

OFFICIAL

PANDEMIC SURGE PLAN

			PLAN
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1.0 Introduction

On 31 December 2019, the World Health Organization (WHO) was informed of a cluster of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province, China. On 12 January 2020 it was announced that a novel Coronavirus had been identified in samples obtained from cases and that initial analysis of virus genetic sequences suggested that this was the cause of the outbreak. This virus is referred to as SARS-CoV-2 the associated disease as COVID-19. Since the initial variant detection there have been multiple new variations of the coronavirus and a second and third surge across summer 2020 and 20/21 winter period with an expected new strain Omicron surge winter 2021/22.

This document describes the Trust's surge plan in the event of certain demand triggers being met within the Covid-19 pandemic.

2.0 Policy Statement

This plan outlines arrangements for surge as part of the Trust's response to the Coronavirus Pandemic. This plan is undertaken in line with the Trust's Major Incident Management Plan and Business Continuity Plans and will form part of a co-ordinated multi-agency response in accordance with the Civil Contingencies Act 2004. The plan is based on regional and national guidance developed by the UK Government and UK Health Security Agency (UK HSE) and should be read in conjunction with national guidance documents.

3.0 Definitions/Abbreviations

The World Health Organization (WHO) currently defines a pandemic as "the worldwide spread of a new disease. A pandemic occurs when a new virus emerges and spreads around the world, and most people do not have immunity."

Abbreviations are listed in Appendix D.

4.0 Roles and Responsibilities

The Trust Executive Team is responsible for ensuring a robust plan is in place together with adequate resources to deliver that plan when a pandemic occurs that seriously affects the Trust's ability to provide essential services.

This plan will apply to all staff, patients, contractors, volunteers and visitors on any Sherwood Forest Hospitals NHS Foundation Trust (SFH) site during the COVID-19 Pandemic.

This is a Trust wide document and is intended for all colleagues, wards and departments who have a role to play in the COVID-19 pandemic response.



5.0 Approval

Approval for this document will be made by the Trust Incident Control Team and then by the Trust Management Team (TMT). This is a living document, which will be updated to reflect changes in provision and location of services and amended as systems of preparedness are enhanced and strengthened. It will be subject to review at least annually.

6.0 Document Requirements

6.1 Summary

This plan continues to provide an overview of the actions to be taken by Sherwood Forest Hospitals NHS FT during a surge of COVID-19 demand to the hospitals. The plan is based on assumptions and guidance outlined in:

https://www.england.nhs.uk/coronavirus/secondary-care/

The principles outlined in this plan are supported by the Trust Business Continuity Plans where necessary.

There is uncertainty about what may happen during a pandemic. It is not possible to predict the severity or duration and some situations are beyond the control of Sherwood Forest Hospitals NHS FT. This document is designed to give direction and instruction to respond to COVID-19.

To ensure the Trust has up to date information about situations as they develop, the Trust Intranet has a dedicated page that will be regularly updated with relevant information for staff:

http://sfhnet.nnotts.nhs.uk/admin/webpages/default.aspx?recid=4393

6.1.1 Key Principles

Plans for responding to any pandemic build on and enhance normal business continuity planning. The key principles for the response to COVID-19 at SFH are:

- Patients will be at the centre of our decision making, mitigating the risk to them
- Reduce the risk of cross infection in both patients and SFH colleagues
- Lead and support colleagues in line with Health & Safety guidelines, CARE values, ensuring their well-being is paramount
- Learn from our experiences and that of others and implement this learning
- Manage Covid-19 surges with only necessary disruption to non-Covid services whilst maintaining first principle bullet point
- Assess risk and safely recover services for patients in line with national expectations
- Colleagues should be supported and provided with appropriate training and education for the areas they are working in

The Trust COVID-19 surge plan is based on a number of source documents, drawn from a wide range of documents covering a variety of issues. The content is subject to change as planning assumptions may differ from the actual situation and specific guidance may replace provisional guidance as the pandemic evolves.

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6.2 Human Resources

6.2.1 Staff Absence

Increasing staff absence, over and above normal levels, is a material risk during a pandemic leading to the risk to disruption of services to both patients with Covid and with other illnesses. This is through several areas:

- Actual illness caused by Covid-19 and a positive LFT and/ or PCR result
- Colleagues isolating with symptoms who may have a negative LFT result

Business Continuity Plans (BCPs) are in place to manage services with a 30%, 20% and 10% absence rate, although some of this is related to the pausing of elective services which in future surges would want to be avoided.

Bespoke BCPs may be required in services where there is a high level of infection or isolation or in services with a small number of colleagues.

Additional staff absences are likely to result from other illnesses, taking time off to provide care for dependants, to look after children in the event of schools and nurseries closing, family bereavement, shielding, practical difficulties in getting to work and/or other psychosocial impacts.

During the pandemic, daily staffing meetings will take place for nursing and where required medical staff and other impacted areas.

New guidance will be adopted as instructed and communicated across the organisation accordingly.

6.2.2 Staff Shielding

There is no additional guidance for staff to shield in 2022/23. Should this change, these measures will be determined at a national level, and the Trust will implement appropriate action for staff as instructed.

Shielded patients are identified with a flag on the Medway and Nerve Centre systems for future reference.

6.2.3 Staff Wellbeing

Staff wellbeing events will be strengthened during the pandemic. This will take the form of available support resource, e.g. psychology, occupational health, Vivup, Thrive app and ensuring, in the clinical areas, that staff have adequate provision of PPE stocks and equipment to undertake their duties, and food and drinks. There will also be an emphasis on staff taking breaks for rest and respite during work and between shifts and person-centred discussions relating to individual health and wellbeing concerns. Adjustments and flexible working will be explored where necessary and supported via compassionate discussions and individual risk assessments.



6.3 Organisational Plans

The Covid-19 Pandemic Surge Plan for the Trust is aligned to the identified principles and is based on the following assumptions and principles:

- All sites of the Trust will be engaged in the response to a Covid-19 Pandemic and any subsequent surges or re emergences of the virus
- Divisions and departments will be responsible for developing/reviewing and implementing their plans within the framework of the Trust COVID-19 Plan
- Effective communication will be essential to maintain services.
- Key policies and procedures must be robust and flexible enough to meet changing demands and unanticipated issues
- Acute services are part of a wider health and social care response
- Unprecedented demand on emergency services may result in the deferment of elective and non- essential work
- High levels of staff absenteeism are likely (between 15 to 20% of the workforce that may require time off at some stage over the entire period of the pandemic with individuals absent for a period of seven to ten working days)
- Staff will be redeployed to areas of greatest need within the Trust
- The Trust's obligations regarding the health and safety of its staff and visitors must be maintained
- There may be a sharp increase in hospital mortality rates and mortuary capacity may become limited very quickly

The principles as set out above will be actively managed via the **Incident Control Team (ICT)** – this is the strategic oversight group of the incident. It is chaired by the Chief Operating Officer or another member of the Executive Team and meets daily during the pandemic with reduced meetings depending on the national alert level. The Terms of Reference and standard agenda can be found in Appendices A and B. There are a number of sub-groups to the ICT established during the pandemic with a particular focus on workforce resilience, supply of goods and services to support clinical care and capacity.

Full Terms of Reference for each group can be within Appendix E.

6.3.1 Incident Control Room/Capacity and Flow

The assessment of healthcare demand and available appropriate capacity will be managed via the existing Trust hospitals' site/bed managers and operations centres. This will be on a continual basis, 24 hours per day, 7 days a week. Surge plans and available capacity will be instructed through ICT and monitored/ reported through the flow room.

The Associate Direction of Operations, Emergency Pathway is based in the command centre and attends all flow discussions Mon - Fri with Silver on call out of hours. The Loggist will be in attendance in line with national alert level and Incident command hours of operating.



6.3.2 Sitreps

The following additional SITREPs are to be put in place alongside normal reporting and national submissions. These require cooperation between Divisions, specific services and information services. The SITREPS will be subject to change depending on the national situation. As of November 2022, the core submissions for Acute Trusts are as follows:

- 10.00 Sitrep Paediatric bed report
- 11.00 Sitrep National Acute Trust (SDCS)
- 12.00 Weekly Monday Sitrep Acute Discharge (SDCS)
- 11.00 Sitrep Mortuary capacity submission (NHSX web portal) (Tuesday /Daily on request)
- 11.00 UEC Sitrep and bed report
- 11.30 Sitrep Maternity Service Alterations (Daily)
- 12.00 Weekly Cancelled Operations Elective Return (Mon)
- 12.00 Waiting List MDS (Weds)
- 12.00 Weekly Surgical Waiting List (Weds)
- 12.00 Sitrep National PPE (web portal) (Tuesdays only)
- 12.00 iiMarch Daily Update Submission to be completed and returned by providers with a declared Covid-19 Outbreak
- 12.00 Extended waiting times return (Weds)
- 12.00 CYP mental health condition (Weds)
- 14.00 Sitrep Weekly NHS Activity Collection (SDCS) (Weds)
- 14.00 CHESS (Mon)
- 14.00 ICU/HDU Flu
- 14.00 Weekly Blood Cancellations Sitrep
- 15:00 104 Week Wait Return (Weds)
- 17.00 Staff LFT Test results (Weds)
- 17.00 Lateral Flow testing (SCDS) (Tues)
- 17.00 LFD test report (SCDS) (Tues)
- 17.00 Staff LFT/LFD results (Weds)
- 17.00 Paediatric surgery submission (Fri)

6.3.3 National and Regional Guidance

All National and Regional Guidance will be received by the Trust COVID-19 Inbox. The Trusts Associate Director of Operations, Emergency Pathway is identified as the responsible owner to log, distribute and ensure that response deadlines are met in a timely manner. Out of hours the inbox is the responsibility of Gold On-call.

U:\Central\COVID19\Covid Spread sheet Management\COVID-19 Inbox

The National link to guidance is: COVID-19 | Topic | NICE

The Emergency Planning, Resilience and Response Lead for the Trust will work alongside the Local Resilience Forum and wider Integrated Care System partners to ensure information flows and wider escalations are communicated.



6.3.4 Business Continuity

Corporate and clinical services across the Trust have their own set of business continuity assessments and plans. These business continuity plans allow decisions to be made as to whether or not a service is essential to the safe functioning of the Trust.

Individual clinical departmental business continuity assessments and plans have been produced. It is expected that departments will initiate these plans during the pandemic. The link to Divisional and departmental business continuity plans is here: Business Continuity Plans

6.3.5 Service Changes

It is likely during a pandemic that a change to existing services may be required. This may involve temporary moves, suspension or closure of patient services. All service change will be reviewed and agreed at ICT. The change will be logged, given a reference number and communicated with external partners as appropriate. The required information includes:

- Date
- Division
- Department/Service
- Request made by:
- Service changes effective from date
- Review date
- Rationale E.G National guidance / Royal College guidance / Staffing. Please state is this
 consistent across the System.
- Clinical sign off Name and date
- Divisional sign off Name and date
- Any clinical or safety risks
- Safety net for patients
- Describe any impact on Social Services/Community Provider/Mental Health that would signal a communication to the wider system.

