Sandwell and West Birmingham Hospitals NHS Trust

Report Title	Winter Planning		
Sponsoring Executive	Liam Kennedy, Chief Operating Officer		
Report Author	Melanie Roberts, Deputy Chief Operating Officer		
Meeting	Public Trust Board	Date	1st October 2020

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

The Paper outlines the Trusts plan to managing patients safely during the winter period. The Paper and modelling explains the likely admissions we expect to see over the winter period in bed days required. This assumes that overall admission numbers whether Covid or non-Covid will be the within the range of the last three years. After completing a demand and capacity model for the winter period, October to March, we then needed to ensure that mitigations were in place to address the gap. The mitigations include:

- Frailty pathway in ED
- Increased usage of same day emergency care including quick access to diagnostics
- MDT approach with all care homes in Sandwell and West Birmingham
- Switching Elective work to Day case to release surgical beds for Emergency capacity
- Improvements in our End of Life pathway with Leasowes supporting

The Board is asked to:-

- Note and support the winter modelling completed
- Consider and discuss the plan to counteract the additional bed demand and the proposed timescales
- Evaluate the alert system that will be developed to ensure we remain on target and can initiate emergency actions should we hot the alerts

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

Plan		Plan		Plan	
Safety Plan	x	Public Health Plan		People Plan & Education Plan	
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?]*

Clinical leadership Executive

4. Recommendation(s)

The Board is asked to:

a.	Note and support the winter modelling completed
b.	Consider and discuss the plan to counteract the additional bed demand and the proposed timescales
c.	Note the alert system that will be developed to ensure we remain on target and can initiate emergency actions should we hot the alerts

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

Trust Risk Register	x						
Board Assurance Framework							
Equality Impact Assessment	Is this required?	Y		N	x	If 'Y' date completed	
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 ctober 1st 2020
Winter Planning

1. Background

1.1 Winter Planning has historically been concerned with how many medicine beds we have, what was our current length of stay (LOS), with the percentage increase in admissions (based on population size) and what would we need to reduce length of stay too, to stay within the Bed Base.

1.2 We have developed on previous good work to utilise 36 months of data which has been used to show the linear movement for the last 12 months and the mean movement over 36 months, we have then used the midpoint between the two for the model, this should reduce variation

1.3 The purpose of the modelling undertaken this year is to inform decision making regarding bed capacity within the rust, bed requirements and escalation planning.

1.4 This paper outlines the planning assumptions, the gaps in bed numbers and the schemes that have been implemented by the groups and the mitigations

2. Baseline & Assumptions

2.1 We have worked with the groups to ascertain what beds they have this winter by 5 different bed types (Adult, Children, Critical Care, Medical Assessment Unit and Community [IMC-MFFD-EOL]

2.2 Table 1 shows the Trust level bed base changes and current beds open as of 16th September

	Summer	Winter	Actual
Adult (including medicine and surgery)	433	480	482
Medical Assessment Beds	88	88	79
ITU	18	18	18
Children's	34	49	49
Community	131	131	131

2.3 For modelling purposes occupancy is based on 92% for all beds except Medical Assessment Beds which has been modelled at 85%. (Please note in past years we have run our medical beds at 99% occupancy)

3. Winter projects to reduce demand and increase flow

3.1 There are 9 schemes proposed to reduce the gap in beds needed to maintain flow through winter. These schemes are bp0th to reduce admissions and reduce length of stay for patients Please note the bed savings are based on partial effect of these schemes not full effect and the affect is against all bed types

Schemes (partial effect)	**Bed reduction per month**	**Scheme type**
Reduce the unproductive LOS (red/green) for the top 20 diagnosis codes across all groups	11 beds	Reduction in length of stay
Care/Nursing home – WebEx / Visionable appointments/Point of Care pilot in care homes	4 beds	Admission avoidance
Increase AMAA (hot clinic) usage (removing patients out of AMU) pathways and opening times	2 beds	Admission avoidance
Frailty front door pilot	2 Beds	Admission avoidance
Winter conditions – e.g. respiratory packs – include contact details + Visionable clinics plus community MDT virtual	8 beds	Admission avoidance
Asthma, Parkinson's, MS, Heart Failure run by community	2 beds	Admission avoidance
EOL pathway reduction	2 beds	Reduction in length of stay
Birmingham Council D2A project	12 beds	Reduction in length of stay
Sandwell Council D2A project	18 beds	Reduction in length of stay

3.2 The above table shows a bed saving of 61 beds based on the 9 schemes. These schemes are based on partial effect of the schemes and are across all beds. Some such as the discharge to assess pathways will have a direct impact on community beds in the first instance but once working well would see patient's discharges directly from the adult acute beds more quickly. There are 5 admission avoidance schemes which would have a direct effect on both our assessment wards and adult bed base.

