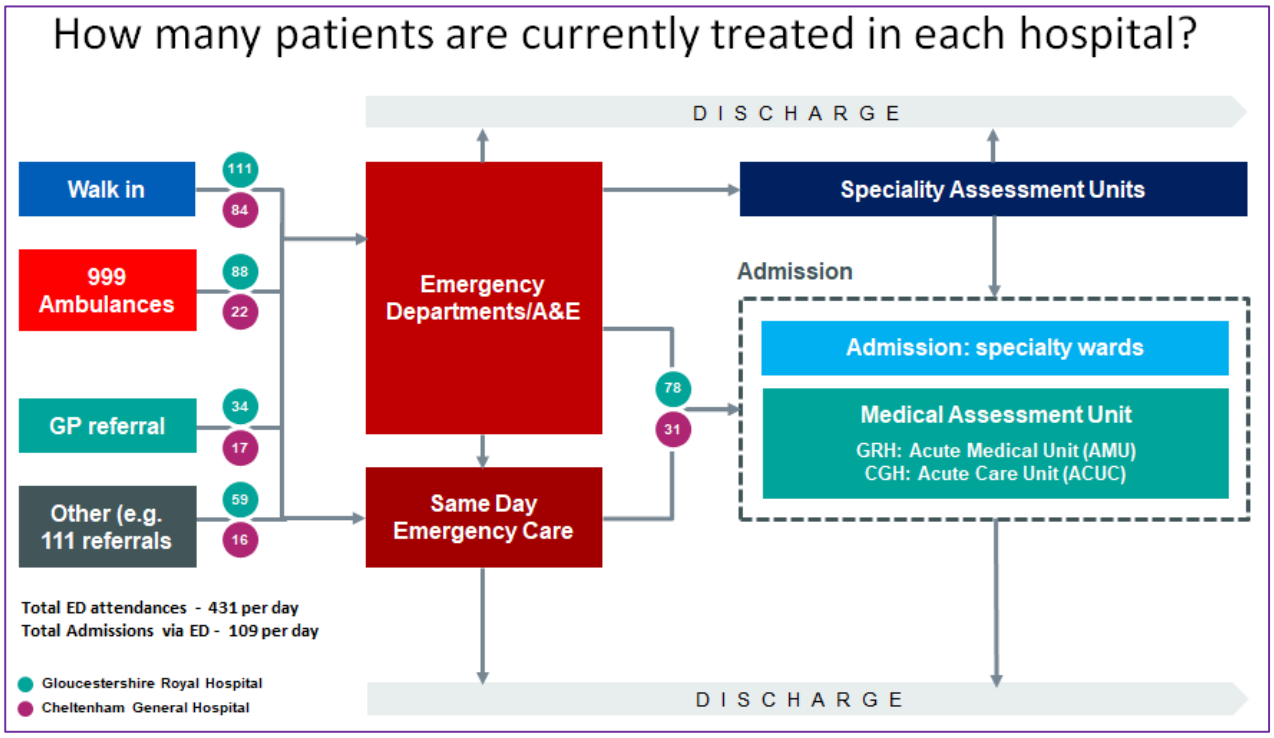
4.4.7 *Acute medicine (acute take) current configuration*

An acute medical take is currently in place in both hospital sites, supported by the services outlined in the table below.

Gloucestershire Royal Hospital (GRH)	Cheltenham General Hospital (CGH)
Emergency Department: 24/7 Consultant Led	Emergency Department: 8am – 8pm consultant led. 8pm – 8am Nurse led
Same Day Emergency Care: 8 am - 10 pm Mon-Fri 8 am - 9 pm Sat-Sun	Same Day Emergency Care: 8-6pm Mon to Fri
Assessment Units: ▪ Trauma, Surgical, Gynaecology Assessment Units ▪ Stroke Centre ▪ Medical Assessment Unit – 50 beds (including Frailty Assessment Service - FAS)	Assessment Units: ▪ Urology ▪ Medical Assessment Unit 24 beds
On site and off site access to specialty services e.g. acute medicine, emergency general surgery, trauma, stroke, critical care, paediatrics, gynaecology, ENT	On site and off site access to specialty services e.g. acute medicine, emergency general surgery, trauma, stroke, critical care, paediatrics, gynaecology, ENT

These services are shown in the emergency admissions pathway diagram overleaf. Out of hours patients with very serious conditions or whose diagnosis is uncertain

(undifferentiated) and need to be assessed urgently by the Acute Medicine Team will be taken to GRH e.g. by ambulance, if not already there.



4.4.8 *Deteriorating patient current configuration*

The Trust has an existing 'Acute Care Response Team' consisting of just over 16 WTE staff, predominantly Advanced Clinical Practitioners.

Escalation in the case of a patient deteriorating can be via the ward F1/2 doctors, the specialty team, and/or the resident medical or surgical middle grade overnight.

4.4.9 *Trauma and Orthopaedics (T&O) current configuration*

In 2017 the GIRFT programme supported the Trust in piloting the centralisation of T&O services on separate sites. A pilot launched in October 2017 centralised planned orthopaedics (starting with hip and knee arthroplasties) to Cheltenham General Hospital while emergency trauma was centralised to Gloucestershire Royal Hospital.

4.4.10 *Gastroenterology current configuration*

In November 2018 the Trust, with support from the Gloucestershire Health Overview and Scrutiny Committee (HOSC), launched a pilot to test consolidation of gastroenterology onto one ward at CGH, whilst also providing two 'high acuity' gastroenterology beds at GRH for acutely unwell patients. These are supported by a dedicated 'Gastroenterologist of the day' based on the GRH site.

Key Points

The *Fit for the Future Programme* includes looking at how we can develop outstanding specialist hospital care, our "*Centres of Excellence.*

The first phase of *Centres of Excellence* would affect adult:

- **General surgery – emergency and planned upper gastrointestinal (GI) and colorectal including day surgery**
- **Image-guided interventional surgery (IGIS): interventional radiology, vascular and cardiology procedures**
- **The acute medical 'take'**
- **Clinical support for the proposed 'deteriorating patient' model of care**

Also in scope for Phase 1 are the existing 'pilot' reconfigurations of Trauma & Orthopaedics (2017) and Gastroenterology (2018).

***Centres of Excellence* is a clinical programme including executive leads for medicine and nursing and with clinical division Chiefs of Service**

Each Workstream is made up of consultants, nurses, therapists and scientists, with project and operational management support.

5 Case for change

Gloucestershire Hospitals NHS Foundation Trust was formed in 2002 by the merger of Gloucestershire Royal NHS Trust, responsible for GRH, and East Gloucestershire NHS Trust, responsible for CGH. Since that time several changes have been implemented to offer patients the benefits of improved access and outcomes.

Today, the Trust provides acute and specialist hospital care for Gloucestershire and neighbouring areas including emergency, planned, maternity, children's services and cancer care, serving a population of approximately 850,000 (of which 652,000 are in Gloucestershire), and for some specialties such as oncology, haematology and vascular surgery to wider networks close to a million in population.

The hospitals are centrally located within the county and are only 8 miles apart. Developing as two district general hospitals has enabled the evolution of two acute hospitals with their own unique characteristics originally serving different parts of Gloucestershire, but with the development of more complex health interventions, the smaller scale of duplicated services has resulted in patients having to travel to partners in larger regional centres in Oxford, Bristol and Birmingham for more specialist services. For patients who are treated in-county, covering two sites can dilute the effectiveness of the available resources, compromising quality, productivity and staff recruitment and retention.

5.1 Local population needs

This section is based on a wider Population Health Needs assessment produced for the Fit for the Future Programme by the public health team in Gloucestershire County Council. It draws out factors the system should take into account when considering the configuration of services to better meet population health needs and to reduce health inequalities. Links to the JSNA and JHWS can be found in Section 3.3.

5.1.1 *Demographics*

Assuming current population trends continue the population in Gloucestershire will rise by 23,432 between 2018 and 2023, from 652,475 to 675,907. The dominating feature of the population projections is the sharp increase in population in the age group 65 or over. These changes mean that by 2041, the proportion of people in the county who are aged 65 or over will have risen from 20.8% to 28.9%, and the proportion of people aged 85 or over will have risen from 2.9% to 5.5%. Population projections in the older age categories far exceed national averages.

In general, Gloucestershire is not a very deprived county. An average IMD[5] rank for each of the six districts in Gloucestershire shows that even the most deprived districts (Gloucester City, and Forest of Dean) fall in the middle quintile (middle 20%) for deprivation out of 326 English authorities. Tewkesbury, Cotswold, and Stroud districts are in the least deprived quintile, with Cheltenham in the second least deprived quintile. However there are pockets of deprivation and 13 areas of Gloucestershire are in the most 10% deprived nationally (an increase from 8 areas in 2010). These 13 areas account for 20,946 people (3.4% of the county's population).

[5] **Index of Multiple Deprivation (IMD, 2015):** The Index of Multiple Deprivation 2015 is the official measure of relative deprivation for small areas1 (or neighbourhoods) in England. The Index of Multiple Deprivation ranks every small area in England from 1 (most deprived area) to 32,844 (least deprived area). The indicator is made up of 7 sub-indicators to calculate an overall indicator. National and local organisations use the IMD, often alongside other data, to develop strategies and target interventions.

5.1.2 *Population Health*

The health of people in Gloucestershire is generally better than the England average with life expectancy at birth being higher than the England averages for both genders. Life expectancy is 7.4 years lower for men and 5.2 years lower for women in the most deprived areas of Gloucestershire than in the least deprived areas. People living in more deprived areas are more likely to have a greater prevalence of severe and enduring mental and physical health problems and be more frequent users of urgent care services.

Addressing the causes of death ('excess deaths') driving the difference in life expectancy between our least and most deprived areas, and targeting those which contribute most to the gap would have the greatest impact on reducing inequalities. The top cause of excess deaths for both males and females was coronary heart disease; this was followed by other cancers for males and Chronic Obstructive Pulmonary Disease (COPD) for females.

Modelling disease prevalence rates against predicted changes in the Gloucestershire population shows the number of people living with conditions including diabetes and dementia is likely to increase over the next 10-20 years. It is estimated that by 2030 there will be; over 1,100 more people aged 18+ with longstanding health condition caused by a stroke; over 4,800 more people aged 65+ predicted to have dementia; and 9,400 more people aged 16+ estimated to have diabetes.

Multi-morbidity (the presence of multiple chronic /long-term conditions in an individual including physical and mental health comorbidity), increases with age. Modelled data shows that 10% of people aged 45-64 are living with physical and mental health comorbidity. This increases to 30% for those aged 85 and over. In the 25-44 year-old age group physical and mental health co-morbidity is more common than 3 or more long term conditions.

Recent analysis of primary care data in Gloucestershire suggests that the prevalence of multi-morbidity is even higher than that modelled, with 50% of adults aged 45 years or older and 95% of people aged 85 years or older having at least two long-term conditions recorded. The management of multiple long-term physical and mental health conditions alongside an aging population is an increasing consideration for the health and social care system in Gloucestershire.

5.1.3 *Emergency Care Demand – Admissions*

Emergency admission activity at GHNHSFT has increased in recent years, between 2016/17 and 2018/19 there was an increase of 21%. The Gloucestershire population is growing and therefore this additional activity is also partly attributable to population increase but in the large part is attributable to an increase in demand for acute hospital care that remains poorly understood. The development of care models outside of hospital (to ensure that only those patients who need acute hospital care present to our EDs), is an important part of the wider Fit for the Future vision. The admission rate per 10,000 from 2013-2019 is increasing in line with the increase in emergency admissions seen in England as a whole. However, benchmarking shows GHNHSFT admits slightly more patients than the national average.[6]

Although admission activity by volume is highest in the three most populated localities (Gloucester City, Cheltenham and Stroud & Berkeley Vale), the highest rates of admission per 1,000 are observed in patients from Gloucester City and The Forest of Dean. Analysis of Standardised Admission Ratios (SARs) during 2018 also highlighted that admissions were higher than expected in Gloucester City, Forest of Dean and Tewkesbury localities.

[6] Based on Dr Foster 2018 analysis and England average.

The highest amount of emergency admissions are in the 65 year old age-group however the greatest increases in activity have been seen in the 18-64 year old age group. Analysis of SARs for 2018 shows that, for patients aged 15-44, there were multiple diagnosis chapters with higher than expected admission rates including endocrine, pregnancy conditions, skin, respiratory and nervous system.

Over the past three years, the top three diagnoses for emergency admissions by broad ICD-10 diagnostic chapter were consistently: XVIII - Signs and symptoms and abnormal findings not elsewhere classified; X - Diseases of the respiratory system; and XIX - Injury, poisoning and certain other consequences of external causes (which would include falls).

Local admissions data demonstrates a relationship between deprivation and emergency admissions with a higher proportion of admission from more deprived areas of the county than from more affluent areas. NHS RightCare[7] identifies 17 Priority wards in Gloucestershire where there are the highest rates of excess unplanned hospitalisations, with the top five in Gloucester City:

- Matson and Robinswood
- Kingsholm and Wotton
- Moreland
- Westgate
- Barnwood

A potential 842 hospital admissions could be avoided if the admission rate for these wards moved to the expected admission rate for Gloucestershire based on median deprivation. RightCare has identified that the top ten conditions driving inequalities in unplanned admissions are abdominal and pelvic pain, pain in throat and chest, disorders of the urinary system and COPD.

When compared to the England average RightCare found that Gloucestershire has higher rates of unplanned admissions in black and ethnic minority groups compared to the white population. This may reflect opportunity for improvement, although it has to be noted that these rates are comparable to Clinical Commissioning Groups (CCGs) with similar socio-demographic characteristics.

When the proportion of emergency and planned admissions in each decile of deprivation is compared there is a consistently higher proportion of planned admission observed in more affluent quintiles, and a higher proportion of emergency admissions observed in more deprived quintiles. This replicates the pattern seen nationally. Variations in use of care have been explained in the literature by differences in need (e.g. prevalence of multi-morbidity), quality of care, barriers to access (both perceived and actual) and variation in individual help-seeking behaviours.

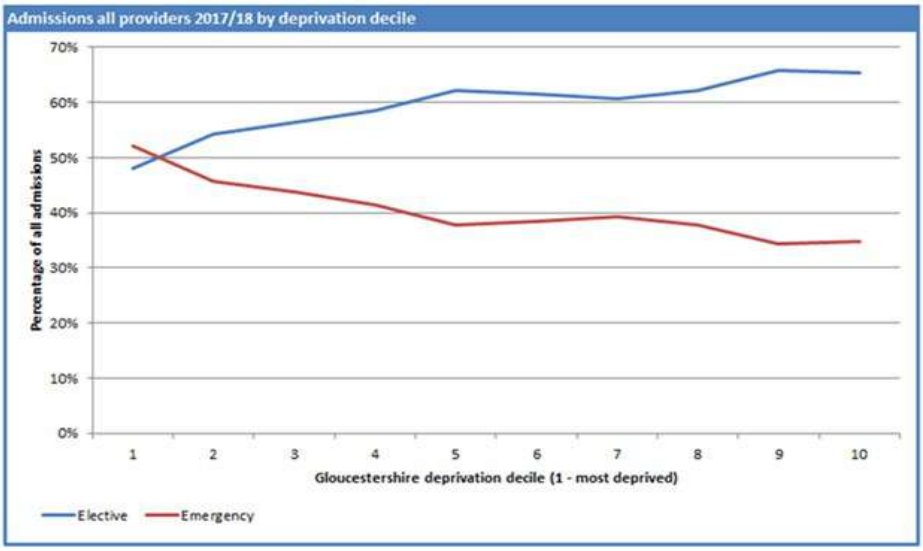
5.1.4 *Planned Care Demand*

Gloucestershire has a lower rate of planned admissions than is seen nationally. Planned care activity across all age groups has remained broadly stable since 2016. Planned admissions for females are consistently slightly higher than for males at a ratio of 1.1 to 1, (52.6% of

[7] NHS RightCare teams work with local systems to present a diagnosis of data and evidence across that population to identify opportunities and potential threats within healthcare systems. Within their diagnostic packs RightCare calculate opportunities at CCG level comparing a CCG either to its most similar 10 CCG's or the 5 best CCG's within that similar 10. The 10 CCG's are similar in terms of size, demography, deprivation, ethnicity and other variables that can impact population healthcare within an area.

planned admissions are female). Where the treatment speciality is rheumatism, the ratio of females to males is 3 to 1 over the same period whereas for cardiology the ratio changes to 0.5 to 1.

There is a less pronounced relationship between deprivation and planned admissions than that observed in the use of urgent care, however the graph below demonstrates that the proportion of planned admissions increases with affluence and there are more people using urgent care services than planned services in the most deprived quintile.



Comparison of the proportion of emergency and planned (elective) admissions during 2017/18 by deprivation quintile, 1= most deprived 10=least deprived (Gloucestershire CCG data warehouse, SEM)

In Gloucestershire the programmes with the greatest planned care activity over the last 3 years are:

- **General surgery** (decreasing trend in activity during period)
- **Gastroenterology** (increasing trend in activity during period)
- **Trauma** (decreasing trend in activity during period)
- **Ophthalmology** (increasing trend in activity during period)
- **Urology** (decreasing trend in activity during period)

Analysis of the Standardised Admissions Ratio (SAR) for all planned admissions (snapshot data, 2018) demonstrates that overall in Gloucestershire it was lower than expected during this period (SAR 92.44). One of the aims of the *Centres of Excellence* case is to increase our planned care provision to reduce waiting times, thus improving patient experience and health outcomes.

When explored by IMD diagnostic codes by Dr Foster the planned SAR was however higher than expected for injuries and poisonings[8] in Gloucestershire (SAR: 124.48). This higher ratio was observed across most localities other than Cheltenham and North Cotswolds.

SAR analysis by age band showed the following:

- For younger adults aged 15-44 years the SAR is significantly higher than expected SAR, and this higher SAR appears to be driven by higher than expected planned

[8] Injuries and poisonings IMD classification include: injuries, fractures, adverse effects e.g. poisonings, toxic effects, burns and corrosions and would therefore include a broad range of causes including falls and overdose.

admissions relating to the following ICD-10 diagnostic classifications: nervous system, pregnancy, injury and poisonings, neoplasms, and digestive conditions.

- Overall the SAR for adults 44-64 years is lower than expected (SAR: 95.06) although the SAR is higher than expected for certain diagnostic codes (neoplasms, injuries and poisonings, nervous system and digestive conditions).
- The SAR for older adults aged over 65 years and over is lower than expected (SAR: 87.11) and this is the case across most diagnostic categories other than a slightly higher SAR for planned admissions related to neoplasm.

According to RightCare[9], the specialties in Gloucestershire with the greatest combined opportunity for improved outcomes and reduced costs are; Circulation, Musculoskeletal, Gastro-intestinal, Trauma and injuries and Cancer. In terms of potential **lives saved** per year (**outcomes**), NHS RightCare identified the following best programme opportunities in Gloucestershire:

- **Gastrointestinal -** Potential to save 12 lives if outcomes were comparable to 10 most similar CCG's, potential to save 27 lives if outcomes comparable to best five in group
- **Circulation -** Potential to save 30 lives if outcomes were comparable to best five in group
- **Trauma and Injuries** - Potential to save 14 lives if outcomes were comparable to 10 most similar CCG's, potential to save 27 lives if outcomes comparable to best five in group
- **Respiratory** - Potential to save 19 lives if outcomes comparable to best five in group

If supported the proposals within phase 1 of Fit for the Future will improve gastrointestinal and trauma outcomes.

5.2 National drivers/context

This section sets out the national context in which this business case has been developed.

The *Centres of Excellence* programme envisions that some specialties will have a greater separation of urgent care and planned care to improve availability of beds, access to appropriate senior staff, ensure fewer cancelled operations and improve waiting times. The benefits of separating planned and unplanned activity are cited by a number of sources.

The Royal College of Surgeons of England (RCS) recommends separating planned surgical admissions from emergency admissions (ideally on a single site), suggesting that this can result in earlier investigation, definitive treatment and better continuity of care, as well as reducing hospital-acquired infections and length of stay (particularly medical emergencies) wherever possible.[10] The King's Fund also states that professional guidance as well as the available research evidence support the separation of planned from emergency surgery (either geographically or through the provision of dedicated facilities and staff).

More recently, the NHS Long Term Plan[11] states that separating urgent from planned services can make it easier for NHS hospitals to run efficient surgical services. Planned services are provided from a 'cold' site where capacity can be protected to reduce the risk

[9] Source: PHE, RightCare, NHS England. Commissioning for Value: Where to Look. January 2017. NHS Gloucestershire CCG https://www.england.nhs.uk/wp-content/uploads/2016/03/gloucestershire-ccg-cfv.pdf

[10] RCS referenced in King's Fund (2014) https://www.kingsfund.org.uk/publications/reconfiguration-clinical-services/elective-surgical

[11] NHS (2019) https://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan.pdf

of operations being postponed at the last minute if more urgent cases come in. Managing emergency care on a separate 'hot' site allows trusts to provide improved trauma assessment and better access to specialist care, so that patients have better access to the right expertise at the right time. NHS England has confirmed that it will continue to support hospitals that wish to pursue this model.

It is recognised that separation of emergency end elective work can be achieved in a number of ways. There is time separation whereby clinicians do a block of emergency work, cancelling their elective commitments and then have a period of elective work with no emergency commitments. In addition there can be physical separation. This could be achieved by designated emergency and elective units on the same site or by separating the services to different sites. If complex cases are managed on a separate site from emergencies there needs to be adequate surgical and ITU support.[12]

GHNHSFT is identified in the NHS Long Term Plan as an exemplar for this model of care, citing our work with the national *Getting it Right First Time* (GIRFT) team to pilot separation of planned orthopaedics from trauma. This followed the GIRFT Orthopaedics report[13] which recommended the creation of 'cold' planned orthopaedic centres, either protected facilities within an existing hospital or separate sites. Provided the appropriate co-adjacencies are available to support high quality safe care, including appropriate medical care for the complex patient, separation can lead to reduced infection rates for patients and increased staff morale.

Coronavirus (COVID-19)

As a result of the pandemic, GHNHSFT has had to put in place a number of temporary COVID-19 service changes, the key principles of which are:

- To separate COVID and non-COVID pathways by site and by pathway to reduce risk of COVID transmission to and between patients and staff.
- To use our two hospital sites to achieve this by making CGH the focus for elective operating, cancer care & non-COVID diagnostic imaging and GRH as the 'front door' for acute emergency medical and emergency surgical pathways.
- To centralise key points of entry including the Emergency Department, acute medical take and emergency general surgery so we can better control flow in to hospital and separate three key pathways: COVID positive, suspected COVID and non-COVID patients.
- To designate the Intensive Care Unit (ICU) at CGH as a non-COVID unit - this is a key dependency for increasing cancer and planned care operating in this second phase. (Note this includes the ability to accommodate a COVID positive patient by exception, in the available side rooms).
- To design a model of care to accommodate both a continuation of the current level of COVID-positive patients as well as a possible second surge.
- To develop a recovery model that promotes public confidence in our services to ensure that the public recognises that both our hospitals are safe places to come to receive acute hospital services.

[12] See 10.

[13] GIRFT (2015) https://gettingitrightfirsttime.co.uk/wp-content/uploads/2018/07/GIRFT-National-Report-Mar15-Web.pdf

- To ensure our plans are in line with direction set by South West Regional Team and NHS England, namely:
    - Recovery programmes at institution level should complement system strategy and the longer term vision
    - A much greater separation between urgent and elective work by site and pathway
    - A way of operationalising segregation between COVID and non COVID
    - Virtual by default unless good reasons not to
    - Triage/single points of access/resources and control at the front end of pathways
    - Guidance provided in *Operating framework for urgent and planned services in hospital settings during COVID-19*, NHS England, May 2020.

5.3 Why improvements to current provision are needed

In the context of the national and county-wide picture of growing demand, improved technology and workforce supply challenges, the Trust's current configuration leads to specific clinical (quality), workforce and financial challenges which are outlined below.

5.3.1 *Clinical Challenges*

- 3 in 10 emergency general surgery patients have suspected gallstones. Currently less than 50% see an Upper GI specialist (rated 15 on Trust risk register).
- At times, senior surgical decision makers are in theatre and unavailable to review patients waiting for specialist surgical assessment in ED or Surgical Assessment Unit leading to delays in treatment.
- Emergency General Surgery admissions to CGH are not compliant with South West Clinical Senate 2017 review requirement for access to a Surgical Assessment Unit, or a 24 hour CEPOD list. There is also no access to ultrasound scans at weekends.
- Shared specialty access to emergency theatres (both sites) can lead to extended 'time to theatre' leading to sub-optimal EGS care (rated 15 on Trust risk register).
- National standards recommend all acute medicine patients to undergo consultant review within 14 hours of arrival. A recent NHSI 7 Day Service self-assessment showed that 67% of patients were seen by a consultant within 14 hours during weekdays, whilst at the weekend this dropped to 48%.
- Every year around 600 patients travel outside of Gloucestershire for image-guided surgical procedures e.g. Cardiology Primary Percutaneous Coronary Intervention (PPCI) that could be offered in-county with the right staff and equipment.
- Existing dispersed configuration of facilities for image-guided surgery reduce our capacity to offer minimally invasive techniques. There is clear evidence that these can reduce the need for more invasive surgery, reduce the physiological insult to patients and thereby reduce complications and hospital stays.

5.3.2 *Workforce Challenges*

- In a 7 month period in 2019 15% of shifts for emergency general surgery were not covered (390 shifts out of 2599). Rota gaps have increased by 46% in three years (rated 16 on Trust risk register)
- The Trust has a 43% vacancy rate for acute medical physicians. This is based on an establishment of 14 consultants, with only 8 posts filled.

- GI surgical trainees have reported negative feedback about workload and training environment. If this situation does not improve, the Deanery could withdraw trainees from the GI service in Gloucestershire impacting further on workforce and safety of care (rated 15 on Trust risk register)
- Due to a shortage of radiologists we are not compliant with The Royal College of Radiologists' recommendation that provision of a robust 24/7 Interventional Radiology service should be a "priority for all acute hospitals".
- Since May 2019 we have advertised three times for locum and twice for substantive interventional cardiologist recruitment, and have only successfully recruited 1 locum in this time. There are similar challenges with recruiting cardiac catheter lab nurses.

5.3.3 *Financial Challenges*

- Repatriation of patients going out of county for minimally invasive techniques would bring £460,000 additional income to the county with the potential for this to increase over time.
- The Trust's imaging equipment is recorded on the risk register as being out of date. A Managed Equipment Service contract worth £46m over 15 years will replace and maintain obsolete kit, but decisions are required on where to install the equipment for optimal productivity and improved patient outcomes.
- Image-guided surgery is currently offered in three separate sites in GHNHSFT, driving up the cost of equipment and storage, e.g. £80k consumables waste in 2017/18
- Workforce challenges outlined above lead to high agency and locum costs

5.3.4 *Performance Challenges*

The key performance measures as at December 2019 which indicate the need for improvements are:

- ED 4 hour target at 83.47%, although in line with agreed trajectory is short of the national 95% target
- Bed occupancy rate of 95.4% (average) compared with a desired occupancy of <92%
- Rate of emergency admission is slightly higher than peer group[14]
- Over 400 operations cancelled on the day for non-clinical reasons in the most recent 12 month period
- Activity income lost to patients travelling out of area for their procedure
- Staff turnover rate over 11% 2019/20

5.3.5 *Emergency General Surgery Challenges*

Since June 2019 the Trust has re-assessed the specific safety, quality and workforce risks associated with delivering the current configuration model outlined in section 4.4.5. A review of serious incidents and Datix reports demonstrates both an increasing number of incidents over time, as well as an increasing awareness of the fine margins between harm and no harm outcomes.

These risks were shared with regulators and partners at a single item Quality Surveillance Group (QSG) on 11th November 2019. The postgraduate deanery was in attendance at this meeting and approved the proposed changes to the delivery model set out in this document.

[14] GHFT is 32% ROA compared with 30% national (2018)

A number of mitigations have already been put in place and have ensured that the Emergency General Surgery (EGS) service has remained safe. However the Trust feels that it is impossible to ensure the provision of a safe EGS service on two sites for any significant period of time. There is an increased risk that the service will become unsafe, potentially overnight.

This is not a position that a responsible organisation or system can ignore. Failure to address this position would be to the detriment of our patients and potentially to future of our local hospital services. It is for this reason that the proposal is being pursued to make changes to the EGS service as part of the Fit for the Future process.

Risk Summary

The main risks relate to the combination of a structural issue with the way services are set up – the provision of EGS on two sites - increasing workload and sustained difficulty in staffing two rotas. This means that the EGS service has reached a point in which patients are being put at risk of harm despite all of the mitigations that have been put in place. Fundamentally this risk derives from the fact that, at times, senior surgical decision makers are in theatre and unavailable to review patients waiting for specialist assessment. Without further change this situation will get worse.

The risk relating to general surgery was first entered onto the Divisional Risk Register in 2016 and in August 2017 the risk was re-assessed and escalated to the Trust's corporate Risk Register; most recently this risk has been re-presented to reflect the distinct risk domains of quality, safety and workforce.

Several mitigations have been put in place including the provision of a Surgical Assessment Unit on the GRH site to support rapid, specialist assessment, improve flow of surgical patients through their pathway and to ensure the efficient use of specialist surgical staff.

This development has been generally positive and has resulted in a reduction in admissions and increased use of ambulatory pathways. However, this has not removed the structural issue of two site provision and by concentrating work in one area has compounded the issue for short periods of time when activity is at its highest and/or staffing at its lowest.

The table overleaf shows a summary of the Pre-COVID 19 Trust risk register entries and scores relating to EGS.

Risk ID	Title	Main Domain	Score (C x L)
S2275	A risk of unsafe surgical staffing caused by a combination of insufficient trainees, senior staff and increased demand resulting in compromised trainee supervision, excessive work patterns and use of agency staff impacting on the ability to run a safe and high quality surgical rotas.	Workforce	4 x 4 (16)
S2930	A risk to patient safety caused by insufficient senior surgical cover resulting in delayed senior assessment and delays to urgent treatment for patients	Safety	4 x 3 (12)
S3035	A risk to safe service provision caused by an inability to provide an appropriate training environment leading to poor trainee feedback which could result in a reduction in trainee allocation impacting further on workforce and safety of care	Workforce	5 x 3 (15)
S3036	A risk of sub-optimal care for patients with gall bladder disease and other sub-specialty conditions caused by a lack of ability to create sub-specialty rotas resulting in inequitable care and different clinical outcomes	Quality	3 x 5 (15)
S3038	A risk of sub-optimal care for EGS patients requiring surgical treatment caused by limited day time access to emergency theatres resulting in increased length of stay and poor patient experience.	Quality	4 x 4 (16)

Safety risk

Although the key risk to a safe, sustainable service is workforce, the safety risk now is scored at 4x3 (consequence x likelihood) reflective of major harm occurring on a monthly basis. A stretched workforce and increasing workload mean that patients have waited, at times, up to 11 hours to be seen on the Surgical Assessment Unit and in one case this has directly resulted in the death of a patient. In a number of other cases the delay to be seen by a senior decision maker has contributed to the harm reported in the serious incident.

Coronavirus (COVID-19)

Table below shows change in EGS risk scores pre & post temporary service change:
In GHFT risks are graded using the following score:

- **Extreme risk: 15 to 25 (consequence x likelihood)**
- **High risk: 8 to 12**
- **Moderate risk: 4 to 8**
- **Low risk: 1 to 3.**

Risk No.	Risk description	Risk Score - Prior to temporary centralisation	Risk Score - Following temporary centralisation
S2275	A risk of sub-optimal staffing caused by a combination of insufficient trainees, senior staff and increased demand resulting in compromised trainee supervision, excessive work patterns and use of agency staff impacting on the ability to run safe and high quality surgical rotas.	***Extreme Risk*** Workforce – 16 Statutory – 12 Finance – 10	***Moderate Risk*** Workforce – 6 Statutory – 6 Finance – 6
S3035	A risk to safe service provision caused by an inability to provide an appropriate training environment leading to poor trainee feedback which could result in a reduction in trainee allocation impacting further upon workforce and safety of care.	***Extreme Risk*** Workforce - 15	***High Risk*** Workforce - 9
S2930	A risk to patient safety caused by insufficient senior surgical cover resulting in delayed assessment and delays to urgent treatment for patients.	***Extreme Risk*** Quality – 15 Safety – 12 Statutory – 10	***Moderate Risk*** Quality – 4 Safety – 4 Statutory – 4
S3036	A risk of sub-optimal care for patients with specialist care and other sub-specialty care conditions caused by lack of ability to create sub-specialty rotas resulting in inequitable care and different clinical outcomes.	***Extreme Risk*** Quality – 15	***Moderate Risk*** Quality – 6
S3038	A risk of sub-optimal care for emergency surgical patients requiring surgical treatment caused by limited day time access to emergency theatres resulting in increased length of stay and poor patient experience.	***Extreme Risk*** Quality – 16 Safety – 9	***High Risk*** Quality – 12 Safety - 9
S3187 COVID	A risk of sub-optimal emergency surgical staffing caused by COVID-19 pandemic, increasing risk of patient safety due to delayed assessment and treatment.	***Extreme Risk*** Safety – 20 Workforce – 16 Business – 16 Statutory – 10	***Low Risk*** Risk now closed following Exec review.

Workforce risks

The workforce risk is scored at 5x3 and reflects two distinct risks; one relating to the risk of trainees being reduced or withdrawn from the service by the Deanery and the second relating to the impact of changes to current consultant practice if they were to limit the discretionary effort they provide to ensure services are delivered as safely and comprehensively as possible.

The loss of either the trainees or consultant support would have a catastrophic effect on the viability and safety of the service. Both the consultants and trainees have written to the Trust to express their concerns with the current situation and that it is not sustainable for any significant period of time.

The Deanery has written to the Trust to report the concerns of the trainees and request information on the Trust's plans to reduce the pressure on trainees while working on-call. Should the Deanery remove some or all of the trainees then there is the possibility that the EGS service could no longer continue.

The consultants have also expressed concerns about the sustainability of the current situation. This is increasingly likely to mean a choice between continued support for the emergency service or a reduction in support to elective surgery with an equally unacceptable impact on cancer patients, patients waiting 52 weeks and waiting times more generally.

Quality risks

The quality risk is scored at 3x5. By splitting the on-call surgical team over two sites it is impossible to ensure that patients are seen by an appropriately skilled sub-specialist surgeon. Upper GI surgeons will admit patients with colorectal problems and vice-versa. This is particularly an issue for patients requiring a cholecystectomy who may require a second admission if admitted under a colorectal surgeon (about 30% of emergency admission); or similarly a patient requiring a bowel resection may require a second operation for a reversal of colostomy if admitted under an upper GI surgeon. While this is not unsafe it has an obvious impact on quality and patient experience.

The Trust has controlled and mitigated the safety and workforce risks to the best of its ability. This has included changes in pathways; new Standard Operating Procedures; introduction of the Surgical Assessment Unit; funding of additional posts; creative workforce solutions including links to research, teaching and overseas recruitment; non-medical workforce solutions; and streamlining locum recruitment via an online App.

The fundamental issue that needs to be addressed is the requirement to provide access to subspecialist surgical care, without delay.

Section 8.3.2 sets out the details of the proposed changes.

Key Points

- **Demand for healthcare is increasing due to population growth**
- **Healthcare experiences disproportionate increases in demand associated with age, multi-morbidity and socio-economic factors. This is a national problem for the NHS.**
- **In Gloucestershire, splitting resources across two hospital sites contributes to quality, workforce, financial and performance issues which affect patient outcomes and staff recruitment and retention and efficient use of resources**
- **Furthermore, service fragmentation means that each year over 600 Gloucestershire residents are travelling out of county for care that we could otherwise provide locally**
- **There is a clear evidence base that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resource**
- **There are strong quality and safety drivers to support proposed changes to the emergency general surgery service**

6 Engaging with clinicians, patients the public and other stakeholders

In this section we seek to demonstrate that the Fit for the Future programme has engaged inclusively, innovatively and constructively with our internal and external stakeholders, most importantly with the residents of Gloucestershire and users of our services. In doing so we believe we have met the requirements of NHSE&I Guidance:

- Robust public involvement;
- To be proactive to local populations;
- To be accessible and convenient;
- To take into account different information and communication needs, and;
- To involve clinicians.

The Fit for the Future (FFTF) public and staff engagement programme started in August 2019 to seek views on the future provision of urgent and specialist hospital care in Gloucestershire. All feedback received was collated into a comprehensive Output of Engagement Report (please see Appendix 2) that has been used to inform the development of our potential solutions for future local NHS services.

Evidence of our collaborative approach can be found in the Healthwatch Gloucestershire Annual Report 2019-20 (see Appendix 7), which included the following:

> *During the year, we worked alongside our local NHS partners as they embarked on a far-reaching engagement project to review urgent and hospital care in Gloucestershire. Our aim was to make sure the needs, views and experiences of local people were placed at the heart of decision making about changes to services.*
> *Our staff and volunteers were involved in meetings, consultations, interviews, and workshops. We made sure that the consultation information was easy to understand and that the needs of local communities were considered at every point. Towards the end of the year, volunteers took part in 'Solutions Appraisal' sessions, to scrutinise new service delivery models.*

A summary of our key activities is summarised in this section.

6.1 Public Engagement

6.1.1 *What was the initial engagement about and what did we ask the public and staff to help us with?*

We said we think it's important to:

- ensure care is co-ordinated
- provide most care in or near home
- ensure high quality services in the right place: right staff, skills and equipment
- Have outstanding hospital care when you are unwell

We asked the public:

- what's important to them in getting urgent (not life threatening) same day advice and care
- to tell us what they think about our ideas for a 'centres of excellence' approach to providing specialist services at the two large hospital sites in the county
- to help us with developing potential solutions for some specialist services: Emergency and Acute Medicine, General Surgery and Image Guided Interventional Surgery

6.1.2 *What did we do during the initial public engagement and how many people got involved?*

- 1230 FFTF online surveys completed
- *1252 FFTF surveys (template) received from Cheltenham MP*
- 153 FoD Hospitals surveys completed
- 28 Public Drop in Events
- 12 Independently facilitated workshops
- 1 Engagement Hearing
- 13 Other events
- Staff communication and engagement
- Media advertising

- **Website** - 18,872 views of the One Gloucestershire website, incl. 4,755 views of the Fit for the Future engagement page.
- 1,800 visits to the Forest of Dean website
- 21 **Facebook** posts (non- paid for activity), with a total reach of 34,406.
- 4-week paid for **Facebook** advert that linked to the engagement section on the One Gloucestershire website. This achieved a reach of 57,440 with 82 shares.
- 49 **tweets**, with a total of 42,625 impressions.
- 7,000 Hardcopy engagement **booklets**

OVER 3300 local people participated in planned activities – but the focus of engagement is not about numbers it is about receiving qualitative feedback from a broad range of people

6.1.3 *Does the feedback reflect the views of a cross-section of people in Gloucestershire?*

We worked with **Inclusion Gloucestershire** to ensure the voices of people with protected characteristics were heard

We collected a range of demographic data from the FFTF survey respondents*

Age, Role, Postcode, Disability status, Carer status, Ethnicity, Religion/belief, Gender identity, Sexual orientation, whether Pregnant or recently given birth.

Respondents to the demographic survey questions broadly represent the local population profile. Exception are a high response rate from people with a Cheltenham postcode and people who identify as an unpaid carer.

All feedback received during engagement is collated, read and considered; no 'weighting' is applied to feedback.

6.1.4 *What were the main feedback themes?*[15]

6.1.4.1 Emergency and acute medicine

- **Cheltenham** Retain CGH A&E / Re-instate A&E 24.7 at CGH / CGH is a General Hospital so needs to retain 'general ' services
- **Centres of Excellence** Emergency Medicine is not a specialist service / GRH A&E won't have capacity to cope with increased demand / Some support for ED at GRH only
- **Quality/Equity/Sustainability** Safety risk – people will have poorer outcomes / Important: Quality of care/ Outcomes/Safety/Patient experience / Not sustainable as it is, the system is going to have to change
- Ensure **mental health** is considered and built into the system
- **Communications/pathways** NHS 111 sends too many people to A&E / Better communications – public don't know where to go
- **Access/Population** Access from the east of the County = Inequality / A&E attendance increased by poor GP access / Travel delays / Poor public transport / Car parking charges / consider population growth
- **Workforce / Technology** Attract next generation of A&E clinicians / More joined up way of providing care / Make the most of diversity of workforce / Ensure sufficient numbers of staff, with appropriate mix of skills to deliver range of services required / Focus on staff recruitment and retention

6.1.4.2 General (incl. Emergency) Surgery

- **Cheltenham or Gloucester** Retain General Surgery at CGH and GRH / Centralise General Surgery at GRH
- **Centres of Excellence** Centralising emergency general surgery enables running of a daily emergency surgical clinic / would one hospital site have capacity for all emergency general surgery beds?
- **Access/Population** Concern about having a site without critical care or general surgery
- **Workforce** Attract next generation of sub-specialist surgeons to Gloucestershire

6.1.4.3 Image Guided Interventional Surgery (IGIS)

- **Cheltenham or Gloucester** Establish IGIS at both CGH and GRH / at GRH only/ or at CGH only
- **Centres of Excellence** /Sustainability Why aren't we doing this already?
- **£Funding** Cost effective to establish IGIS on one site
- **Access** Surprise and shock at current situation (patients having to go out of county for treatment)

6.1.5 *Responding to engagement feedback*

Our response to the engagement feedback is multifaceted and is ultimately scrutinised when our preferred option(s) is/ are put forward for consultation; where we will describe the precise changes that are proposed and identify the implications (and mitigations) to the

[15] These comments are extracted from our Output of Engagement Report and presented *verbatim*

issues that concern the people of Gloucestershire. However, at the PCBC stage we have sought to utilise feedback in a number of ways.

6.1.5.1 Solutions Appraisal Phase

At the solutions appraisal phase we explicitly sought to use engagement feedback as a guide to likely acceptability of any solution and this was included in the desirable criteria applied at the appraisal workshop (see Section 7.3.3). The mechanism for doing this was to use the specific questions identified during engagement (Section 6.5.4 of the Output of Engagement Report details *Suggestions and Questions - Improving specialist hospital services and developing 'Centres of Excellence')*. The original questions had been reviewed by the clinical Workstreams and programme governance and responses were added to each. These were provided to all appraisal workshop scorers in advance and then discussed and scored by consensus and these results were used as part of the overall assessment process (see Section 7.3.9.2).

In many cases the questions aligned to the feedback themes listed above while others focused on particular concerns. The questions and responses can be found in Appendix 3. It should be noted that questions are included *verbatim* and for completeness all 40 questions are listed although in some cases they were specific individual/ personal queries that will be addressed via a separate process.

6.1.5.2 Responding to key themes

A key theme, and the subject of many of the direct questions, was Cheltenham Emergency Department /A&E. During the engagement phase it became necessary to confirm there were no proposals to close Cheltenham ED/A&E and we have publicly committed to the future of the Accident and Emergency (A&E) Department in Cheltenham where the service will remain consultant led and there will be no change to the pre-COVID opening hours. There was also a request to review the re-opening of Cheltenham Emergency Department overnight, with corresponding transfer of capacity from GRH to CGH for acute medical admissions overnight. In response we added this to the Medium-List and it was fully appraised at our solutions workshop; details can be found in Section 7.3.11.

The physical capacity of Gloucestershire Royal Hospital (GRH) to accommodate some of the proposals, in terms of both clinical space and patient and carer access (e.g. car parking), was a concern for the public. Similarly there were concerns expressed regarding travel time impacts for services that were centralised onto a single site. Section 8 includes details of the individual clinical models and travel impact analysis.

A key theme for the public, and core to our Case for Change (section 5), is the impact of proposed changes on clinical staff numbers, recruitment and retention. This is detailed in Sections 5.3.2.

The principles behind *our Centres of Excellence* were supported by many of those responding to engagement and were strongly endorsed by the members of the independently organised Citizen's Jury (see Appendix 4). When asked what is most important for the public to know about the *Centres of Excellence* model, the Jury view included:

- *Centres of Excellence is driven by compelling clinical and business arguments, but may result in significant changes and some barriers to how people access healthcare services including Emergency & Acute care;*

- *It is one part of a significantly broader strategy to deliver a world class integrated care service within the county but is not designed to solve all current problems experienced by NHS hospitals;*
- *NHS clinical staff themselves support the Centres of Excellence approach;*
- *Outstanding patient care and service is at the forefront of Centres of Excellence model of health service deliver*

There is recognition that these are complex issues and there is a balance of quality and outcomes benefits, potential staff benefits and negative impacts on some members of the public using these services. This is clearly captured in our appraisal assessments (in sections 7.3.11 and 8), with full details in Workshop Evaluation – Scorecards (Appendix 5) and Workshop Evaluation – rationale behind scores (Appendix 6).

Finally, the engagement process drew attention to the current pathway for many Image Guided Interventional Surgery (IGIS) patients having to access services out-of-county. There was surprise and shock at current situation and concerns *why aren't we doing this already?*

6.1.6 *Integrated Impact Assessment (IIA)*

Our IIA and more specifically the Equality Impact Analysis (see Section 10.3) has identified some groups that may be differentially impacted so our Consultation Strategy and Plan (Section 13.2) has been developed to ensure we fully capture the views and impact of our proposals on these groups.

6.2 Clinical Workstreams

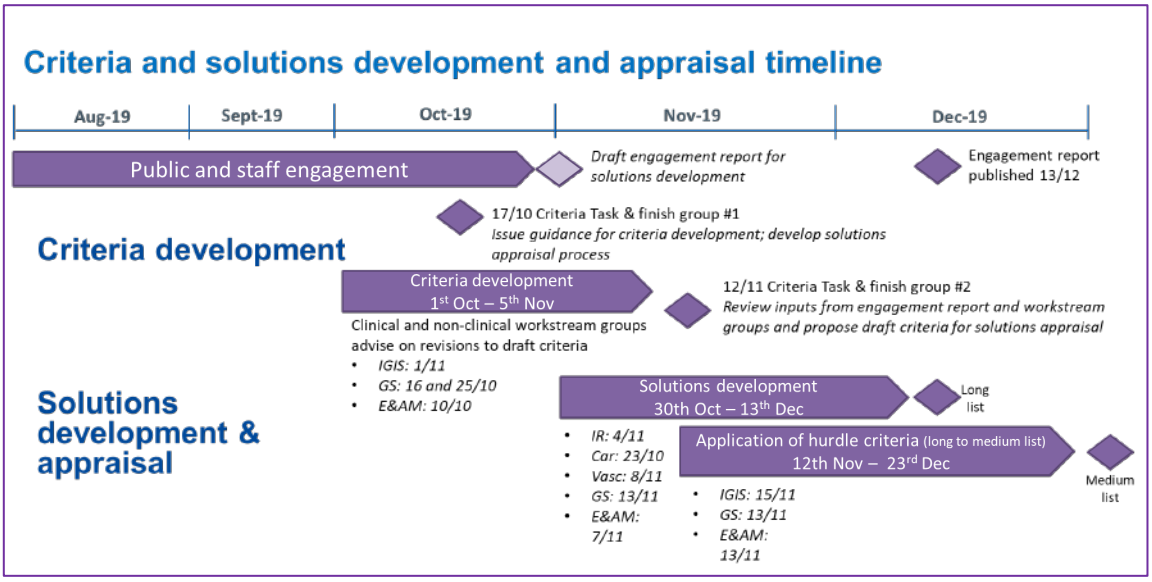
Section 4.1.1 described the governance for the *Centres of Excellence* work, which has clinical leadership and engagement embedded throughout. A key pillar of the programme's clinical leadership approach are the Clinical Workstream Groups.

The three clinical specialties identified as Phase 1 (Image-Guided Interventional Surgery, General Surgery and Emergency & Acute Medicine), identified *transformation delivery groups* to prepare for Public Engagement and Consultation for future configuration of their services, as part of the system-wide *Fit for the Future* programme. These were either existing groups or convened for this specific purpose. Similar groups were convened, and now disbanded, to develop the existing reconfigured clinical models for trauma & orthopaedics and gastroenterology.

The groups met monthly and were clinically led with membership including consultants nurses, therapists and scientists, , divisional and operational management, GHNHSFT clinical and Trust leadership, HR, information, finance, patient engagement leads and a Governor.

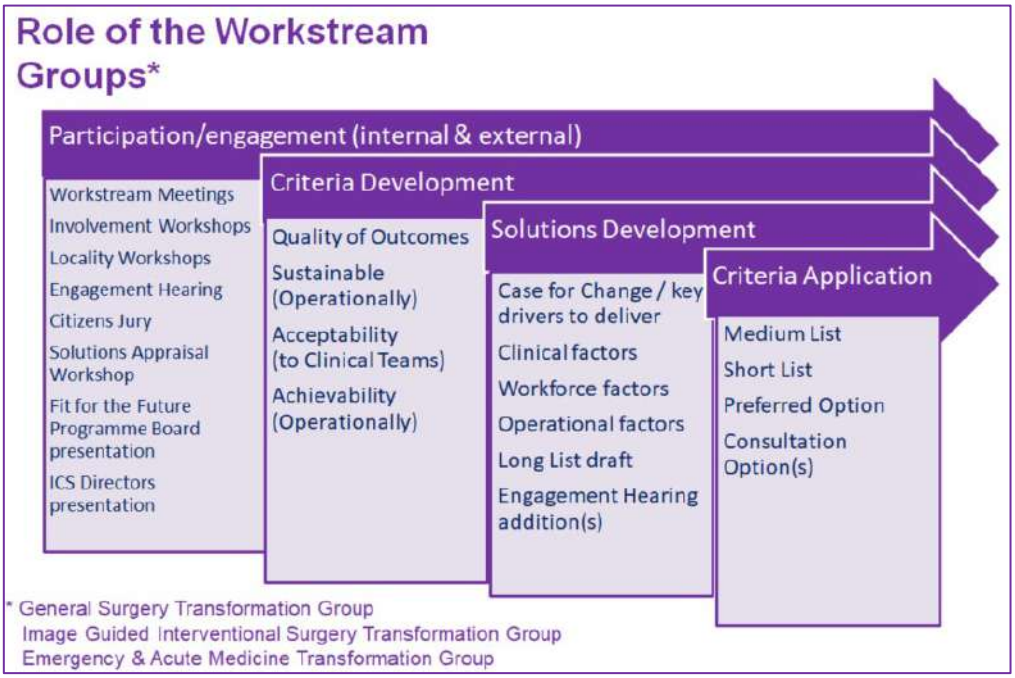
The Transformation Delivery Groups played a key role in the solutions development process including Long Listing and contributed to the appraisal criteria development process.

The graphic overleaf illustrates the input of the Workstream groups (IGIS, GS, E&AM) into the development of the Medium-List.



Other engagement activities included; information stands installed in specialties staff rooms with questionnaires and feedback forms to gain their thoughts on the long list of proposals; drop in sessions; a series of specialty specific engagement workshops; staff surveys specifically regarding their services including one designed for those working in the specialty and another for those who work with the specialty team.

Members of the groups also participated and presented at specialty-specific GP and public workshops. An example Terms of Reference can be found in Appendix 8 and a schematic summary of their role is provided below:



6.3 Staff communication and engagement

All staff working across NHS and care organisations were encouraged to participate during the FFTF Engagement phase. Significant involvement and communication activity has taken place. This included:

6.3.1 *Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT)*

In total 1624 staff from across GHNHSFT and the wider Integrated Care System (ICS) were asked for their views on the programme and to contribute their ideas to its development between January and October 2019. Staff involvement activities to develop the clinical model during that time period included:

Internal Governance

This is described in section 4.1.1, but the clinical Workstream groups and *Centres of Excellence* Advisory Group played a key role in the articulation of clinical models and potential solutions. Between January and October 2019 the *Centres of Excellence* thinking was developed through in the following meetings:

Centres of Excellence Delivery Group	10 x monthly meetings
Centres of Excellence Advisory Group	Feb, Mar, Apr, Jul, Oct
Trust Leadership Team	Apr, May, Jun, Jul, Aug and standard programme progress reports in Sep, Oct
Trust Board strategy sessions	May, Jun, Jul, Oct

Semi-structured interviews

These were designed to gain widespread clinical involvement in the clinical model options for *centres of excellence*. Clinicians from all in-scope specialties for the three phases were invited to a semi-structured interview with the programme team and clinical leads between January and April 2019; 60 interviews with 72 staff were completed.

As part of this process the programme team also attended the six ICS Clinical Programme Groups covered by the scope: diabetes, eye health, circulatory, respiratory, frailty, MSK. This was to ensure the CPGs were aware of the programme, and to ask for their views on clinical configuration and future pathway developments which might affect it.

Finally, the development of the clinical model was discussed with the ICS New Models of Care Board in January (initial process) and March (update) and a workshop session in May to present and test the emerging thinking on the clinical model options. Approximately 70 clinical staff from the wider ICS were involved in the CPG and NMOC discussions.

This work allowed the team to explore key clinical configuration issues raised by the South West Clinical Senate in 2017, coming up with further potential solutions around configuration and clinical adjacencies. It also helped to refine the vision from a concept of planned/emergency sites, to one in which each specialty could be optimised in several ways over two or more sites depending on the mix of specialties and services in each place. The options by the end of the process included: centralisation and co-location as well as separation (planned/emergency flows).

Model of Care workshop - 'Conversation not conclusion'

A workshop in April 2019 was attended by 79 people including 14 public representatives. It was designed to enable conversation and capture a range of views, rather than seek decision or consensus. Through an interactive format we wanted to: get participants' input into the *Centres of Excellence* Case for Change and suggestions so far; raise awareness of the *Centres of Excellence* vision; and gather feedback and content to be used for further involvement and engagement activities as well as material for potential business cases and public engagement/ consultation. This was an interactive day, with the first session designed around a 'poster gallery' setting out items from the case for change, and the remainder of the day run in 'world café' style allowing participants to interact with a range of elements in the *Centres of Excellence* model.

Staff workshops

Four staff workshops were held in June 2019. These were advertised across all divisions in the Trust and senior leaders were encouraged to release staff across all bands and disciplines to be able to attend. The same workshop was repeated four times in the morning and afternoon at both sites and 40 staff contributed their views.

Staff engagement roadshow

The objective of the roadshow was to get to every area of the Trust to speak to staff, reaching 1321 people face to face. During the visits, leads distributed Fit for the Future engagement booklets and flyers with the website address and a guide to finding the e-survey. They counted the staff they spoke to and completed a feedback form with key messages and any further actions required.

GHNHSFT has produced a comprehensive Staff Engagement Report providing further detail on the process and outcomes of the activities outlined above, which can be found at Appendix 9.

6.3.2 *Gloucestershire Health and Care NHS Foundation Trust (GHCFT)*[16]

- August – hard copies of the FFTF booklets were distributed to all 2g and GCS sites
- August 20, FFTF launch covered on both 2g and GCS Trust intranets
- August 21, FFTF launch covered on both 2g and GCS Trust websites
- August 29, information about programme of engagement and ways to get involved shared at Senior Leadership Network and monthly senior leaders' gathering (joint event for 2g and GCS)
- September 9, information about engagement and methods for responding shared via Team Talk –a monthly management cascade briefing (joint for 2g and GCS)
- September 12, story on both Trust intranets updating on FFTF process and giving dates of community workshops and other engagement methods
- September 19, story on GCS and 2g intranets sharing letter from Medical Directors, encouraging response to FFTF engagement
- October 9, story on GHCFT website regarding Citizens' Jury recruitment getting underway
- October 14, story about FFTF engagement closing 'today' published on GHCFT Trust intranet

[16] * previously Gloucestershire Care Services NHS Trust and 2gether NHS Foundation Trust - the organisations merged on 1 October 2019

6.3.3 *NHS Gloucestershire CCG*

The CCG held an engagement session as part of its Accountable Officer led Team Brief session, included articles and updates in its Team Brief e-bulletin, update features on the Intranet homepage featuring engagement opportunities. Articles were also placed in the weekly CCG 'What's New This Week' GP member practice e-bulletin. The CCG introduced FFTF discussions at a variety of county meetings such as Integrated Locality Partnerships and the New Models of Care Board.

Clinical Commissioning Annual Event – GP workshops

The Annual GP Commissioning Event provided an opportunity for GPs from the across Gloucestershire to come together to participate in the FFTF Engagement. The Emergency and Acute Medicine and General Surgery workshops used a Question and Answer and comments format

6.3.4 *Gloucestershire County Council (GCC)*

Gloucestershire County Council Health Overview and Scrutiny Committee Members have received regular updates on the FFTF programme and engagement. Copies of the engagement booklet have been available to elected members and staff.

Members of GCC staff involved with the development of the Gloucestershire Health and Wellbeing Strategy have joined several of the FFTF engagement events to promote the Strategy and to participate in discussion groups.

6.3.5 *Independently facilitated workshops – public and staff*

A series of independently facilitated workshops were held between August and October 2019. Each workshop focussed on a specific topic; General Surgery, Image Guided Interventional Surgery and Acute and Emergency Medicine. An objective of the workshops was to achieve discussions in a *balanced room* in which the opinions of neither professionals nor lay participants were allowed to dominate.

6.4 Other Stakeholders

6.4.1 *Neighbouring CCGs*

The FFTF Programme team have been in contact with neighbouring CCGs including:

- Bath and North East Somerset, Swindon and Wiltshire
- Bristol, North Somerset and South Glos
- Herefordshire and Worcestershire
- South Warwickshire
- Oxfordshire
- Monmouth (Aneurin Bevan Health Board)

The engagement includes sharing information on the programme scope, telephone calls to discuss potential impact, exchanging of activity information and agreements to build relationships and share information as the preferred option(s) are finalised.

In accordance with NHSE&I Guidance letters of support from neighbouring CCGs can be found in Appendix 33.

6.4.2 *Health Overview and Scrutiny Committee*

Throughout both the One Place, and now, the Fit for the Future Programmes regular updates on the FFTF programme and engagement have been provided to the Health Overview and Scrutiny Committee (HOSC) and the Outcome of Engagement report was presented and discussed with members in January 2020.

Coronavirus (COVID-19)

As a result of COVID-19 the ICS has actively engaged with the HOSC regarding the temporary service changes and will continue to present regular updates. Our intention is that these proposals and our plans for public consultation will be tabled at the HOSC on 22nd October 2020.

There is no national definition of 'significant variation' set out in the legal duties relating to engagement and consultation. Gloucestershire ICS partners have developed with the GCC HOSC (with input from Healthwatch Gloucestershire) a Memorandum of Understanding regarding the local definition of key terms; this PCBC is drafted on the basis that the proposed models of care will fall within such a definition. Accordingly, as part of the NHSE&I Stage 2 process this PCBC is drafted on the basis that public consultation is required and details of our consultation proposals can be found in Section 13 and Appendix 22.

As part of our engagement we are also in contact with neighbouring HOSCs.

6.4.3 *Deanery*

The Deanery surgical clinical tutor and deanery representative have been in contact with the GHNHSFT training programme director for surgery to discuss how we are responding to the concerns raised. Further work is ongoing with the Director of Medical Education, Training programme directors and Clinical Tutors to review the training opportunities that the future configuration of services and will provide. This will then be shared and discussed with the Programme Directors and Heads of School for Medicine and Surgery. Our response can be found in Section 9.2.3.8.

6.4.4 *Neighbouring Hospital Trusts*

The FFTF Programme team working with colleagues at GHNHSFT have been in contact with neighbouring Trusts, sharing information on the programme scope, telephone calls to discuss potential impact, exchanging of information and agreements to build relationships and share information as the preferred option(s) are finalised.

6.4.5 *MPs*

The ICS Executives are in regular communication with local MPs and this has included proposals within scope of the Fit for the Future Programme. Further details can be found in our Consultation Strategy and Plan (Appendix 22).

