WALES AUDIT OFFICE
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Operating theatres follow-up

Abertawe Bro Morgannwg University Health Board

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The person who delivered the work was Stephen Lisle.

Contents

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Summary report

Background and key findings

1. Operating theatre services are an essential part of patient care. It is in the interest of patients and NHS organisations to ensure that operating theatre resources are used to best effect so that they are cost effective, support the achievement of waiting time targets and contribute to positive patient experience.

2. Previous work carried out by the Wales Audit Office has identified significant scope for improvement in operating theatre and day surgery performance across Wales. In August 2011, the Wales Audit Office carried out a review of operating theatre and day surgery performance in Abertawe Bro Morgannwg University Health Board (the Health Board).

3. The review concluded that while some steps had been taken to improve theatre utilisation, accelerated and better co-ordinated action was needed to address the comparatively poor performance and concerns raised by staff. Our original recommendations are included in Appendix 1. The Health Board developed an action plan to implement these recommendations and the Health Board's Audit Committee requested that the Wales Audit Office reviews progress within approximately a year of publishing the 2011 report.

4. This follow-up review assessed progress in implementing the action plan. The review also considered whether the Health Board's actions are likely to lead to sustained improvement in operating theatres and day surgery.

5. We sought to answer the following question: *Has the Health Board made sufficient progress in improving theatre performance since our review in August 2011*?

6. We concluded: **The Health Board has rightly focused significant efforts in putting in place the groundwork for improvements across theatre services. However, the impacts on performance have been disappointing so far and the Health Board should give priority to tackling some key, remaining barriers**.

7. We came to this conclusion because:

- Part 1: Theatres have rightly been a priority for the Health Board and there is now a better structure and framework for driving service improvement.
- Part 2: Despite considerable efforts, operating theatres performance has not improved as much as we would have expected.
- Part 3: Sustainable improvement in future will be extremely difficult if a range of key issues are not addressed as a priority.

Recommendations

8. In the box below we set out our recommendations. We begin by setting out some contextual information about the problems the Health Board is experiencing. Then we present recommendations for improvement. The recommendations were discussed and agreed with senior managers prior to the report being finalised.

Theatre Work Programme and Theatre Board - Staff have limited awareness of the Theatre Work Programme and the Theatre Board.

R1 The Health Board should:

- Involve its Communications and Marketing team in 'branding' its programme to make it clearly identifiable and distinct from other initiatives. The Health Board may want to consider using the MINDSPACE[1] methodology to encourage greater support for the programme.
- More clearly state the programme's actual objectives. Greater visibility of the objectives might encourage greater support for the programme.
- Publicise the impacts of the programme to its operational staff.
- Retain the current Theatre Board members but also introduce a rolling membership of band 7s and 6s to improve staff inclusivity and engagement.
- Update the Theatre Board's terms of reference so that its role encompasses more than just the Transforming Theatres Programme (TTP).

Joint working across directorates - The reorganisation of directorates has resulted in deterioration in relationships between Anaesthetics and Theatres.

R2 The Health Board should:

- Develop an action plan to specifically improve joint working between Anaesthetics and Theatres. Leaders from both directorates should be held jointly accountable for delivery of the action plan, which should specifically include actions that will significantly reduce cancellation of theatre lists.
- Address as a priority the problems with aligning Anaesthetic and Theatre resources.

Communications with theatres staff – Despite actions to improve communications with staff, there is clearly significant scope to improve further.

R3 The Health Board should:

- Introduce a staff forum for all grades of staff involved in theatres at each hospital.
- Extend use of Sharepoint and consider using blogs and other communication technologies.
- Ensure staff are given the opportunity to read and discuss this report, as part of a session that aims to directly engage staff in solving the issues raised in this report.

[1] MINDSPACE is a checklist developed by the Cabinet Office that aims to provide low-cost and low-pain ways of changing people's behaviours.
http://www.instituteforgovernment.org.uk/publications/mindspace

Preoperative assessment - There has been minimal development of preoperative assessment since our previous review and key problems we identified in 2011 remain.

R4 The Health Board should:

- Invest time and effort in properly process-mapping preoperative assessment services, to ensure there is robust understanding of demand and supply across all areas and specialties of the Health Board.
- Develop a corporate vision stating what it hopes to achieve from preoperative assessment, and standardise processes and outcome measures for preoperative assessment based on best practice.
- Find an innovative way of ensuring sufficient anaesthetic involvement in preoperative assessment in Swansea. This could include the use of telemedicine to allow anaesthetists to work across more than one hospital site. We understand that telemedicine equipment has been purchased for stroke services and is not being used.

