Briefing paper on COVID-19 Temporary Service changes
Update to Health Overview and Scrutiny Committee

Document Control

Responsible Director:	Ellen Rule, Director of Transformation and Service Redesign
Status:	V 2.2

Version	Date	Author/ Reviewer	Comments
1.0	28/06/2021	Micky Griffith	V 1.0 draft developed for review
2.0	30/06/2021	Ellen Rule	V 2.0 review and editing of v1.0
2.1	30/06/2021	Simon Lanceley	V2.1 review and editing of v2.0
2.2	01/07/2021	Micky Griffith	Incorporate Feedback

Document Distribution:

Forum/Audience	Date	Doc	Comments
Health Overview and Scrutiny Committee	13/07/21	v2.2	

Contents

1. Purpose of the Document

This paper for the Gloucestershire Health Overview and Scrutiny Committee (HOSC) provides an update to the committee regarding the COVID-19 Temporary Service Changes, including a brief summary of proposals previously discussed at HOSC and sets out the next steps including the service restoration plans.

The approach set out in this paper (and the associated paper on FFTF also presented to the committee) describes our plans for the continued development of our health services to improve quality, ensure sustainability as well as some further temporary measures intended to ensure that we can maintain our state of preparedness for any future COVID-19 waves that may impact over the remainder of this year.

2. COVID-19 Temporary Service Changes

As part of the Gloucestershire Integrated Care System (ICS) response to the COVID-19 Pandemic, service changes were implemented by Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT) and by Gloucestershire Health and Care NHS Foundation Trust (GHCFT).

The rationale for the changes was to support our response and recovery:

- To limit the risk of transmission of the virus to patients and staff,
- To enable restoration of many of the services paused in response to the pandemic, increasing the volume of cancer surgery, planned care and specialist diagnostic activity, especially to those patients who are most vulnerable,
- To give confidence to our local population that our hospitals were safe places to visit
- To ensure that the available workforce was aligned to activity and requirement for COVID secure service models

Changes were implemented as Temporary (Emergency) Service Changes, as defined in the Memorandum of Understanding agreed between the ICS and Gloucestershire's Health Overview and Scrutiny Committee (HOSC). Changes were implemented in 3 phases between April 2020 and January 2021.

2.1 GHNHSFT

A summary of the service changes is presented below:

GHNHSFT Service change	Date implemented
CGH[1] Emergency Department to Minor Injury & Illness Unit (MIIU) 8am to 8pm, 7-days a week	June 2020
Acute Medical Take to GRH[2], including Respiratory high care[3]	June 2020
Neurology to CGH	January 2021
Urology emergency pathway to GRH	June 2020

[1] CGH: Cheltenham General Hospital

[2] GRH: Gloucestershire Royal Hospital

[3] Given the clinical nature of COVID-19, this change evolved during the Pandemic with more acute respiratory care moving to GRH so that specialist respiratory skills were available 24/7 to support the centralised acute medical take and COVID admission pathways.

GHNHSFT Service change	Date implemented
Aveta Birthing Centre to GRH	January 2021
Emergency General Surgery to GRH	April 2020
Vascular Surgery to GRH	June 2020
Acute Stroke & Rehabilitation Unit to CGH	June 2020
Medical Day Unit (MDU) to CGH	December 2020

2.2 GHCFT

A summary of the service changes is presented below:

GHC Service change	Date implemented
Dilke MIIU[4] - Closed	April 2020
Vale MIIU – Closed	April 2020
Tewkesbury MIIU - Closed	April 2020
North Cotswold MIIU – reduced hours	April 2020
Lydney MIIU – reduced hours	April 2020
Cirencester MIIU – reduced hours	April 2020
Stroud MIIU – reduced hours	April 2020
Tewkesbury Theatre - Closed	November 2020
Vale Community Hospital – increase Stroke Beds (#16 to #20)	June 2020

3. Learning from Coronavirus (COVID-19) Temporary Changes

Whilst the temporary changes were made as a result of the pandemic, there are a number of key principles that can be considered as part of resilience planning for any future waves, including:

- To separate COVID-19 and non-COVID-19 pathways by site and by pathway to reduce risk of COVID-19 transmission to and between patients and staff.
- To use our two hospital sites to achieve this by making CGH the focus for planned/elective operating, cancer care and non-COVID-19 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 flows into hospital and separate three key pathways: COVID-19 positive, suspected COVID-19 and non-COVID-19 patients.

[4] MIIU – Minor Illness and Injury Unit

- To designate the Intensive Care Unit (ICU) at CGH as a non-COVID-19 unit - this is a key dependency for cancer and planned care.

In some cases, the temporary changes relate to some of the same clinical services included in our Fit for the Future (FFTF) proposals (see separate FFTF paper).

The unique circumstance of COVID required the NHS to make changes to service configurations (as detailed above) to separate COVID and non-COVID admissions pathways, maintain critical services and support operational capacity and resilience. These temporary changes have created an opportunity for rapid learning and trialling of service change that, in many cases, support improvements to patient outcomes and experience.

Finally, whilst not related to the Temporary Service Changes, it should be noted that the ICS and partners have put in place a systematic and inclusive process to identify improvements that have been developed as a result of the pandemic (a.k.a. our “Silver Linings”), that includes an assessment of whether they should be retained. These include improvements to operational processes, ways of working and patient experience, staff health & wellbeing and communication. Whilst the details of these still require further work, examples include:

- A significant increase in ‘virtual’ outpatient appointments eliminating the need for many patients to travel, particularly for follow-up appointments, creating space on our hospital sites and reducing the pressure on car parking.
- Improved staff health, wellbeing and support, with the potential benefits in terms of sickness absence, retention and recruitment.
- A shift to relatively high levels of home and remote working across a wide range of staff groups, departments and roles (clinical and non-clinical), with potential effects on staff wellbeing, reduced environmental impact and opportunities for more efficient use of our buildings and estate.

4. Temporary Service Change Restoration Plan

4.1 GHNHSFT

In accordance with our commitment and desire to limit the use of Temporary Service Changes, we have completed the restoration of the significant majority of services including those with the largest impact on patients. In some cases, where temporary service changes aligned with FFTF Phase 1 approvals, these have been implemented[5]; see table below:

Service change	Proposed outcome	Current status
CGH Emergency Department	**Restore at CGH** to pre-Pandemic state	**Complete**
Acute Medical Take[6]	**Restore at CGH** to pre-Pandemic state	**Complete**
Neurology	**Restore at CGH** to pre-Pandemic state	**Complete**
Urology emergency pathway	**Restore** to pre-Pandemic state	**Complete**
Aveta Birthing Centre	**Restore at CGH** to pre-Pandemic state	**Complete**
Emergency General Surgery	**Retain at GRH**- FFTF Phase 1	**Complete**
Vascular Surgery to GRH	**Retain at GRH** – FFTF Phase 1	**Complete**[7]

In a small number of cases, taking account of our ongoing learning from COVID-19, the current status of the pandemic and continued existence of national COVID-19 regulations, we propose to retain the following Temporary Service Changes:

1. Retention of high care respiratory at GRH (this formed part of the acute medical take change).
2. Retention of Acute Stroke and Rehabilitation at CGH.
3. Retention of Medical Day Unit at CGH

Retention of High Care Respiratory at GRH

In response to the COVID-19 Pandemic, acute medical patients requiring high-care respiratory treatment are managed by the specialist respiratory team in a dedicated High Care unit at GRH. The COVID high care unit was operational throughout the second surge and managed around 270 patients with acute respiratory failure during this period. Patients received advanced respiratory support via non-invasive ventilation (NIV) or nasal high flow oxygen with full cardio-respiratory monitoring. The unit was staffed by specialist respiratory

[5] Further details on the implementation of FFTF Phase 1 are contained in a separate FFTF Update paper

[6] Acute Medical Take to GRH has been approved as part of FFTF Phase 1 but is not due to be implemented until 2022/23.