Key Points

- **The Fit for the Future programme has engaged inclusively, innovatively and constructively with our internal and external stakeholders, most importantly with the residents of Gloucestershire and users of our services.**
- **There is clear evidence of clinical leadership and engagement in the development of the options/ preferred model**
- **Front line clinicians and other staff have been involved in developing proposals and in their engagement.**
- **Clinicians have been at the centre of our case for change which is based on the best available evidence.**
- **Our ICS leadership (Chairs, accountable officers, chief executives and medical directors), have collective and personal leadership and accountability when considering the development these proposals.**
- **We have and will continue to engage with our neighbouring Commissioners, providers and HOSCs.**

7 Developing clinical models

7.1 A structured process

The Fit for the Future Programme has, from the outset, had a clear process in place to develop its clinical models through a combination of innovative ways to involve local people and staff (from a survey and 'drop in' events, independently facilitated workshops, an engagement hearing, a citizens jury and culminating in an inclusive and transparent solutions appraisal process), a clear governance structure and agreed and delivered outputs.

In Section 6 we clearly demonstrate that this has been a structured, clinically-led process to develop potential new approaches for services, the details of which are presented in Section 8; and comprises:

Building a clear Case for Change (Section 5) - This involved describing the local population's health and care needs now and into the future, setting out how services are currently provided and highlighting the challenges faced by current health and care services now and in the future as they seek to meet the needs of our local population.

Defining evaluation criteria (section 7.3.1), against which different *Centres of Excellence* models for the future have been assessed. These were heavily shaped by feedback from the pre-consultation engagement phase.

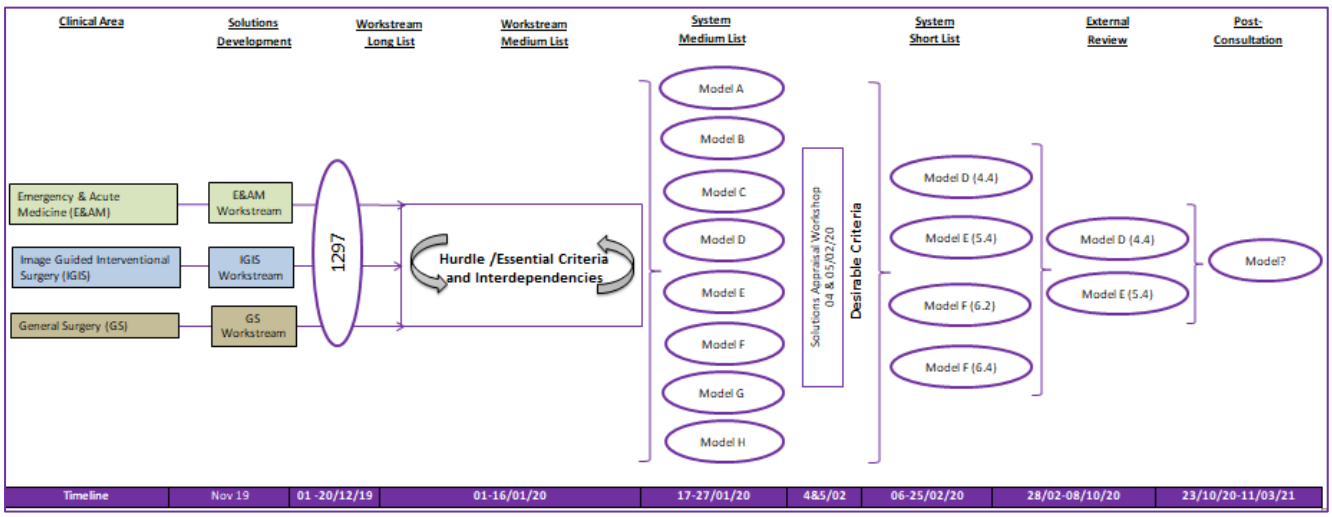
Developing best practice care pathways and models of care. This first involved drawing on local, national and international exemplars.

The **shortlisted options** have been evaluated against the agreed criteria, including modelling of activity and financial impacts; detailed in Section 11.

Building on the evaluation of options, shortlisted options have been further tested for safety, feasibility and viability both internally (by the ICS and organisational governance) and reviewed by the South West Clinical Senate and NHSE&I.

7.2 Solutions Development Process – Steps and Timeline

A schematic of the process and high level timeline is presented below:



7.3 Evaluating clinical models

7.3.1 *Criteria Development*

We have undertaken extensive engagement and used an iterative process to develop our evaluation criteria, this included:

- Established a Criteria Development Task & Finish Group including Public/patient representatives, public engagement leads and clinical Workstreams.
- Desktop research of national good practice
- Direct contact with other areas/ systems
- Review of draft proposals during public engagement phase
- Significant redrafting
- 2nd stage review by Clinical Workstreams, ICS New Models of Care Board and ICS Directors
- Citizens Jury (CJ) review of criteria domains and triangulation of CJ outputs with proposal
- Finalisation of criteria for use in solutions appraisal workshop

7.3.1.1 Review of draft proposals during public engagement phase

At all 12 of our public workshops we asked attendees to consider the question *'what is important to you'* to assist with the development of our evaluation criteria for potential solutions. A facilitated group exercise at each workshop explored the areas of relative and most importance providing an important step in developing selection criteria for use in any further decision-making processes following this initial engagement phase. A set of 'draft' evaluation criteria was shared with workshop participants to promote these discussions. As part of a dynamic and responsive engagement process, following feedback received at the first workshop, the 'draft' criteria were adapted for subsequent workshops discussion. Details of the feedback can be found in the Output of Engagement Report (Appendix 2).

7.3.2 *Hurdle/Essential Evaluation Criteria*

The agreed process to *"take solutions off the table"* was to apply hurdle or essential criteria to the individual Workstream Long Lists. These were identified in the draft Pre-Consultation Business Case (PCBC) in July 2019 and following engagement feedback we added fifth criteria in relation to the Case for Change; these are listed as follows:

- Address the issues identified in the Case for Change
- Supports the delivery of high quality care across Gloucestershire, ensuring provision of a clinically safe service.
- Achievable and able to be delivered in a timely and sustainable way.
- Affordable and offers best value for money, making the most of the Gloucestershire pound
- Supports sustainable ways of working and facilitates both recruitment and retention of our workforce.

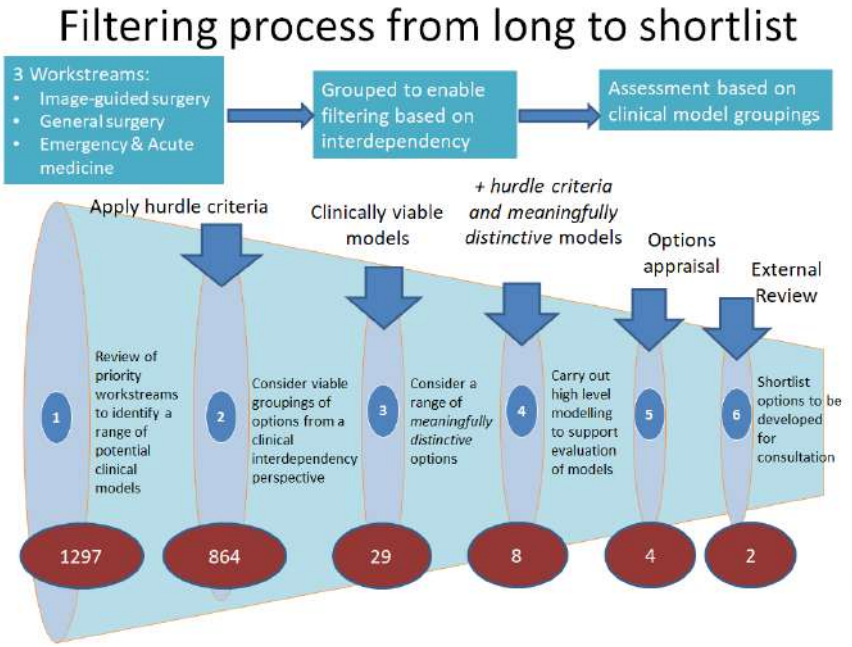
7.3.3 *Desirable Evaluation Criteria*

The process described in Section 7.3.1 culminated in the development of seven criteria domains (each with a sub-set of questions); the full list can be found in Appendix 10; however a summary is presented below:

Quality of care (10 questions)
This section included questions to evaluate clinical effectiveness, patient outcomes, patient and carer experience, continuity of care, the quality of the care environment, self-care, patient transfers, travel time impact and the management of risk.
Access to care (10 questions)
This section included questions to evaluate the impact on patient choice, simplifying the offer to patients, travel burden for patients, carers and families, waiting times, supporting the use of new technology to improve access, improving or maintaining service operating hours and locations, impact on equality and health inequalities and accounting for future changes in population size and demographics.
Deliverability (8 questions)
This section included questions to evaluate the expected time to deliver, meeting the relevant national, regional or local delivery timescales, access to the required staffing capacity and capability, support services, premises/estates and technology to be successfully implemented.
Workforce (12 questions)
This section included questions to evaluate the impact on workforce capacity / resilience, optimising the efficient and effective use of clinical staff, cross-organisational working across the patient pathway, flexible deployment of staff and the development of innovative staffing models, staff health and wellbeing, recruitment and retention, maintaining or improving the availability of trainers, enabling staff to maintain or enhance their capabilities/ competencies, the travel burden for staff and clinical supervision.
Acceptability (1 question)
This question seeks to evaluate if the model has satisfactorily taken into account, and responded to, the Fit for the Future Outcome of Engagement Report

7.3.4 *Solutions Development Stages*

The diagram below illustrates the stages of our solutions development process and details of the events and meetings can be found in Appendix 36.



7.3.5 *Step 1: Developing a Long-List*

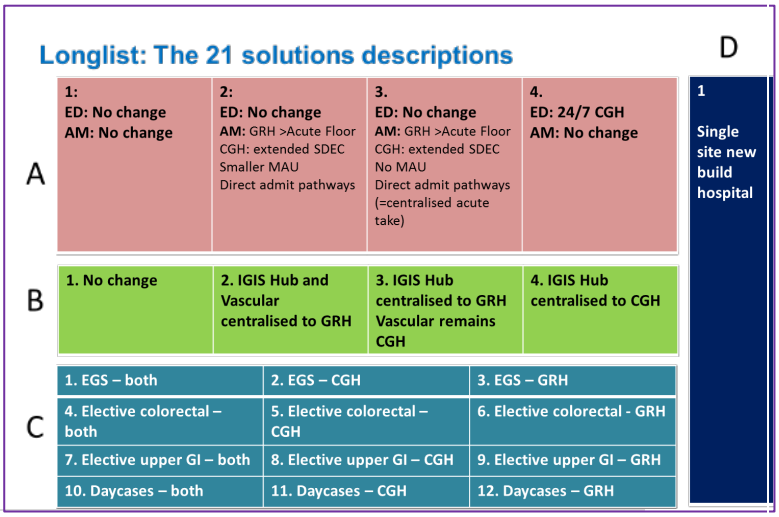
The Long-List was developed separately by the three Workstreams:

- Image-Guided Interventional Surgery
- General Surgery
- Emergency & Acute Medicine

Each Workstream held workshops using pre-arranged and bespoke meetings between 30th October and 13th December 2019. All Workstreams had access to the following documents to support development of the Long-List:

- the draft *Outcomes of Engagement Report* to ensure the Long-List reflected feedback from the public engagement phase, including notes from the three independently facilitated *Solutions Development Workshops* with a balanced room of lay and service representation
- a modelling baseline report including protected characteristics data, benchmarking and activity
- a draft *Baseline Impact Report* to provide context on protected characteristics, inequality and travel

This led to 21 separate solutions descriptions, as illustrated, where A = Emergency & Acute Medicine, B = Image Guided Interventional Surgery, C = General Surgery D= New build single hospital:



Each solution has its own supporting document setting out the clinical model, adjacencies and potential impact. There are 1297 possible variations of the solutions descriptions above.

It should be noted that the system intends to consult on the long-term configuration of Trauma & Orthopaedics and Gastroenterology as part of this process. These two specialties are only considered in two variants for each: continue the new configuration, or revert to the previous delivery model. These were therefore not factored into the process until Step 4.

7.3.6 *Step 2: Applying the Hurdle Criteria*

The clinical Workstream groups were asked to review the draft Long-List solutions against the Hurdle Criteria outlined above, and provide recommendations about any solution which did not meet the hurdle criteria, along with supporting evidence. Their recommendations were discussed by GHNHSFT Executive Team on 10th December and at *Centres of Excellence* Advisory Group for further discussion on 11th December.

Two solutions were recommended for removal due to failure to clear the hurdle criteria set:

Solution ref	Descriptor	Hurdle not cleared	Rationale/evidence
D1	Single site new build hospital	1, 3, and 4	Although 'Gloucestershire 2050' references a vision for a new acute hospital for the county, within the 10 year timeframe of this programme a new hospital is not part of the ICS or Trust vision, and the supporting capital is unlikely to be available to make it affordable and therefore achievable.
C1	Emergency general surgery on both sites (CGH and GRH)	1 and 5	High level workforce risks exist associated with continuing delivery of this 'current state' configuration. Assessed as unsustainable in the short to medium term on this basis, and therefore also does not meet Case for Change.

7.3.7 *Step 3: Group into clinically viable models*

The next stage was to bring the three Workstream solution descriptors together to eliminate any combinations of solutions that did not form 'clinically viable' models. This process was started by *Centres of Excellence* Advisory Group on 11th December 2019, and then discussed further by the clinical Workstream groups. There were several recommendations and suggestions from this discussion, which can be summarised in three themes:

- combinations to remove
- combinations/solutions that can be set aside to become variants on distinct models later
- other considerations

7.3.7.1 Combinations/solutions to remove

C2 (centralise Emergency General Surgery to CGH) was assessed as unviable due to clinical adjacencies, in particular the key clinical adjacency with paediatrics and trauma. Paediatrics is relevant because, in GHNHSFT, the general surgery team look after children with surgical emergency conditions. In Gloucestershire, paediatrics is centralised at GRH and the case for change that led to this configuration still stands and it is not possible or desirable to either revert to a split-site Paediatric Service or centralise paediatrics to CGH. Trauma is currently centralised to GRH as a pilot and the programme intends to consult on this becoming a long-term solution.

The combination of A3 (centralised acute medical take) and B4, centralise 24/7 Image-Guided Interventional Surgery hub to CGH, was assessed as non-viable due to the clinical linkage between the acute medical take and cardiology – if the acute take was on one site and the 24/7 IGIS hub on a separate site, there is a risk that 'chest pain' patients routed to the 24/7 IGIS hub that did not need interventional cardiology but the services of acute medicine would need to be transferred cross site.

Solution A2 (smaller MAU in CGH) was deemed sub-optimal and not a viable alternative solution, particularly when considered alongside the only remaining viable emergency general surgery solution (centralise to GRH) and was recommended to be removed from further consideration.

7.3.7.2 Viable solutions/combinations that can be set aside as variants on preferred model(s)

A number of solutions were identified as being theoretically viable but not drivers for a clinical model, or contributing to meeting the case for change. An example of this was splitting the (currently centralised) upper GI elective/planned surgical service across both sites. These solution combinations were retained, but discounted from the proposed model variants.

7.3.7.3 Other recommendations:

The A1 (no change in emergency and acute medicine) and B1 (no change in image-guided interventional surgery) options did not clear hurdle criteria as they did not meet the case for change. They were retained as a comparator in the 'no change' scenario.

A4 (re-open CGH ED overnight) was not deemed compatible in combination with C3 (centralise emergency general surgery to GRH), the only remaining EGS solution. However, it needed to remain on the list for further evaluation due to the amount of public feedback asking for it to be considered (see Section 6.1.5.2). All other A4/C3 combinations are discounted.

The effect of these recommendations resulted in 14 remaining solutions descriptions, of which 10 were variations on the current model. Allowing for the combinations that were held for consideration later, this left 29 potentially viable configurations.

7.3.8 *Step 4: Meaningfully Distinctive options*

At this stage the aim was to reduce the 29 variants to a Medium-List of options that differ sufficiently from each other to be compared and evaluated. On this basis, **eight options** were evaluated at our Solutions Appraisal Workshops in February 2020. Some of these had multiple variants and so the configuration which allowed the most distinction between this option and others was used to ensure the proposed change was clear. All viable variants were still available to be applied to solutions that scored well in appraisal workshop.

7.3.9 *Step 5: Solutions Appraisal Workshop*

The Fit for the Future (FFTF) Programme aimed to put in place an evidence-based, transparent and inclusive solutions appraisal process that enabled a broad range of participants to help shape our emerging solutions and has met its statutory assurance requirements. The objective of the Solutions Appraisal Workshop was to debate, discuss and assess the working ideas (*Medium-List)* against a set of evaluation criteria and to discuss and agree the score each group will give to each of the solutions and models. The process established a hierarchy (the *Short-List)* and the rationale for them, allowing further detailed analysis to be undertaken that will provide material to the decision making body to take

account of in deciding which option (the *Preferred Option)* or options are taken forward to consultation.

7.3.9.1 Format

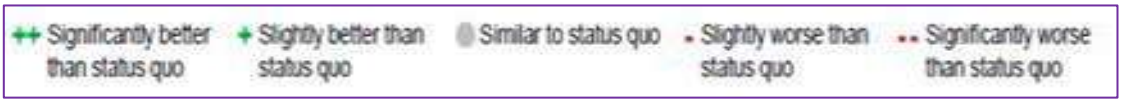
Workshops took place on 4th and 5th February 2020 with 30 scorers per day selected to represent a range of stakeholders and evenly distributed into 4 facilitated groups:

- 49% clinical (incl. Workstreams, Primary Care, mental health, ambulance service and ICS clinical leads)
- 32% public/patient representatives (incl. members of our Citizens Jury, Solutions Criteria Task & Finish Group and our Integrated Impact Assessment Reference Group)
- 14% ICS organisational leads (incl. strategy and finance)
- 5% other stakeholders (incl. public health and social services)

7.3.9.2 Assessment Process

The process to develop the evaluation criteria is described in Section 6.1. Whilst there were seven domains developed, five were scored at the workshop (quality of care, access to care, deliverability, workforce and acceptability) and two (value for money and strategic fit), were not scored due to insufficient information available at the time.

The assessment method chosen was to compare Solutions to the status quo and record if:



Scorers were provided with a range of information to support the process including:

- Baseline Integrated Impact Assessment (see Appendix 11)
- Evaluation Criteria Information – description of "what would be better" and "what would be worse" for each Solution for every question (see Appendix 12)
- Travel Impact Analysis
- Output of Engagement Report (see Appendix 2)

The scoring was a two stage process:

1. **Online questionnaire**: all the information was sent in advance and scorers completed individual assessments (including comments), of the solutions/models they had been allocated, prior to the workshop. Over 60% of scorers completed the on-line assessment indicating a high level of engagement and commitment.
2. **Workshop consensus**:
    - scorers were given copies of their assessments
    - facilitators shared the online results for each question
    - A discussion took place referencing the workshop information and comments
    - A consensus score and any comments were agreed and recorded

Each of the eight models was assessed twice (once on each day); however given that a number of solutions were components of a number of models, each Solution was assessed between two and eight times.

7.3.9.3 Workshop Short-List

The scores and comments from the workshop were collated to provide an overall position for each solution and scorecards produced to assess if they were to proceed to the Short-List. The scorecards for all evaluated models can be found in Appendix 5

Details of the Models are presented in Section 8.

Off the Short-List

- Model A – revert to original Gastro/T&O configurations
- Model C – re-open Type 1 CGH ED overnight
- Models G & H – on the basis that solution C8 (elective/ planned Upper GI to CGH) was ruled out

On the Short-List

Fixed items that are common to all models:

- A3 – centralise acute medical take to GRH
- C3 – centralise EGS to GRH
- C11 – centralise general surgery day cases to CGH

Variable items:

- B2 (24/7 IGIS hub and vascular surgery to GRH , IGIS spoke at CGH)
- B3 (24/7 IGIS hub to GRH. IGIS spoke and vascular surgery at CGH)
- C5 (Centralise elective/ planned colorectal to CGH)
- C6 (Centralise elective/ planned colorectal to GRH.)

7.3.9.4 Workshop Evaluation – rationale behind scores

A summary of the criteria domain evaluation scores and comments for Short-List solutions is provided in Section 8 whilst Medium-List Solutions rejected following evaluation can be found in 7.3.11.1.

For completeness, the Solution to revert to original Gastro/T&O configurations (which was rejected following evaluation) is included in Section 8 as this is currently a pilot.

Solution B4 was evaluated at the workshop but only in combination with the current state delivery model for acute medicine. Given the scored preference was for A3 – centralise the acute medical take to GRH, the previous decision on clinically viable models (discounting B4 in combination with A3 (Section 8.3.1), means that B4 does not progress to Short-List.

The individual questions for each domain and separate table scorecards are provided in Appendix 5.

The Evaluation criteria evidence pack can be found in Appendix 12 and full details of all workshop comments are available in Appendix 6.

The assessment method is as detailed in 7.3.9.2 and represented in the tables as:

Significantly better than status quo	Slightly better than status quo	Similar to status quo	Slightly worse than status quo	Significantly worse than status quo

Off the Short-List

C8: Centralise elective/ planned upper gastrointestinal to Cheltenham General Hospital (CGH).			Models: G & H
Quality	**Scores**	Similar or worse than status quo	
	Comments	• Concern for planned patients who become unwell in hospital after their operation would not have on site access to the EGS team • Transfer risks • Complication rate for upper GI is high	
Access	**Scores**	Broadly similar to status quo	
	Comments	• Reduced elective cancellations • Potential to improve ability to achieve national waiting time standards • Current service is centralised on one site	
Workforce	**Scores**	Similar or worse than status quo	
	Comments	• Destabilise F1 rotas • There may be some staff dissatisfaction in respect of staff who prefer GRH as base • Separation of planned Upper GI from the EGS site would reduce time trainers and trainees are on the same site • Split from EGS	
Deliverability	**Scores**	Worse than status quo	
	Comments	• Insufficient foundation year doctors to provide 24/7 rota at CGH. Insufficient consultant numbers to support weekend review (ward rounds) of elective patients in CGH. • The impact on access to Department of Critical Care • Consultant on-call rota for elective centre would need to be agreed as insufficient consultant numbers to support weekend review (ward rounds) of elective patients in CGH (if EGS in GRH). • Phasing Priorities 1) EGS 2) day case 3) colorectal 4) Upper GI • Theatre capacity	
Acceptability	**Scores**	Worse than status quo	
	Comments	• No clear clinical benefit to change • A lot of upheaval for potentially less gain	

Based on the appraisal scores which evaluated this proposal in the quality, staffing and deliverability domains as worse or no better than the current (Pre-COVID) position, it was recommended and subsequently approved that this option should not progress to the short list.

A4: Re-open Cheltenham Emergency Department overnight, with corresponding transfer of capacity from GRH to CGH for acute medical admissions overnight		Model C
Quality	**Scores**	Similar or worse than status quo
	Comments	• Lack of senior medical practitioners - worse. • National standards for sepsis and unwell children not met. • Also no Gynae or paeds on CGH. • MH liaison team capacity. • Walk-in that are very unwell better services at GRH; no 24 hr MRI. • Also negative impact on GRH/ overall County compliance • If just ED resource then Pts requiring full range of services that attend CGH will need onward transfer to GRH
Access	**Scores**	Similar or better than status quo
	Comments	• If fully staffed adds location after 20:00 • If changed could simplify message but can ED do everything that Pts need. • If staff pulled from GRH, would be worse
Workforce	**Scores**	Significantly worse than status quo
	Comments	• Inability to recruit. Already insufficient staff for current service. Split site more difficult to manage • Staff need confidence in a robust rota. This solution increases pressure. Senior decision maker on site. Vulnerability and isolation. • Deanery - potential to refuse trainees or not on split site. Jr Drs not fully supported if no recruitment and staff split across sites • Impact on ability to deliver to professional roles especially trainees • Likely to be worse than the current option. Already have existing gaps in middle grade rotas and difficulties in recruiting medical and nursing staff. Extending the rotas to include overnight at CGH will place increasing pressure on staff. • Highly likely to adversely affect staff morale and health and wellbeing.
Deliverability	**Scores**	Similar or worse than status quo
	Comments	• Deliverability is subject to recruitment (not easy). Clinical view is unanimous and strong feeling against solution. People would leave • Clear requirement for extra staff to deliver. Recruitment is ongoing issue across NHS and locally. A lot of effort and innovation expended. No certainty in achieving. • CT lack of availability. Sub specialty not on site (Gynae, Obs, Paeds and stroke)
Acceptability	**Scores**	Similar or worse than status quo
	Comments	• Engagement Report - Vast majority of concerns was closing CGH ED rather than reinstatement. This solution was added in response. • Considerable negative aspects across all domains • Same position as in 2012 - same problems

Based on the appraisal scores which evaluated this proposal in the quality, staffing and deliverability domains as worse or no better than the current (Pre-COVID) position, it was recommended and subsequently approved that this option should not progress to the short list.

7.3.10 *Step 6: External Review*

The South West Clinical Senate undertook the Clinical Review Panel (CRP) on 20/08/20 and the report of the findings (Appendix 34), was a key element of the NHSE&I Stage 2 Assurance process in relation to Test 3 (see Section 12.3.3). In respect of vascular surgery the panel and report noted:

- The model with colocation of vascular services with the IGIS hub at GRH was supported, to support co-dependencies with the IGIS hub, trauma and diabetes for best patient care
- Locating the IGIS hub at GRH with a spoke at CGH makes a lot of sense in terms of working to scale and recruiting
- Vascular surgery at CGH would require a separate middle/junior medical on call rota and it is unlikely that this could be staffed
- Colocation with diabetes, IGIS hub and trauma make GRH favourable for vascular delivery whereas there is less validity for colocation with the IGIS spoke
- The CRP was opposed to a split site option for vascular surgery

Following the external review of our proposals internal discussions were held with clinical teams and through the GHNHSFT and GCCG governance structures and the decision was taken to withdraw Solution B3 (24/7 IGIS hub to GRH; IGIS spoke and vascular surgery at CGH) from the proposed public consultation.

The scorecard for Solution B3 (which was completed prior to the CRP) is presented overleaf.

How was B3 evaluated? [17]

Due to significant concerns on the viability of this solution one table chose not to score every domain

B3: Centralise the image-guided interventional surgery (IGIS) 'hub' at GRH, with IGIS spoke at CGH and with the vascular arterial centre remaining at CGH		Model F
Quality	**Scores**	Similar or significantly better than status quo
	Comments	• Not clear whether there is a detriment to vascular by moving. • ? Mini stroke and carotid artery link slightly worse with Vascular separate • Better for majority, less transfers • 300+ out of county repatriated from Bristol/Oxon/Bham. Centralisation PCIs, OOH sepsis. • Lack of co-location with vascular - compromise safety. Also separation from Urology • Solution will require new kit (MES) so better than current although changes will need to be made for status quo • 300+ cardiology pts and overnight pts will be improved. Also IR on same site as acute Pts
Access	**Scores**	Significantly better
	Comments	• Step change in provision - 24/7 IR new service • Some people disadvantaged but many more positive • Could develop some new elective interventions locally • This solution is likely to lead to an acceleration of the implementation of a 24/7 Primary PCI service and fill gaps that are present in the 24/7 Interventional Radiology on call.
Workforce	**Scores**	Significantly divergent scores; worse or better than status quo
	Comments	• Extended scope nursing and radiographers • Better resilience, improved scope for development • CGH based nursing staff - short term impact for specific staff • IGIS hub improves OOH but creates operational difficulties; significant challenge • separation of vascular, emergency and complex Pts having to travel • Vascular staff - No. Also more time in car • Cardiology hub is good. Varied and complex interventions • Split site bad, vascular bad
Deliverability	**Scores**	Slightly better than status quo
	Comments	• Would need to have an emergency vascular SOP • Slightly worse in comparison with other models • The establishment of an IGIS hub is expected to improve our ability to attract and retain staff.
Acceptability	**Scores**	Slightly better than status quo
	Comments	• Responds to engagement

[17] Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

A table detailing the Models evaluated at the workshop and their component Solutions is provided below. The hashed out areas are those Models not progressed to Short-List (following the Solutions Appraisal Workshop and External Review).

Clinical pathway group	Ref	Solutions Descriptor	New proposed models	Model A	Model B	Model C	Model D (4.4)	Model E (5.4)	Model F (6.2)	Model F' (6.4)	Model G	Model H
			Medium List	Revert to original Gastro/T&O configurations	Centralise emergency general surgery	Re-open Cheltenham ED overnight	Centralise general surgery daycases and elective colorectal to Cheltenham. Centralise acute medicine and the IGIS hub to Gloucester (+ model B)	Centralise complex elective GI to Gloucester (+model B)	Centralise acute medicine and IGIS hub to Gloucester with vascular retained in Cheltenham. Centralise general surgery daycases and elective colorectal to Cheltenham. (+ model B/EGS)	Centralise acute medicine, elective colorectal and IGIS hub to Gloucester with vascular retained in Cheltenham. Centralise general surgery daycases to Cheltenham. (+ model B/ EGS)	Centralise IGIS hub and acute medicine to Gloucester; centralise complex elective GI to Cheltenham (+model B)	Centralise IGIS hub and complex elective GI to Cheltenham (+model B)
Emergency medicine	A4	Reopen CGH ED overnight	✓			✓						
	A5	CGH ED - no change		✓	✓		✓	✓	✓	✓	✓	✓
	A6	GRH ED - no change		✓	✓		✓	✓	✓	✓	✓	✓
Acute medicine	A1	Acute Medicine on both sites (no change)		✓	✓							✓
	A3	Centralise acute medicine to GRH	✓				✓	✓	✓	✓	✓	
Image guided interventional surgery	B1	No change		✓	✓							
	B2	IGIS hub and vascular centralised to GRH	✓				✓	✓			✓	
	B3	IGIS hub to GRH, vascular stay in CGH	✓						✓	✓		
	B4	IGIS hub centralised to CGH	✓									✓
General Surgery	C1	EGS both sites										
	C3	EGS centralised to GRH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	C4	Elective colorectal both (no change)		✓	✓							
	C5	Elective colorectal to CGH	✓				✓		✓		✓	✓
	C6	Elective colorectal to GRH	✓					✓		✓		
	C8	Elective upper GI CGH	✓								✓	✓
	C9	Elective upper GI GRH (no change)		✓	✓		✓	✓	✓	✓		
	C10	GI daycases - both		✓	✓							
	C11	GI daycases - CGH	✓				✓	✓	✓	✓	✓	✓
Gastroenterology	Gastro	Centralised CGH			✓		✓	✓	✓	✓	✓	✓
	T&O 1	Split O=CGH/T=GRH			✓		✓	✓	✓	✓	✓	✓
Trauma & Orthopaedics	Gastro	Original configuration		✓								
	T&O 2	Original configuration	✓	✓								
Enabler		Deteriorating patient model					✓	✓	✓	✓		

For more details on the process please see Appendix 13 *Centres of Excellence* – Long to Medium List Process and Appendix 36 - Long to Short list events and meetings.

Key Points

- **We have undertaken extensive engagement and used an iterative process to develop our evaluation criteria**
- **We followed a systematic 6-step process to identify our Long-List and progress to our Short-List, including external review by the South West Clinical Senate**
- **We put in place an evidence-based, transparent and inclusive solutions appraisal process that enabled a broad range of participants to help shape our emerging solutions.**
- **Our solutions workshop scorers were 49% clinical and 32% public/patient representatives**

8 Proposals for consultation

8.1 What are the options for the 'future state' service model?

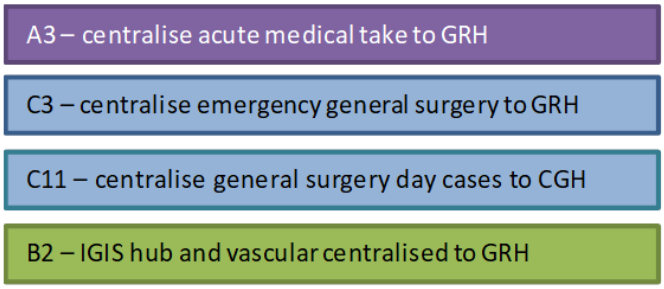
In Section 7 we describe the process of developing proposed solutions and distinct options for appraisal. Listed below are the change proposals that form our proposed shortlist.

8.2 Components of the clinical models

There are seven elements of the proposed clinical model which are fixed across all options and a one element that has a potential variant with the preference yet to be agreed. The following section sets out the specific service change proposals for each of the eight distinct elements.

8.2.1 *Four preferred reconfiguration proposals – common across all models*

The four solutions below were appraised as being preferable to the current state scenario and are therefore the preferred configurations. These are:

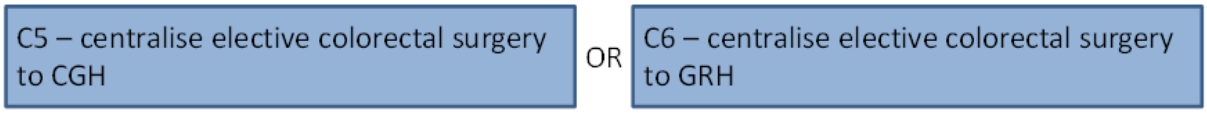


8.2.2 *Three associated proposals – common across all models*

There are three associated proposed clinical solution proposals which are common across all models. These are:

1. Formalise 'pilot' configuration of trauma & orthopaedics (started October 2017)
2. Formalise 'pilot' configuration of gastroenterology (started November 2018)
3. Develop the 'deteriorating patient' model for the CGH site

8.2.3 *One proposal with potential variant*



Centralising colorectal surgery was considered preferable to retaining the current two-site split, and so alternative options remain on the shortlist for further consideration.

The following sections provide more detail on each of these service change proposals.

8.3 Proposed new clinical solutions

8.3.1 *Centralise the Acute Medical Take to Gloucestershire Royal Hospital (A3)*

In this solution the undifferentiated acute medical take would be centralised to GRH, 24/7, including the staff and facilities for assessment of acute medical patients. CGH would retain the following acute and emergency service provision:

- 7-day Consultant-led Emergency Department 8am to 8pm, with nurse-led MIIU 8pm to 8am
- A 5-day (M-F), Same Day Emergency Care (SDEC) service (sometimes referred to as Ambulatory Care)

The hospital admission routes for acute medical patients would therefore be:

- 24/7 to GRH via ED/acute assessment/direct admission pathways
- 24/7 to GRH via CGH ED or SDEC – inter-site transfer
- 12/7 to CGH via direct admission pathways for differentiated specialty patients

Overwhelming feedback from our public engagement was that we should consider retaining a 'status quo' or increasing the ED provision at CGH. Both solutions were developed for appraisal and re-opening the Type 1 provision overnight at CGH was ruled out at solutions appraisal stage.

The option to continue with the current service provision at CGH has been evaluated as feasible by the Trust. Although staffing two departments continues to pose challenges, ED staffing is sufficient for two departments, with positive feedback from junior doctors on the training they receive working across the two departments. The drivers for change are much stronger for acute medicine and therefore the priority focus for change is with the acute medical take.

We have developed a Standard Operating Procedure setting out details of how patients attending CGH ED who require a surgical review will be managed if the proposal is implemented. Please see section 8.3.2.7 for further information, and section 8.3.6 for details on how any deteriorating patients will be managed out of hours if the decision is made following consultation to implement the preferred option.

Patients attending CGH ED and requiring a senior medical review will be managed within the department, with support from the senior decision maker (ST3+/consultant) based on the adjacent Ambulatory Emergency Care unit. Out of hours access to senior support is via the deteriorating patient model outlined in section 8.3.6.

Direct admission pathways already operate at CGH for oncology and ophthalmology patients. Further direct admission pathways will be developed for patients that have been triaged by a Health Care Professional, e.g. General Practitioner or Paramedic and it is deemed appropriate for them to be admitted direct to a specialty ward at CGH. Further work is required with SWAST, GPs and clinical teams to design and agree these pathways, but specialties could include cardiology, respiratory, care of the elderly and gastroenterology.

There are no proposed changes to the current configuration of mental health liaison services, which will still be provided on both sites. However, the centralisation of the acute medical take will support continued development of 'Core 24' requirements and enable timely support and intervention for patients with the greatest need.

8.3.1.1 What pathways would be impacted if the preferred option is implemented?

Our calculations for the impact implementation of the preferred option would have on emergency admissions incorporate **all in-scope admissions** for this programme, not just the acute medical take element described above. The maximum activity impact described below therefore includes:

- Acute 'medical take' (admissions) that would transfer to GRH
- Emergency General Surgery admissions that would transfer to GRH
- Vascular emergency admissions that would transfer to GRH, if model 4.4 or 5.4 was implemented
- Interventional Cardiology activity that would transfer to GRH as part of the proposed 24/7 IGIS hub

To ensure we use the most up to date activity but excluding any impact of Coronavirus we have used a baseline period of 01/02/19 – 31/01/20.The baseline for **total** adult emergency admissions into CGH is 14,245 (2019/20 Feb to Jan). We have assumed that 1,416 of these admissions could have been dealt with in an ambulatory emergency care setting[18], so this volume would remain in CGH with development of our Same Day Emergency Care (SDEC) opening hours and pathways. These are patients currently admitted under general medicine. A further 2,120 admissions were either direct to ward, or direct from ED to ward without going through the Cheltenham Medical Admissions Unit (ACUC). Whilst we cannot guarantee that all of these pathways would continue exactly as-is with the proposed changes, we have assumed that **an equivalent volume of direct admissions or additional SDEC pathways** can be facilitated in CGH. The workings for this are shown below.

CGH emergency admission activity that could transfer to GRH (based on Feb 2019 to Jan 2020 baseline)

	Admitted from ED	To GRH	% to Tx	Admitted Directly	To GRH	% to Tx
Accident and Emergency	31	31	100%	0	0	0%
Cardiology	42	42	100%	12	12	100%
Care of the Elderly	26	0	0%	7	1	14%
Clinical haematology	30	3	10%	290	0	0%
Colorectal surgery	200	200	100%	6	6	100%
Critical care medicine	49	0	0%	12	0	0%
Diabetic medicine	2	2	100%	0	0	0%
Endocrinology	5	0	0%	2	0	0%
Gastroenterology	50	0	0%	27	0	0%
General medicine	7,479	7,479	100%	558	558	100%
General surgery	1,598	1,598	100%	75	75	100%
Gynaecological oncology	6	1	17%	3	0	0%
Gynaecology	3	0	0%	0	0	0%
Interventional Cardiology	241	241	100%	4	4	100%
Interventional radiology	1	0	0%	0	0	0%
Medical Endoscopy	1	0	0%	0	0	0%
Medical oncology	91	9	10%	1,040	0	0%
Midwife episode	0	0	0%	551	0	0%
Obstetrics	0	0	0%	11	0	0%
Ophthalmology	19	2	11%	17	1	6%
Paediatrics	1	0	0%	0	0	0%
Respiratory	62	2	3%	28	2	7%
Stroke	40	34	85%	2	1	50%
Surgical Endoscopy	2	0	0%	0	0	0%
Trauma and Orthopaedics	2	0	0%	1	0	0%
Upper gastrointestinal surgery	58	58	100%	6	6	100%
Urology	1,053	4	0%	132	1	1%
Vascular (Hernia)	30	0	0%	2	0	0%
Vascular surgery	279	279	100%	57	57	100%
Admissions	**11,401**	**9,985**	**88%**	**2,844**	**724**	**25%**
Difference		**1,416**			**2,120**	

Totals	
Admissions	**14,245**
To remain at CGH	**3,536**
To GRH	**10,709**

[18] Based on analysis of all emergency admissions with LOS<24 hours and with admission reasons in the Directory of Ambulatory Emergency Care.

This means that, of the baseline 14, 245 emergency admissions to CGH:

- 1,416 SDEC pathways would remain at CGH
- 2,120 direct admission pathways (or enhanced SDEC pathways) would remain at CGH

10,709 patient admissions would transfer to GRH over phase 1 of the programme (approximately 30 per day)

These 10,709 admissions are a combination of acute medical take, emergency general surgery, emergency vascular and interventional cardiology admissions and procedures.

8.3.1.2 What would be the impact on the Emergency Departments if the preferred option is implemented?

A clinically-driven programme of work will review the admission transfer volumes outlined above and work with partners to develop clinical pathways that deliver and further reduce the 10,709 figure through a range of methods, including a range of enhanced direct admit pathways for specialties that will remain on the CGH site.

Pending this work we have had to make some assumptions to allow us to estimate the impact on services:

- At this stage of planning we are working on the assumption that patients self-presenting to CGH ED (walk-ins) will continue to do so, and that pathways developed through the clinically-led work described above will be enacted by health care professionals without the need for the patient to travel to the GRH ED.
- We are also assuming at this stage that all emergency transfers to GRH go via the ED, which is unlikely to be the case with further development of direct pathways into the Acute Floor.

Until further clinically driven programme work is put into place, the impact on the respective EDs is estimated to be as follows:

	Cheltenham General Hospital	Gloucestershire Royal Hospital	GHFT TOTAL
Admitted Baseline	11,401	27,322	38,723
Non-Admitted Baseline	39,524	79,215	118,739
Baseline TOTAL	50,925	106,537	157,462
Admitted Changes	-9,985	9,985	0
Non-Admitted Changes	-724	724	0
Changes TOTAL	-10,709	10,709	0
MODELLED ADMITTED	1,416	37,307	38,723
MODELLED NON-ADMITTED	38,800	79,939	118,739
MODELLED TOTAL	40,216	117,246	157,462

8.3.1.3 What is the evidence for this clinical solution?

We recognise that this proposed solution will mean that some patients would have to travel further for access to emergency assessment and admission. The increased travel distance is 8 miles/13km between CGH and GRH.

There is also the potential for a very small number of patients to be conveyed by ambulance to Great Western Hospital (GWH) in Swindon, if they are located in the South East of the Cotswold locality. The impact for these patients is likely to be low as Cirencester, for example, is isochronal (of equal time) to both GWH and CGH.

Due to the increased travel distance we have reviewed evidence (see citation list overleaf), on travel times and clinical outcomes, as well as clinical outcomes associated with the proposed acute assessment solution. We found that:

- Getting patients to definitive, specialist hospital care can be more important to outcomes than getting them to the nearest hospital for certain conditions, such as stroke, major trauma and heart attacks;
- One source found some evidence that increased travel distance may increase mortality for a few patients with severe illness, however the distances that researchers associated with poorer outcomes is over 12 miles (so less than the increased distance of 8 miles for some patients in this proposal). Furthermore, other factors need to be offset against this such as staff, safety, training and support facilities.
- Research was found from a variety of countries including UK, Scandinavia and the US, with two studies in particular reviewing mortality associated with distance travelled. These concluded:
    - "patients who experienced an increase in the distance to their home hospital of between 51 and 60 kilometres (30-36 miles) ran an estimated 15 percent lower risk of surviving the acute myocardial infarction"[19]
    - There was no statistically significant effect of distance in mortality from 0 to 12 miles. Over 12 miles they saw an increase in mortality.[20]

How does this evidence relate to the clinical models proposed in this Pre-Consultation Business Case?

There is evidence that:

- The extra distance between CGH and GRH would not make a difference to mortality/clinical outcomes
- That local provision of certain services for severe illness, where clinically indicated, could improve outcomes, e.g. patients travelling to Bristol for Primary PCI
- In an emergency, patients should be seen by a senior clinical decision maker as soon as possible. This improves outcomes and reduces length of stay, hospitalisation rates and cost;

[19] Source: *A matter of life and death: hospital distance and quality of care: evidence of emergency room closures and myocardial infarctions* Health Econmetrics and Data Group University of York (Sweden), 2014

[20] Source: *Effects of driving distance and transport time on mortality among Level I and II traumas occurring in a metropolitan area* (Chicago), 2018

- Acute assessment units (which co-ordinate tests and input from the different hospital specialist teams) enhance patient safety, improve outcomes and reduce length of stay;
- Senior input (early clinical review) is associated with increased discharges;
- It is best practice for acute medicine patients to undergo consultant review within 14 hours of arrival in hospital.

Evidence reviewed:

- Kings Fund: *Reconfiguring A&E and urgent care services – Summary of the Reconfiguration of Clinical Services Report,* 2014
- QualityWatch *Focus on: distance from home to emergency care*, 2014
- Irish Association for Emergency Medicine – position paper on reconfiguration and/or regionalisation of emergency services, 2008
- *A matter of life and death: hospital distance and quality of care: evidence of emergency room closures and myocardial infarctions* Health Econmetrics and Data Group University of York (Sweden), 2014
- *Effects of driving distance and transport time on mortality among Level I and II traumas occurring in a metropolitan area* (Chicago), 2018
- *Transforming Urgent and Emergency Care Services in England*, 2015
- Pinkney, Jonathan; Rance, Susanna; Benger, Jonathan: *How can frontline expertise and new models of care best contribute to safely reducing avoidable acute admissions? : a mixed-methods study of four acute hospitals*. Health Services and Delivery Research; 2016; vol. 4 (no. 3)
- Geelhoed GC, Geelhoed EA Arch Dis Child 2008;93:62-64; White AL, Armstrong PAR, and Thakore S. *"The impact of senior clinical review on patient disposition from the emergency department"* Emergency Medicine Journal, 2010;27:262-265
- Bullard MJ, Villa-Roel C, Guo x. et. a. (2012). *The role of a rapid assessment zone/pod on reducing overcrowding in emergency departments: a systematic review*
- Royal College of Emergency Medicine (RCEM) *The Way Ahead* 2008-12
- Royal College of Emergency Medicine - *Promoting Excellence in Emergency Medicine* - to be published in 2020
- West Midlands Quality Review and Society for Acute Medicine. *Quality Standards for acute medical units* - WMQRS/SAM, 2012. www.acutemedicine.org.uk/index.
- Academy of Medical Royal Colleges, *the benefits of consultant delivered care*, January 2012

8.3.1.4 What are the interdependencies[21] with other services?

Proposed Solution	Interdependencies (i.e. services that need to be immediately available on-site)
A3 – centralise acute medicine to GRH	Emergency Department Respiratory medicine Critical care General anaesthetics 24-hour radiology CT and MRI Urgent diagnostic haematology and biochemistry OT and physio Acute mental health services/psychiatric liaison Acute cardiology Care of the elderly

All of these services are already available on the GRH site, 24/7.

8.3.1.5 How does this address the case for change?

Reason for change	How preferred option addresses this
Demand for healthcare is increasing due to population growth	Single-site 'take' provides more capacity to support higher levels of demand.
Healthcare experiences disproportionate increases in demand associated with age, multi-morbidity and socio-economic factors. This is a national problem for the NHS.	Consolidated acute assessment function enables other hospital specialties to provide consistent 'time to review' standard operating procedures, i.e. improves access to multiple specialist opinions required for complex patients, including timely access to specialist mental health liaison services.
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* model for emergency care.

[21] All interdependencies listed in this PCBC were defined by the Clinical Workstream Groups. These groups referred to the South East Coast Clinical Senate work on interdependencies in the first instance but there are some differences due to the proximity of the two GHFT sites and existing clinical models. Only services required on-site immediately are listed.

Reason for change	How preferred option addresses this
National standards recommend all acute medicine patients to undergo consultant review within 14 hours of arrival. A recent NHSI 7 Day Service self-assessment showed that 67% of patients were seen by a consultant within 14 hours during weekdays, whilst at the weekend this dropped to 48%. The Trust has a 43% vacancy rate for acute medical physicians. This is based on an establishment of 14 consultants, with only 8 posts filled.	Consolidating two teams into one will: • By centralising a finite specialist workforce, enable consistent provision of early senior review (both acute medicine, and specialties), increasing the number of patients reviewed within 14 hours of arrival • Offset the impact of a high physician vacancy rate – staff acting down, use of agency doctors, rota gaps • Offer a more attractive job roles and training opportunities to improve recruitment and retention • Enable consistent and timely provision of mental health liaison services • Improved delivery of early senior review and mental health liaison (in combination with service design) will reduce the rate of emergency admission

8.3.1.6 How was this evaluated? [22]

A3: Centralise Acute Medical Take to GRH		Model D, F & G
Quality	**Scores**	Similar to significantly better than status quo
	Comments	• Evidence of right 1st time transfer - subject to other pathways being in place • Gain from right place 1st time is greater than loss from travel time • Better outcomes, faster review, senior input, rounded special care • Concern: need to understand # of anticipated transfers and impact of travel/transfers. Carers impact • Impact of changes on other medical specialties at CGH; potential to increase transfers; need to recognise number of unknowns • Mental Health very important; medical beds at 1 x site easier but will need MH presence on both sites • For a reasonable number of Pts/ frequent occasions it will increase speed of intervention e.g. Acute MI, thrombolysis
Access	**Scores**	Broadly positive except worse for patient and carer travel
	Comments	• For people in Cheltenham it is a longer journey time • More burden on carers and family. • Ambulances would be directed to GRH 1st time • here is a benefit of right decision 1st time reducing # of journeys for Pts; 1 vs 2 journeys • CINAPSIS is more difficult on 2 x sites. Increase use should reduce attendances at hospital. Switch to clinic or SDEC • Consensus that centralisation = reduced duplication = increased efficiency = increased capacity to be responsive to changes/increases in demand
Workforce	**Scores**	Slightly to significantly better than status quo
	Comments	• Negative short term for a specific groups of staff • Resilience / capacity of medics improved; also nursing. Co-location v positive • Single site reduces workforce inefficiencies increase flexibility • Bigger teams more resilient, can manage the staff more flexibly (take account of individuals); more time for staff development • Current F1 feedback is poor; this solution will improve. Deanery requirements need to be met. Issue of training facilities/ space • Currently role cross-cover to fill gaps. Solution is clearer, doing what you are supposed to do; critical mass = greater opportunity
Deliverability	**Scores**	Similar to slightly better than status quo
	Comments	• Will require a lot of changes to make it happen; investment in Acute Medicine. ? 36 month timeframe for reconfiguration or new build • Only if services move the other way. Would be completely dependent on this so need to be clear what might be moved as a knock-on. • Negative impact if people not wanting to change locations/redeployment to 1 site • 1 x site: consolidates imaging resource, mental health avail improved;
Acceptability	**Scores**	Similar to slightly better than status quo
	Comments	• Divergent views • Anxiety re capacity at GRH and access to services; also links with oncology unit. Solution Fits with CoEx approach. • Strongly positive message, outweigh negative

[22] Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

8.3.1.7 What are the benefits including clinical outcomes?

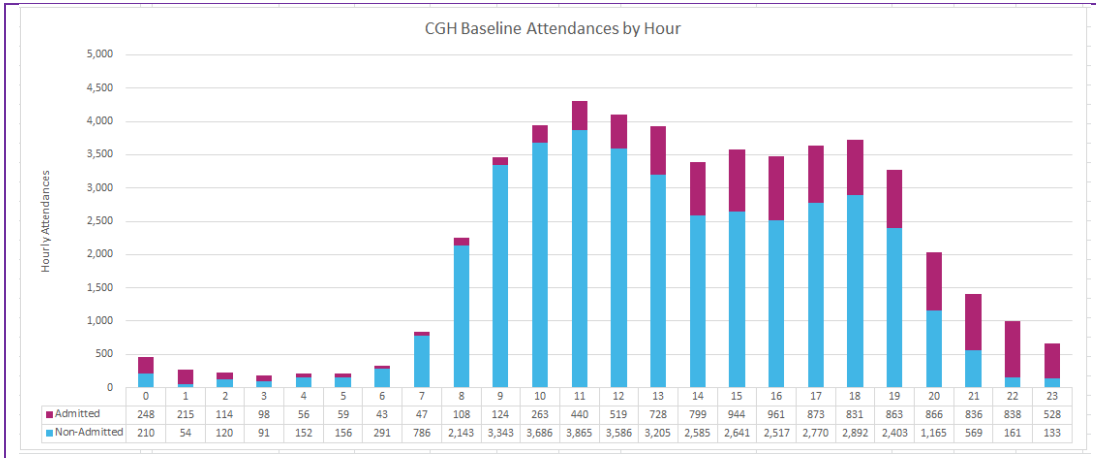
Proposed Solution	Benefits
A3 – centralise acute medical take to GRH	• Early senior review <14 hours, ↓waits, ↓admissions, and ↑outcomes • Timely access to mental health support teams ↓waits, ↓admissions, and ↑outcomes • Consolidates acute medicine rota – ↑safety and staff recruitment/retention • Co-location with key acute specialties – trauma, paediatrics, ↑outcomes

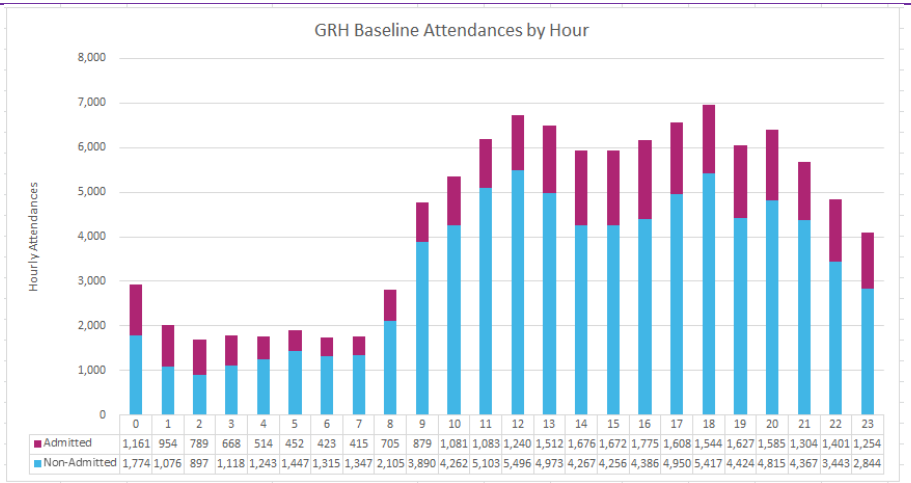
Further details are provided in the Benefits Realisation plan (Appendix 35)

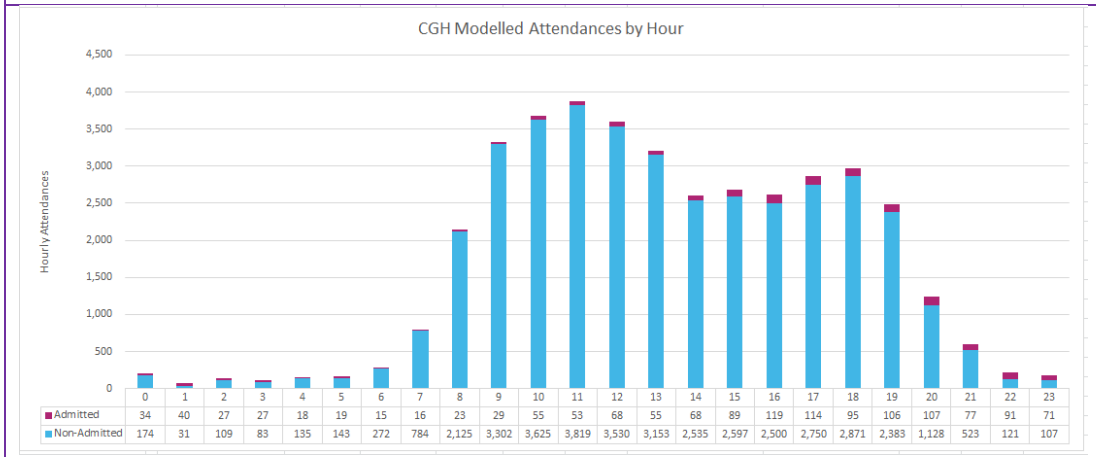
8.3.1.8 Baseline and Modelled Activity

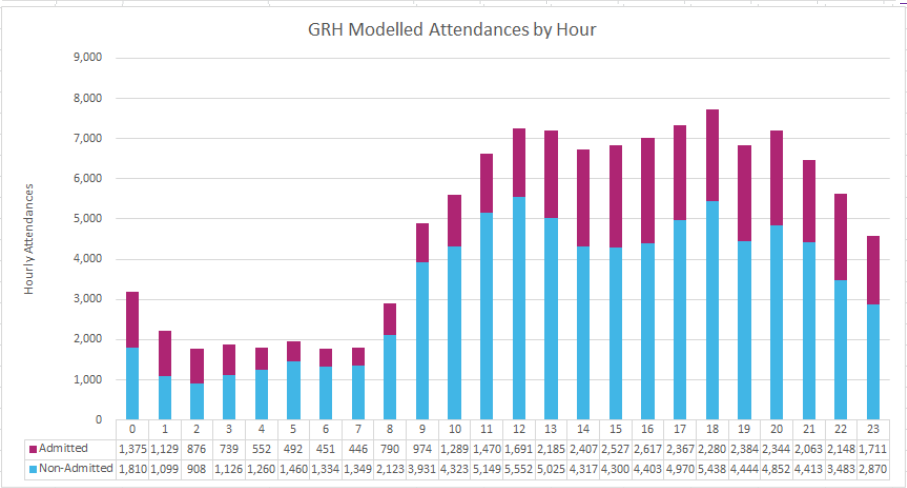
Admitted and non-admitted baseline and impact activity data is detailed in the sections above. The baseline and modelled ED activity per hour by site is provided overleaf.

The activity impact of the proposed changes on beds, critical care, theatres and workforce is detailed in Section 9


CGH Baseline Attendances by Hour
Hourly Attendances
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Admitted 248 215 114 98 56 59 43 47 108 124 263 440 519 728 799 944 961 873 831 863 866 836 838 528
Non-Admitted 210 54 120 91 152 156 291 786 2,143 3,343 3,686 3,865 3,586 3,205 2,585 2,641 2,517 2,770 2,892 2,403 1,165 569 161 133


GRH Baseline Attendances by Hour
Hourly Attendances
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Admitted 1,161 954 789 668 514 452 423 415 705 879 1,081 1,083 1,240 1,512 1,676 1,672 1,775 1,608 1,544 1,627 1,585 1,304 1,401 1,254
Non-Admitted 1,774 1,076 897 1,118 1,243 1,447 1,315 1,347 2,105 3,890 4,262 5,103 5,496 4,973 4,267 4,256 4,386 4,950 5,417 4,424 4,815 4,367 3,443 2,844


CGH Modelled Attendances by Hour
Hourly Attendances
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Admitted 34 40 27 27 18 19 15 16 23 29 55 53 68 55 68 89 119 114 95 106 107 77 91 71
Non-Admitted 174 31 109 83 135 143 272 784 2,125 3,302 3,625 3,819 3,530 3,153 2,535 2,597 2,500 2,750 2,871 2,383 1,128 523 121 107


GRH Modelled Attendances by Hour
Hourly Attendances
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Admitted 1,375 1,129 876 739 552 492 451 446 790 974 1,289 1,470 1,691 2,185 2,407 2,527 2,617 2,367 2,280 2,384 2,344 2,063 2,148 1,711
Non-Admitted 1,810 1,099 908 1,126 1,260 1,460 1,334 1,349 2,123 3,931 4,323 5,149 5,552 5,025 4,317 4,300 4,403 4,970 5,438 4,444 4,852 4,413 3,483 2,870

Coronavirus (COVID-19)

Medicine Division early reflections (9th- June – 8th July)

- Increase in Friends and Family scores – 82% Jan to May to 86% in June
- Increase in GRH ED shift fill rate from 85% Jan to May, 96% in June, 97% in July (1st to 8th)
- Increase in CGH ED shift fill rate from 87% Jan to May, 82% in June, 100% in July (1st to 8th)
- Comparing GRH June 2019 ED performance with June 2020 (post Temporary service changes)
    - ED 4 hour performance 82.8% to 84%
    - 64% reduction in 12 hour breaches
    - 19% reduction in time to be seen by Doctor
- Improvement across GRH and CGH Safety KPI Checklist: +5% at GRH and +7% at CGH, including improvement in:
    - NEWS score recording on admission
    - Pain score at triage (within 1st hour)
    - Analgesia administered at triage
    - Pain score assessed hourly
    - Analgesia administered within time limits
    - Net of Kin aware within 2 hours of admission
    - Refreshments offered within 2 hours of admission
    - Reduction in Average Length of Stay: 10% reduction at GRH, 19.6% reduction at CGH
- Benefits of 2nd Medical Registrar at GRH
- Demand for CINAPSIS (GP referral) remains strong
- Excellent inter-site transfer service from Medipatrol. Very proactive. Able to step down patients e.g. to acute stroke unit in a safe and timely manner

8.3.2 *Centralise Emergency General Surgery to Gloucestershire Royal Hospital (C3)*

Under this preferred option all emergency general surgery admissions would be managed by a centralised team on the GRH site.

