Sandwell and West Birmingham Hospitals NHS

NHS Trust

Report Title	IT Infrastructure Delivery Update		
Sponsoring Executive	Toby Lewis, Chief Executive		
Report Author	Toby Lewis, Chief Executive		
Meeting	Trust Board	Date	4th October 2018

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

During October we "go live" with changes in our WiFi and underlying infrastructure. The Board should satisfy itself on that work, whilst delegating detailed consideration to the new Digital MPA.

With the changes in leadership and management, work on the future state model for the IT department will be pushed back to December's Board. Consideration should be given to what is expected in that work, as we need to make definitive decisions about service shape from spring 2019.

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

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

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

Executive Digital Committee

4. Recommendation(s)

The Trust Board is asked to:

a.	CONFIRM that IT resilience is now our top safety priority
b.	RECOGNISE the actions undertaken and set expectations for our next meeting

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

Trust Risk Register		3109, 3110					
Board Assurance Framework		Risk Number(s): BAF 1					
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	

1. Summary

1.1 We are improving the corporate WiFi across Sandwell General Hospital, the retained part of City Hospital, Rowley Regis Hospital and the Lyng Centre. IT are making changes to the network infrastructure in order to improve resilience across the retained estate. Whilst we are a fortnight behind schedule, the overall plan remains sound, and is now backed by detailed operational planning.

2. Strategic Context

2.1 IT availability and stability is one of the top issues that the Trust carries. The confidence in the IT services is low and the IT department has a poor reputation across the Trust.

2.2 There are many issues with the IT service in the Trust of which WiFi reliability and Network stability are fundamental building blocks.

2.3 Currently there are outages on both services which cause difficulties in delivering services across the trust.

2.4 The Board has agreed a plan of remedy, and awaits an applications improvement plan later in Q3.

2.5 The timetable for Unity is beyond the scope of this paper. It is appreciated that go-live cannot happen in late October, and we will use the Digital MPA to confirm the revised date after a further fortnight's work with our partner Cerner on options.

3. Underlying issues

3.1 **Our network hardware is mainly in date**
   - We do not have a major issue with the age of the physical devices however a few devices, some switches and routers, will need to be replaced with spares that we have in stock.

3.2 **The Software and Firmware managing the devices needs updating**
   - In many cases the levels of software and firmware versions, which instruct the hardware on how to route network traffic, are out of date. This exposes us to the risk of security breaches, of losing network connections and of not being able to resolve issues with third parties as our versions make us out of support.

   - Our management of the network is poor.

   - We have a limited skill-set for managing the network in house that leads to our support teams being beyond their skill and comfort zone when managing incidents with the network and with planning for a stable infrastructure.

4.   Current progress

4.1   We have engaged third parties to help.

- WiFi roll out

SCC are helping with the roll-out of new WiFi points in order to improve WiFi across the sites. The anticipated time of these being resolved is weeks ending:

5th October 2018	Sandwell Hospital will be complete
12th October 2018	Retained Site in City Hospital will be complete
19th October 2018	Rowley Regis Hospital WiFi will be complete
26th October 2018	The Lyng Centre will be complete

Immediately after deployment a walk-round programme will take place to tackle any residual issues experienced by end users.

- Network issues

We have engaged Logicalis who are a well-known IT and Network specialist to improve stability across three of the five areas of network performance.

They will be improving the firmware and software versions on the devices, they will be reviewing the devices and replacing where deemed to be necessary, they will be putting rules in place in order to dynamically route traffic and improve stability.

The steps outlined above will enable us to manage the network, to monitor the performance of us and to recover the network with less downtime when future issues occur.

The other two elements for infrastructure stability are the skills of the Trust staff and the processes and procedures we expect them to follow when making changes to the network.

We are managing changes to the network ensuring that they are planned, documented and approved with appropriate rollback plans. We are reviewing the technical skills in the team with a view to growing them and supplementing them with people or services from outside the Trust.

- The timescales for Network improvements

The work has begun on the network improvements. We expect the work to complete by the end (rather than the middle) of November 2018 which will give us stability over the Christmas period and will give us a trusted platform on which to launch Unity.

Further recommended work will be identified during the stabilisation phase.

5.   The N3 NHS Network

5.1   Some issues we encounter are with the N3 NHS network. We have recently made some recommended changes to the network, which have increased stability in that area. We will be preparing to N3 circuits with the Health & Social Care Network (HSCN) in 2019.

6.   Recommendation

The Trust Board is asked to:

6.1   **CONFIRM** that IT resilience is now our top safety priority
6.2   **RECOGNISE** the actions undertaken and set expectations for our next meeting

Martin Sadler
Chief Informatics Officer
September 28th 2018