Where appropriate the NHSI/E Emergency Change Form will be completed and submitted to the CCG and Regional Incident Team.

6.4 Service and Divisional Surge Plans

Several areas and departments within the Trust may experience challenges in maintaining 'service as usual' during COVID-19 pressures. Brief outlines are provided below of specific service responses, but these will be adapted in response to emerging patterns and case presentations at the time. It is anticipated elective activity will be maintained Covid surges and should be managed as part of normal demand. In light of this, the thresholds for surge will be dynamic and accepting there may be pressures in part for the organisation and with the workforce.



Specific surge plans will be triggered as follows:

Plan	Triggers	Time to peak (based on Surge 1)
ED segregation	Covid-19 is circulating in the community	N/A
Adjustment to Medical rotas	As per medical staffing escalation plan	
Critical Care surge (up to 24 beds on a required incremental basis)	6 Covid positive or treated for Covid patients	12 days
Oxygen SITREP daily reporting	50% VIE fill	N/A
Medicine Full capacity plan for next surge area – Level 3	4 th floor at full capacity	N/A

6.4.1 Division of Urgent Care and Emergency Medicine

ED must maintain segregation to reduce the risk of nosocomial infections from Covid. This particularly includes the need for segregation within Resus where the risks are the highest due to the acuity of the patients and because of aerosolization.

The department was re-designed to respond to the infection control measures and segregation requirements. This involved relocating some services such as the paediatric minor illness pathway and minor injuries into alternative environments to create more space for ED adult Majors and Resus.

In order to facilitate the plan there are interdependencies on other specialities to support the delivery of a safe ED.

For the purpose of the plan

- RED patients have respiratory symptoms/Suspected Covid
- GREEN patients do not have respiratory symptoms/Covid related symptoms

6.4.2 Plan for Self-Presenting Patients:

- All patients will be requested to put a hospital issued surgical mask on before entering the ED
- All patients will be requested to use hand gel
- Patients requiring review in ED will be directed to ED Reception
- Patient will register at Reception
- Covid suspected patients will be requested to sit in the identified red zone waiting area, whilst awaiting triage
- None suspected Covid patients will be requested to follow the normal process
- Triage to occur and plan of care to be agreed

If the patient has Covid symptoms/Covid is suspected and requires treatment in majors they will be directed to the Red Zone within majors.



The Emergency Department has been segregated into Red and Green

Zones. Capacity has been expanded within the department to accommodate the predicted modelling of both an increase in patient demand and to allow for adequate social distancing.

Whilst the enhanced care cubicles within the Resus area are not full isolation rooms, they will have a higher level of protection from floor to ceiling curtains and can be used to provide greater isolation to red patients requiring higher levels of care.

Any patient requiring admission whether classified as Red or Green will have a fast swab taken in ED to determine whether they are Covid positive or negative prior to admission so that an appropriate bed and isolation area can be identified.

Emergency Department plans for COVD-19 can be found at Appendix F

6.4.3 Acute Medicine

The Emergency Admissions Unit (EAU) is a ward with capacity for 40 beds. EAU will take suspected/confirmed Covid patients directly into a side room/cubicle space.

The Short Stay Ward is able to take patients both with and without respiratory symptoms; the areas have associated staffing to enable patients to be staffed separately. The ward accepts short stay (less than 72 hours). The ward has capacity for 40 beds in total.

6.4.4 Discharge Lounge

Should the surge plan be triggered as part of major incident the Discharge Lounge will move location. Business as usual will apply until then and patients will be segregated as per infection status within the existing unit as below.

Discharge Lounge	Division & Specialty	Specific Details	Number of Beds
Clinic 15, Discharge Lounge	Urgent & Emergency Care	Mon-Sun 7am-9pm	12 green chairs

6.5 Division of Surgery

6.5.1 Critical Care

The full Critical Care Surge Plan for COVID-19 can be found in Appendix G

In summary, a sustained increase in demand for Critical Care services to expand beyond normal capacity will be / can be as a result of:

- An increase in patient numbers,
- A decrease in number of staff available, or
- Flow through the system being impeded.

For the purposes of the COVID 19 pandemic, all patients admitted to Critical Care with respiratory symptoms/disease as outlined by the UKSHA guidance 10th March 2020 will be classed as 'infectious' until proven otherwise.

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SFH commissioned critical care capacity is 13 bed spaces –: 12 Level 3 equivalents + 1 nurse in charge. Real time monitoring of Critical Care beds is done via regular bed meetings and to the Mid-Trent Critical Care Network via the NHS Pathways and Directory of Services system (DoS) which is updated every six hours as a minimum. Flow and capacity are currently managed by the Critical Care Band 6s, Ward leader/deputies, Matron and Divisional General Manager with escalation to Bronze/Silver in conjunction with the Consultant on call for the Critical Care Unit (CCU).

This surge plan describes the isolation of positive and potential COVID-19 patients through a series of compartmentalised phases within a number of annexed areas. It assumes a predicted flow in to CCU and maximum utilization of Respiratory virus and non-respiratory virus Zone beds. However, this remains fluid to enable the safest patient care depending on circumstances (patient numbers, acuity and staffing skill mix). The described phases may differ depending on numbers within the clinical Zones and the total figures are the maximum capacity at that stage.

Baseline	13
Commissioning of 2 bed spaces on B Side (with isolation)	+2
ICU will then surge into Theatre Recovery	+8
Total	23

COVID patients will be admitted to the ICU, firstly to side A and then to B side should isolation capacity allow. Should isolation rooms not allow, Theatre 8 will be utilised.

Further capacity identified for escalation includes:

Location & Type	No. of beds	Nurse to patient ratio	Medicine cover	Patient Cohort
Theatres 8, 7, 6, 1a	12	`	Critical Care and Anaesthetics	Surge of Critical care patients
EAU – High dependency admissions unit	4	1:2 EAU team, UEC division	Acute medicine team	Patients admitted via ED requiring enhanced care Examples include: - DKA - Overdose - Post seizure

SFH will adhere to national guidance ensuring that critical care is offered and provided in an appropriate manner whilst recognising that in the event of demand outstripping capacity, national and regional guidance on utilising regional capacity, patient transfers or any appropriate triage decisions will be followed.

Daily meetings will occur within the Trust to assess the response and likely duration of the surge escalation. Once the immediate response to the emergency nears completion, the emphasis will move to recovery and remediation. The Hospital Gold Command Team will assume the strategic lead in coordinating the Trust process of returning the hospital to a state of normality. This recovery process will be managed through a 3-tier management structure directed by the Gold Command Team (Strategic), managed by the Silver Command/ Site management team (tactical) and actioned by the Division / Service Areas (Operational).

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Should any of these triggers be met this would prompt an MDT discussion to review:

- Resident consultant on call for general anaesthesia/ITU
- Nursing staffing levels review
- Need for merit team implications on both anaesthetic and ODP resource
- Elective operating number and type of surgeries.
- Anaesthetic trainees' rotas review and number of Reg/SAS/CT needed overnight, plus need for medical tier 1 doctor support.
- Surgical divisional support to critical care and on-going workload

The trigger of inpatients diagnosed is proposed as there is a correlation between this and the actual ICU bed requirement which occurs approximately 5 days later.

6.6 Division of Medicine

6.6.1 Respiratory

Patients who present with clinical or radiological evidence of pneumonia or influenza like symptoms and meet the current case definition requiring admission will take the following pathway if the triggers outlined below are met.

Monday – Friday 8am – 6pm

- Patient admitted to EAU in a side room clerked through 'normal' medical admission process by Acute Medicine/GIM on-call team.
- If no side room capacity on EAU then the patient can be discussed with the on-call respiratory consultant for review in ED and transfer to respiratory side room (RSU, Ward 42 or Ward 44) if no other patients on EAU are awaiting a respiratory bed.
- If admission agreed, clerking done by Acute Medicine/GIM on-call team and patient moved from ED to fourth floor. Patients will be reviewed either in ED or on level 4 by the respiratory consultant on-call
- If no capacity on fourth floor the below 'out of hours' process will be followed
- Covid positive patients with relevant other specialty diagnosis (e.g. diabetic ketoacidosis, acute liver disease) may be transferred directly to the specialty base ward following PTWR by the acute medicine consultant in ED

Outside of above hours (weekends and bank holidays)

- Patient admitted to EAU in a side room clerked through 'normal' medical admission process by Acute Medicine/GIM on-call team.
- If no side room capacity on EAU, patient admitted to SSU into side room (SSU side rooms to be treated as 'EAU overspill')
- Clerking done by Acute Medicine/GIM team and patient moved from ED to SSU
- Respiratory Consultant in-reach for Covid-positive patients with respiratory symptoms will be
 provided to SSU on the same basis as is provided to EAU (This includes weekends and bank
 holidays for this specific group of patients and respiratory, not other specialties): referrals for posttake review between 8 and 6 Monday to Friday, and review of patients on weekend mornings.



A number of steps are required to support this, these are;

- Daily IPC review of side rooms on EAU, SSU & fourth floor to ensure most appropriate patients are in side rooms
- Patients with respiratory symptoms and Covid positive may be co-horted. Patients with incidental Covid positivity without respiratory symptoms should be isolated in an individual cubicle.
- Respiratory physician in-reach for post takes review/ specialty review to EAU and to 'EAU overspill' on SSU. Referrals for review will be made on ICE (this is current process on EAU)
- Clerking teams will make every effort to clerk patients in ED. If required clerking carried out on SSU by take team
- 'EAU overspill' (on SSU) to be reviewed before 8AM bed meeting by the UEC Bronze on Call and bed-waits to be discussed in bed meeting
- Short Stay Unit has sending rights to specialties where a patient has been admitted directly to SSU only for Infection Prevention Control reasons. Consultant-to-consultant referral is not required for these patients but is likely to have been requested if a specific specialty is identified.

Patients who are Covid-19 positive should be allocated to a ward for their presenting symptoms; for example, if a patient is presenting with a stroke, and are Covid-19 positive the patient should be placed on the Stroke Unit.

For patients who are Covid-19 positive with no other presenting symptoms; they should follow the process described in 6.6.1 and placed in the next available ward bed in line with Infection Control guidance. There is a need to avoid the following wards due to the vulnerability of the patients who are on those wards:

Ward 24 Ward 22

However, it is recognised that in the event of significant surge, these areas may not be avoided and in which case, there will need to be an assessment of risk with Infection Control support.

Non-critical care CPAP is delivered on Ward 23. However, if they reach fully capacity then consideration to step up to the Respiratory Support Unit (RSU) (dependent on staffing and their capacity).

The implementation of a Respiratory related RSU will be decided at ICT following consultation with Respiratory and ITU Lead Clinicians.

6.7 Division of Women and Children

6.7.1 Acute Paediatric Services

Patients will be nursed on the general paediatric ward and treated in line with their COVID-19 status positive/suspected and negative.