[7] further implementation support required – see separate FFTF Update paper

and intensive care nurses with protected nursing: patient ratios. At the peak of wave 2 the unit was admitting in excess of 5 patients per day for advanced respiratory support. As a result, the number of patients needing to go to the critical care unit for non-invasive support fell from around 50% of all admissions to around 10% by the time wave 2 peaked in January 21, illustrating that respiratory high care was successfully able to relieve pressure on critical care unit beds.

The current phase of the pandemic means it is clear that the risk of further surges remains, especially in the context of circulating new variants. The capability to re-establish capacity at GRH as COVID high care at short notice is therefore a key part of our COVID strategy over the next 12 months as we learn more about how the longer-term pattern of this disease in our communities will emerge. Due to the specialist staffing, equipment and infection control measures already installed at GRH, there is no realistic alternative location for COVID high care in the short to medium term.

Patients with other emergency respiratory symptoms will continue to be taken to Gloucester Emergency Department (ED) or Cheltenham ED by ambulance or as directed by their GP. Walk-in respiratory patients will also continue to be treated at both sites.

Proposal – High Care Respiratory will remain at GRH as a Temporary Service Change for the remainder of the fiscal year (to March 2022) to enable us to maintain our ability to be responsive to further 'waves' of COVID-19 that may impact through the rest of this year.

We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Respiratory care in Gloucestershire and will provide an update on this work at the next meeting of the HOSC.

Retention of Acute Stroke & Rehabilitation at CGH

As part of our response to the COVID-19 Pandemic, the acute stroke ward was transferred to Woodmancote ward at CGH, with the hyper acute stroke unit (HASU) remaining at GRH. During this period, and subject to agreed clinical protocols, within 72 hours on HASU, patients were transferred to the acute stroke ward at CGH, to continue their treatment. In addition, the bed numbers at the community stroke rehabilitation centre at The Vale hospital increased from 14 to 20 beds, to reduce delays in patients waiting in GHNHSFT who were ready to step down to community-based specialist rehabilitation service, maximising their recovery and rehabilitation potential.

Operating the stroke service in this configuration has highlighted a number staff and patient benefits including an improvement in the national metric used to assess the performance of stroke services; the Sentinel Stroke National Audit Programme (SSNAP) audit tool. In its pre-Pandemic configuration the stroke service was rated C (on a scale of A to E), but in its temporary configuration the service has thrice been rated B. Feedback from staff and patients is that Woodmancote is much better suited to support acute stroke care and rehabilitation than the previous Tower Block ward as it includes wide spaced bays that are open and light, bathroom facilities include overhead ceiling hoists, an environment that is designed to stimulate physical interaction and cognitive improvement.

Whilst welcoming these improvements in performance and positive impact on patients, there remain a number of elements of the stroke pathway which need to be further evaluated and tested before we can determine if this temporary change can provide the benefits indicated by our experience to date over the long-term; these include the separation of HASU and acute stroke (from the GRH site), the sustainability of benefits resulting from stroke rehabilitation on our planned care site (CGH), the preferred staffing models for each element

of the pathway based on patient acuity, the optimal number of beds within each stage of the pathway (including community rehabilitation beds) and the impact on beds that may result from concurrent proposals that are being developed to enhance our Early Supported Discharge service.

Proposal – To retain Acute Stroke & Rehabilitation at Cheltenham General Hospital and the additional Stroke Rehabilitation beds at the Vale as a Temporary Service Change until March 2022

We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Stroke care in Gloucestershire and will provide an update on this work at the next meeting of the HOSC.

Medical Day Unit move to CGH

Medical Day Unit (MDU) is a Nurse led service that is open between 8am and 4pm Monday to Saturday and provides a range of planned 'day case' procedures (infusions, tests, biopsies and treatments) for medical and surgical patients. Historically, MDU has been provided at CGH and GRH with some procedures taking place on ward areas. Pre-Pandemic MDU was located on the ground floor of Gallery Wing at in GRH.

MDU moved to College Road at CGH as a COVID-19 temporary service change as this reduced the risk of nosocomial[8] infection for this patient group, many of whom are immunosuppressed[9]. This move also enabled the Trust to carry out further service moves, (involving the Frailty Assessment Service and the Gloucestershire Priority Assessment Unit), which has made better use of the GRH site, supporting care delivery in the ED at GRH by improving patient flow (to the frailty assessment services and the priority assessment unit). It also enabled the Trust to re-locate the Surgical Assessment Unit and the Gynaecology Assessment Unit from their previously 'temporary' location to co-locate these important assessment services adjacent to the GRH ED.

The unique circumstance of COVID required the NHS to make changes to service configurations to separate COVID and non-COVID admissions pathways, maintain critical services and support operational capacity and resilience. These temporary changes, such as MDU, have created an opportunity for rapid learning and trialling of service change that support improvements to patient outcomes and experience and system efficiency and effectiveness and should be considered as the possible future-state.

Proposal – Given the positive benefits already identified by locating the MDU at CGH, both for patients who need to access services at the MDU but also for patients accessing our ED services at GRH our intention is to:

- Retain the Medical Day Unit at CGH as a Temporary Service Change to March 2022 (to minimise the disruption to patients and staff); whilst concurrently:
- Undertaking a targeted engagement and consultation with affected patient groups regarding the proposal that the Medical Day Unit should be moved to CGH as a permanent service change

MOU *Pro- forma - Consideration of 'substantial' nature of a proposed service variation* for each of the services is provided in Annexes 1-3.

[8] an infection that is acquired in a hospital or other health care facility.

[9] a situation in which the body's immune system is intentionally stopped from working, or is made less effective, usually by drugs.

