Paper ref:	TB (05/20) 001

Sandwell and West Birmingham Hospitals NHS
NHS Trust

Report Title	COVID-19: Surge and Super Surge		
Sponsoring Executive	Liam Kennedy, Chief Operating Officer		
Report Author	Liam Kennedy, Chief Operating Officer		
Meeting	Trust Board (Public)	**Date**	7th May 2020

1. Suggested discussion points *[two or three issues you consider the Trust Board should focus on]*

The Board might wish to focus discussion on the following three points:

- Why the Super Surge plan has been constructed, but is viewed as not required at this point
- The effectiveness of our surge plan
- How services will be delivered post recovery using the learning from surge

The paper presents a well thought through surge and super surge plan based on the imperial college modelling of COVID-19 trends. Recent trends suggest that there is no longer a requirement for Super surge, but the Board should note the risk of increase cases following relaxation of self-Isolation. The realignment of services will be material in assessing the future models of single site care aligned with Midland Metropolitan University Hospital, under which the Board will shortly consider proposals about how and where these services will be delivered.

2. Alignment to 2020 Vision *[indicate with an 'X' which Plan this paper supports]*

Safety Plan	x	Public Health Plan	X	People Plan & Education Plan	x
Quality Plan	x	Research and Development		Estates Plan	
Financial Plan	x	Digital Plan		Other *[specify in the paper]*	

3. Previous consideration *[where has this paper been previously discussed?]*

None

4. Recommendation(s)

The public Trust Board is asked to:

a.	**NOTE** planning done to date and assurance of decision making
b.	**DISCUSS** some of the learning from surge and potential future implications
c.	**COMMIT** to the archiving of super surge plan

5. Impact *[indicate with an 'X' which governance initiatives this matter relates to and where shown elaborate]*

Trust Risk Register		n/a					
Board Assurance Framework		n/a					
Equality Impact Assessment	Is this required?	Y	X	N		If 'Y' date completed	1 June
Quality Impact Assessment	Is this required?	Y		N	X	If 'Y' date completed	

SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST

Report to the Public Trust Board: 7th May 2020

COVID-19: Surge and Super Surge

1. Summary

1.1 The paper needs to be considered along with previous updates of COVID-19 to Board. National policy required that the Trust put together a surge plan which reacted to the volume of COVID-19 or query COVID-19 patients presenting. Similarly mandated, we developed a super surge plan as a failsafe in case the modelling was prudent in its approach to the spread of infection or as mutual aid for neighbouring organisations.

1.2 This paper outlines imminent changes to our planning and reflects on Super Surge. This includes a summary of the effectiveness of the Surge plan and the current position of the organisation. It recognises that the peak of the first Surge is now passed. The timing and scale of a second Surge is unknown.

1.3 Many services were moved or wards changed from their primary function to deal with COVID-19 treatment and the paper outlines those material changes. It assesses initial lessons from those changes with a view to future planning.

2. Surge Plan

2.1 The surge planning was effectively developed into 4 key areas; Workforce, assets, supplies and realignment of clinical services and estate. This was implemented through clinical groups and support services, as well as corporate functions, through twice daily tactical meetings. An emergency planning PMO supported the operationalisation of these meetings seven days a week.

2.2 The surge plan was supported and advised by two clinical teams: The Clinical Advisory Group, led by the Medical Director; and an Infection Control Guidance group, led by the Chief Nurse. All national guidance concerning surge has been tracked and documented with the action taken. As one might expect not all national guidance was implemented in the specified time frame as the tactical and strategic groups needed to undertake due diligence on risk before reacting. No evident harm has followed from these derogations.

2.3 April, when compared to March, has seen continuity of approach, but a change of scale, with significant staff redeployment, not only to support CCS, but also to bolster ward staffing numbers. That may prove crucial as blue volumes rise again in May. We have seen a consolidation of surgical services entirely to the Sandwell site. Only Ophthalmology and emergency theatres remain on the City site. Our 2 ITUs were staffed and opened to create up to 52 beds. The acute and general medical rotas were embedded and staffed, working effectively across the April period over 7 days.

2.4 Personal Protective Equipment (PPE) is a challenge faced currently across the NHS, but the Trust, through the Chief Finance Officer, has managed to ensure that stock supplies of all items have remained in good supply (six days+) and that has been acknowledged as a key success of our surge plan. We continued to offer all partner providers adequate PPE to support staff protection. This included providing PPE to primary care and Care Homes since March. Staff feedback on PPE has been positive, as evidenced in the April QIHD report provided to the Quality and Safety Committee.