A centralised service would offer the following advantages:

Senior decision maker

By having two teams on call there will always be a senior decision maker free from operating theatre commitments to assess patients on the SAU and in ED as well as at CGH. Early involvement of senior decisions maker can improve outcomes, as referenced in our evidence section. This will also provide additional trainee supervision and better support the juniors with their workload, reducing the workforce risk. Access to operative training will also be improved with less overnight operating by the trainees.

Surgical Assessment Unit (SAU)

At present, the single team are responsible for patients on inpatient wards, SAU, in the Emergency Department and in theatres: clinical priority will always dictate that patients in theatre and the sickest patients on the wards are prioritised by the surgical team. Unfortunately, even 'well' surgical patients can deteriorate rapidly so it is important to provide timely assessment and regular review for all surgical patients. In the preferred solution there will be two teams on call, one in theatre and the other free from theatre activities to see patients in a timely manner. The providing a team dedicated to assess and review all surgical patients presenting on the day, the delays to patient review in ED and on SAU will be eliminated, improving patient safety.

Cohorted Team

Whilst cohorting the two on call teams onto one site will not eradicate on-call rota gaps, it will provide flexibility in managing the workload. Should there be a gap in cover, the two teams will be able to review the total workload and allocate tasks accordingly to minimise inequities and reduce the risk to both patients and staff.

Sub-specialty rota

At present, certain patients do not get the same treatment for the same condition depending on which sub-specialty consultant is on call. Whilst the Trust has appointed enough consultants to run a sub-specialty rota, delivering the on call service on two sites has prohibited this being enacted. By having the two on call teams on the same site, a sub-specialty rota can be implemented to mitigate the quality risk, removing the inequitable patient pathways and providing sub-specialist access to very complex patients, e.g. Boerhaave Syndrome.

Access to emergency theatres

Patients can be delayed in getting to theatre if the team is undertaking other tasks, such as undertaking the ward round or attending ED. By providing a team dedicated to operating, delays will be minimised due to a delineation of tasks and the implementation of the sub-specialist rota. Furthermore, undertaking more operating during the day will reduce the volume of out-of-hours operating, reducing the work burden on the resident junior staff and complying with national guidelines (NCEPOD).

The benefit of a subspecialty rota on patient Aaleyah's presentation with gallstones is illustrated overleaf:

Coronavirus (COVID-19)

Patient story

The benefit to patients of having 7-day access to sub-specialist care is evidenced through the patient story below. Without the two surgeon model made possible by centralising EGS to a single site, the patient could have been operated on by an Upper GI surgeon with a higher chance of a stoma.

Kate is in her mid-sixties, a retired nurse who lives on the outskirts of Cheltenham.

On a Sunday afternoon in early June, while working on her allotment, Kate began to feel dizzy and unwell. On returning home Kate began to experience stomach pain and felt progressively worse. During the evening having vomited Kate decided to call NHS 111. After a telephone assessment an ambulance was despatched. Kate was taken to Gloucester Royal Hospital in the early hours of the morning. Care from paramedics was excellent, they handed over to GRH staff and then further assessments were undertaken, including bloods and a scan.

Consultant Surgeon Tom Roe advised that Kate had a bowel obstruction and this would require surgery. There were two options, she would either be taken to a ward for an overnight stay and operated on the following day or operated on immediately. Much to Kate's relief, it was agreed that she would be operated on straight away, treatment was speedy and Kate felt well informed on what the issue was and how the Consultant proposed to deal with it. Tom Roe advised that he would attempt the surgery using keyhole surgery. But if this wasn't possible he would need to make major incision.

Kate said:

"I felt very lucky to be operated on so quickly and with the use of laparoscopy. Tom Roe explained things to me and was very nice. Having worked previously at Gloucestershire Royal I had a good understanding that one outcome might be that I ended up with a stoma bag. I am thankful that that wasn't necessary and there was a good outcome to my surgery. As a patient you can sometimes lose your dignity and the team that looked after me in theatre made sure that didn't happen and I am so grateful to them."

After the operation, which took several hours, Kate was taken to Ward 5b.
"Being a patient in the time of Covid-19 was a strange experience. I was in a six bedded bay – but the middle beds were taken out, so only 4 patients were being cared for and we were kept socially distant. Thank goodness for technology – as with no visitors being allowed in, having a phone meant I kept in touch with people, which made a tremendous difference to me."
Kate stayed four days on ward 5b to recover from her emergency surgery.
"The team that looked after me were lovely. I was given my privacy, curtains were drawn around my bed and staff asked if they could come in – which I really appreciated. Everybody was really kind and did their best to help."
Kate was discharged from hospital and is now recovering at home, with a follow up planned in 6-8 weeks.

8.3.2.1 What is the evidence for this proposed clinical solution?

Key messages from the evidence:

- Creating an 'emergency team', linked with a 'surgeon of the week' is a good method of providing dedicated and supervised training in all aspects of emergency and planned care.
- Care delivered by specialists saves lives and delivers better outcomes
- The evidence-based South West Clinical Senate review criteria not currently met by GHNHSFT are:
    - The provision of a protected Surgical Assessment Unit (SAU).
    - The provision of 24/7 CEPOD or Emergency Theatre.

Evidence reviewed:

- Royal College of Surgeons of England: Separating emergency and elective surgical care: Recommendations for practice. Sept 2007
- South West Clinical Senate review of Emergency General Surgery, 2017
- Boyd-Carson, H., Doleman, B., Herrod, P.J.J., Anderson, I.D. et al. British Journal Surgery. 2019; 106: 940-948
- Strategy 10: Improving elective care through separating acute and elective surgery, 2012

8.3.2.2 What are the interdependencies with other services?

Proposed Solution	Interdependencies (i.e. services that need to be immediately available on-site)
C3 – centralise emergency general surgery to GRH	Anaesthetics ITU Diagnostic Radiology Interventional Radiology Facilities (IR suite) Paediatrics Trauma Urgent GI Endoscopy

All of the services listed above are already available on the GRH site.

8.3.2.3 How does this address the case for change?

Reason for change	How preferred option addresses this
Demand for healthcare is increasing due to population growth	Single-site 'take' provides more capacity to support higher levels of demand.
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* model for emergency care.
• 3 in 10 emergency general surgery patients have suspected gallstones. Currently less than 50% see an Upper GI specialist (rated 15 on Trust risk register). • At times, senior surgical decision makers are in theatre and unavailable to review patients waiting for specialist surgical assessment leading to delays in treatment. • Emergency General Surgery admissions to CGH are not compliant with South West Clinical Senate 2017 review requirement for access to a Surgical Assessment Unit. • Shared specialty access to emergency theatres (both sites) can lead to sub-optimal EGS care (rated 15 on Trust risk register). • In a 7 month period in 2019 15% of shifts for emergency general surgery were not covered (390 shifts out of 2599). Rota gaps have increased by 46% in three years (rated 16 on Trust risk register) • GI surgical trainees have reported negative feedback about workload and training environment. If this situation does not improve, the Deanery could withdraw trainees from the GI service in Gloucestershire impacting further on workforce and safety of care (rated 15 on Trust risk register) • Rate of emergency admission is 9.7% higher than peer group	Consolidating the two teams will: • Provide access to a subspecialist review – colorectal and upper gastrointestinal (upper GI) • Reduce delays in access to review • Deliver an evidence-based SAU model • Reduce delayed access to emergency theatre • Significantly improve junior doctor training • Offer a more attractive job roles and training opportunities to improve recruitment and retention • Increase delivery of early senior review (in combination with service design) will reduce the rate of emergency admission

8.3.2.4 How was this evaluated? *

C3: Centralise Emergency General Surgery (EGS) to Gloucestershire Royal Hospital (GRH).		Model B-H
Quality	**Scores**	Similar to significantly better than status quo
	Comments	• An emergency service. Greater availability to discuss Pts as not in theatre. Link to CINAPSIS • SAU seen much quicker. Dedicated unit • If seen quickly in SAU reduce admissions, increase self-care • Issue for CGH ED walk-in patients or deteriorating patient on CGH site (<1 per day). Right place first time • A working deteriorating patient model at CGH is key to achieving significantly better. • Provides rota sustainability 1 x site. Safety improved • Would need to have SOP's for transfers both access to NHS transport and make own way protocols • Opportunity for reduced variation • Centralising offsets the loss of local offer in CGH.
Access	**Scores**	Broadly positive except worse for patient and carer travel
	Comments	• Burden on families / carers is greater than patients as repeat journeys particularly carers • Patients impacted during day time • Mitigated by fewer number of attendances with senior decision maker; reduced admissions and LoS • Parking GRH • Solution provides capacity of right clinician. Able to speak to GP, reduce delays. A more robust service to review Pts • Switch of EGS to GRH reduces elective cancellations and waits
Workforce	**Scores**	Slightly to significantly better than status quo
	Comments	• Develop new roles e.g. ANPs • Currently 100's gaps in rotas filled with extra shifts, consultant cover, local trainees or agency. Increases sickness absence. New solution will improve • EGS - solution a must do for trainees (on warning) • Trainer capacity and access increased • Some staff relocation esp. nurses but consultants and senior trainees are cross county already • Issues/ challenges for rotas other services at CGH • Should improve resilience.
Deliverability	**Scores**	Similar to slightly better than status quo
	Comments	• Cannot be assessed in isolation -linked to other FFTF Gen Surgery changes and other non FFTF services • No premises required clinically, likely to be the physical beds but dependent on what happens to elective Gen Surgery • Reliant on deteriorating patient model • Currently high risk service. GHFT priority #1. Consultants support a single Gloucester site • Mostly redeployment of existing staff. Req. some additional staff (junior Dr/middle grade) for rotas. Also positive impact on trainees and development of ANPs.
Acceptability	**Scores**	Better than status quo
	Comments	• Tough decision but status quo not acceptable. Use of resources for better services. Public - need to reassure, provide evidence, mitigations for any disadvantage, offset by improved outcomes.

* Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

8.3.2.5 What are the benefits including clinical outcomes?

Proposed Solution	Benefits
C3 – centralise emergency general surgery to GRH	• Eliminates sub-specialty variation, ↓waits and ↑outcomes • All EGS patients able to benefit from SAU with associated evidence for ↑ experience and outcomes • Access to dedicated 24/7 emergency theatre – ↓waits and ↑outcomes • Improves trainee experience • Improves staff recruitment and retention

Further details are provided in the Benefits Realisation plan (Appendix 35)

8.3.2.6 Quality Indicators

Listed below are the quality indicators that would be used pre- and post-implementation to monitor impact.

Domain/ Indicator	Benchmark	Frequency of monitoring	Data collection method
Safe: Incidents Never Events / Harm	An 80% reduction in current described risks	Monthly As incidents occur	Datix
Effective: % gallbladder removals on 1st emergency admission % patients seen as day cases for benchmark procedures	AS per bed modelling As per BADS	Quarterly	Business Intelligence (BI) Model Hospital
Patient Centred: Complaints Friends & Family Test	Maintain low complaint levels A reduction in negative comments 60%	Monthly Quarterly	Datix Friends & Family Test (FFT)
Timeliness: Time to assessment by senior clinician for emergency patients (both sites) Number and time of transfers from CGH to GRH for care under the emergency general surgery team	Not currently collected for CGH. 3 monthly audit of SAU waits for GRH Not currently collected.	Quarterly	Manual Audit Source data from SWAST
Efficient: Reliance on agency and locum staff (as measured by spend) Reduction in proportion of patients admitted following emergency presentation Number of elective GI patients cancelled due to no Critical Care beds at GRH % patients cancelled for non-clinical reason Number of General Surgery outliers on non-general surgery wards	• 40% reduction from current • 50% reduction in activity with LOS < 24 hours • Maintain low levels of cancellations • Maintain low levels of cancellations • Not currently collected.	Quarterly Quarterly Monthly Monthly Monthly	Finance BI DCC BI BI

Domain/ Indicator	Benchmark	Frequency of monitoring	Data collection method
Staff: Satisfaction Turnover Vacancy rate Sickness	No deterioration from current No deterioration from current Improvement from current Improvement from current	Annually Quarterly Quarterly Quarterly	Staff Survey HR HR HR

8.3.2.7 Standard Operating Procedures (SOPs) if the preferred option is implemented

Proposed SOPs have been developed with stakeholders across the Trust for the areas below and are included in the appendices:

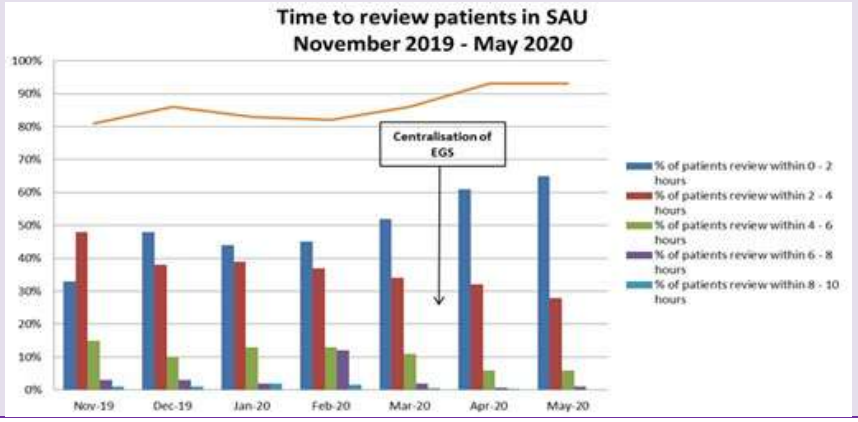
- Patients presenting to CGH Emergency Department requiring a surgical opinion (Appendix 26)
- Patients on other speciality wards at CGH requiring a surgical opinion (Appendix 27)
- Ring-fencing of surgical wards at GRH (Appendix 28)

Services that require a surgical opinion will have access to the on-call surgical team 24/7. The registrar will review the patient and should the situation require consultant opinion, one of the two consultants on call will go to CGH to review the patient. This will be the same process should the patient require operative support in an emergency. Planned patients that require operative support will be pre-organised.

Coronavirus (COVID-19)

EGS - Summary of patient and staff benefits:

- The numbers of patients reviewed in under four hours has improved from 81% to 93% and this higher level of performance has been sustained in May when activity was higher than pre-COVID levels (see graph below).
- During April 2020 a total of 25 emergency operations were carried out between the hours of 20:00 – 08:00, a reduction of 40% when compared to April 2019 - this supports national best practice of operating within hours due to timely assessment of admissions.
- No Serious Incidents recorded since 1st April 2020.
- Standard Operating Procedures (SOPs) established for patients in CGH that require a surgical opinion (inpatient and walk-in patients) – no near misses or incidents recorded.
- From 1st April to 18th June (11 weeks), 45 general surgery patients have been transferred from CGH to GRH, an average of 4 per week.
- Model of care is in line with guidance from NHSE to restrict the number of routes by which undifferentiated non elective patients can enter a hospital to protect patients from nosocomial (hospital acquired) infection.



8.3.3 *Centralise general surgery day cases to CGH (C11)*

General surgery day cases are currently admitted to either hospital site. Currently this means that day surgery capacity is compromised by the need to prioritise emergency patients, leading to cancellations. The new solution would provide dedicated Day Surgery Unit facilities in CGH for centralised day surgery operating. With correct scheduling increasing numbers of laparoscopic cholecystectomies can be performed in the day case setting. Day case coloproctology and planned general surgery including hernia repair is already well established.

8.3.3.1 What is the evidence for this proposed clinical solution?

Key messages from the evidence:

- Day surgery principles are fundamental to modern patient care
- The cancellation of surgery creates untold hardship for patients who plan their working and family lives around the proposed operation date. Most are cancelled at less than 24 hours' notice. The cost implications to the community are immense but have not been calculated. The separation of emergency and planned surgery is essential through adequate observation ward access.
- Shortened hospital stay and earlier mobilisation reduce the risk of hospital-acquired infections and venous thromboembolism
- Day surgery works best when it is provided in a self-contained unit that is functionally and structurally separate from inpatient wards and operating theatres
- High-volume, non-complex planned cases are particularly suited to geographic separation
- Every effort should be made to avoid mixing day cases and inpatients on the same operating list to maintain quality of care and efficiency
- The secondary recovery unit should not accept inpatient activity and even at times of severe hospital escalation

Evidence reviewed

- Appleby, J *Day case surgery: a good news story for the NHS*, BMJ 2015
- Bailey *et al*: *Guidelines for Day Case Surgery*, 2019
- Department of Health *Surgery health building note 10-02 Day surgery facilities*, 2007
- NHS Institute for Innovation and Improvement *Focus on: Cholecystectomy*, 2006
- Nasr A. *et al Impact of admissions on elective surgical workload* Ir J Med Sci, 2004
- Royal College of Anaesthetists: *Chapter 6: guidelines for provision of anaesthesia services for day surgery*, 2020
- Strategy 10: *Improving elective care through separating acute and elective surgery*, 2012

8.3.3.2 What are the interdependencies with other services?

Proposed Solution	Interdependencies (i.e. services that need to be immediately available on-site)
C11 – centralise general surgery day cases to CGH	Anaesthetics

24/7 ITU will continue to be available on the CGH site.

8.3.3.3 How does this address the case for change?

Reason for change	How preferred option addresses this
Demand for healthcare is increasing due to population growth	Single-site day surgery unit will provide more capacity and increased efficiency to support higher levels of demand.
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* model for planned care.
Over 400 operations cancelled on the day for non-clinical reasons in the most recent 12 months.	Moving more day surgery onto the CGH site into dedicated facilities for day surgery will reduce the risk of operations being cancelled for non-clinical reasons, i.e. because of staff, theatres or beds being allocated to emergency patients.

8.3.3.4 How was this evaluated? [23]

C11: Centralise general surgery Day Cases to CGH		Model D-H
Quality	**Scores**	Similar to significantly better than status quo
	Comments	• Reduced cancellation improves outcomes • Increased quality through separation, dedicated unit and scale • These Pts are regularly cancelled due to emergency/beds. Solution guarantees access. Also reduce unplanned overnight stays (due to late start) • Need SOP/ plan for deteriorating Pt. Although rare (lo #) and lower acuity Pts • Centralisation principle reduces risk, Low cancellations, more efficient, clean process and seamless
Access	**Scores**	Broadly positive except worse for patient and carer travel
	Comments	• Reduction in cancellations = increased capacity = reduced waits • day case not multiple visits • 2 sites to 1 • Possible to extend operating hours • Reduction in cancellations - Pts see this v positively • Reduces a physical location BUT increases capacity with dedicated unit. Common model is dedicated separate facility - improves access • Parking capacity
Workforce	**Scores**	Similar to better than status quo
	Comments	• Positive environment, not emergency but some staff moves • Increased capacity - options to repatriate pts. List of same procedure (hi vol) better for learning • Less Specialty Nurses involved with this cohort so reduced impact • Centralise principle positive impact. Day case focussed only. No Jr Drs • High volumes and low cancellations
Deliverability	**Scores**	Similar to slightly better than status quo
	Comments	• Linked to all other Gen Surgery changes • Priorities 1) EGS 2) day case 3) colorectal 4) Upper GI • Theatre capacity an issue. day case bed requirement achieved by moving other services • Depends what else is on the site. Day case wards need modelling on process flow incl. parking, drop-off • No change in staffing required • Requires operating list shifts to GRH
Acceptability	**Scores**	Similar to slightly better than status quo
	Comments	• Compared to current: Workforce domain scored positive, Quality & deliverability domains similar to current and Access balanced. Overall positive • Engagement Report - Balances services at both sites. Supports a vibrant future for CGH. • Which site for day case not clear

[23] Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

8.3.3.5 What are the benefits including clinical outcomes?

Proposed Solution	Benefits
C11 – centralise GI day cases to CGH	• ↑ quality and responsiveness of care with dedicated day surgery unit staff and facilities • Better patient experience – ↓ risk of cancellation or delay and more time for self-care advice, ↑ facilities designed for day case care

Further details are provided in the Benefits Realisation plan (Appendix 35)

8.3.4 *Centralise the image-guided interventional surgery (IGIS) 'hub' to GRH including vascular; IGIS spoke at CGH (B2)*

Both cardiology and interventional radiology use similar equipment, similarly trained support staff, and similar recovery processes post-operatively. By co-locating these services to create a new 24/7 hub we will be able to maximise the use of the support staff and equipment across the two services. This is an innovative, but not unprecedented solution that would put the trust amongst the best in the country for providing a full range of endovascular and interventional services.

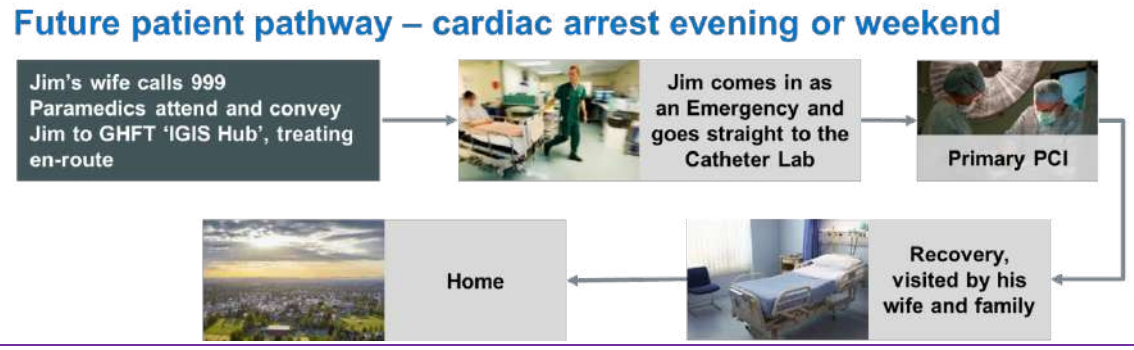
The overwhelming majority of vascular Interventional Radiology (IR) is in-hours work, with the exception of EVAR for ruptured aneurysm, which is a small number of patients per year.

The vascular arterial centre would relocate from CGH to GRH to be co-located with the 24/7 hub.

A key benefit of this plan will be the ability to resolve staffing shortages that currently prevent the Trust from offering a 24/7 service for primary percutaneous coronary intervention (rescue angioplasty).

Jim and his wife told us about how he ended up being treated in Bristol following his heart attack. You can watch his story here: https://youtu.be/4A7C9eSa9vY

If we have an image-guided interventional surgery hub, Jim's pathway would look like this:



8.3.4.1 What is the evidence for this proposed clinical solution?

- Many surgical procedures have been replaced or enhanced by the provision of interventional radiology services, as well as allowing new treatments for patients that were not previously feasible
- Minimally invasive surgery is significantly associated with reduced probability of Surgical Site Infections (SSIs)
- Minimally invasive techniques reduce the need for surgery, reducing the physiological insult, thereby reducing complications and hospital stays
- Interventional radiology and cardiology services need to be co-located with acute services where time critical interventions need to be provided, and the out of hours critical care support is available
- The Royal College of Radiologists recommends that provision of a robust 24/7 Interventional Radiology service should be a "priority for all acute hospitals"
- A specific recommendation of the Getting it Right First Time (GIRFT) report into Vascular Services at Gloucestershire Hospitals (December 2019) was *"Ideally you should be moving towards a 24/7 urgent vascular service. This requires at least 6 vascular surgeons*

and 6 consultant clinicians capable of delivering vascular interventional procedures 24/7. You may not be able to continue as a vascular hub unless you have 24/7 cover for vascular interventional procedures, so this must be urgently addressed"

- There appears to be some evidence that increased travel distance to ED may increase mortality for a few patients with severe illness. However other factors needs to be offset against this such as staff, safety, training and support facilities.
- There is evidence that local provision of certain services for severe illness, where clinically indicated, could improve outcomes

Evidence reviewed:

- *Provision of Interventional Radiology Services*, British Society of Interventional Radiology, 2013
- *Provision of interventional radiology services*, second edition, Royal College of Radiologists, 2019.
- *Interventional Radiology (IR): Improving Quality and Outcomes for Patients*, A Report from the National Imaging Board, 2009
- Gandaglia, G. et al. Effect of Minimally Invasive Surgery on the Risk for Surgical Site Infections: Results From the National Surgical Quality Improvement Program (NSQIP) Database, 2014
- NICE Guidance for Myocardial infarction https://www.nice.org.uk/guidance/cg167
- Kings Fund: *Reconfiguring A&E and urgent care services – Summary of the Reconfiguration of Clinical Services Report,* 2014
- QualityWatch *Focus on: distance from home to emergency care*, 2014
- Irish Association for Emergency Medicine – position paper on reconfiguration and/or regionalisation of emergency services, 2008
- *A matter of life and death: hospital distance and quality of care: evidence of emergency room closures and myocardial infarctions* Health Econmetrics and Data Group University of York (Sweden), 2014
- *Effects of driving distance and transport time on mortality among Level I and II traumas occurring in a metropolitan area* (Chicago), 2018

Further evidence for the vascular changes in B2:

- Vascular surgery should be considered an urgent care service and services reconfigured to reflect this. Rapid access to urgent assessment outpatient clinics in needed, along with one stop diagnostic clinics. For complex patients a one stop pre surgery day visit that covers cardiac, respiratory, CPEX, anaesthetics and care of the elderly assessments reduces delays and improves outcomes.
- The Vascular Society of Great Britain recommends that 'designated [vascular] arterial centres are collocated with major trauma centres or trauma units

Evidence reviewed:

- Vascular Society: *The Provision of Services for Patients with Vascular Disease*, 2018
- GIRFT review of vascular services, 2018
- Kings Fund: *Reconfiguration of Clinical Services: What is the Evidence?* Nov 2014
- Specialised Commissioning specification for vascular network arterial centre

8.3.4.2 What are the interdependencies with other services?

Model	Interdependencies
B2 – IGIS hub in GRH	Department of Critical Care Anaesthetics Theatres IR input required to support trauma unit IR suite 'spoke' to support oncology and urology in CGH Stroke

8.3.4.3 How does this address the case for change?

The case for change drivers are related to interventional cardiology and radiology. There are no vascular-specific change drivers.

Reason for change	How do potential options address this
• Existing dispersed configuration of facilities for image-guided surgery reduces our capacity to offer minimally invasive techniques. There is clear evidence that these can reduce the need for surgery, reduce the physiological insult to patients and thereby reduce complications and hospital stays. • Image-guided surgery is currently offered in three separate sites in GHNHSFT, driving up the cost of equipment and storage, e.g. £80k consumables waste in 2017/18 • The Trust's imaging equipment is recorded on the risk register as being out of date. A Managed Equipment Service contract worth £46m over 15 years will replace and maintain obsolete kit, but decisions are required on where to install the equipment for optimal productivity and improved patient outcomes.	Significantly improves efficient and effective use of new state of the art equipment which will: • increase the range of services we are able to offer patients, improving outcomes • address storage issues, reducing waste of expensive consumables
• Existing dispersed configuration of staff for image-guided surgery reduces our capacity to offer minimally invasive techniques. • Due to a shortage of radiologists we are not compliant with The Royal College of Radiologists' recommendation that provision of a robust 24/7 Interventional Radiology service should be a "priority for all acute hospitals". • Since May 2019 we have advertised three times for locum and twice for substantive interventional cardiologist recruitment, and have only successfully recruited 1 locum in this time. There are similar challenges with recruiting cardiac catheter lab nurses.	Significantly improves efficient and effective use of highly qualified staff which will: • increase the range of services we are able to offer patients, improving outcomes • improve recruitment and retention of staff

• Every year around 600 patients travel outside of Gloucestershire for image-guided surgical procedures (e.g. PPCI) that could be offered in-county with the right staff and equipment. • Repatriation of 115 patients going out of county for minimally invasive techniques would bring £460,000 additional income to the county	• Increases the range of services we are able to offer patients, allowing more patients to be treated in the county and improving outcomes • Avoiding out of county travel reduces burden on patients, their families and South West Ambulance Service NHS Foundation Trust • Increases income to the county

8.3.4.4 How was B2 evaluated? [24]

B2: Centralise the image-guided interventional surgery (IGIS) 'hub' to GRH including vascular; IGIS spoke at CGH			Models D & G
Quality	**Scores**	Slightly or significantly better than the status quo	
	Comments	• Significant - a 24/7 service that is not currently offered. • Many emergency IGIS interventions are time critical; locating a hub at the County's trauma unit will reduce the average time to intervention for many emergencies. • Co-location of vascular, interventional radiology and interventional cardiology supports the multi-disciplinary approach to the management of primary angioplasty; evidence that patient outcomes could improve • By improving our ability to expand IGIS provision, patients currently travelling out of County for IGIS procedures could be treated at GHT, • In-county Primary PCI reduces the distance to travel (and therefore time to intervention) for patients requiring emergency intervention. Average 'call to balloon' response time reduced.	
Access	**Scores**	Similar or better than status quo	
	Comments	• Positive impact on right area of need (Glos / West). Some people not getting the service at the moment as out of County. Potential to help disadvantaged groups more. • Improve patient access to services locally (not Bristol/Leeds/Birmingham) • Caveat is cost of providing kit/ equipment • Service moving from Cheltenham to Gloucester will increase travel time for residents of Cheltenham	
Workforce	**Scores**	Slightly or significantly better than the status quo	
	Comments	• Improved / dual training CAR/Vascular/IR • Concentration of IGIS facilities into a hub will improve the resilience of service provision • Establishment of a hub for IGIS will improve efficient deployment of technical staff – allowing radiographers to quickly move between facilities and support multiple lists. • The co-location of catheter labs with Interventional Radiology improves the opportunity to develop innovative nursing and technician roles • CGH staff to GRH. Impact to be understood. Staff recruitment offer. Some resistance for some people to overcome.	
Deliverability	**Scores**	Broadly better but significant proportion "Don't know"	?
	Comments	• Bed impact and who moves? • Dependent on many other moves and £. Availability of beds • ED, EGS, Cardiology, Vascular all interrelated. • Vascular more complex • Only way to get a 24/7 rota. • Funding?	
Acceptability	**Scores**	Better than status quo	
	Comments	• Clarify vascular within the model. Explain what is available where. What is retained/not included? How does this fit with the 2013 service change? • Need to be clear about interdependency with other services. • Could be significant but need more info - strong caveat	

[24] Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

8.3.4.5 What are the benefits of B2 including clinical outcomes?

Proposed Solution	Benefits
B2 – IGIS hub and vascular arterial centre in GRH	• Workforce benefits – centralised location allows cross-cover to resolve recruitment gaps • Patient outcomes – access to more minimally invasive techniques with associated improvement in outcomes • Colocation with acute specialties (trauma, renal) – improves time to senior review and theatre, and associated improvement in outcomes • Patient experience – increase local offering, reduced travel out of area • Financial benefits – increased income to the county, more efficient use of resources (equipment/consumables) • Meets Vascular Society of Great Britain recommendation that 'designated [vascular] arterial centres are collocated with major trauma centres or trauma units'

Further details are provided in the Benefits Realisation plan (Appendix 35)

Coronavirus (COVID-19)

Surgery Division early reflections (9th-23rd June)

- Positive feedback from renal, diabetes and stroke team in terms of early review by Vascular of inpatient referrals

8.3.4.6 Quality Indicators

Listed below are the quality indicators that would be used pre- and post-implementation to monitor impact.

- Specialty referral response time e.g. vascular team responding to inpatient referrals from diabetes, renal and stroke
- Patient stories to demonstrate benefits of co-location/ shared care.

8.3.5 *Formalise 'Pilot' Configuration of Trauma and Orthopaedics*

In 2017 the GIRFT programme supported the Trust in piloting the separation of trauma and orthopaedic services. The pilot launched in October 2017 with planned hip and knee arthroplasties transferring to Cheltenham General Hospital (CGH), and emergency trauma patients centralised to Gloucestershire Royal Hospital (GRH).

The following areas were not changed during the pilot:

- Outpatient and fracture clinics continued to run on both Gloucester and Cheltenham General sites
- Paediatric trauma and orthopaedics were unaffected and remained on the Gloucestershire Royal site
- Both planned and trauma spinal surgery continued to be provided at Gloucestershire Royal
- Other planned orthopaedic surgery continued to be provided at Gloucestershire Royal (e.g. wrists/ankles) pending evaluation of the pilot.

Expected public consultation via the One Place programme (the previous name for the FFTF programme), did not progress during the summer of 2018. Instead, work was initiated on reviewing the two clinical pathways in the context of the whole clinical model as described in this PCBC. In liaison with the Gloucestershire Health Overview and Scrutiny Committee (HOSC) the pilot was extended and has continued to operate as outlined above with regular updates to HOSC. This 'pilot' has therefore now been in place for almost three years.

'Mr G's story below illustrates the changes we made in planned orthopaedics:

Pre-Pilot	Post-pilot
Elective/ planned Orthopaedics (Pre-Pilot) Mr G is admitted for planned hip surgery in Gloucester. His operation has previously been cancelled due to lack of protected ring fenced beds and a rise in trauma admissions. He undergoes surgery in a theatre complex alongside other specialties. The physiotherapy team have responsibilities to the trauma patients as well as the planned ones. He is discharged once he meets his physiotherapy milestones. **Mr G had his first operation cancelled and spent 5 days in hospital**	**Elective/ planned Orthopaedics (Post-Pilot)** Mr G is admitted for planned hip surgery in Cheltenham. There is a bed waiting for him and he knows exactly what to expect. He is screened for MRSA. He has his surgery in a dedicated high volume orthopaedic unit which follows standardised protocols for anaesthetics and implants. A system called 'Enhanced Recovery After Surgery' is used on the ward to help Mr G recover quickly after his operation. He is discharged once he meets his physiotherapy milestones and has clear information on how to get in touch with the unit if he has any problems after he has returned home. **Mr G spent 4 days in hospital**

8.3.5.1 What is the evidence for this proposed clinical solution?

As this solution has been in place for nearly three years, the evidence set out below includes both published literature, and pilot impact information.

Published evidence

Guidance suggests that separating emergency and planned services can prevent the admission of emergency patients (both medical and surgical) from disrupting planned activity and vice versa, thus minimising patient inconvenience and maximising productivity for the Trust. Accordingly, the national *Getting it Right First Time* (GIRFT) standards recommend the creation of a 'cold' planned orthopaedic centre, either within an existing hospital environment or separate on the same site in a dedicated unit. GIRFT state that the clinical advantages of having dedicated (ring-fenced) orthopaedic units are well known (reduced infection, shorter length of stay, fewer cancellations).

This is supported in the other literature which concludes that dedicated units with higher volumes of planned surgery (such as hip replacements) utilising evidence-based surgical practices (and enhanced recovery programmes) and technological advances have been found to reduce length of stay and costs.

Evidence reviewed:

- Nasr A. *et al Impact of admissions on elective surgical workload* Ir J Med Sci, 2004
- Royal College of Surgeons of England: *Separating emergency and elective surgical care: Recommendations for practice*. Sept 2007
- Nuffield Trust *Improving length of stay: what can hospitals do?* 2015
- South West London Elective Orthopaedic Centre, 2009
- GIRFT *A national review of adult elective orthopaedic services in England, 2015*
-

Pilot evidence

Performance indicators for the pilot are described below, but in summary the key benefits delivered were:

- Improved access to specialist trauma and orthopaedic clinicians for advice
- More planned operations carried out initially
- Reduction in on-the-day surgery cancellations and significant reductions in cancellations overall

There have also been operational challenges, indicating that reconfiguration has been a means to an end, not an end in itself:

- Seasonal pressure across the hospital and increased demand for emergency trauma have still led to cancelled operations, even on the 'planned care site'
- In particular, spinal surgery – retained on the GRH site – lost 13 weeks' elective/ planned operating during winter 2018/19.
- Further work has been undertaken to ensure specialist trauma advice is available in a timely way for emergency and ward patients in CGH

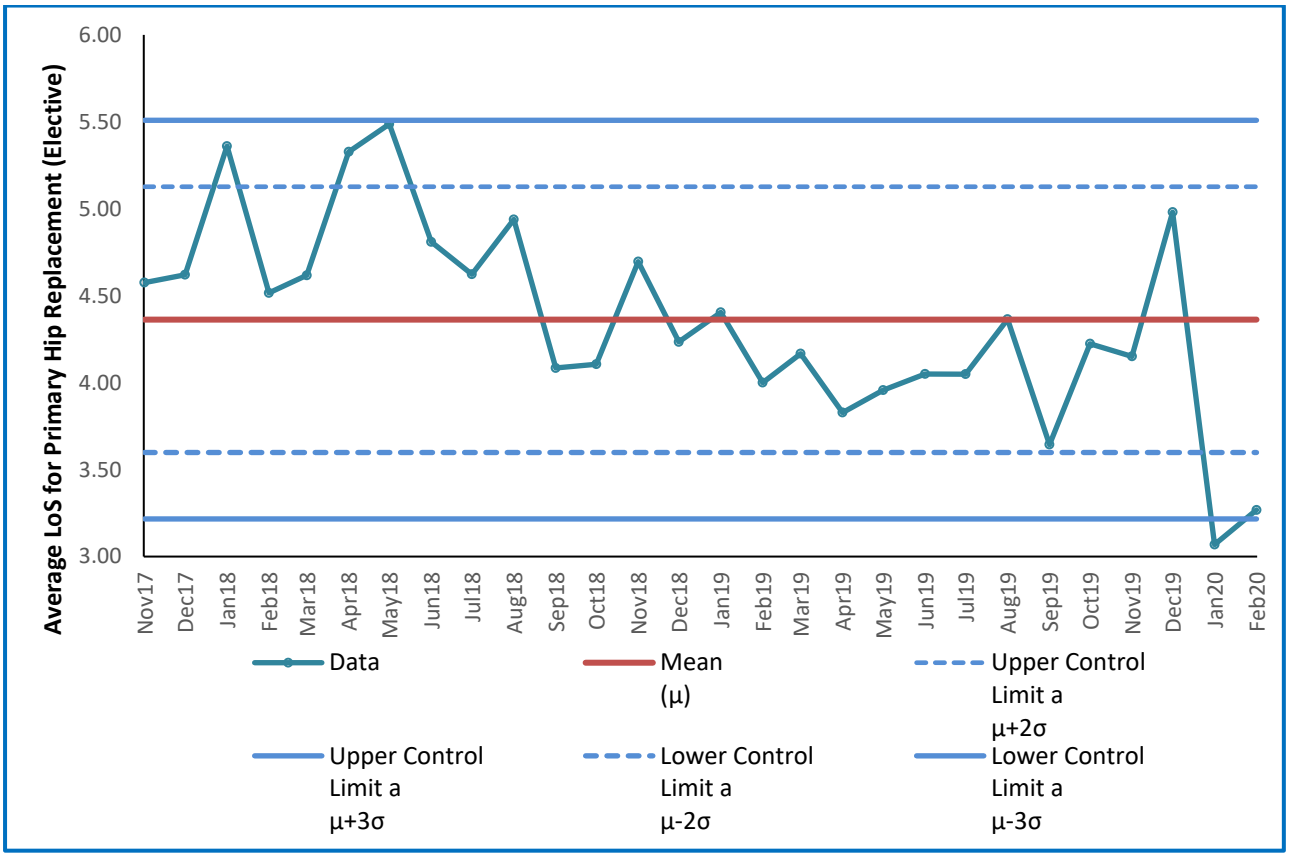
Trauma improvements

The following improvements have also been made to the Trauma pathway:

- All trauma patients now receive a **daily senior review** by the on-call consultant 7 days a week
- **Every GP and MIIU trauma referral** now triaged by a senior decision maker, patients are prioritised with urgent cases seen sooner.
- Enhanced junior doctor support and teaching experience recognised by the Severn Deanery – see F2 quality panel scores below
- T&O Doctors working to a ***Professional Standard*** to provide a specialty review within 30 minutes for patients referred from Emergency Dept.
- A trial of an acute assessment and treatment unit (TATU) in June 2019 included 648 patients, and avoided 311 inpatient bed requests along with other positive outcome measures.

Orthopaedic improvements

Average length of stay for planned primary hip replacement has reduced by 20% in last year and the Trust as a whole is below national average for hips and knee surgery length of stay. The SPC chart below shows the changes to average length of stay so far:



Elective/ planned Orthopaedics Discharges from CGH/GRH with Length of Stay>0

The following tables compare planned orthopaedic performance indicators before and after the pilot:

Table 1: Orthopaedic admissions and operations before and after the pilot

Elective Data	Monthly average prior to change [1]	Monthly average after change [2, 3]	% change
Total Admissions: Elective	594	637	⬆ 7%
Hip Arthroplasty Operations	62	72	⬆ 16%
Knee Arthroplasty Operations	70	80	⬆ 14%

Notes:
[1] Monthly average for 12 months prior to change in Nov 2017
[2] Monthly average for period of pilot: Nov 2017 to April 2019
[3] CGH theatre ("Apollo") closed for refurbishment between January and June 2019

Table 2: Orthopaedic patient cancellations before and after the pilot

Elective Data	Monthly average prior to change [1]	Monthly average after change [2]		Comments
On the day cancellations Average per month	40	18	⬇ 55%	Enhanced Recovery work will improve this further
Cancellations up to 5 days before	39	27.8	⬇ 29%	Many of these slots will have been reused by other surgeons
Total cancellations for Trauma	34	6.8	⬇ 80%	Showing spikes of Trauma after snow and ice and Bank Holidays
Total cancellations for Beds	10	8.8	⬇12%	Including winter pressures

Notes:
[1] Average in Sept 2017
[2] Monthly average for period of pilot: Nov 2017 to April 2019

Lessons learnt and areas for improvement

The purpose of a pilot is to test a specific service change before deciding to implement a larger or permanent change. Although overall the evaluation and evidence suggests the changes have been in the right direction, there are still issues with the trauma and orthopaedic service requiring further improvement efforts. These include:

- Trauma shifted to GRH initially without an agreed mechanism to provide trauma specialist review to patients on the CGH site. With considerable effort this has now been addressed, and is an important lesson learnt for future service reconfigurations

- Continued pressure on emergency capacity has seen trauma patients 'outlying' onto into elective/ planned orthopaedic wards, leading to delayed and cancelled planned operations
- Loss of elective/ planned spinal activity in winter 2018/19 due to emergency admitted patient demand

The *centres of excellence* aim is ultimately to rebalance the pressure on the two sites so that planned care can be more protected from emergency demand. Some actions may be unrelated to trauma and orthopaedics, and some may entail further review of the remaining planned activity on the GRH site (spines, wrists, ankles) to agree long-term options for ring-fencing or moving theatre and ward capacity to ensure these operations can continue in spite of emergency demand. Review of remaining orthopaedics provision on the GRH site is planned in Phase 2 of the programme.

Patient Experience

There was no purpose-designed patient experience exercise carried out before, during or after the pilot. This means that we are reliant on data collected routinely through the Friends and Family Test (FFT) to understand how patients were affected.

We have learnt from this, and for any future changes we will carry out more bespoke patient engagement work which will enable us to understand what matters most to patients in considering service changes, and to draw better comparisons between specific aspects of care before and after a change.

Staff Experience

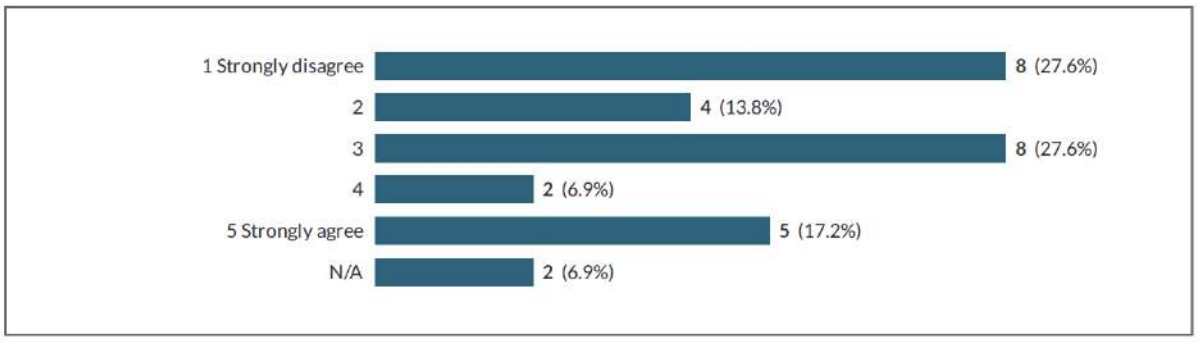
As with patient experience, no purpose-designed staff experience survey was carried out prior to implementation of the pilot. However, in 2019 the specialty distributed a comparative staff experience survey. As well as asking staff about their current experience, those who were in post before the changes outlined above were asked how they thought this compared with the way it was before.

72 staff associated with T&O were asked to complete the survey, 29 responded (40% return). 21 of the 29 were senior clinical staff and 26 people were working at the Trust before the pilot reconfiguration started in October 2017.

When asked to consider the service before October 2017 compared to the service now, 17 (65%) rated the overall service and the functionality of the clinical team as '*about the same or better*'.

On the whole, the respondents were not agreeable to returning to the previous state, prior to October 2017:

I would like to go back to the previous state, pre October 2017



Ongoing work is underway to address the issues raised by staff following the pilot reconfiguration of trauma and orthopaedic services.

We have learnt from this, and for any future changes we will carry out more bespoke staff engagement work which will enable us to understand what matters most to staff in considering service changes, and to draw better comparisons between specific aspects of care before and after a change.

Junior doctor feedback is sought through annual quality panels. The latest F2 feedback for CGH and GRH respectively is shown overleaf, reflecting a positive improvement with similar on-call concerns to those raised in the survey.

F2 T&O Quality Panel Feedback 2018/19, CGH

Grading	2017-18 Grading	2018-19 Grading
EEE Grade	Requires Improvement	Good
SWE Grade	Inadequate	Excellent
Quality Data Grade	Choose an item.	Choose an item.
Overall Grade	Requires Improvement	Good

Anomaly Grade and Comments (optional)	Survey Returns: 6 Maximum Returns: 9 Anomalies and Comments: Weekend handover

Qualitative Remarks

Areas of Excellence	SpR support, teamworking. Efforts to ensure educational content.
Areas of concern	Balance of service vs training.
Actions to Improve Grade (SMART)	Weekend handover is a concern; continue to ensure maximum educational input. Great to see SpRs leading on training, but as/when they rotate may be missed.
General Comments (optional)	Pleasing to see good feedback. Some senior trainees named as excellent trainers – please feedback to them.

F2 T&O Quality Panel Feedback 2018/19, GRH

Grading	2017-18 Grading	2018-19 Grading
EEE Grade	Requires Improvement	Good
SWE Grade	Requires Improvement	Good
Quality Data Grade	Choose an item.	Choose an item.
Overall Grade	Requires Improvement	Good

Anomaly Grade and Comments (optional)	Survey Returns: 4 Maximum Returns: 5 Anomalies and Comments: 1 vacant post 2nd rotation

Qualitative Remarks

Areas of Excellence	Improvement on feedback.
Areas of concern	F2s holding SpR bleep. Please check Clinical Supervisors are allocated appropriately, long hours
Actions to Improve Grade (SMART)	Ensure induction for all trainees. Consistency of teaching.
General Comments (optional)	Better feedback – thanks. Continue to develop educational opportunities – eg theatre, clinics.

8.3.5.2 What are the interdependencies with other services?

No proposed changes to the current service configuration, in which all interdependencies are addressed.

8.3.5.3 How does this address the case for change?

The changes outlined above are already in place. However, the clinical solution in place addresses the following reasons for change:

Reason for change	How preferred option addresses this
Demand for healthcare is increasing due to population growth	Consolidating emergency/planned care teams on separate sites provides more capacity and increased efficiency to support higher levels of demand.
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* model for both emergency (trauma) and planned care (orthopaedics).
Trustwide, over 400 operations cancelled on the day for non-clinical reasons in the most recent 12 month period reported.	Moving planned care away from the main emergency site has reduced the risk of operations being cancelled for non-clinical reasons, i.e. because of staff, theatres or beds being allocated to emergency patients.

8.3.5.4 How was this evaluated? *

The solutions appraisal exercise was designed to evaluate proposed changes compared with the status quo. Given that the changes outlined above are already in place, the proposed change evaluated in this case was ***reverting back*** to the original configurations, i.e. reversing the pilot.

	Revert to original Gastroenterology and Trauma & Orthopaedics configurations	Model A
Quality	**Scores**	Worse than status quo
	Comments	• The continuity and availability to sub specialty care would be lost and wait times for specialist trauma would increase • Spreading consultants and junior doctors across two sites; means that there would be a detrimental effect to emergency care • The benefits including reduced elective cancellations and daily input to trauma patients would be lost • Reversing the pilot would reduce the likelihood that patients with Gastroenterology problems would see a specialist • Continuity of care could be adversely affected if the pilot was reversed • The current process is working well and teething issues have been resolved. However the unexpected increase in trauma does lead to pressure during peak demand.
Access	**Scores**	Broadly similar to status quo
	Comments	• More cancellations • Planned care worse • Increased travel time for some and less for others • Both emergency and elective patients could wait longer
Workforce	**Scores**	Slightly or significantly worse than status quo
	Comments	• If reversed the benefits in patient care would be lost and there would be an impact on morale for all staff groups • Recruitment would become harder, as posts with reduced time to deliver specialist services are less popular with applicants. • Since the pilot there has been an improvement in recruitment for nursing and specialty doctors • Junior Doctors feedback from the deanery was poor in GRH due to heavy workload and patchy supervision. Latest reports are good at both sites and it is believed that the dedicated consultant on trauma allows vastly improved supervision and teaching
Deliverability	**Scores**	Similar or worse than status quo
	Comments	• The current pilot is already in place and so does not require changes to be delivered. • If Gastroenterology reversed it would take a 6 month period to work up and would impact other services and reduce beds in medical wards at GRH • If Trauma & Orthopaedics reversed it would take a 6 month period to work up and would impact on ED delivery
Acceptability	**Scores**	Slightly worse than status quo
	Comments	• No evidence to support * Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

8.3.5.5 What are the benefits including clinical outcomes?

There were drawbacks/lessons learnt which are highlighted above. However, in solutions appraisal these were not considered to outweigh the benefits listed below.

Proposed Solution	Benefits
Both elements of the solution	• Improved access to specialist trauma and orthopaedic clinicians for advice
Centralise trauma to GRH	• Co-location with single acute take in proposed new model • All trauma patients now receive a daily senior review by the on-call consultant 7 days a week, reducing length of stay. • Enhanced junior doctor support and teaching experience recognised by the Severn Deanery • Every GP and MIIU trauma referral now triaged by a senior decision maker - patients are prioritised with urgent cases seen sooner. • T&O Doctors working to a Professional Standard to provide a specialty review within 30 minutes for patients referred from Emergency Dept.
Centralise orthopaedics to CGH	Better patient experience: • More planned operations carried out • Half the number of on-the-day surgery cancellations and significant reductions in cancellations overall

Further details are provided in the Benefits Realisation plan (Appendix 35)

8.3.5.6 Quality Indicators

These can be found in Section 8.3.5.1

8.3.6 *Formalise 'Pilot' Configuration of Gastroenterology*

Gastroenterology is a busy speciality that provides medical care (non-surgical) for patients with stomach, pancreas, bowel and liver problems. This includes the provision of endoscopy tests i.e. diagnostic camera tests of either the upper or lower gut to diagnose a range of conditions including stomach and bowel cancer, as well as care for patients with illnesses like liver cirrhosis, coeliac disease, ulcerative colitis and Crohn's disease, Irritable Bowel Syndrome, stomach ulcers and indigestion.

Much of the work is done in outpatients with a smaller number of patients requiring admission to hospital. Before any changes, the gastroenterology team looked after two wards, one at Cheltenham and one at Gloucester.

In November 2018 the Trust, with support from the Gloucestershire HSCOSC, launched a pilot to test consolidation of gastroenterology onto one ward at Cheltenham (Snowshill ward, 18 beds), whilst also providing two 'high acuity' gastroenterology beds at Gloucester for acutely unwell patients. These high acuity beds are supported by a 'gastroenterologist of the day' rota to ensure compliance with timeliness standards for senior review.

Upper gastrointestinal bleeds are managed via this route in-hours, and out of hours through a county-wide on-call rota (i.e. attending either site as required), with access to emergency endoscopy available on both sites.

Similarly, patients with inflammatory bowel disease presenting at GRH would be reviewed by the attending Gastroenterologist of the day and resident EGS team. Patients presenting or admitted to CGH would be reviewed by the on-site gastroenterology team, or by the EGS team within internal guidelines.

The scenario below illustrates the differences in care for 'Mrs J' before and after implementation of the proposed solution above.

Scenario pre-pilot	**Scenario post -pilot**
Mrs J is a 67 year old lady who had been taking aspirin and clopidogrel following a coronary stent insertion. She is admitted to GRH as an emergency with "coffee ground" vomiting. She is seen initially by the Consultant Acute Physician on-call at 15:00 and referred to Gastroenterology. She is admitted to ward 7a and reviewed the following morning by the Gastroenterology registrar who requests an upper GI endoscopy. This is scheduled and performed on the next available inpatient endoscopy list, which is the following afternoon (48 hours after admission). The scope shows mild gastritis and Mrs J is discharged the following morning. **She has been in hospital for 3 days**.	Mrs J is reviewed by a senior member of the Gastroenterology team shortly after she arrives. They request an Upper GI endoscopy which is carried out the following morning in the new daily protected inpatient endoscopy slots. This confirms mild gastritis and, as the scope is carried out in the morning she can be discharged later the same day. **Mrs J was only in hospital for 1 day**.

8.3.6.1 What is the evidence for this proposed clinical solution?

As this solution has been in place for over two years, the evidence set out here includes both published literature, and pilot evaluation materials.

Published evidence

This solution was originally implemented as part of system preparedness for winter 2018/19. It was implemented to release capacity on the GRH site and ensure senior clinical review standards were in place for acute admissions. Although medical gastroenterology is not a 'planned' service *per se*, following initial acute presentation the solution allows ongoing care to be delivered in a single dedicated inpatient ward away from the busier site.

Evidence reviewed:

- *Future hospital: caring for medical patients. A report from the Future Hospital Commission to the Royal College of Physicians*. 2013.
- Pannick *et al: rethinking medical ward quality* in BMJ 2016;355:i5417
- Academy of Medical Royal Colleges, *the benefits of consultant delivered care*, January 2012

Pilot evidence

Summary information for the pilot's key evaluation metrics are set out below, but in summary the key benefits delivered have been:

- 'Time to be seen' by a gastroenterologist from e-referral has reduced from 1-2 days to 6-12 hours
- Capacity has been created to offer an additional 237 endoscopy procedures a year, shortening waiting times for patients and reducing costly spend on private providers
- There has been a decrease in the number of reported violence and aggression incidents against staff (from 8.5 per month to 1.6)
- Transfers between sites have been significantly less than expected (less than 1 patient a day transfers to Cheltenham for admission, compared with 2 to 3 expected), indicating the availability of early senior review for emergency patients is working well and that admissions have been avoided, as suggested by the evidence
- Positive staff and patient feedback

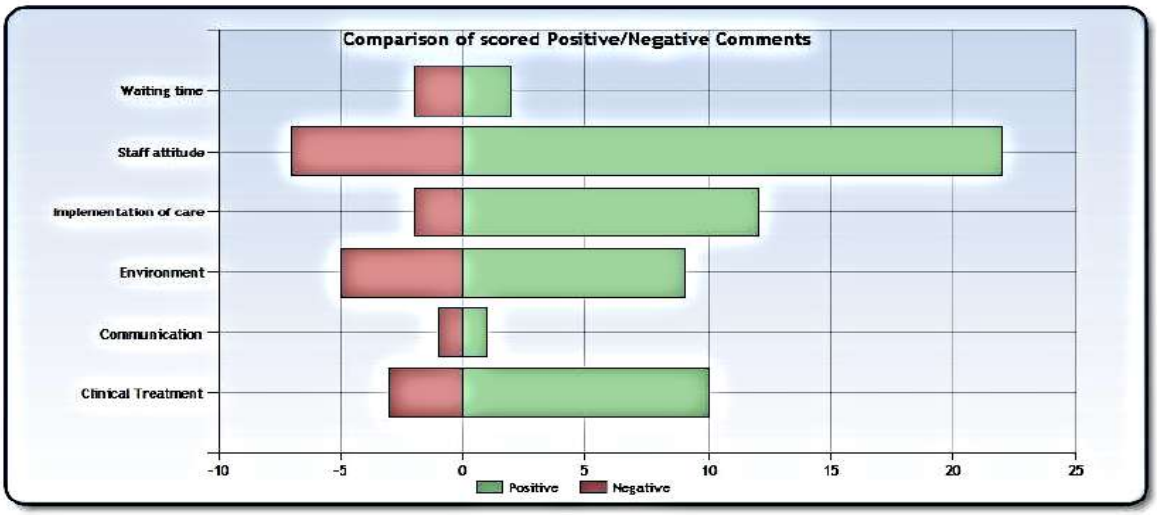
The pilot evaluation metrics were:

#	Measure	Data source
1	Improving patient experience	*FFT, bespoke ward survey*
2	Improving staff experience	*Monthly report from Medical Staffing*
3	Time for patient to see Gastroenterology specialist following inpatient e-referral	*Internal Audit - Gastro SpR*
4	Provision of additional Endoscopy capacity	*Internal Audit - Endoscopy Booking Team*
5	Reducing use of private sector	*Report from finance*
6	Achieving 6 week wait diagnostic standard	*6ww diagnostic report*
7	Reducing patient length of stay	*Data Warehouse*
8	Treating patients on the right medical ward (reducing outliers)	*Site snapshot*
9	Time to transfer patients to Snowshill ward at CGH (where required)	*Trakcare report*

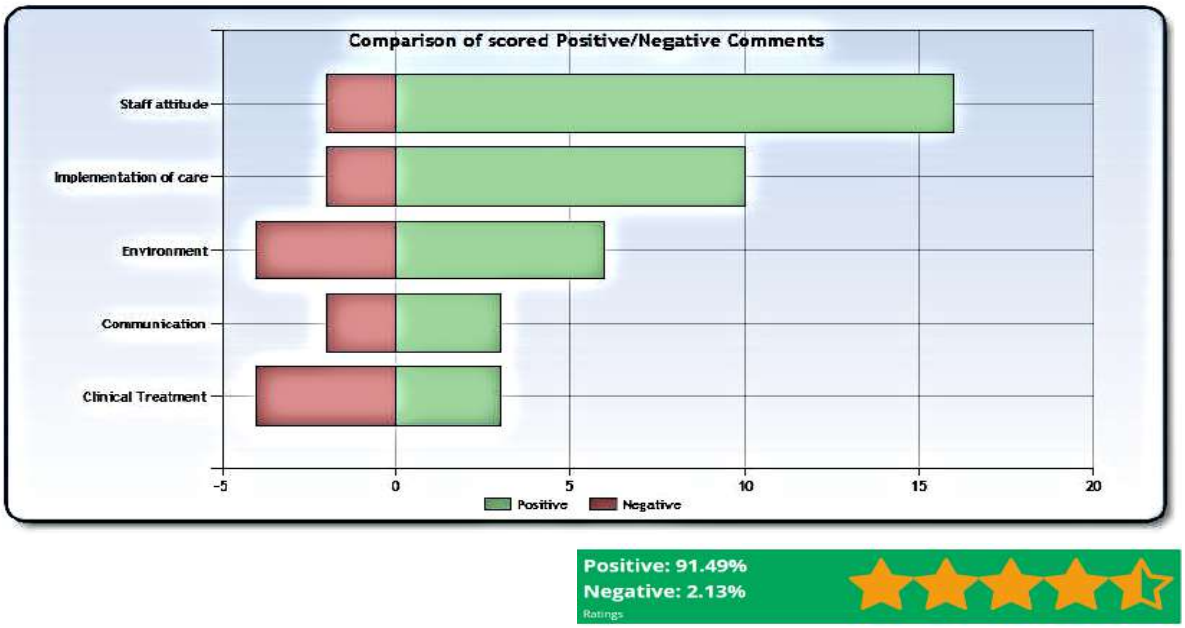
Details of the performance against these metric is given below:

#1. Improving patient experience

The chart below shows Trust 'friends and family' test scores for gastroenterology inpatient wards before the pilot (20% response rate):



The chart overleaf shows Trust 'friends and family' test scores for gastroenterology inpatient wards after the pilot (20% response rate):



"Patient care was constantly excellent and tailored to each persons need (from what I saw). My main need was for information, which came whenever I needed it - and sometimes before".