4.2 GHCFT

The restoration plans for GHC temporary changes are presented below:

Service change	Proposed outcome	Current status
Tewkesbury MIIU	**Restore** to pre-Pandemic state	**Complete**
North Cotswold	**Restore** to pre-Pandemic state	**Complete**
Tewkesbury Theatre	**Restore** to pre-Pandemic state	**Complete**
Cirencester MIIU	**Restore** to pre-Pandemic state	Reduced opening hours. Reinstate by end August 2021
Lydney MIIU	**Restore** to pre-Pandemic state	Reduced opening hours. Reinstate by end August 2021
Vale MIIU	**Restore** to pre-Pandemic state	Reduced opening hours. Reinstate by end August 2021 subject to PCN Mass Vaccination site re-locating
Stroud MIIU	**Restore** to pre-Pandemic state	Reduced opening hours Anticipate closure mid-August to end December (refurbishment) then re-open 8am – 11pm
Dilke MIIU	**Retain** – extension of temporary service change	Remains temporarily closed
Vale Community Hospital – Stroke Beds	**Retain** – extension of temporary service change	See details in section 4.1

Dilke MIIU

The rationale for the Dilke MIIU remaining temporarily closed is that it cannot re-open whilst restrictions and social distancing remains in place as waiting area is within the main hospital corridor.

5. Conclusion

In early 2020 the ICS and partners needed to respond quickly to the developing COVID-19 pandemic, and we are grateful to the HOSC for their pragmatic support and challenge over the past 15 months. This paper confirms that the significant majority of COVID-19 Temporary Service Changes will come to an end in August 2021, with the exception of the services listed below for which we are proposing the following:

GHNHSFT

1. High Care Respiratory – to remain at GRH.
2. Acute Stroke and Rehabilitation - to remain at CGH.
3. Medical Day Unit – to remain at CGH.

GHCFT

4. Dilke MIIU – to remain closed until all social distancing measures can be removed.
5. Stroud MIIU – to reopen in pre-Pandemic state in December 2021 following refurbishment programme.

Annex 1: Pro- forma - Consideration of 'substantial' nature of a proposed service variation - Stroke Services

Name of NHS Trust/ Name of NHS Commissioning Organisation
Gloucestershire Clinical Commissioning Group **Gloucestershire Hospitals NHS Foundation Trust** **Gloucestershire Health and Care NHS Foundation Trust**
Lead Manager and contact details
Tracey Hendry: General Manager – Medicine
Details of the current service

The specialist stroke pathway in Gloucestershire is delivered jointly by Gloucestershire Hospitals NHS FT (GHNHSFT) and Gloucestershire Health and Care NHS FT (GHCFT).

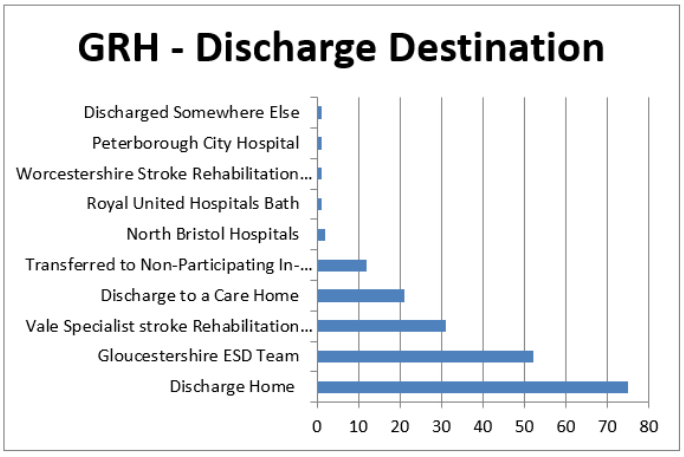
The stroke service consists of medical, nursing, therapy and support staff and cares for patients of all ages that present with stroke and/ or Transient Ischaemic Attack (TIA).

The GHNHSFT stroke service manages the largest number of stroke patients in the South West. It is a well-established service with well-developed links to the regional tertiary stroke centre at North Bristol Trust (NBT).

Following a comprehensive review of the stroke pathway, as part of the business case for the development of a dedicated Community Stroke Rehabilitation Unit (which opened in March 2019), the Gloucestershire stroke pathway comprises the following:

1. Hyper Acute Stroke Unit (HASU)
2. Acute stroke ward (including acute rehabilitation)
3. Community stroke rehabilitation unit
4. Early Supported Discharge (ESD) service

Suspected stroke and TIA patients access the service via the Emergency Department (ED), where patients suitable for revascularisation (i.e. thrombolysis and thrombectomy) are identified. After assessment on HASU, most patients move to the acute stroke ward. The table below shows the discharge destinations from the Acute Trust for the period Q1 2019/20.



The aim of the Community stroke rehabilitation unit (where specialist rehabilitation is provided in an inpatient community setting), is to support specialist stroke provision over the whole pathway, for patients, who do not need to remain in the acute hospital, resulting in increased therapy provision and leading to improved outcomes. This is aligned to the ambition of the Integrated Care System (ICS) for less reliance on acute and more on community.

Patients can be discharged from either the acute stroke ward or the community rehabilitation unit to the Early Supported Discharge (ESD) service, a therapy led outreach community 'step down' service (provided by GHCFT).

Pre-COVID-19, Gloucestershire Royal Hospital (GRH) by GHNHSFT. The GHNHSFT stroke service also provides outpatient and TIA clinics. The community rehabilitation service is provided at the specialist community rehabilitation centre at The Vale community hospital (provided by GHCFT).

The table below shows the number of stroke beds provided in Gloucestershire prior to the COVID-19 Pandemic:

Hyper Acute Stroke Unit (HASU) - GRH	Acute stroke - GRH	Community stroke rehabilitation unit – The Vale	Total beds
15	36	14	65

In June 2020, GHNHSFT implemented a number of temporary service changes as part of the ICS response to the COVID-19 Pandemic.

The changes were implemented to reduce the number of emergency routes into hospital and to free-up additional capacity on the GRH site to create a 'red' emergency care COVID controlled site with patients managed through three emergency admission pathways: confirmed COVID, suspected COVID and confirmed non-COVID. This allowed CGH to be established as a 'green' planned care COVID controlled site to enable cancer and urgent planned care operations and diagnostic tests to continue.

As part of these changes, the hyper acute stroke unit (HASU) remained at GRH but was moved to the ground floor to be closer to the ED and allocated 8 to 12 beds (to be flexed according to demand) on a shared ward with Cardiology.

The acute stroke ward was transferred to Woodmancote ward at CGH, providing 32 beds. During this period, and subject to agreed clinical protocols, within 72 hours on HASU, patients are transferred to the acute stroke ward at CGH, to continue their treatment.

In addition, the bed numbers at the community stroke rehabilitation centre at The Vale hospital increased from 14 to 20 beds, to reduce delays in patients waiting in GHNHSFT, who were ready to step down to community-based specialist rehabilitation service, maximising their recovery and rehabilitation potential.

