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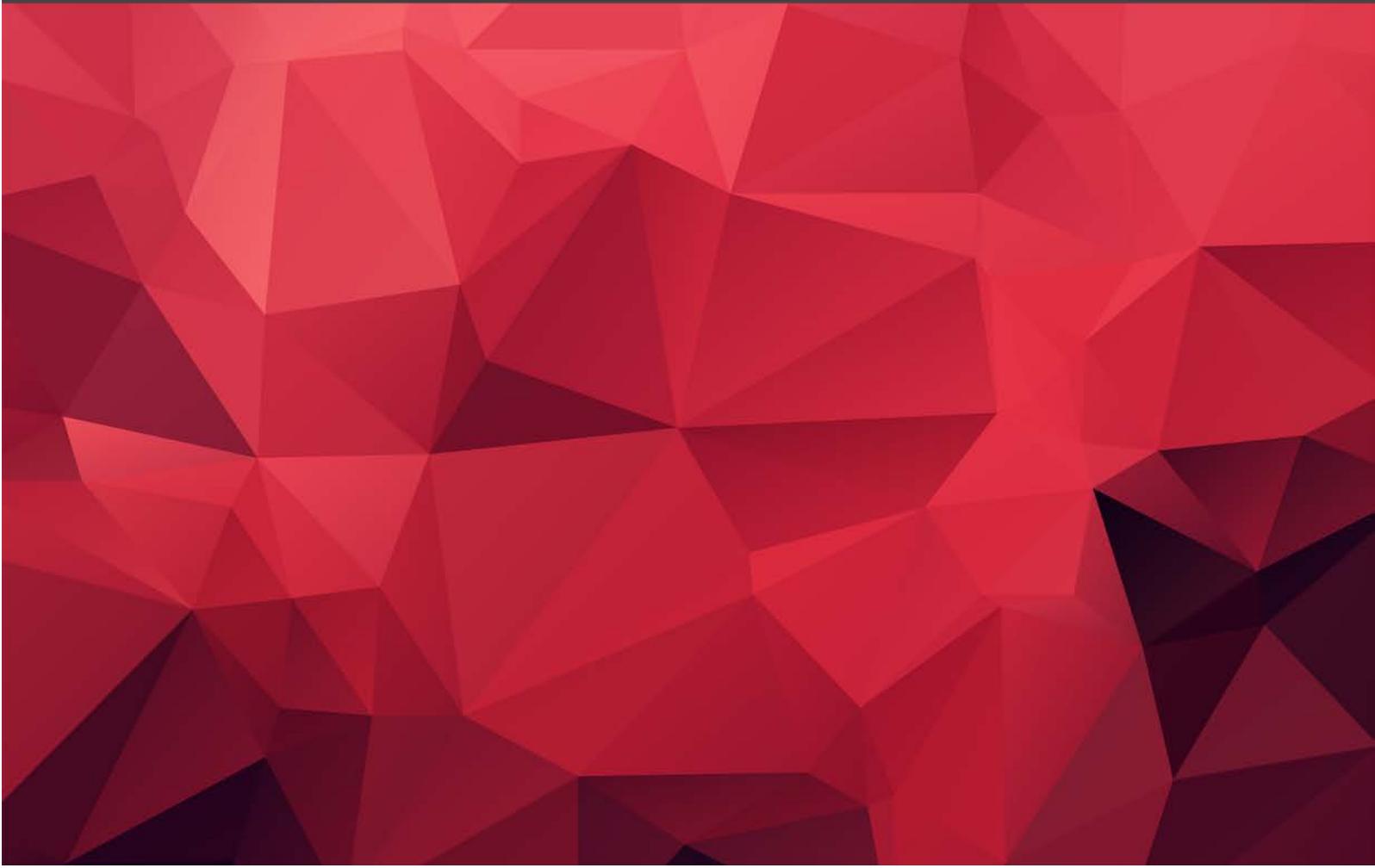
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# Review of operating theatres – assessment of progress – **Hywel Dda University Health Board**

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This work was delivered by Philip Jones.

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Management arrangements are stronger and the Health Board has made some progress in monitoring staffing levels and skill mix but theatres IT systems are not fit for purpose so it is hard to get useful activity and performance data.