#2. Improving staff experience

Ongoing staff views have been sought and examples of their comments provided below:

Senior nurse

"We have a much higher Dependency level now, as usually have 2 or 3 really sick patients, often needing ITU [critical care] input, and lots of central lines and I.V's. Staff are enjoying the challenge of these patients and are feeling well supported by Medical Team, 2 weeks at a time for Consultants working well. We obviously cannot keep beds empty, so if we have no Gastro patients, or we have a side room free, we get General Medical patients, which we then have enormous difficulty in moving out, even when we then have Gastro patients to come in, so that could work better.

We also are having more referrals for eating disorder patients, and we feel strongly that we should only take those patients who actually require Gastro input, i.e. NG and re-feeding, but they still need to be referred and accepted by the Team. We cannot take all eating disorder patients, or we will never get our Gastro patients in with only 18 beds, they need to be managed by Eating disorder team"

Junior Doctors

"Previously, we had a massive bed-base with few juniors and sometimes no SpR for various reasons. This led to reduced training opportunities at all levels, the consultants were incredibly stretched due to having to do a WR [ward round] of nearly 50 patients (which felt unsafe at times - we had many outliers on the 5th floor). The juniors were doing 8am-7pm days, sometimes later… Since the change, it has been a phenomenal change. We have a small bed-base BUT more intensely sick gastro patients. I think it means they are getting the care they should and much more experience for all levels without feeling over-worked and unsafe. There is more time at both sites to go to endoscopy, do extra clinics and actually do our admin or teach the juniors".

"Endoscopy - I have to say that the endoscopy opportunities we are getting are far more than we did.... I personally have managed to get signed off on diagnostic upper GI endoscopy in 1 year having done very little previously."

"In GRH, there is a dedicated SpR and consultant DAILY who sees gastro referrals every day. Previously, due to the ward commitments, it could sometimes be a delay of a few days before gastro referrals were being seen. We are able to triage them and either decide to scope them that day or transfer to Snowshill as required"

"Prior to the move, it was not uncommon for SpR clinics to be cancelled due to "service pressures" but this does not happen"

"I must say I have had a fantastic experience as a 1st year SpR - the consultants are just the nicest I have ever had the pleasure of working with and I really hope to come back. They have really made me feel part of the team and have been open to any suggestions to make things work for us. Despite some of the things that could stand to improve, it really is great and I only have really good things to say. I think the reconfiguration really works for our training and for the patients and I would be sad if it changed back!"

Consultants – gastroenterology

"The impact on my working life has been positive. I greatly enjoy the GoD [Gastroenterologist of the Day] rounds with additional time for teaching the SpRs as well as being able to provide expertise and focussed investigation and treatment to patients on all wards with GI or hepatological symptoms. I can advise GPs efficiently to offset unnecessary admissions and can validate referrals. We can select and transfer patients for more intensive treatment on our GI ward".

"Altogether it has been a positive experience and we continue to strive to improve our GI service with the hope of achieving an exemplar of best practice for all aspects of GI care"

"In my opinion, this pilot has been a great success. It has been beneficial to the clinical team and to the patients. The single ward on the CGH site has helped us to ensure that GI patients are nursed in the correct environment with the right expertise, rather than being an outlier on a non-GI ward. The gastroenterologists are not looking after patients outside of their expertise, which improves LOS [length of stay]"

"Amongst the medical staff there has been a dramatic improvement in morale and the staff now feel very positive"

Consultants – other

"Phenomenal input. 8am on AMU followed by afternoon review. Patients rarely wait longer than 6h for review unless overnight"

#3. Time to see gastroenterology specialist

- Pilot target :100% within 24 hours
- Before pilot - 24 to 48 hours
- After pilot - 6 to 12 hours

#4. Provision of additional endoscopy capacity

- Pilot target: additional 7 lists per week
- 5.6 additional endoscopy lists per week (equates to 237 per year) (current vacancies prevent increasing any further at this stage)

#5. Reducing use of private sector

No longer sending patients to private sector with no requirements to re-engage with a private provider. Prior to the pilot the annual trust outsourcing spend for private endoscopy was £660,000.

#6. Achieving 6 week wait diagnostic standard

Target met.

#7. Reducing patient length of stay

Further work is required to evaluate the impact on length of stay.

#8. Treating patients on the right medical ward (reducing outliers)

Further work is required to evaluate the impact on outliers.

#9. Time to transfer patients to CGH (where required)

Our planning assumption prior to the pilot was that **2 to 3 patients per day** would need to be transferred from GRH to CGH.

Between November 2018 and February 2019 **only 21 patients** required transfer, an average of **less than 1 patient per day**.

This is because:

- More patients are being discharged home direct from Acute Medical Unit at GRH
- Patients referred by GP are being directed straight to Cheltenham General.

8.3.6.2 What are the interdependencies with other services?

No proposed changes to the current service configuration, in which all interdependencies are addressed. The proposed change to the acute medical and associated on-site acute medical cover at CGH will require review of the direct admission route.

8.3.6.3 How does this address the case for change?

Reason for change	How preferred option addresses this
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* model for both emergency (gastroenterologist of the day) and planned care (cohorted medical gastroenterology ward).
Rate of emergency admission is 9.7% higher than peer group Bed occupancy rate of 95.4% (average) compared with a desired occupancy of <92%	Acute admission pathway on the GRH site has reduced rate of admission in this cohort of patients. Moving the specialty bed base to CGH has contributed to reduced pressure on the GRH bed base but further work required to understand occupancy impact.

8.3.6.4 How was this evaluated?

Please see joint evaluation assessment in Section 8.3.5.4

8.3.6.5 What are the benefits including clinical outcomes?

Proposed Solution	Benefits
Continue pilot configuration of gastroenterology	• Reduced rate of emergency admission • Increased capacity for endoscopy • Improved patient experience: reduced risk of admission, dedicated ward setting with specialist teams, timely endoscopy • Improved staff experience • Reduced costs of outsourcing to private provider

Further details are provided in the Benefits Realisation plan (Appendix 35)

8.3.6.6 Quality Indicators

These can be found in Section 8.3.5.1

8.3.7 *Develop an Improved Model for Care of the Deteriorating Patient*

Our proposed deteriorating patient model consists of expanding our Acute Care Response Team (ACRT) to 24/7 on both sites, and providing them with on-site resident ITU consultant support overnight in Cheltenham.

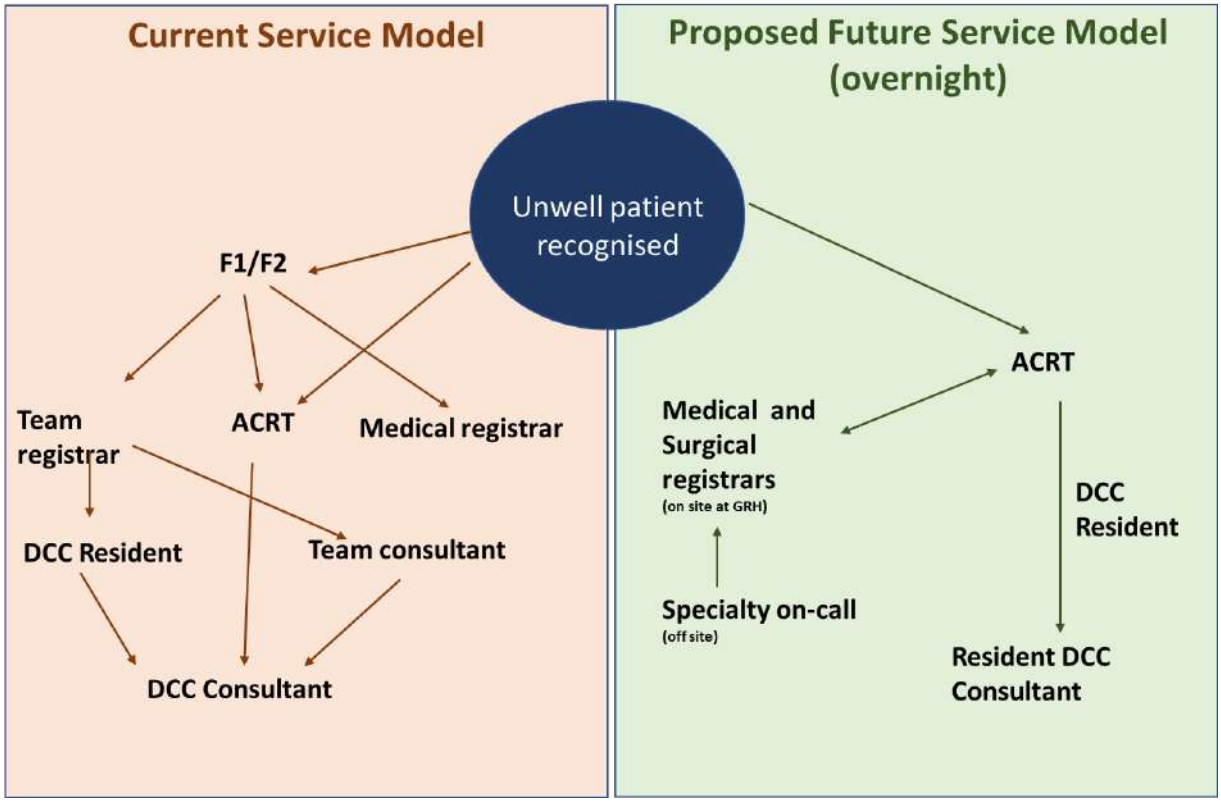
The ACRT are specialists in deteriorating patients regardless of specialty or site. They would be led in each site by a band 8a Advanced Clinical Practitioner (ACP) supported by a band 7.

For immediate life-threatening issues overnight in Cheltenham the ACRT practitioners would be supported by a **resident Intensive Care Consultant**. There would also be a resident junior intensive care doctor onsite.

For other patients identified as deteriorating overnight in Cheltenham the on-site ACRT team would be supported by the two resident surgical registrars, and two resident medical registrars based in GRH. They would be available over the phone, and if necessary to travel to CGH to review patients (see section 8.3.2.7 for the surgical 'standard operating procedure' developed to support delivery of the EGS solution).

The medical and surgical middle grades and ACRT team would also have access to existing specialty county-wide on-call teams as required.

These arrangements are illustrated in the graphic below.



The clinical scenarios overleaf describe how this new clinical model would work in practice.

8.3.7.1 Potential Future Model Scenarios

Chest infection

Mr L, an inpatient on a medical ward admitted with a probable chest infection, is found to have become more unwell. This deterioration is identified by vital signs being recorded by a ward Health Care Assistant (HCA). The NEWS2 approach utilises a scoring system which allocates points to ranges of vital signs where higher scores reflect patients who are more unwell. Mr L is found to have score of 5. These vital signs are checked by the registered nurse and found to be correct. The nurse knows to contact the Deteriorating Patient Team for the initial escalation, no matter what time of day or night. The Deteriorating Patient practitioner reviews the patient, initiates treatments and outlines the management plan for the ward nurses.

Later, Mr L is found not to have adequately responded to treatment so the Deteriorating Patient practitioner reviews the patient and decides to escalate their care, which they do by calling the Medical Registrar or the Critical Care resident, depending on the nature of clinical advice required. If appropriate, the patient's own consultant will be sought for an opinion.

Should Mr L need emergency admission to Critical Care this will be expedited by the Critical Care resident and the Deteriorating Patient practitioner.

Post-operative bleed

Overnight a urology patient who is 10 hours post operation is noted to be deteriorating due to worsening vital signs and the ward staff summon the ACRT practitioner. They carry out a full review of the patient including investigations and diagnose that bleeding is the most likely diagnosis. The case is discussed with the critical care consultant who agrees with the working diagnosis and that urgent surgery is required. The on-call consultant urologist and on-call consultant anaesthetist are summoned from home, whilst the ACRT practitioner continues to prepare the patient for surgery.

Complex Medical Patient

Patient on a Sunday afternoon is found to be acutely but not seriously unwell by ward staff who alert the ACRT practitioner. The ACRT practitioner reviews the patient who determines that no urgent lifesaving treatment is required. The patient however has a longstanding and complex medical history involving a number of systems (respiratory, cardiology etc.) and is on many medications.

The ACRT practitioner takes time to thoroughly review the patient, including their medications. They discuss the patient with the Medical Registrar at GRH who is able to see the images of x-rays and other scans/investigations, including all blood results, on the system.

The patient's medical state is optimised and the ACRT practitioner arranges to review the patient again later in the day.

Airway Emergency

Patient on an orthopaedic ward suddenly and unexpectedly has a fit. The seizure is ongoing and the ward staff immediately ring 2222 for the Resuscitation Team. By this time the patient is blue due to lack of oxygen due to a compromised airway.

The attending Resuscitation Team is led by the resident Critical Care Consultant. The patient receives intravenous drugs and their airway is managed by rapid intubation. The patient is sedated and ventilated and transferred to Critical Care onsite for ongoing management by the Consultant.

Post-operative Acute Myocardial Infarction

Patient on a general surgical ward develops sudden and persistent chest pain, the nurse promptly alerts the ACRT practitioner and undertakes a set of vital signs. The practitioner reviews the patient, carries out serial ECGs and takes appropriate blood tests. They diagnose an Acute Coronary Syndrome (ACS) and discuss the case with the Medical Registrar at GRH who on reviewing the ECGs agrees the patient needs urgent transfer to the Angiography Suite for Primary PCI (which in this scenario is assumed to be centralised at GRH, pending full options appraisal of alternatives).

The medical registrar liaises with appropriate staff to be ready to receive the patient. The practitioner at CGH liaises with the Site Team to arrange urgent transfer in a 'blue light' ambulance to GRH.

They also appraise the critical care consultant at CGH so that they are made aware of the situation in case the patient's condition deteriorates prior to transfer. At a later time the surgeon in charge of the patient's care is brought fully up to date with the ongoing situation.

Patient developing a general surgical problem on the Cheltenham site

A patient who underwent a planned aortic aneurysm repair 5 days previously deteriorates on the vascular ward in the evening and complains of abdominal pain. An ACRT practitioner sees the patient and starts appropriate resuscitation with IV fluids, antibiotics, pain relief and obtains up to date blood samples, including a blood gas.

The blood gas reveals that the patient is quite unwell (acidotic) and following urgent review by the ITU consultant they are transferred to the Department of Critical Care (DCC). The vascular consultant on-call is informed and an urgent CT scan is arranged which suggests a lack of blood supply to the large bowel (colonic ischaemia). The patient is discussed urgently with the general surgical consultant first on call for the county. They arrange for the 'second on-call' consultant to come in to Cheltenham General to review the patient on ITU. Following this the patient is taken immediately to theatre for an operation to remove the affected bowel (colectomy).

8.3.7.2 What is the evidence for this proposed clinical solution?

A literature search around the benefits of an Acute Care Response Team demonstrates that these models are popular in Australia, New Zealand and the United States. Although research is fairly limited to date, a publication in 2018 concluded that rapid response teams may reduce in-hospital mortality rates and another in 2016 found the implementation of a rapid response team to reduce hospital mortality and cardiac arrests.

However, a 2015 review concluded that high quality evidence supporting the effectiveness of rapid response teams is controversial. The common theme throughout all publications is that the implementation should include good education and buy in from staff.

In 2010 ICNARC used their extensive database (over a million patient datasets) to evaluate the benefits of a consistent Critical Care Outreach Service[25]. Despite precise service models varying, the underlying principles are the same. The objectives of Critical Care Outreach Services (CCOS) are to improve the quality of acute patient care and experience. Despite the introduction of CCOS into the NHS without any provision for a concurrent evaluation (and thereby preventing robust evaluation within an RCT), our more limited, yet rigorous, non-randomised evaluation suggested, both quantitatively and qualitatively, some positive

[25] Evaluation of Critical Care Outreach Services by ICNARC (2010)

effects. However, no clear characteristics of what should form the optimal CCOS could be identified.

Though not an original aim for CCOS, they facilitate connectivity, reduce communication difficulties and enhance the delivery of care across organisational, professional and speciality boundaries and may, in this way, create an important culture change leading to improved quality of care, that is, improved recognition of acute deterioration, initial management and escalation of treatment. CCOS also appear to have made a significant impact on morale, career development, ward staff clinical skills, confidence levels, education and training. However, ultimate management of the critically ill should be the responsibility of those who have the appropriate knowledge and experience.

A study carried out in February 2019 relating to referrals to the Critical Care Outreach Team (CCOT) at Whittington Health NHS Trust suggests that CCOT add value:

- **Better outcomes** – This project has seen improved safety due to earlier involvement of experts in managing critically ill patients. The CCOT have seen an increase in timely referrals within the hour, the comparative yearly average of 60% (15/16) rising to 80% (16/17). This demonstrates that a greater awareness of staff can lead to timelier critical care interventions for the most unwell patients.
- **Better experience** – The project has presented an earlier opportunity to discuss and establish patients' wishes with regards to treatment escalation and DNACPR decisions.
- **Better use of resources** – This intervention supports earlier identification of patients who are showing signs of deteriorating clinically and improving timely referral to the CCOT. Although not measured, it is anticipated that this will have contributed to the wider aims of interventions in this area, namely to reduce mortality, morbidity and the cost implication of impact on length of stay in hospital including critical care (NICE 2017). This nurse led improvement has demonstrated earlier management of unwell patients by experts, whilst empowering staff to utilise their skills. The project has also promoted person-centred care that ensures patients and relatives have control in their decisions about treatment escalation and DNACPR. This enables more sensitive and appropriate professional interventions.

NICE guidance March 2018 recommends that hospitals consider providing access to critical care outreach teams (CCOT) for patients who have, or are at risk of, acute deterioration, accompanied by local evaluation of the CCOT service.

The model set out in this business case was designed by a Task and Finish group made up of representatives from the current ACRT, consultant anaesthetists, Divisional Nursing Director, Chief of Service, Specialty Director, HR, Finance, Deputy Medical Director and a Medical Registrar.

Evidence reviewed:

- Royal College of Physicians. *Care of medical patients out of hours*. Position statement. London RCP, 2010
- Clinical guideline [CG50] : *Acutely ill adults in hospital: recognising and responding to deterioration,* Published date: July 2007 (Updated 2010)
- NCEPOD*Time to Intervene – A review of patients who underwent cardio-pulmonary resuscitation as a result of in hospital cardiorespiratory arrest*, 2012
- NCEPOD Report *An Acute Problem? 2005*
- Rowan, K *Evaluation of outreach services in critical care;* Project SDO/74/2004; published by the National Coordinating Centre for the Service Delivery and Organisation
- (NCCSDO) research programme, managed by the London School of Hygiene & Tropical Medicine
- The Atlas of Shared Learning (2019): *Improving referral to the Critical Care Outreach Team* 14 February 2019

8.3.7.3 What are the interdependencies with other services?

The team has a key dependency on critical care, which will be available 24/7 on both sites.

8.3.7.4 How does this address the case for change?

Reason for change	How preferred option addresses this
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* model, particularly for planned care where the team will be instrumental in ensuring CGH is a safe environment for the full range of planned care procedures, not just simple surgery.

8.3.7.5 How was this evaluated?

This element is a clinical enabler to the other proposed models described and was therefore not evaluated as part of the Fit for the Future process described for the other solutions.

An internal evaluation of the options was carried out by the Task and Finish team and set out in the Deteriorating Patient Business Case, approved by the respective Divisional Boards, Trust Leadership Team and Trust Board.

The options and options appraisal is set out below.

Option 1 – Do Nothing

This would require the least change, but would fail to address any of the issues outlined above and is therefore discounted.

Option 2 – Increase ACRT only

This option would considerably improve consistency and sustainability, would strengthen support available to junior medical rotas, and is the most straightforward option to implement after 'do nothing'. However, it does not address the issues identified by the South West Clinical Senate relating to the *Centres of Excellence* strategic objective. It would

only be progressed as the preferred option if *Centres of Excellence* ceased to be the strategic direction of travel.

Option 3 – Increase ACRT + middle grade medical cover

This comprises the option above, plus recruitment of additional middle grade doctors to ensure sufficient appropriate medical cover is available on both sites 24/7. Middle grade cover could include staff grades, internal locums and external RMO.

All attempts to increase middle grade cover have been unsuccessful over the last 5 years. This includes overseas recruitment and multiple job adverts failing to get suitable applicants. This option is therefore discarded due to demonstrable failure to recruit the necessary workforce.

Option 4 – Increase ACRT + ITU Consultant site cover

This option is evaluated as the preference on the basis that, unlike in many other Trusts, GHNHSFT has been successful in recruiting and retaining ITU consultants. This is in contrast to the Trust's ability to successfully recruit other middle/locum/training grade doctors.

These options are compared in the table below against a set of core criteria:

Option	Equitable Patient Access at both sites	Cost	Strategic Fit (supports CoEx strategy)	Ability to Maintain Rotas	Service Sustainability	Ease of Implementation
1	X	✓	X	X	X	✓
2	X	✓	X	X	✓	✓
3	✓	X	X	X	X	X
4	✓	✓	✓	✓	✓	✓

The preferred option described in this business case is Option 4: increase ACRT capacity and provide planned care site cover by expanding the ITU consultant rota.

8.3.7.6 What are the benefits including clinical outcomes?

- Compliance with recommendation that Trusts should ensure each hospital provides a formal outreach service that is available 24 hours per day, seven days per week.
- Evidence that a formal CCOS (critical care outreach service) is associated with a significant decrease in:
    - CPR rates during the 24 hours prior to admission;
    - out-of-hours admissions to the critical care unit; and
    - acute severity of illness of admissions; for admissions from the ward.
- Reduction in unwarranted variation in the timely referrals of critically ill patients.
- Earlier provision of specialist care to patients, ensuring improved patient care, experience and outcomes as well as better use of resources.

8.3.7.7 Proposed Implementation plan

This clinical model is a priority enabler for the Centres of Excellence clinical model. The business case for delivery of the proposed deteriorating patient team was approved by GHNHSFT Board in July 2019, and the first cohort of six band 6 trainees joined in April 2020. They were due to commence their formal two year training programme in April 2020, however due to the impact of COVID the University deferred the start of that training programme until September 2020.

Two recruitment initiatives have seen eight new team members join the service in the past 12 months, with six of these posts being new positions with additional funding. These staff will gain clinical experience and expertise from colleagues, and from specialists outside the service, while they increasingly gain competence and confidence to work autonomously. Alongside their work-based learning they are all starting a university based course in Advanced Clinical Practice, which will lead to a Masters' level qualification in advanced practice which will further enhance their clinical abilities. They, like their colleagues, will improve their banding in line with their qualifications and greater clinical expertise and ability. They will become increasingly autonomous as they manage sick and deteriorating patients whilst offering support to ward teams and medical colleagues.

8.3.8 *Reconfiguration of Elective/ planned Colorectal Surgery - 2 Variants (C5 & C6)*

There are two potential proposed models for the configuration of elective/ planned colorectal surgery. Both entail centralisation of elective/ planned general surgery, currently provided in both CGH and GRH.

In scenario C5 elective/ planned colorectal surgery would be centralised to CGH. This would separate it from emergency general surgery and elective/ planned upper gastrointestinal surgery in GRH. However, it would be co-located with urology and gynae-oncology – creating a 'pelvic surgery hub' and also with medical gastroenterology to support delivery of excellence in digestive disease care.

In scenario C6 elective/ planned colorectal surgery would be centralised to GRH, creating a single co-located service for admitted gastrointestinal elective/ planned care, alongside emergency general surgery. In this scenario the services would on the same site but in separate units.

8.3.8.1 What is the evidence for this proposed clinical solution?

Separating emergency and planned services can prevent the admission of emergency patients (both medical and surgical) from disrupting planned activity and vice versa, thus minimising patient inconvenience and maximising productivity for the Trust. The success of this will largely depend on having sufficient beds and resources for each service.

The Royal College of Surgeons of England (RCS) recommends separating planned surgical admissions from emergency admissions (ideally on a single site), suggesting that this can result in earlier investigation, definitive treatment and better continuity of care, as well as reducing hospital-acquired infections and length of stay (particularly medical emergencies) wherever possible.[26]

- Scenario C5 (centralise to CGH) would deliver complete separation as suggested in the guidance, but has potential to reduce continuity of care.
- Scenario C6 (centralise to GRH) would align better with the Royal College of Surgeons guidance, but requires separation of work flows on the GRH site

Hospital-acquired infections can be reduced by the provision of protected planned wards and avoiding admissions from the emergency department and transfers from within/outside the hospital. Care delivered by specialists saves lives and delivers better outcomes.

Evidence reviewed:

- Royal College of Surgeons of England: *Separating emergency and elective surgical care: Recommendations for practice*. Sept 2007
- Strategy 10: *Improving elective care through separating acute and elective surgery,* 2012
- Boyd-Carson, H., Doleman, B., Herrod, P.J.J., Anderson, I.D. et al. British Journal Surgery. 2019; 106: 940-948).
- Aaserud and Trommald, 2001
- Mayer et al, 2008
- Mäkelä et al 2011
- Abercrombie, J *General Surgery: GIRFT national programme specialty report* 2017

[26] King's Fund (2014) https://www.kingsfund.org.uk/publications/reconfiguration-clinical-services/elective-surgical

8.3.8.2 What are the interdependencies with other services?

Model	Interdependencies
C5 – centralise elective colorectal to CGH	Anaesthetics DCC Diagnostic Radiology Interventional Radiology Facilities (IR suite) Urgent GI Endoscopy
C6 – centralise elective colorectal to GRH	Anaesthetics DCC Diagnostic Radiology Interventional Radiology Facilities (IR suite) Urgent GI Endoscopy

The key services required for delivery of a planned colorectal surgery service are already available on both hospital sites and this would not be altered under any of the proposals in this business case.

8.3.8.3 How does the proposal to centralise to CGH (C5) address the case for change?

Reason for change	How potential option addresses this
Demand for healthcare is increasing due to population growth	Consolidating emergency/planned care teams on separate sites provides more capacity and increased efficiency to support higher levels of demand.
There is clear guidance that greater separation of planned and emergency (elective and non-elective) services in hospitals contributes to improved outcomes for patients and more effective use of resources.	This solution supports delivery of a *centre of excellence* for planned care.
Trustwide over 400 operations cancelled on the day for non-clinical reasons in the most recent 12 month period reported	It is unlikely that major resectional surgery would be cancelled to accommodate emergency cases. However the guidance suggests there would be benefits to separating planned surgery (either on a different site, or in dedicated same-site unit).

8.3.8.4 How was C5 evaluated? *

C5: Centralise elective/ planned colorectal to Cheltenham General Hospital (CGH).			Models D, F, G & H
Quality	**Scores**	Divergent scores (40% of questions), remainder similar to status quo	
	Comments	• If EGS has moved onto different site. Pts not reviewed by consultant at w/e. Requires a plan/SOP for deteriorating patient. • More handovers. Less w/e cover. Reduce team continuity • Advantages of centralisation concerns about moving away from emergencies. • Already one of the best in county therefore can't make significant impact • Significant concerns on model regarding surgical cover overnight and at weekends - May be a hybrid model. • Improved Access to sub-specialty. Co-location positive for planned - selected site irrelevant	
Access	**Scores**	Similar to status quo except worse for patient and carer travel	
	Comments	• Centralisation increases capacity = reduced waits • Carer impact higher • <280 negatively impacted Glos/FOD • Pts in for < 1 week but impact on families • Capacity of service is not reduced but # of locations 2 to 1 • Out patients unchanged	
Workforce	**Scores**	Divergent scores (40% of questions), remainder similar or better than status quo	
	Comments	• Who is looking after patients at night? • Depends on rota • Nursing impact / rotation • Centralisation positive i.e. dedicated elective time but uses same team allocated based on time (shifts); so split across sites • Deanery prefer trainees to work on 1 site only so split in GS is negative • Staff can concentrate on non-elective; not distracted by emergency • Impact potentially offset as other GS services also switch sites • Benefits of colorectal on single site.	
Deliverability	**Scores**	Similar to worse than status quo	
	Comments	• Significant time and work required to model and deliver. Priority hierarchy 1) EGS 2) day case 3) colorectal. Require sustainable change • Cannot deliver in isolation. ANPs and rotas need to be modelled/ provided • Single unit positive but separate sites negative • Single colorectal location is supported by consultants but no agreement on site • Separation of elective from emergency positive; potential to increase consultant capacity w/e and evenings. AHPs and nurse - greater experience. Develop new skill sets • Need to create theatre space and small # beds	
Acceptability	**Scores**	No consensus	
	Comments	• Not a decisive clinical benefit; a lot of concerns, so harder to identify benefits compared to current. Which site for colorectal not clear • Engagement Report - Balances services at both sites. Supports a vibrant future for CGH. • If we move elective to CGH we still have the same risk on emergencies so why would we promote?	

* Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC

8.3.8.5 What are the benefits of C5 including clinical outcomes?

Solution	Benefits
C5 – centralise elective/ planned colorectal to CGH	• Quality benefits from centralised team – best practice care by dedicated team and potential to improve service quality and offer (e.g. to patients going out of county) • Clinical benefits of colocation with medical gastroenterology to support delivery of excellence in digestive disease care • Clinical benefits of colocation with urology and gynae-oncology – creating a 'pelvic surgery hub' • Patient experience – ↓ risk of cancellation/delay in centralised/ring-fenced service

Further details are provided in the Benefits Realisation plan (Appendix 35)

8.3.8.6 How does the proposal to centralise to GRH (C6) address the case for change?

Reason for change	How potential option addresses this
Demand for healthcare is increasing due to population growth	Consolidating emergency/planned care teams onto a single site provides more capacity and increased efficiency to support higher levels of demand.
GI surgical trainees have reported negative feedback about workload and training environment. If this situation does not improve, the Deanery could withdraw trainees from the GI service in Gloucestershire impacting further on workforce and safety of care (rated 15 on Trust risk register)	As above, consolidating the teams onto a single site with improved rotas could allow better provision and protection of training opportunities and support.
Separation of planned inpatient work from emergency work on a single site is the best model of care according to Royal College of Surgeons' recommendations. This contributes to improved outcomes for patients and more effective use of resources.	Complex GI patients are high risk and sometimes require returns to theatre as emergencies. The model supports delivery of a *centre of excellence* for planned care whilst maintaining access to urgent care if required.

8.3.8.7 How was C6 evaluated? [27]

C6: Centralise elective/ planned colorectal to Gloucestershire Royal Hospital (GRH)			Model E
Quality	**Scores**	Similar to better than status quo	
	Comments	• Subspecialty positive. Same site as EGS positive • Reduced protection of elective patients from emergency pressure • Upside with EGS • Increased risk of overflow and or cancellation	
Access	**Scores**	Similar to worse than status quo	
	Comments	• Centralised positive impact • Single site • Carers and families twice the impact	
Workforce	**Scores**	Slightly to significantly better than status quo	
	Comments	• Centralisation and sub specialisation • Dedicated, complete separation • Availability to Trainee; sub-spec training • Education supervision, physical availability	
Deliverability	**Scores**	Similar to slightly better than status quo	
	Comments	• Site co-location with EGS increases likelihood of deliverability. Need to model theatre capacity, bed #. Shorter timescale than C5 • Increased efficiency and capacity through centralisation • Theatre requirements, model of care changes elsewhere. • ITU and Beds challenging	
Acceptability	**Scores**	Similar to status quo	
	Comments	• Engagement Report - negative perception of service moving from CGH. • Compared to current: Workforce positive; Quality & Deliverability similar/better; acceptability no better and Access similar/worse. ? Nett out	

8.3.8.8 What are the benefits of C6 including clinical outcomes?

Proposed Solution	Benefits
C6 – centralise elective/ planned colorectal to GRH	• Quality benefits from centralised team, with additional benefits of co-location with EGS and UGI – best practice care by dedicated team and potential to improve service quality and offer (e.g. centre of excellence for digestive diseases, improved provision to avoid patients going out of county) • Improves continuity of care and access to subspecialist opinion • Improves trainee experience • Patient experience – ↓ risk of cancellation/delay in centralised/ring-fenced service

Further details are provided in the Benefits Realisation plan (Appendix 35)

[27] Comments from solutions appraisal panel members are reproduced for transparency but there may be statements that do not reflect the facts available in this PCBC.

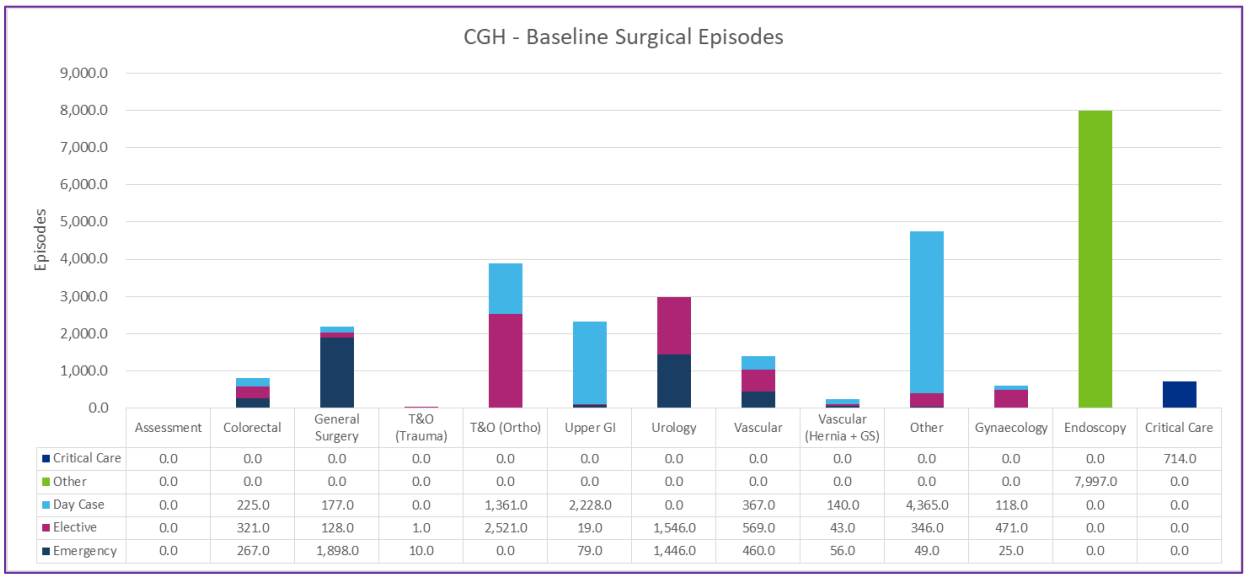
8.4 Baseline Activity

To ensure we use the most up to date activity but excluding any impact of Coronavirus our baseline period is 01/02/19 – 31/01/20.

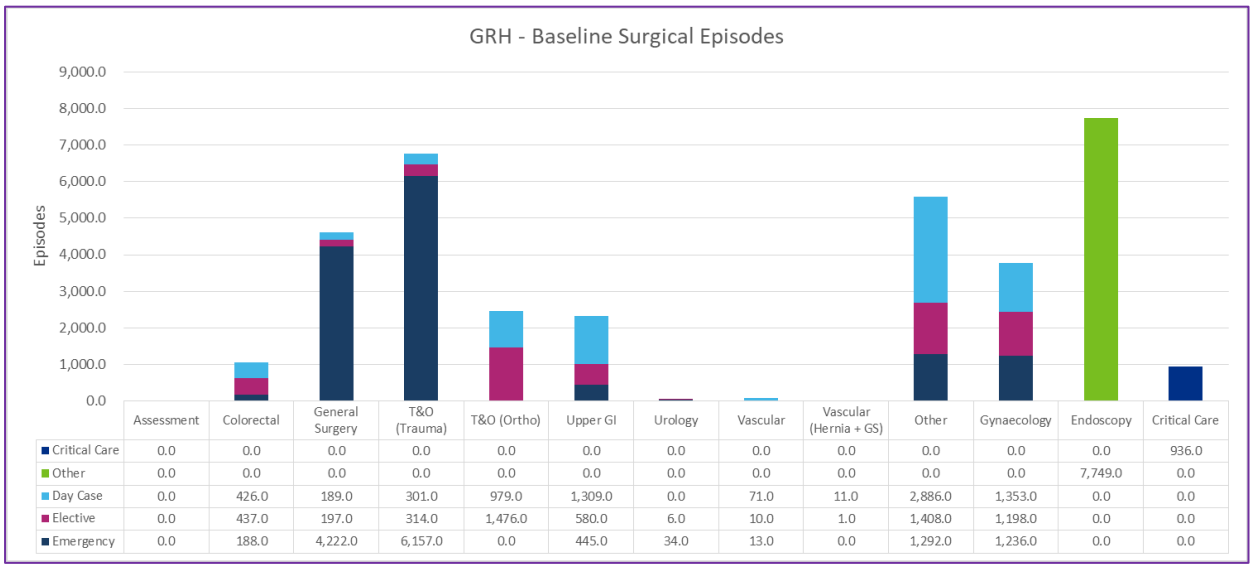
It should be noted that patient *episodes* will be higher than the volume of individual patients.

The activity impact of the proposed changes on beds, critical care, theatres and workforce is detailed in Section 9.

8.4.1 *Surgical Episodes*

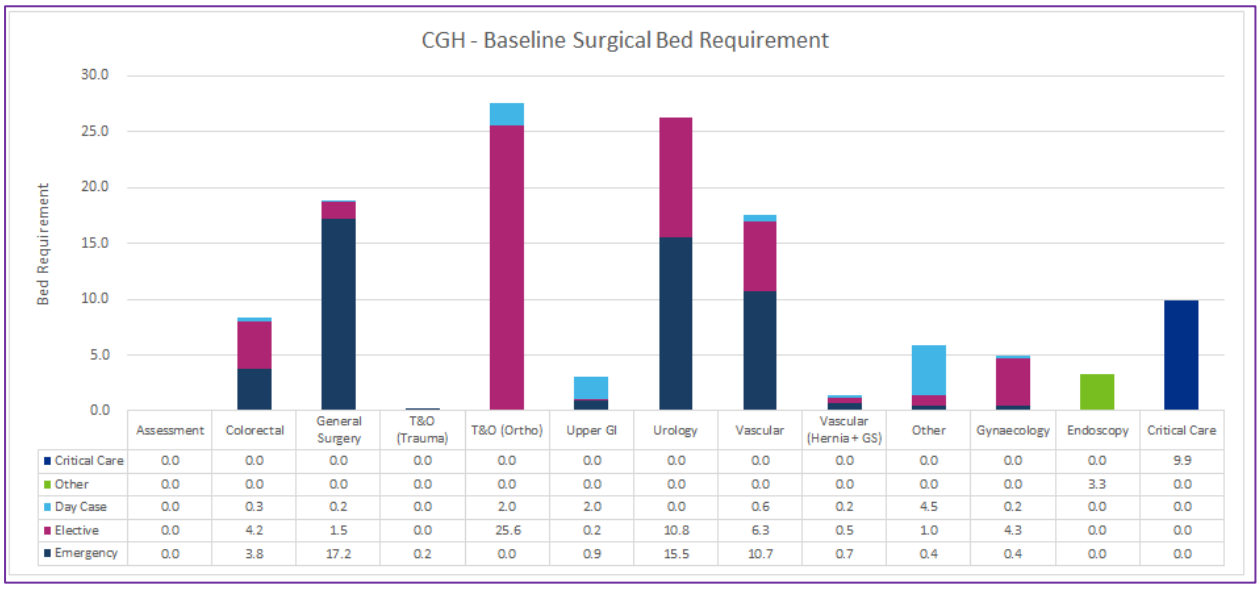


	Assessment	Colorectal	General Surgery	T&O (Trauma)	T&O (Ortho)	Upper GI	Urology	Vascular	Vascular (Hernia + GS)	Other	Gynaecology	Endoscopy	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	714.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,997.0	0.0
Day Case	0.0	225.0	177.0	0.0	1,361.0	2,228.0	0.0	367.0	140.0	4,365.0	118.0	0.0	0.0
Elective	0.0	321.0	128.0	1.0	2,521.0	19.0	1,546.0	569.0	43.0	346.0	471.0	0.0	0.0
Emergency	0.0	267.0	1,898.0	10.0	0.0	79.0	1,446.0	460.0	56.0	49.0	25.0	0.0	0.0

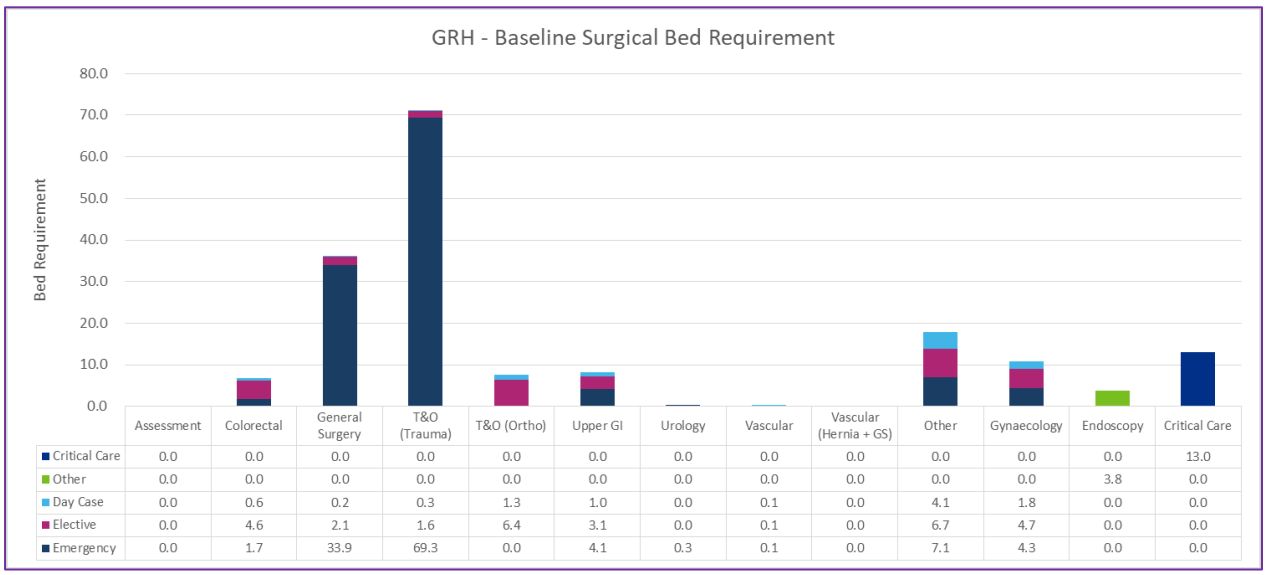


	Assessment	Colorectal	General Surgery	T&O (Trauma)	T&O (Ortho)	Upper GI	Urology	Vascular	Vascular (Hernia + GS)	Other	Gynaecology	Endoscopy	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	936.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,749.0	0.0
Day Case	0.0	426.0	189.0	301.0	979.0	1,309.0	0.0	71.0	11.0	2,886.0	1,353.0	0.0	0.0
Elective	0.0	437.0	197.0	314.0	1,476.0	580.0	6.0	10.0	1.0	1,408.0	1,198.0	0.0	0.0
Emergency	0.0	188.0	4,222.0	6,157.0	0.0	445.0	34.0	13.0	0.0	1,292.0	1,236.0	0.0	0.0

8.4.2 *Surgical Bed Requirement*

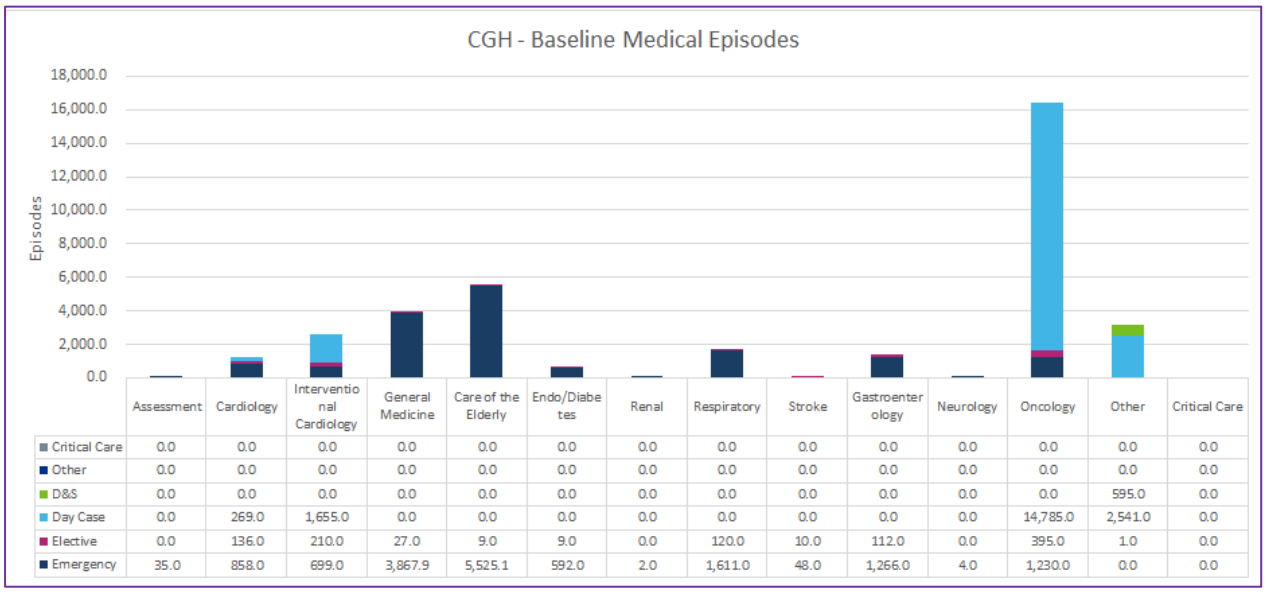


	Assessment	Colorectal	General Surgery	T&O (Trauma)	T&O (Ortho)	Upper GI	Urology	Vascular	Vascular (Hernia + GS)	Other	Gynaecology	Endoscopy	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Day Case	0.0	0.3	0.2	0.0	2.0	2.0	0.0	0.6	0.2	4.5	0.2	0.0	0.0
Elective	0.0	4.2	1.5	0.0	25.6	0.2	10.8	6.3	0.5	1.0	4.3	0.0	0.0
Emergency	0.0	3.8	17.2	0.2	0.0	0.9	15.5	10.7	0.7	0.4	0.4	0.0	0.0

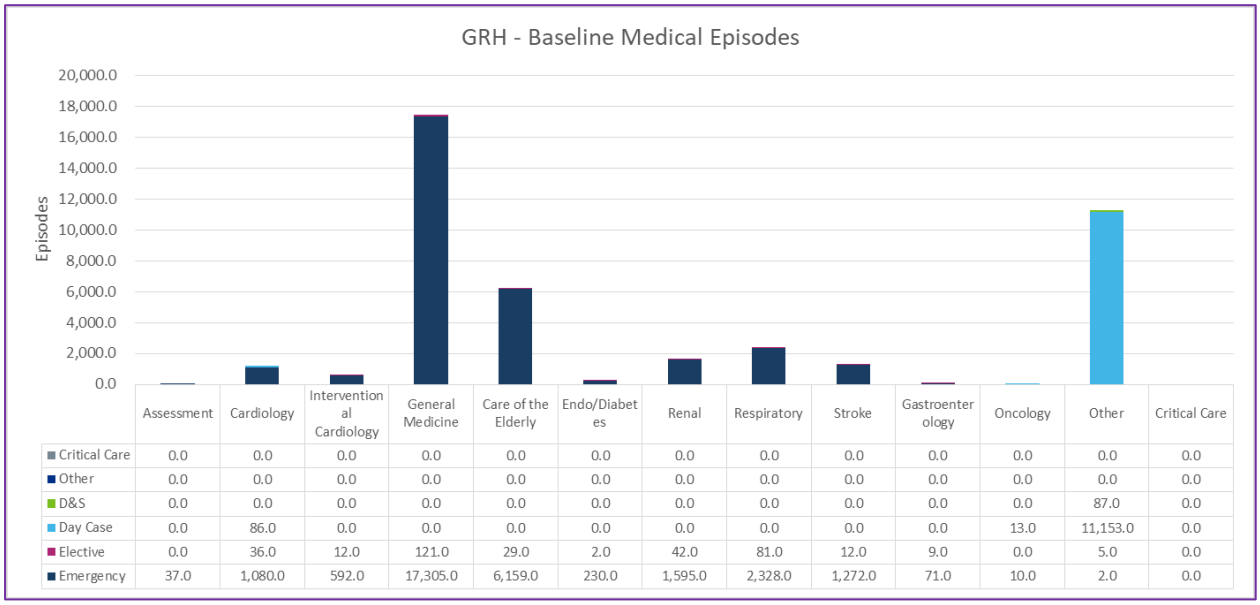


	Assessment	Colorectal	General Surgery	T&O (Trauma)	T&O (Ortho)	Upper GI	Urology	Vascular	Vascular (Hernia + GS)	Other	Gynaecology	Endoscopy	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Day Case	0.0	0.6	0.2	0.3	1.3	1.0	0.0	0.1	0.0	4.1	1.8	0.0	0.0
Elective	0.0	4.6	2.1	1.6	6.4	3.1	0.0	0.1	0.0	6.7	4.7	0.0	0.0
Emergency	0.0	1.7	33.9	69.3	0.0	4.1	0.3	0.1	0.0	7.1	4.3	0.0	0.0

8.4.3 *Medical Episodes*

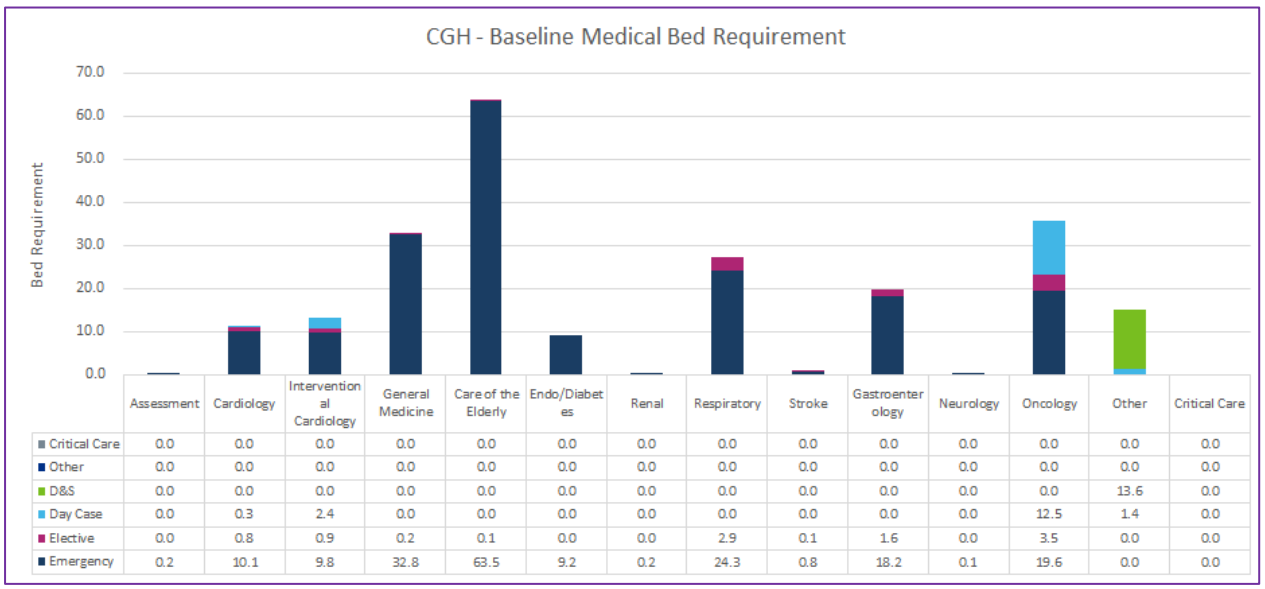


	Assessment	Cardiology	Interventional Cardiology	General Medicine	Care of the Elderly	Endo/Diabetes	Renal	Respiratory	Stroke	Gastroenterology	Neurology	Oncology	Other	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	595.0	0.0
Day Case	0.0	269.0	1,655.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14,785.0	2,541.0	0.0
Elective	0.0	136.0	210.0	27.0	9.0	9.0	0.0	120.0	10.0	112.0	0.0	395.0	1.0	0.0
Emergency	35.0	858.0	699.0	3,867.9	5,525.1	592.0	2.0	1,611.0	48.0	1,266.0	4.0	1,230.0	0.0	0.0

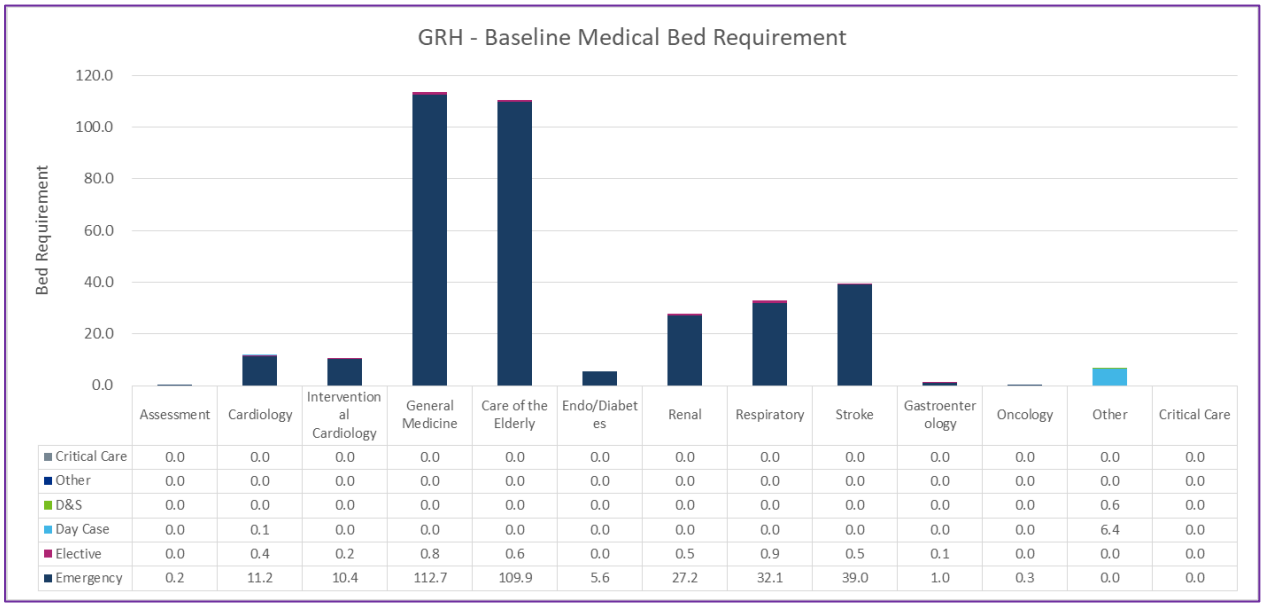


	Assessment	Cardiology	Interventional Cardiology	General Medicine	Care of the Elderly	Endo/Diabetes	Renal	Respiratory	Stroke	Gastroenterology	Oncology	Other	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.0	0.0
Day Case	0.0	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0	11,153.0	0.0
Elective	0.0	36.0	12.0	121.0	29.0	2.0	42.0	81.0	12.0	9.0	0.0	5.0	0.0
Emergency	37.0	1,080.0	592.0	17,305.0	6,159.0	230.0	1,595.0	2,328.0	1,272.0	71.0	10.0	2.0	0.0

8.4.4 *Medical Bed Requirement*



	Assessment	Cardiology	Interventional Cardiology	General Medicine	Care of the Elderly	Endo/Diabetes	Renal	Respiratory	Stroke	Gastroenterology	Neurology	Oncology	Other	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.0
Day Case	0.0	0.3	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	1.4	0.0
Elective	0.0	0.8	0.9	0.2	0.1	0.0	0.0	2.9	0.1	1.6	0.0	3.5	0.0	0.0
Emergency	0.2	10.1	9.8	32.8	63.5	9.2	0.2	24.3	0.8	18.2	0.1	19.6	0.0	0.0



	Assessment	Cardiology	Interventional Cardiology	General Medicine	Care of the Elderly	Endo/Diabetes	Renal	Respiratory	Stroke	Gastroenterology	Oncology	Other	Critical Care
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Day Case	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0
Elective	0.0	0.4	0.2	0.8	0.6	0.0	0.5	0.9	0.5	0.1	0.0	0.0	0.0
Emergency	0.2	11.2	10.4	112.7	109.9	5.6	27.2	32.1	39.0	1.0	0.3	0.0	0.0

9 Proposed Models and Impact Assessment

9.1 Two Potential Service Models

The diagram below shows how the elements of the proposed clinical models described above combine to form the two potential solution variants in our shortlist.

Clinical pathway group	Ref	Solutions Descriptor	Model D (4.4)	Model E (5.4)
Actue medicine	A3	Centralise acute medicine to GRH	✓	✓
Image guided interventional surgery	B2	IGIS hub and vascular centralised to GRH	✓	✓
	B3	IGIS hub to GRH, vascular stay in CGH		
General surgery	C3	EGS centralised to GRH	✓	✓
	C5	Elective colorectal to CGH	✓	
	C6	Elective colorectal to GRH		✓
	C11	GI daycases - CGH	✓	✓
Gastroenterology Trauma & Orthopaedics	Gastro 1	Centralised CGH	✓	✓
	T&O 1	Split O=CGH/T=GRH	✓	✓
**Enabler - Deteriorating patient model			✓	✓

The two shortlist models contain all variations of the elements evaluated as better than 'current state' during our shortlisting process.

In Section 8 for each Solution we have detailed:

- The evidence for each;
- The benefits including clinical outcomes;
- How each was evaluated and why;
- How each addresses the case for change
- The interdependencies with other services, and;
- The baseline activity

The following sections discuss the impact of the two clinical models at a consolidated level. As presented in the table above each of the Models consist of:

Fixed proposals that are common to all models:

- Formalise the reconfiguration of Trauma and Orthopaedics (currently a pilot);
- Formalise the reconfiguration of Gastroenterology (currently a pilot);
- Centralise the acute medical take to GRH;
- Centralise emergency general surgery to GRH;
- Centralise general surgery day cases to CGH, and;
- Centralise 24/7 IGIS hub and vascular surgery to GRH, IGIS spoke at CGH
- 'deteriorating patient' model for 24/7 care of patients in CGH

Proposals that still have variable options:

- Centralise elective colorectal to CGH **OR** Centralise elective colorectal to GRH

Whilst the impacts on individual service users and staff will be different within each Model (as detailed in further sections below), given the scale of the fixed proposals and the single variant there are a number of broad impacts that can be described.