Elective clinically urgent cases will be maintained in line with Trust processes and Outpatients will be offered either via a telephone consultation or face to face if deemed clinically appropriate to see the patient. These will be risk assessed by the Consultant using the risk status

All tertiary pathways are currently maintained via contact with speciality colleagues in those hospitals and will be managed on an individual case by case basis



6.7.2 Children's Assessment Unit

The Children's Assessment Unit will operate extended hours from 10am to 10pm Monday to Sunday. This will be a consultant led service who will also provide a triage and advice and guidance service to primary care.

6.7.3 Maternity and Neonatal Services

The Trust will plan its maternity response in line with current PHE guidance. The aim of the plan is to ensure that:

- A flexible and practical approach to maintaining safe maternal and neonatal care is adopted.
- SFH's maternity services are resilient and meet the needs of the local population.
- SFH promotes partnership working across the breadth of maternity services.

Labour and Home Birth

One birthing partner is permitted to attend the birth and will be reviewed against the Trust's visiting policy. The midwifery team will support any woman who is by herself in this situation and are able to provide support in advance of the birth.

The home birth service will continue to run as business as usual but be subject to review against all relevant national guidance.

Neonatal Services

The service continues to work within the Service Specification for Level 2 and Level 3 babies. All Tertiary pathways with NUH remain intact and will be managed on a case-by-case basis. Out of area referrals may be required if capacity is full in local tertiary units which is within the normal Network process.



6.8 Division of Diagnostics and Outpatients

6.8.1 Infection Prevention and Control basic principles

Trust infection prevention and control advice both during the COVID-19 pandemic will follow the latest UKSHA Guidance. Key points have been summarised below with further detail available on the Trust Internet page: http://sfhnet.nnotts.nhs.uk/admin/webpages/default.aspx?recid=4393

- Consistently implement standard infection prevention and control principles and additional respiratory protection including use of gloves, aprons and surgical masks for all known or suspected pandemic Covid-19 patients and change to an FFP3 mask if carrying out and aerosol generating procedure.
- All staff wearing FFP3 masks must be fit tested.
- Frequent soap and water hand washes supported by regular use of alcohol hand rub.
- Clear isolation signage to guide staff and visitors on appropriate PPE.
- Frequent cleaning of high touch surfaces
- Maintain social distancing

Isolation of Patients

All suspected or confirmed COVID19 positive patients should be nursed in single rooms to assist with the reduction of transmission. Whilst swab results will support this, they must not delay patients getting to the specialties that they need. Once the Trust reaches its capacity to care for such patients in single rooms, it will move to cohorting infected patients in bays and then in wards to help with the reduction of infection transmission.

6.8.2 Pharmacy

The Pharmacy service will continue to provide high level oversight on how medicines are used within the Trust maintaining security and safety to the highest degree feasible within the crisis situation. Processes will be in place for the procurement and supply of medicines especially critical medicines and those used to treat those patients affected by COVID-19. Operational processes will prioritise workload throughout the pandemic period prioritising staff and services as appropriate according to available personnel to maintain patient flow and safety. Stock levels will be monitored across the organisation, where feasible, levels adjusted according to on-going need and supplies adjusted to meet need where these medicines are available. Medicines shortages will continue to be monitored and alternative sources and medicines sourced as appropriate.

6.8.3 Pathology

The Pathology service will continue to function as normal, supporting activity whilst it is still operational or until staffing capacity reaches a tipping point.

6.8.4 Mortuary Arrangements and Excess Deaths

The current standard Mortuary capacity is 76 including 18 bariatric fridge spaces and freezer spaces on the KMH site and 11 fridge spaces at Newark. The Excess Deaths Cell have confirmed they will not be providing additional external capacity for future pandemic related surges.



The projected scale of excess deaths in a pandemic is likely to present many challenges for local services. In view of the number of deaths expected, local authorities, in conjunction with the Coroner, will make provision for early support from funeral directors and mutual aid.

Mortuary capacity is reported on a daily basis Monday – Friday with an agreed expected capacity on a Friday afternoon to accommodate usual weekend activity. This information is also submitted nationally.

As per the mortuary capacity contingency plans (attached), if demand for the KMH mortuary increases over the expected numbers, deceased patients will be transferred to Newark in the first instance.



Close liaison with the Coroner's office and funeral directors will ensure deceased patient collection is expedited to facilitate capacity.

The Mortuary Capacity Contingency Plan is reviewed annually before distribution to Trust Silver oncall and other appropriate personnel (due to be reviewed and distributed in December 2022)

In addition, histopathology staff are now trained in basic mortuary procedures in case of a reduction in staff.

6.8.5 Radiology

Where workforce allows the Radiology service will operate as a normal service within the IPC restrictions but with social distancing and the use of PPE. There is enhanced staffing out of hours to enable adherence to IPC processes. Reporting is being undertaken on and off site by in-house Radiologists and radiographers, with outsourcing provision overnight. The service will be supplemented by the use of external mobile scanners and the independent sector.

6.9 Procurement and Supply Chain

The Procurement and Materials Management team order, deliver and store ward consumables to forty-four locations throughout the Trust. The team have traditionally been closely involved with the Infection Prevention and Control team when planning for pandemic responses. The team:

- have developed a Procurement influenza pandemic Business Continuity Plan
- have developed and implemented a PPE Strategy which is appended to the Business Continuity Plan
- will pre-determine the stock levels of consumables for any newly designated pandemic wards
- will receive critical supplies for PPE items from the national system and on the triggering of this
 plan will report this information at appropriate timescales to the ICT
- will present a regular stock take Equipment Report to ICT at appropriate intervals
- will calculate anticipated requirements for other consumables and notify NHS Supply Chain

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6.10 Estates and Facilities Division Representative / Medirest Contract Director

- this will be run via the PFI contract working with the Associate Director of Estates & Facilities
- will consider and advise on stockpiling disposable linen in the event of laundry services being greatly reduced due to staff shortages
- will consider and advise on the stockpiling of food/water and other consumable goods
- will develop pandemic influenza contingency plans with external contractors to ensure continuity of supplies and services
- will monitor and advise on waste disposal

6.11 Communications

The Trust's Communications team is primarily responsible for communicating with staff, volunteers, patients, visitors, stakeholders and families and carers in the build up to and during a pandemic. The communications service is required to: work with the Trust's command and control team regarding the communications crisis plan and business continuity plan; provide internal communications through all available internal communications channels; make UKSHA information available to staff and patients; publish up to date information on the Trust website and handle proactive and reactive media relations.

The Communications service will interact with system colleagues, NHS England (Midlands) and LRF colleagues to ensure communications is consistent and issues are shared.

Trust wide information will be distributed daily during a pandemic surge at least twice per week during the Covid period. This will be via email and will be shared at each shift handover across all services within the Trust.

Key external messages may include number of staff and patients affected (The trust website will show what services are impacted); business continuity plans in place and other messages as directed by the Department of Health and Social Care.

The service will be responsible for responding to reactive enquiries; media briefings if a major incident is declared; liaising with relevant agencies (UKSHA, DHSC, NHS England, and the Nottingham and Nottinghamshire ICS among others, and providing information for patients and visitors.

7.0 Additional Surge Capacity (major incident response)

In the event of the hospital requiring additional emergency capacity, or a major incident is declared, the below areas will be considered to open. These areas are in line with the Trusts Full Capacity Protocol. The decision to open additional emergency capacity will be undertaken by ICT. The derogation of staffing numbers will be led by the Chief Nurse and Medical Director, alongside any national guidance at the time. EQIs are in place for all the proposed areas and held centrally by the Chief Nurse and respective Divisional teams.

The order of opening may change following ICT and taking into consideration the circumstances; Divisions will be supported to move or cancel services accordingly to allow the safe opening of emergency capacity. The plan below takes account of continuing the winter plan roll out as planned.

Ward	Additional Beds	Comments
Surgical Daycase Unit	8	Detrimental impact on electives
Medical Daycase Unit	8	
Cath Lab	10	
Minster Ward	22	Newark

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8.0 MONITORING COMPLIANCE AND EFFECTIVENESS

Minimum	Responsible	Process	Frequency	Responsible
Requirement	Individual	for Monitoring	of	Individual or
to be Monitored		e.g. Audit	Monitoring	Committee/
				Group for Review of
				Results
(WHAT – element of compliance or effectiveness within the document will be monitored)	(WHO – is going to monitor this element)	(HOW – will this element be monitored (method used))	(WHEN – will this element be monitored (frequency/ how often))	(WHERE – Which individual/ committee or group will this be reported to, in what format (e.g. verbal, formal report etc.) and by who)
All elements of	Chief Operating Officer	Incident Control Team	Prior to a	Executive Management
response will be			forecast	Team
monitored			pandemic and	
			at least annually	
			outside of a	
			pandemic	

9.0 Training and Implementation

All staff will be trained as required with the area they will be working. A list of individuals with respiratory, critical care and FIT mask testing skills is maintained at local levels. Training will be implemented as required through bespoke group and 1:1 to deliver a level of competence.

The requirement to continue with all aspects of mandatory training during a pandemic will be reviewed.



10.0 Impact Assessments

EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/proc	edure being reviewed: Covid-19 Pandem	ic Plan	
•	cy/procedure: Revised existing policy		
Date of Assessment: 15th De			
	dure and its implementation answer the one of the contraction down into areas)	questions a – c below against each cha	aracteristic (if relevant
Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality
The area of policy or its imp	lementation being assessed:		
Race and Ethnicity	No change to impact	Adherence to National policy actions via covid 19 inbox	Proactive actions to ensure individuals who may be in the protected characteristics of health inequalities have equal access to hospital services
Gender	No change to impact		
Age	Patients who may be categorised as elderly and requiring support on discharge may be affected if	Triggers in place to identify bed design in the event of surge	Resource availability to enable speedy discharges



urgent discharges to clear		
beds is required		
No change to impact		
No change to impact	Adherence to National policy actions via covid 19 inbox	
No change to impact		
No change to impact	Adherence to National policy actions via covid 19 inbox	
No change to impact		
No change to impact		
No change to impact	Adherence to National policy actions via covid 19 inbox	
	beds is required No change to impact No change to impact	beds is required No change to impact No change to impact Adherence to National policy actions via covid 19 inbox No change to impact Adherence to National policy actions via covid 19 inbox No change to impact No change to impact No change to impact Adherence to National policy actions via covid 19 inbox Adherence to impact No change to impact Adherence to National policy

What consultation with protected characteristic groups including patient groups have you carried out?

• Submitted to EDI lead for discussion and inclusion

What data or information did you use in support of this EqIA?

• D2A discharge information, national Covid reports

As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints, or compliments?

• No

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Level of impact

From the information provided above and following EQIA guidance document <u>Guidance on how to complete an EIA</u> (<u>click here</u>), please indicate the perceived level of impact:

Low-level of Impact

For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

Name of Responsible Person undertaking this assessment: Maggie McManus

Signature:

Maggie McManus

Date:

15th December 2022

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ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of an environmental impact assessment is to identify the environmental impact, assess the significance of the consequences and, if required, reduce and mitigate the effect by either, a) amend the policy b) implement mitigating actions.