The table below shows the number of stroke beds provided in Gloucestershire once the temporary service changes were implemented:

Hyper Acute Stroke Unit (HASU) - GRH	Acute stroke ward- CGH	Community stroke rehabilitation unit – The Vale	Total beds
8 (with the ability to flex to 12)	32	20	60-64

Details of the proposed change to service

Operating the stroke service in this configuration has highlighted a number staff and patient benefits including an improvement in the national metric used to assess the performance of stroke services; the Sentinel Stroke National Audit Programme (SSNAP) audit tool. In its pre-Pandemic configuration the stroke service was rated C (on a scale of A to E), but in its temporary configuration the service has thrice been rated B. Feedback from staff and patients is that Woodmancote is much better suited to support acute stroke care and rehabilitation than the previous Tower Block ward as it includes wide spaced bays that are open and light, bathroom facilities include overhead ceiling hoists, an environment that is designed to stimulate physical interaction and cognitive improvement.

Whilst welcoming these improvements in performance and positive impact on patients, there remain a number of elements of the stroke pathway which need to be further evaluated and tested before we can determine if this temporary change can provide the benefits indicated by our experience to date over the long-term; these include the separation of HASU and acute stroke (from the GRH site), the sustainability of benefits resulting from stroke rehabilitation on our planned care site (CGH), the preferred staffing models for each element of the pathway based on patient acuity, the optimal number of beds within each stage of the pathway (including community rehabilitation beds) and the impact on beds that may result from concurrent proposals that are being developed to enhance our Early Supported Discharge service.

To enable the ICS to undertake the necessary work with our stroke clinicians, stakeholders and patients, our proposal to the Health Overview and Scrutiny Committee (HOSC) is to retain Acute Stroke & Rehabilitation at Cheltenham General Hospital and the additional Stroke Rehabilitation beds at the Vale as a Temporary Service Change until March 2022. We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Stroke care in Gloucestershire and will provide an update on this work at the next meeting of the HOSC.

It is anticipated that this service model will continue to provide:

- 7-day acute stroke review service remaining at GRH, plus an enhanced service at CGH for any patients who may have had a stroke.
- Adjacent access to the ED from HASU, improving the ability for the stroke team (including therapy staff) to provide timely support to ED, to assess patients and begin treatments and to transfer patients from the ED to HASU, making more efficient use of the HASU beds.
- The acute stroke service will remain on a purpose-built, stroke rehabilitation ward (Woodmancote) that caters to the needs of stroke patients, including wide spaced bays, that are open and light. The bathroom facilities include overhead ceiling hoists that allow staff to more easily meet the personal hygiene needs of each patient. The ward environment includes art-work and tactile discs, that are designed to stimulate physical interaction and cognitive improvement throughout the ward, that adds an additional softer environment benefit.
- Assurance that, should there be any future wave of COVID-19, the acute stroke service can be delivered from the planned COVID controlled site.

The benefit of moving patients from a HASU to a physically separate acute stroke and rehabilitation ward is that the patient can see their progression of recovery after their stroke, thereby supporting the psychological, as well as physical, elements of the treatment offered. Patients are then discharged home (with minimal support), discharged home with Early Supported Discharge, or referred to The Vale rehabilitation unit.

Timescales involved	
To enable the ICS to undertake the necessary work with our stroke clinicians, stakeholders and patients, our proposal to HOSC is to retain Acute Stroke & Rehabilitation at Cheltenham General Hospital and the additional Stroke Rehabilitation beds at the Vale as a Temporary Service Change until March 2022. We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Stroke care in Gloucestershire and will provide an update on this work at the next meeting of the HOSC	
What is the reason for the proposed service change?	
During this temporary service change, there has been an overall improvement in performance against national performance metrics for stroke services. The Sentinel Stroke National Audit Programme (SSNAP) audit tool is used by stroke services to measure performance. This tool provides an overall service rating, which ranges from A to E. Prior to COVID the GHFT service had a rating of C. During COVID this rating improved to B, which is the highest rating recorded by the service. The Community Stroke Rehabilitation Service has also maintained an A rating during this period. Also, as stated in the proposed service model, there are a number of benefits that patients are already experiencing as a result of being based in the Woodmancote ward environment. Whilst welcoming these improvements in performance and positive impact on patients, there remain a number of elements of the stroke pathway which need to be further evaluated and tested before we can determine if this temporary change can provide the benefits indicated by our experience to date over the long-term; these include the separation of HASU and acute stroke (from the GRH site), the sustainability of benefits resulting from stroke rehabilitation on our planned care site (CGH), the preferred staffing models for each element of the pathway based on patient acuity, the optimal number of beds within each stage of the pathway (including community rehabilitation beds) and the impact on beds that may result from concurrent proposals that are being developed to enhance our Early Supported Discharge service.	
Has any consultation or engagement/ involvement taken place to date?	
The original temporary changes were made 'at pace' in response to the rapidly evolving level 4 incident associated with the COVID pandemic, and as such there was not sufficient time for public engagement to be conducted at the point of instigation of these temporary (emergency) changes. This is in line with accepted practice when change is required as an 'emergency' response to a major incident. We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Stroke care in Gloucestershire and this will include engagement with patients and stakeholders.	
Expected impact of change and what is being done to address this	
Changes in accessibility (i.e. transport issues/ opening hours etc)	The temporary re-location of acute stroke from GRH to CGH has impacted some patient and carer travel times; either positively (for patients in the east of the county) or negatively (for patients in the west). Initial analysis has shown the there is a relatively even distribution of patients admitted to the GHNHSFT stroke service from the east and the west of the county.

	Full travel analysis will be completed as part of the work-up of long-term options and will be presented to HOSC at the next scheduled meeting. The COVID-19 temporary move has been in place for 10 months and during this period there have been no complaints or concerns raised regarding access to the services at CGH (on Woodmancote). As previously stated, the temporary change excludes any changes to the access (pathway) for hyper-acute stoke patients as they will all continue to be admitted to the Emergency Department at GRH and then move to the Hyper Acute Stroke unit in the first instance. This pathway has been in place for some years. By increasing the specialist stroke rehabilitation service by six beds those patients who have had a stroke across the county have a greater access to the required specialist care. However, we have a consequential decrease in the general rehabilitation offer within the Berkeley Vale locality. This will be met by the services provided at the Stroud Hospital and from the wider county beds. Patients will continue to be prioritised based on clinical need and we will endeavour to ensure that patients are cared for as close to home as is possible
Patients/ carers affected (demographic assumptions that have been made)	A full Integrated Impact Assessment would be developed if this temporary change is to be considered in the long-term. Previous impact assessment has identified the following that would need to be considered: **Age** The age of an individual combined with additional factors including other 'protected characteristics' may affect their health and social care needs. Individuals may also experience discrimination and inequalities because of their age. Analysis of previous stroke patients has identified that 60% are >75 years, 20% are 65-74 years and 20% 18-64 years. **Gender** There is no conclusive evidence to suggest that access to and experience of acute hospital care differs solely on the basis of a person's gender. Analysis of previous stroke patients has identified that 53% are male and 47% female. **Race / Ethnicity** Studies of secondary care usage have found that ethnicity is a significant predictor of acute hospital admission. The district with the highest proportion of ethnic diversity is Gloucester city meaning that a geographical distribution of services away from GRH might have a greater impact on these communities. **Disability** Forest of Dean is the only district locally that exceeds the national average in terms of the proportion of residents living with a disability. People with disabilities may have an increased risk of developing secondary conditions that are more likely to result in the need for acute