9.2 Impacts common to all Models

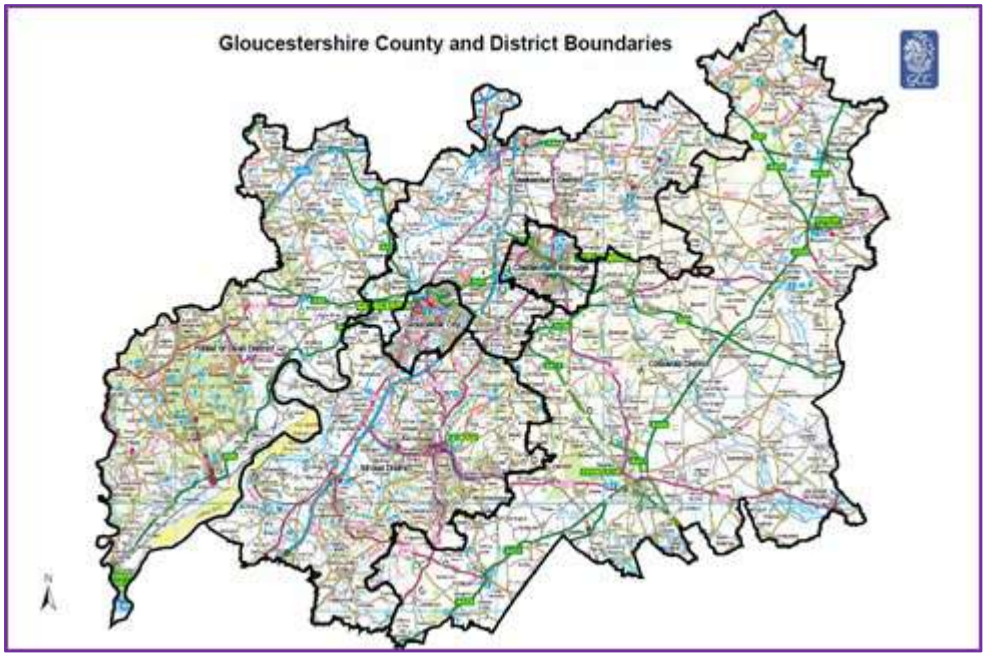
The impact for fixed proposals is detailed in this section and the impact for the single variant (as detailed earlier in Section 8) is then presented for each of the two models. This section also includes our approach to generic issues irrespective of the model such as GRH bed capacity mitigations, DCC capacity at GRH, our approach to staff re-location etc.

9.2.1 *Scale*

As described in Section 3.4.1 Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT) is one of the largest hospital trusts in the country with total annual activity of over 990,000, including 141,000 ED attendances, 696,000 outpatient appointments and 156,000 inpatient admissions. The annual numbers of admissions that are in scope within our proposals (excluding Trauma & Orthopaedics and Gastroenterology which are currently "pilots" and are being formalised as part of FFTF) is ~25,000 episodes, which represents 16% of the total inpatient admissions.

9.2.2 *Patient & Family/Carer Impact*

All of the potential changes involve services being centralised on one or other of GHNHSFT two main hospital sites, Gloucestershire Royal Hospital (GRH) and Cheltenham General Hospital (CGH), which are 8 miles apart.



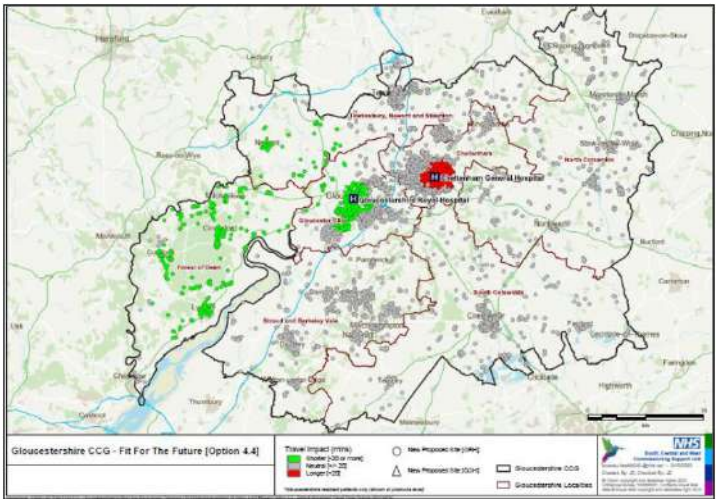
Locality Populations	
Cheltenham	117,090
Gloucester	129,285
Tewkesbury	92,599
Cotswolds	89,022
Stroud	119,019
Forest of Dean	86,543

9.2.2.1 Travel

We fully recognise and appreciate that behind every number is a patient and family/carer and that the day to day impact on them will vary dependent on a range of factors including access to car travel, public transport availability and accessibility and differential impact related to protected characteristics (as detailed in our Integrated Impact Assessment (Section 10). To help assess the impact on carers/families we have included information on admission length of stay (LoS), as in many cases carers/families will visit multiple times during a patient's stay in hospital.

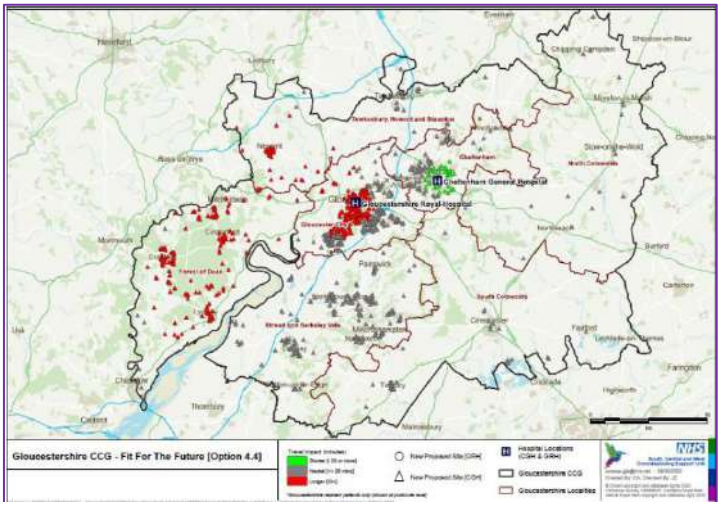
The pattern of travel impact of centralising services on patients living in each locality is broadly the same (full details can be found in Appendix 21).

For services moved from Gloucestershire Royal Hospital to Cheltenham General Hospital	**For services moved from Cheltenham General Hospital to Gloucestershire Royal Hospital**
• **No/Low impact** – North Cotswolds, South Cotswolds, Tewkesbury, Gloucester (East), Stroud and Berkley Vale • **Positive impact** – Cheltenham • **Negative impact** – Forest of Dean and Gloucester (West)	• **No/Low impact** – North Cotswolds, South Cotswolds, Tewkesbury, Stroud and Berkley Vale, Cheltenham (West) • **Positive impact** – Forest of Dean and Gloucester (West) • **Negative impact** – Cheltenham (East)



To illustrate, the map (presented left), provides an example of the impact for a service moved from CGH to GRH where green dots are patients positively impacted, grey dots are patients with neutral impact and red dots are negatively patients impacted

To illustrate, the map (presented right), provides an example of the impact for a service moved from GRH to CGH where green dots are patients positively impacted, grey dots are patients with neutral impact and red dots are negatively patients impacted



We have undertaken detailed analysis using anonymised activity for the in scope services to assess the impact of our proposals on patients. Using the postcodes in our baseline activity we worked with the NHS South, Central and West Commissioning Support Unit (SCW CSU) to create spatial maps for each solution presented in Section 8.3 and combined these for the four proposed clinical models. The analysis was completed for:

- Travel by car (peak)
- Travel by car (off peak)
- Travel by public transport

As the data was anonymised and we therefore do not have access to the specific mode of transport used by patients who currently access services we have used the following methodology to calculate the impact for each model:

Step 1. For all modes of travel (assuming all patients were to access using this mode), calculate the numbers of patients for each solution (e.g. Centralise Emergency General Surgery to Gloucestershire Royal Hospital -C3), for each of the following categories
    a. Positive impact (decrease 20+ minutes)
    b. Neutral impact (+/- 20 minutes)
    c. Negative impact (increase 20+ minutes)

Step 2. For each solution assess if travel by "blue light" ambulance is likely, estimate proportion of total patients and calculate the number of patients likely to travel by ambulance.

Step 3. For each solution identify the locality within Gloucestershire where the largest number of negatively impacted patients reside.

Step 4. Using ONS car ownership data for the relevant locality, calculate the potential number of patients for each solution who could be users of public transport (This is likely to overstate the use of public transport as many non-car owners will use other means to get to hospital.

Step 5. For each solution assess if time of day (peak or off-peak) can be estimated e.g. if emergency (distributed across 24 hrs) or Day-case (2 cohorts a.m. peak and p.m. off-peak).

Step 6. Using the data from Step 1 calculate the number of patients for each solution that will be travelling by car (peak and off-peak) and by public transport.

Step 7. Using the data from Step 1 and 5 calculate the number of patients for each solution who are negatively or positively affected and deduct from the total to find those where the impact is neutral.

Step 8. Combine the results for each solution relevant to each Model and calculate a weighted average. This is the number presented for each model in the sections below.

In addition to the above, we have also assessed the impact of our proposals on accessibility to public transport. As a rural county the availability of public transport varies across our localities and we wanted to identify a baseline of patients and assess the impact of each model. We used the following assumptions:

- Accessibility to GRH and CGH via public transport between the hours of 0900-1200.
- Allowed 30 minute walking time

We modelled our baseline for each specialty within the scope of FFTF and identified 317 patients who **currently** (using the assumptions above) would not have access to public transport. We then modelled our proposals for each solution and model and identified that there was **no impact**. The number of patients without access to public transport (based on the assumptions above) ranged from 270-272. Full details are provided in Appendix 21).

The details of the annual travel impact (for peak / off-peak car and for public transport) is provided for each Model (see sections below), for the ~25,000 in scope episodes the numbers of patients negatively impacted represents, on average, <15% of the number of episodes within the scope of our proposals and therefore 2% of overall GHNHSFT patient activity i**.e. ~98% of patients are unaffected**.

The analysis above excludes patients who travel outside of Gloucestershire for image-guided surgical procedures. Within the scope of the IGIS service proposals contained in the PCBC are the current 115 patients who undergo various Interventional Radiology interventions mostly delivered from Birmingham and Oxford, a few from Bristol, and some travel as far as Leeds. Identifying the postcodes of the current patients has not been possible and therefore we have assumed the travel distance impact to be the average distance from Gloucester to the relevant out of county Provider, as listed below:

No patients (approx.)	Destination	miles (return)	Total Miles
50	Birmingham	127.2	6,360
50	Oxford	97.8	4,890
15	Bristol	70	1,050

In addition to the patients directly benefitting, our IGIS service proposals will contribute towards other initiatives aimed at repatriating patients, including:

- 250 Percutaneous coronary intervention (PCI) / Primary percutaneous coronary intervention **(**PPCI) patients - These nearly all go to Bristol. This activity is contained within the separate GHNHSFT PPCI business case.
- 60 trans-catheter aortic valve implantation (TAVI) patients – Currently performed in Bristol. This is a future opportunity.
- >300 Electro Physiology patients - nearly all go to Bristol. This is a future opportunity.

9.2.2.2 Carers and Families Travel Impact

It is important to assess the travel impact of changes on loved ones visiting patients as having regular visitors has an impact on outcomes. We do not have access to individual families/carers locations or on their visiting behaviours but have used length of stay (LoS) information to assess likely additional impact caused to them by visiting i.e. the longer the LoS the higher the travel impact. Details for each model provided in sections below.

It is important to set out travel time analysis in the context of the clinical impact (related to clinical outcomes) i.e. the clinical benefits our residents can expect to gain to offset the additional 8 miles/ 20 minutes of travel. As stated earlier, given the scale of the “fixed proposals” and the limited quantity of variants a summary of the outcomes (as detailed earlier in Section 8) is presented overleaf.

Fixed Proposals	Benefits
A3 – centralise acute medical take to GRH	• Early senior review <14 hours, ↓waits, ↓admissions, and ↑outcomes • Timely access to mental health support teams ↓waits, ↓admissions, and ↑outcomes • Consolidates acute medicine rota – ↑ • Co-location with key acute specialties – trauma, stroke, paediatrics, ↑outcomes
C3 – centralise emergency general surgery to GRH	• Eliminates sub-specialty variation, ↓waits and ↑outcomes • All EGS patients able to benefit from SAU with associated evidence for ↑ experience and outcomes • Access to dedicated 24/7 emergency theatre – ↓waits and ↑outcomes
C5 – centralise elective/ planned colorectal to CGH	• Quality benefits from centralised team – best practice care by dedicated team and potential to improve service quality and offer (e.g. to patients going out of county) • Clinical benefits of colocation with medical gastroenterology to support delivery of excellence in digestive disease care • Clinical benefits of colocation with urology and gynae-oncology – creating a 'pelvic surgery hub' • Patient experience – ↓ risk of cancellation/delay in centralised/ring-fenced service
C6 – centralise elective/ planned colorectal to GRH	• Quality benefits from centralised team, with additional benefits of co-location with EGS and UGI – best practice care by dedicated team and potential to improve service quality and offer (e.g. centre of excellence for digestive diseases, improved provision to avoid patients going out of county) • Improves continuity of care and access to subspecialist opinion • Patient experience – ↓ risk of cancellation/delay in centralised/ring-fenced service
B2 – IGIS hub and vascular arterial centre in GRH	• Patient outcomes – access to more minimally invasive techniques with associated improvement in outcomes • Colocation with acute specialties (trauma, renal) – improves time to senior review and theatre, and associated improvement in outcomes • Patient experience – increase local offering, reduced travel out of area • Meets Vascular Society of Great Britain recommendation that 'designated [vascular] arterial centres are collocated with major trauma centres or trauma units'

9.2.2.3 Car Parking

On the GRH site there are a total of 11 car parks providing 1,854 car parking spaces, of which 532 are public, 1208 staff and 87 spaces available for blue badge holders (DDA). On the CGH site there are a total of 11 car parks providing 741 car parking spaces, of which 192 public, 437 staff and 40 Oncology patient car parking spaces with 56 spaces for blue badge holders. The breakdown of current parking availability is tabled below:

Cheltenham General Hospital – Car Park Space Totals					
Original space count taken from Practical Completion to end of concession					
Car Park	Public	Staff	DDA	Crown Lease	Renal
1	46	40	17	0	0
2	0	0	6	0	0
3	117	0	12	0	0
4	0	3	14	6	20
5	0	0	0	0	20
6	0	103	0	5	0
7	0	76	0	0	0
8	0	93	0	0	0
9	0	85	4	5	0
10	0	37	0	0	0
11	29	0	3	0	0
Totals	**192**	**437**	**56**	**16**	**40**
Total Spaces Available	**741**				

Gloucestershire Royal Hospital – Car Park Space Totals						
Original space count taken from Practical Completion to end of concession						
Car Park	Public	Staff	DDA	Contractors	Crown Lease	Renal
Tower	401	604	31	0	0	0
2	0	99	2	0	0	0
4	0	97	0	0	0	0
5	0	2.9	20	0	3	6
6	13	2	12	0	2	0
7	0	43	1	0	0	0
8	0	110	0	0	0	0
9	8	44	4	0	5	11
10	110	0	0	0	0	0
11	0	0	6	0	0	0
Totals	**532**	**1208**	**87**	**0**	**10**	**17**
Total Spaces Available	**1854**					

As stated earlier Trust is currently undertaking a full review of staff travel and car parking in line with NHS car parking management guidance to identify best practice in car park management and sustainable transport; including:

- Working with patients and staff to make sure that users can get to the site as safely and conveniently as possible;
- Solutions should also be economically viable;
- Travel plan should reduce environmental impact of staff commuting to work;
- Charges should be reasonable for the area;
- Concessions should be available for certain groups of users (see below);
- Other concession, for example for volunteers or staff who car share should be considered locally; and
- Priority for staff parking should be based on need.

The public and staff have the option of using the 99 bus between the two hospital sites. It operates Monday to Friday from 6.20am (first bus) to 7pm (last departure), every half an hour and takes 30 minutes. It is free to GHNHSFT staff on production of an ID badge. The bus service also collects staff from the Arle Court Park and Ride in Cheltenham. The cost for this is £1.00 on production of ID badge and the cost for parking your car there is free. Staff impacted by changes may choose to use this service if their base changes from one site to another, but consideration needs to be given to the increase in their daily journey time as a result. The numbers of staff impacted is detailed for each of the models (see following sections).

In December 2019, the Department of Health and Social Care (DHSC) announced that from April 2020 all hospital trusts in England will be expected to provide free parking to certain groups of people and this requirement is being considered in the Trust review; the groups are:

- Disabled people - Holders of blue badges while attending hospitals for treatment, to visit patients or when working there;
- Frequent outpatient attenders - A person who is identified in advance as visiting as an outpatient for 3 or more times in a month;
- Parents of sick children staying overnight - A parent or guardian of a child in hospital overnight can park for free between the hours of 1900 and 0700. This would apply to a maximum of two vehicles;
- Staff working night shifts - All staff of the Trust working night shifts can park for free between the hours of 19:30 and 08:30. A 'night shift' in this context must include working until at least midnight.

Our approach to calculating the impact on car parking for each model follows the same methodology as that used for patient travel i.e. a weighted average using data that includes proportional use of public transport, "blue light" ambulance etc. The impact for each model is presented in the relevant sections.

9.2.2.4 Carbon Impact

We have estimated the carbon impact using the following methodology:

- Using Model 5.4 which has the most changes and highest number of patients impacted
- Using our travel impact analysis to determine number of patients positively and negatively impacted.
- Using travel time as a proxy for travel distance calculated the net impact (difference between positively and negatively affected)
- Using the 8 mile distance between GRH and CGH calculated the carbon impact
- Using the number of repatriated patients from out of county Providers estimated the average distance saved and converted this to carbon impact.

An assessment of the travel impacts on carbon footprint of the proposed changes can be found in Appendix 25; the overall impact is +2.2 metric tonnes of CO^2, with the repatriated patients mitigating 61% of the inter-site impacts.

We recognise this analysis does not report any other environmental impacts but as the level of activity and therefore resource use is the same as the baseline, travel is the single largest change.

9.2.3 *Workforce Impact*

The ICS partners, as sponsors of this PCBC, are fully cognisant of the indispensable role that our staff have in the delivery of the proposed changes. GHNHSFTs People and Organisational Development Strategy sets out the trusts' direction of travel for 2019 to 2024 in terms of our staff and is centred around the ethos of *"Caring for those who Care".* The NHS Long Term Plan, sets out how we will transform models of care over a 5 year period with both the Interim NHS People Plan (published June 2019) and the recently launched People Plan 2020/201, set out the workforce transformation needed to deliver 21st century care including an initiative to "release time to care", all linked to the NHS Long Term Plan. Great emphasis is also placed on staff development, health and wellbeing and work life balance including a far more flexible approach to working patterns etc.

We are committed to supporting and developing our staff and fully endorse the NHS Long Term Plan ethos of ensuring we have "…*enough people with the right skills and experience so that staff have the time they need to care for patients well"* **(NHS long Term Plan).** All of this has underpinned our approach in respect of the workforce plans for Centres of Excellence

We recognise that changes to ways of working may impact on job satisfaction, morale and retention and that the relocation of services will have differential impact on staff in-terms of potential increased travel time and cost. The staff affected will include those working directly in the services in scope and there may be some changes for staff working in support services e.g. Theatres, critical care, therapies and diagnostics. The specific numbers of staff impacted in each model is detailed in the relevant sections below, however our approach to the process will be consistent in all cases.

Coronavirus (COVID-19)

The temporary changes detailed in Section 3.5 required GHNHSFT to rapidly engage with staff to implement the site changes and this experience and the lessons learned will be built into our FFTF implementation.
As part of the temporary changes implementation plan each individual staff member was afforded the opportunity to express their personal preference in terms of place of work, with the majority of choices being met. In all case staff were accommodated within their current Division.

9.2.3.1 Staff Engagement if a decision is made to implement proposed models

Managers will use team meetings and one to one meetings to understand individual and team preferences on location or specialty. Staff wishing to remain within their current Division e.g. Surgery, Medicine etc., will be accommodated and, wherever possible, within their current specific speciality. The objective will be to accommodate preferences wherever possible i.e. stay on the same ward or site, stay together as a team or stay with the specialty (so move with the service) and this will be achieved through vacancy management which will form part of any implementation plan.

As staff are required to work across sites, relocation is not anticipated to be a contractual issue but we recognise that there may be individual needs or concerns which will need to be accommodated and these will be raised with the HR Advisory and HR Business Partner (HRBP) team to resolve e.g. travel issues and child care.

A staff briefing document will be provided to Managers to support these conversations and ensure consistency of message and will be sent to Staff Side for review. Feedback on the proposals will be captured on a standard form. A Frequently asked questions (FAQs) will also be provided.

Our approach is to encouraged staff to talk to their line manager throughout the process to discuss individual issues or circumstances and if further support is required staff can seek advice from the HR Advisory Service, staff side representative or for staff wellbeing and psychological support through the GHNHSFT 2020 Hub.

To support the process we will ensure regular communication between each affected HRBP with oversight by the Director of People and OD. This will ensure that we have early sight of any issues including if the messaging has been adequate and consistent and if there are any issues to implementation. Any inconsistencies or areas of concern will be escalated to the Divisional Tri and relevant HRBP and the team will be proactive in meeting colleagues and staff groups where necessary.

As part of the centralisation changes linked to Emergency General Surgery a number of internal ward shifts would be undertaken within Cheltenham hospital. This will be achieved in line with existing budgets and monies which would be realigned between the relevant cost centres. Staff will be afforded the opportunity to either move sites with their speciality or transfer to another ward/service within their current site. Any such change would be undertaken in line with the relevant HR policies.

9.2.3.2 Workforce Planning Models

Critical to workforce planning is identifying demand and capacity and this has been central to the work underpinning this PCBC. Workforce planning is an essential element of any Business Planning Cycle and as such a crucial building block in the Operational planning for FFTF and establishing Centres of Excellence. In line with NHS directorate and Trust guidance the overall tester is that we comply with the Safer Staffing requirements as detailed in National Quality Board (NQB) guidelines which states providers:

- must deploy sufficient suitably qualified, competent, skilled and experienced staff to meet care and treatment needs safely and effectively
- should have a systematic approach to determining the number of staff and range of skills required to meet the needs of people using the service and keep them safe at all times
- must use an approach that reflects current legislation and guidance where it is available

Ratio of staff to Patients

When considering ratio of staff to patients a number of the NHS related recognised measuring tools were applied dependent upon speciality/professional staff group/expertise etc. including:

- Safer Nursing Care Tool ((SNCT)) for nurses
- RCN recommendations
- NICE guidance
- Relevant Royal colleges recommendations in terms of physicians
- Professional bodies
- HIRST data

GHNHSFT has an established process in terms of review of nursing (both registered and unregistered) that is undertaken annually with a bi annual review. The Trust also recently undertook an in-depth review of the staffing levels within acute medicine in particular AMU which has been applied for the purposes of this modelling. In line with best practice, whilst the measuring tools used were an excellent starting point, adjustments were then made based on local and expert knowledge in terms of local demographics, in particular acuity. Considerable thought was given to the overall management of the areas and this has been combined with the patient/staff ratio particularly in terms of banding; thereby ensuring a robust approach to workforce planning and the management and support of staff.

In addition, an essential component of workforce planning is the "do ability" factor including:

- Application of uplift to ensure adequate cover for absence such as annual leave and training
- Legal compliance such as working time directive
- Rotas particularly in relation to sustainability of a rota

9.2.3.3 Recruitment and Retention

A key theme for the public, and core to our Case for Change (section 5), is the impact of proposed changes on clinical staff numbers, recruitment and retention and examples of our workforce challenges are detailed in Section 5.3.2. The development and appraisal of our proposals have included the requirement to support sustainable ways of working and facilitate both recruitment and retention of our workforce. Our proposals are targeted at addressing our key workforce challenges including rota gaps, vacancy rates, trainee experience and recruitment conversion rates.

Whichever option(s) is approved a planned phased approach to recruitment will be applied; with identified sources of pipeline and any marketing/advertising identified and planned. In terms of *best for patient and best for staff* having substantive staff in place is best all-round and therefore any required recruitment will be structured in such a way to minimise the use of locum/agency/bank. Identified pipeline/sources in terms of workforce supply include:

- New Roles – such as Associate Specialist: Advanced Clinical Practitioners (ACP) Physician Associate (PA)
- Redeployment of existing staff – ensuring we support and equip those identified staff to undertake any such move
- External recruitment
- Apprenticeship e.g. ACP role part of the deteriorating patient model
- International recruitment both in terms of Medical & Dental, Nursing and Therapists particularly in light of the revised licencing laws
- External recruitment through dedicated recruitment campaign. Using recently established enhanced recruitment marketing material it is planned to organise targeted campaigns such as Deteriorating Patient
- Recruitment advertising sources include various forms of social media; professional publication & journals; National press such as the Guardian and also local press; trust intranet; NHS jobs.

In Section 8.3 we detail how each proposed new clinical solution will positively impact our workforce challenges including centralisation of services to avoid splitting resources across two hospital sites which we believe contributes to quality, workforce, financial and

performance issues which affect patient outcomes and staff recruitment and retention and efficient use of resources. A selection of these benefits is provided in the table overleaf:

Solution	Impact on recruitment / retention
Centralise the Acute Medical Take to Gloucestershire Royal Hospital (A3)	Consolidating two teams into one will: • Offset the impact of a high physician vacancy rate – staff acting down, use of agency doctors, rota gaps • Offer a more attractive job roles and training opportunities to improve recruitment and retention • Consolidates acute medicine rota
Centralise Emergency General Surgery to Gloucestershire Royal Hospital (C3)	Consolidating the two teams will: • Significantly improve junior doctor training • Offer a more attractive job roles and training opportunities to improve recruitment and retention
Formalise 'Pilot' Configuration of Trauma and Orthopaedics	• Enhanced junior doctor support and teaching experience recognised by the Severn Deanery
Formalise 'Pilot' Configuration of Gastroenterology	• Improved staff experience
Reconfiguration of Elective/ planned Colorectal Surgery - 2 Variants (C5 & C6)	• Consolidating the teams onto a single site with improved rotas could allow better provision and protection of training opportunities and support. • Improves trainee experience
Establish an Image-Guided Surgery Hub in Gloucestershire Royal Hospital	• Significantly improves efficient and effective use of highly qualified staff which will improve recruitment and retention of staff • centralised location allows cross-cover to resolve recruitment gaps

9.2.3.4 Training – including new roles/ways of working' realignment of skills and upskilling

We are committed to providing training, development and support to our staff. Any change in job role/area or working conditions such as equipment etc. would be identified and individual and personalised skills analysis work undertaken to identify skills and any gaps/upskilling required.

Where specialities are centralised on a particular site this will enhance the training and support offered to staff. It will also form closer working relationship and peer support which is a positive. For mentors this will prove invaluable in terms of easier access to those they are mentoring and vice versa.

An example of our approach includes the work we are doing in partnership with Gloucestershire University securing training on a phased approached for 3 year ACP training programme which will support the delivery of our Deteriorating Patient Model.

9.2.3.5 Staff Support through change

It is recognised that any change can impact individuals and groups of staff. A significant element of Managing Change is to support those individuals who are both directly and indirectly affected, one of the main being communication and underlining the need for staff involvement. This is an inclusive process not exclusive.

To support the process we will ensure regular communication between each affected HRBP with oversight by the Director of People and OD. This will ensure that we have early sight of any issues including if the messaging has been adequate and consistent and if there are any issues to implementation. Any inconsistencies or areas of concern will be escalated to the Divisional Tri and relevant HRBP and the team will be proactive in meeting colleagues and staff groups where necessary. Any such change would be undertaken in line with the relevant HR policies.

How change affects individuals can differ greatly and that is why in line with our trust ethos of *Caring for those Care* individual personal needs will be considered. Whilst our underling needs must be to ensure we are able to meet the needs of the service in terms of patient safety and patients we will also balance this with the needs of our staff.

Through staff engagement we will identify individual wants and needs, managing this in line with our trust policies and procedures which are aimed to resolve matters wherever possible by consent.

Staff will be afforded support and this will be made available and tapered to individual needs. This will also include confidential support links such as 2020 Staff Advise and Support Hub; Working Well (colloquially referred to as Occupational Health) and Staff Support.

9.2.3.6 Staff Travel

Remodelling of services across our two main hospital sites will ultimately have an impact on staff travel to and from work. Staff will experience;

- No change as a result of reconfiguration.
- Positive change resulting in shorter travel times.
- Negative change resulting in increased travel time to get to and from their work place.

As described above, as most staff are required to work across sites within their service line relocation is not anticipated to be a contractual issue but we recognise that there may be individual needs or concerns and our programme of staff engagement will provide opportunities for these to be addressed.

GHNHSFT is currently undertaking a full review of staff travel and car parking as part of a wider remit to develop a Travel Plan in support of their 'Journey to Outstanding' and their Sustainability Agenda with the aim to:

- Introduce a new Staff Travel and Car Parking Policy and eligibility criteria;
- Implement a new electronic based employee parking management system; and
- Develop and better promote Sustainable Travel options that will underpin positive changes to Staff Travel

The Trust has already completed GIS mapping and transport analysis of the two acute sites and its locality, enabling staff car sharing and better promoting intra-site travel and local travel options.

Details of the number of staff affected by the proposals are described in subsequent sections but at PCBC stage it does not show where the individual members of staff travel from or their means of getting to and from work i.e. is it public transport, lift, walking. Most staff will travel to work during peak times but depending on work pattern they may travel during off peak times e.g. shift work. More detailed analysis will be contained in the Decision Making Business Case (DMBC), these issues having been considered in more details as part of the consultation feedback analysis and decision making process, however the table overleaf looks at the proposed shortlisted solutions and the potential impact on staff travel within each county locality. It does not include staff that travel to work from outside the county.

	Staff living in:						
Solution Descriptor	Gloucester	Cheltenham	Forest of Dean	North Cots	South Cots	Stroud	Tewkesbury
A3: Centralise acute medicine to GRH	●	●	●	●	●	●	●/●
C3: EGS centralise to GRH	●	●	●	●	●	●	●/●
C11: GI day cases- CGH	●	●	●	●	●	●	●/●
B2: IGIS hub and Vascular to GRH	●	●	●	●	●	●	●/●
C5: Elective colorectal to CGH	●	●	●	●	●	●	●/●
C6: Elective colorectal to GRH	●	●	●	●	●	●	●/●

KEY

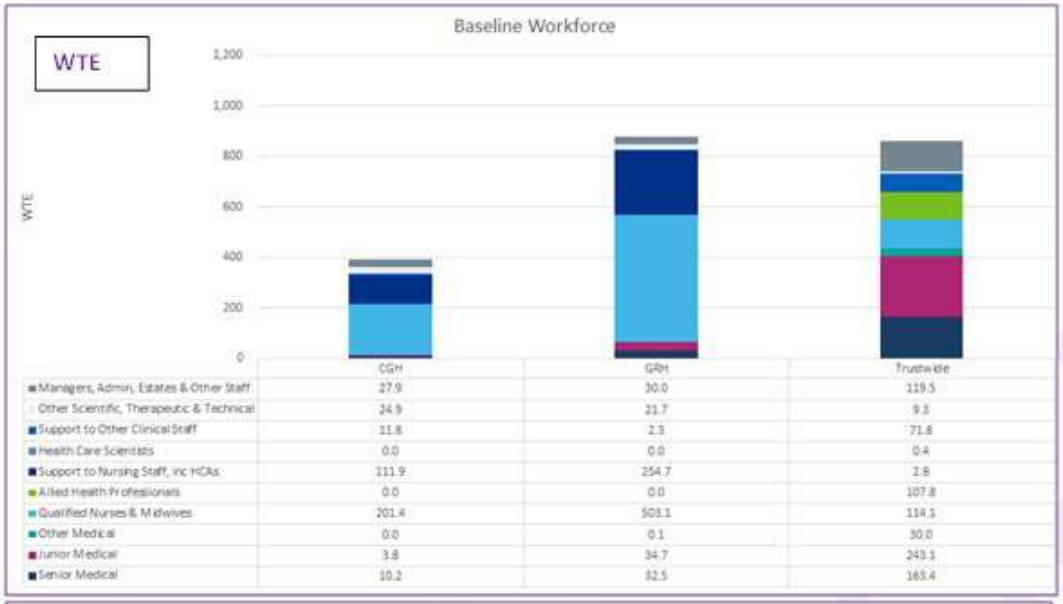
● **no change** ● **Positive** ● **negative**

9.2.3.7 Baseline Workforce

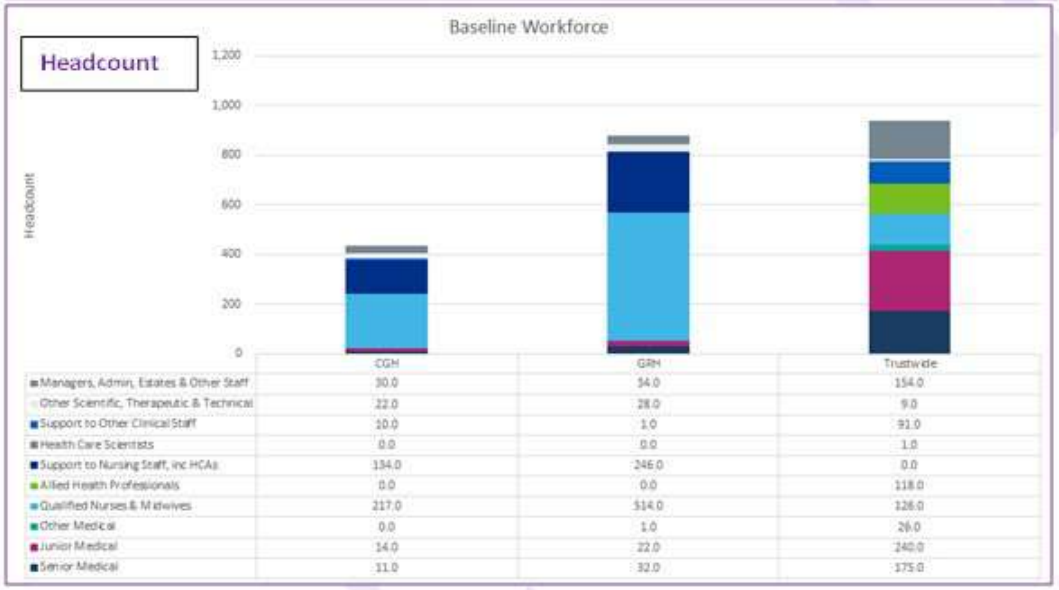
In calculating our baseline (and the subsequent modelling of impact) it is important to note that, for an assessment of numbers of staff affected (our understanding of the requirements of both the South West Clinical Senate and NHSE&I), our calculations **are not based** on the individual staff members' contractual status but on a high level estimate of those staff normally working at either GRH, CGH or across the Trust (Trustwide). As previously stated, most GHNHSFT staff are required to work across all sites within their service line.

For the baseline we have included workforce data for Whole Time Equivalents (WTE) to evidence the scale of resource associated and Headcount, but for all workforce impact we have presented the information in terms of Headcount to evidence the numbers of individual staff members associated with each change.

Our baseline WTE and Headcount numbers by staff group are provided overleaf:



Staff Group - Baseline	CGH	GRH	Trustwide	GHFT TOTAL
Senior Medical	10.2	32.5	163.4	206.1
Junior Medical	3.8	34.7	243.1	281.6
Other Medical	0.0	0.1	30.0	30.1
Qualified Nurses & Midwives	201.4	503.1	114.1	818.5
Allied Health Professionals	0.0	0.0	107.8	107.8
Support to Nursing Staff, inc HCAs	111.9	254.7	2.8	369.4
Health Care Scientists	0.0	0.0	0.4	0.4
Support to Other Clinical Staff	11.8	2.3	71.8	85.9
Other Scientific, Therapeutic & Technical	24.9	21.7	9.3	55.9
Managers, Admin, Estates & Other Staff	27.9	30.0	119.5	177.3
TOTAL	**391.8**	**878.9**	**862.1**	**2,132.9**



Staff Group - Baseline	CGH	GRH	Trustwide	GHFT TOTAL
Senior Medical	11.0	32.0	175.0	218.0
Junior Medical	14.0	22.0	240.0	276.0
Other Medical	0.0	1.0	26.0	27.0
Qualified Nurses & Midwives	217.0	514.0	126.0	857.0
Allied Health Professionals	0.0	0.0	118.0	118.0
Support to Nursing Staff, inc HCAs	134.0	246.0	0.0	380.0
Health Care Scientists	0.0	0.0	1.0	1.0
Support to Other Clinical Staff	10.0	1.0	91.0	102.0
Other Scientific, Therapeutic & Technical	22.0	28.0	9.0	59.0
Managers, Admin, Estates & Other Staff	30.0	34.0	154.0	218.0
TOTAL	**438.0**	**878.0**	**940.0**	**2,256.0**

9.2.3.8 Additional Staff – Centralise the Acute Medical Take to Gloucestershire Royal Hospital (A3)

The proposed centralisation of the acute take to GRH is common to all models and the staffing (WTE) impact is shown in the table below. Due to economies of scale that can be achieved by centralising the service to a single site, 5.88 WTE can be released. Extending the hours of the Ambulatory Emergency Care service at CGH from 8am - 6pm Monday to Friday to 8am - 8pm Monday to Friday requires an additional 1.6 WTE. The overall workforce impact of centralising the acute medical take to GRH is therefore -4.28 WTE (see table overleaf).

	Role	WTE
Reduction		
Qualified Nurses & Midwives	Registered Nurse - Band 7	-1.00
Support to Nursing Staff	Non Registered Nurse - Band 3	-3.88
	Non Registered Nurse - Band 2	-1.00
Total Savings		**-5.88**
Ambulatory Emergency Care Extension		
Qualified Nurses & Midwives	Registered Nurse - Band 5	0.64
	Registered Nurse - Band 6	0.32
	Registered Nurse - Band 7	0.32
Sub-total		**+1.28**
Support to Other Clinical Staff		
	ATO - Band 3	**+0.32**
Net impact		**-4.28**

9.2.3.9 Acute Care Response Team (ACRT)

Our proposed deteriorating patient model (section 8.3.6) consists of expanding our Acute Care Response Team (ACRT) to 24/7 on both sites, and providing them with on-site resident ITU consultant support overnight in Cheltenham. The ACRT are specialists in deteriorating patients regardless of specialty or site. They would be led in each site by a band 8a Advanced Clinical Practitioner (ACP) supported by a band 7. The Deteriorating Patients Business Case was approved by GHNHSFT in May 2019 and although discrete from this PCBC there are clear dependencies and our detailed activity and workforce modelling has identified a number of additional workforce impacts that are included within our financial modelling. These are:

	Role	WTE
Qualified Nurses & Midwives	Registered Nurse - Band 8a	+8.4
	Non Registered Nurse - Band 6	-1.60
Support to Nursing Staff	Non Registered Nurse - Band 2	+0.90
Junior Medical	Junior doctor and Medical Agency Registrar	-12.60
Net impact		**-4.90**

9.2.3.10 Additional Staff – Centralise the image-guided interventional surgery (IGIS) 'hub' to GRH including vascular; IGIS spoke at CGH (B2)

The proposal to establish of a 24/7 hub for IGIS at GRH requires an increase in the nursing establishment within IR to deliver the revised model. The urgent nature of many unscheduled IGIS interventions means that in order to provide a comprehensive service, facilities must be accessible at all times. The staffing requirement has been designed to provide a full IGIS service 08:00-20:00 5 days per week, with on-call cover during the night and at weekends. The staffing of the IGIS day case recovery area will be jointly shared by both cardiology and IR nursing, allowing for some immediate efficiency to be realised. Further nursing efficiencies are achievable through closer integration; however this will require the development of a training programme to ensure the competency requirements of both services are fully met. A small WTE nursing efficiency is achieved through the repatriation of activity from the CGH-based hybrid theatre to within the IGIS hub

In order to facilitate overall increase in IR capacity, the current group of IR consultants will move sessions from general reporting to IR cover. It is estimated that will equate to movement of 5 PAs per week from reporting to IR DCC. The cost of backfilling the reporting sessions will need to be accounted for, 5PAs of consultant time.

Vascular surgery currently has access to an emergency theatre list at CGH, shared with both urology and gynaecology. Relocating the arterial centre of the regional vascular network to GRH requires emergency theatre capacity to be made available at GRH. There is a clinical requirement to retain the emergency theatre list at CGH for the continued use by gynaecology and urology. Although some staff can be transferred across with vascular, there is additional staffing required to cover the weekend emergency lists at GRH, this is detailed in the table below.

Additional Staff B2	WTE
Nursing Staff (Band 5)	
Extension of GRH IR from 1 room to 2 rooms (8am to 8pm)	+ 3.47
Day-case areas (8am to 8pm) – 8 beds	+ 2.56
CGH IR room – repatriation of IRT cases	+ 0.85
CGH IRT – reduction in IRT support	- 0.96
Total additional Nursing	**+5.92**
Medical Staff	**+0.50**
Vascular Emergency Theatre Requirement	
Consultant Anaesthetist	+1.22
Band 2 HCA	+0.80
Band 5 Qualified Nurse	+1.60
Band 6 Qualified Nurse	+0.80
Vascular Emergency Theatre Total	**+4.42**
Total additional	**+10.84**

9.2.3.11 Medical Staffing –Out of Hours

In order to provide sufficient detail (and the necessary internal and external assurance) this section presents the additional requirements for all models. Cross-site surgical cover is complex due to the interdependencies with specialties outside the scope of this PCBC.

Centralisation of EGS

The proposed centralisation of EGS creates a requirement for General surgical registrars

Model	Requirements
4.4 (Colorectal- CGH Vascular-GRH)	2 x urology Specialty Trainees (ST)
5.4 (Colorectal- GRH Vascular-GRH)	2 x urology Specialty Trainees (ST)

Colorectal at Cheltenham General Hospital (CGH): Model 4.4

The proposal to safely manage 7-day elective colorectal service (and other specialties) at CGH if emergency general surgery is centralised to GRH is for *Deteriorating Patient* model - comprising 24/7 resident ITU Consultant & Acute Care Response Team (Band 8a, Band 7, Band 6, Band 3). Supported by EGS non-resident Registrar and 2 x ANPs (Band 7). The table below sets these proposals in the wider context and more detail is provided in Appendix 31

Specialty	Do Nothing baseline			Option 4.4 (CR- CGH Vas-GRH)			Option 5.4 (CR & Vas GRH)		
	Consultant	Registrar	Foundation	Consultant	Registrar/CT	Foundation	Consultant	Registrar/ CT	Foundation
Breast	No consultant rota, covered by GS	Included in GS rota	OOH covered by EGS (both sites)	No change	DPM – escalate to cons	DPM – escalate to cons	No change	DPM – escalate to cons	DPM – escalate to cons
T&O	1:20 rota based at GRH	1:16 rota based at GRH	GRH Rota 1:10. CGH: OOH combined with EGS rota	No change	No change	CGH: DPM – escalate to registrar at GRH	No change	No change	CGH DPM – escalate to registrar at GRH
Gynae-oncology (elective)	CGH: Consultants cover inpatients, No acute admissions	All at GRH None at CGH	CGH reviewed by EGS rota & escalated to consultant	On call based GRH CGH – no change	DPM – escalate to cons	DPM – escalate to cons	On call based GRH CGH – no change	DPM – escalate to cons	DPM – escalate to cons
Urology	1:9 (1:10) based at CGH	1:5 based at CGH resident until 18.00 non- resident to 23.00. W/e Resident 08.00-12.00. Non- resident 12.00-20.00	Part of EGS rota in CGH	No change	1:8 non-resident all night rota required at CGH to provide assessment of admissions • 2 ST required	DPM – escalate to registrar	No change	1:8 non-resident all night rota required at CGH to provide assessment of admissions • 2 ST required	DPM – escalate to registrar
Colorectal- (elective)	OOH covered by EGS (both sites) Weekend planned review by EGS consultant	OOH covered by EGS resident registrar (both sites)	OOH covered by EGS (both sites)	Option A- OOH covered by EGS (2 consultants on call) *	DPM at CGH supported by non-resident registrar 2 ANP (Band 7)	DPM at CGH– escalate to registrar at GRH. Will work on split sites	OOH covered by EGS (2 consultants on call) Weekend planned review by EGS consultant (TBC)	OOH covered by on site EGS registrar	On site resident team
EGS	Separate rotas on both sites. . Most consultants contribute to both rotas	1:8 CGH 1:9 GRH But 3 vacancies (locum & agency)	GRH FY1 rota. CGH: EGS rota combined with T&O	2 consultants on call 24/7 to provide support to both sites	1:15- resident GRH & 1:15 non-resident CGH	Foundation rota at GRH	2 consultants on call 24/7 to provide support to both sites	1:15- resident GRH & 1:15 non-resident CGH	Foundation rota at GRH
Vascular	1:7 rota	1: 7 (non-res) but only 1 in post currently therefore picked up by GS rota 6:7	Part of EGS rota in CGH	1:7 based at GRH	1:7 (non-res)Only 1 in post but resident GS reg. could cover 6:7	As for EGS	1:7 based at GRH	1:7 (non-res)Only 1 in post but resident GS reg. could cover 6:7	As for EGS
additional Staffing required				Additional ST X2 required for urology rota.			Additional ST X2 required for urology rota.		
Total additional				2 ST doctors required for urology			2 ST doctors required for urology		

Key:
Requires additional resource

9.2.3.12 Impact of proposed changes on junior doctor rotas and training

The overarching concerns from trainees are that historically there was a significant imbalance between CGH and GRH in surgical workload and opportunity. This meant less than ideal training experience for surgeons on either side – too much emergency work in GRH to get to theatre and too little surgical experience in CGH for the number of trainees placed there. Part of the aim of the EGS reconfiguration is to better manage the emergency workload and even out the opportunities for specialist surgical experience. The surgical clinical tutor and deanery representative have been in contact with the training programme director for surgery to discuss how we are responding to the concerns raised. Further work is ongoing with the Director of Medical Education, Training programme directors and Clinical Tutors to review the training opportunities that the future configuration of services and will provide. This will then be shared and discussed with the Programme Directors and Heads of School for Medicine and Surgery.

The Deanery advises and we recognise that it is important to maintain foundation trainee post numbers across the trust and all the work schedules for posts affected will be reviewed to ensure suitable learning opportunities are still open to them. There is potential to be offered further foundation posts next year, as the first cohort of the extra 1500 medical school places will be graduating; however GP training programmes are changing the year after that to include less time in hospital posts so it is possible that there is little change in overall junior doctor numbers but a shift in trainee type. The advice from the Deanery can be summarised as:

- The learning objectives for foundation doctors are set through a national curriculum, overseen by the UK foundation programme office and the GMC
- Foundation year 1 doctors require immediately available support from people with the skills to manage problems they might face (so that could be the ACRT or DCC team).
- There is no precise specification for particular hours of the day or night but posts should provide opportunities for experience to achieve the learning outcomes.
- Foundation year 1 doctors require immediately available support from people with the skills to manage p F2s take on more responsibility for leading and managing patient care but still need to be able to access support for problems they might face (so that could be the ACRT or DCC team).
- If there are going to be big changes in foundation post rotas, we should discuss them with the Gloucestershire foundation programme directors (at one of their regular Tuesday meetings) and then make sure the Foundation school team at the deanery is aware.
- There is no rule that requires training to be provided on one site. Many trainees will need to work at several sites to achieve their learning outcomes. Moving between sites should be justified on training grounds rather than service grounds and doctors in training must have induction to all areas and appropriate clinical supervision at all times. If doctors need to move sites during a shift we need to think about how they will do that safely (and return back afterwards) and without interrupting continuity of patient care.
- Training posts must allow trainees to achieve the learning outcomes set in their curriculum. Colleges may set expectations for proportions of elective/emergency work but this isn't universal across programmes and will be a guide. If a college sets

an expectation that is unachievable but we can demonstrate that trainees are able to meet their learning needs with a different pattern that would be fine. That's difficult to do prospectively though.

- The risk of prioritising service over training is the withdrawal of training posts and loss of trainees.

Summary of the Impact on trainee doctors for various options:

Key: level of training provided	1 Poor	2 Adequate	3 Good

Services (Involved)	Baseline (pre COVID)		Option 4.4 CGH-CR, D/C GS, GRH- AMT, EGS, Vascular		Option 5.4 CGH- D/C GS, GRH- AMT, EGS, CR, D/C GS, Vascular	
	Registrars	Foundation	Registrars	Foundation	Registrars	Foundation
Acute Medical Take	1	1	3	3	3	3
Emergency General Surgery	1	1	3	2	3	3
Colorectal (elective)	2/3	2	3	2	3	3
Gastroenterology	2	1	3	3	3	3
Trauma & Orthopaedics	2	1/2	3	2/3	3	2/3
Vascular	3	2	3	3	3	3
Sub Total	11.5	8.5	18	15.5	18	17.5
ED	2	2	2	2	2	2
Urology	3	1	3	2	3	2
Sub Total	5	3	5	4	5	4
Overall Total	**14.5**	**11.5**	**23**	**19.5**	**23**	**21.5**

Grey indicates specialties that will not change but there may be an impact.
This assumes that for all models the additional doctors required can be recruited

Further details can be found in Appendix 31

9.2.4 *Bed Capacity*

9.2.4.1 Baseline

The bed number baseline for the in scope services is presented below:

CGH Baseline	Colorectal	General Surgery	Upper GI	Vascular	Vascular (Hernia + GS)	Interventional Cardiology	General Medicine	TOTAL
Emergency	3.8	17.2	0.9	10.7	0.7	9.8	32.8	75.9
Elective	4.2	1.5	0.2	6.3	0.5	0.9	0.2	13.8
Day Case	0.3	0.2	2.0	0.6	0.2	2.4	0.0	5.7
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**8.3**	**18.9**	**3.1**	**17.6**	**1.4**	**13.1**	**33.0**	**95.4**

GRH Baseline	Colorectal	General Surgery	Upper GI	Vascular	Vascular (Hernia + GS)	Interventional Cardiology	General Medicine	TOTAL
Emergency	1.7	33.9	4.1	0.1	0.0	10.4	112.7	162.9
Elective	4.6	2.1	3.1	0.1	0.0	0.2	0.8	10.9
Day Case	0.6	0.2	1.0	0.1	0.0	0.0	0.0	1.9
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**6.9**	**36.2**	**8.2**	**0.3**	**0.0**	**10.6**	**113.5**	**175.7**

GHFT Baseline	Colorectal	General Surgery	Upper GI	Vascular	Vascular (Hernia + GS)	Interventional Cardiology	General Medicine	TOTAL
Emergency	5.5	51.1	5.0	10.8	0.7	20.2	145.5	238.8
Elective	8.8	3.6	3.3	6.4	0.5	1.1	1.0	24.7
Day Case	0.9	0.4	3.0	0.7	0.2	2.4	0.0	7.6
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**15.2**	**55.1**	**11.3**	**17.9**	**1.4**	**23.7**	**146.5**	**271.1**

Details of the total bed numbers by specialty for both GRH and CGH can be found in Appendix 32a.

The bed requirement for each of the individual models is presented in the relevant sections (9.3.5.2, 9.4.5.2, 9.5.5.2 & 9.6.5.2), but there are a number of factors that need to be considered in the context of the bed number impact.

9.2.4.2 GHNHSFT Strategic Site Development Programme (GSSD)

Independent to the Fit for the Future programme and subject to a completely separate internal and external assurance process, GHNHSFT has recently submitted planning applications as part of plans to transform CGH and GRH as part of a £39.5m investment. Under the plans CGH will benefit from better day case surgery facilities with the development of two additional theatres and a Day Surgery Unit. The new facilities will

improve patient experience, reduce waiting lists and result in fewer operations being cancelled.

GRH will benefit from an improved Emergency Department and acute medical care facilities designed to speed up diagnosis, assessment and treatment. There will be a redesigned outpatients and fracture clinic accommodation for orthopaedic outpatients, additional x-ray capacity and a programme of ward refurbishment.

Subject to planning permission and the successful navigation of the final business case through various checkpoints including internal and external audits, work could begin on site in 2021 with the buildings being open to patients in 2023.

These developments provide additional capacity across both sites and once completed, colleagues and patients will have a more modern, spacious environment in which to work and receive care, enabling teams to achieve their ambitions of delivering even better patient care.

The work at Cheltenham will enhance theatre capacity and in doing so will ensure fewer patients from the county will have to travel out of Gloucestershire for treatment. Meanwhile at GRH the plans will help to relieve crowding ED during busy periods which is something both patients and staff have flagged as a priority.

Capital funding was awarded by NHS England in 2018 and was allocated under the Gloucestershire Sustainability and Transformation Partnership (STP), now called Gloucestershire's Integrated Care System. The funding allocation is recognition of the strong partnership working between health, social care and the voluntary sector in the county.

As part of this programme the bed capacity at GRH will be increased.

9.2.4.3 Centralisation Benefits

There are efficiency benefits to be achieved through centralisation e.g. with Emergency General Surgery there are opportunities in the following areas:

- Reduce average length of stay for emergency gall bladder patients
- Reduce average length of stay for emergency patients
- Reducing length of stay of parenteral patients with a length of stay of over 28 days

9.2.4.4 Winter Plan 19/20

As part of the Trust's 2019/20 Winter Plan office space has been converted to house the Surgical Assessment Unit (SAU) and the SAU area has been reverted to a 6-bed inpatient bay. Capital cost of this work was included in 2019/20 capital plan.

9.2.4.5 FFTF Phasing

As presented in the implementation plan (section 9.8) Phase 1 of the FFTF programme is delivered over 2+ years with the centralisation of the Acute Take to GRH towards the end of this period. This creates the opportunity to complete the further work identified in section 9.2.4.3 above and to bring forward specialties in Phase 2 of the FFTF programme (section 4.3.1) that can redistribute the bed requirements across both sites; however this is all subject to separate staff and public engagement, Senate & NHSE&I review and consultation process.

9.2.4.6 Indicative Bed requirement and mitigations (GRH)

The table below has been included to provide an overview of the impact of the proposed service changes and the potential mitigations (which have been listed above).

Solutions Description	Option 4.4 Model D1	Option 5.4 Model E
Centralise acute medicine to GRH	✓	✓
Deteriorating Patient / ACRT	✓	✓
Department of Critical Care	✓	✓
IGIS hub and vascular centralised to GRH	✓	✓
IGIS hub to GRH, vascular stay in CGH	✗	✗
EGS centralised to GRH	✓	✓
Elective colorectal to CGH	✓	✗
Elective colorectal to GRH	✗	✓
GI daycases - CGH	✓	✓
Bed Model Output	-78.4	-90.8
Mitigation #1 – new capacity:		
Additional + 24 medical beds	24	24
Additional + 17 AMU beds	17	17
5th Floor + 6 beds	6	6
Total + beds	47	47
Net impact #1	-31.4	-43.8
Mitigation #2 – benefits of centralisation		
AMU ALoS of 1 day to AEC		
Direct admit pathways to CGH		
Benefit of EGS centralisation	4.7	4.7
Net impact #2	-26.7	-39.1
Mitigation #3 – FFtF Phase 2		
Specialty A to move to CGH (tbc)	32	32
Net impact	5.3	-7.1

9.2.5 *Critical Care*

9.2.5.1 Baseline

9.2.5.2 Capacity Mitigations

Critical care (CC or DCC[28]) capacity modelling has been completed to determine the impact of all models and results in a net increase in demand in the range of 3 to 7 critical care beds on the GRH site, with the commensurate reduction in DCC beds at CGH. The modelling is based on the following assumptions (further detail can be found in Appendix 30):

- Based on data from 2016 – 2018 so assuming no increase from DCC average delayed discharges
- Based on average 70% critical care bed occupancy rates
- All patients from the planned care speciality transferring to CGH will move to CGH critical care with the exception of those acutely admitted directly from GRH Emergency Department or Acute Medical Unit
- All patients repatriated from other providers will go to critical care at CGH.

The long term solution is to build more DCC beds in Gloucester, with the appropriate number of side rooms, funded through the national programme to increase ITU capacity

Coronavirus (COVID-19)

As a result of COVID-19 there is a national guidance recommending the provision of more ITU beds. Gloucestershire ICS has submitted a capital bid for funding within the South West planning scheme (these range from an additional 4 to 12 beds in GRH- there are currently 19). The Surgical Division has been working towards a business case and an external company have reviewed requirements and recommend a requirement for 33 beds (by 2030) in GRH, increasing to 35 if future population growth is included. Funding for this increased capacity will be sought through the national programme once details are released.

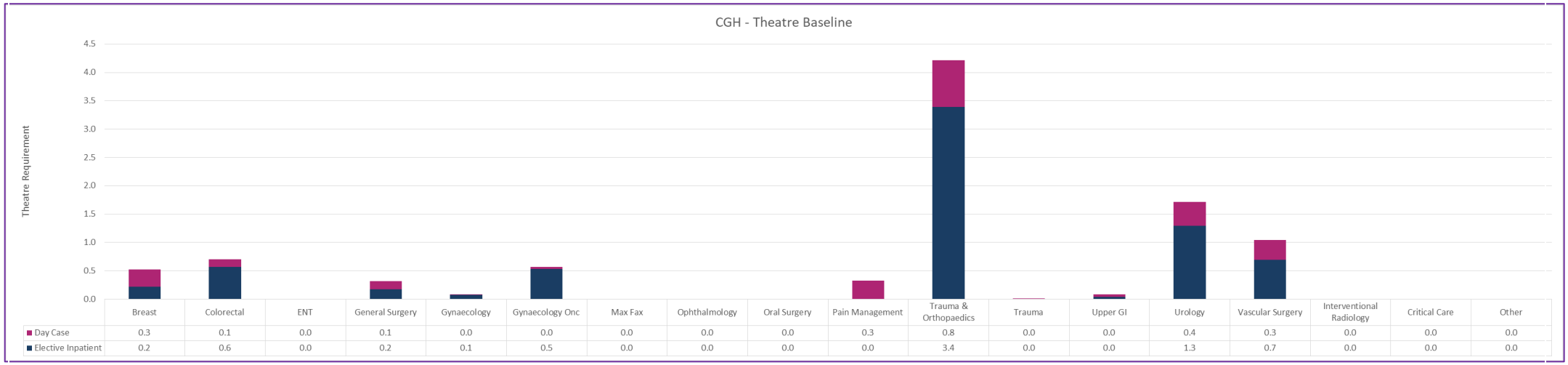
Our workforce modelling has included the transfer of DCC staff from CGH to GRH whilst maintaining the recommended safe staffing consultant and nurse ratios at the CGH site. These step change costs do provide increased flexibility to utilise CGH to balance capacity where clinically appropriate.

The implementation timeline in the PCBC (Section 9.8) is to move the acute medical take in 2023 and ideally the new DCC provision would be in place.