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# Summary report

## Introduction

- 1 Operating theatre services should be cost effective, contribute to high quality patient care and be managed to help the Health Board achieve its waiting time targets. However, using theatres effectively is highly dependent on external factors including pre/post-operative processes.
- 2 In 2011, the Wales Audit Office reviewed the effectiveness of operating theatres across Wales. In Hywel Dda Health Board (the Health Board) we concluded that, while improving theatre and day surgery performance was becoming a greater priority, concerted action was required to improve the quality of theatre information, address areas of poorer performance and respond to concerns raised by staff.
- 3 The Wales Audit Office looked at this again in 2014 after requests from Audit Committees, executives and others who recognised theatre performance in many areas remained suboptimal. We asked: Is the Health Board building on our previous recommendations and delivering high-quality and efficient theatre services?
- 4 We reported our findings to the Health Board in July 2014. We concluded that there had been some local efforts to improve theatres but overall there had not been significant improvement and some fundamental barriers remained. We found that:
  - **there had been some improvement actions since 2011 but issues remained in relation to the efficiency of surgical services, inadequate use of safety interventions and some mixed perceptions from staff:**
    - there had been local efforts to improve efficiency although there was scope to be more efficient at several points along the patient’s surgical journey.
    - whilst key safety interventions were becoming more commonly used in theatre they were often not carried out in the right way.
  - **the lack of central leadership and considerable problems with data had been fundamental barriers to improvement:**
    - theatres had not been a corporate priority and the lack of central drive and leadership had been a fundamental barrier to improvement.
    - there were considerable data problems and local efforts to drive improvement suffered because of the lack of good information.
- 5 Our 2014 report made a number of recommendations about:
  - World Health Organisation (WHO) checklist and briefings
  - Incident reporting and learning
  - Staffing levels
  - Theatres performance information
  - Central drive and leadership

- 6 The Auditor General included local work to track progress made by the Health Board in addressing his 2014 recommendations in his Audit Plan for 2018. This progress update started in February 2018 asking: **Has the Health Board made sufficient progress in response to the findings and recommendations made in the original review?**
- 7 In undertaking this progress update, we:
- sent the Health Board a self assessment which was completed and returned to us;
  - reviewed a number of documents including those which were attached to the self assessment; and
  - interviewed Health Board staff to discuss progress, current issues and future challenges.
- 8 We summarise our findings in the following section. Appendix 1 has more detailed information.

## Our findings

- 9 We conclude that management arrangements are stronger and the Health Board has made some progress in monitoring staffing levels and skill mix, but theatres IT systems are not fit for purpose so it is hard to get useful activity and performance data.
- 10 **Exhibit 1** summarises progress against each of the previous recommendations.

### Exhibit 1: status of 2014 recommendations

Total number of recommendations	Implemented	In progress	Overdue	Superseded
9	4	5	0	0

Source: Wales Audit Office

- 11 The Health Board has made progress against all recommendations although the pace of improvement varies:
- the NSPA 'Five Steps to Safer Surgery' methodology has been implemented on all sites. This includes the WHO checklist and debriefing.
  - the Health Board's audit of the WHO checklist in June 2017 found varying degrees of completeness across hospitals and between teams. Results were presented to all sites in audit meetings.
  - the Health Board has introduced a Datix reporting dashboard into all theatres and incidents are a standing agenda item at theatre forum meetings. Trends are identified locally from the Datix dashboard and subsequent action is taken to address the issues. Staff training is identified and structures have been reviewed where appropriate.

- senior nurse managers carry out annual reviews of staffing levels and skill mix against Association For Perioperative Practice guidelines for patients in a peri-operative setting.
- the impact of longer training for operating department practitioners has been discussed with the corporate workforce team. Staffing levels were reviewed and uplifted where necessary, gaps still remain and are being covered by long-term agency staff.
- there are still shortcomings in the robustness and usefulness of theatre performance information. Plans are in place to embed a theatres performance dashboard.
- the Chief Operating Officer is the designated executive lead for operating theatres. Leadership arrangements are clearer and stronger now at individual hospital sites and across the Scheduled Care Directorate.
- the Theatres Improvement Group, chaired by the Chief Operating Officer, now leads work to improve theatres arrangements. The Group wants to explore issues such as clinical variation and clinical value. The Health Board turnaround process includes some work strands that relate to theatres, such as non-pay theatres costs. The Group's terms of reference were being reviewed at the time of our fieldwork.

## Recommendations

- 12 Our work has not identified any new significant risks in relation to operating theatres, and we have made no additional recommendations. The Health Board needs to continue to make progress in addressing outstanding recommendations. These recommendations are set out in [Exhibit 2](#).

### Exhibit 2: recommendations

2014 Recommendations that are still outstanding	
<b>R2: Incident reporting and learning</b>	
a.	Regularly use statistical process control charts to help identify patterns and trends in incident reporting.
b.	The corporate concerns team should work with theatre teams from all sites to agree a set of actions aimed at improving feedback to staff involved in incidents and strengthening the approach to learning from incidents.