	care. This geographical clustering means that geographical changes to where services are delivered may have a disproportionate impact on those with disabilities in terms of access. A travel impact assessment will be needed to fully assess this impact. Providing services from a calmer site, with a shorter overall length of stay, may well benefit those with disabilities as they may be more affected by such factors than the general population.
Changes in methods of delivery (venue / practitioner)	Emergency patient pathways will continue unchanged as the stroke pathway begins in Gloucestershire Royal Hospital (GRH) site by admission to the Hyper Acute Stroke unit either via: a) Emergency Department presentation b) Outpatients via attendance at a TIA clinic c) From an inpatient ward where a patient has suffered a stroke that was not predicted and therefore the patient is not already under active stroke inpatient treatment. Care will be delivered through the stroke specialist Consultant medical and nursing team on a rotation basis through GRH and CGH. Consultants are rostered for a week at a time to complete inpatient ward cover and this has been in place for the duration of the temporary service change without issue. The following essential support services have adjusted work patterns to provide a split site cover, ensuring no service disruption as a result of the temporary service move: • Physical Therapy • Cognitive Therapy • Psychological Support • Dietitian • Speech & Language Therapy
Impact upon other service delivery	Whilst the temporary service change remains in place, support services, such as those noted above, will continue to adjust work patterns in order to facilitate patient level support over Cheltenham and Gloucester sites. Other services such as health records, portering, catering and pharmacy would not be affected as these are all currently provided across both Cheltenham and Gloucester sites. There are a number of patients who would have been able to receive general rehabilitation within the beds at the Vale as a result of this change who will now receive their care in the nearest available unit. Experience will be monitored using the FFT
Wider implications	It is not envisaged that there will be any negative implications on the wider community or health economy whilst the temporary service change remains in place.
Equality/ Inequality issues	A full Integrated Impact Assessment would be developed if this temporary change is to be considered in the long-term. Previous impact assessment has identified the following that would need to be considered:

	Deprivation Gloucester city has the highest proportion of its population living in the most deprived areas **Homelessness** On average 2.37 per 1000 households are homeless in Gloucestershire with highest levels in Cheltenham and Gloucester city. **Substance Misuse** The age standardised hospital admissions due to substance misuse in Gloucestershire is among the lowest in the South West region at 38 per 100,000 persons; lower than both regional and national rates; however mortality rates suggest that the district of Gloucester City has the highest rates of deaths due to substance misuse, significantly higher than county and national averages. **Mental Health** The prevalence of mental health disease within the GP practice registered population within Gloucestershire is among the lowest in the South West region at 0.8%; significantly lower than both regional and national averages GHFT admission data demonstrates that more people attend GRH than CGH with mental health related issues. The specialist stroke rehabilitation service at the Vale is a county wide service and is open to the whole population based on clinical need. The remaining community hospitals will all continue to offer general rehabilitation for all residents across the county
Name of person completing this pro-forma	Tracey Hendry (General Manager – Care of the Elderly, Neurology, Stroke) and Joseph Mills (Deputy Divisional Director, Medical Division) Clare Stephenson – Strategy and Transformation Programme Manager
Date proforma completed	**01/07/21**
Outcome (HOSC Comments)	

Annex 2: Pro- forma - Consideration of 'substantial' nature of a proposed service variation: Respiratory Services

Name of NHS Trust/ Name of NHS Commissioning Organisation
Gloucestershire Clinical Commissioning Group **Gloucestershire Hospitals NHS Foundation Trust**
Lead Manager and contact details
Joe Mills (Deputy Divisional Director, Medical Division)
Details of the current service

Respiratory Services provide a patient centred service for all ages of patients, presenting with respiratory related issues. Specifically, the team specialise in the treatment of problems in regard to the upper airway, the lungs, the chest wall and the ventilatory control system. The team consists of medical, nursing, therapy and support staff.

Prior to COVID respiratory inpatient beds were provided on both sites.

- Cheltenham General Hospital (CGH) – Knightsbridge Ward (12 beds) and Avening Ward (21 beds)
- Gloucester Royal Hospital (GRH) – Ward 8b (33 beds).

The Fit for the Future activity baseline (Feb 19 to Jan 20) showed total admissions as 3628 with the majority (2003) being admitted to GRH.

The Consultant led Outpatient Clinics/Services are provided at both acute hospital sites plus seven locations in the community. These services are used for general respiratory conditions and also suspected cancer and sleep disorders. As part of the investigation patients may be referred for further screening. This could be arranged for the same day or as a separate appointment for another service for example an X-Ray, a CT scan, a blood test, lung function tests, a sleep study, an allergy skin prick test or a bronchoscopy, all of which will be undertaken as an Outpatients appointment.

In June 2020, Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT) implemented a number of temporary service changes as part of the Integrated Care System (ICS) response to the COVID-19 Pandemic. The changes were implemented to reduce the number of emergency routes into hospital and to free-up additional capacity on the GRH site to create a 'red' emergency care COVID controlled site with patients managed through three emergency admission pathways: confirmed COVID, suspected COVID and confirmed non-COVID. This allowed CGH to be established as a 'green' planned care COVID controlled site to enable cancer and urgent planned care operations and diagnostic tests to continue.

In response to the COVID-19 Pandemic, acute medical patients requiring high-care respiratory treatment are managed by the specialist respiratory team in a dedicated High Care unit at GRH. The COVID high care unit was operational throughout the second surge and managed around 270 patients with acute respiratory failure during this period. Patients received advanced respiratory support via non-invasive ventilation (NIV) or nasal high flow oxygen with full cardio-respiratory monitoring. The unit was staffed by specialist respiratory and intensive care nurses with protected nursing: patient ratios. At the peak of wave 2 the unit was admitting in excess of 5 patients per day for advanced respiratory support. As a

result, the number of patients needing to go to the critical care unit for non-invasive support fell from around 50% of all admissions to around 10% by the time wave 2 peaked in January 21, illustrating that respiratory high care was successfully able to relieve pressure on critical care unit beds.

Details of the proposed change to service

Our proposal to the Health Overview and Scrutiny Committee (HOSC) is that High Care Respiratory will remain at GRH as a Temporary Service Change for the remainder of the fiscal year (to March 2022) to enable us to maintain our ability to be responsive to further 'waves' of COVID-19 that may impact through the rest of this year. We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Respiratory care in Gloucestershire and will provide an update on this work at the next meeting of the HOSC.

National guidelines recommend that advanced respiratory support and complex respiratory care are delivered within dedicated respiratory support units and only a minority of trusts in the UK do not provide a designated area for NIV. This proposal will enable us to continue to deliver this important service for respiratory patients across the county.