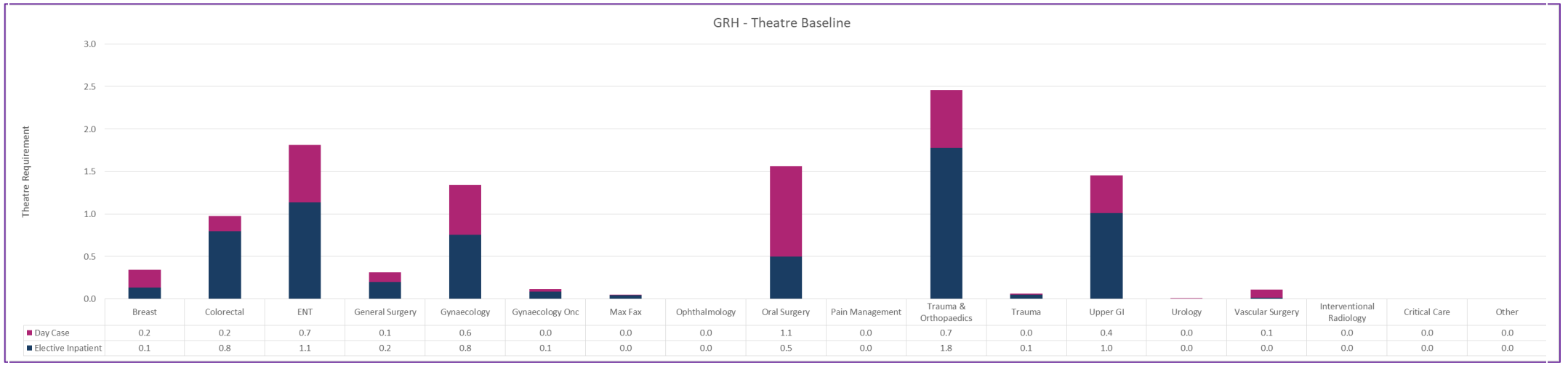
[28] Also known as Dept. of Critical Care

9.2.6 *Theatres*

9.2.6.1 Baseline



	Breast	Colorectal	ENT	General Surgery	Gynaecology	Gynaecology Onc	Max Fax	Ophthalmology	Oral Surgery	Pain Management	Trauma & Orthopaedics	Trauma	Upper GI	Urology	Vascular Surgery	Interventional Radiology	Critical Care	Other
Day Case	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.0	0.0	0.4	0.3	0.0	0.0	0.0
Elective Inpatient	0.2	0.6	0.0	0.2	0.1	0.5	0.0	0.0	0.0	0.0	3.4	0.0	0.0	1.3	0.7	0.0	0.0	0.0



	Breast	Colorectal	ENT	General Surgery	Gynaecology	Gynaecology Onc	Max Fax	Ophthalmology	Oral Surgery	Pain Management	Trauma & Orthopaedics	Trauma	Upper GI	Urology	Vascular Surgery	Interventional Radiology	Critical Care	Other
Day Case	0.2	0.2	0.7	0.1	0.6	0.0	0.0	0.0	1.1	0.0	0.7	0.0	0.4	0.0	0.1	0.0	0.0	0.0
Elective Inpatient	0.1	0.8	1.1	0.2	0.8	0.1	0.0	0.0	0.5	0.0	1.8	0.1	1.0	0.0	0.0	0.0	0.0	0.0

9.2.6.2 Theatre Capacity

There is increased Theatre capacity required for the changes. For all models there is an additional requirement for emergency theatre. At GRH there is an emergency theatre that runs 24/7 for all surgical specialties so with EGS (the largest users of the emergency list) going to GRH (in all Models), more emergency theatre requirement is required. This is in order to provide a second list Mon-Fri from 08.00 to 18.00. This will require theatre nursing staff and anaesthetic staff and is included in our workforce and financial modelling.

In addition models 4.4 and 5.4 where Vascular is situated at GRH further emergency theatre capacity would be required. Requirement is to fund the second emergency list for a longer period. The plan would be to use some of the previous CGH emergency list to extend the second emergency list to 08.00 to 20.00 M-F but additional staff are required to run the second list at GRH on a Saturday and Sunday 08.00-20.00 (and is included in our workforce and financial modelling).

The original CGH emergency list is for a half day list every day and an on call team at night. The half day emergency list will be reallocated to provide extended lists for urology to undertake their urgent work and for funding to accommodate vascular emergencies at GRH. The on call team will be retained at CGH for other emergency out-of-hours surgery at CGH. There is no capital requirement as GHNHSFT has sufficient Theatre capacity e.g. Theatre 2 is available at GRH.

9.2.6.3 Pre-Operative assessment Service

GHNHSFT has a centralised pre-operative assessment service for all elective surgical patients. It is provided by specially trained nurses together with a team of anaesthetists. The nursing staff undertake an assessment; this can be either face to face or by telephone depending on the type of surgery or comorbidities present which is identified on the basis of a questionnaire completed in out- patients. The anaesthetic consultants work alongside the nurses and see patients who are to undergo complex surgery and/or have a high level of co-morbidity and also those who require a review following test results.

The pre-assessment team also ensure that MRSA swabs are taken and for arthroplasty (joint replacement) MSSA testing is also completed. The pre-assessment team were awarded the 'Small step' award in 2020 for SSI prevention as the implementation of MSSA testing has resulted in a very significantly reduced infection rate. Patient education is linked with pre-assessment for some types of surgery for example the stoma specialist nurses come to the unit to instruct patients within the same visit as the pre-assessment. There is also a standardised pre-operative anaemia pathway which includes an iron infusion service.

The team are centralised apart from a separate team for Ophthalmology services as they also carry out a range of eye tests at the same appointment; however the ophthalmology pre-assessment team work to the same template and also have access to the anaesthetic team.

There are no plans to change pre-operative assessment services as a result of the 'Fit for the Future' initiatives.

9.2.7 *Diagnostic and Specialist Division impact*

9.2.7.1 Radiology and Pathology

There are no concerns regarding impact for radiology and pathology for any of the proposed Models.

9.2.7.2 Therapies

The therapy team for surgery covers all wards. Removing medical outliers will mean beds will be likely to turn over more quickly linked to ERAS and therefore the workload for Therapy in these areas will not reduce with the reduction of medical outliers.

Therapy teams are small in terms of number as they are often specialty focused such as respiratory. Therapist input at the earliest stage for many acute medical patients is essential. Not only if this crucial in the treatment of the patient but it also has a positive effect on length of stay. It is therefore essential that we have presence at both CGH and GRH for a number of specialities.

Although any increase is not expected to be significant we will be undertaking further work to establish if there are any additional resources required and this will be built into our DMBC.

9.2.8 *Non-emergency patient inter-site transfers (NEPT)*

Non-emergency patient inter-site transfers (NEPT) are currently provided by two ambulances, seven days a week across the Trust. The transfers include transporting inpatients from GRH to the Hartpury (CathLab) Suite at CGH, moving patients between hospital sites and supporting the discharge of patients, who qualify for a NEPT. An initial assessment has been made of NEPT activity required to support the FFTF options and the cost is included in our financial model.

Coronavirus (COVID-19)

This assessment has involved reviewing the existing NEPT activity, the additional NEPT activity associated with the temporary service changes, in response to COVID-19 (i.e. where both EGS and the acute medical take are centralised on the GRH site) and comparing this activity against the proposed service configurations for each option. Currently, in support of the temporary service changes, the Trust has commissioned an additional three ambulances a day to support NEPT activity. It is anticipated that the future NEPT activity will require between three and four ambulances per day, assuming that 7-8 patient journeys can be carried out per day per vehicle.

9.2.9 *ED Attendances and Emergency Admissions Impact*

Centralising the acute medical take to GRH is the same for all Models and the modelled impact is detailed in Section 8.3.1.

9.2.10 *Formalising 'Pilot' Configurations*

As detailed in section 8, the Trauma and Orthopaedics pilot has been in place since October 2017 and Gastroenterology since November 2018 and as all activity is within our baseline, and therefore as no change is proposed (i.e. the status quo), no impact has been modelled.

9.2.11 *Ambulance "Blue Light" Impact*

The programme is working with South Western Ambulance Service NHS Foundation Trust (SWASFT) to model the ambulance travel impact but the capacity to do this was affected by Coronavirus (COVID-19).

As of September 2020 we have agreed with SWASFT the following process to identify and model the impact of these proposals, which includes:

- The modelling is to be undertaken by Operational Research in Health (ORH) Limited. ORH currently provides SWASFT with service planning support and collects data from SWASFT and maintains a detailed simulation model of SWASFT operations.
- GHNHSFT will provide ORH with anonymised information of all ambulance journeys that will be impacted by the proposed changes and which hospital the incident would be eligible for transport to.
- GHNHSFT will provide the information for the period 28/02/19-31/01/20
- ORH will link the data to the Computer Aided Dispatch (CAD) data.
- Each incident will be mapped to a digital road network so that the closets appropriate hospital can be identified; this will allow a new patient flow profile to be generated, giving expected numbers of re-directs.
- A virtual replica of SWASFT operations will be created to simulate the impact of the proposed changes, dispatching "virtual" vehicles within the model to assess travel time and availability to either respond to another incident or travel back to base.
- The model will identify impact on response times of the proposed changes and then identify what, if any, additional resources are required.

The modelling is anticipated to be complete by November 2020 and will be detailed in the DMBC. To assist the financial assessment of the proposed changes within this PCBC a high level estimate is included in the Economic and Financial Analysis (Section 11) and will be updated within the DMBC.

9.3 Model D (4.4)

9.3.1 *Proposed Model Description*

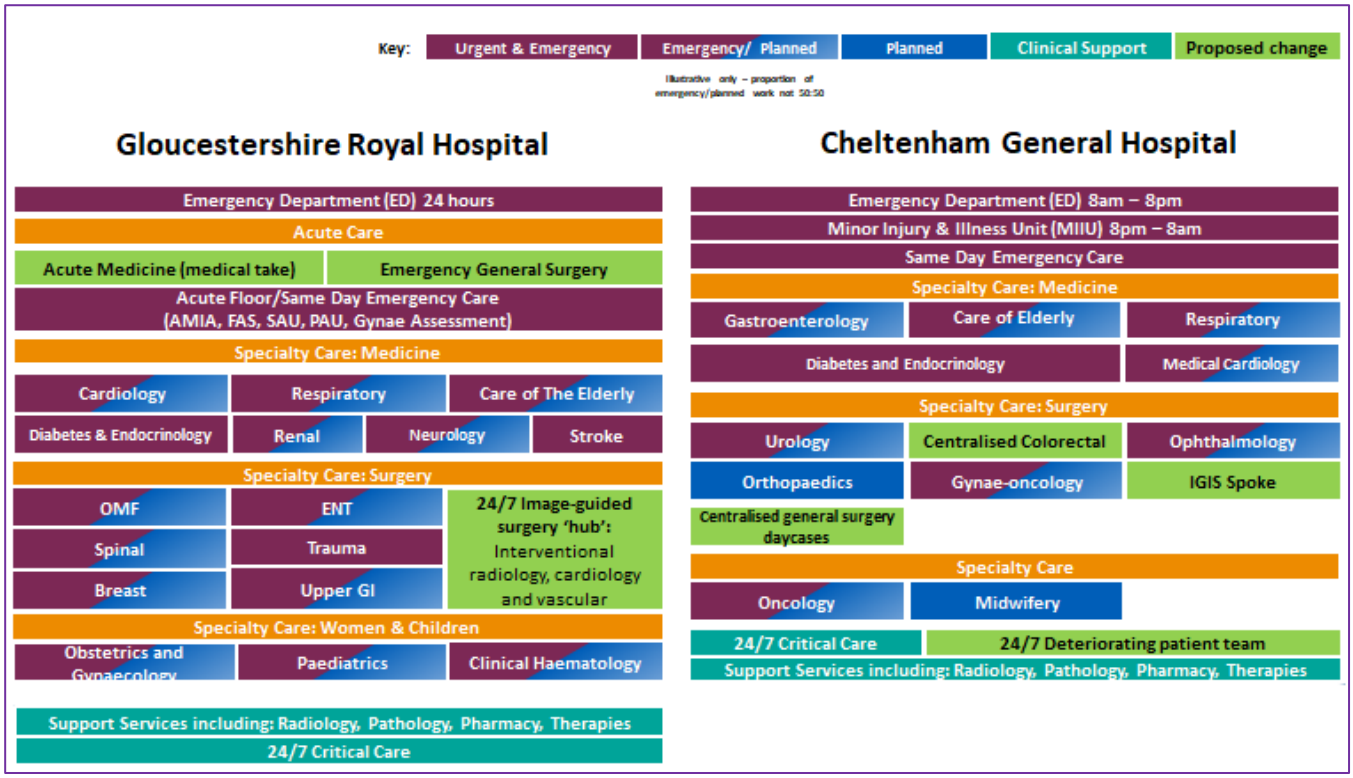
Model D/4.4 contains all 6 'fixed' elements:

- GRH: centralised acute medical take, emergency general surgery, and trauma
- CGH: centralised orthopaedics, gastroenterology, general surgery day cases, 24/7 image-guided interventional surgery hub centralised to GRH including the vascular arterial centre, .and the deteriorating patient model

The variants are:

- elective/ planned colorectal surgery centralised to CGH

The diagram below shows these elements (highlighted in green[29]) within the context of the other specialties on each hospital site.



[29] As the proposals for the two pilots (Gastroenterology and T&O) are for no change to current location these are excluded from the diagram

9.3.2 *Integrated impact assessment (IIA)*

Our IIA can be found in Section 10 and includes Health Inequalities and Equality Impact Assessment for Model D (4.4). The IIA considers both the impacts (including travel) and the benefits to give an overall assessment.

9.3.3 *Patient and Family/Carer Impact*

9.3.3.1 Patient Travel Impact

The methodology for calculating the impact on patient travel is detailed in section 9.2.2.1. For this model, the analysis estimates that 22% of patients will travel by public transport, 23% peak car travel and 55% off-peak.

The numbers of patients and the impact for Model 4.4 is:

Model	Positive (decrease 20+ mins)	Neutral (+/- 20mins)	Negative (increase 20+ mins)
D (4.4)	1,663	19,468	3,254
%	6.9%	79.8%	13.3%

Details including travel impact maps and numbers by locality and model component are available in Appendix 21.

9.3.3.2 Carers and Families Travel Impact

The table below presents the LoS for those patients negatively impacted only (weighted by mode of travel using the same methodology as patient travel) and shows that ~45% are for 1 day or less (low impact on families/carers) whereas ~ third are in excess of 6 days (potentially a high impact on families/carers).

LoS range	#	% of negatively impacted	% of total
0-1 day	1453	44.7%	6.0%
2-5 days	804	24.7%	3.3%
>6 days	997	30.6%	4.1%

Further details can be found in Appendix 21.

9.3.3.3 Car Parking

Using the same methodology as for patient travel impact (including that 22% of patients use public transport and 25% of Emergency Admissions to GRH are “blue light”) the daily impact is as follows:

Parking required	GRH	CGH
Transfer to	+29	+3
Transfer from	-3	-29
Net change	+26	-26
% of available required	4%	-

9.3.4 *Workforce impact*

9.3.4.1 Headcount

Staff Group - Modelled	CGH	GRH	Trustwide	GHFT TOTAL
Senior Medical	7.0	39.0	172.0	218.0
Junior Medical	14.0	36.0	226.0	276.0
Other Medical	0.0	1.0	26.0	27.0
Qualified Nurses & Midwives	202.0	544.0	111.0	857.0
Allied Health Professionals	0.0	0.0	118.0	118.0
Support to Nursing Staff, inc HCAs	128.0	252.0	0.0	380.0
Health Care Scientists	0.0	0.0	1.0	1.0
Support to Other Clinical Staff	0.0	15.0	87.0	102.0
Other Scientific, Therapeutic & Technical	0.0	50.0	9.0	59.0
Managers, Admin, Estates & Other Staff	26.0	55.0	137.0	218.0
TOTAL	377.0	992.0	887.0	2,256.0

Staff Group - Changes	CGH	GRH	Trustwide	GHFT TOTAL
Senior Medical	-4.0	7.0	-3.0	0.0
Junior Medical	0.0	14.0	-14.0	0.0
Other Medical	0.0	0.0	0.0	0.0
Qualified Nurses & Midwives	-15.0	30.0	-15.0	0.0
Allied Health Professionals	0.0	0.0	0.0	0.0
Support to Nursing Staff, inc HCAs	-6.0	6.0	0.0	0.0
Health Care Scientists	0.0	0.0	0.0	0.0
Support to Other Clinical Staff	-10.0	14.0	-4.0	0.0
Other Scientific, Therapeutic & Technical	-22.0	22.0	0.0	0.0
Managers, Admin, Estates & Other Staff	-4.0	21.0	-17.0	0.0
TOTAL	-61.0	114.0	-53.0	0.0

The analysis (which excludes new posts) indicates that:

- 61 staff who predominantly worked at CGH will work at GRH if the proposal is implemented
- 53 staff who worked across both sites will work predominantly at GRH if the proposal is implemented

9.3.4.2 Additional staff

Section 9.2.3 provides details of the additional staffing requirements common to all models and this section details those specific to Model 4.4.

Colorectal at Cheltenham General Hospital (CGH): Model 4.4

The proposal to safely manage 7-day elective colorectal service (and other specialties) at CGH if emergency general surgery is centralised to GRH is for *Deteriorating Patient* model - comprising 24/7 resident ITU Consultant & Acute Care Response Team (Band 8a, Band 7, Band 6, Band 3); supported by EGS non-resident Registrar and 2 additional ANPs (Band 7).

9.3.4.3 Staff Travel Impact

A generic assessment of impact is included in Section 9.2.3.2 and the numbers of staff impacted specific to Model D (4.4) is.

- 61 staff who predominantly worked at CGH will now work at GRH
- 53 staff who worked across both sites will now work predominantly at GRH

9.3.5 *Activity Modelling*

9.3.5.1 Episodes Impact

The table below presents the Trust the episode activity for Model 4.4 categorised by:

- Hospital site,
- Surgical and medical divisional split,
- Original baseline,
- the changes in activity within Model 4.4; and,
- the overall remodelled Trust activity

Surgical Episodes Baseline	CGH	GRH	GHFT
Emergency	4,290.0	13,587.0	17,877.0
Elective	5,965.0	5,627.0	11,592.0
Day Case	8,981.0	7,525.0	16,506.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	27,947.0	35,424.0	63,371.0

Surgical Episodes Model Changes	CGH	GRH	GHFT
Emergency	-2,760.0	2,760.0	0.0
Elective	46.0	-46.0	0.0
Day Case	1,200.0	-1,200.0	0.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	-1,514.0	1,514.0	0.0

Surgical Episodes Modelled TOTAL	CGH	GRH	GHFT
Emergency	1,530.0	16,347.0	17,877.0
Elective	6,011.0	5,581.0	11,592.0
Day Case	10,181.0	6,325.0	16,506.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	26,433.0	36,938.0	63,371.0

Medical Episodes Baseline	CGH	GRH	GHFT
Emergency	15,738.0	31,340.0	47,078.0
Elective	1,029.0	437.0	1,466.0
Day Case	19,250.0	12,316.0	31,566.0
D&S	595.0	87.0	682.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	36,612.0	44,180.0	80,792.0

Medical Episodes Model Changes	CGH	GRH	GHFT
Emergency	-4,659.9	4,659.9	0.0
Elective	-210.0	210.0	0.0
Day Case	-1,655.0	1,655.0	0.0
D&S	0.0	0.0	0.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	-6,524.9	6,524.9	0.0

Medical Episodes Modelled TOTAL	CGH	GRH	GHFT
Emergency	11,078.1	35,999.9	47,078.0
Elective	819.0	647.0	1,466.0
Day Case	17,595.0	13,971.0	31,566.0
D&S	595.0	87.0	682.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	30,087.1	50,704.9	80,792.0

TOTAL Episodes Baseline	CGH	GRH	GHFT
Emergency	20,028.0	44,927.0	64,955.0
Elective	6,994.0	6,064.0	13,058.0
Day Case	28,231.0	19,841.0	48,072.0
D&S	595.0	87.0	682.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	64,559.0	79,604.0	144,163.0

TOTAL Episodes Model Changes	CGH	GRH	GHFT
Emergency	-7,419.9	7,419.9	0.0
Elective	-164.0	164.0	0.0
Day Case	-455.0	455.0	0.0
D&S	0.0	0.0	0.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	-8,038.9	8,038.9	0.0

TOTAL Episodes Modelled TOTAL	CGH	GRH	GHFT
Emergency	12,608.1	52,346.9	64,955.0
Elective	6,830.0	6,228.0	13,058.0
Day Case	27,776.0	20,296.0	48,072.0
D&S	595.0	87.0	682.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	56,520.1	87,642.9	144,163.0

9.3.5.2 Bed Numbers Impact

The table below presents the shifts in bed numbers[30] for the in-scope services for:

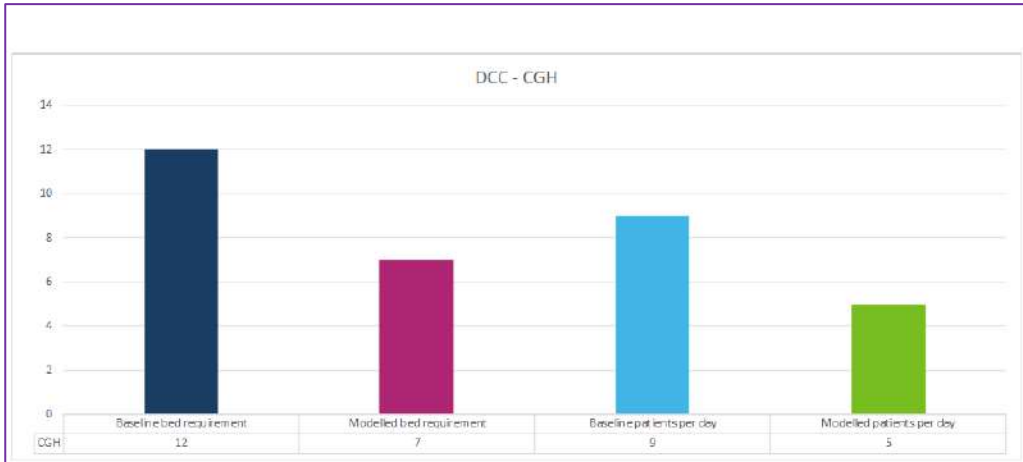
- Cheltenham General Hospital
- Gloucestershire Royal Hospital and,
- The overall net change for GHNHSFT

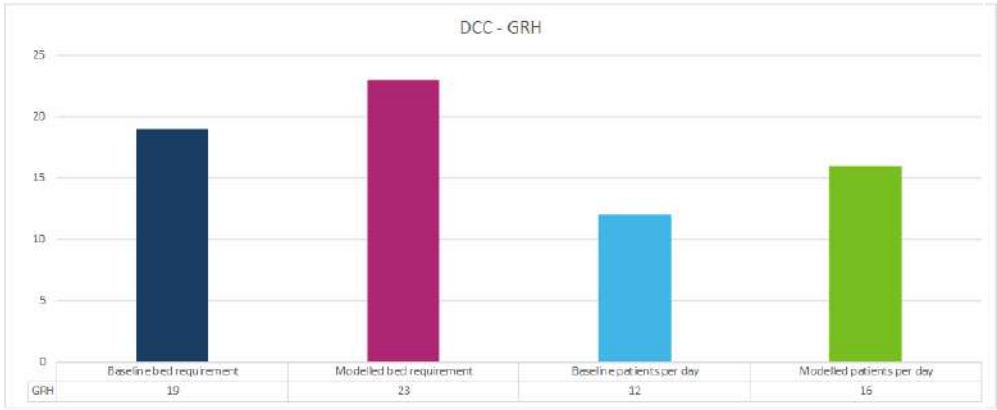
Model 4.4	Colorectal	General Surgery	Upper GI	Vascular	Vascular (Hernia + GS)	Interventional Cardiology	General Medicine	TOTAL
CGH Changes								
Emergency	-3.8	-17.2	-0.9	-10.7	-0.7	-9.8	-32.8	-77.1
Elective	4.6	2.1	-0.2	-6.3	0.0	-0.9	0.0	-0.7
Day Case	0.6	0.2	0.9	0.1	0.0	-2.4	0.0	-0.6
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**1.4**	**-14.9**	**-0.2**	**-16.9**	**-0.7**	**-13.1**	**-32.8**	**-78.4**
GRH Changes								
Emergency	3.8	17.2	0.9	10.7	0.7	9.8	32.8	77.1
Elective	-4.6	-2.1	0.2	6.3	0.0	0.9	0.0	0.7
Day Case	-0.6	-0.2	-0.9	-0.1	0.0	2.4	0.0	0.6
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**-1.4**	**14.9**	**0.2**	**16.9**	**0.7**	**13.1**	**32.8**	**78.4**
GHFT Changes								
TOTAL	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

The table above does not take account of the proposals in place (see Section 9.2.4) increase in bed capacity at GRH e.g. additional bed numbers provided through the capital programme, benefits of centralisation and further phases of FFTF. The result of these additional bed capacity proposals would mean that **this initial 78 bed deficit reduces to a 5 bed surplus**, which would be reinvested to reduce bed occupancy at GRH.

[30] Due to coding in the Baseline bed numbers, the in-scope service bed numbers also includes Assessment (0.2 beds), Stroke (0.6 beds) and Oncology (0.4 beds)

9.3.5.3 Critical Care impact





	Cheltenham General Hospital	Gloucestershire Royal Hospital	GHFT TOTAL
DCC Bed Requirement Baseline	12	19	31
DCC Option Modelled	-5	4	-1
DCC Bed Requirement TOTAL	7	23	30

	Cheltenham General Hospital	Gloucestershire Royal Hospital	GHFT TOTAL
DCC Patients per Day Baseline	9	12	21
DCC Option Modelled	-4	4	0
DCC Patients per Day TOTAL	5	16	21

9.3.5.4 Theatre impact

Theatre Requirement	Cheltenham General Hospital	Gloucestershire Royal Hospital	GHFT TOTAL
Elective Inpatient Theatre Baseline	7.0	6.5	13.5
Day Case Theatre Baseline	2.6	4.1	6.7
Theatre Baseline TOTAL	9.6	10.6	20.2
Elective Inpatient Theatre Changes	0.2	-0.2	0.0
Day Case Theatre Changes	0.9	-0.9	0.0
Theatre Changes TOTAL	1.1	-1.1	0.0
Elective Inpatient Theatre Modelled	7.2	6.3	13.5
Day Case Theatre Modelled	3.4	3.2	6.7
Theatre Modelled TOTAL	10.6	9.6	20.2

9.3.5.5 Diagnostic and specialist Division impact

Changes												
	CGH				GRH				GHFT			
	Day Case	Emergency	Elective Inpatient	TOTAL CGH	Day Case	Emergency	Elective Inpatient	TOTAL CGH	Day Case	Emergency	Elective Inpatient	TOTAL GHFT
Angio, Fluoro & Endo	-3,496	-355	-234	-4,085	3,496	355	234	4,085	0	0	-0	-0
CT	11	-2,799	264	-2,524	-11	2,799	-264	2,524	0	0	0	0
DEXA	0	0	0	0	0	0	0	0	0	0	0	0
MRI	2	-410	46	-363	-2	410	-46	363	0	0	0	0
NucMed	0	-13	-13	-26	0	13	13	26	0	0	0	0
Obstetrics US	0	0	1	1	0	0	-1	-1	0	0	0	0
Plain film X-Ray	-94	-3,799	64	-3,829	94	3,799	-64	3,829	0	0	0	0
US	41	-664	-153	-776	-41	664	153	776	0	0	-0	-0
TOTAL	-3,536	-8,042	-24	-11,602	3,536	8,042	24	11,602	0	0	-0	-0

This equates to a shift of ~ 32 diagnostic procedures per day from CGH to GRH.

9.4 Model E (5.4)

9.4.1 *Model Description*

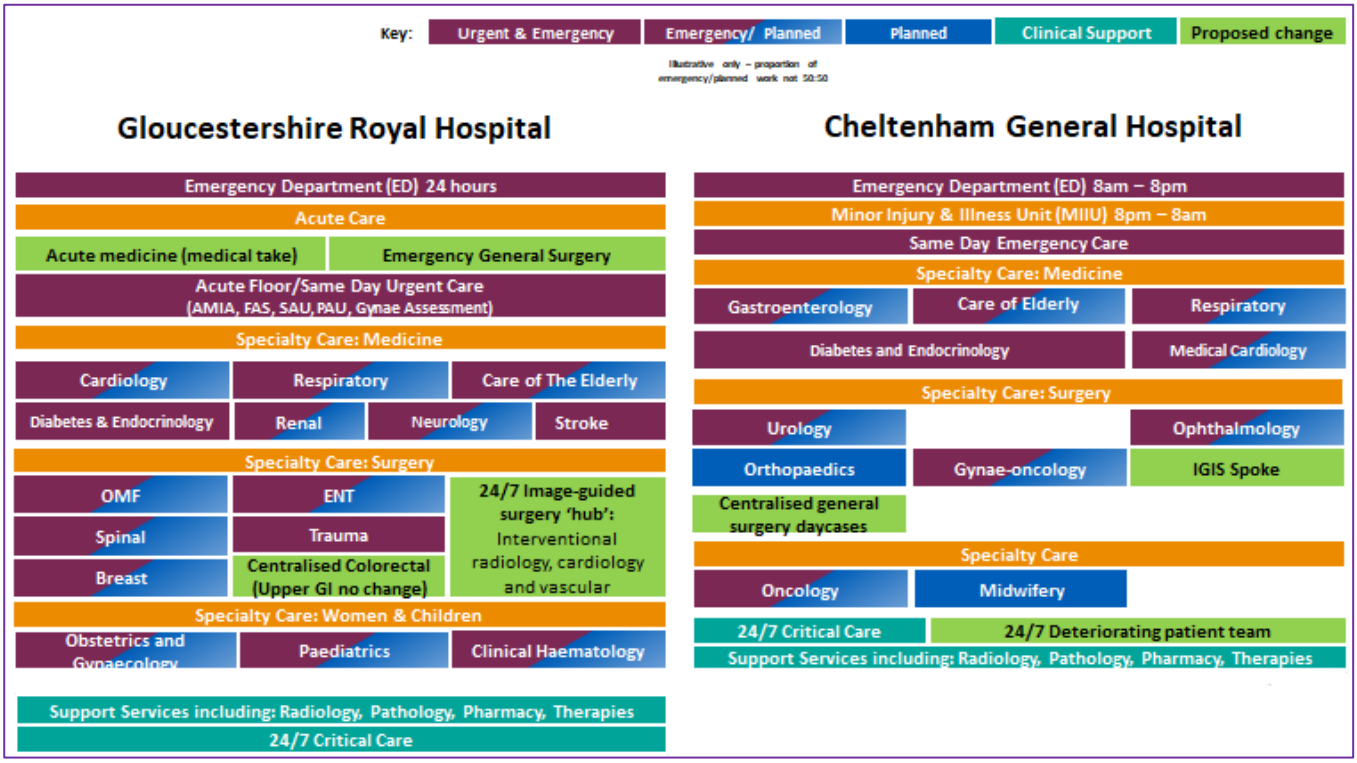
Model E/5.4 contains all 6 'fixed' elements:

- GRH: centralised acute medical take, emergency general surgery, and trauma
- CGH: centralised orthopaedics, gastroenterology, general surgery day cases, 24/7 image-guided interventional surgery hub centralised to GRH including the vascular arterial centre, .and the deteriorating patient model

The variants are:

- elective/ planned colorectal surgery centralised to GRH to create a centralised general surgery service for inpatients

The diagram below shows these elements (highlighted in green[31]) within the context of the other specialties on each hospital site.



[31] As the proposals for the two pilots (Gastroenterology and T&O) are for no change to current location these are excluded from the diagram

9.4.2 *Integrated impact assessment (IIA)*

Our IIA can be found in Section 10 and includes Health Inequalities and Equality Impact Assessment for Model E (5.4). The IIA considers both the impacts (including travel) and the benefits to give an overall assessment.

9.4.3 *Patient and Family/Carer Impact*

9.4.3.1 Patient Travel Impact

The methodology for calculating the impact on patient travel is detailed in section 9.2.2.1. For this model, the analysis estimates that 22% of patients will travel by public transport, 22% peak car travel and 56% off-peak.

The numbers of patients and the impact for Model 5.4 is:

Model	Positive (decrease 20+ mins)	Neutral (+/- 20mins)	Negative (increase 20+ mins)
E (5.4)	1,789	19,594	3,047
%	7.3%	80.2%	12.47%

Details including travel impact maps and numbers by locality and model component are available in Appendix 21.

9.4.3.2 Carers and Families Travel Impact

The table below presents the LoS for those patients negatively impacted only (weighted by mode of travel using the same methodology as patient travel) and shows that ~45% are for 1 day or less (low impact on families/carers) whereas ~ third are in excess of 6 days (potentially a high impact on families/carers).

LoS range	#	% of negatively impacted	% of total
0-1 day	1369	44.9%	5.6%
2-5 days	756	24.8%	3.1%
>6 days	922	30.3%	3.8%

Further details can be found in Appendix 21.

9.4.3.3 Car Parking

Using the same methodology as for patient travel impact (including that 22% of patients use public transport and 25% of Emergency Admissions to GRH are “blue light”) the daily impact is as follows:

Parking required	GRH	CGH
Transfer to	+30	+1
Transfer from	-1	-30
Net change	+29	-29
% of available required	4.6%	-

9.4.4 *Workforce impact*

9.4.4.1 Headcount

Staff Group - Modelled	CGH	GRH	Trustwide	GHFT TOTAL
Senior Medical	7.0	39.0	172.0	218.0
Junior Medical	14.0	36.0	226.0	276.0
Other Medical	0.0	1.0	26.0	27.0
Qualified Nurses & Midwives	163.0	583.0	111.0	857.0
Allied Health Professionals	0.0	0.0	118.0	118.0
Support to Nursing Staff, inc HCAs	89.0	291.0	0.0	380.0
Health Care Scientists	0.0	0.0	1.0	1.0
Support to Other Clinical Staff	0.0	15.0	87.0	102.0
Other Scientific, Therapeutic & Technical	0.0	50.0	9.0	59.0
Managers, Admin, Estates & Other Staff	24.0	57.0	137.0	218.0
TOTAL	297.0	1,072.0	887.0	2,256.0

Staff Group - Changes	CGH	GRH	Trustwide	GHFT TOTAL
Senior Medical	-4.0	7.0	-3.0	0.0
Junior Medical	0.0	14.0	-14.0	0.0
Other Medical	0.0	0.0	0.0	0.0
Qualified Nurses & Midwives	-54.0	69.0	-15.0	0.0
Allied Health Professionals	0.0	0.0	0.0	0.0
Support to Nursing Staff, inc HCAs	-45.0	45.0	0.0	0.0
Health Care Scientists	0.0	0.0	0.0	0.0
Support to Other Clinical Staff	-10.0	14.0	-4.0	0.0
Other Scientific, Therapeutic & Technical	-22.0	22.0	0.0	0.0
Managers, Admin, Estates & Other Staff	-6.0	23.0	-17.0	0.0
TOTAL	-141.0	194.0	-53.0	0.0

The analysis (which excludes new posts) indicates that:

- 141 staff who predominantly worked at CGH will now work at GRH
- 53 staff who worked across both sites will now work predominantly at GRH

9.4.4.2 Additional staff

Section 9.2.3 provides details of the additional staffing requirements common to all models and there are no further additional staff for Model 5.4.

9.4.4.3 Staff Travel Impact

A generic assessment of impact is included in Section 9.2.3.2 and the numbers of staff impacted specific to Model E (5.4) is:

- 141 staff who predominantly worked at CGH will now work at GRH
- 53 staff who worked across both sites will now work predominantly at GRH

9.4.5 *Activity Modelling*

9.4.5.1 Episodes Impact

The table below presents the Trust the episode activity for Model 5.4 categorised by:

- Hospital site,
- Surgical and medical divisional split,
- Original baseline,
- the changes in activity within Model 5.4; and,
- the overall remodelled Trust activity

Surgical Episodes Baseline	CGH	GRH	GHFT
Emergency	4,290.0	13,587.0	17,877.0
Elective	5,965.0	5,627.0	11,592.0
Day Case	8,981.0	7,525.0	16,506.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	27,947.0	35,424.0	63,371.0

Surgical Episodes Model Changes	CGH	GRH	GHFT
Emergency	-2,760.0	2,760.0	0.0
Elective	-1,037.0	1,037.0	0.0
Day Case	1,200.0	-1,200.0	0.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	-2,597.0	2,597.0	0.0

Surgical Episodes Modelled TOTAL	CGH	GRH	GHFT
Emergency	1,530.0	16,347.0	17,877.0
Elective	4,928.0	6,664.0	11,592.0
Day Case	10,181.0	6,325.0	16,506.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	25,350.0	38,021.0	63,371.0

Medical Episodes Baseline	CGH	GRH	GHFT
Emergency	15,738.0	31,340.0	47,078.0
Elective	1,029.0	437.0	1,466.0
Day Case	19,250.0	12,316.0	31,566.0
D&S	595.0	87.0	682.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	36,612.0	44,180.0	80,792.0

Medical Episodes Model Changes	CGH	GRH	GHFT
Emergency	-4,659.9	4,659.9	0.0
Elective	-210.0	210.0	0.0
Day Case	-1,655.0	1,655.0	0.0
D&S	0.0	0.0	0.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	-6,524.9	6,524.9	0.0

Medical Episodes Modelled TOTAL	CGH	GRH	GHFT
Emergency	11,078.1	35,999.9	47,078.0
Elective	819.0	647.0	1,466.0
Day Case	17,595.0	13,971.0	31,566.0
D&S	595.0	87.0	682.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	30,087.1	50,704.9	80,792.0

TOTAL Episodes Baseline	CGH	GRH	GHFT
Emergency	20,028.0	44,927.0	64,955.0
Elective	6,994.0	6,064.0	13,058.0
Day Case	28,231.0	19,841.0	48,072.0
D&S	595.0	87.0	682.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	64,559.0	79,604.0	144,163.0

TOTAL Episodes Model Changes	CGH	GRH	GHFT
Emergency	-7,419.9	7,419.9	0.0
Elective	-1,247.0	1,247.0	0.0
Day Case	-455.0	455.0	0.0
D&S	0.0	0.0	0.0
Other	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0
Total	-9,121.9	9,121.9	0.0

TOTAL Episodes Modelled TOTAL	CGH	GRH	GHFT
Emergency	12,608.1	52,346.9	64,955.0
Elective	5,747.0	7,311.0	13,058.0
Day Case	27,776.0	20,296.0	48,072.0
D&S	595.0	87.0	682.0
Other	7,997.0	7,749.0	15,746.0
Critical Care	714.0	936.0	1,650.0
Total	55,437.1	88,725.9	144,163.0

9.4.5.2 Bed Numbers Impact

The table below presents the shifts in bed numbers[32] for the in-scope services for:

- Cheltenham General Hospital
- Gloucestershire Royal Hospital and,
- The overall net change for GHNHSFT

Model 5.4	Colorectal	General Surgery	Upper GI	Vascular	Vascular (Hernia + GS)	Interventional Cardiology	General Medicine	Total
CGH Changes								
Emergency	-3.8	-17.2	-0.9	-10.7	-0.7	-9.8	-32.8	-77.1
Elective	-4.2	-1.5	-0.2	-6.3	0.0	-0.9	0.0	-13.1
Day Case	0.6	0.2	0.9	0.1	0.0	-2.4	0.0	-0.6
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**-7.4**	**-18.5**	**-0.2**	**-16.9**	**-0.7**	**-13.1**	**-32.8**	**-90.8**
GRH Changes								
Emergency	3.8	17.2	0.9	10.7	0.7	9.8	32.8	77.1
Elective	4.2	1.5	0.2	6.3	0.0	0.9	0.0	13.1
Day Case	-0.6	-0.2	-0.9	-0.1	0.0	2.4	0.0	0.6
D&S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical Care	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	**7.4**	**18.5**	**0.2**	**16.9**	**0.7**	**13.1**	**32.8**	**90.8**
GHNHSFT								
TOTAL	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

The table above does not take account of the proposals in place (see Section 9.2.4) to increase the bed capacity at GRH e.g. additional bed numbers provided through the capital programme, benefits of centralisation and further phases of FFTF. The result of these additional bed capacity proposals would mean that **this 91 bed deficit reduces to a 7 bed deficit.**

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[32] Due to coding in the Baseline bed numbers, the in-scope service bed numbers also includes Assessment (0.2 beds), Stroke (0.6 beds) and Oncology (0.4 beds)

9.4.5.3 Critical Care impact

9.4.5.4 Theatre impact

Theatre Requirement	Cheltenham General Hospital	Gloucestershire Royal Hospital	GHFT TOTAL
Elective Inpatient Theatre Baseline	7.0	6.5	13.5
Day Case Theatre Baseline	2.6	4.1	6.7
Theatre Baseline TOTAL	9.6	10.6	20.2
Elective Inpatient Theatre Changes	-1.8	1.8	0.0
Day Case Theatre Changes	0.5	-0.5	0.0
Theatre Changes TOTAL	-1.3	1.3	0.0
Elective Inpatient Theatre Modelled	5.2	8.3	13.5
Day Case Theatre Modelled	3.1	3.6	6.7
Theatre Modelled TOTAL	8.3	11.9	20.2

9.4.5.5 Diagnostic and specialist Division impact

	Changes												
	CGH				GRH				GHFT				
	Day Case	Emergency	Elective Inpatient	TOTAL CGH	Day Case	Emergency	Elective Inpatient	TOTAL CGH	Day Case	Emergency	Elective Inpatient	TOTAL GHFT
Angio, Fluoro & Endo	-3,496	-388	-347	-4,231	3,496	388	347	4,231	0	0	0	0
CT	11	-4,351	-60	-4,400	-11	4,351	60	4,400	0	0	0	0
DEXA	0	0	0	0	0	0	0	0	0	0	0	0
MRI	2	-539	-13	-551	-2	539	13	551	0	0	0	0
NucMed	0	-13	-15	-28	0	13	15	28	0	0	0	0
Obstetrics US	0	0	0	0	0	0	0	0	0	0	0	0
Plain film X-Ray	-94	-4,252	-131	-4,477	94	4,252	131	4,477	0	0	0	0
US	41	-1,199	-536	-1,694	-41	1,199	536	1,694	0	0	0	0
TOTAL	-3,536	-10,744	-1,101	-15,381	3,536	10,744	1,101	15,381	0	0	0	0

This equates to a shift of ~ 42 diagnostic procedures per day from CGH to GRH.

9.5 Is there a preferred option?

As described in Section 9.1 the two proposed models consist of:

Fixed proposals that are common to all proposed models:

- Formalise the reconfiguration of Trauma and Orthopaedics (currently a pilot);
- Formalise the reconfiguration of Gastroenterology (currently a pilot);
- Centralise the acute medical take to GRH;
- Centralise emergency general surgery to GRH;
- Centralise general surgery day cases to CGH,
- Centralise 24/7 IGIS hub and vascular surgery to GRH, IGIS spoke at CGH, and;
- 'deteriorating patient' model for 24/7 care of patients in CGH

However, the patient, public and staff engagement programme, that included the solutions appraisal process, did not deliver a preferred option for the location of planned colorectal care. We therefore plan to test this variant further and in the context of the decisions in the light of the consultation as to whether or not to adopt the proposed options or modify them, make a decision on planned colorectal care informed by feedback from the public consultation.

The solutions appraisal process identified that all of the shortlisted options provided additional benefits to our patient population in terms of outcomes and quality of care. Some detriments in patient access were identified, but it was the assessment of the multi-disciplinary groups working together at the solutions appraisal workshops that all of the options taken forward onto our shortlist would represent a net improvement for patients in Gloucestershire over the current model of care.

Proposal that still has a variable option:

- Centralise elective colorectal to CGH **OR** Centralise elective colorectal to GRH

The outcome of these proposals for each site would therefore be:

	Gloucestershire Royal Hospital	Cheltenham General Hospital
Fixed Proposals	• Single acute medical take • Emergency general surgery • 24/7 image-guided interventional surgery hub • Trauma • Vascular	• General Surgery day cases • Gastroenterology • Elective Orthopaedics • IGIS spoke • Deteriorating patient model (enabler)
Variable Proposals		
Model D (4.4)		• Elective colorectal
Model E (5.4)	• Elective colorectal	

9.6 Implementation plan

This section presents the plans for implementing the proposed changes as part of Phase 1 of the Fit for the Future Programme described in this pre consultation business case, if following consultation, a decision is made to implement Model D or Model E. It is accepted that a more detailed Programme Implementation Plan (PIP), describing the activities/tasks and their sequencing to deliver the required changes is required and this will be included in our Decision Making Business Case (DMBC).

9.6.1 *Timing and preparation*

Implementation will only begin once all consultation feedback has been fully considered and analysed and a formal decision has been made by Gloucestershire ICS Board, ICS Executives, CCG Governing Body and GHNHSFT Board which considers fully the consultation feedback. This implementation plan assumes a start date of February/March 2021. The first stage will be to confirm:

- The proposed workstreams for this phase
- Clarity on who will be responsible for which pieces of work
- Key milestones for the planning phase
- How the plans will be agreed and approved

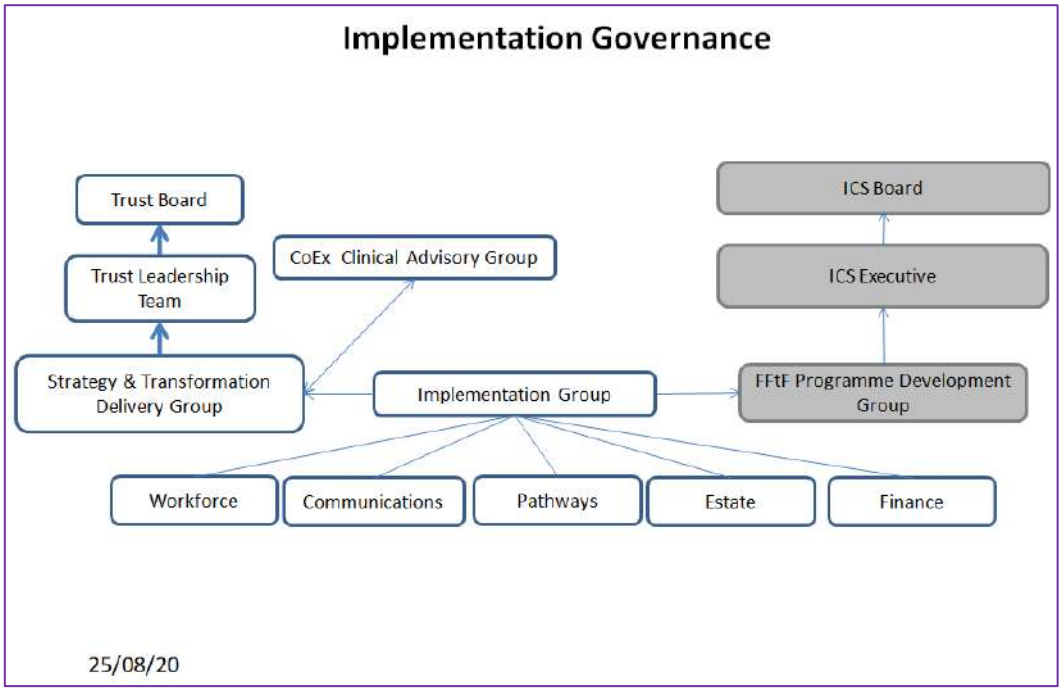
9.6.2 *Implementation Governance arrangements*

Formal governance arrangements are required to steer and govern the process of service reconfiguration and development of the FFTF programme; to deliver this we will set up a dedicated FFTF Implementation Group that is embedded within existing ICS structures; this will:

- Meet monthly to provide direction, ensure effective co-ordination, resolve issues and manage risks and interdependencies;
- Include representation from GHNHSFT, Gloucestershire CCG, service users and their representatives and other key stakeholders and leads for each of the workstreams;
- Appoint a senior responsible officer to take on overall accountability for the implementation relating to service changes. They will be responsible for ensuring effective working relationships with the wider sector in planning and implementing changes.
- Agree and monitor performance metrics to track and manage progress against key milestones.

A number of workstreams will be established (as presented overleaf), to lead on both the planning and development required to support the changes to service provision as well as the transactional processes of change. Governance arrangements will have clear links within the wider Gloucestershire ICS and individual organisational governance structures to ensure that implementation plans across all areas are aligned.

A robust risk management framework will be implemented to ensure that the principles of measuring, managing and reporting risk are maintained.



9.6.2.1 Service and pathway redesign: clinical workstreams

It is envisaged that there will be a number of clinical workstreams, based on the proposed new clinical solutions, but we recognise the interdependencies between them and will design our structures to avoid silo working. These will be finalised when the detailed implementation plan is completed.

Each Workstream will be responsible for planning the service transformation and reconfiguration programme and will report to the Implementation Group. These workstreams will focus on:

- finalisation of clinical pathways;
- how service reconfiguration will be phased, where will there be dual running and when transition and implementation would occur;
- management structures, workforce considerations and governance including policies and protocols.

9.6.2.2 Non-clinical workstreams

There will be a number of non-clinical workstreams to support the clinical workstreams in implementing the finalised service model and will include (but not limited to):

- Workforce
- Estates
- Communication and stakeholder engagement
- Finance

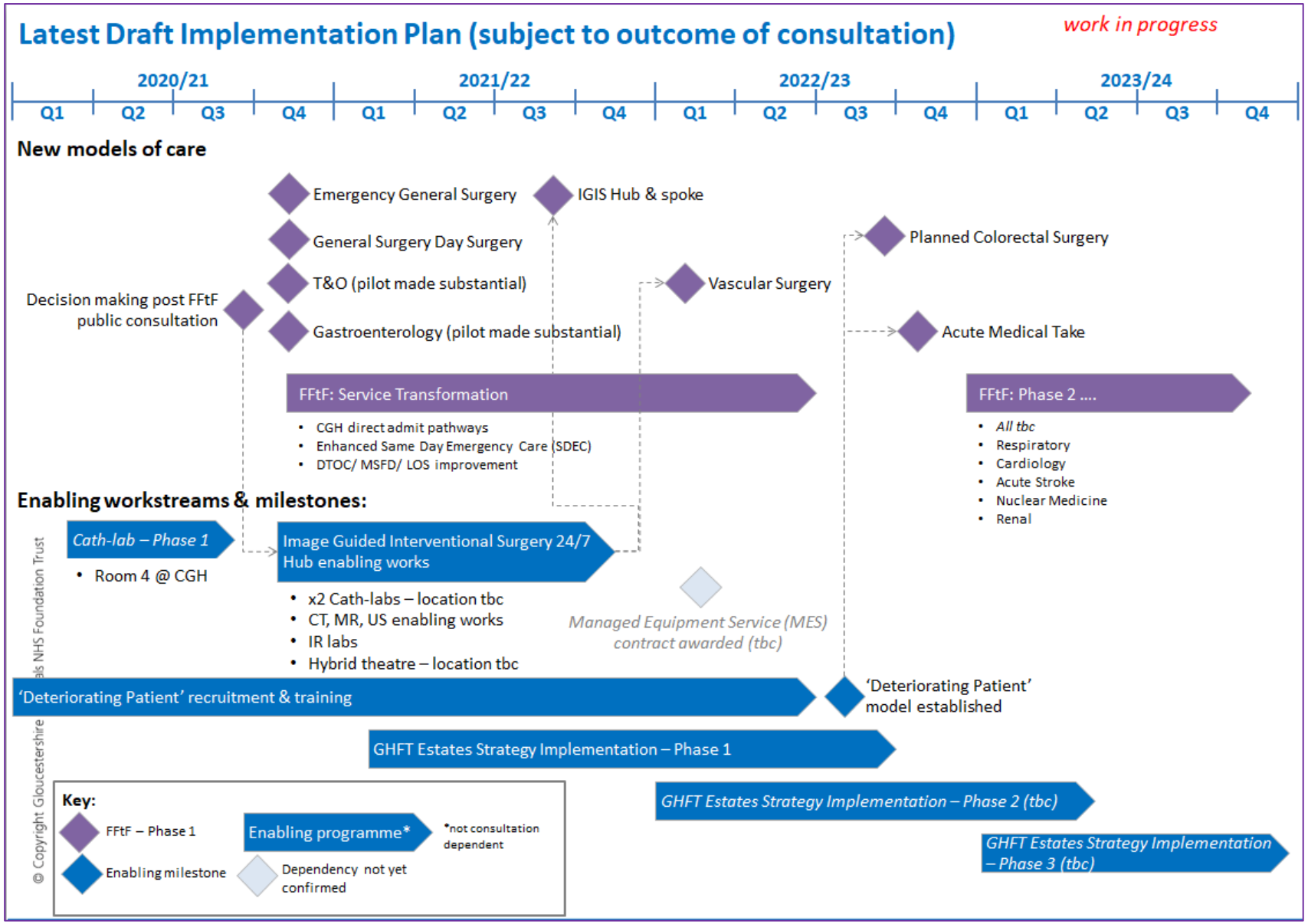
9.6.3 *Indicative timeline for implementation*

Our *Fit for the Future Programme,* which incorporates *Centres of Excellence,* is a large scale, long-term change programme which will be delivered over a number of years. This PCBC contains our Phase 1 'sentinel' models before we widen the scope of our clinical model development. Furthermore, the phases (as described in section 4.3.1) **will not necessarily be implemented sequentially**.

Whilst the exact details of the implementation plan cannot be confirmed until after the outcome of the public consultation and upon a decision being made, taking into account the consultation feedback, the schematic overleaf provides the indicative phasing of the proposed service change, recognising interdependencies between some of the elements of the proposal.

There are a number of factors supporting the implementation of our proposals including:

- No further actions are required to confirm the configurations of trauma and orthopaedics and gastroenterology
- A programme of enabling activities will commence post public consultation and organisation decision making to ensure the Trust is ready to switch the acute medical take to GRH in 2023. These include:
    - Development of direct admission pathways and protocols with system partners
    - Development of enhanced same day emergency care pathways and capacity in CGH
    - Other 'patient flow' work to support reduced bed occupancy
    - Implementation of the Trust's estates strategy phase 1
    - Full implementation of the 'deteriorating patient' model
- General surgery day cases will be transferred to CGH as theatre capacity allows
- The 'IGIS hub' is enabled by the in-house Managed Equipment Service contract award (tbc), and capital investment as part of the phased implementation of the Trust estates strategy
- Any further reconfigurations from Phase 2 that would enable delivery of a balanced beds and operating model would be implemented prior to 2023 if possible, subject to any further public engagement and consultation required.


Latest Draft Implementation Plan (subject to outcome of consultation)
work in progress
2020/21
2021/22
2022/23
2023/24
Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4
New models of care
Emergency General Surgery
IGIS Hub & spoke
General Surgery Day Surgery
Planned Colorectal Surgery
T&O (pilot made substantial)
Vascular Surgery
Decision making post FFtF public consultation
Gastroenterology (pilot made substantial)
Acute Medical Take
FFtF: Service Transformation
CGH direct admit pathways
Enhanced Same Day Emergency Care (SDEC)
DTOC/ MSFD/ LOS improvement
FFtF: Phase 2 ....
All tbc
Respiratory
Cardiology
Acute Stroke
Nuclear Medicine
Renal
Enabling workstreams & milestones:
Cath-lab – Phase 1
Room 4 @ CGH
Image Guided Interventional Surgery 24/7 Hub enabling works
x2 Cath-labs – location tbc
CT, MR, US enabling works
IR labs
Hybrid theatre – location tbc
Managed Equipment Service (MES) contract awarded (tbc)
'Deteriorating Patient' recruitment & training
'Deteriorating Patient' model established
GHFT Estates Strategy Implementation – Phase 1
GHFT Estates Strategy Implementation – Phase 2 (tbc)
GHFT Estates Strategy Implementation – Phase 3 (tbc)
Key:
FFtF – Phase 1
Enabling milestone
Enabling programme*
*not consultation dependent
Dependency not yet confirmed
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Coronavirus (COVID-19)

As described in section 3.5.2, in response to the COVID-19 pandemic, GHNHSFT implemented a number of temporary proposals and there is now some overlap between the emergency/temporary service changes and our Fit for the Future proposals.

#	Service	FFtF shortlisted solutions	COVID-19 temporary change
1	Emergency general surgery	Centralise to GRH	Centralised to GRH
2	Elective general surgery	Daycases to CGH Colorectal centralised to CGH ***or*** Colorectal centralised to GRH	None
3	Acute medical take	Centralise to GRH	Centralised to GRH
4	Vascular surgery	Move to GRH	Moved to GRH
5	Image Guided Interventional Surgery (IGIS)	24/7 Hub to GRH, spoke to CGH	None
6	Cheltenham ED	No Change	MIIU 7/7 (8am to 8pm)
7	Trauma & Orthopaedics	Centralise Trauma to GRH Centralise Orthopaedics to CGH (Operating as Pilot since Oct 17)	None
8	Gastroenterology	Centralise to CGH (Operating as Pilot since Nov 18)	None
10	Acute stroke	Not in scope	Moved to CGH
11	Urology	Not in scope	Emergency front door moved to GRH

10 Integrated Impact Assessment

This assessment has been completed by **Mid and South Essex University Hospitals Group ("MSE") Strategy Un**it in conjunction with the Fit for the Future Programme team. Impact analysis, as part of the evaluation of the two pilot changes (Gastroenterology and Trauma & Orthopaedic inpatient services) has been undertaken locally; a short summary can be found at the end of this section.

10.1 Executive summary

Context

MSE Strategy Unit and Partners were engaged as an independent expert provider by Gloucestershire Integrated Care System (ICS) to undertake an independent Integrated Health Inequalities and Equality Impact Assessment (IHIEIA) of the proposed development of centres of excellence and the resulting proposed relocation of services at GRH and CGH.

Purpose

Through the IHIEIA the commissioners wanted to ensure that any decisions made by them would support advancing equality and ensure fairness by removing barriers, engaging patients and community and delivering high quality care. This would also help ensure that the commissioners continue to meet their responsibilities under Section 149 of the Equality Act 2010 and demonstrate due regard to the need to eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Equality Act; advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and foster good relations between persons who share a relevant protected characteristic and persons who do not share it. The IHIEIA also helps to ensure that the commissioners continue to meet the duty to reduce inequalities between patients with respect to their ability to access health services reduce inequalities between patients with respect to the outcomes achieved for them by the provision of health services, as set out in s.14T of the NHS Act 2006.

Process

Evidence review, data analysis and feedback from engagement, including opinion surveys, panel discussions and focus groups, were considered by the Strategy Unit team to summarise both positive and negative impacts of the proposed changes for people with protected characteristics, outlined by the Equality Act 2010, impact on other health inequalities and the general health impact.

10.1.1 *Summary of Impact*

The IIA specifically focused on the impact of the proposed changes, described in 2 models, Model D and E. A summary of the key impacts are below. The impacts are quantified based on the scale of patients likely to be affected by the proposed change, the duration of the impact e.g. short, medium or long term and this then identifies the overall probability of the impact being beneficial or adverse. Impacts are quantified using a combination of data collected by the Trust regarding the total number of patients and patient subsets and paired with evidence review of the impacts based on literature and open source data. All neutral impacts have been removed from the summary. A detailed summary of this process is included in the Annex – (Appendix 14a), which includes all data and evidence based review. The impacts are broken down into two visuals shown overleaf. Figure 1 represents the overall impact of each model and figure 2 represents the impact of each individual proposed solution that makes up a model. The key indicates the nature of the impact. Where there are moderate adverse impacts, these have been highlighted within the document and recommendations have been made.