Area of impact	Environmental Risk/Impacts to consider	Yes/No	Action Taken (where necessary)
Waste and	Is the policy encouraging using more materials/supplies?	Yes	Monitored and
materials	 Is the policy likely to increase the waste produced? 	Yes	reported through
	• Does the policy fail to utilise opportunities for introduction/replacement of materials that	N/A	IPC and national
	can be recycled?		guidance
			Waste
			monitoring
Soil/Land	 Is the policy likely to promote the use of substances dangerous to the land if released? (e.g. lubricants, liquid chemicals) 	No	
	• Does the policy fail to consider the need to provide adequate containment for these substances? (For example bonded containers, etc.)	N/A	
Water	Is the policy likely to result in an increase of water usage? (estimate quantities)	Yes	Hand
	• Is the policy likely to result in water being polluted? (e.g. dangerous chemicals being introduced in the water)	No	washing/IPC
	• Does the policy fail to include a mitigating procedure? (e.g. modify procedure to prevent water from being polluted; polluted water containment for adequate disposal)	N/A	
Air	• Is the policy likely to result in the introduction of procedures and equipment with resulting emissions to air? (For example use of a furnaces, combustion of fuels, emission, or particles to the atmosphere, etc.)	No	
	Does the policy fail to include a procedure to mitigate the effects?	N/A	
	Does the policy fail to require compliance with the limits of emission imposed by the		
	relevant regulations?	N/A	
Energy	Does the policy result in an increase in energy consumption levels in the Trust?	Yes	Electric, medical
	(estimate quantities)		gases as per
			demand driven-

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			monitored and reported
Nuisances	 Would the policy result in the creation of nuisances such as noise or odour (for staff, patients, visitors, neighbours and other relevant stakeholders)? 	No	

11.0 Evidence base

https://www.england.nhs.uk/coronavirus/secondary-care/

U:\Central\COVID19\Covid Spread sheet Management\COVID-19 Inbox

12.0 Keywords

Covid-19 Surge Pandemic Response Surge plans Incident management Control

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13.0 Appendices

Appendix A - Incident Control Team Terms of Reference

Incident Control Team - Covid 19

The ICT is a delegated sub-committee of the Executive Team Meeting

Membership

In Hours (weekdays)	Out of hours (weekends)
Chief Operating Officer (Chair)	Executive on Site (Chair)
Medical Director (Vice-Chair)	Gold on call
Chief Nurse (Vice-Chair)	Silver on call
Divisional Leadership team rep - UEC	Senior Nurse on Site
Divisional Leadership team rep - Surgery	Duty Nurse Manager
Divisional Leadership team rep - D&O	Infection Control Nurse on call
Divisional Leadership team rep - W&C	Communications on call
Divisional Leadership team rep - Medicine	Procurement Lead
Infection Control Lead	Consultants on call (where necessary)
Procurement Lead	, , , , , , , , , , , , , , , , , , ,
Communications Lead	
Head of Operations	

Role - The ICT will:

- Ensure accurate and timely SITREP reporting to all relevant external agencies data on numbers of patient and staff who are ill showing symptoms of Covid 19. Information collated will include patient name, date of birth, date and time of onset of symptoms, ward or department
- Review daily guidance from NHSE/UKHSA and other relevant agencies
- Sign off surge plans from specialties
- Decide the level of response demanded by the current level of activity
- Oversee bed/activity management and scale down elective and non-urgent activity as necessary to re-deploy wards as emergency admissions facilities
- Ensure that all non-essential Trust meetings have been cancelled, but that where necessary business as usual continues
- Ensure that all significant decisions are logged appropriately and preserved safely
- Through the workforce resilience sub-group monitor staff shortages to ensure safe levels are maintained. If this is no longer possible take decisions to close areas and merge staffing complements, revising decisions on adequate risk assessed staffing
- Oversee the production and review of emergency rotas
- Ensure absence reporting system is effectively implemented
- · identify wards for re-designation on a planned basis
- Ensure the provision of a robust Incident Control Room
- Oversee and sign off the production of a Covid-19 Pandemic plan
- As designated by the Executive Team authorised appropriate expenditure to support the services in response ensuring all investments are backed by an approved strategy for use
- Report weekly to Executive team/Trust Management Team

.



Duties - The ICT has a duty to:

- review the plan and note the actions required
- contact and brief all departments to ensure preparedness
- · liaise with the communications team to ensure that links with other agencies are in place
- monitor the developing situation
- consider itself on standby

Serviced by - will oversee:

- Agreement of agenda with the chair.
- Maintenance of an action and decision log
- Maintenance of a risk and issue log
- Preparation of update to the board via the risk committee

Frequency

The ICT will meet daily, 7 days a week and this will be escalated or stepped down as required. The gold commander for Covid -19 on days and gold commander out of hours will assemble the ICT as required.

Quorum

The committee is quorate when a representation from executive team, operations, clinical teams, and the infection prevent, and control team are present.

Reporting Procedures

The committee will report to the Executive Team meeting as required and hold an "action log" of issues, owners and timelines for completion.

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Appendix B – Agenda for Incident Control Team

Date: Time:

Venue: Boardroom / MS Teams

No	Item	Presenter	Paper
1.	Welcome and Introductions	Chair	Verbal
2.	Actions, Risks, and Issues Log Review	Chair	Enclosure 2
3.	Covid/IPC Update	IPC Representative	Enclosure 3
4.	Operational Update	Operations Representative	Verbal
5.	Regional and National Guidance Log and Immediate Actions Required	Emergency Planning & Business Continuity Officer	Verbal
6.	Workforce Update	HR Representative	Verbal
7.	Equipment/Procurement Update	Procurement Representative	Verbal
8.	Oxygen usage (inc. VIE levels)	Estates Representative	Verbal
9.	Vaccine Update	HR Representative	Verbal
10.	PCN update	PCN Representative	Verbal
11.	Communications update Any key messages for organisation	Communications Representative	Verbal
12.	C19 Dashboard – for information	ALL	Enclosure 12
13.	Financial Recommendations – • None received	-	-
14.	Adhoc Items (including non-Covid Incident items) •	ALL	Verbal
15.	Any Other Business	ALL	Verbal

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Appendix C - Sherwood Forest COVID-19 Ward Standard Operating Procedure

Introduction

In the event of a surge of a confirmed pandemic Coronavirus at SFH or when the need for isolation of other viral infections affects business continuity, a decision to open an isolation ward will be decided by the Gold on call in collaboration with the Incident Control Team.

The location of the Isolation ward will be Ward 44.

The purpose of the isolation ward is to prevent transmission of infection because of the significant consequences associated with hospital acquisition of infection.

Referral Process

- Potential referrals for the isolation ward will be identified by the relevant medical team, Infection Prevention and Control team and the Operations Centre and must meet the admission criteria as defined below.
- The IPC team will determine which patients are admitted to the Isolation ward following the referral, in collaboration with the IPC team and Virology
- The operations centre will facilitate transfers to the Isolation ward in collaboration with IPC team, IPC team and Microbiology.
- The responsibility for the patients transferred to the Isolation ward remains that of the Consultant and team under whom they were admitted. This team must be kept informed throughout this process.

Admission criteria for Cubicles on the Isolation ward:

- Suspected Coronavirus that has been swabbed
- Laboratory confirmed Influenza A only
- Laboratory confirmed Influenza A and still symptomatic
- All other respiratory viruses or co-infections

Cubicle's usage should begin in numerical order with the ward doors closed on the wards' corridor, (i.e. 2-7) to effectively close off contaminated areas.

Admission criteria for cohorting in bays on Isolation ward:

- Laboratory confirmed Coronavirus
- The decision to admit onto the Isolation ward will be made by the ID Consultant with the support of the Respiratory Team.

Staffing requirements (this is based on the assumption that the ward has 22 patients)

All staff working on the Isolation ward must be competent and compliant with the use of personal protective equipment (PPE/FFP).

All staff working on the Isolation ward will be offered vaccination (where available) if they have not had their vaccine.

Security staff should be arranged with Medirest for all entrances to the ward to prevent non-essential staff and relatives entering. These staff should be provided with clear information about how to challenge and how to help.

Staffing required for 24 patients:

Medical staff

Monday to Friday (0900 - 1700)

- Named Respiratory Consultant
- 1 dedicated SpR
- 2 dedicated Junior

Monday to Friday (1700 - 2100)

Dedicated x 2 Junior reporting to IPC/Respiratory Consultant

Weekend (0900 - 2100)

Dedicated x 2 Junior reporting to IPC/Respiratory Consultant

All week (2100 - 0900)

- Dedicated x 2 Junior reporting to IPC/Respiratory Consultant
- Hospital at night reporting to IPC/Respiratory Consultant

Nursing staff:

- 5 RNs per shift.
- 4 dedicated HCAs per shift.
- Dedicated Floor Walker

Therapist:

- Named physiotherapist and OT staff
- Named pharmacist

Domestic staff:

Dedicated domestic and catering staff

Administrative support:

1 dedicated Ward clerk to be based at the ward reception

Staff requirement will be reviewed and adjusted to Isolation ward bed capacity.

N.B: If possible, staff described as "dedicated" should not work in other areas of the Trust. All Staff within SFH will be expected to provide support to Ward 44 that have undertaken and been able to demonstrate that they can use FFP safely.

A designated area on Ward 44 will be facilitated for staff to undertake their breaks. PPE/FFP must be removed, and hand hygiene must be performed on entering the area.

Staff on Ward 44 will have a designated changing area.



Other people wishing to enter the ward must have a very clear reason for entry and must follow infection control precautions.

Equipment, supplies and facilities requirements

- **Personal Protective Equipment** i.e. masks, aprons, gloves must be available continuously and regularly topped up
- A supply of scrubs for all staff entering and working on the ward must be available. The suggested level of supplies required is: 20 each of the small, medium, large, extra-large per 24hrs these will be supplied via the linen room (Ext 3139).
- Waste Management: infectious waste bins should be placed in every bay and single room, clean utility, dirty utility
- **Enhanced cleaning** using disinfectant (1 in 1000 chlorclean) and disposable cloths and mops must be in place whilst the ward is an Isolation ward.
- **Equipment** must **not** be shared with any other ward, remove equipment from the ward that is not required
- **Signage** at entrances there will be clear signage indicating designation of ward and restricted visiting

Relatives and Visitors

 Visitors will NOT be allowed on the ward at any time, in case of emergency exceptions – these must be discussed with IPC.

Transfers or movements

- If patient movement from the ward is required, then patients must wear a non-valve mask during this process and until effectively isolated again.
- De-isolation of patients from the Isolation ward must be discussed IPC team, ID/Virology and the Operations centre
- Patients on the Isolation ward should be discharged home directly, via the adjoining ward (Ward 41) once clear of isolation precautions to prevent recontamination. The patient should not use the discharge lounge.
- The requirement for isolation (or not) must be communicated with transport staff including ambulance crews and with long term care facilities as appropriate.