The current phase of the pandemic means it is clear that a significant risk of further surges remains, especially in the context of circulating new variants. The capability to re-establish capacity at GRH as COVID high care at short notice is therefore a key part of our COVID strategy over the next 12 months. Due to the specialist staffing, equipment and infection control measures already installed at GRH, there is no realistic alternative location for COVID high care in the short to medium term.

Patients with other emergency respiratory symptoms will continue to be taken to GRH Emergency Department (ED) or CGH ED by ambulance or as directed by their GP. Walk-in respiratory patients will also continue to be treated at both sites

There will be no change in the delivery of outpatient services.

Timescales involved

Our proposal to HOSC is that High Care Respiratory will remain at GRH as a Temporary Service Change for the remainder of the fiscal year (to March 2022) to enable us to maintain our ability to be responsive to further 'waves' of COVID-19 that may impact through the rest of this year. We propose to continue to work through the evidence to enable us to develop a longer-term proposal for Respiratory care in Gloucestershire and will provide an update on this work at the next meeting of the HOSC.

What is the reason for the proposed service change?

The current phase of the pandemic means it is clear that a significant risk of further surges remains, especially in the context of circulating new variants. The capability to re-establish capacity at GRH as COVID high care at short notice is therefore a key part of our COVID strategy over the next 12 months. Due to the specialist staffing, equipment and infection control measures already installed at GRH, there is no realistic alternative location for COVID high care in the short to medium term.

National guidelines recommend that advanced respiratory support and complex respiratory care are delivered within dedicated respiratory support units and only a minority of trusts in the UK do not provide a designated area for NIV. This proposal will enable us to continue to deliver this important service for respiratory patients across the county.

The main drivers for this change are:

1. Whilst the risk of COVID remains to maintain the ability to re-establish at short notice a COVID high care in GRH
2. The need to develop a dedicated respiratory high care area, using the learning and equipment established during COVID, which will benefit respiratory patients in the future, in accordance with nationally recommended guidelines.

This service model will enable the following:

- If another COVID surge is expected, the service, at short notice will be able to establish a COVID controlled respiratory ward and areas at GRH.
- Assurance that patients with COVID symptoms will be taken straight to GRH via South West Ambulance Service (SWASFT).
- Enable patients from across the county who require advanced respiratory support or complex respiratory care to benefit from management within an enhanced respiratory high care unit
- Improve ability to sustainably resource a high care respiratory unit at GRH, improving patient outcomes and reducing mortality.
- Maintain a respiratory emergency admission pathway at CGH.

Has any consultation or engagement/ involvement taken place to date?

The original temporary changes were made 'at pace' in response to the rapidly evolving level 4 incident associated with the COVID pandemic, and as such there was not sufficient time for public engagement to be conducted at the point of instigation of these temporary (emergency) changes. This is in line with accepted practice when change is required as an 'emergency' response to a major incident.

We propose to continue to work through the evidence to enable us to develop a longer-term proposal for respiratory care in Gloucestershire and this will include engagement with patients and stakeholders.

Expected impact of change and what is being done to address this

Changes in accessibility (i.e. transport issues/ opening hours etc)	Patients with COVID, symptoms of COVID, at risk of needing respiratory high care or complex respiratory care will continue to be taken by ambulance direct to the Emergency Department at GRH, in accordance with an agreed protocol with SWASFT. Patients with other emergency respiratory symptoms will continue to be taken to GRH Emergency Department (ED) or CGH ED by ambulance or as directed by their GP. Walk-in respiratory patients will also continue to be treated at both sites The establishment of a High-Care Unit at GRH has impacted some patient and carer travel times. Initial analysis has shown the there is a relatively even distribution of patients admitted to the Respiratory service from the east and the west of the county. Full travel analysis will be completed as part of the work-up of long-term options and will be presented to HOSC at the next scheduled meeting.

Patients/ carers affected (demographic assumptions that have been made)	A full Integrated Impact Assessment would be developed if this temporary change is to be considered in the long-term. Previous impact assessment has identified the following that will need to be considered: **Race / Ethnicity** Studies of secondary care usage have found that ethnicity is a significant predictor of acute hospital admission. The district with the highest proportion of ethnic diversity is Gloucester city meaning that a geographical distribution of services to GRH might have a greater impact on these communities. **Gender** There is no conclusive evidence to suggest that access to and experience of acute hospital care differs solely on the basis of a person's gender. Our records show that 47.8% of respiratory patients are female and 52.2% are male. **Disability** Forest of Dean is the only district locally that exceeds the national average in terms of the proportion of residents living with a disability. People with disabilities may have an increased risk of developing secondary conditions that are more likely to result in the need for acute care. This geographical clustering means that geographical changes to where services are delivered may have a disproportionate impact on those with disabilities in terms of access. A travel impact assessment will be needed to fully assess this impact.
Changes in methods of delivery (venue / practitioner)	Patients with COVID, symptoms of COVID, at risk of needing respiratory high care or complex respiratory care will continue to be taken by ambulance direct to the Emergency Department at GRH, in accordance with an agreed protocol with SWASFT. Patients with other emergency respiratory symptoms will continue to be taken to GRH Emergency Department (ED) or CGH ED by ambulance or as directed by their GP. Walk-in respiratory patients will also continue to be treated at both sites
Impact upon other service delivery	Services such as health records, portering, catering and pharmacy would not be affected as these are all currently provided across both Cheltenham and Gloucester sites.
Wider implications	It is not envisaged that there will be any negative implications on the wider community or health economy whilst the temporary service change remains in place.
Equality/ Inequality issues	A full Integrated Impact Assessment would be developed if this temporary change is to be considered in the long-term. Previous impact assessment has identified the following that would need to be considered:

	Deprivation Gloucester city has the highest proportion of its population living in the most deprived areas **Homelessness** On average 2.37 per 1000 households are homeless in Gloucestershire with highest levels in Cheltenham and Gloucester city. **Substance Misuse** The age standardised hospital admissions due to substance misuse in Gloucestershire is among the lowest in the South West region at 38 per 100,000 persons; lower than both regional and national rates; however mortality rates suggest that the district of Gloucester City has the highest rates of deaths due to substance misuse, significantly higher than county and national averages. **Mental Health** The prevalence of mental health disease within the GP practice registered population within Gloucestershire is among the lowest in the South West region at 0.8%; significantly lower than both regional and national averages GHFT admission data demonstrates that more people attend GRH than CGH with mental health related issues.
Name of person completing this pro-forma	Joe Mills Deputy Divisional Director, Medical Division Dr Henry Steer – Clinical Lead Respiratory Consultant Clare Stephenson – Strategy and Transformation Programme Manager
Date proforma completed	**01/07/21**
Outcome (HOSC Comments)	

Annex 3: Pro- forma - Consideration of 'substantial' nature of a proposed service variation: Medical Day Unit

Name of NHS Trust/ Name of NHS Commissioning Organisation

Gloucestershire Clinical Commissioning Group
Gloucestershire Hospitals NHS Foundation Trust

Lead Manager and contact details

Medical Day Unit
Laura Greenway - Matron
lauragreenway@nhs.net
Tes Davies - MDU Senior Sister
tes.davies@nhs.net

Details of the current service

The Medical Day Unit (MDU) provides multiple outpatient services for patients in Gloucestershire. The MDU is a Nurse led service which is open between 8am and 4pm Monday to Saturday. The services provided by the MDU include:

- IV drip (intravenous infusion) treatments for patients with stomach, kidney, neurology, rheumatology, breathing or skin conditions. (for the majority of IV infusions patients attend monthly)
- Tests for pre-surgery iron infusions
- Tests for hormone production conditions (endocrinology)
- Blood or iron transfusions
- Recovery for renal and liver biopsies
- An ultrasound probe to check for heart conditions (transoesophageal echocardiogram)
- Liver biopsy
- Fluid drained from the abdomen (paracentesis drains).

