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Health Board



<b>Meeting Date</b>	<b>17 September 2019</b>	<b>Agenda Item</b>	<b>4.3</b>
<b>Report Title</b>	<b>Theatre Performance – Update Report</b>		
<b>Report Author</b>	Brian Owens – Unit Service Director		
<b>Report Sponsor</b>	Chris White – Chief Operating Officer		
<b>Presented by</b>	Chris White – Chief Operating Officer		
<b>Freedom of Information</b>	Open		
<b>Purpose of the Report</b>	This report informs the Finance and Performance Committee of the current performance against key performance indicators for theatres. Additionally the paper highlights key objectives and achievements following the Theatre Efficiency and Surgical Redesign Group.		
<b>Key Issues</b>	<p>Effective and efficient theatres are key requisites to the sustainable delivery of key access standards.</p> <p>Theatre utilisation is complex and often factors outside of the theatre environment impact of the ability of theatres to utilise all available operative time.</p> <p>Performance has improved across a number of the KPI's when compared with the previous report to the committee.</p> <p>The Theatre Efficiency and Surgical Redesign Group has delivered improvement that has increased the volume of cases being delivered on the NPTH and Singleton sites.</p>		
<b>Specific Action Required (please choose one only)</b>	<b>Information</b>	<b>Discussion</b>	<b>Assurance</b>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Recommendations</b>	<p>Members are asked to:</p> <p>Receive and note the current performance and the actions being taken to improve the overall performance in a sustainable and consistent manner.</p>		

## Theatre Efficiency and Surgical Redesign

### 1. INTRODUCTION

This report updates the Finance and Performance Committee on the current performance for theatres across the Health Board. Furthermore, the paper summaries, key actions following the enhanced theatre program implementation.

### 2. PERFORMANCE

Measuring theatre efficiency is complex and the time spent actually operating is the end component of many processes, some of these are not within the control of the theatre teams / surgeon i.e. unscheduled care demand over flowing into scheduled care bed capacity.

The theatre efficiency and surgical redesign project are also working with clinical staff to develop an alternative suite of performance indicators that will be more sensitive to change and provide a more comprehensive overview of performance. Theatre utilisation is currently a measure of the time spent in theatre operating, it does not demonstrate the volume of cases undertaken e.g. two surgeons with similar case mixes, surgeon 'a' completes two cases and finishes early compared with surgeon 'b' that takes the entire session for one case. In this scenario, surgeon 'b' would have the better utilisation performance despite using more resources to complete fewer cases.

Nonetheless, the 13-month performance against the previously agreed metrics is shown below.

Theatre KPI, shown below:

	Target	Change	Data July 2018 to July 2019			
	(no more than)	Performance compared with Mar 18 - Mar 19 (HB level)	Health Board	Morrison	Singleton	NPT
Late starts	25%	No Change	42%	41%	48%	37%
Early finishes	20%	No Change	39%	36%	33%	58%
Utilisation	90%	2% worse	71%	76%	60%	63%
Cancelled Operations	10%	12% improvement	13%	10%	13%	19%
Cancelled on the day	10%	26% improvement	9%	9%	11%	7%
Cancelled on the day by patient (unwell)	10%	4% improvement	20%	14%	22%	44%
by Hospital non clinical	20%	6% worse	50%	58%	43%	26%
by Hospital Clinical	10%	2% improvement	29%	27%	33%	30%

Comparing the data above with the 13-month period previously reported to the committee, there are some positive signs of improvement.

- Late starts and early finishes continue at the same levels.
- Theatre utilisation has decreased by 2%, however given the volume of cancelled cases due to the unscheduled care pressures this decrease is less than anticipated.