Summary of Proposed Models

Key	Description
Significant Positive Impact	The positive impact is significant despite small adverse impacts
Significant Positive Impact Moderate Adverse Impact	The positive impacts outweigh the adverse impacts, however the adverse impacts have been identified and recommendations made to mitigate against these
Significant Adverse Impact	The adverse impact is significant and despite positive impacts it is not clear that the adverse impacts are outweighed by the positive impacts
Neutral Impact (no significant change)	No significant change identified for this cohort

		Model D	Model E
Protected Characteristics	Age	Significant Positive Impact Moderate adverse impact	Significant Positive Impact
	Disability	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Gender	Significant Positive Impact	Significant Positive Impact
	Pregnancy	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Martial Status	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Ethnicity	Significant Positive Impact	Significant Positive Impact
	Sexual Orientation	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Religion	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Gender Reassignment	Neutral Impact (no significant change)	Neutral Impact (no significant change)
Health Inequalities	Deprivation	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Looked After Children	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Carers and Unpaid Carers	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Homelessness	Significant Positive Impact	Significant Positive Impact
	Substance Abuse	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Mental Health	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
Health Impact	Cardiovascular Disease	Significant Positive Impact Moderate adverse impact	Significant Positive Impact
	Diabetes	Significant Positive Impact	Significant Positive Impact
	Neurological Conditions	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Falls among the elderly	Significant Positive Impact	Significant Positive Impact
	Overweight and Obese	Significant Positive Impact	Significant Positive Impact

Figure 1 Summary of models

Model Summary

All models propose the following changes,

- Centralise acute medicine to Gloucestershire Royal Hospital
- Centralise emergency general surgery to Gloucestershire Royal Hospital
- Centralise general surgery/GI day cases to Cheltenham General Hospital
- 24/7 Image Guided Interventional Surgery (IGIS) hub and vascular surgery to GRH with IGIS spoke at CGH

These are all significantly positive changes that outweigh the adverse impacts identified. The adverse impacts identify that centralising emergency surgery to Gloucestershire Royal means that patients who deteriorate (e.g. day case patients) at Cheltenham General Hospital or attend A&E but require emergency surgery may need to be transferred. This has been considered adverse for those who are most vulnerable to deterioration such as those over 65. There were 6,176 emergency admissions to general surgery last year (Feb 19 to Jan 20), 4,215 of which were at Gloucestershire Royal Hospital. It is estimated; however, that ~6 patients per day in total will be affected by the new arrangements (1,961 in total) and overall 93% of patient's journeys will remain within +/- 20 mins of their existing journey. It is also estimated that there will be significantly less than 1 patient per day needing to be transferred in an emergency as a result of inpatient deterioration and a Standard Operating Procedure will be put in place for this event. This means the impact is relatively small and outweighed by the positive clinical outcomes. Emergency general surgery care would be improved by providing a dedicated team on the Surgical Assessment Unit which would review all patients presenting on the same day. This would reduce delays to review, improving patient safety. Evidence suggests patients who are seen quicker have reduced admissions and increased self-care post treatment.

Coronavirus (COVID-19)

As part of GHNHSFT's response (see section 1.7) the Trust temporarily consolidated vascular emergency and elective inpatient pathways to Gloucestershire Royal Hospital whilst day case venous patients remained at Cheltenham General Hospital. The Trust has been monitoring the patients attending Cheltenham General Hospital A&E who require a transfer to Gloucestershire Royal Hospital. On average, during the pandemic, 2 general surgery patients per week were transferred to Gloucestershire Royal Hospital, 17 in total between 1st April and 18th June 2020. It is also important to note, it is estimated that significantly less than 1 patient per day will require a transfer as a result of inpatient deterioration.

Model D

In Model D the same adverse impact identified above also relates to elective colorectal surgery patients, who will be centralised to Cheltenham General Hospital. This means this cohort will also need to be considered as potentially at risk of needing to be transferred if they deteriorate. This risk, however, is estimated to impact significantly less than 1 patient per day, meaning this is outweighed by the positive clinical outcomes of having a centralised clinical response to elective surgeries such as this. By centralising some elective surgery, quality of care could be improved as a result of co-location with other relevant specialities. There is also a reduced risk of cancellations for patients as they will have access to a ring

fenced service. Day case patients, e.g. Gastroenterology patients, are currently cancelled frequently due to the need for emergency beds, therefore, by separating elective and emergency there is dedicated resource reducing the number of cancellations for patients.

Coronavirus (COVID-19)

As part of GHNHSFT's response (see section 1.7) the Trust temporarily consolidated vascular emergency and elective inpatient pathways to Gloucestershire Royal Hospital whilst day case venous patients remained at Cheltenham General Hospital. This temporary change was only implemented in June 2020 and, therefore, the impact on vascular patients is still being monitored. In a 12 month period approximately 500 inpatients would move from Cheltenham General Hospital to Gloucestershire Royal Hospital and approximately 750 day case procedures would continue at Cheltenham General Hospital.

Model E

Model E has the least adverse impacts identified. This model co-locates IGIS and vascular and centralises elective colorectal surgery with emergency general surgery. The adverse impacts for Model E are reflected in the adverse impacts for all models.

Please see a more detailed look at each individual proposed change overleaf;

10.1.2 Summary *of Proposed Solutions*

		A3 - Centralise acute medicine to GRH	B2 - IGIS hub and vascular centralised to GRH	C3 - EGS centralised to GRH	C11 - GI day cases to CGH	C5 - Elective colorectal to CGH	C6 - Elective colorectal to GRH
Protected Characteristics	Age	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact
	Disability	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Gender	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Pregnancy	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Martial Status	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Ethnicity	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Sexual Orientation	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Religion	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Gender Reassignment	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
Health Inequalities	Deprivation	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Looked After Children	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Carers and Unpaid Carers	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Homelessness	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Substance Abuse	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Mental Health	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
Health Impact	Cardiovascular Disease	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact
	Diabetes	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Neurological Conditions	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Falls among the elderly	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Overweight and Obese	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact

Figure 2: Summary of proposed changes

10.1.3 *Potential Positive Impacts (Please see Annex for detailed analysis)*

Centralising acute medicine enhances patient safety, improves outcomes and reduces length of stay as it allows for more patients to be seen by a senior reviewer within 14 hours of arrival, associated with increased patient discharges and improved clinical outcomes. 67% of admissions to acute medicine last year were for over 65s, meaning this cohort is significantly impacted by this change and its benefits.

By centralising the IGIS hub patients will now have a 24/7 service available to them. By co-locating this with the County's Trauma hub patients are more likely to receive emergency intervention faster. By co-locating with vascular the Trust is creating a multi-disciplinary approach to management of primary angioplasty which can improve patient outcomes. 68% of interventional cardiology patients and 66% of vascular patients last year were over 65, meaning this cohort is significantly impacted by this change and its benefits.

The centralisation of services will also mean quality of care and expertise will be enhanced, particularly beneficial to patients with long term conditions or co-morbidities which are prevalent in patients with disabilities, those aged 65 and some BAME communities.

By centralising services, patients will have reduced waiting times, fewer cancellations and less unplanned overnight stays. Timely appointments with fewer cancellations means patients can more effectively plan their travel (e.g. pick up and drop off times if they are not driving themselves). This will benefit all patients, including those with disabilities who may need to plan travel in advance.

Reduced unplanned overnight stays may help to limit anxiety and unfamiliarity, particularly important for patients with a learning disability.

Having a more consistent workforce can make a significant positive impact to patients, specifically those with learning disabilities or from a minority group as consistency allows for ongoing communication with a familiar team and helps build trust for patients.

25% of Gloucester city's population are living in deprived areas, approx. 32,000 people. Therefore centralising emergency general surgery, acute medicine and IGIS to the GRH provides improved access to the right specialists to manage the care of this higher risk community. Deprivation is linked to co-morbidities and poorer health outcomes, therefore, centralising services to form different hubs with co-located specialities across both sites with enhanced quality of care and reduced waiting times will benefit all those living in deprivation across the County.

The centralisation of services will provide more comprehensive and co-located specialised care, which could be beneficial for carers who are caring for someone with multiple conditions. Centralisation also means services will be ring fenced, ensuring fewer cancellations, reduced waiting times and improved clinical outcomes, resulting in improved self-care. These benefits will help to support carers to reduce their time attending hospital with the person they are caring for and improve the health outcomes of both the person they are caring for and, in turn, potentially their own health.

There are 79 people registered with Gloucestershire's homeless healthcare team and it has been identified this cohort are significantly most likely to use A&E and community care services and evidence suggests those who are homeless are more likely to have multiple health conditions. Given rates of homelessness are slightly higher in Gloucester than surrounding areas; centralising emergency general surgery to GRH provides improved access to the right specialists to manage the care of homeless people who present with multiple conditions.

There is a strong association between physical health and mental health. People with long-term conditions, such as diabetes or cardiovascular disease, have significantly raised rates of depression, anxiety and other mental health problems. Evidence suggests they receive poorer quality care than those with a single condition.[33] 1.2% of all A&E attendances last year were for those with mental health conditions, the large majority attended GRH A&E. Therefore by centralising services, patients with comorbidities could receive a better quality of specialist care as they will be treated with a multi-disciplinary approach. .

Diabetes tends to be prevalent with other co-morbidities such as, heart conditions, meaning that this cohort is likely to be impacted by the centralisation of services as they are likely to use several different services due to having multiple conditions. Thus centralising services will improve their quality of care by reducing waiting times, faster diagnostics and a multi-disciplinary approach to multiple conditions.

By centralising services new and innovative training opportunities will be available to staff which will positively impact moral, help to retain existing staff and attract new staff. The co-location of catheter labs with Interventional Radiology improves the opportunity to develop innovative nursing and technician roles that would not have been possible before.

10.1.4 *Potential Adverse Impacts*

A centralised hub for IGIS will provide the capacity and capability to provide specialist centralised care for these patients. It is important to consider patients having interventional surgery are often more complex and can be higher risk, often with other co-morbidities and long term conditions such as cardiovascular conditions. Engagement with staff at Gloucestershire Hospitals Foundation Trust identified some concerns that patient safety may be compromised by having IGIS and vascular separate as this could result in some complex and emergency vascular patients needing to transfer, identified vulnerable groups are patients who have had a mini stroke or patients with carotid artery disease.

If emergency general surgery is centralised to GRH, people attending A&E at CGH or patients (e.g. day cases and elective colorectal) deteriorating and needing emergency general surgery may need to be transferred to GRH. Patients over 65 are most vulnerable to deterioration and currently 40% of general surgery patients are over 65, meaning they are disproportionately impacted by this. Currently, however, it is only 8 per day in total will be impacted by the new arrangements, with significantly less than 1 patient per day needing transfer in an emergency as a result of inpatient deterioration. This means the impact is relatively small and outweighed by the positive clinical outcomes.

GI day case patients are generally lower acuity and so are less likely to deteriorate; however, in the event a patient does deteriorate they may need to be transferred to GRH. Patients over 65 are more likely to experience co-morbidities and other health conditions and therefore could be more vulnerable to needing transfer; however, transfer as a result of deterioration is already indicated to be low and infrequent. This is outweighed, however, by reduction in waiting times, enhanced quality of care and a reduction in the number of patients who are required to stay overnight unplanned as a result of a late start.

Feedback from staff and patients suggests parking can be a challenge at both sites. This could prove challenging for patients with a disability who will require a disabled parking bay of drop off point if the demand increases beyond what is currently available as a result of centralising services. Moving sites can also be a challenge for patients with a sensory

[33] https://www.kingsfund.org.uk/projects/mental-health-and-long-term-conditions-cost-co-morbidity

impairment who may be familiar with their local hospital site but may be require travel to the other site. Additional support may be needed to help patients navigate this change.

The new proposed models will mean that deteriorating patients may need to be transferred depending on the site they attended and their condition. For patients with a physical, sensory or learning disability, this may mean additional support with transport arrangements on their return home as they may not drive. It is important to note this will likely be in unique circumstances and outweighed by the clinical benefits of centralising services

Carers and unpaid carers are likely to experience the clinical benefits of better quality of care for the patient, shorter waiting times and specialist services working in a multi-disciplinary approach which could help to reduce their number of hospital visits. It is possible, however, in some instances a carer may need to attend both sites based on the proposed changes (although unlikely), or in the event the patient deteriorates, they may need to transfer to GRH for emergency surgery if they are currently at CGH. These events have been estimated to happen for significantly less than 1 patient a day, meaning that, the benefits outweigh the risks for carers.

Enhanced clinical outcomes outweigh the negative impacts of travel for the majority of cohorts; however, it is important to consider the possible impact of additional cost in travel for some either through fuel costs or public transport fares for all patients, but particularly considering those in low income households. It is important to consider that this is outweighed by enhanced clinical outcomes as centralising services will likely reduce waiting times and therefore parking fees and in all the proposed solutions, ~80% of all patients impacted will see a neutral impact in travel (a change +/-20 mins).

Travel

Patients

Patients may need to travel to a different site for their treatment in the future. Travel analysis has suggested that approximately 80% of all patients will see minimal change in their journey (+/- 20 mins). This equates to approximately 20,000 people and on average 7% will have a shorter journey, just over 1,600 people

On average, 13% of patients of the services contained within these proposals will have a negative travel impact. The largest negatively impacted cohorts are those who under the proposals would need to travel to GRH for acute medicine and those travelling to CGH for elective colorectal if this are to be centralised in CGH.

Gloucestershire Hospitals Trust have assessed the evidence around the extra distance some patients may need to travel in the event of an emergency (see section 8.3.1.3) and the evidence suggests the distance would not impact negatively on mortality or the clinical outcomes of patients.

By centralising services, a number of patients would see significant reductions in their travel times as they could now be treated locally, whereas at present Primary PCI patients are travelling to other hospitals, such as Bristol, for their treatment.

There are also currently patients travelling out of county for IGIS procedures. By centralising IGIS it improves the ability for this provision to expand, increasing the potential for more patients to be treated in-county, overall reducing travel for some patients. Within the scope of the IGIS service proposals are the current 115 patients who undergo various Interventional Radiology interventions mostly delivered from Birmingham and Oxford, a few from Bristol, and some travel as far as Leeds. In addition to the patients directly benefitting,

our IGIS service proposals will contribute towards to other initiatives aimed at repatriating up to a further 600 patients.

Staff

It is important to consider the impact increased travel can have on child care provision or caring responsibilities of staff.

Despite some staff required to travel more, centralising general surgery day cases will reduce the number of visits a patient makes which creates more capacity for staff.

Currently there are challenges in filing rotas, increased sickness absence and increased use of agency staff to combat this. This puts staff under pressure and impacts morale. The proposed solutions aim to give staff more dedicated time by making processes more efficient. Some changes will bring teams together and result in less travel and as teams become bigger there will be more opportunity for flexibility of staff. By centralising some emergency and elective cohorts the environment improves for workforce as they have more dedicated capacity, fewer cancellations and less late starts and by creating an IGIS hub, this creates new opportunities for staff to train and develop new specialist skills as well as to attract and retain more staff

Public and Staff Engagement

The key concerns for patients are around access to specialist care regardless of where they live, time to assessment and overall waiting times and the availability of services locally so there is not an inequality in service provision.

Engagement from the public suggests BAME communities feel it is vitally important services remain close to patients who need it most. This cohort identified the need to see a specialist at their earliest opportunity and some think that centres of excellence are a good idea to promote specialist care.

Feedback from people over 65 confirmed that there are concerns around access to specialist staff in a timely manner.

Both Staff and the public expressed some concerns about GRH being able to cope with an increase in emergency admissions with staff looking at it from a facilities and resource perspective, and the public considering waiting times and parking.

Feedback from people over 65 confirmed that there is concern around transport. Specifically they highlighted the impact on family and friends of travelling to a different hospital, the surrounding area and how to get there. This cohort also criticised public transport reliability. This point was emphasised by those living outside of both Gloucester and Cheltenham where transport is perceived to be more complicated.

Feedback indicated that the public are more concerned with travel times than distances when it comes to care but also indicated that for some parts of the county it can take an hour to attend hospital if the proposed changes take place and this will result in increased fuel costs on top of parking charges.

Overview of local engagement

More than 3,300 face-to-face contacts were made across local communities during the FFTF Engagement period. In addition, staff working across NHS and care organisations were actively encouraged to participate in the engagement. Consequently a total of 2482 surveys were completed, with feedback also captured through workshops and other engagement events.

An overview of the feedback received during the engagement period is included in Section 6. Feedback was received from across the county with targeted engagement through a

series of workshops. The workshops were supported by Inclusion Gloucestershire (a local user-led organisation whose aim is to reduce health inequalities) who helped to recruit members of the public as experts in their own lives to participate, and provide a balance of opinion, in discussions with NHS clinicians and professionals. Those who attended the workshops disclosed demographic information relating to:

- Age – including a young carer
- Disability – physical disability, Autism and learning disabilities
- Race – individuals from different BAME communities
- Religion or belief
- Substance misuse
- Sexual orientation
- Those who are socially isolated

Demographic information was also collected via the survey, although not everyone provided the full range of information. From the information collected, approx. 38% of respondents were aged over 65 yr., with approx. 25% declared a disability or long term condition and 87% described themselves as White British. This is comparable to demographic information about the county (Source: Inform Gloucestershire).

In addition, engagement undertaken regarding the NHS Long Term Plan targeted our diverse communities. In partnership with Healthwatch Gloucestershire, a series of drop-ins and workshop style events were held with local communities of interest: the elderly; patients with disabilities and long term conditions; those with poor mental health and learning disabilities; carers; LGBT+ representatives; young people not in employment, education or training (NEET) and representatives from the BAME communities. Feedback relevant to FFTF noted that people felt the most important elements of their care were:

- Support is available as close to home as possible;
- Quality of care/expertise and continuity of care;
- Choice and timeliness of appointments;
- Reduced cancellations of appointments and operations.

10.1.5 *Recommendations based on evidence review*

General Communication

Proactive engagement will be needed to explain the benefits and mitigate public perceptions of additional risks to patient and visitor wellbeing. Ensure sufficient time, resource and focus is allocated to engagement with a range of groups on travel impacts, both planned and emergency, and for families and visitors as well as patients. Staff travel may also be a factor.

Emphasising to the public that current A&E services at CGH will be maintained is important to alleviate concerns around its closure. Feedback from over 65s emphasises the need to ensure all patients are aware of their local A&E and where to go in the event of an emergency. There are concerns around whether they will need to learn the route to a new A&E so ensuring they know A&E is still available at CGH and what to do in the event of an emergency is important.

Targeted Communication [34]

- It is recommended residents and service users over 65s and BAME communities are engaged with to explain the reasons for centralising IGIS and the implications for co-locating vascular with IGIS from a clinical outcomes perspective.
- It is recommended those over 65 are engaged regarding the proposed centralisation of emergency general surgery as 60% of the cohort are over 65. It is important to consider the impact for patients deteriorating at CGH who may need to be transferred, particularly those over 65 who may have more difficulty travelling around the county e.g. visitors such as relatives who may be relying on public transport and who may have health conditions themselves. It is also recommended to consider if there will be repatriation plans for patients who started at CGH.
- It is recommended that BAME communities, particularly those vulnerable to long term conditions are targeted in the consultation to feedback their views of the proposed changes and their perceived challenges.
- It is recommended patients with disabilities are part of the co-design where possible, looking at specific challenges such as disabled access and transport for those who do not drive. Engagement with representative organisations and support groups would also be needed to understand how to support patients with learning disabilities who may need to travel to a different site.
- It is recommended that carers are engaged with as part of the consultation with a specific interest in understanding what practical support may be required to help them navigate changes, specifically around disability access, travel information and required facilities.
- Engagement with homeless communities to understand what challenges they may face, if any, particularly if the centralisation of specialist services is perceived by this cohort to improve the quality of their care and also to understand if they will find the proposed move of services a challenge. Gloucestershire Hospitals Trust have reached out to the Housing & Support Forum and Gloucester Homelessness Forum to engage with those who are homeless or currently rough sleepers.
- Engaging with those living in lower income areas is important to understand if they currently struggle to access healthcare and if they think the proposed centralisations and movement of services will improve their access to healthcare.
- It is recommended those with mental health conditions are represented through public engagement and representative organisations for mental health to identify how the proposed changes will impact them if they are required to travel further, attend a new location or have appointments in different hospitals
- Engage with those living in low income households regarding travel options and distances to services.
- It is recommended to engage through existing forums with patients or via representative organisations for frailty and falls cohorts to understand how frailty needs to be considered in the proposed changes.

[34] Please see Appendix 22 for our consultation plan that takes account of these recommendations.

Transport and accessibility

High quality signposting, good quality wheelchair access and interactive information for those with sensory impairments will be necessary to help patients navigate this change. Both sites will already have facilities in place for patients with disabilities but it is important to ensure these are optimised and co-designed where possible with representative organisations and patients with disabilities.

Any change involving emergency transport will need to be part of engagement as this could result in access concerns.

Liaise with the local authority and transport services regarding public transport options for people who may need to use public transport to travel between hospital sites or access a different site from their home.

When centralising services it is important to assess if there is an appropriate number of disabled parking bays to accommodate increases in demand of, for example, specific elective procedures. Engagement with patients with disabilities can help to identify the perceived challenges and what is required.

Moving sites can be a challenge for patients with a sensory impairment who may be familiar with their local hospital site but may be required to travel to the other site. Additional support may be needed to help patients navigate this change; engagement through representative organisations for sensory impairments and disabilities would be beneficial to understand the best way to offer support.

Staff Engagement

Explaining how specialist staff are distributed across the two sites will be beneficial in alleviating concerns around accessibility to specialist care equally across the county.

10.2 Integrated Impact Assessment (IIA) – background information

10.2.1 *Context – Fit for the Future and Proposed options*

The Fit for the Future Programme was developed by health partners in Gloucestershire to support achievement of the NHS Long Term Plan's ambitions and in commitment to the public in Gloucestershire. As partners in Gloucestershire's health and care system, we believe patients who have serious illness or injury that requires specialist care, should receive treatment in centres of excellence, equipped with the right specialist staff, skills, resources and technology so they can by deliver care that is fit for the future.

The Fit for the Future Programme (previously called "One Place"), strives to develop outstanding specialist hospital care across the Cheltenham General and Gloucestershire Royal hospital sites. These will be "Centres of Excellence" for planned care and treatment, and for emergency care respectively. Our vision is for a single hospital on two sites, linked by the A40 'corridor', providing reliable and high quality care and experience, safely and that delivers the best possible outcomes for local people.

To date, the Trust has faced some challenges describing a clear future for services, However, the Trust believes there is a huge opportunity to develop centres of excellence providing outstanding specialist care where more patients can be treated, waiting times are lower, patient experience is improved and patient outcomes are amongst the best.

This programme seeks to maximise the opportunities of hospital care being delivered from two sites, by achieving the benefits of a separation of elective and emergency provision with one site focusing more on planned care and one more emergency-driven care site. This is unlikely, due to the needs of our population and critical co-dependencies, to be fully achieved, so any future clinical model will retain a 24/7 front door (ED/ED+MIIU) and ITU on both sites.

A summary of the proposed changes to services is as follows:

Clinical pathway group	Ref	Solutions Descriptor	Model D (4.4)	Model E (5.4)
Acute medicine	A3	Centralise acute medicine to GRH	✓	✓
Image guided interventional surgery	B2	IGIS hub and vascular centralised to GRH	✓	✓
General Surgery	C3	EGS centralised to GRH	✓	✓
	C5	Elective colorectal to CGH	✓	
	C6	Elective colorectal to GRH		✓
	C11	GI daycases - CGH	✓	✓
Gastroenterology Trauma & Orthopaedics	Gastro 1	Centralised CGH	✓	✓
	T&O 1	Split O=CGH/T=GRH	✓	✓
**Enabler - Deteriorating patient model			✓	✓

10.2.2 *Why Integrated Impact assessment (IIA)?*

An integrated impact assessment supports decision making by evaluating the impact of a proposal, informing public debate and supporting decision makers to meet their Public Sector Equality Duty and their duty to reduce inequalities.

The assessment was achieved by undertaking and combining three different methods reflecting best practice guidance summarised in figure 1.

In relation to equality, these responsibilities include assessing and considering the potential impact which the proposed service relocation could have on people with characteristics that have been given protection under the Equality Act, especially in relation to their health outcomes and the experiences of patients, communities and the workforce. With reference to health and health inequalities, the responsibilities include assessing and considering the

impact on the whole of the population served by the relevant statutory bodies and identifying and addressing factors which would reduce health inequalities, specifically with regard to access and outcomes.

10.2.3 *What is included in the IIA?*

NHS partners in Gloucestershire commissioned the MSE Strategy Unit and Partners in February 2020 to:

- Undertake and complete a full Integrated Health Inequalities and Equality Impact Assessment (IIA) prior to the consultation process of the Fit for the Future programme's proposed changes.
- Provide recommendations based on the evidence review conducted as part of the IIA to inform an action plan developed and owned by commissioners and the *One Gloucestershire* Integrated Care System
- Ensure the report contains evidence that decision-making arrangements will pay due regard to equalities and inequalities issues and the Brown principles[35].
- The assessment uses techniques such as evidenced based research, engagement and impact analysis to understand the impact of change on the population, the impact on groups with protective characteristics and the impact on accessibility and quality of services. The aim of the report is to understand and assess the consequences of change whilst maximising positive impacts and minimising negative impacts of the proposed change.

This IIA is made up of 3 chapters:

- Equality Impact Assessment
- Health inequalities impact assessment
- Health impact assessment

10.2.4 *Applicable Standards and Principles*

Key legal principles and guidance recognised and referenced as part of this document are:

- s.149 - Public Sector Equality Duty (PSED) of the Equality Act 2010.
- Equality and Human Rights Commission's paper (2012).
- Brown Principles[36].
- The Public Services (Social Value) Act 2012.
- The Autism Act 2009.
- The Children's Act 2004.
- Section 14T and 13G of the NHS Act 2006
- Commissioner duties as set out in Section 14 of the National Health Service Act 2006
- NHS Five Year Forward View and NHS Long Term Plan.
- The NHS Constitution

[35] [35] R. (Brown) v. Secretary of State for Work and Pensions [2008] EWHC 3158 at paras 90-96.

[36] R. (Brown) v. Secretary of State for Work and Pensions [2008] EWHC 3158

10.2.5 *What is the scope of this IIA?*

Patients covered

- The current and future patients from Gloucestershire Hospitals NHS Foundation Trust.
- The population served by Once Gloucestershire ICS
- Population/communities covered
- The overall population of Gloucestershire

Workforce

The current workforce at Gloucestershire Royal Hospital (GRH) and Cheltenham General Hospital (CGH)

10.2.6 *The IIA Methodology*

This IIA process includes an evidence review, data analysis and linking with outputs from stakeholder engagement to identify potential impacts of proposals on key groups. Each aspect had specific focus areas as listed below:

An **evidence review** of health issues and the risk factors for the specific patient/client groups impacted by the move as well as general population. This will ensure all population groups with the potential to be impacted are considered.

Descriptive analysis of the current patient population and health landscape within England. This includes specific emphasis on areas covered by CCGs relevant to Gloucestershire. This analysis has been used to establish an understanding of the scale of impact. This ensures the response to the impact is proportional to its scale.

Comparative analysis to assess whether different groups of the patient population/staff population, namely those that fall under protected characteristics, are disproportionately impacted by the proposed changes. This is done within the context of equality and diversity, health inequalities and population health impact. For each category of assessment, themes are used to assess impact following a description of the effect using evidence/data, whether it was positive or negative and would be difficult to remedy or be irreversible.

Assessing future demand for the service and potential impact upon different groups of the patient and workforce population in the context of equality and diversity, health inequalities and population health impact.

Iterative process combining information gathered from engagement activity conducted with the local population such as opinion surveys, panel discussions and focus groups carried out by Gloucestershire Hospitals NHS Foundation Trust.

Each impact was prioritised based on:

- **Probability** of the impact occurring (using a decision matrix combining scale and duration)
- **Scale** of those impacted
- **Duration** of the impact e.g. short, medium or long term

10.2.7 *The IIA assumptions and limitations*

Patients who have attended GRH, CGH and community provision have been used to identify potentially impacted patients and scale of impact.

The population of Gloucestershire as a county has been used to identify population health needs and inequalities of those who may be impacted by the proposed changes.

Population growth projections are based on ONS 2011 Census and current scenarios thus by default the analysis will assume that current trends will remain constant.

The overall impact of travel has been assessed considering both staff and patients feedback through engagement. Travel analysis for patients has been provided by Gloucestershire Commissioning Support Unit.

10.2.8 *How to read the IIA*

There are 3 chapters in the IIA;

- Equality Impact Assessment
- Health inequalities impact assessment
- Health impact assessment

Each chapter will start with a summary of the positive impacts and negative impacts followed by evidence based recommendations related to these impacts. The impacts of each solution has been assessed and then aggregated up to assess the impact of each proposed model of change.

10.3 Equality Impact assessment: the impact on groups with protected characteristics

Equality impact assessment is a tool which identifies and assesses impacts on a range of affected groups of people with characteristics protected under the Equality Act 2010, namely: age; gender, disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race and ethnicity; religion and belief; and sexual orientation.

The aim of an Equality Impact Assessment (EIA) is to establish the differential impact of a policy, such as in this case the development of centres of excellence and the proposed relocation or centralisation of services within Gloucestershire, on these groups. It also considers the potential measures which could reduce any negative impacts, especially in relation to health outcomes and the experiences of patients, carers, communities and the workforce. It also seeks to identify opportunities to better promote equality and good relations.

Protected characteristics considered in the analysis as per Equality Act 2010:

- **Age**: a reference to a person of a particular age group, for example this includes older people; middle years; early years; children and young people.
- **Sex**: a reference to a man or a woman.
- **Gender reassignment**; a reference to a person who is to undergo, is undergone or has undergone a process (or part of a process) for the purpose of reassigning the person's sex by changing physiological or other attributes of sex
- **Disability**: includes people with physical or mental impairments where the impairment has a substantia and long terms adverse effect on the individual's ability to carry out normal day-today activities e.g. people with learning disability; sensory impairment; mental health conditions; long-term medical conditions.
- **Marriage and civil partnership**: people who are married or in a civil partnership.
- **Pregnancy and maternity**: women before and after childbirth; breastfeeding.
- **Race**: a reference to people of a particular racial group.
- **Religion or belief**: a reference to people of a particular religion or belief.
- **Sexual orientation**: a person's sexual orientation towards persons of the same sex; persons of the opposite sex or person of either sex.

10.3.1 *Summary of impacts on people with protected characteristics*

		A3 - Centralise acute medicine to GRH	B2 - IGIS hub and vascular centralised to GRH	C3 - EGS centralised to GRH	C11 - GI day cases to CGH	C5 - Elective colorectal to CGH	C6 - Elective colorectal to GRH
Protected Characteristics	Age	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact
	Disability	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Gender	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Pregnancy	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Martial Status	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Ethnicity	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Sexual Orientation	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Religion	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Gender Reassignment	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)

10.3.2 *Potential Positive Impacts*

Centralising acute medicine enhances patient safety, improves outcomes and reduces length of stay as it allows for more patients to be seen by a senior reviewer within 14 hours of arrival, associated with increased patient discharges and improved clinical outcomes. 67% of admissions to acute medicine last year were for over 65s, meaning this cohort is significantly impacted by this change and its benefits.

By centralising the IGIS hub patients will now have a 24/7 service available to them. By co-locating this with the County's Trauma hub patients are more likely to receive emergency intervention faster. By co-locating with vascular the Trust is creating a multi-disciplinary approach to management of primary angioplasty which can improve patient outcomes. 68% of interventional cardiology patients and 66% of vascular patients last year were over 65, meaning this cohort is significantly impacted by this change and its benefits.

Coronavirus (COVID-19)

As part of GHNHSFT's response (see section 1.7) the Trust temporarily consolidated vascular emergency and elective pathways to Gloucestershire Royal Hospital; this has allowed the Trust to monitor the impact on patients and staff whilst optimising patient care during these unprecedented times. The Trust can use this learning to help inform planning for the future.

The centralisation of services will also mean quality of care and expertise will be enhanced, particularly beneficial to patients with long term conditions or co-morbidities which are prevalent in patients with disabilities, those aged 65 and some BAME communities.

By centralising services, patients will have reduced waiting times, fewer cancellations and less unplanned overnight stays. Timely appointments with fewer cancellations means patients can more effectively plan their travel (e.g. pick up and drop off times if they are not driving themselves). This will benefit all patients, including those with disabilities who may need to plan travel in advance.

Reduced unplanned overnight stays may help to limit anxiety and unfamiliarity, particularly important for patients with a learning disability.

10.3.3 *Recommendations based on evidence Review* [37]

- It is recommended that BAME communities, particularly those vulnerable to long term conditions are involved in the consultation to feedback their views of the proposed changes and their perceived challenges.
- High quality signposting, good quality wheelchair access and interactive information for those with sensory impairments will be necessary to help patients navigate this proposed change. Both sites will already have facilities in place for patients with disabilities but it is important to ensure these are optimised and co-designed where possible with representative organisations and patients with disabilities.
- Proactive engagement will be needed to explain the benefits and mitigate public perceptions of additional risks to patient and visitor wellbeing. Ensure sufficient time, resource and focus is allocated to engagement with a range of groups on travel impacts, both planned and emergency, and for families and visitors as well as patients. Staff travel may also be a factor.
- Explaining how specialist staff are distributed across the two sites will be beneficial in alleviating concerns around accessibility to specialist care equally across the county.

10.3.4 *Potential adverse Impacts*

A centralised hub for IGIS will provide the capacity and capability to provide specialist centralised care for these patients.

If emergency general surgery is centralised to Gloucestershire Royal Hospital, people attending A&E at Cheltenham General Hospital or patients (e.g. day cases and elective colorectal) deteriorating and needing emergency general surgery may need to be transferred to Gloucestershire Royal Hospital. Patients over 65 are most vulnerable to deterioration and currently 40% of general surgery patients are over 65, meaning they are disproportionately impacted by this. Currently, however, it is only 8 per day in total will be impacted by the new arrangements, with less than 1 patient per day needing to be transferred in an emergency as a result of inpatient deterioration. This means the impact is relatively small and outweighed by the positive clinical outcomes.

Coronavirus (COVID-19)

Following the temporary change of Emergency General Surgery to GRH, the Trust has been monitoring the patients attending CGH A&E/MIU who require a transfer to GRH; on average 2 general surgery patients per week were transferred to GRH, 17 in total between 1st April and 18th June 2020.

GI day case patients are generally lower acuity and so are less likely to deteriorate; however, in the event a patient does deteriorate they may need to be transferred to GRH. Patients over 65 are more likely to experience co-morbidities and other health conditions and therefore could be more vulnerable to needing transfer; however, transfer as a result of

[37] Please see Appendix 22 for our consultation plan that takes account of these recommendations.

deterioration is already indicated to be low and infrequent. This is outweighed, however, by reduction in waiting times, enhanced quality of care and a reduction in the number of patients who are required to stay overnight unplanned as a result of a late start.

Feedback from staff and patients suggests parking can be a challenge at both sites. This could prove challenging for patients with a disability who will require a disabled parking bay of drop off point if the demand increases beyond what is currently available as a result of centralising services. Moving sites can also be a challenge for patients with a sensory impairment who may be familiar with their local hospital site but may be required to travel to the other site. Additional support may be needed to help patients navigate this change.

The new proposed models will mean that deteriorating patients may need to be transferred depending on the site they attended and their condition. For patients with a physical or learning disability, this may mean additional support with transport arrangements on their return home as they may not drive. It is important to note this will likely be a rare occurrence and therefore outweighed by the clinical benefits.

10.3.5 *Recommendations based on evidence review*[38]

- It is recommended residents and service users over 65s and BAME communities are engaged with to explain the reasons for centralising IGIS and the implications for co-locating vascular with IGIS from a clinical outcomes perspective.
- It is recommended those over 65 are engaged with regarding the proposed centralisation of emergency general surgery as 60% of the cohort are over 65. It is important to consider the impact for patients deteriorating at CGH who may need to be transferred, particularly those over 65 who may have more difficulty travelling around the county e.g. visitors such as relative who may be relying on public transport and who may have health conditions themselves. It is also recommended to consider if there will be repatriation plans for patients who started at Cheltenham General Hospital.
- Identifying to the public that current A&E services at CGH will be maintained is important to alleviate concerns around its closure. Feedback from over 65s emphasises the need to ensure all patients are aware of their local A&E and where to go in the event of an emergency. There are concerns around whether they will need to learn the route to a new A&E so ensuring they know A&E is still available at Cheltenham General Hospital and what to do in the event of an emergency is important.
- Any change involving emergency transport will need to be part of engagement as this could result in access concerns.
- Liaise with the local authority and transport services regarding public transport options for people who may need to use public transport to travel between hospital sites or access a different site from their home.
- When centralising services it is important to assess if there is an appropriate number of disabled parking bays to accommodate increases in demand of, for example, specific elective procedures. Engagement with patients with disabilities can help to identify the perceived challenges and what is required.
- Moving sites can be a challenge for patients with a sensory impairment who may be familiar with their local hospital site but may be required to travel to the other site.

[38] Please see Appendix 22 for our consultation plan that takes account of these recommendations.

Additional support may be needed to help patients navigate this change, engagement through representative organisations for sensory impairments and disabilities would be beneficial to understand the best way to offer support.

- It is recommended patients with disabilities are part of the co-design where possible, looking at specific challenges such as disabled access and transport for those who do not drive. Engagement with representative organisations and support groups would also be needed to understand how to support patients with learning disabilities who may need to travel to a different site.

Coronavirus (COVID-19)

It is recommended that the impact of any COVID-19 pandemic temporary service changes are assessed based on staff and patient experience, access to care and quality and timeliness of care to ensure that the learning from the pandemic is reflected in any future reconfiguration decisions. This will also include considerations around the zoning in patients to ensure segregated pathways for COVID and non-COVID patients to ensure patient safety.

10.4 Health Inequalities Impact Assessment

The Health inequalities impact assessment identifies and assesses health inequalities and the impact of the proposed changes for the local community. The aims of a health inequalities impact assessment include identifying and addressing factors which would reduce health inequalities, specifically with regard to access and outcomes.

The World Health Organisation (WHO) defines health inequities or health inequalities as 'avoidable inequalities in health between groups of people within countries and between countries.' Such inequities arise from inequalities within and between societies. According to the WHO, 'social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs.'

Unlike the protected characteristics listed in the Equality Act 2010, there are no specific groups identified in Section 14T of the NHS Act 2006 in relation to the duty to reduce health inequalities. However, research has identified that a range of groups and communities are at greater risk of poorer access to health care and poorer health outcomes[39]. Groups other than those that have protected characteristics as defined in the Equality Act 2010 who face health inequalities:

- Looked after and accommodated children and young people.
- Carers: paid/unpaid; family members.
- Homeless people or those who experience homelessness: people on the street; those staying temporarily with friends/family; those in hostels/B&Bs.
- People with addictions and substance misuse problems.
- People who have low incomes.
- People living in deprived areas.
- People living in remote, rural and island locations.
- People with enduring mental ill health.
- People in other groups who face health inequalities.

10.4.1 *Summary of impacts of health inequalities*

		A3 - Centralise acute medicine to GRH	B2 - IGIS hub and vascular centralised to GRH	C3 - EGS centralised to GRH	C11 - GI day cases to CGH	C5 - Elective colorectal to CGH	C6 - Elective colorectal to GRH
Health Inequalities	Deprivation	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Looked After Children	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Carers and Unpaid Carers	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact
	Homelessness	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Substance Abuse	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)	Neutral Impact (no significant change)
	Mental Health	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact	Significant Positive Impact Moderate adverse impact

[39] https://www.england.nhs.uk/wp-content/uploads/2019/01/ehia-long-term-plan.pdf

10.4.2 *Potential Positive impacts*

25% of Gloucester city's population are living in deprived areas, approx. 32,000 people. Therefore centralising emergency general surgery, acute medicine and IGIS to the Gloucestershire Royal Hospital provides improved access to the right specialists to manage the care of this higher risk community. Deprivation is linked to co-morbidities and poorer health outcomes, therefore, centralising services to form different hubs with co-located specialities across both sites with enhanced quality of care and reduced waiting times will benefit all those living in deprivation across the County.

The centralisation of services will provide more comprehensive and co-located specialised care, which could be beneficial for carers who are caring for someone with multiple conditions. Centralisation also means services will be ring fenced, ensuring fewer cancellations, reduced waiting times and improved clinical outcomes, resulting in improved self-care. These benefits will help to support carers to reduce their time attending hospital with the person they are caring for and improve the health outcomes of both the person they are caring for and, in turn, potentially their own health.

There are 79 people registered with Gloucestershire's homeless healthcare team and it has been identified this cohort are significantly most likely to use A&E and community care services and evidence suggests those who are homeless are more likely to have multiple health conditions. Given rates of homelessness are slightly higher in Gloucester than surrounding areas; centralising emergency general surgery to Gloucestershire Royal Hospital provides improved access to the right specialists to manage the care of homeless people who present with multiple conditions.

There is a strong association between physical health and mental health. People with long-term conditions, such as diabetes or cardiovascular disease, have significantly raised rates of depression, anxiety and other mental health problems. Evidence suggests they receive poorer quality care than those with a single condition.[40] Therefore by centralising services patients with comorbidities could receive a better quality of specialist care. In Particular, emergency services where the majority of patients with mental health conditions are already attending as 1.2% of all A&E attendances last year were for mental health conditions, the large majority attending Gloucestershire Royal Hospital A&E.

Coronavirus (COVID-19)

In light of the COVID-19 pandemic, some patient groups may now be further impacted by the need to self-isolate for 14 days prior to an elective admission to hospital. Homeless patients, for example, may find this challenging and may be unable to self-isolate. Those with long term health conditions may be shielding and reluctant to attend hospital due to concerns regarding COVID-19 and families in low income households, those who are self-employed or those who have recently been made redundant may feel unable to self-isolate prior to a hospital visit as they are financially unable to take the time off from work. This could result in some patient cohorts not attending hospital for the treatment they need.

[40] https://www.kingsfund.org.uk/projects/mental-health-and-long-term-conditions-cost-co-morbidity

10.4.3 *Evidence Based Recommendations*

- It is recommended that carers are engaged with as part of the consultation with a specific interest in understanding what practical support may be required to help them navigate changes, specifically around disability access, travel information and required facilities.
- Engaging with those living in lower income areas is important to understand if they currently struggle to access healthcare and if they think the proposed centralisations and movement of services will improve their access to healthcare.
- It is recommended those with mental health conditions are represented through public engagement and representative organisations for mental health to identify how the proposed changes will impact them if they are required to travel further, attend a new location or have appointments in different hospitals
- Engage with homeless communities to understand what challenges they may face, if any, is needed. Particularly if the centralisation of specialist services is perceived by this cohort to improve the quality of their care and also to understand if they will find the proposed move of services a challenge.

Coronavirus (COVID-19)

Consider how some patient cohorts are impacted by the need to self-isolate prior to an elective admission and consider how these cohorts could be supported to follow the social distancing rules. Offer virtual appointments and explain the process of attending hospital to patients so they understand how they will be kept safe during their hospital visit. (zoning, COVID and non-COVID separation, PPE etc.).

10.4.4 *Potential adverse Impacts*

Carers and unpaid carers are likely to experience the clinical benefits of better quality of care for the patient, shorter waiting times and specialist services working in a multi-disciplinary approach which could help to reduce their number of hospital visits. It is possible, however, in some instances a carer may need to attend both sites based on the proposed changes (although unlikely), or in the event the patient deteriorates, they may need to transfer to GRH for emergency surgery if they are currently at CGH. These events have been estimated to happen for less than 1 patient a day, meaning that, the benefits outweigh the risks for carers.

Enhanced clinical outcomes outweigh the negative impacts of travel for the majority of cohorts; however, it is important to consider the possible impact of additional cost in travel for some either through fuel costs or public transport fares for all patients, but particularly considering those in low income households. It is important to consider that this is outweighed by enhanced clinical outcomes as centralising services will likely reduce waiting times and therefore parking fees and in all the proposed solutions, ~80% of all patients impacted will see a neutral impact in travel (a change +/-20 mins).

10.4.5 *Evidence Based Recommendations*

- Ensuring good and proportionate levels of engagement with carers throughout any consultation on proposed service changes will be essential. Hearing their views on changes to care delivery, as well as practical support for using services in future themselves, or with those for whom they care, specifically around disability access, travel information and required facilities, will be vital.
- Engage with those living in low income households regarding travel options and distances to services.

10.5 Health Impact Assessment

The Health impact assessment identifies and assesses health outcomes, service impacts and workforce impact of the proposed changes for the local community. The aims of a health impact assessment include assessing and considering the impact on the whole of the population served by the relevant statutory bodies and identifying and addressing factors which would reduce health inequalities, specifically with regard to access and outcomes.

Health Impact Assessments emerged as the recommended tool for maximising the health of the population through embedding health in all policies with the publication of the Gothenburg consensus. The framework, which was produced by the World Health Organization [WHO] European Centre for Health Policy, was underpinned by four core values: sustainable development, equity, democracy and the ethical use of evidence[41].

Based on an initial scoping exercise and evidence review we identified the main aspects within the context of health and the wider determinants of health that potentially have the greatest impact Gloucestershire's proposed changes. These are:

1. Cardiovascular Disease
2. Diabetes
3. Falls in the elderly
4. Overweight and Obesity

10.5.1 *Summary of impacts of the health assessment*

		A3 - Centralise acute medicine to GRH	B2 - IGIS hub and vascular centralised to GRH	C3 - EGS centralised to GRH	C11 - GI day cases to CGH	C5 - Elective colorectal to CGH	C6 - Elective colorectal to GRH
Health Impact	Cardiovascular Disease	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact
	Diabetes	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Neurological Conditions	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact	Significant Positive Impact Moderate adverse Impact
	Falls among the elderly	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact
	Overweight and Obese	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact	Significant Positive Impact

10.5.2 *Potential Positive Impacts*

Diabetes tends to be prevalent with other co-morbidities such as, heart conditions, meaning that this cohort is likely to be impacted by the centralisation of services as they are likely to use several different services due to having multiple conditions. This means centralising services will improve their quality of care by reducing waiting times, faster diagnostics and a multi-disciplinary approach to conditions.

Obesity is often linked to a large number of co-morbidities which mean obese patients are significantly more likely to be impacted by the proposed changes. The movement of services could result in specialist care being provided in one place leading to a better quality of care.

Patients who fall regularly are one of the cohorts more likely to be impacted by the proposed changes as they will usually attend hospital more than other cohorts in the

[41] https://globalizationandhealth.biomedcentral.com/articles/10.1186/1744-8603-10-13

population. 1,812 people per 100,000 in Gloucestershire are admitted to hospital due to falls. This cohort may benefit from the centralisation of services in the same way as over 65s because frailty can correlate with age, see "Age" section of the EQIA.

10.5.3 *Evidence Based Recommendations*

- It is recommended to engage through existing forums with patients or via representative organisations for frailty and falls cohorts to understand how frailty needs to be considered in the proposed changes.

Coronavirus (COVID-19)

It is important to consider a number of patients with long term health conditions are likely to be shielding due to the COVID-19 pandemic. Therefore, it is important to explain clearly to patients and their relatives the pathways for COVID and non-COVID patients so they understand the safety procedures in place should they need to attend hospital during this time.

10.6 Impact analysis of the two pilot changes (Gastroenterology and Trauma & Orthopaedic inpatient services)

Impact analysis, as part of the evaluation of the two pilot changes (Gastroenterology and Trauma & Orthopaedic inpatient services) has been undertaken locally with the support of the Local Authority Public Health Department.

10.6.1 *Gastroenterology Summary*

As detailed in section 8.3.6 the solutions appraisal exercise was designed to evaluate proposed changes compared with the status quo. Given that the Gastroenterology pilot is already in place, the proposed change evaluated in was ***reverting back*** to the original configurations (i.e. reversing the pilot), and therefore the impact assessment has been undertaken on the same basis. Impacts include:

- There are a number of patients with identified needs for whom it is important to ensure access to the service is equitable, for example 25% of the Gloucester city population living in deprived areas and the rates of homelessness being slightly greater in Gloucester.
- Some patients who attend Gloucestershire Royal Hospital may require a longer stay and therefore need to transfer to Cheltenham General Hospital for admission.
- Some patients with long term conditions may need multiple admissions and some of these people will live in the west of the county requiring a longer journey.

10.6.2 *Trauma & Orthopaedic inpatient services Summary*

As detailed in section 8.3.5 the solutions appraisal exercise was designed to evaluate proposed changes compared with the status quo. Given that the Trauma & Orthopaedic inpatient services pilot is already in place, the proposed change evaluated in was ***reverting back*** to the original configurations (i.e. reversing the pilot), and therefore the impact assessment has been undertaken on the same basis. Impacts include:

- 25% of the Gloucester city population are living in deprived areas, approximately 32,000 people. Therefore, centralising trauma (emergency orthopaedics) to Gloucestershire Royal Hospital provides improved access to the right specialists to manage the care of this higher risk community.

- Rates of homelessness are slightly higher in Gloucester than surrounding areas; this group have a significant requirement for trauma services.
- Despite some patients from the west of the county having to travel further for elective (planned) orthopaedic surgery the move of planned care to Cheltenham General Hospital has enabled the provision of ring-fenced wards with 80% lower chance of cancellation due to emergency trauma patients requiring the attention of specialist staff.
- The way the inpatient beds are organised now (in the pilot) includes 17 single rooms at Cheltenham General Hospital and 18 at Gloucestershire Royal Hospital which gives flexibility to maintain privacy and dignity.
- There are some patients who attend A&E at Cheltenham General Hospital who may need to transfer to Gloucestershire Royal Hospital for admission.

More details can be found in Appendix 14b.

10.7 Next steps

The independent Integrated Impact Assessment (IIA) undertaken has identified the potential for people with certain protected characteristics, health inequalities and health impacts to be adversely impacted by some of the proposals. Our proposed consultation (see section 13 and appendix 22) has been developed to respond to the findings of the IIA and the IIA itself will be updated post-consultation to take account of consultation feedback and the impact upon people with protected characteristics.

Full details of the Draft IIA can be found in Appendix 14a.

Key Points

- **Patients over 65 may need further support to access services in the new location if their journey becomes longer and they are less familiar with the centralised location.**
- **The key concerns identified through public engagement are around access to specialist care regardless of where they live, time to assessment and overall waiting times and the availability of services locally so there is not an inequality in service provision**
- **BAME communities are disproportionately impacted by the proposed changes to vascular, GI day cases, Emergency general surgery and Interventional cardiology as 5%-8% of patients (depending on speciality) are BAME but in the overall population of Gloucestershire 4.6% are BAME.**
- **Overall, centralised services could provide shorter lengths of stay, faster diagnostics and minimise waiting times, which will help patients, visitors and carers who are more likely to attend hospital regularly with the person they are caring for.**
- **If centralisation results in extended travel time or a more complex journey, this could lead to journeys being more challenging for patients, carers and relatives**
- **A centralised Image Guided Interventional Surgery (IGIS) hub will provide the capacity and capability to treat more patients in-county who are currently travelling out of Gloucestershire for their specialist care. This will make specialist care more accessible to patients, particularly benefiting those aged over 65 who can remain closer to home and are a cohort who may find travel more complicated**

11 Economic and Financial Analysis

11.1 Introduction

The information contained within this section has met the NHSE&I Stage 2 requirements of a Pre-Consultation Business Case and will be further updated for the Decision Making Business Case (DMBC). The options for change are not about saving or costing money, the priority is ensuring our services are truly fit for the future. The benefits adjusted financial proposals presented in Section 11.7 are currently net neutral and as part of the analysis we have identified a number of downside risks that will continue to be tested and mitigated.

The economic and financial analysis has been developed by the Fit for the Future Programme team working with GHNHSFT clinical divisions, reporting to the GHNHSFT Director of Finance and in collaboration with the Gloucestershire Integrated Care System (ICS) Directors of Finance (DoF) group which comprises DoFs from GHNHSFT, GCCG and GHCFT.

The programme team included GHNHSFT Finance team, information analysts, a Senior HR Business Partner for Workforce Transformation, an Associate Director of Finance from NHS South, Central and West CSU (SCW), as well as the FFTF Programme Director and Programme Managers.

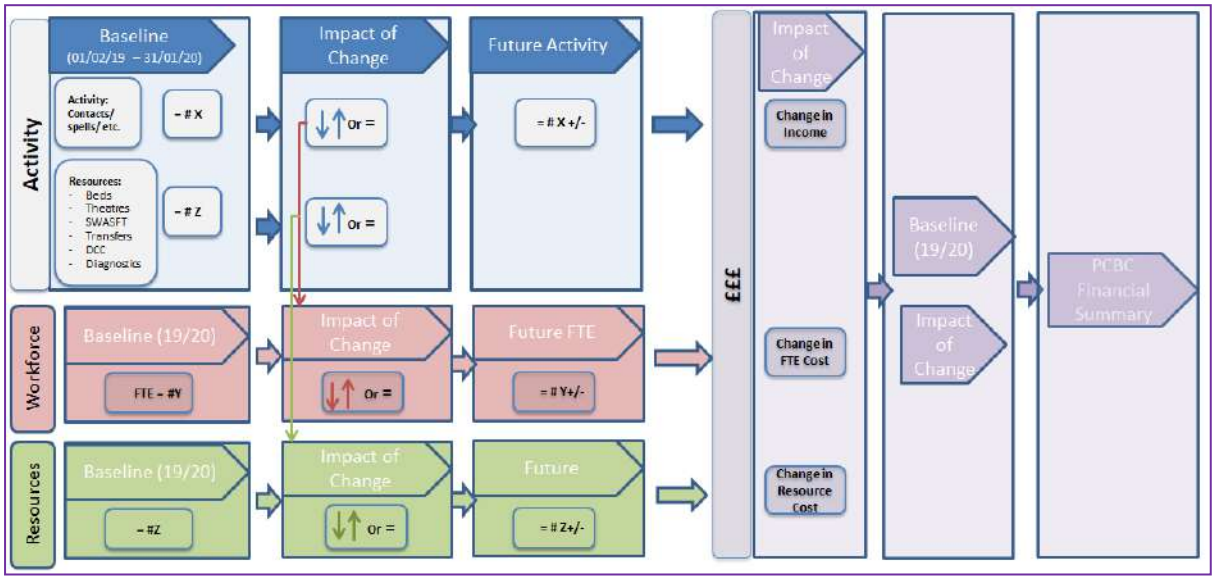
The team had dedicated weekly activity, workforce and finance modelling meetings attended by the GHNHSFT Executive Lead. The finance Workstream worked with the NHSE&I Finance team as part of the assurance process prior to the Stage 2 meetings.

11.2 Methodology

Our methodology was based on the following principles:

- Identification of the relevant clinical divisions / service areas for solutions in scope
- Identification of the appropriate baseline for activity, workforce and finance
- Identification of shifts of activity for each of the proposed solutions
- “Bottom up” impact assessment for each solution to identify changes in workforce or other resource requirements
- Robust “Confirm and Challenge” process to ensure any staffing or resource requirements were essential
- Identification of financial impact (income and expenditure, both recurrent and non-recurrent) of proposed changes
- Combine proposed changes with baseline to determine finance for each solution / service area
- Overall summary by Model

This approach is presented in the diagram overleaf.



11.3 Activity Baseline

As stated elsewhere in this PCBC, as a consequence of the Coronavirus (COVID-19) pandemic the FFTF programme was paused from the end of March to early June 2020. Prior to this we had revised our activity baseline from 2018/19 to the most recent 12 months available in order for us to complete the PCBC in March 2020; we therefore selected the period 01/02/2019 – 31/01/2020. Following the resumption of the Programme, given the compact revised timeline and to avoid an unnecessary burden on our already busy clinical teams in a process of revalidating baseline activity information, the decision was made not to amend the activity baseline and the period 01/02/19 – 31/01/20 has been used for all the activity analysis and modelling contained within the PCBC.

It should be noted that there are no changes in activity with the exception of the ~113 repatriated, Specialised Commissioning IGIS patients. All other shifts in activity between GRH and CGH are net neutral at a Trust level.

11.4 Financial and Workforce Baseline

Following the resumption of the Programme in June 2020, the opportunity to use GHNHSFTs 2019/20 financial year outturn position was available, and, given the alignment with the ICS financial period and the internal validation of this information, it was agreed to use this for the PCBC. Similarly, the validated and finance linked workforce baseline (including establishment data etc.) for the 2019/20 financial year was used for all workforce modelling.

Consideration was given to the issue of using slightly different activity and finance baseline periods. In addition to the points made above, the impact of Coronavirus (COVID-19) on finance was identifiable through the coding of costs whereas the impact on activity was a reduction that would have required an estimate of the non-Covid position to have been made. Overall the assessment was that our selected baselines were the most appropriate.

11.5 Financial aspects common to all models

As described throughout the PCBC, our proposals contain only one variant (elective colorectal) with all other elements of each model being the same. The financial aspects common to all models are presented below, followed by the overall financial impact for each model.

11.5.1 *IGIS Repatriated Patients*

Common to all models is the repatriation of ~ 113 patients going out of Gloucestershire for minimally-invasive IGIS techniques. This is the subject of ongoing negotiation with NHS England/Improvement Specialised Commissioning. Based on the current NHS tariffs, the price of this activity is £463,600.

11.5.2 *Deteriorating patient model / Acute Care Response Team (ACRT)*

Common to all models is the development of an improved deteriorating patient model that consists of expanding our Acute Care Response Team (ACRT) to 24/7 (24 hours a day, 7 days a week) on both sites, and providing the Team with on-site resident ITU consultant support overnight in Cheltenham. This programme is subject to a separate GHNHSFT business case. However, the FFTF programme includes a £397,078 cost pressure which is the net position of additional cost pressures, budget already in place, and financial savings in future years.

11.5.3 *Centralisation of Acute Take*

Common to all models is the Centralisation of Acute Take at GRH. The centralisation has assumed workforce to be 'like for like' staffing, with potential reduction as indicated below:

Reduction in WTE -savings		WTE	Based on mid point cost
Qualified Nurses & Midwives	Registered Nurse - Band 7	-1.00	-56,257
Support to Nursing Staff	Non Registered Nurse - Band 3	-3.88	-105,841
	Non Registered Nurse - Band 2	-1.00	-25,508
Total Savings		-5.88	-187,607
AEC Extension			
Qualified Nurses & Midwives			
	Registered Nurse - Band 5	0.64	26,397
	Registered Nurse - Band 6	0.32	16,070
	Registered Nurse - Band 7	0.32	19,918
		1.28	*62,385*
Support to Other Clinical Staff			
	ATO - Band 3	0.32	10,071
		1.60	72,456
Net impact		-4.28	-115,151

11.5.4 *Department of Critical Care (DCC)*

Detailed modelling and engagement with DCC has taken place as part of the FFTF programme, with a number of iterations of staffing models (and costs). The final agreed position is that there is no requirement for additional staff (or costs).

11.5.5 *Capital*

The FFTF programme does not include any capital costs. There are elements of other GHNHSFT capital programmes (approved and/or planned) which are relevant to the programme as enablers; these are:

GHFT Approval	Enabling capital and revenue schemes	Total Capital Value	Total Revenue Value
✓	**GSSD**	**£39,500,000**	**£0**
✓	**Cath Labs**	**£5,509,117**	**£0**
✗	**MES**	**£0**	**£3,423,000**

11.5.6 *Income*

With the exception of the repatriated IGIS patients (which is the subject of ongoing negotiation with NHS England/Improvement Specialised Commissioning), there may be some counting and coding changes related to AEC pathways, but this PCBC does not include any additional activity and resultant income from Commissioners.

11.5.7 *Growth assumptions*

The Fit for the Future Programme's objective is to deliver our *Centres of Excellence* for planned and emergency care and our vision is for a single hospital on two sites, linked by the A40 'corridor', providing the very best care, experience, safety and outcomes for local people. The activity, workforce and financial modelling is based on shifts in existing GHNHSFT activity between GRH and CGH (dependent on each Model configuration), that is

already fully incorporated into the ICS's future planning process and subject to the appropriate internal and external governance outside of FFTF. This planning process is a combination of growth assumptions (population growth, demographic changes, increasing demands for services, prevalence and complexity, inflation etc.) and mitigations (demand management, self-care, channel shift, service developments etc.) and is unaffected by the relocation of the services proposed in this PCBC.