3.3 Implementation of the length of stay improvements across surgery and medicine are already on track with a focus on the reduction of LOS within the top 20 diagnosis codes

from 10 days to 7 days across all specialities with the exception of stroke which is excluded

3.4 Similarly to last year, both the end of life pathway and the care home MDTs involve partner organisations from social care, primary care networks and commissioning. Four primary care networks are engaged in the MDT process but there is work to be undertaken to engage the other four PCNs

3.5 Annex A shows the snapshot of the adult medical bed position per month with the bed savings from the schemes

3.6 Annex B contains a waterfall chart that shows the bed schemes in place ad when those beds come on line to close the gap , timescales, and allocated lead for each scheme

4 Gap

4.1 The initial gap for winter assumes that both COVID and winter can be managed within the bed base as it has been throughout the first wave. There is additional modelling within the plan at both 40 additional beds for COVID and an additional 100 beds. This creates a larger gap and the surge plan would be activated should we require those extra beds and additional wards opened. There is one ward on both sites set up for use during COVID but staffing would be the challenge

4.2 At present utilising the above schemes there is variation in the bed gaps for each different bed type modelled as below:-

- Adult beds - 6 beds to 54 beds
- Children's beds – there would be no bed gap, occupancy ranges with a maximum occupancy of 45 beds
- Critical care beds – at present the variation would be a bed gap from 4 beds to 16 beds but this will be covered by flexing between level 2 and level 3 beds
- Medical Assessment beds – No gap but we are currently working on less beds due to the need to provide and NIV area
- Community beds – the only month there is a gap is December and that is 1 bed. For other months we require 20 less beds within the community bed base

5 Mitigation

5.1 The main areas as you can see that we will have pinch points are around Adult beds.

There are three further plans we have instigated to reduce the gap are as follows:-

1. Increase in medical beds that do not require any extra staffing which will provide extra 27 beds. However 16 of these 27 beds are currently open so we only actually gain 11 beds but that is dependent on haematology moving to city and N5 being staffed to 27 beds. These beds are not currently included within the adult bed base in Annexe 1

2. Reduction of elective activity to support emergency demand in a planned way for 3 months from 1st December which is the equivalent of 24 extra beds per month

3. Move from 92% - 95% occupancy which will give us a further 16 beds

5.2 Even with this further mitigation there remains a gap of 15 beds during the month of December. Further mitigation will be required during December to increase the bed occupancy to 98% to close this gap

5.3 The bed model suggests community will not utilise all of their 131 beds, the model suggests they will utilise between 94 and 119 beds except December when the model suggests they will utilise all of their 131 beds. There may be an opportunity when the usage is less to either redeploy staff (which they currently are doing) to support medicine or implement a bed is a bed model to increase flow to community beds.

6 Monitoring

6.1 A dashboard will be developed as an alert system to monitor progress of the schemes and to inform us when they are not delivering for us to action and resolve quickly.

6.2 For each scheme we will look at the historical bed days used and then reduce this based on the bed reduction. We will then monitor weekly the usage of bed days.

6.3 For each scheme regarding admission avoidance we will plot the target activity and then plot the actual. We will monitor this against the weekly target

6.4 We will also have a winter plan which pulls all of the targets together and then plots actual bed day usage so that we can see from a cumulative picture as to whether we are on track.

6.5 Tracking will occur on a weekly basis in the form of a winter dashboard, and will be reported to the Urgent Care Board on a monthly basis. The dashboard will be circulated to the Urgent Care Board members on a weekly basis.

6.5 The information team will use statistical process control principles and will raise exceptions with the DCOO/COO when there is a projected line above the target.

7 Risks

7.1 There are 4 main risks outlined as below:-

1. Staffing - There are currently vacancies in nursing in Medicine and there has been discussions about a potential HIT team similar to last winter to mitigate staffing gaps on the wards. The process for agency approval and the work the medicine team have bene undertaking to attract staff to join the bank will help mitigate this risk but

the risk remains in place. Staffing ratios would need to be discussed to support these additional beds

2. Winter Schemes - We have 9 schemes in place, if any one scheme does not deliver, then it will need to be replaced by another scheme or over delivery on another. We also need to stress the team working especially between colleagues in medicine, PCCT and surgery.

3. COVID-19 - If COVID-19 has a second surge we will need to revert to our COVID surge plan to manage the sites on a daily basis.

4. Increase in admissions – If admissions increase by 10%, the gap in beds required to meet demand will be between 55 and 83 beds extra to our current emergency demand. The surge plan would be activated at this point so that as a Trust we can risk assess and agree the next steps such as stopping all elective activity and opening of additional wards

5. Elective to Daycase activity – In effect to achieve the switch the team are looking to change electives during December to February by 250 per month to daycase. They are also working on what specialities can change most procedures to day case permanently. The risk are long waiters, failed chronology of booking, failure to comply with phase 3 and production plan expectations, decrease in RTT performance, income reduction (if moved off block), and clinically compromised decisions. For phase 3 the group are revising locally the recovery plan to ensure volume and value meets the phase 3 submission. Approximately 90% of elective and day case tariffs are the same. The risk is Trauma and Orthopaedic which has a different tariff for elective and daycase.

8. Recommendations

The Board is asked to:

- Note and support the winter modelling completed
- Consider and discuss the plan to counteract the additional bed demand and the proposed timescales
- Note the alert system that will be developed to ensure we remain on target and can initiate emergency actions should we hot the alerts

Annex A: Snapshot of the adult medical bed position per month with the bed savings from the schemes

Annex B: waterfall chart that shows the bed schemes in place ad when those beds come on line to close the gap, timescales, and allocated lead for each scheme

Melanie Roberts
Deputy Chief Operating Officer
16th September 2020

Annex A

Adult Bed Position month by month

	October	November	December	January	February	March
Current winter bed stock	488	488	488	488	488	488
Current forecasted demand emergency beds	466	466	513	490	471	446
Winter schemes bed saving per month (partial effect)	19	21	22	21	20	19
Emergency beds required after schemes	447	445	490	469	451	428
Elective forecast demand	53	51	53	57	56	46
Elective to day case scheme (partial effect)			24	24	13	
Total bed requirement	500	496	519	502	494	474
Remaining gap through winter	12	8	31	14	6	0
Move occupancy from 92% to 95%	0	0	15	0	0	0
Other mitigation move from 95% to 98%			1			