## 2014 Recommendations that are still outstanding

### R3: Staffing levels

- a. Ongoing Health Board-level work to assess staffing levels should specifically consider whether concerns about short-staffing in theatres are justified, and if necessary, staffing should be uplifted to ensure safety.
- b. The Health Board should collect data to quantify the extent to which delays on the wards are impacting on theatres, to inform broader Health Board considerations about ward staffing levels.
- c. All acute sites should work with Human Resources to develop local action plans for improving succession planning in theatre teams.

### R4: Theatres Performance information

- a. As a priority, the Health Board should convene a group, with membership from the executive team, theatre staff from all sites and the Myrddin team, with the aim of working together towards a shared outcome of ensuring good quality performance information is readily available and used to drive theatre improvements.

### R5: Central Drive and Leadership

- a. The Health Board should convene a high-profile Health Board-level theatres group, led by a named executive lead for theatres that will drive theatres improvement and share learning across the organisation.
- b. Theatre user groups should also be reinstated at each acute site with the aim of improving multidisciplinary discussions, consideration of performance data and driving local improvement in theatres.

Source: Wales Audit Office

# Appendix 1

## Progress since our 2014 recommendations

Exhibit 3: Assessment of progress

Recommendation	Status	Summary of progress
<b>R1 World Health Organisation checklist and briefings:</b>		
a. Senior nursing and medical staff should regularly witness and critique the use of the checklist and briefings. Constructive feedback should be given, with the aim of promoting the benefits of these interventions as team-working aids and not simple tick lists.	Completed	<p>The NSPA 'Five Steps to Safer Surgery' methodology, which includes the WHO checklist and debriefing, has been implemented at all sites.</p> <p>The Health Board audit of the WHO checklist (June 2017) found varying degrees of completeness across hospitals and between teams. Results were presented to all sites through audit meetings. The checklist is embedded as part of the surgical process, and the Clinical Director follows up in instances where the checklist is not used.</p> <p>All staff groups are involved in work to modernise the checklist's format and terminology. Team briefing templates have been developed, piloted and implemented across all sites. The Theatre Managers Group will continue to review and update their content and functionality.</p>
b. Consider implementing good practice from Cwm Taf University Health Board where junior doctors carry out covert audits of the checklist and briefings.	Completed	<p>The Clinical Director does not support the use of covert audits.</p> <p>Senior nurse managers for theatres monitor compliance with the Fundamentals of Care. The findings are discussed at multi-disciplinary forums. There is monthly sign off of the results by senior nurses. The Head of Nursing collates action plans and reports.</p> <p>Band 7 team leaders review compliance with the WHO checklist and their findings are discussed as part of the team briefing process (see also R1a).</p>
c. Surgeons and anaesthetists who support the checklist and briefings should be asked to act as champions to engender support amongst their colleagues.	Completed	<p>Champions have been established at all sites although it was unclear whether any are medical staff. Theatre staff, rather than clinical teams, lead the checklist procedure.</p> <p>The checklist is discussed at Scheduled Care, Service Delivery Manager, senior nurse managers, and theatre staff meetings.</p>

Recommendation	Status	Summary of progress
<b>R1 World Health Organisation checklist and briefings:</b>		
d. Theatre teams should work together to tailor the checklist for use in their theatres. This will help the tool be more relevant and teams should be encouraged to make the checklist work for them.	Completed	See R1a
<b>Resources</b>		
<b>R2 Incident reporting and learning</b>		
a. Regularly use statistical process control charts to help identify patterns and trends in incident reporting.	In progress	<p>Incident reporting processes have been strengthened and are more consistent between hospital sites.</p> <p>The Health Board has introduced a Datix reporting dashboard into all theatres and incidents, are a standing agenda item at theatre forum meetings. Local trends are reported on and action is taken to address the issues. For example, staff training needs have been identified and structures have been reviewed where appropriate.</p> <p>Inconsistencies in incident reporting have been identified and changed, which allows for more accurate information comparison between sites. For example, Worthybush General Hospital included, unnecessarily, theatre cancellations. This has been stopped.</p> <p>Serious incidents are subject to a comprehensive process of root cause analysis, resolution, and formal signing off.</p> <p>The Acute Services Quality, Safety and Experience Committee minutes from November 2017 show that directorate teams constantly monitor Datix incident reports to ensure that they are correctly recorded.</p>