Performance and performance monitoring – Theatre efficiency has not improved as quickly as expected. The Health Board appears to do little or no monitoring of patient experience regarding theatre services and performance reporting on theatre efficiency and productivity can be further improved.

R5 The Health Board should:

- Continue to drive improvements in theatre efficiency, particularly in relation to day surgery theatres.
- Record patient stories from people who have had surgery within the organisation. These stories should be publicised within all theatres to highlight what is good and what needs to improve within theatre services.
- Use the opportunity provided by the new theatre system to improve performance reporting, particularly the balance of reporting at various levels such as by hospital, by theatre and by specialty. New reporting mechanisms should encourage team-based performance reporting to drive ownership of improvements.
- Introduce more regular and better co-ordinated central collation and analysis of theatre staff sickness data.

Staffing resources – Staff we spoke to had concerns about staffing levels, particularly due to high sickness rates.

R6 The Health Board should.

- Record, monitor and act on incidents where staffing levels are reported to be a high risk or contributory factor.
- Implement changes required as a result of the forthcoming Association for Perioperative Practice (AfPP) review.
- Consider involving the Conditions and Wellbeing Team more widely within theatre services with a view to reversing the recent rise in sickness levels.
- Make it easier for staff to work flexibly across hospital sites by increasing standardisation of processes, and finding a proactive way to help staff become familiar with hospital sites where they have previously not worked.

Stock and equipment - An options appraisal exists to resolve the high pressure being experienced within the Hospital Sterilisation and Disinfection Unit (HSDU). For certain procedures, the Health Board holds only one theatre tray. There are also relatively frequent incidents where trays have been damaged or wet.

R7 The Health Board should:

- Assess the risks associated with procedures where it has only single theatre trays. The results of the risk assessment should be reported to the Theatre Board.
- Audit the patient safety, cost and efficiency implications of damaged wraps and wet trays. These matters should be considered and then regularly reported upon to the Theatre Board.
- Take a quick and effective decision on the options appraisal in relation to HSDU.

Detailed report

Part 1: Theatres have rightly been a priority for the Health Board and there is now a better structure and framework for driving service improvement

Theatre improvement continues to be a high priority for the Health Board

9. Our previous report concluded that whilst the strategic importance of theatres was recognised, there were weaknesses in strategic planning and management of theatres.

10. We recognise that theatres improvement continues to be a high priority for the Health Board. Our document review suggests there is a wide range of initiatives being carried out with the aim of improving theatres performance. Managerial staff we interviewed were positive about the executive involvement in and support being given to theatres improvement work.

11. The Health Board's requests for outside help in improving theatres is also a positive sign that it recognises the importance of improvement work. Examples of these requests include the Audit Committee asking the Wales Audit Office to follow-up its review, and the Health Board's requests for the Delivery and Support Unit, as well as Capita, to become involved in supporting theatres improvement.

The new work programme provides greater clarity around the direction of travel although there is scope to be clearer about the objectives

12. In response to our previous report, the Health Board put together an action plan which aimed to address our recommendations, as well as recommendations from the Delivery and Support Unit. This action plan was complicated and included more than 60 actions.

13. In May 2012, the new Theatre Work Programme was tabled at the Theatre Board. The programme appears to be a better document for driving improvement than the previous action plan. The programme focuses on five themes that appear broadly sensible and comprehensive. The scope of the programme also aims to shift emphasis from looking just at theatres to focusing on the entire patient pathway. Again, this appears to be an intelligent way of approaching these complex issues.

14. We also note that senior managers are beginning to think in different ways about the direction of travel and the actions that are needed to achieve the programme's ambitions. Examples include consideration of shut down periods so annual leave can be better aligned between all types of staff, and we were also told about the consideration of financial penalties for specialties who do not comply with rules about the cancellation of theatre lists. Whilst we are not necessarily saying that either of these initiatives are the right approach, it is a positive thing that senior managers are beginning to realise that things have to change and that new ways of thinking are required.

15. Whilst we recognise the above strengths in the programme, there may be scope to highlight, more obviously, the specific objectives that are sought. Nearly all of the operational staff we interviewed[2] had little or no awareness of the programme and its aims. When staff were asked what they thought were the Health Board's key priorities for theatres, there was very wide variation in their responses and no consistency of view about the main priorities[3]. This might be an indication of limited involvement from operational staff in generating the programme, and/or it might reflect ongoing weaknesses in the communication of these objectives to staff. Matters relating to staff communications are discussed further in Part 3 of this report.