The MDU provides support for patients across a number of specialties. The table below shows the number of patients, categorised by attendance frequency and proportion (%).

MDU Attendances	# Patients	% patients	# attendences	% attendences
< 10	1919	92.8%	4595	66.5%
11-19	126	6.1%	1564	22.6%
20-29	14	0.7%	341	4.9%
30-39	7	0.3%	243	3.5%
40+	2	0.1%	163	2.4%
Total	**2068**		**6906**	

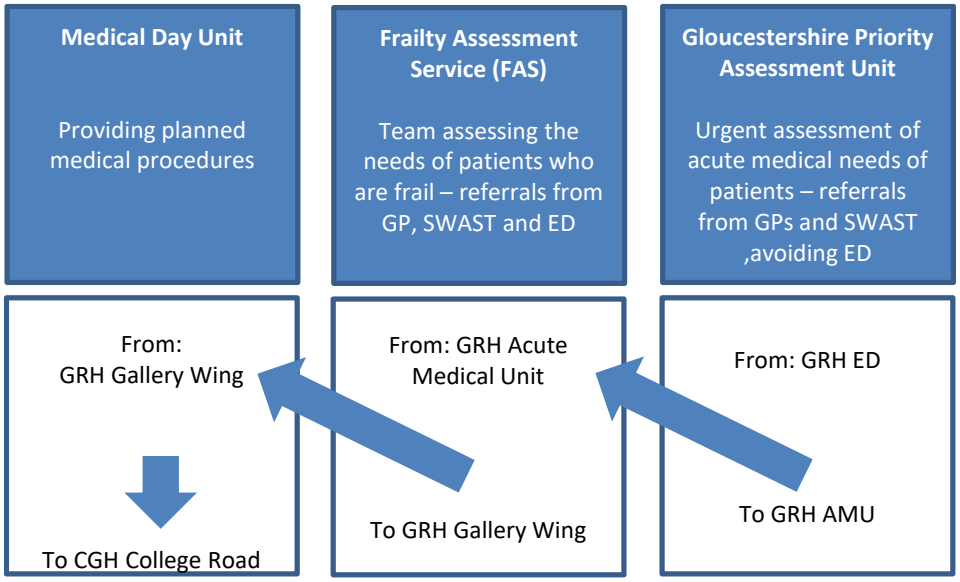
The top five referring specialties are gastroenterology, neurology, rheumatology, hepatology and general medicine. These specialties make up 85% of the MDU activity. A table of the full breakdown MDU procedures by specialty between Feb 2019 and Jan 2020 is presented on Page 26.

The MDU service has previously been provided at both Cheltenham General Hospital (CGH) and Gloucestershire Royal Hospital (GRH), with some activity originally taking place in ward areas and later these services were merged and located on the ground floor of the Gallery Wing at in GRH.

In June 2020, Gloucestershire Hospitals NHS Foundation Trust (GHNHSFT) implemented a number of temporary service changes as part of the Integrated Care System (ICS) response to the COVID-19 Pandemic. The changes were implemented to reduce the number of emergency routes into hospital and to free-up additional capacity on the GRH site to create a 'red' emergency care COVID controlled site with patients managed through three emergency admission pathways: confirmed COVID, suspected COVID and confirmed non-COVID. This allowed CGH to be established as a 'green' planned care COVID controlled site to enable cancer and urgent planned care operations and diagnostic tests to continue.

As part of our COVID response GHNHSFT has moved same day emergency care/assessment units out of inpatient ward areas to reduce the risk of cross infection and undertaken a full review of bed numbers and locations on wards from an infection control guidance and improving patient experience perspective.

MDU moved to College Road at CGH as a COVID-19 temporary service change as this reduced the risk of nosocomial infection for this patient group, many of whom are immunosuppressed. This move also enabled the Trust to carry out further service moves, involving the Frailty Assessment Service (FAS) and the Gloucestershire Priority Assessment Unit (GPAU), which has made better use of the GRH site, supporting care delivery in the Emergency Department (ED) at GRH by improving patient flow (to the frailty assessment services and the priority assessment unit). It will also enable the Trust to re-locate the Surgical Assessment Unit and the Gynaecology Assessment Unit from their previously 'temporary' location to co-locate these important assessment services adjacent to the GRH ED.



Details of the proposed change to service

Given the positive benefits already identified by locating the MDU at CGH, both for patients who need to access services at the MDU but also for patients accessing our ED services at GRH our intention is to:

- Retain the Medical Day Unit at CGH as a Temporary Service Change to March 2022 (to minimise the disruption to patients and staff); whilst concurrently:
- Undertaking targeted engagement and consultation with affected patient groups regarding the proposal that the Medical Day Unit should be moved to CGH as a permanent service change

The full range of procedures will be provided at CGH, with the exception of a small number of procedures, involving liver and renal biopsies. According to data between February 2019 and January 2020, there were 85 of these procedures which is approx. 1 % of total procedure activity.

In addition, Transoesophageal Echo (TOE) procedures will also only be provided at GRH, these procedures accounted for less than 1% of total procedures performed by MDU between February 2019 and January 2020.

Timescales involved

Given the positive benefits already identified by locating the MDU at CGH, both for patients who need to access services at the MDU but also for patients accessing our ED services at GRH our intention is to:

- Retain the Medical Day Unit at CGH as a Temporary Service Change to March 2022 (to minimise the disruption to patients and staff); whilst concurrently:
- Undertaking targeted engagement and consultation with affected patient groups regarding the proposal that the Medical Day Unit should be moved to CGH as a permanent service change

What is the reason for the proposed service change?

Retaining the MDU at CGH will enable the FAS and GPAU to remain in their current locations and sustain the ED improvements. It will also enable the Trust to re-locate the Surgical Assessment Unit and the Gynaecology Assessment Unit from their temporary location in Medical Outpatients to a space adjacent to the ED.

The long-term plan is to develop CGH as a centre of excellence for planned care. Locating the MDU at CGH would therefore also be consistent with the Trust's strategic direction for this site. As a result, the ICS is requesting an extension to the temporary changes to provide an opportunity to engage and consult with the public around the current proposal.

Has any consultation or engagement/ involvement taken place to date?