Given the context above this PCBC does not include any activity growth assumptions however our benefits realisation plans (section 11.9) include a number of growth avoidance/non-cash releasing benefits.

11.5.1 *Phasing*

The indicative timeline for the implementation of these proposals is presented in Section 9 which identifies that the higher costs (and the downside risks) are planned for Year 3 onwards whereas the earlier implemented changes are associated with lower cost proposals. It should be noted that this timeline is subject to change and our ambition is to deliver the benefits of the programme as soon as is practicable and there is therefore a limited phasing effect for Phase 1 of FFTF.

The phasing of the two models is presented in the relevant sections.

11.6 Downside Risks

There are number of identified downside risks that are common to all Models; these are:

Financial Risk	Unadjusted Impact	Likelihood	Consequence	Risk-adjusted Impact	Narrative
Inability to achieve income from additional specialised commissioning activity	£463,600	M	H	£111,813	£300k represents the recurrent cost pressure to SW Spec Comm, as detailed in GHFT/SW Spec Comm joint paper 21/08/20. Adjusted 30 Sep-01Oct20 to take account of letter of support and adjusted risk values of specific procedures
Deteriorating Patient / Acute Care Response Team - junior doctor savings to be identified	£1,069,616	L	L	£84,890	Confidence that these specific posts in the establishment will be identified, but leaving £85k in to reflect ~1.0 of 12.6WTE not coming to fruition
Contingency for staff moves within 'Surgery' element: Colorectal, Upper GI, Emergency Surgery, Day Surgery, T&O	£307,953	L	L	£40,000	Although £30.8m (623.8WTE) is the baseline of the in-scope teams within the 'Surgery' element, the size of the teams whose contractual position is likely to change (ie those not already considered to be 'Trustwide' is £4m (104.5WTE), so contingency has been adjusted to ~1% of this amount
Managed Equipment Service - 5% overspend on IGIS I&E element (if capital scheme, this would be capital charges)	£95,000	L	L	£0	Any overspends would have to be met from within service budgets, as part of usual financial monitoring and approval processes
We continue to work with SWAST (and their modelling partners, ORH) to calculate the financial effect to them of up to 6,554 ambulance arrivals per year at CGH moving to GRH (or other sites, such as GWH, Swindon) If this was new activity, SWAST's contract value would be increased by 50% of the contract value / contractual activity per unit, which for Gloucestershire CCG would be £134 per additional unit of activity for the baseline year	£878,236	H	M	£175,647	However, as this is redirected, rather than new, activity, many of the relevant costs will already be covered within the existing GCCG contract with SWAST. If we assume 20% of the additional unit cost is relevant to cover additional fuel, staff time and other variable costs required to convey patients to a site other than CGH, the financial impact to SWAST is in the region of £175k, but additional modelling is being undertaken to confirm these assumptions
During the temporary COVID changes that have involved CGH's ED become a MIIU, GWH in Swindon has seen an increase of ~1.2 A&E attendance per day, of which 60% are admitted as an inpatient	£615,705	M	L	£92,356	However, as FftF changes would only see CGH's ED becoming a nurse-led MIIU from 2000-0759, and as 85% of CGH's ED activity occurs between 0800-1959, it is safe to assume that only 15% of the current activity shift to GWH would continue under the proposed changes Using the average (mean) tariffs paid by GCCG to GWH for similar activity, this additional activity may result in additional cost for GCCG of £92k, but this would form part of discussions between commissioners and providers further in the business case process
	£3,430,110			**£504,706**	

The identification of these risks is not an acknowledgement of their certainty but recognition of the need to highlight to the organisation, ICS and NHSE&I and to risk adjust and mitigate.

11.7 Analysis of the two models

11.7.1 *Model D (4.4)*

Fixed elements	Variants
GRH: centralised acute medical take, emergency general surgery, and trauma CGH: centralised orthopaedics, gastroenterology, general surgery day cases, 24/7 image-guided interventional surgery hub centralised to GRH including the vascular arterial centre and the deteriorating patient model	Elective/ planned colorectal surgery centralised to CGH

11.7.1.1 Activity shift

The details of the activity and bed number changes can be found in section 9.3.5; in summary:

Annual activity change (currency)	Volume
CGH to GRH (Episodes)	9,873
CGH to GRH (Beds)	86.9
GRH to CGH (Episodes)	1,834
GRH to CGH (Beds)	8.5
CGH to GRH (Admissions)	10,709

11.7.1.2 Workforce Changes

The details of the workforce changes can be found in section 9.3.4; in summary:

B2:

Staff type and Band	WTE	ML costs
Nurse band 5	5.92	202,000
Consultant	0.50	65,000
Non pay cost		0
Additional overhead cost	-	
Total Cost	**6.42**	**267,000**

Vascular Emergency Theatre Requirement

Staff Type	WTE	£
Consultant Anaesthetist	1.22	164,700
Band 2 HCA- 0.8WTE	0.80	21,267
Band 5 Qualified Nurse- 1.6WTE	1.60	65,993
Band 6 Qualified Nurse- 0.8WTE	0.80	40,175
Total impact	**4.42**	**292,135**
	10.84	**559,135**

		Model 4.4
Staff Type		
Urology 2 ST Drs	£	£137,200
Advanced Nurse Practitioners	£	£112,514
Total additional staff	£	**£249,714**
Urology 2 ST Drs	WTE	2.00
Advanced Nurse Practitioners	WTE	2.00
Total additional staff	WTE	**4.00**

11.7.1.3 Revenue Impact

Ref	Solutions Description		Baseline	Option 4.4 Model D1
A3	Centralise acute medicine to GRH			✓
	Deteriorating Patient / Acute Care Response Team			✓
	Department of Critical Care			✓
B2	IGIS hub and vascular centralised to GRH			✓
B3	IGIS hub to GRH, vascular stay in CGH			✗
C3	EGS centralised to GRH			✓
C5	Elective colorectal to CGH			✓
C6	Elective colorectal to GRH			✗
C11	GI daycases - CGH			✓
	Revenue Costs			
	Clinical Services		£112,148,141	£113,217,682
	Non-Clinical Costs		£4,940,111	£4,961,411
	Building Running Costs		£0	£0
	Other Revenue Costs		£24,282,449	£24,558,249
	Total Revenue Costs		**£141,370,700**	**£142,737,342**
	Additional Costs			**£1,366,642**
	Additional Income			
	Additional specialised commissioning activity			-£463,600
	Total Additional Income			**-£463,600**
	Net Recurrent Revenue Impact			**£903,042**
	WTE change			**12.66**
	Transitional Costs			
	Hybrid Theatre enabling building works - now included within overall MES programme			£0
	Moves and enabling works for colorectal			£0
	Total Transitional Costs - Non-Recurrent Revenue Impact			**£0**

11.7.1.4 Phasing

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
DCC			£0	£0	£0	£0	£0	£0
IGIS			£559,200	£559,200	£559,200	£559,200	£559,200	£559,200
Surgery	£525,514	£525,514	£525,514	£525,514	£525,514	£525,514	£525,514	£525,514
TOTAL	£525,514	£525,514	£1,366,642	£1,366,642	£1,366,642	£1,366,642	£1,366,642	£1,366,642
Recurrent Income								
Acute			£0	£0	£0	£0	£0	£0
ACRT			£0	£0	£0	£0	£0	£0
DCC			£0	£0	£0	£0	£0	£0
IGIS			-£463,600	-£463,600	-£463,600	-£463,600	-£463,600	-£463,600
Surgery	£0	£0	£0	£0	£0	£0	£0	£0
TOTAL	£0	£0	-£463,600	-£463,600	-£463,600	-£463,600	-£463,600	-£463,600
Net Recurrent Position								
Acute	£0	£0	-£115,151	-£115,151	-£115,151	-£115,151	-£115,151	-£115,151
ACRT	£0	£0	£397,078	£397,078	£397,078	£397,078	£397,078	£397,078
DCC	£0	£0	£0	£0	£0	£0	£0	£0
IGIS	£0	£0	£95,600	£95,600	£95,600	£95,600	£95,600	£95,600
Surgery	£525,514	£525,514	£525,514	£525,514	£525,514	£525,514	£525,514	£525,514
TOTAL	£525,514	£525,514	£903,042	£903,042	£903,042	£903,042	£903,042	£903,042
Annual Cost	£525,514	£525,514	£903,042	£903,042	£903,042	£903,042	£903,042	£903,042

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Benefits								
Acute	£0	£0	-£144,143	-£144,143	-£144,143	-£144,143	-£144,143	-£144,143
ACRT	£0	£0	£0	£0	£0	£0	£0	£0
DCC	£0	£0	£0	£0	£0	£0	£0	£0
IGIS	£0	£0	-£169,147	-£169,147	-£169,147	-£169,147	-£169,147	-£169,147
Surgery	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113
TOTAL	-£531,113	-£531,113	-£844,404	-£844,404	-£844,404	-£844,404	-£844,404	-£844,404
Benefits-Adjusted Annual Cost	-£5,599	-£5,599	£58,638	£58,638	£58,638	£58,638	£58,638	£58,638
Risk-Adjusted Worst Case Impact								
Acute	£0	£0	£268,003	£268,003	£268,003	£268,003	£268,003	£268,003
ACRT	£0	£0	£84,890	£84,890	£84,890	£84,890	£84,890	£84,890
DCC	£0	£0	£0	£0	£0	£0	£0	£0
IGIS	£0	£0	£111,813	£111,813	£111,813	£111,813	£111,813	£111,813
Surgery	£40,000	£40,000	£40,000	£40,000	£40,000	£40,000	£40,000	£40,000
TOTAL	£40,000	£40,000	£504,706	£504,706	£504,706	£504,706	£504,706	£504,706
Annual Cost Including Benefits and Risks	£34,401	£34,401	£563,344	£563,344	£563,344	£563,344	£563,344	£563,344

11.7.2 *Model E (5.4)*

Fixed elements	Variants
GRH: centralised acute medical take, emergency general surgery, and trauma CGH: centralised orthopaedics, gastroenterology, general surgery day cases, 24/7 image-guided interventional surgery hub centralised to GRH including the vascular arterial centre and the deteriorating patient model	Elective/ planned colorectal surgery centralised to GRH to create a centralised general surgery service for inpatients

11.7.2.1 Activity shift

The details of the activity and bed number changes can be found in section 9.3.5; in summary:

Annual activity change (currency)	Volume
CGH to GRH (Episodes)	10,322
CGH to GRH (Beds)	92.6
GRH to CGH (Episodes)	1,200
GRH to CGH (Beds)	1.8
CGH to GRH (Admissions)	10,709

11.7.2.2 Workforce Changes

The details of the workforce changes can be found in section 9.3.4; in summary:

B2:		
Staff type and Band	**WTE**	**ML costs**
Nurse band 5	5.92	202,000
Consultant	0.50	65,000
Non pay cost		0
Additional overhead cost	-	
Total Cost	**6.42**	**267,000**
Vascular Emergency Theatre Requirement		
Staff Type	**WTE**	**£**
Consultant Anaesthetist	1.22	164,700
Band 2 HCA- 0.8WTE	0.80	21,267
Band 5 Qualified Nurse- 1.6WTE	1.60	65,993
Band 6 Qualified Nurse- 0.8WTE	0.80	40,175
Total impact	**4.42**	**292,135**
	10.84	**559,135**

Urology 2 ST Drs		Option 5.4
Staff Type		
General surgical registrars	£	£137,200
Core trainee doctors	£	
Total additional staff	**£**	**£137,200**
General surgical registrars	WTE	2.00
Core trainee doctors	WTE	
Total additional staff	**WTE**	**2.00**

11.7.2.3 Revenue Impact

Ref	Solutions Description		Baseline	Option 5.4 Model E
A3	Centralise acute medicine to GRH			✓
	Deteriorating Patient / Acute Care Response Team			✓
	Department of Critical Care			✓
B2	IGIS hub and vascular centralised to GRH			✓
B3	IGIS hub to GRH, vascular stay in CGH			✗
C3	EGS centralised to GRH			✓
C5	Elective colorectal to CGH			✗
C6	Elective colorectal to GRH			✓
C11	GI daycases - CGH			✓

Revenue Costs		
Clinical Services	£112,148,141	£113,105,168
Non-Clinical Costs	£4,940,111	£4,961,411
Building Running Costs	£0	£0
Other Revenue Costs	£24,282,449	£24,558,249
Total Revenue Costs	**£141,370,700**	**£142,624,828**
Additional Costs		**£1,254,128**
Additional Income		
Additional specialised commissioning activity		-£463,600
Total Additional Income		**-£463,600**
Net Recurrent Revenue Impact		**£790,528**
WTE change		**10.66**
Transitional Costs		
Hybrid Theatre enabling building works - now included within overall MES programme		£0
Moves and enabling works for colorectal		£100,000
Total Transitional Costs - Non-Recurrent Revenue Impact		**£100,000**

11.7.2.4 Phasing

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Recurrent Costs								
Acute			-£115,151	-£115,151	-£115,151	-£115,151	-£115,151	-£115,151
ACRT			£397,078	£397,078	£397,078	£397,078	£397,078	£397,078
DCC			£0	£0	£0	£0	£0	£0
IGIS			£559,200	£559,200	£559,200	£559,200	£559,200	£559,200
Surgery	£413,000	£413,000	£413,000	£413,000	£413,000	£413,000	£413,000	£413,000
TOTAL	**£413,000**	**£413,000**	**£1,254,128**	**£1,254,128**	**£1,254,128**	**£1,254,128**	**£1,254,128**	**£1,254,128**
Recurrent Income								
Acute			£0	£0	£0	£0	£0	£0
ACRT			£0	£0	£0	£0	£0	£0
DCC			£0	£0	£0	£0	£0	£0
IGIS			-£463,600	-£463,600	-£463,600	-£463,600	-£463,600	-£463,600
Surgery	£0	£0	£0	£0	£0	£0	£0	£0
TOTAL	**£0**	**£0**	**-£463,600**	**-£463,600**	**-£463,600**	**-£463,600**	**-£463,600**	**-£463,600**
Net Recurrent Position								
Acute	£0	£0	-£115,151	-£115,151	-£115,151	-£115,151	-£115,151	-£115,151
ACRT	£0	£0	£397,078	£397,078	£397,078	£397,078	£397,078	£397,078
DCC	£0	£0	£0	£0	£0	£0	£0	£0
IGIS	£0	£0	£95,600	£95,600	£95,600	£95,600	£95,600	£95,600
Surgery	£413,000	£413,000	£413,000	£413,000	£413,000	£413,000	£413,000	£413,000
TOTAL	**£413,000**	**£413,000**	**£790,528**	**£790,528**	**£790,528**	**£790,528**	**£790,528**	**£790,528**
Annual Cost	**£513,000**	**£413,000**	**£790,528**	**£790,528**	**£790,528**	**£790,528**	**£790,528**	**£790,528**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Benefits								
Acute	£0	£0	-£144,143	-£144,143	-£144,143	-£144,143	-£144,143	-£144,143
ACRT	£0	£0	£0	£0	£0	£0	£0	£0
DCC	£0	£0	£0	£0	£0	£0	£0	£0
IGIS	£0	£0	-£169,147	-£169,147	-£169,147	-£169,147	-£169,147	-£169,147
Surgery	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113	-£531,113
TOTAL	**-£531,113**	**-£531,113**	**-£844,404**	**-£844,404**	**-£844,404**	**-£844,404**	**-£844,404**	**-£844,404**
Benefits-Adjusted Annual Cost	**-£18,113**	**-£118,113**	**-£53,876**	**-£53,876**	**-£53,876**	**-£53,876**	**-£53,876**	**-£53,876**
Risk-Adjusted Worst Case Impact								
Acute	£0	£0	£268,003	£268,003	£268,003	£268,003	£268,003	£268,003
ACRT	£0	£0	£84,890	£84,890	£84,890	£84,890	£84,890	£84,890
DCC	£0	£0	£0	£0	£0	£0	£0	£0
IGIS	£0	£0	£111,813	£111,813	£111,813	£111,813	£111,813	£111,813
Surgery	£40,000	£40,000	£40,000	£40,000	£40,000	£40,000	£40,000	£40,000
TOTAL	£40,000	£40,000	£504,706	£504,706	£504,706	£504,706	£504,706	£504,706
Annual Cost Including Benefits and Risks	**£21,887**	**-£78,113**	**£450,830**	**£450,830**	**£450,830**	**£450,830**	**£450,830**	**£450,830**

11.8 Enabler schemes

11.8.1 *Digital*

There is a wide range of digital developments across the ICS and within GHNHSFT, but FFTF is not reliant on the delivery of any specific digital solutions in order to be implemented. The programme and the Centres of Excellence vision is based on our two existing hospitals and services so will utilise shared systems across the Trust.

11.9 Benefits Realisation

The financial and economic analysis described above has focused on the costs - predominantly staffing - associated with implementing our proposals. This PCBC has clearly identified significant benefits (as detailed in the sections above) and Appendix 35 presents our current benefits realisation plans that will be further enhanced as we develop our Decision Making Business Case. This further work with include quantification of benefits in terms of patient outcomes and experience, staff benefits, increased efficiency, reductions in risk and potential cost savings that will mitigate and support the cost of these proposals.

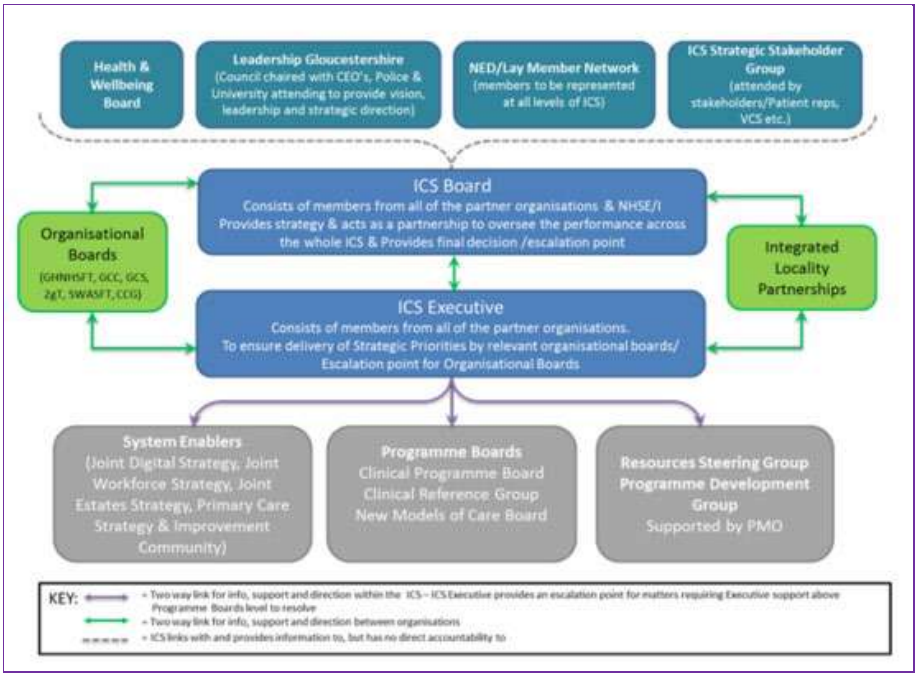
Key Points

- **We have used a "Bottom up" impact assessment for each solution to identify changes in workforce or other resource requirements**
- **We have ensured a robust "Confirm and Challenge" process to ensure any staffing or resource requirements are essential**
- **We have undertaken detailed benefits realisation planning to ensure the expected outcomes for patients, staff and the health economy are deliverable**
- **Our proposals after benefits are within a financial tolerance that the system would be able to prioritise funding accordingly. The profile of the spend also allows further opportunity to push further benefits out, and the expectation within the system is that the identification and quantification of additional benefits will make both options (at least) cost neutral**

12 Governance and decision making

Gloucestershire is uniquely coterminous as a footprint and has strong partnerships already in place as demonstrated by our wave 2 ICS status. We have a strong commitment from all of our system partners to move forwards with this new way of working and believe it will be pivotal to support us to deliver against our challenging performance, financial and delivery objectives more quickly, as embodied by the scale of the proposals for change set out in these proposals.

ICS partnerships continue to need to operate within the existing statutory framework which means that the CCG, Gloucestershire County Council and NHS Trusts (GHNHSFT and GHCFT), remain the statutory accountable bodies within the health and care system. We propose that our organisations will continue to work within our Memorandum of Understanding (MoU) which sets out the principles of collaboration between partners and which will be the vehicle for the collective delivery of this transformational change at pace and scale. A schematic of the ICS collaboration model is provided below.



The concept of *Centres of Excellence* is consistent with the strategic context of the ICS. The core purpose of the ICS is to:

- Maximise ownership and the pace of transformation and associated developments.
- Maximise the value gained from the Gloucestershire NHS and social care pound.
- Reduce areas of service duplication.
- Minimise transactional costs.

As part of the Integrated Care System approach the system is working towards the best governance models to support delivery informed by emerging national thinking. The aims of the governance structure will be to support:

- Driving transformational change programmes to deliver the service change described by the Fit for the Future Business Case and emerging service specifications.
- Delivery of performance against key NHS constitution measures.
- Delivering within our financial means.

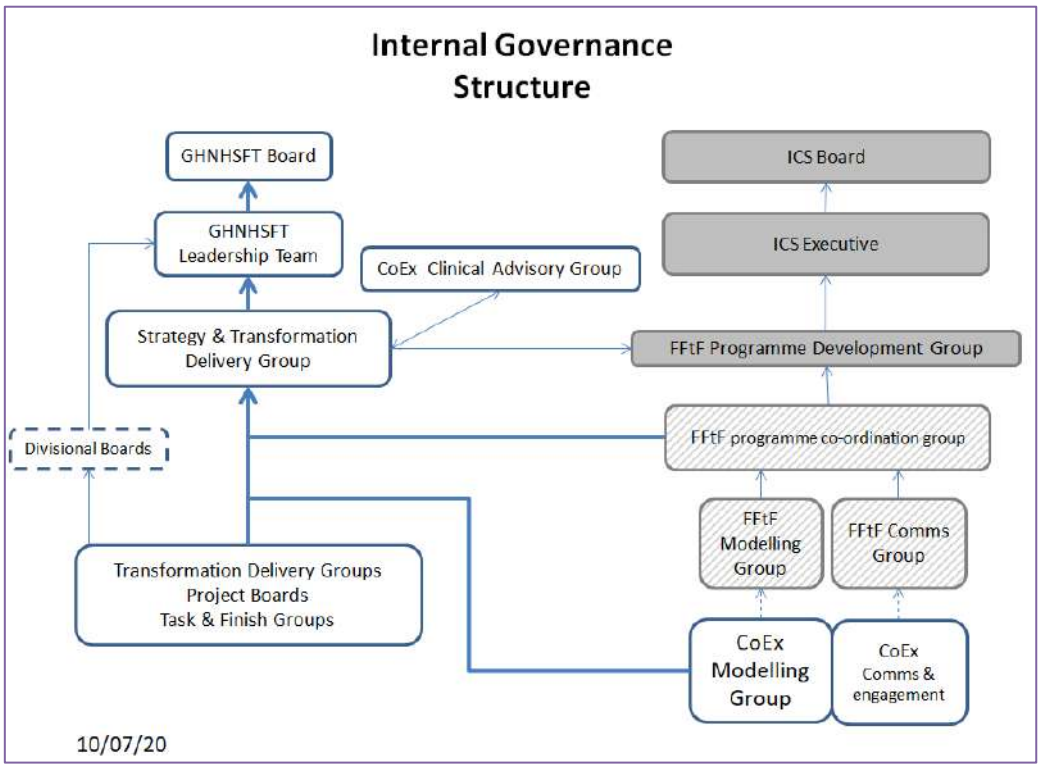
- Ensure an integrated approach to 'business as usual' delivery across our system, including taking an increasingly mutual perspective of organisational success for key system enablers such as IT, workforce, organisational development
- Ensuring consistent clinical quality and clinical governance frameworks are in place across the integrated urgent care system.

12.1 Internal Assurance

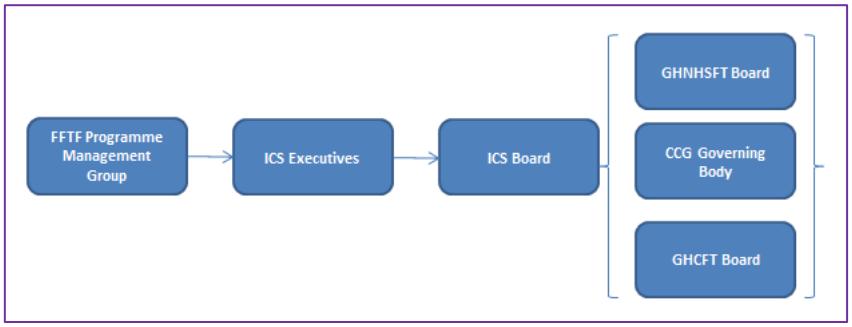
The Fit for the Future Programme is overseen by the Gloucestershire ICS and is embedded into both system and individual organisational governance structures. Regular reports are taken to the ICS Board and ICS Executives and also to CCG Governing Body, GHNHSFT and GHCFT Trust Boards, as well as system and Board sub-committees. The FFTF internal governance log can be found in Appendix 24.

The programme management arrangements are overseen through the Fit for the Future Programme Development Group (PDG) including oversight of the Programme Director, the Programme Managers Group, FFTF Communications and Engagement and activity and financial modelling. Investment is provided by the system to ensure that there are central programme resources in place to ensure delivery of programme objectives.

As described in section 4, our Fit for the Future Programme (previously called "One Place"), includes the development outstanding specialist hospital care in the future across the CGH and GRH sites; our "*Centres of Excellence*". The Fit for the Future and *Centres of Excellence* Governance arrangements are illustrated in the diagram below:



In terms of decision making, as stated earlier, although we are developing a strong ICS partnership we continue to need to operate within the existing statutory framework which means that the CCG and NHS Trusts (GHNHSFT and GHCFT), remain the statutory accountable bodies. Our process for decision making and sign-off is illustrated overleaf:



In terms of timescales, details of our Programme Plan can be found in Appendix 15 but the high level milestones are as follows:

Task	Date
PCBC approval of version to NHSE&I/Clinical Senate	
Key Lines of Enquiry to senate for a desk top review	14/02/20
NHSE&I review meeting	26/02/20
GHNHSFT Board	13/08/20
CCG Governing Body	13/08/20
ICS Executives	20/08/20
ICS Board	20/08/20
PCBC sent to the South West Clinical Senate & NHSE&I	06/08/20
South West Clinical Senate panel	20/08/20
NHSE&I Stage 2	03/09/20
NHSE&I Stage 2 follow up	01/10/20
PCBC approval of version to HOSC	
ICS Executives	01/10/20
GHNHSFT Board	08/10/20
CCG Governing Body	08/10/20
HOSC meeting	22/10/20
Public Consultation	23/10-17/12/20
Consultation review period	18/12/20-11/02/21
Decision Making Business Case (DMBC)	01/03/21
DMBC approval	
ICS Board	18/02/21
ICS Executives	04/03/21
GHNHSFT Board	11/03/21
CCG Governing Body	11/03/21
Implementation	Mar 21

12.1.1 *Consultation Review*

In accord with the process used for the development of these proposals and this PCBC, the Outcomes of Consultation Report will be overseen by the Gloucestershire ICS (co-ordinated by the FFTF Programme Development Group) and our response will be assessed and evaluated to ensure it validates the consultation outcomes and that progress to implementation is fully informed by solid detailed analysis of consultation outcomes. The review will be by both system and individual organisational governance structures including ICS Board, ICS Executives, CCG Governing Body and GHNHSFT Board, as well as CoEx Clinical Advisory Group, GHNHSFT Strategy and Transformation Group and our NMOC Board.

12.1.2 *Decision Making Business Case (DMBC)*

Following the review of the outcomes of the consultation we will develop our Decision Making Business Case (DMBC) that will include our response to the consultation and our implementation proposals, an updated Integrated Impact Assessment taking into account the consultation feedback, further detailed activity/bed, workforce and financial analysis and a detailed implementation plan. We will, as now, keep NHSE&I informed throughout the consultation review period and during the DMBC development process and agree the proposed next steps once all feedback from the consultation has been gathered and analysed.

The DMBC will require approval from ICS Board, ICS Executives, CCG Governing Body and GHNHSFT Board.

Our proposed governance arrangements for implementation can be found in Section 9.8.

12.2 External Assurance

12.2.1 *Feedback from South West Clinical Senate*

The Fit for the Future Programme (FFTF) has worked closely with the South West Clinical Senate with regular updates and sharing of documentation including our July 2109 PCBC, a specifically drafted Senate Key Lines of Enquiry (KLOE) document (in Feb 2020), our PCBC v2.8 in February 2020 prior to the programme pause due to Coronavirus (COVID-19) and finally our PCBC v3.2 that formed the basis for the Clinical Review Panel.

12.2.1.1 *Desk top review*

The report of the desk top review of the FFTF KLOE document can be found in Appendix 16. This included 34 specific questions relating to:

- Key Areas
- Workforce
- Emergency General Surgery
- Acute Admissions
- Other

The questions have informed a number of sections within the PCBC (primarily Sections 8 & 9) but for ease of reference, we have also included signposting to the relevant sections for each question in Appendix 17

12.2.1.2 *Clinical Review Panel (CRP)*

The panel took place on 20/08/20 and the report of the findings can be found in Appendix 34 and a summary of the findings, recommendations and provisos can be found in section 12.3.3.

12.2.2 *NHS England and Improvement (NHSE&I) assurance process*

NHS England and Improvement (NHSE&I) conduct system level approval on all business cases that need to go to consultation. The level of this assurance is decided based on both the materiality of the service changes proposed in financial terms and the level of financial robustness of the organisations involved.

NHE&I has been involved in the Fit for the Future Programme (previously called "One Place"), with regular meetings to share progress and secure input; including review and Check-in meetings on the 26/02/20, 10/08/20 and 27/08/20, and there are regular (weekly) calls. In accordance with best practice guidelines, NHSE&I has undertaken assurance of the plans for consultation and the models of care for the future and the proposals have met the requirements. The process consists of:

- **A strategic sense check** which examines the Case for Change and the level of consensus for change (completed).
- **Review of feedback from South West Clinical Senate.** The Senate provides independent, strategic clinical advice and leadership to all commissioners across the South West geographical area. It is a non-statutory advisory body and it therefore works collaboratively and objectively across the health system. The South West Clinical Senate will provide NHSE&I with an independent review of clinical elements of the plans for service change following their initial desk top review of our KLOE document (report issued on 11/03/20; see Appendix 16), the clinical panel (20/08/20) and the Clinical Review Panel report (Appendix 34).
- **Stage 2 assurance checkpoint** takes place in advance of any wider public involvement or public consultation process or a decision to proceed with a particular option. This took place on 03/09/20 and 01/10/20. Before public consultation is launched, proposals were tested to ensure there is a high degree of confidence that options are capable of being delivered as proposed and do not imply an unsustainable level of capital expenditure or revenue funding. Support for proposals from providers and other commissioners impacted to a significant degree by the proposals' was also be tested.

This version of our PCBC (v4.2) includes our responses to the CRP report and to the NHSE&I KLOEs and a bridging document detailing the material changes between v3.2 and v4 has been provided to NHSE&I.

12.3 Five Tests

A key element of assurance is that there must be clear and early confidence that a proposal satisfies the government's four tests and NHS England's test for proposed bed closures (where appropriate).

12.3.1 *Test #1: Strong public and patient engagement.*

The process to develop our model of care and service reconfiguration solutions has been based on substantial public involvement and co-production with groups including clinicians, patients and the public, local Healthwatch, the local voluntary sector (e.g. Inclusion Gloucestershire), and managers. Our most recent activity was the Fit for the Future (FFTF) public and staff engagement programme started in August 2019 to seek views on the future provision of urgent and specialist hospital care in Gloucestershire. All feedback received was collated into a comprehensive Output of Engagement Report (Appendix 2), and online appendices and has been used to inform the development of the potential solutions presented in this PCBC, with specific focus on:

- what's important to local people in getting urgent (not life threatening) same day advice and care across our communities in Gloucestershire, including illness and injury services
- ideas for a 'Centres of Excellence' approach to providing specialist services at the two large hospital sites in the county
- a range of ideas for the next few years, including Accident, Emergency and Assessment Services (including ED), General Surgery and Image guided interventional surgery

In addition to the FFTF engagement phase we have actively sought ongoing input from the public throughout all stages as proposals are developed; these include:

- In-public solutions and criteria development workshops (Workstream and locality)
- Citizens' Jury
- Engagement hearing
- Solutions Appraisal Workshop

It is our view that this provides a clear link between public engagement and solutions development and appraisal

Finally, initial engagement feedback from the NHSE&I/Clinical Senate has been that the:

"engagement output report shows that the team have really given people every opportunity to take part in the engagement programme and the resulting output report is very extensive. Full credit for openness and transparency."
"The engagement for FFTF described was proportionate, targeted and had due regard for protected groups. From feedback received, the system is in a good place to know what the county as a whole thinks and the locations where the most negatively impacted populations live."

We also have an ongoing dialogue with both local MPs and councillors that has continued during development of these proposals and will be ongoing through consultation and implementation.

Following the NHSE&I Stage 2 review on 03/09/20 this test has been assured.

12.3.2 *Test #2: Consistency with current and prospective need for patient choice.*

Our solutions appraisal criteria included a specific assessment of the impact on patient choice; this was "*What is the likelihood of this solution meeting the requirements of the NHS Constitution and The NHS Choice Framework*".

When considering the impact on patient choice it should be noted that:

- None of the proposed solutions/models will withdraw the number of specialties provided by GHNHSFT.
- Outpatients (OP) is not in scope and there are therefore no plans within the Fit for the Future Programme to affect patient's OP choices.
- A number of the proposals include emergency services and are therefore outside of the scope of patient choice; however from an NHS Constitution perspective there should be improvements in waiting times.
- The proposed changes relate to the centralisation of services either on the Gloucester or Cheltenham sites (previous centralisation has resulted in improved outcomes for patients).
- Whilst the number of sites where patients can choose to have their operation may change, the two hospital sites are only 8 miles apart and we believe the improved patient outcomes outweigh the reduction in choice regarding locations. This would be supported by the STP consultation which indicated the access to a clinical expert outweighed travel time concerns of patients.

Following the NHSE&I Stage 2 review on 03/09/20 this test has been assured.

12.3.3 *Test #3: Clear, clinical evidence base.*

A comprehensive clinical evidence base has been produced, taking into account national guidance and best practice, to inform the service model proposals and in accordance with NHSE&I guidance Commissioners have worked closely with GHNHSFT in the development of the clinical case for change, with Medical directors and heads of clinical services involved in building the clinical evidence base (see Section 8).

The South West Clinical Senate undertook the Clinical Review Panel (CRP) on 20/08/20 and the report of the findings can be found in Appendix35. Overall the CRP assessed that the proposals, which are extensive, were considered broadly well thought through and well aligned with national guidance and best practice. Despite some reservations, the Clinical Review Panel (CRP) concluded that it could offer assurance that the proposed clinical models presented are ready to proceed to public consultation, with the following provisos and observations:

- The proposed centralisation of the acute medical take to GRH was strongly supported, with the view that this should not be delayed until 2022 and that all efforts should be made to accommodate this as soon as possible on the GRH site to reduce the risk to patients and improve the clinical quality of the service provided.
- The proposed provision of Emergency General Surgery at GRH was strongly supported, provided that this move is supported by sustainable staffing, with out of hours and weekend consultant reviews and nursing support. Efforts should be made to accommodate this as soon as possible on the GRH site to reduce the risk to patients and improve the clinical quality of the service provided.

- The desire to maintain Emergency Department services at CGH was understood and supported by the CRP, but the Panel was mindful of the previous panel's support for reconfiguration of Emergency care pathways in Gloucestershire which included a single site ED. The panel recommend that work continues on the development of urgent care in Gloucestershire that optimises clinical outcomes whilst ensuring parity of care and alignment with emerging clinical models.
- The panel supported the deteriorating patient model at CGH, with the provision that this is supported by a resident medical registrar
- The panel noted and were concerned by the lack of agreement among clinicians about the location of vascular surgical services. The panel was of the opinion that Gloucestershire should only consult the public on a model or models that have full clinical support within the system. The model with colocation of vascular services with the IGIS hub at GRH was supported, to support co-dependencies with the IGIS hub, trauma and diabetes for best patient care. As stated in Section 7.3.10 this feedback has resulted in a change to the vascular options for consultation.
- The panel noted and were concerned by the lack of agreement among clinicians about the location of elective colorectal services. Following the CRP further work has been undertaken to ensure the option of a centralised elective colorectal service at either CGH or GRH can be included in our public consultation.
- The CRP noted issues and risks around delayed discharged and links with social care. This will impact bed base and staffing and needs to be an area of focus and planning.
- The CRP supported making permanent the pilots for gastroenterology, elective upper GI surgery and T&O, all of which were demonstrated to be working well and improving patient care.
- As with the previous panel, there continued to be concerns from the CRP that workforce proposals were over-confident in their ambition to recruit staff across all professional teams – medical, nursing and AHP. Clear and realistic mitigation plans for the workforce strategy must be developed.

Following the NHSE&I Stage 2 review on 03/09/20 this test has been assured.

Coronavirus (COVID-19)

The following evidence from COVID-19 temporary changes was presented to Clinical Senate Panel (20/08/20)

Objective area	Temporary change metric	Baseline 1: Pre –Covid Monthly average (Mar 19 to Feb 2020)	Baseline 2: Covid Phase 1 Monthly average (Mar to May 2020)	Covid Phase 2 (June & July 2020)
Transmission risk	Nosocomial transmission (14-day)	n/a	17 per month	1 per month ↓
Service restoration	IP & DC cancer & planned care activity	7,490	3019 ↓	3826 ↑
	OP cancer & planned care activity	64, 400	41, 950 ↓	50, 845 (53, 222 in July) ↑
	2 week wait referrals	2,257	1,451 ↓	1883 (2,091 July) ↑
Public confidence	OP patient cancellations – Covid concerns	n/a	18% (30% April)	3.8% (2.4% July) ↓
	Elective patient cancellations – Covid concerns	n/a	26% (48% April)	2.1% (1.1% July) ↓
Emergency & Acute Care	Emergency CGH to GRH transfers (SWAST)	149	88	103
	% time to triage <15m	72%	76% ↑	73% ↓
	4 hour standard	82.3%	83.7% ↑	87.1% ↑
	AEC activity	332	189 ↓	261 ↑
Acute Stroke	Stroke unit <4hrs	71%	70% ↓	72% (78.6% July) ↑
	90% stay on stroke unit	88%	86% ↓	84% ↓
	Swallow assessment <4hrs	71%	70% ↓	72% (78.6% July) ↑
	CT <1hr	50%	45% ↓	54% (63.5% July) ↑

12.3.4 *Test #4: Support for proposals from clinical commissioners.*

As part of the ICS the CCG is taking a lead role in the FFTF Programme working closely with ICS partners, but most particularly with GHNHSFT as the NHS Trust providing the services that are the subject of this PCBC. As stated in Section 3, the internal governance structure and processes ensure visibility of our proposals across the ICS. In respect of Test#4, these proposals have been approved by the Governing Body NHS Gloucestershire CCG (which includes GP member representatives), and has support from our Primary Care Locality Leads, the New Models of Care Board and the ICS Clinical Reference Group.

We have engaged for some time with all of our neighbouring CCGs and NHS Trusts, providing updates as our proposals developed and will work closely with those CCGs or NHS Trusts who may be impacted. We have provided patient numbers by GP Practice to assist the identification of areas to focus our consultation communication. Furthermore, due to Coronavirus (COVID-19) there is greater emphasis (but not exclusively) on use of electronic channels to seek feedback as part of our consultation (see section 13.2.1), so this will facilitate consultation feedback from impacted residents in neighbouring CCG areas.

In accordance with NHSE&I Guidance letters of support from neighbouring CCGs and the ICS can be found in Appendix 33. We have also engaged with NHS England Specialised Commissioning in respect of the ~ 115 patients travelling out of county who undergo various Interventional Radiology interventions mostly delivered from Birmingham and Oxford, a few from Bristol, and some travel as far as Leeds. A statement from Specialised Commissioning can be found in Appendix 33.

Following the NHSE&I Stage 2 review on 01/10/20 this test has been assured.

12.3.5 *Test #5: Bed modelling*

There are no planned reductions in beds available at GHNHSFT as a result of these proposed configurations. The bed requirement for each of the individual models is presented in the relevant sections (9.3.5.2 & 9.4.5.2) and Section 9.2.4 details the proposals in place to increase the bed capacity at GRH e.g. additional bed numbers provided through the capital programme, benefits of centralisation and further phases of FFTF).

As part of the Clinical Senate review and assurance process the panel was "told that there was no net change in bed numbers across GRH & CGH and, on this basis, were *provisionally* of the opinion that the "Bed Test" was met".

Following the NHSE&I Stage 2 review on 03/09/20 it was agreed that the NHS Bed Test is not applicable to these proposals.

12.4 Public sector equality duty (PSED)

Section 149 of the Equality Act 2010 requires the CCG, in the exercise of its functions, to have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Equality Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (see below) and persons who do not share it. This is expanded on under s.149(3) of the Equality Act, as set out below;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

In order to advance equality of opportunity, decision-makers should have due regard in particular to the need to:

- Remove or minimise the disadvantage suffered by persons who share relevant protected characteristics;
- Take steps to meet the needs of those who share such characteristics; and
- Encourage participation of those who share such characteristics.

The requirements of the Equality Act 2010 also mean that the CCG should ensure that service design and communications should be appropriate and accessible to meet the needs of diverse communities

The requirements of the Public Sector Equality Duties are integral to the Fit for the Future approach. To inform the programme there has been extensive engagement and communications activity seeking to gather the views of seldom heard groups. The planned consultation will continue with this approach, and is underpinned by our Integrated Impact Assessment (see Appendix 14a & 14b). The Equality Impact Assessment will be updated iteratively and used to inform decision making as the Programme progresses.

Furthermore, our solutions appraisal criteria included a specific assessment of the impact of solutions on accessibility to services and the Public Sector Equality Duty; namely "*What is the likelihood of this solution having a positive impact on equality and health inequalities as set out in the Public Sector Equality Duty 2011 and the Health and Social Care Act 2012*?"

12.5 Information Governance (IG) issues and privacy impact assessment

Following specialist IG advice, the Data Protection Impact Assessment (DPIA) has been drafted on the basis that the current phase of the FFTF Programme is focusing on a PCBC and then a consultation process, there should be no change to any patient pathways and patient data flows. At no time will any patient identifiable data be held by the programme. The data that will be held by the programme during the next phase is as follows –

- Project Management documentation
- Programme Governance documentation
- Consultations documentation and feedback

The current DPIA is presented in Appendix 18 and will be adapted for each the phase of the programme including implementation.

It should be noted that all the proposals that form part of this PCBC are not intended to change the provider of the services nor are there changes to clinical systems or record keeping specific to the FFTF Programme; any changes would be subject to a separate DPIA process.

The DPIA describes:

- the data, data flows, and retention period
- any data protection and privacy risks identified
- the risk management measures agreed

Key Points

- **The Fit for the Future Programme is overseen by the Gloucestershire ICS and is embedded into both system and individual organisational governance structures**
- **The concept of Centres of Excellence is consistent with the strategic context of the ICS.**
- **NHS England and Improvement and the South West Clinical Senate have been involved in the Fit for the Future Programme (previously called "One Place"), with regular contact and sharing of documents to monitor progress and secure input and support**
- **NHSE&I have confirmed the "5 tests" have been met.**

13 Proposed consultation

13.1 Legal requirements

The law requires NHS commissioners to 'involve' the public when making changes to service provision. Pursuant to section 14Z2 of the NHS Act 2006, a CCG must:

> *"make arrangements to secure that individuals to whom to whom the services are being or may be provided are involved (whether by being consulted or provided with information or in other ways):*
>
> *(a) in the planning of the commissioning arrangements by the group,*
>
> *(b) in the development and consideration of proposals by the group for changes in the commissioning arrangements where the implementation of the proposals would have an impact on the manner in which the services are delivered to the individuals or the range of health services available to them, and*
>
> *(c) in decisions of the group affecting the operation of the commissioning arrangements where the implementation of the decisions would (if made) have such an impact."*

Section 242 of the NHS Act 2006 places a duty on NHS Trusts and Foundation Trusts to make arrangements as respect to health services for which it is responsible, which secure that users of those services, whether directly or through representatives, are involved in the:

a) Planning of the provision of those services;

b) The development and consideration of proposals for changes in the way those services are provided; and

c) Decision to be made by the NHS provider affecting the operations of those services.

Section 244 of the NHS Act 2006 and the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013 requires NHS bodies to consult relevant local authority Overview and Scrutiny Committees on any proposals for substantial developments of the health service or for substantial variations in the provision of the health service. This duty is additional to the duty of involvement under sections 242 and 14Z2 of the NHS Act 2006 (which applies to patients and the public rather than to Overview and Scrutiny Committees).

The FFTF consultation will be subject to The Consultation Institute (tCI) Quality Assurance Process, which comprises 6 interventions:

1. Scope – tCI work with us to ensure the scope is understood and agreed
2. Project (Consultation) Plan - helping us put together a plan than stands up to scrutiny
3. Documentation - ensuring the documentation meets the statutory, public law requirements and public need
4. A mid-review of how the consultation is going, any challenges dealt with and whether any changes are necessary
5. A closing review of how the consultation has gone, whether anything else needs doing, any challenges dealt with and confirmation of post consultation processes
6. Final report - ensuring the final Output of Consultation Report is an accurate reflection of what has been learned and will meet the need for Gunning II and Due Regard.

13.2 FFTF Communication and Consultation Strategy and Plan

Our FFTF Communication and Consultation Strategy and Plan can be found in Appendix 22 and includes:

- Consultation and communication objectives;
- Stakeholder analysis;
- Stakeholder mapping;
- Consultation and communication methods, channels and materials;
- Consultation and communication Action Plan, and;
- Consultation methodology with particular reference to delivering a *socially distanced* consultation (see below).

13.2.1 *Socially Distanced Consultation*

Coronavirus (COVID-19)

Unlike all the other sections of this PCBC the Coronavirus (COVID-19) pandemic is not context for our proposals but a significant material factor in the development of our plans. At the time of writing (October 2020[42]), restrictions are still in place including:

1. Keep your distance from people outside your household or support bubble
2. Avoid being face-to-face with people if they are outside your household or support bubble
3. Keep your hands and face as clean as possible
4. Keep indoor places well ventilated
5. Avoid crowded spaces
6. Work from home if you can
7. If you have to travel (for example, to work or school), think about how and when you travel
8. Face coverings
9. Avoid shouting or singing close to people outside your household or support bubble
10. Reduce the number of people you spend time with in a work setting
11. Wash your clothes regularly
12. When at work or in business or public premises, follow the advice on site

In addition to these there also remains a significant proportion of the population who continue to restrict their contact outside their homes and this has included accessing NHS services. As a result of these the traditional approach to consultation that aims to maximise face-to-face consultation activities will need to be restricted or modified and our plans include greater use of online consultation.

[42] https://www.gov.uk/government/publications/staying-safe-outside-your-home/staying-safe-outside-your-home

We have invested in a stakeholder management and online-consultation platform (Engagement HQ), to support 'virtual' consultation to facilitate our innovative approach and have worked with tCI in its development including their categorisation:

Always online	The millennial generation and most people of working age. Workstation use is declining as many people transferred to smartphones and the use of downloaded applications to play games, listen to music or communicate via email or social media. In principle, they can be reached
Seldom online	Those who have access to the internet but make relatively little use of it or maybe use it only for a very restricted range of applications.
Never online	Declining year on year, but internet access is currently only used by 71% (males) and 64% (females) of over 65's. Clearly, they will need to be reached by non-digital means ONS data - 7% households have no access

Our consultation strategy is predicated on an assumption that online activities only are unlikely to be considered sufficient alone to meet legal duties regarding consultation and equalities and therefore barriers to prevent participation must be removed or alternatives found. We will put in place processes to evaluate the effectiveness of our digital engagement/ consultation from the start of the detailed consultation planning period.

Many of the pre COVID 19 attitudes held regarding online communication have changed rapidly in the last few months. In a recent project to test out a methodology for rapid online deliberation participant feedback of deliberation online included:

- Being at home was a positive as it created a safe space to give opinions which may have felt less comfortable face to face
- Being concerned about data handling – people need to feel safe both physically and digitally
- Slides being posted and available to refer back to, live notetaking made it easier for people to remain informed even if they need to leave the room for any reason. It was suggested it enabled more people to be involved that would normally struggle to do so
- Having the opportunity to ask questions as you go along and not interrupt the presentation, means questions can be pulled together
- Found tech appeared not to be a problem, connectivity was a little problematic for some participants but because of the things above being in place, people were able to catch up and it didn't prevent people from participating. Only caveat is that by only being online excludes all those currently offline.

Full details, including the evaluation metrics and techniques, can be found in Appendix 22.

13.3 Planned next steps

We are already implementing the Action Plan contained within our Consultation Strategy and Plan, including

- Production of consultation material structure and content template for FFTF consultation
- Finalisation of FFTF consultation booklet/narrative – based on tCI approved content template
- Engagement HQ training
- tCI Quality Assurance part 1 Agree Scope

Full details can be found in Appendix 22.

Key Points

We understand our legal and regulatory requirements

We have completed our:

- **Consultation and communication objectives;**
- **Stakeholder analysis;**
- **Stakeholder mapping;**
- **Consultation and communication methods, channels and materials;**
- **Consultation and communication Action Plan, and;**
- **Consultation methodology**

We have fully updated our strategy and plans to deliver a compliant *socially distanced* consultation

We are finalising our consultation documents

14 Appendices

Appendix 1: One Gloucestershire Long Term Plan (response to The NHS Long Term Plan) - Short Guide 2019-24

See separate document

Appendix 2: Outcome of Engagement Report

See separate document

Appendix 3: Outcome of Engagement Report – question responses

See separate document

Appendix 4: Citizens' Jury Report

See separate document

Appendix 5: Workshop Evaluation – Scorecards

See separate document

Appendix 6: Workshop Evaluation – rationale behind scores

See separate document

Appendix 7: Healthwatch Gloucestershire Annual Report 2019-20

See separate document

Appendix 8: Transformation Delivery Groups Terms of Reference

See separate document

Appendix 9: GHNHSFT Staff Engagement Report

See separate document

Appendix 10: Desirable Evaluation Criteria

See separate document

Appendix 11: Integrated Impact Assessment Baseline

See separate document

Appendix 12: Evaluation criteria evidence pack

See separate document

Appendix 13: Centres of Excellence – Long to Medium List Process

See separate document

Appendix 14a: Integrated Impact Assessment (IIA)

See separate document

Appendix 14b: Impact analysis of the two pilot changes (Gastroenterology and Trauma & Orthopaedic inpatient services)

See separate document

Appendix 15: FFTF High level work programme 170320

See separate document

Appendix 16: South West Clinical Senate Feedback (11/03/20)

See separate document

Appendix 17: South West Clinical Senate Feedback (11/03/20) – Question Responses

See separate document

Appendix 18: Data Protection Impact Assessment

See separate document

Appendix 19: Gloucestershire Joint Health and Wellbeing Strategy 2019-2030

See separate document

Appendix 20: Joint Strategic Needs Assessment 2017

See separate document

Appendix 21: Travel Impact Analysis

See separate document

Appendix 22: Communication and Involvement Strategy (incl. Draft Consultation Plan)

See separate document

Appendix 23: FFTF Programme Risks

See separate document

Appendix 24: FFTF internal governance log

See separate document

Appendix 25: Travel Impact Analysis – Carbon emissions

See separate document

Appendix 26: EGS SOP for CGH ED attendances

See separate document

Appendix 27: EGS SOP for accessing surgical opinion in CGH

See separate document

Appendix 28: EGS SOP for ring-fenced GI bed base

See separate document

Appendix 29: SOP Acute Floor Zone – ESU

See separate document

Appendix 30: DCC & Theatre Modelling Assumptions

See separate document

Appendix 31: Impact of changes on Junior Doctor rotas and training

See separate document

Appendix 32: Activity and bed modelling

See separate document

Appendix 33: Letters of support

Available in v 3.3

Appendix 34: South West Clinical Senate Review Panel Report (Sept 20)

See separate document

Appendix 35: Benefits Realisation Plan

See separate document

Appendix 36: Long to Short list process

See separate document

Appendix 37: Glossary of Terms and Abbreviations

24/7	Twenty-four hours a day, seven days a week
A&E	Accident and emergency department (also known as emergency department).
AEC	Ambulatory Emergency Care
ACRT	Acute Care Response Team
AMU	Acute Medical Unit
AMIA	Acute Medical Initial Assessment
ASU/HASU	Acute Stroke Unit/Hyper Acute Stroke Unit
Case for Change	The case for change is the document that sets out why things need to change within local health and care services to make sure they are fit for the future.
Centres of Excellence (CoEx)	The development of the two main hospital sites. Part of the Fit for the Future Programme
CEPOD	A permanently staffed operating theatre that can run on a 24 hour basis
CGH	Cheltenham General Hospital
CINAPSIS	A referral system that makes it easy for clinicians to communicate between healthcare organisations
Citizen's Jury (CJ)	An independently facilitated process which took place in Jan 2020 with 18 strong Jury members working for five days in public with participants reflecting the county's diverse population. Jury members considered feedback from the Fit for the Future public and staff engagement, together with evidence on the need for change across Gloucestershire's two main hospital sites. They heard from NHS staff working in the services, from public and patient representatives and from a variety of other speakers on relevant topics. They made recommendations on their priorities for development of three specialist hospital services - general surgery, image guided surgery and emergency and acute medicine.
CCU	Cardiac Care Unit
CCOS (CCOT)	Critical Care Outreach Service (Critical Care Outreach Team)
COPD	Chronic inflammatory lung disease, a Group of Lung Conditions Including Bronchitis and Emphysema
COVID-19/ Coronavirus	COVID-19 is a new illness that can affect your lungs and airways. It is caused by a virus called coronavirus.
CPG	Clinical Programme Group
CQC	Care Quality Commissioning. The independent regulator of all health and social care services in England.
CR	Colorectal
CT	Computed Tomography scans that can produce detailed images of many structures inside the body.

Deanery	A regional organisation responsible for postgraduate medical and dental training
DCC	Department of Critical Care
DMBC	Decision making business case that will be prepared following consultation, to support in making a final decision on service change. It will consider all the responses to the consultation
E&AM	Emergency and Acute Medicine
ED	Emergency Department
EGS	Emergency General Surgery
ENT	Ear Nose and Throat
FBC	Full Business Case
FFFT	Fit for the Future Programme
GCC	Gloucestershire County Council
GCCG/CCG	Gloucestershire Clinical Commissioning Group. CCGs are the GP-led bodies responsible for planning and investing in many local health and care services including the majority of hospital care and stroke services.
GHCFT	Gloucestershire Health & Care NHS Foundation Trust - Formed in 2019 by the merger of 2gether Trust and Gloucestershire Care Services
GHNHSFT/GHFT	Gloucestershire Hospitals NHS Foundation Trust
GI	Gastrointestinal (a planned gastrointestinal service is sometimes referred to as upper GI and a planned colorectal service is sometimes referred to as lower GI).
GIRFT	Getting It Right First Time programme is helping to improve the quality of care within the NHS by bringing efficiencies and improvements.
GRH	Gloucestershire Royal Hospital
GS	General Surgery
GWH	Great Western Hospital
HOSC	Health overview and scrutiny committee (HOSC) - A committee of the relevant local authority, or group of local authorities, made up of local councillors who are responsible for monitoring, and if necessary challenging, health plans.
Hot and Cold Split	Emergency Care (Hot) and Planned Care (Cold)
ICS	Gloucestershire Integrated Care System Bringing together NHS providers and commissioners and local authorities to work in partnership in improving health and care
ICU	Intensive Care Unit
IGIS	Image Guided Interventional Surgery

IIA	Integrated Impact Assessment. The purpose of the integrated impact assessment is to explore the potential positive and negative consequences of the proposals. It includes a health impact assessment (HIA), travel and access impact assessment, equality impact assessment (EqIA) (in which the impacts of the proposals on protected characteristic groups and deprived communities are assessed) and sustainability impact assessment.
IMD	Indices of Multiple Deprivation
IR	Interventional Radiology
ITU	Intensive Treatment Unit
JHWS	Joint Health & Wellbeing Strategy requires the Local Authority and Clinical Commissioning Group (CCG) to work together to understand the health and wellbeing needs of their local community, and agree joint priorities for addressing these needs to improve health and wellbeing outcomes and reduce inequalities.
JSNA	Joint Strategic Needs Assessment, a high level overview of need in Gloucestershire. It is jointly produced by Gloucestershire County Council and the Clinical Commissioning Group on behalf of the Gloucestershire Health and Wellbeing Board whose members decide the strategic direction of public agency commissioning in Gloucestershire.
KLOE	Key Lines of Enquiry
LOS	Length of Stay
MAU	Medical Assessment Unit
MIIU	Minor Injury & Illness Unit
MOU	Memorandum of Understanding
NEPT	Non-Emergency Patient Transfers
The NHS Five Year Forward View	Published on 23 October 2014 and sets out a vision for the future of the NHS. The purpose is to articulate why change is needed, what that change might look like and how we can achieve it
NHS Long Term Plan (LTP)	The NHS long term plan sets out priorities for the NHS over the next ten years
NHSE&I	NHS England and NHS Improvement came together on 1 April 2019 as a new single organisation
NMOC	New Models of Care are the way that way that health and social care services are organised, accessed and delivered.
OG	Oesophagogastric
One Gloucestershire	The working name given to the partnership between the county's NHS and care organisations to help keep people healthy, support active communities and ensure high quality, joined up care when needed
One Place	Previous name for the FFFT Programme
PDG	Programme Development Group

PCBC	Pre-consultation business case. The document which presents the business case for any changes to services on which the CCGs agree to consult. It shows that CCGs have properly considered the options, undertaken pre-consultation engagement, submitted to the required scrutiny and met the four tests and three conditions required by the Secretary of State.
PPCI/PCI	Primary Percutaneous Coronary Intervention. A coronary angioplasty is a procedure used to widen blocked or narrowed coronary arteries
PPE	Personal Protective Equipment
PTS	Patient Transport Service
RCS	Royal College of Surgeons
SAU	Surgical Assessment Unit
SARS	Standardised Admission Ratios
SDEC	Same Day Emergency Care (sometimes referred to as Ambulatory Care)
SOPs	Standard Operating Procedures
STPs	Sustainability Transformation Plans. Five-year plans covering all aspects of NHS spending in England.
SWASFT	South West Ambulance Service Foundation Trust
T&O	Trauma and Orthopaedics
tCI	The Consultation Institute a UK based not-for-profit organisation specialising in best practice public consultation & stakeholder engagement.
TDG	Transformation Delivery Group
The 'Four Tests'	NHS England has issued guidance on how commissioners should manage major service change and the criteria that should be met. One of the key requirements is to ensure that the 'four tests' are embedded within the reconfiguration planning process. The tests are designed to demonstrate that there has been a consistent approach to both managing change and engaging with patients and the public.
The King's Fund	An English health charity that shapes health and social care policy and practice and provides NHS leadership development
UAU	Urology Assessment Unit
WHO	World Health Organisation
WTE	Whole Time Equivalent