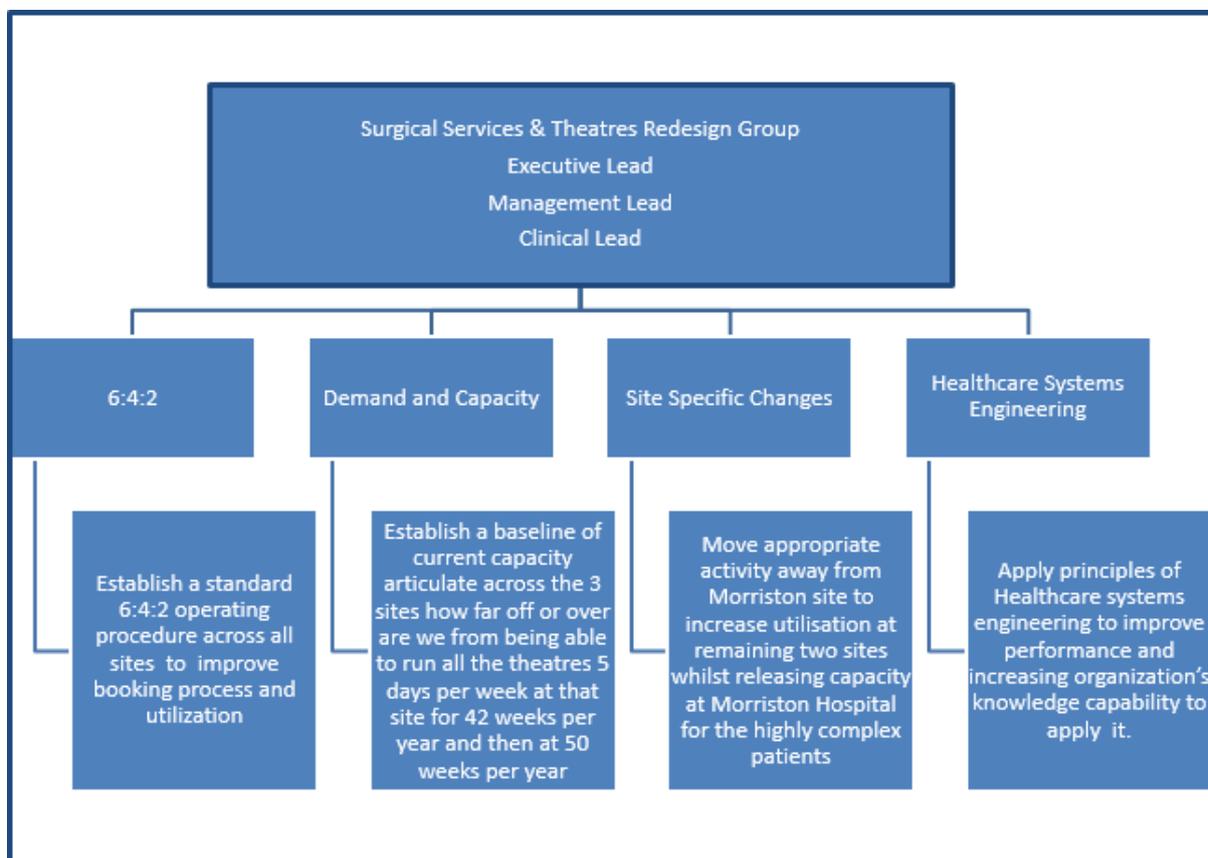
- There has been a step improvement in reducing the number of patients that are cancelled on the day, a 26% improvement compared with the previously submitted data, with performance achieving our internal standards for the first time since the project has been monitoring these metric's.
- The total number of cancellations has improved by 12%, albeit we remain 3% off our internal standard.

It is evident that despite the limitations of the current metrics, early signs of improvement are being demonstrated with fewer patients being cancelled and cancelled on the day of their planned procedure.

See appendix for a detailed breakdown of performance at site and speciality level.

### 3. PROJECT

The project has matured further since the last update in May 2019 and individual work streams have made progress towards their defined scopes and specific objectives.



**Figure 1** Project Work streams

### Progress

#### 6:4:2 – (Dashboard and Standard Operating Procedure)

Standard Operating Procedure

3. Theatre Performance - Tuesday, 17<sup>th</sup> September 2019

All three sites (Morrison, Singleton, NPTH) have now adopted a standard operating procedure to implement and embed the principles of the 6:4:2 booking process, this is facilitated by weekly 'scrum' meetings. The meeting ensures that theatre sessions are booked as far in advance as possible and allocates resources based on booked sessions to avoid resources being deployed when sessions are cancelled.

This is a Health Board approach across the theatre suites aimed at standardising booking practices and maximising efficiencies. This is still a new process and it is anticipated that there will be some immediate improvements, however to fully actualise the potential benefit, cultural and embedded behaviours will need to be addressed that have been established and have not been challenged over many years.