2.5 Our Visionable platform for video consultation with patients has seen over 200 users register and the platforms become an integrated part of the outpatient offering. This has been more feasible in surgical services and paediatrics, as the physicians have been deployed to the rota cited above.

2.6 The Trust has constantly managed its supply of oxygen and Estates have ensured that all patient and staff facing areas now have the adequate protective screens as part of our assurance offering, something that will now be embedded as standard practice going forward.

2.7 Clinical pathways have been developed to ensure that we focus on the clinical outcomes of COVID-19 patients, including, but not limited to:

- the use of proning on base wards and ITU,
- an integrated adult NIV and CPAP pathway with ceilings of care and oxygen saturation standards
- and the segregation of negatively swabbed query COVID-19 patients to newly designated 'Lilac' ward areas to further decrease the risk of cross contamination

2.8 Cancer services and immuno-compromised patients have all been moved off of the two acute sites. All cancer services continue to operate, albeit with some limitations due to the regional demands for complex surgery and post-surgical high dependency support required, which has led to some rationing according to published NICE guidance. Our surge plan saw us react quickly to the requirement for independent sector support for these services and ensured we were able to secure capacity. This capacity will remain in place through Q1.

2.9 We have established 2 query COVID-19 primary care sites, including relocating the Lyndon practice. Our broader support to general practice includes video consultation appointments and infection control expertise. A regular dialogue with colleagues has informed the Trust's approach to service planning and priorities. There is a shared recognition that shielding cohorts will be important in the weeks ahead.

2.10 We have worked closely with all nursing homes to ensure that adequate supplies of PPE were available and that we co-managed expectations in relation to what 'stream' patients were coming from. We have managed patients in non-COVID-19 environments from their entrance to the acute and through community settings to offer assurance to nursing homes of the asymptomatic nature of patients. With revised guidance this

week we are working through with the CCG and Local Authorities the right way to manage tests/post-test asymptomatic periods.

2.11 The look forward into May sees the next stages of the Surge plan including the requirement to establish greater capacity for non-COVID-19 patients. The Surge plan has embedded and the organisation is in a more stable position following the initial rapid development work required. The May position balances the surge consolidation work with the recovery and restoration phase. We would expect to have our plan finalised not later than 13th May, albeit the broad shape of the plan is now in place and is outlined in a parallel paper.

3. Derogation assurance on surge

3.1 The Board should be assured that although delivered at pace the Surge plan considered national guidance in a timely, but responsive manner. All actions or decisions taken in relation to national guidance were logged. This included only three deviations from national guidance on our approach to PPE:

1) we agreed enhanced protection, using ffp3 masks for staff who would need to attend to deteriorating patients in an urgent matter;
2) we agreed to extended the life of our half face respiratory masks filters, from the providers guidance of 8 weeks to 12 weeks; and
3) we agreed that face visors could be used multiple times, by the same user, by wiping them down instead of single use and dispose.

3.2 As outlined to the Quality and Safety Committee we also made the decision not to use the issued ventilators on safety grounds after much due diligence. The surge plan allowed for the use of theatre ventilators to substitute the requirement for these ventilators. However, it should be noted that if we achieve full capacity of non-invasive ventilation (NIV) and intensive care unit (ICU) with high dependency oxygen flow patients, an alternative plan would need to be enacted to ensure both have adequate ventilator supply. This is being worked through and is being included on the risk register.

3.3 The People and OD Committee was also briefed on the logistical issues with nursing workforce re-allocation through to ICU and wards. This week we will achieve (3 weeks later than planned) collated information on deployment and personal competency. This will then be reviewed to ensure that we have a profile of staff capability across the red and blue streams. This work will report in detail to Gold Command in time for 12th May.

4. Super Surge stand down

4.1 Initial modelling suggested a deficit in the West Midlands Intensive Care support. Original plans from neighbouring organisations also demonstrated a significant lack of ability to expand rapidly. The Critical Care Team prepared a super surge plan in case that modelling came to fruition or any neighbouring providers were to require mutual aid. Our super surge plan effectively took our Intensive Care Unit (ICU) capacity from the surge capacity of 52, up to 104 through use of theatres, endoscopy and other ward areas at the City Hospital site. Gold vetoed a preferred option to expand into the BTC,

on both commercial grounds of contract jeopardy, and with a view to recovery. Under the super surge plan staffing numbers would have remained the same, but the ratio of staff to patients would have changed, and operated well outside historic professional norms (albeit within ratios deployed in the Excel model).