The original temporary changes were made 'at pace' in response to the rapidly evolving level 4 incident associated with the COVID pandemic, and as such there was not sufficient time for public engagement to be conducted at the point of instigation of these temporary (emergency) changes. This is in line with accepted practice when change is required as an 'emergency' response to a major incident.

We will now undertake targeted engagement and consultation with affected patient groups regarding the proposal that the Medical Day Unit should be moved to CGH as a permanent service change

Expected impact of change and what is being done to address this	
Changes in accessibility (i.e. transport issues/ opening hours etc)	The service move will impact patient and carer travel times; either positively (for patients in the east of the county) or negatively (for patients in the west). Initial analysis has shown the there is a relatively even distribution of patients accessing the MDU from the east and the west of the county. The MDU provides day services only, therefore carer impact would relate to escorting patients to the MDU in the daytime only. Full travel analysis will be completed as part of the formal process and considered as part of the evaluation.
Patients/ carers affected (demographic assumptions that have been made)	**Race / Ethnicity** Studies of secondary care usage have found that ethnicity is a significant predictor of acute hospital admission. The district with the highest proportion of ethnic diversity is Gloucester city meaning that a geographical distribution of services away from GRH might have a greater impact on these communities. There is limited data on race and ethnicity of MDU patients. **Gender** There is no conclusive evidence to suggest that access to and experience of acute hospital care differs solely on the basis of a person's gender. Analysis of previous data shows that 58.8% were female and 41.2% were male. **Disability** Forest of Dean is the only district locally that exceeds the national average in terms of the proportion of residents living with a disability. People with disabilities may have an increased risk of developing secondary conditions that are more likely to result in the need for acute care. This geographical clustering means that geographical changes to where services are delivered may have a disproportionate impact on those with disabilities in terms of access. There is currently no data captured for MDU to determine the number of patients who may experience disability. **Age** The age of an individual combined with additional factors including other 'protected characteristics' may affect their health and social care needs. Individuals may also experience discrimination and inequalities because of their age. Analysis of previous MDU patients shows 55% are aged between 18-64, 20% are aged between 65-74, 18% are aged 75-84, 6% are aged 85+ and less than 1% are aged 0-17. **Religion** Analysis of previous MDU patients shows that 48.7% identified themselves as Christian, 42.6% identified themselves as having 'no religion' and 7.5% identified recorded that they belonged to "other

	religion", this did not include Buddhist, Christian, Hindu, Muslim, Sikh or Jewish. The retention of the MDU at CGH is unlikely to have a significant negative or positive impact upon peoples of faith. Both CGH and GRH have a team of Chaplains who provide spiritual and pastoral care and support for all faiths to help people find strength comfort and meaning at what can be a very difficult time in their lives.
Changes in methods of delivery	See changes in accessibility.
Impact upon other service delivery	There are no known impacts upon other service delivery.
Wider implications	It is not anticipated that there will be wider implications from this move.
Equality/ Inequality issues	A full integrated impact assessment will be carried out as part of developing the pilot. Previous impact assessment has identified the following that will need to be considered: **Deprivation** Gloucester city has the highest proportion of its population living in the most deprived areas **Homelessness** On average 2.37 per 1000 households are homeless in Gloucestershire with highest levels in Cheltenham and Gloucester city. **Substance Misuse** The age standardised hospital admissions due to substance misuse in Gloucestershire is among the lowest in the South West region at 38 per 100,000 persons; lower than both regional and national rates; however mortality rates suggest that the district of Gloucester City has the highest rates of deaths due to substance misuse, significantly higher than county and national averages. **Mental Health** The prevalence of mental health disease within the GP practice registered population within Gloucestershire is among the lowest in the South West region at 0.8%; significantly lower than both regional and national averages GHNHSFT admission data demonstrates that more people attend GRH than CGH with mental health related issues.
Name of person completing this pro-forma	**Laura Greenwood,** **Tes Davies,** **Hannah Reed** **Clare Stephenson**
Date proforma completed	**01/07/21**
Outcome (HOSC Comments)	

MDU procedures by specialty between Feb 2019 and Jan 2020

Proc Desc	Cardiology	Colorectal surgery	Dermatology	Endocrinology	Gastroenterology	General medicine	General surgery	Geriatric medicine	Gynaecology	Hepatology	Interventional radiology	Medical oncology	Nephrology	Neurology	Palliative medicine	Respiratory medicine	Rheumatology	Trauma and Orthopaedics	Upper gastrointestinal surgery	Urology	Vascular surgery	Other specialties	Grand Total
Cytokine inhibitor drugs Band 1	0	0	110	0	1409	26	0	0	0	0	0	1	38	12	1	3	576	0	0	1	0		2177
Infusion of therapeutic substance	16	44	47	10	593	273	55	50	19	14	5	5	83	78	2	37	108	212	16	36	2		1723
Immunomodulating drugs Band 1	0	0	0	0	2	0	0	0	0	0	0	0	0	680	0	0	0	0	0	0	0		682
Monoclonal antibodies Band 1	0	0	0	0	663	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0		664
Drainage of ascites NEC (Disabled)	0	0	0	0	70	1	0	0	1	491	0	0	0	0	0	0	0	0	0	0	0		563
Blood Sampling	0	0	10	2	231	13	0	0	0	70	0	2	0	17	1	1	48	0	0	0	0		396
Intravenous Immunoglobulins	0	0	0	0	2	4	0	0	0	1	0	0	0	182	0	0	0	0	0	0	0		189
Red Cell Transfusion	1	3	0	1	20	48	2	2	0	12	0	4	1	0	2	0	0	0	0	0	0		97
Short synacthen test	5	0	0	54	3	12	0	7	0	0	0	0	0	3	0	1	1	0	0	0	0		86
Transoesophageal echocardiography	61	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0		63
Approach to organ under ultrasonic control	0	0	0	0	25	1	0	0	0	19	0	0	3	0	0	0	0	0	0	0	0		48
Percutaneous biopsy of lesion of liver NEC (Disabled)	0	0	0	0	24	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0		37
Antifungal drugs Band 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0		18
Glucose tolerance test	0	0	0	9	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		15
Paracentesis abdominis for ascites	0	0	0	0	2	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0		13
Unspecified intramuscular injection	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		12
Left sided operation	0	0	0	2	0	1	0	1	0	0	0	0	3	1	0	0	0	0	0	0	2		10
Haemodialysis NEC (Disabled)	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0		9
Transthoracic echocardiography	5	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0		8
Immune response drugs Band 1	0	0	0	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0		7
Right sided operation	0	0	0	0	2	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	2		7
Other specified injection of therapeutic substance	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		6
Percutaneous transluminal peripheral insertion of central catheter	0	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0		5
Other procedures less than 5 per year																							73
Grand Total	**88**	**47**	**168**	**86**	**3084**	**393**	**59**	**70**	**20**	**638**	**5**	**12**	**149**	**990**	**6**	**60**	**734**	**214**	**16**	**37**	**16**	**21**	**6913**