Appendix D – Abbreviations and Definitions

ABBREVIATION	DEFINITION		
ADHD	Attention Deficit Hyperactivity Disorder		
AGP	Aerosol Generated Procedure		
CCU	Critical Care Unit		
CHESS	COVID-19 Hospitalisation in England Surveillance System		
COPD	Chronic Disruptive Pulmonary Disease		
D&O	Diagnostics and Outpatients		
DHSC	Department of Health and Social Care		
DKA	Diabetic Ketoacidosis		
DoS	Directory of Services		
EAU	Emergency Admissions Unit		
ECDC	European Centre for Disease Prevention and Control		
ED	Emergency Department		
ESR	Electronic Staff Record		
FFP	Filtering Face piece		
GHSI	Global Health Security Initiative		
GIM	General Internal Medicine		
ICP	Integrated Care Partnership		
ICB	Integrated Care Board		
ICT	Incident Control Team		
ICU	Intensive Care Unit		
ID	Infectious Disease		
ITU	Intensive Treatment Unit		
KMH	Kings Mill Hospital		
LRF	Local Resilience Forum		
MCH	Mansfield Community Hospital		
NHIS	Nottinghamshire Health Informatics Service		
NHS	National Health Service		
NHSE	National Health Service England		
NHSI	National Health Service Improvement		
NIV	Non-Invasive Ventilation		
PARP	Poly-ADP Ribose Polymerase		
PPE	Personal Protective Equipment		
PSV	Pandemic Specific Vaccine		
RSU	Respiratory Support Unit		
SCF	Senior Clinical Fellow		
SCID	Sickle Cell Disease		
SDCS	Strategic Data Collection Service		
SFHT	Sherwood Forest NHS Hospitals Trust		
SHO	Senior House Officer		
SITREP	Situation Report		
Spry	Speciality Registrar		
UEC	Urgent and Emergency Care		
UKSHA	United Kingdom Strategic Health Authority		
WHO	World Health Organisation		

Appendix E – ICT and Subgroup Terms of Reference

Healthier Communities, Outstanding Care	Sherwood Forest Hospitals WHS Foundation Thus		
Terms of Reference	V1.1 09/04/2020		
Name of Committee	Covid 19 Workforce Sub-Group		
Constitution	The Covid 19 Workforce sub-group is a delegated sub-committee of the Covid 19 Operational Group		
	Deputy Director HR		
	Head of OH		
	Head of Resourcing		
Mamharahin	HRBP		
Membership	Operational HR Colleagues		
	Health and Safety Manager		
	Associate Chief Nurse		
	Operational colleagues if and when required		
	The groups role is to ensure the Trust is brought up to a "fully prepared" status from a workforce perspective, it will:		
	ensure adequate workforce availability by:		
	 utilising ESR to identify clinical and non-clinical skills which staff may have but not use in their current role, and which may be crucial to redeployment 		
	o developing a system of identifying staff who have recovered from Covid 19 and can be prioritised for the care of patients infected or units where the introduction of influenza would have serious consequences		
	o ensuring that staff details for each ward/department are up to date		
Data	o identifying routes to accessing additional staff resource		
Role	o advising on staff transport issues if services are disrupted		
	o liaising with the Trust's Accommodation Manager and advise on provision of accommodation for staff who are unable to commute to and from work		
	o considering the possibility of expanding nursery facilities in the event of schools closure		
	ensure guidelines for the exclusion from duty of staff deemed to be an infection risk are in place		
	ensure a system to track, monitor and report staff sickness absence across all Trust sites is in place		
	ensure plans for the provision of psychological and social support for staff are in place		
Duties	The group has a duty to ensure the trust is fully prepared for a pandemic from a workforce perspective and to escalate any risks / issues to the Covid 19 operational group		
	The PMO will oversee:		
	Agreement of agenda with the chair.		
Serviced By	Maintenance of an action and decision log		
	Maintenance of a risk and issue log		
	Preparation of update to the ICT		
Frequency of Meetings	The group will meet weekly and this will be escalated or stepped down as required.		
Quorum	The committee is quorate when a representation from XXX are present.		
	The committee will report to the Covid 19 Operational Group as required and hold an "action log" of issues, owners and timelines for completion.		
Reporting Procedures	The following groups report into the Workforce Group; Recruitment and Resourcing Sub Group Advice and Guidance Sub Group Training, Education and Development Sub Group Staff Health and Well Being Sub Group Swabbing Sub Group		
Date Approved	Apr-20		

Appendix F – Emergency Department plans for COVID-19

Specific Details	Capacity (Number of
	patients)
Currently staffed by SFH but may move to St	N/A
John's Ambulance 8 am-Midnights x 7 days.	
·	
	N/A
speciality clinics to see patients following initial	
assessment.	
Symptomatic patients/those with a face mask to sit	
in specific area within waiting room	
	11/4
	N/A
· ·	
surge- all minor injuries to go to fracture clinic	
to create room on minors for paediatrics	
Paediatrics minor illness to go to CAU. Paediatrics	N/A
to be run from minors. PC24 continues to be	
, ,	
primary care.	
Red patients can be accommodated in SDEC in	23 treatment chairs and
	2 trolleys. Red patients to sit within
, , , , ,	red zone
before they move to the unit so that appropriate	100 20110
isolation measures can be put in place	
Resus for red and green patients.	12
Evention, prodictric requestionts will not discharge	In high demand, patients
	will need to be nursed 2 patients in 1 space. Max
non- cross contamination.	capacity 16
Would turn into green zone	22 trollies
Used for 'fit to sit patients'	8 chairs (Cannot mix
	green and red patients
To go into paediatric space	together) 12-14 trollies dependent
10 go into paediatrio space	upon spacing in between
	Currently staffed by SFH but may move to St John's Ambulance 8 am-Midnights x 7 days. For patients to be asked to sanitise hands and wear a mask No change in process. There is support from speciality clinics to see patients following initial assessment. Symptomatic patients/those with a face mask to sit in specific area within waiting room Patients who have a confirmed fracture are sent to an Open Access Fracture Clinic the same day (Mon-Thurs 9am-4.30pm, Friday 9-12:30). If in surge- all minor injuries to go to fracture clinic to create room on minors for paediatrics Paediatrics minor illness to go to CAU. Paediatrics to be run from minors. PC24 continues to be utilised for paediatric patients that can go to primary care. Red patients can be accommodated in SDEC in one of the treatment rooms. 3 x fast swabs can be used each day for query/symptomatic Red ambulatory patients to determine covid status before they move to the unit so that appropriate isolation measures can be put in place Resus for red and green patients. Exception: paediatric resus patients will need to be nursed in red area with appropriate precautions for non- cross contamination. Would turn into green zone



Appendix G- Critical Care surge plan for COVID-19

SOP CC-12 CRITICAL CARE SURGE PLAN (Pandemic/HCID)

Document Category:	CLINICAL			
Document Type:	STANDARD OPERATING PROCEDURE			
Key Changes:	 Summary – Description of 1-4 phases and change to phase 2 surging into theatre 8. Changes to Bed Numbers per Annex table Surge Phases – modification to phases 1-4; description of introducing Amber Zones for suspected COVID patients Medical Staffing – Change to medical staffing cover 			
Version: 1.7	Issue Da	nte: 26.10.20	Review Date:	on-going
Supersedes:	1.6			
Approved by			Date	
(committee/group):			Approved:	
Scope/ Target Audience: (delete as applicable / describe)	Trustwide			
Evidence Base/ References:				
Lead Division:	SURGERY			
Lead Specialty:	CRITICAL CAR	E		
Author:		D CRITICAL CARE		
Sponsor:	HoS ANAESTH	ETICS, CRITICAL	CARE, PAIN	
		Name the documents here	or record not applicable	
Associated Policy				
Associated Guideline(s)				
Associated Procedure(s)				
Associated Pathway(s)				
Other associated documents e.g. documentation/ forms				
e.g. documentation/ form	<u> </u>			
Consultation Undertaken:				
Template control:	v1.3 January 2018 (Sup	oports the Trust's 'Policy for	Policies')	



Executive Summary

The aim of this document is to outline the process through which Adult Critical Care services maintain business continuity as far as practical during a pandemic event. It describes how Critical Care services at SFH will increase capacity to cope with sustained increased demand for whatever reason and forms part of a Trust wide response to such an event. As described, this would enable up to 24 patients to be cared for by Critical Care, in line with the expected surge. However additional plans are in place up to a maximum of 65 patients to be managed by Critical Care.

This surge plan describes the isolation of positive and potential COVID-19 patients through a series of compartmentalised phases within a number of annexed areas. It assumes a predicted flow in to CCU and maximum utilisation of Respiratory virus and non-respiratory virus Zone beds. However, this remains fluid to enable the safest patient care depending on circumstances (patient numbers, acuity and staffing skill mix). The described phases may differ depending on numbers within the clinical Zones and the total figures are the maximum capacity at that stage.

Phase 1: COVID patients will be admitted to the ICU, firstly to side A and then to B side (13 patients).

Phase 2: ICU will then surge into Theatre Recovery (8 patients)

Phase 3: Theatres 8, 7, 6, 1, 1a, 2, 3 and 5 (24 patients) this gives the capacity to ventilate a total of 45 patients.

Phase 4: Level 2, non-ventilated patients would be cohorted into Day Care Recovery as a Respiratory Virus Zone (up to 12 patients) and then Day Case Trolley side non-respiratory virus Zone (up to 8 patients). This totals 65 patients.

Nursing staff will initially be managed within the current CCU establishment. Dependant on patient numbers and acuity additional patients will be nursed in a pod system with 1 CCU trained nurse incrementally overseeing up to a maximum of 8 patients who would be directly cared for by up to 8 non-critical care staff plus 1 Health Care Support Worker per 8 patients.

There will be 1 overarching Nurse in Charge and up to 2 other supernumerary nurses to oversee the annexed areas.

Introduction

This document provides a framework for reacting to a surge in demand for Critical Care. It is NOT a rigid plan and accepts that a degree of flexibility is essential to respond to varying threats.

In the context of this document, the term *surge* relates to a sustained increase in demand for Critical Care services to expand beyond normal capacity. This can be as a result of

- an increase in patient numbers,
- a decrease in number of staff available, or
- flow through the system being impeded.

Surge management is not an "all or nothing" event and the Critical Care response will vary dependant on the threat. There is an obvious risk that patients will inevitably receive care that is suboptimal to that which is normally delivered, and this guidance aims to minimise this risk to the individual patient and community requiring critical care.

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Nursing Staffing:

Nurse staffing will be based on the current CCU establishment providing overarching responsibility for the nurse management of up to 65 patients with the support of non-ICU nurses and HCAs.