4.2 At the time of writing, the ICU demand is just above 20 and future modelling does not indicate that this demand is likely to exceed the surge capacity created. Whilst the NEC-Nightingale is not primarily a ventilated unit if regional difficulties arose this is a preferred option for wider support. However, it is proposed to the Board that the Super surge plan be archived and focus given to continuing surge planning and the restoration and recovery stages. This is relevant both to the planning of staff time and to the estate plan.

5. Next steps

5.1 Following rapid developments during COVID-19, a series of changes to services were developed. Some of these changes have seen services consolidated onto single sites or delivered through a different model. A development session including Executives, Non-Executive members and senior representatives from the Clinical Group triumvirate will work through those changes with a view to which have worked well and risks associated. Regional and national guidance sets out assurance processes for such changes both retrospectively and for forward consideration.

5.2 Those services most affected include paediatric inpatients and urgent care, our 7-day medical cover, delivery of virtual outpatients and consolidation of surgical services. There are benefits and risks to all these changes that must be evaluated over the next few weeks to understand which will be embedded as future ways of working.

5.3 This review must be conducted with future sight on the Midland Metropolitan University Hospital so that we can change and align practice to coincide with how we are looking to develop services for our future models. Public involvement and patient involvement in these changes evaluation is essential and we will consider with Health-watch and others how best to achieve that.

6. Recommendations

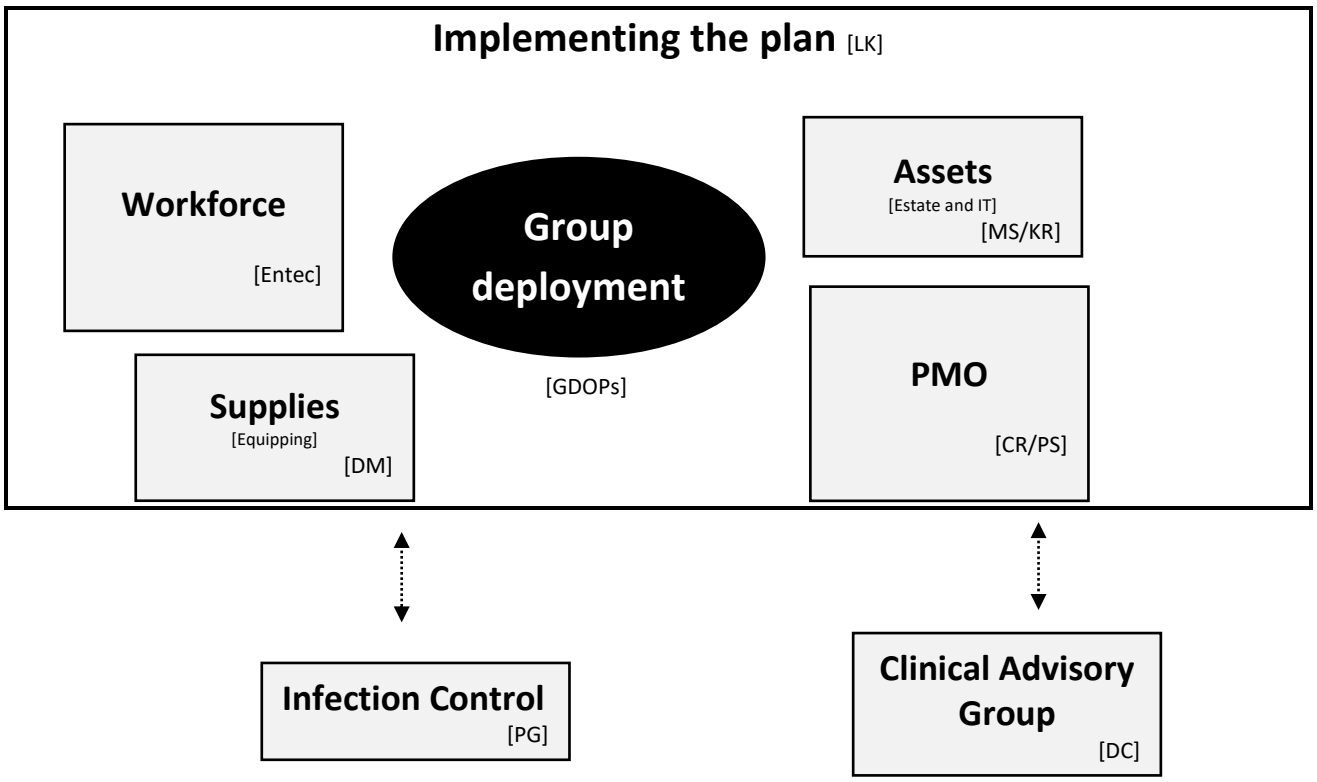
6.1 The Trust Board is asked to:

a. **NOTE** planning done to date and assurance of decisions
b. **DISCUSS** some of the learning from Surge and potential future implications
c. **COMMIT** to the archiving of Super surge plan

Liam Kennedy
Chief Operating Officer
1 May 2020

Annex 1: Tactical Governance structure
Annex 2: Extract from Surge planning update document

Annex 1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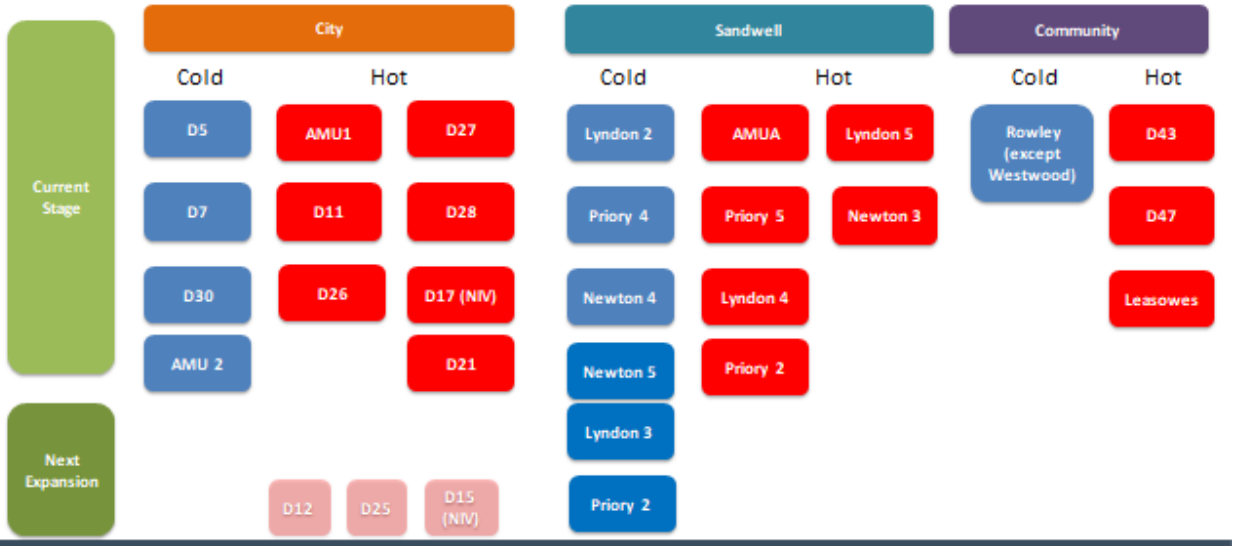
Workforce
[Entec]
Group deployment
[GDOPs]
Assets
[Estate and IT]
[MS/KR]
PMO
[CR/PS]
Supplies
[Equipping]
[DM]
Infection Control
[PG]
Clinical Advisory Group
[DC]

Expansion Plan – creating an additional 100 beds

NHS Sandwell and West Birmingham NHS Trust



ITU and NIV Expansion Plans

NHS Sandwell and West Birmingham NHS Trust

Standard Surge

ICU baseline capacity is 17 Level 3 equivalents

Our Surge plan increases this to 52 L3 equivalents – just over a 300% increase in baseline capacity

Site	Location	L3 equivalents
City	ICU	16
	D16	10
SGH	ICU	16
	N1	10
TOTAL		**52**

Super Surge plan

Site	Location	L3 Equivalents	Notes
City	Windmill / Rosie Ross Theatres	22	Will require transfer of theatre activity to BTC
	Endoscopy	5	
	D7B/D8	5	
	D6	4	
SGH	1st Floor theatre	10	
	3rd Floor theatre	10	
Total		**52**	

NIV Plan

We can normally accommodate 4 NIV patients on D17, the plan looks to expand this to 42

Site	Location	NIV equivalents
City	D15	21
	D17	21