The Informatics' department has developed a dashboard that will facilitate the monitoring and improvements expected from this process. The expectation is that the dashboard will 'go live' from 9<sup>th</sup> September 2019. To date the Health Board has previously not been able to measure and monitor compliance with the 6:4:2 process and therefore has no clear benchmark of the current level of performance.

See appendix for 'screen shots' of some of the views the dashboard now provides.

The dashboard has been developed with clinical and managerial representatives and is being demonstrated to a wide range of consultant and anaesthetic staff at the September theatre audit day.

### Demand and Capacity

A key challenge has been to understand how many of the 33 physical theatres across the SBUHB theatre suites can be staffed five days per week for 42 and 50 weeks per year. The modelling for the Singleton and Neath Port Talbot (NPTH) sites has been completed, it is expected that the Morrison modelling will be completed by October 2019.

Initial findings of the analysis is summarised in table below:

	Singleton (WTE)	NPTH (WTE)
<b>Current Estb.</b>	90.30	45.57
<b>Current SIP</b>	90.02	41.39
<b>42 Weeks Req.</b>	97.88	43.37
<b>50 Weeks Req.</b>	107.18	50.12
<b>Estb. Variance 42 Weeks</b>	-7.58	2.20
<b>Estb. Variance 50 Weeks</b>	-16.88	-4.55

Whilst the Morrison data is being finalised it appears that the Singleton theatres are not staffed (budgeted) to run for 42 weeks of the year, a consultant typically works 42 weeks per year once leave, study and professional development has been deducted. NPTH does appear to be marginally over established for 42 weeks but under for 50 weeks.

It is vital that this assessment of capacity is completed prior to submitting activity plans as part of the annual planning process. It is also an important factor when assessing theatre utilisation, given that the modelling suggests that in Singleton we cannot staff a 42 week year, despite the theatre suites operating over the full year.

### Site Specific Changes

The primary objective is to move appropriate scheduled care activity away from the Morriston site to increase utilisation at the other two sites whilst releasing capacity at Morriston Hospital for the highly complex and emergency patients.

#### Transfer of Activity to NPTH

Arthroplasty plus hand and wrist theatre sessions has already been transferred from Morriston theatre to NPTH. Additionally some shoulder replacement activity is also transferring in October.

Morriston Delivery Unit has agreed in principle that elective activity that is currently being outsourced or completed on the Morriston site and that would be appropriate to move to NPTH (ASA grade 1 & 2) should be transferred to the NPTH site.

Analysis of the activity suggests that an additional c.14 theatre sessions would be required at NPTH to accommodate all of the activity and an additional c.10-12 inpatient beds would also be required.

The NPTH theatres provide 50 sessions per week across the five theatres; currently just over half of the capacity is utilised by Cwm Taf Morgannwg following the boundary changes and forms part of an SLA between the two Health Boards.

In order to support the continued movement of activity to the NPTH a phased approach will be taken to gradually move activity across as the capacity is created within the theatre timetable.

#### Singleton Trolleys

Analysis of data suggested that the Singleton theatre suite were under booking theatre lists, as inpatient bed capacity was not adequate to service the theatre demands at peak times.

The purchase of an additional six trolleys and the creation of a suitable location was approved in June 2019. Estate works and recruitment process for the trolley area is complete. Recruitment for Band 5 nurses has been challenging, however the trolley area will be operational from September 2019 with temporary staffing plans in place, supported by staffing being temporarily assigned from the NPTH site.

### Health Care Systems Engineering (HCSE):

Funding and the adoption of the HCSE approach has been agreed and commissioned. An initial prototype has been completed for Urology and was demonstrated to the theatre efficiency and redesign group in August 2019.

The initial scope of the work has been agreed in principle and will start by focusing on the following specialities:

- Urology
- Spinal
- ENT
- Orthopaedic and Ophthalmology

The project is planned over the course of a year and includes onsite, offsite support and coaching in applying HCSE principles. The first onsite engagement workshop is planned for 12<sup>th</sup> September. This project will allow for live visualisation of queues (Demand/Waiting list/Work in Progress) to enable more informed decisions regarding capacity and activity planning, so that the systems can be designed to achieve from the outset.