The following describes the number of nursing and HCA staff required for 65 beds:

			SFH	FT Critica	al Care Sur	ge Plan	- 65 be	ds			
		LD			N	,					
	RN (CC)	RN (Non CC)	HCSW	RN (CC)	RN (Non CC)	HCSW					
NIC	1	0	0	1	0	0					
Float	0	5	0	0	5	0					
Level 3 (1:6)*	10	33	18	10	33	18					
Level 2 (1:2)	0	0	0	0	0	0					
Total	11	38	18	11	38	18					
*Critical care nurse to) patient ra	lation									
Operate task allocation	on model										
11 ½ hour shifts											
Registered Nurse											
									AFE	AFE	
									Required	Required	
									(100%	(85%	
									occupanc	occupanc	
	Monday	Tuesday	Wednesda	Thursday	Friday	Saturday	Sunday	Total Shift	y)	y)	Skill Mix (% trained)
Long Day	49	49	49	49	49	49	49	343	109.8		
Long Night	49	49	49	49	49	49	49	343	100.6		
								Total wte	210.4		
								15%	31.6		
								Total AFE	241.9	205.6	
Healthcare assistant											
	Monday	Tuesday	Wednesda	Thursday	Friday	Saturday	Sunday				
Long Day	18	18	18	18	18	18	18	126			
Long Night	18	18	18	18	18	18	18	126			
								Total wte	77.3		
								15%	11.6		
								Total AFE	88.9	5.2	
TOTAL ESTABLISHME	NT REQUIR	RED							330.8	210.8	73.13%

These staff will work within a pod system with 1 CCU RN overseeing the care of up to 8 patients.

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Medical Staffing:

A matrix has been created to identify the additional medical support that will be required at each trigger point.

Tier	Trigger	Tier 1 – Resident Junior Clinical Fellow, ACCP, CESR, foundation Dr (airway training not essential)	Tier 2 – Resident Specialty Doctor, SCF, airway ACCP AIRWAY TRAINED	Critical Care Consultant	1 st -on- call	2 nd -on-call	Anaesthetic Consultant
			Bleep 269	#6488	Bleep 277	Bleep 229	
			Critical Care referral ART calls		Cardiac Arrest	Airway Stabilisation *** Paeds	
N	A & B side only / 0 - 12 L3 equivalents / up to 15 patients	1x Mon-Sun Long day: 0800-2000 1x Mon-Fri NWD: 0800-1800	1x Mon-Sun Long day 0800-2000 Night 1930-0830	Continuity Mon-Fri 0800-1600 Long day/on-call Mon-Fri DCC 0800-2100 => then on-call	Th1	Mon-Fri 0800-1800 Th / training module Mon-Fri 1800-0800, Sat, Sun:	
Red zone	A side = Green B side = Red / up to 15 patients	1x Mon-Sun Long day: 0800-2000 1x Mon-Fri NWD: 0800-1800	2x Mon-Sun Long day 0800-2000 Night 1930-0830 Additional airway 0800-1800 – can be 2 nd -on-call	Sat/Sun DCC 0800-1400 DCC 1930-2100		ICU + remote site	

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1	3 areas / 12	1x	2	As above plus	Th1	Mon-Fri	
-	-14 L3	Mon-Sun	Mon-Sun	Sat/Sun:	11112	0800-1800	
	equivalents	Long day: 0800-2000	Long day 0800-2000	Additional resident		Th	
	/ 100-150%	2011g day: 0000 2000	Night 1930-0830	consultant		'''	
	/ >15	2x	141gHt 1550-0050	08:00-14:00		Mon-Fri	
	patients	Mon-Fri	Additional airway	00.00 14.00		1800-0800,	
	patients	NWD: 0800-1800	0800-1800 – must be			Sat, Sun:	
		14475. 0000-1000	separate to 2 nd -on-			ICU	
			call			100	
			Can				
2	14-17 L3	-			То		Weekday:
_	equivalent /				support		18:00 - 22:00 Additional Resident Anaes
	150-200%				Critical		Cons (from General Cons and Crit Care Cons
					Care as		pool) in addition to on-call Consultant
					able		Weekend:
					0.0.0		12:00 - 20:00 Additional Resident Anaes
							Cons
							60113
							Resident Anaes Cons to support Critical Care
							or cover emergency surgical theatre cases to
							free-up 1st on-call to support Critical Care.
3	18+ L3	1x	2	Full shift:	То	Mon-Fri	Full shift:
	(200%) /	Mon-Sun	Mon-Sun	08:00-20:30 -	support	0800-1800	08:00-20:00 – full resident
	>24 patients	Long day: 0800-2000	Long day 0800-2000	resident 19:30-09:00	Critical	Th	20:00-08:00 – part/full resident
	The particular		Night 1930-0830	part/full resident	Care as		parq ram resident
		2x		party ram resident	able	Mon-Fri	
		Mon-Fri	Additional airway	Second consultant:		1800-0800,	
		NWD: 0800-1800	0800-1800 – must be	Mon-Fri 08:00-16:00		Sat, Sun:	
			separate to 2nd-on-	Sat-Sun 0800-14:00		ICU	
		Consider additional night:	call	Increased finish time			
		1930-0830		depending on			
			+1 additional airway	workload			
		**	(0800-2000 +/-				
			twilight or night)				
			per 8 patients				
			per o patients				



Bed Numbers Per Annexed Area

Site Rollout plan	Beds	Running Total Beds
Critical Care	13	13
Theatre Recovery	8	21
General Th 8	3	24
General Th 7	3	27
General Th 6	3	30
General Th 1A	3	33
General Th 1	3	36
General Th 2	3	39
General Th 3	3	42
General Th 5	3	45
Day Case Recovery	12	57
Day Case Trolley Side	8	65

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Definitions

For the purposes of the COVID 19 pandemic, all patients admitted to Critical Care with respiratory symptoms/disease as outlined by the PHE guidance 10th March 2020 will be classed as 'infectious' until proven otherwise.

Communication

SFH have a dedicated Communications team and a Trust management structure for daily **response** which will continue in the event of a major surge and if escalation is required. The Network lead will be contacted should a surge become imminent.

Management of patients and staff will be via handover and medical ward round. Decisions re admission and discharges, patients flow will be through the Nurse and Consultant in charge.

Staff working for prolonged periods will be given access to email and telephones to communicate with their families

Information for relatives of patients will also be required (Duty of Candour) particularly to explain issues regarding treatment limitation and triage.

Capacity - Bed management

Real time monitoring of Critical Care beds is done via regular bed meetings and to the Mid-Trent Critical Care Network and NHSE via the NHS Pathways and Directory of Services system (DoS) which is updated every 12 hours during the pandemic crisis.

Flow and capacity is currently managed by the Critical Care Band 6s, Ward Leader/Deputies, Matron & DGM with escalation to Bronze/Silver in conjunction with the Consultant on call for CCU.

Surge Phases

This phasing involves a compartmentalization of the annexed areas as the number of COVID-19 patients are admitted and assumes a predicted flow in to CCU and maximum utilization of red and green zone beds. Amber Zones may be created within designated Red Zones to cohort suspected COVID patients as geographically distanced from positive patients as possible. The described phases may differ depending on numbers within the red and green zones and the total figures are the maximum capacity at that stage:

Phase 1 (BAU) – Using existing critical care staffing establishment manage a mix of up to 13 non-COVID level 2 and 3 patients across A&B sides of CCU. N=0 COVID = 13 total

Phase 1a (Separate zones in ICU) – Up to 8 positive or suspected COVID patients managed within side A (Red Zone) with 7 non-COVID level 2 and 3 patients inside B. N= 8 COVID & 5 non-COVID = 13 total.

Phase 2a (move into Theatre 8) – Up to 11 positive or suspected COVID patients with up to 3 being 'amber' suspected patients utilizing side rooms 15 and 16 and theatre 8. This also protects space in recovery to ensure capacity for the recovery of elective patients. N= 11 COVID & 5 non-COVID = 16 total

Phase 2b (move to Theatre Recovery) – More than 8 positive or suspected COVID patients on side A create Red Zone in side B and move non-COVID patients to Theatre Recovery. Utilising side rooms 15, 16 and theatre 8 for up to 3 'amber' suspected patients. N= 16 COVID & 8 non-COVID = 24 total.

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Phase 3 (move into Theatres 7,6,1,1a,2,3,5) - More than 13 positive or suspected COVID patients. Admit additional positive or suspected COVID-19 patients into Theatres 7 & 6. Combination of COVID & non-COVID = 45 total.

Phase 4 (Move into Day Case – Level 2 patients)- More than 45 positive, suspected COVID or non-COVID patients. Move level 2 patients into Day Case Recovery, Red Zone (12 beds) and then Trolley Side, Green Zone (8 beds). Combination of COVID & non-COVID = 65 total.

Capacity & Staffing

In the initial phase, critical care staff will provide all patient care on conventional 1:1 nurse: patient staffing ratios, but as capacity increases this will be down regulated dependent on multiple factors includes staff levels of sickness. It is likely that staff absence rate will exceed 40%-50%.

The workforce modeling plans for Critical Care has been undertaken and this is in line with NHSE/NHSI recent publication 'Covid 19: Principles for the management of demand outstripping the capacity of nursing workforce on the critical care unit and adult inpatient wards. This documents requests assurance to the Board of Directors on the modeling of staffing with 30%, 60% 75% gaps of Registered Nurses in inpatient areas and 20%, 40% and 70% sickness in Critical Care. This modeling for sickness will impact on the number of Critical Care nurses per patients, with plans up to 1:6 patients' ratio.

Use of social media and texts will continue to ask staff to work as bank shifts and requests for agency nurses will be made. Staffing is reviewed 5 rolling days in front so an anticipation of increased activity can be made. The Critical Care Surge plan will be enacted to ensure that the right number of support numbers are available at any one time.

All leave will be reviewed. Staff with transferable critical care skills will be identified and refresher training arranged for recent leavers. It is anticipated that during a surge, patient harm may occur as a direct result of suboptimal staffing ratio, staffing experience and lack of critical care medical personal, all harms will be reviewed in line with the Trust's Governance framework and lessons will be learnt to improve for such events in the future. This will need to be widely appreciated across the Trust and local population, with appropriate staff support mechanism put in place. The Chief Nurse has put alternate week check in sessions with the support staff and the Critical Care staff, to ensure that any issues are identified early, and that appropriate action can be taken. All training would be discontinued as workforce gaps moved towards 20%, with staff moving onto the Critical Care rota

Nursing rota - Cohorting and Podding of Nursing Patient Care

Critical Care currently is established to provide 10 trained ICU RNs per shift over a 24-hour period plus 1 health care assistant per shift. This enables the support of 9 level 3 patients or a mix of level 3 and 2 patients up to our bed capacity of 13.

In the event of the COVID-19 surge we are anticipating significantly higher numbers of patients than current establishment and model of nursing will support.

As physical bed and ICU RN capacity is breached a pod system will be triggered which will enable 1 ICU RN to care for up to 4 patients with the support of non-ICU RNs. This will be a flexible system and deployed to meet patient acuity and demand and distributed throughout the annexes as described.