Recommendation	Status	Summary of progress
<b>Resources</b>		
<b>R2 Incident reporting and learning</b>		
<p>a. Regularly use statistical process control charts to help identify patterns and trends in incident reporting.</p>	<p>In progress</p>	<p>However, while we noted some progress, the number of incidents that were overdue at each review stage was still high:</p> <ul style="list-style-type: none"> <li>• On hold, awaiting review – 381 records, 244 of which were overdue</li> <li>• Under review – 701 records, 626 of which were overdue</li> <li>• Awaiting final approval – 435 records, of which 379 were overdue</li> <li>• Final approval given – 5,447 records</li> </ul> <p>The Scheduled Care Directorate Governance meeting minutes from October 2017 noted that some senior nurses had closed Datix incident entries without completing the corresponding closing form for incident investigation. This is being addressed.</p> <p>A dedicated service manager has been appointed to implement National Safety Standards for Invasive Procedures and Local Surgical Standards for Invasive Procedures. All staff groups are engaged with the work and additional support is provided by the Assurance, Safety and Improvement Team. This should further strengthen incident reporting and resolution, and there are plans to extend this work to critical care and endoscopy.</p> <p>Health boards share clinical incidents at All Wales Theatre Managers meetings, and their conclusions are reported back to the Health Board's Theatre Managers Forum.</p>
<p>b. The corporate concerns team should work with theatre teams from all sites to agree a set of actions aimed at improving feedback to staff involved in incidents and strengthening the approach to learning from incidents.</p>	<p>In progress</p>	<p>See R2a.</p>

Recommendation	Status	Summary of progress
<b>Resources</b>		
<b>R3 Staffing levels</b>		
<p>a. Ongoing Health Board-level work to assess staffing levels should specifically consider whether concerns about short-staffing in theatres are justified, and, if necessary, staffing should be uplifted to ensure safety.</p>	<p>In progress</p>	<p>Theatre staffing levels are being assessed and addressed in a number of ways. Recruitment and retention problems are flagged to the Health Board workforce management team, which offers support to address the issues.</p> <p>Senior nurse managers work with corporate recruitment staff to help promote roles being advertised. Staff said that this work is challenging and takes time.</p> <p>Senior nurse managers carry out annual reviews of staffing levels and skill mix against Association For Perioperative Practice guidelines for patients in a peri-operative setting.</p> <p>The impact of a longer period of training for operating department practitioners has been discussed with the corporate workforce team. While staffing levels were reviewed and uplifted where necessary, gaps remain and are being covered by long-term agency staff.</p> <p>E-rostering has gone live at Withybush General Hospital, Glangwili General Hospital and Prince Philip General Hospital. At the time of this review the system was due to be introduced at Bronglais General Hospital.</p> <p>Senior nurse managers use monthly budget reviews to look for opportunities to up-band existing staff and to use the current establishment as effectively as possible.</p> <p>The workforce management and development action plan includes a full establishment and skill profile review. This enabled the Health Board to develop a a master staffing profile. The Human Resource and Theatre Management teams carry out monthly sickness reviews to identify patterns of sickness.</p> <p>The Health Board is looking at the potential to develop and extend the skills and roles of junior staff. For example, the Band 3-4 scrub role has been developed and introduced.</p>

Recommendation	Status	Summary of progress
<b>Resources</b>		
<b>R3 Staffing levels</b>		
<p>b. The Health Board should collect data to quantify the extent to which delays on the wards are impacting on theatres, to inform broader Health Board considerations about ward staffing levels.</p>	In progress	<p>Staff use Myrddin to record local information on theatre delays. However, the system is not sophisticated enough to identify the impact of, and reasons for, ward delays. The Theatres Transformation Group is working to improve the reporting and use of this information. This includes the development of an IT dashboard for theatres.</p> <p>Theatre Service Delivery staff are members of the All Wales IT Networking group.</p>
<p>c. All acute sites should work with Human Resources to develop local action plans for improving succession planning in theatre teams.</p>	In progress	<p>There is no corporate action plan for succession planning. The Health Board acknowledges the situation, and is taking a number of actions to address it:</p> <ul style="list-style-type: none"> <li>• all sites have mapped nursing staff re-registration requirements;</li> <li>• nurse educators have been appointed and deployed in all units to support up-skilling and career progression;</li> <li>• senior nurse managers are working with corporate recruitment teams to promote recruitment and make roles more attractive (see also R3a).</li> <li>• a review of variable pay against vacancies is ongoing; and</li> <li>• staff are engaged in the recruitment process including participation in recruitment events.</li> </ul>