#### 4. FINANCIAL IMPLICATIONS

The financial implications are monitored via the Performance and Finance Committee. The table below sets out the projected financial benefits identified to date. As the project progresses it anticipates identifying additional further financial benefits. In the first instance, most of these will be cost avoidance as activity that is currently outsourced is repatriated back within the health board theatre suites.

Opportunity	Type	Start	Cash Released	Original FY Range	To Date - High	To Date - Low	Made to Date	Notes	RAG
Wednesday PM Theatre 1 NPTH - Additional Arthroplasty Lists	Cost Avoidance	Apr-19	£0	£145k-£291k	£131k	£65k	£52k	Session being used each week, but generally a mix of 1 TKR, 1 semi-elective trauma, August = 0	Orange
Friday Alt Theatre 1 NPTH	Efficiency	May-19	£0	£10k-£17k	£7k	£2k	£7k	AB using list, patients booked to end of June, elective and semi-elective	Green
6-4-2 Session Opportunity - Late Cancelled Sessions	Efficiency	Jul-19	£0	£0k-£112k					Orange
Trolleys in Singleton - General Surgery - Outsourcing	Cost Avoidance	Oct-19	£0	£0k-£36k					Red
Trolleys in Singleton - Efficiency Gain from Under-Utilised lists	Efficiency	Oct-19	£0	£0k-£29k					Red
Trolleys in Singleton - Increased Uptake of Sessions	Efficiency	Oct-19	£0	£0k-£29k					Red
Shoulder List - NPTH	Cost Avoidance	Oct-19	£	£79k-£298k					Red
<b>Total</b>			<b>£0</b>		<b>£138k</b>	<b>£67k</b>	<b>£59k</b>		

**Figure 2 SSTRG Finance Tracker**

#### 5. RECOMMENDATION

- The committee is asked to note the content of the report demonstrating progress made in specific work streams

<b>Governance and Assurance</b>		
<b>Link to Enabling Objectives</b> <i>(please choose)</i>	<b>Supporting better health and wellbeing by actively promoting and empowering people to live well in resilient communities</b>	
	Partnerships for Improving Health and Wellbeing	<input type="checkbox"/>
	Co-Production and Health Literacy	<input type="checkbox"/>
	Digitally Enabled Health and Wellbeing	<input type="checkbox"/>
	<b>Deliver better care through excellent health and care services achieving the outcomes that matter most to people</b>	
	Best Value Outcomes and High Quality Care	<input checked="" type="checkbox"/>
	Partnerships for Care	<input type="checkbox"/>
	Excellent Staff	<input type="checkbox"/>
	Digitally Enabled Care	<input type="checkbox"/>
	Outstanding Research, Innovation, Education and Learning	<input type="checkbox"/>
<b>Health and Care Standards</b>		
<i>(please choose)</i>	Staying Healthy	<input type="checkbox"/>
	Safe Care	<input checked="" type="checkbox"/>
	Effective Care	<input checked="" type="checkbox"/>
	Dignified Care	<input checked="" type="checkbox"/>
	Timely Care	<input checked="" type="checkbox"/>
	Individual Care	<input checked="" type="checkbox"/>
	Staff and Resources	<input checked="" type="checkbox"/>
<b>Quality, Safety and Patient Experience</b>		
<ul style="list-style-type: none"> <li>• Timely and effective care: People of all ages to have timely access to admission for surgery. When arranged to have confidence in being admitted with the full knowledge of the procedure and its implications as appropriate.</li> <li>• Patient outcomes: to have outcomes comparable with the best in Europe.</li> </ul>		
<b>Financial Implications</b>		
There are no additional financial implications identified as part of this report.		
<b>Legal Implications (including equality and diversity assessment)</b>		
The Health Board is responsible for planning, delivering and optimising theatre capacity and services for its catchment population. The actions being taken take these issues into account and deliver improved utilisation against benchmarked peer groups.		
<b>Staffing Implications</b>		
Initial		
<b>Long Term Implications (including the impact of the Well-being of Future Generations (Wales) Act 2015)</b>		
Optimising the theatres across the Health Board will support an improved delivery against waiting time standards, whilst ensuring the effective deployment of resources reducing variation in cost and resources.		
<b>Report History</b>	May2019,Dec2018	
<b>Appendices</b>	Appendix 1, appendix 2 and appendix 3.	