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The system will build from a 1:2 ratio (1 ICU RN caring for 2 patients with the support of 1 non-ICU nurse) up to what is the current NHSE recommendations of 1:8. This assumes 7 clinical ICU nurses up to 56 patients and then 8 clinical ICU nurses over this.

No of level 3 patients	Ratio ICU:Non-ICU RN
<9 level 3	1:1
>9 - 18	1:2
>18 - 21	1:3
>21-28	1:4
>28-35	1:5
>35-42	1:6
>42-49	1:7
>49 - 56	1:8
>56-65	1:8

Each area will also be overseen by supernumerary shift leader, up to 3, as long as staffing levels allow. The Trust has taken an unprecedented step and introduced a further two Band 7's to the unit, the objective is to provide the unit with senior nurse leadership 7 days per week and be at the 7am and the 7.30pm nursing handover and ensure that the nursing staff are well supported. Throughout the hospital there are several Critical Care Registered Nurses who as the surge plan continues will be pulled back to the unit to provide professional and expert nursing support.

No level 3 patients:	20% workforce gap:	40% workforce gap:	70% workforce gap:
<9 level 3	1:2	1:2	1:2
9 – 18 level 3	1:4	1:4	1:4
19 – 24 level 3	1:6	1:6	1:6

(Critical Care Nurse to number of patients)

A separate non-ICU staff rota has been established provide 24 hour cover from this staff group for ICU, made up of 63.6 FTE registered nurses from across the Trust. They have been split into four tiers, with triggers based on the number of occupied beds.

Trigger point	No of beds:	Need (based on 5.25 FTE per bed)	No of nurses per surge (63.6 total identified)	No of RNs on Support rota
12 beds occupied	9 - 15 beds	15 FTE	16.8 FTE	15 RNs
18 beds occupied	16 - 20 beds	21 FTE	21.8 FTE	20 RNs
22 bed occupied	21 - 24 beds	17 FTE	17.2 FTE	24 RNs
24 beds occupied	25 beds and over	5.25 FTE per bed	7.6 FTE identified	

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Training

Staff returning to or new to ICU will need the following training:

Ex Critical	Shortened skills refresher course and ward overview supervised by
Care Nurses	Department Leader/Nurse Educator
	Swine flu update on nursing timeout days.
Non-ICU	Overview of critical care and familiarisation program to include normal routine,
nursing and	documentation. Tracheostomy care, proning, ventilation and infection control.
HCA's	Successful mask fit. Donning and doffing training in the event of a pandemic.

Training is underway and each staff member has a competency pack to highlight what training they have received and therefore what tasks they are able to complete when supporting an ITU nurse.

Patients - triage

It is likely that demand for Critical Care will out-strip capacity. Some form of health care rationing may well be required to ensure that scarce resources are directed towards the largest group of individuals who have the highest chance of survival. A triage tool based on SOFA scoring (advocated by the Department of Health) has been developed to assist ward Consultants refer appropriate adult patients. This is likely to be difficult for many parent Consultants to adopt.

It is anticipated that patients will present (in the event of a pandemic) with severe type 1 respiratory failure. Initially a full range of organ support will be offered. However, as demand increases care will have to be limited to maximise treatment for as many patients as possible. In this situation the following treatments will NOT be offered:

Renal	Renal replacement therapy
All	> 1 vasoactive

CPAP/High flow will now be offered as part of escalation before intubation and ventilation in the context of COVID. As per the CPAP SOP, ward 43 will support NIV/CPAP for type II respiratory failure i.e COPD and ward 23 will support NIV/CPAP for type I respiratory failure i.e pulmonary edema.

Adult patients will be triaged using a 3 part tool comprising inclusion criteria; exclusion criteria and a physiological score (SOFA Score SEE TABLE BELOW). In the event of two patients being referred to the last CCU bed the patient with the lowest SOFA score will take priority.

SOFA score	1	2	3	4
Respiration PaO ₂ /FiO ₂ mmHg	< 400	< 300	< 200 with respiratory support	< 100 with respiratory support
Coagulation Platelets x 10 ³ /mm ³	< 150	< 100	< 50	< 20
Liver	1.2-1.9	2.0-5.9	6.0-11.9	> 12.0
Bilirubin, mg/dL (µmol/L)	(20-32)	(33-101)	(102-204)	(> 204)
Cardiovascular Hypotension ^a	MAP < 70 mm Hg	Dopamine ≤ 5 or Dobutamine (any dose)	Dopamine < 5 or epinephrine ≤ 0.1 or norepinephrine ≤ 0.1	Dopamine > 1.5 or epine- phrine > 0.1 or norepine- phrine > 0.1
Central Nervous System Glasgow coma score	13-14	10-12	6-9	< 6
Renal Creatinine, mg/dL (µmol/L) or urine output	1.2-1.9 (110-170)	2.0-3.4 (171-299)	3.5-4.9 (300-440) or < 500 mL/day	> 5.0 (> 440) or < 200 mL/day

[&]quot; adrenergic agents administered for at least one hour (doses given are in $\mu g/kg \cdot min)$

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Review triage after admission

Triage directives will be implemented as directed by NHS England.

Treatment Limitation

SFH will adhere to national guidance ensuring that critical care is offered and provided in an appropriate manner whilst recognising that in the event of demand outstripping capacity, national and regional guidance on utilising regional capacity, patient transfers or any appropriate triage decisions will be followed.

Changes to current practice

We will need to maximise throughput to ensure care can be delivered to as many individuals as possible. To facilitate this, we will need to ensure sedation and paralysis levels are kept at an absolute minimum. This may lead to greater use of haloperidol, clonidine and physical restraints. Sedation guidelines will be as per current SFH guidance.

Infection control

Infection control is vital to protect our patients and our staff.

Limiting cross infection

The key points are

- Effective hand decontamination between patients and after contact with hard surfaces
- Use of gloves and aprons
- Normal uniforms should not be worn. If available theatre scrubs should be worn.
- Use of personal protective equipment (PPE) as per guidance
- Staff flow where possible units will be accessed by separate entrance and exits with decontamination facilities available on exit

PPE

During a pandemic surge Health Protection Authority advice is that standard surgical masks should be worn when delivering basic patient care. During aerosol generating procedures PPE should be upgraded to FFP3 mask, visor and gown.

Critical Care areas have been identified as 'hot spots' for AGPs and the PHE requirement is for full PPE: FFP3 mask, visor, gown and long gloves for all suspected or confirmed COVID patients.

It is likely that supplies of FFP3 masks will become depleted. While these masks are designed for short-term use staff may wish to retain and use them for longer periods. However, they should be aware that the external mask surface may be contaminated with virus after leaving an infected area and that use of FFP3 masks outside of standing guidelines from the HPA/manufacturer is at their own risk. FFP3 mask "fit testing" ensures maximum protection and will be offered in all critical care areas.

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Security

It is unlikely that external agencies will be available to provide on-site security.

Once supplementary critical care areas are in operation, in the interests of infection control and staff and patient safety relatives will NOT be permitted to all areas unless adequate supervision can be maintained.

Visiting will be as per Trust guidance which will not allow any visitors unless for compassionate reasons and after the visitor has signed a disclaimer form.

Supplies

For pandemic surge stocks of PPE and key disposables are stored (25% increase on normal base levels) but are inadequate to last for a sustained surge. It may become necessary to re-use single use products where the risk/ benefit argument is favorable on advice from infection control.

Clinicians should simplify treatment and look to conserve drugs and disposables whenever possible. It may be necessary to use alternative therapies (i.e., using anaesthetic vapour to sedate patients ventilated with anaesthetic machines).

In the event of equipment shortages alternative solutions may be required (i.e., use of transport ventilators, use of burettes instead of syringes drivers)

Pharmacy

Patients cared for within Critical Care areas will have drugs made up to the usual standard agreed adult critical care concentrations and prescribed on the standard adult critical care chart and standard hospital drug chart. In the event of paediatric patients being admitted to adult areas, staff will use a weight conversion charts that are located on the intranet. (further copies are available from the pharmacists).

In the event of theatre PODs opening pharmacists will co-ordinate urgent supplies of drugs and fluids from the agreed drugs list in appendix 3 prioritising IV drugs over enteral ones.

Return to pre-surge activity

Daily meetings will occur within SFH to assess the response and likely duration of the surge escalation. Once the immediate response to the emergency nears completion, the emphasis will move to recovery and remediation. The Hospital Gold Command Team will assume the strategic lead in coordinating the Trust process of returning the hospital to a state of normality. This recovery process will be managed through a 3-tier management structure directed by the Gold Command Team (Strategic), managed by the Silver Command/ Site management team (tactical) and actioned by the Division / Service Areas (Operational).

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Appendix 1 - Surging in to Annexed Areas

In the event of a surge in critical care admissions to Critical Care Unit and when all other bed options have been used, it will be necessary to expand our capacity by using other areas.

The following document is a guide to opening an annexed surge area.

- 1. Discuss with Critical Care Consultant and Matron
- 2. Look at step downs, delayed discharges (on level 3 and level 2 areas) and repatriations across all critical care areas.
- 3. Discuss with Band 7 who will advise escalation to Matron/DNM/Silver on call/Speciality Lead, as appropriate.
- 4. During the day the Band 7/Matron may be able to assist with staffing from other critical care areas, office staff, agency etc.
- 5. Overnight inform Duty Nurse Manager and ask if they are able to assist by finding additional staffing from theatres or wards. It is likely that there will be no spare staff within the Trust so it will be necessary to utilise the staff already on duty, or share stable level 3 patients
- 6. Discuss with the Theatre Co-ordinator.
- 7. Ensure there is the correct equipment and drugs in the annexed area before the patient arrives (see appendices). Inform MEMD and pharmacy that an annex will be opening.
- 8. Ask helpdesk to bring extra beds (consider Day Case Unit) for the extra patients. It may be necessary to use the general ward beds with appropriate mattresses.
- 9. It is safer to transfer stable patients from Critical Care Unit to an annex and admit sicker, new admissions directly onto Critical Care Unit. Think about the type of bed the new admissions will need; if any new admissions need spinal precautions, it may be necessary to transfer the stable patients being moved to the annex onto the ward beds with appropriate mattresses mentioned above.
- 10. Ensure you know where the nearest arrest trolley is and inform the nurses working in the annex.
- 11. Ensure staff are aware of the annex evacuation plan.