Recommendation	Status	Summary of progress
<b>Resources</b>		
<b>R4: Theatres Performance information</b>		
<p>As a priority, the Health Board should convene a group, with membership from the executive team, theatre staff from all sites and the Myrddin team, with the aim of working together towards a shared outcome of ensuring good quality performance information is readily available and used to drive theatre improvements.</p>	<p>In progress</p>	<p>Theatres IT systems are still not fit for purpose and staff said that the current situation is highly unsatisfactory. Robust and useful activity and performance data is hard to obtain, and while there have been efforts to improve the situation, progress has been slow.</p> <p>Theatres staff and the infomatics team have a good working relationship. Theatre Schedule Live has been uploaded onto IRIS system across the Health Board, with a traffic light system to highlight un-used sessions. However, theatres staff told us that it has numerous shortcomings. The system is slow and lacks real-time reporting. Staff prefer to go into theatres to see what is happening than to rely on information produced by the system. In addition, it does not provide the trend information which is essential in order to demonstrate service improvements.</p> <p>The Health Board collaborates with NHS Wales Infomatics Service. However, staff were critical of the Myrddin Theatres Module. In particular, that promised system ‘patches’ take a long time to be developed or are not forthcoming at all.</p> <p>The Theatres Transformation Group has set out an action plan to improve activity coding, start and finish times and so on. However, senior staff said that there will be significant challenges in delivering on this work.</p> <p>A theatres dashboard template was due for completion in September 2017. At the time of this review, the installation of the dashboard into IRIS was imminent. There is no meaningful data about cancelled operations although it is hoped that the dashboard will address that.</p> <p>Staff emphasised that they maintain a clear picture of theatre list loading across the four main hospital sites, despite the shortcomings of IT systems. They hold list loading reviews every Tuesday.</p> <p>Senior managers within the Scheduled Care Directorate meet frequently to discuss available information. Senior nurses have discussed the need to feed into the Quality and Safety Dashboard work being led by the Assistant Director of Nursing. They are considering the potential for a bespoke element for theatres.</p>

Recommendation	Status	Summary of progress
<b>Resources</b>		
<b>R5: Central drive and leadership</b>		
<p>a. The Health Board should convene a high-profile Health Board-level theatres group, led by a named executive lead for theatres that will drive theatres improvement and share learning across the organisation.</p>	<p>In progress</p>	<p>The Chief Operating Officer is the designated executive lead for operating theatres, and has a very clear understanding of the current challenges. Scheduled Care Directorate and hospital site leadership arrangements are much clearer and stronger now.</p> <p>The Theatres Improvement Group leads work to improve theatres arrangements, and is chaired by the Chief Operating Officer. The Group plans to explore issues such as clinical variation and clinical value. The Health Board turnaround process includes a number of strands of work that relate to theatres, such as non-pay theatres costs. The Group's terms of reference were being reviewed at the time of our fieldwork.</p> <p>There are high levels of temporary medical staffing across the Health Board, and a number of vacancies exist at any given time. As a result locum staff are pushed to the top end of their productivity. This is particularly challenging for them in the absence of a substantive workforce to provide support.</p> <p>The Directorate is working to build stronger teams, but temporary teams make that much harder to achieve. As a consequence, it is also more difficult to drive theatre changes. Staff recognise that there is still a lot to do to improve theatre productivity.</p>

Recommendation	Status	Summary of progress
<b>Resources</b>		
<b>R5: Central drive and leadership</b>		
<p>b. Theatre user groups should also be reinstated at each acute site with the aim of improving multidisciplinary discussions, consideration of performance data and driving local improvement in theatres.</p>	<p>In progress</p>	<p>The appointment of a Service Delivery Manager, senior nurse managers and support managers is helping to drive improvement.</p> <p>Once established, the theatres dashboard will enable theatres user groups to compile, monitor and compare a consistent performance data set.</p> <p>However, attendance at meetings of the theatre user group remains a challenge, and medical representation is low.</p> <p>The Directorate is focussed on addressing the historical issues which have significantly affected the culture of theatres services at Bronglais Hospital. The Chief Operating Officer has expressed the Health Board's commitment to improving arrangements on that site, and the opening of a new theatres suite in June 2018 will significantly improve the environment for staff and for patients.</p> <p>Senior members of the Scheduled Care Team are highly committed to working with theatres staff at Bronglais Hospital, and in particular to resolving issues that remain from the introduction of the Agenda for Change national pay system. The Health Board's Organisational Development Team is working with theatres staff at Bronglais to look at culture and leadership.</p>

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