Appendix 2 suggested equipment for each annexed bed space

Equipment needed per patient, to open a theatre pod (Note: this is a list of equipment to admit a "standard" level 3 patient. It is not an exhaustive list)

Airway

- Guedel size 2, 3 & 4
- Working suction, suction canister, suction tubing
- Yankauer, suction catheters
- Trach care
- · Cuff manometer and line

Breathing

- Non re-breath (trauma) mask
- Oxygen mask with venturi valves and tubing
- Stethoscope
- Ambu bag and mask
- Water's circuit
- CPAP masks (x3 sizes)
- >¼ full size E cylinder with Schrader valve
- Ventilator
- HME x2
- Ventilator and tubing
- Scissors
- Monitoring

Circulation

- Pressure bag x2
- ECG dots
- ECG leads
- Sats probe
- NIBP lead and cuff
- Invasive pressure leads x2
- Thermometer
- Pen torch
- IV syringes approx. 10 of each size
- 50ml Luer lock syringe x3
- ABG syringes x10
- Insulin syringe x2
- Clinell chlorhexidine swabs
- Giving sets approx. 3 of each type (syringe pump with anti-syphon valve, Alaris volumetric pump and normal infusion set)
- Transducer tray
- Set change labels/additive labels
- Three-way taps
- Red bionector (needle free valve)
- Blue bionector (needle free valve)
- Blind bungs
- Needles (red and pink x10 of each)
- Needles (green, blue, orange x2 of each)
- Tegaderm dressing x2

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- C-view dressing x2
- Roll of tape x1
- Gauze x2
- Water for injections 10ml ampules x1 box
- NaCl 0.9% 10ml ampules x1 box
- Drip stand
- Alaris syringe pump x3
- Alaris infusion pump x3

PPE and infection control

- Plastic aprons
- Gloves S, M, L
- Sharps bin
- Green Clinell wipes
- Charcoal swabs x3
- Urine pot/sputum pot
- Linen bag and trolley (one linen trolley per pod)

NG/feeding

- NG cart (take one from AICU and share for all patients within the pod)
- NG syringes per patient: 50ml bladder tipped syringe x4, Luer lock NG syringe 50ml x4, 20ml x8, 10ml x8, 5ml x8
- NG feed pump
- NG standard feed and giving set
- NGT holder stickers x2
- NG bungs
- Bottle of water x2
- Foils x10

Other

- Bed, pillow, linen and drip stand
- Dry wipes, wet wipes, pads, incontinence sheets
- Toothbrush, toothpaste
- Wash bowl, soap/shower gel
- Chair and silver trolley
- Paperwork, 24-hour chart, pens
- Working telephone
- Slide sheet
- emergency transfer sheet
- Torch

Equipment in Anaesthetic Rooms and theatres

Due to the financial implications of having vast stocks of unused equipment, there is no central store for spare equipment. Early communication with Duty Nurse Manager, Helpdesk and Porters is essential.

Mindray monitors attached to the anaesthetic machines in theatre. There is suction on the anaesthetic machines and a portable suction unit in each theatre.

Theatre equipment that is not needed must be removed and stored elsewhere in theatres, it must not be stored in the anaesthetic room or exit bays as these are fire evacuation routes. Take consumable equipment to the theatre pod on a silver trolley and store it in the clean room within the theatre.

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Appendix 3 - suggested drugs for Annexed Areas

Drugs needed per patient, to open a theatre pod (Note: this is a list of drugs for a "standard" level 3 patient. It is not an exhaustive list)

Atracurium

Antibiotics e.g. Co-amoxiclav, clarithromycin, flucloxacillin, gentamicin, piperacillin/tazobactam, meropenem, ciprofloxacin, levofloxacin, vancomycin

Anti-emetics: ondansetron

Antivirals e.g. Aciclovir, Oseltamivir

Anticonvulsants: phenytoin, levetiracetam, valproate, lorazepam

Adenosine Adrenaline Amiodarone Atropine

Calcium gluconate

Clonidine

Dexamethasone

Digoxin

Diuretics-furosemide

Enoxaparin

Glucose 20% 500ml bags

Glucose 5% 250ml, 500ml and 1000ml bags

Haemofiltration fluid - Prismasol 4 only

Haloperidol injection

Hydrocortisone

Insulin: actrapid only

Ipratropium nebulisers 500 micrograms

Labetalol injection Lansoprazole

Lorazepam

Magnesium

Mannitol 20% 500ml

Noradrenaline

Omeprazole

Propofol: 20ml amps and 100ml bottles

Plasmalyte Rocuronium

Salbutamol nebules (2.5mg and 5mg)

Sodium chloride 0.9% 100ml, 250ml, 500ml and 1000ml bags

Vasopressin

Water for irrigation 1000ml bottle

Water for humidification 1000ml bags

Water for injection 10ml amps

Controlled drug name

Fentanyl 100microgram in 2ml

Fentanyl 500microgram in 10 ml

Ketamine

Midazolam 50mg in 10ml

Morphine 10mg in 1ml

Potassium Chloride 50mmol in 50ml

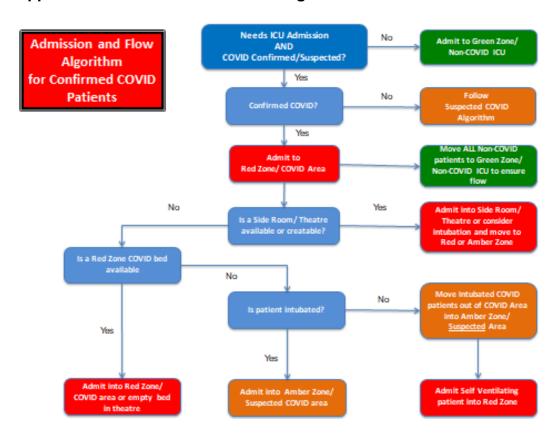
Potassium Chloride 50mmol in 50ml

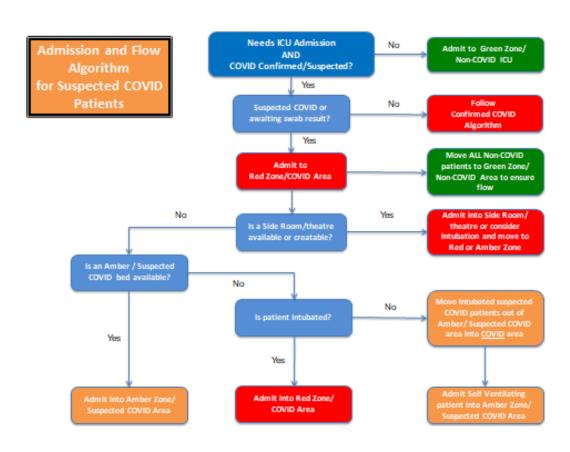
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Appendix 4 – Admission and Flow Algorithm





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Appendix H

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Mortuary Contingency Plans

1. Mortuary planning for storage capacity being exceeded.

There are two patient storage areas in the mortuary and one temporary store which will be retained in the Postmortem room (170011) as required.

In addition, there is an external temporary body store on hire for a period of 20 weeks from Tuesday 23rd November 2021

Capacity is as follows:

The main fridge bank:

Left bank, position 1 4 (freezer spaces only)

Isolation/high risk spaces 4
Left bank spaces 25
Right bank spaces 20

The rear store, access through the PM room:

Standard spaces 15 Bariatric spaces 18

Internal Temporary Body store 12 spaces

External Temporary Body Store 30 spaces

Total capacity 128 (4 of these are freezer spaces)

Please note, only mortuary staff have access to both internal and external temporary stores. Mortuary staff will utilise both temporary stores prior to a weekend or bank holiday to ensure maximum capacity within the main mortuary body store

Babies and Non-viable foetuses have a separate storage area; the Foetal Cabinet is located within the PM Room (170011)

Routine working hours

The mortuary staff will ensure 10 spaces are available in the main fridge bank for overnight admissions.

In addition, funeral directors of the patients ready for release will be contacted to alleviate capacity issues.

If 10 spaces can't be achieved, the contingency plan will be initiated.

If available spaces reach 4 overnight, the out of hours contingency plan will be initiated.

Mortuary - Contingency Plans

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Newark Hospital Mortuary has 11 spaces for body storage (6 guaranteed). This should be the first place to contact should capacity be exceeded within all body stores at King's Mill Hospital. If there is capacity at Newark, AW Lymns Funeral Directors should be contacted. AW Lymns Funeral Directors are contracted by the Trust for the transportation of deceased patients.

The mortuary manager/supervisor will determine the patients to be transferred and will document any movements in line with current record keeping and patient identification.

The Bereavement Service will contact relatives to inform them and ensure consent is given for such a transfer.

n.b. The usual process is to ask permission to move from relatives, however, in times where capacity reaches 10 – 15% it is necessary to sensitively inform relatives of the move to ensure there is sufficient capacity for any overnight admissions

Out of hours

Each Friday or day prior to a bank holiday, the mortuary staff will ensure 20 spaces are available in the main mortuary fridge bank for any weekend admissions. If this is not achievable, the contingency plan will be initiated.

If spaces are reduced to 4 during the weekend, the on-call Mortuary Assistant will be alerted, and the contingency plan initiated by contacting the Silver on-call Manager.

Porters bringing patients to the mortuary over a weekend period should inform switchboard to contact the on-call Mortuary Assistant in the event of spaces being reduced to 4.

If capacity is reached out of hours, the Silver on-call Manager should contact the Newark Mortuary and AW Lymns Funeral Directors to arrange transfer of patients.

Communication is essential with the on-call Mortuary Assistant to co-ordinate collection/transfer in addition to the on-call Chaplain to liaise with relatives*.

* The usual process is to ask permission to move from relatives, however, in times where capacity reaches 10 – 15% it is necessary to sensitively inform relatives of the move to ensure there is sufficient capacity for any overnight admissions

In order to facilitate effective communication between the departments out of hours, the mortuary staff will liaise with Bereavement Centre staff on Fridays (or days prior to a bank holiday) to identify the most appropriate deceased patients for transfer and the respective Next-Of-Kin details.

Details will be communicated to the Chaplaincy team by Friday or the day prior to a bank holiday at 2pm.

This will enable the Silver on-call and Chaplain to initiate the contingency plan out of hours.



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In case of capacity reached at KMH and Newark, NUH may be contacted to transfer patients to QMC/NCH; this will be managed in routine hours between the mortuary team and the mortuary manager

The above option will be managed in conjunction with the Bereavement Centre staff to inform relatives of any transfers

Contacts

KMH Mortuary Assistant on-call (via switchboard)

Newark Site Co-ordinator (Phil Williams) ext 5694 Newark out of hours (porter through switchboard)

AW Lymns Funeral Directors 01623 623765

The appointed funeral director will be asked to collect patients from Newark Hospital mortuary if a transfer has taken place

The premises and procedures of the Newark Mortuary have been inspected by the Trust HTA DI and mortuary manager.

The mortuary manager will receive and validate any invoices resulting from this activity.

2. Bank Holiday/Christmas plan

The plan will be as above.

3. Mortuary planning for failure of the mortuary body storage units.

The Mortuary Manager or on call person would contact the helpdesk to arrange an emergency engineer.

Following a fridge failure the Trust Management will be briefed of the issues.

The appointed funeral directors of all deceased patients cleared for release will be contacted to collect as soon as possible.

The contingency plan will be initiated if the failure cannot be resolved within four hours on consultation with the site co-ordinator.

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In extreme circumstances whereby the funeral director cannot collect the patient from the alternate location, patients will be returned to Kings Mill as soon as space is available.

The mortuary manager will receive and validate any invoices resulting from this activity.

Mortuary Manager - Clair Sleney x3626

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