The Theatre Board and sub-groups provide a definite structure for implementing the programme but the pace of change has frustrated some staff

16. The Theatre Board met for the first time in June 2011, which was after the fieldwork of our previous report. We consider the formation of the Theatre Board to be a positive step. The Theatre Board appears well-led by a good mixture of clinical and managerial leaders who are clearly determined for the Theatre Board to be effective.

17. The Theatre Board also provides a good structure for implementing the new work programme. It has a broad membership, derived from all parts of the Health Board involved in theatre services and the formation of subgroups for delivering the programme's themes and work streams appears to be a sensible arrangement. We also welcome news that important work is now ongoing to ensure there is no duplication of effort in work streams.

18. It is also sensible for the Theatre Board to absorb the work within the TTP. During interviews we were told about some positive impacts from that programme such as heightened focus on theatre efficiency, better performance reporting and better team working in certain theatres. However, we were also told that the impacts from the TTP have been patchy and not mainstreamed across enough theatres. With so much potential overlap between the Theatre Board's work and that of the TTP, we consider it a common sense solution to bring these things together and by doing so, this amalgamation should aim to do more to spread some of the positive impacts that have been achieved by the TTP so far.

[2] Caveat: Whilst our initial study involved a large-scale survey of staff, this follow up study involved only a small-scale investigation of operational staff views. We carried out two drop in sessions with staff, one at Morriston Hospital and one at Princess of Wales. We spoke to a total of 17 members of theatre staff who provided their views about theatre services.

[3] Staff's views on the Health Board's top three priorities for theatres included: efficiencies, cost savings, reducing cancellations of individual patients because of notes not being available, improving standards of care, reconfiguration of services, infection control, cancellations because of overambitious lists, modernising services, increasing throughput and reducing turnaround times.

19. There is a need to update the Theatre Board's terms of reference. According to the current terms, the Theatre Board's purpose is to 'ensure the success and timely delivery of the transforming theatres programme'. It is our understanding that the functions of the Theatre Board are now much wider than this and the terms of reference should be updated to reflect this broader role.

20. During our fieldwork we heard some mixed views about the effectiveness of the Theatre Board. Several staff commented that the Theatre Board had got off to a slow start and that they continued to be frustrated with the slow pace of change. Some other staff were positive and optimistic about the Theatre Board. Nearly all of the operational staff we spoke to had not heard of the Theatre Board.

There are examples of theatre initiatives that have led to direct benefits

21. As well as important strategic changes, such as the formation of the Theatre Board and the development of the work programme, the Health Board has launched some initiatives that have secured direct benefits. Some of these initiatives include:

- The Conditions and Wellbeing Team working with theatre staff. By giving theatre staff better access to this team's services, we were told that there has been a five per cent reduction in staff sickness levels. The data presented to us from the Health Board considered showed that in the west of the organisation, sickness rates had declined fairly consistently during 2011-12 but the rate increased again during 2012-13. At July 2012 the sickness rate was approximately 10 per cent. In the east of the organisation the Health Board did not provide sufficient data to be able to comment comprehensively on trends in sickness but the data did show sickness levels at Neath Port Talbot theatres ranging from 5.4 per cent to 12.4 per cent in 2010. At Princess of Wales main theatres in 2011, monthly sickness levels ranged from 2.8 per cent to 7.2 per cent and at Princess of Wales day surgery unit, sickness ranged from 0 per cent to 6.5 per cent in 2011. Whilst we welcome the work of the Conditions and Wellbeing Team, we remain concerned that further work is required to sustainably reduce the level of sickness and improved collation and central analysis of sickness is required.
- The introduction of e-learning packages within theatres. These online training modules have been helpful in allowing greater flexibility around staff training. Staff are able to complete modules during downtime rather than staff having to be taken out of theatre sessions. Staff we spoke to were generally positive about this development. Compliance is relatively high for most mandatory training courses although in June 2012 the compliance in Resuscitation training was just 63 per cent and compliance with IPR was 72 per cent.

- Considerable savings secured through the work of the Clinical Supplies User Group. The group was formed in September 2011 with a particular focus on standardising theatre supplies. A paper that went to the May 2012 Theatre Board recognised that the group has made savings of approximately £200,000 since its inception. There is clearly a need to continue with the drive for savings given the Clinical Support Services directorate has a cost improvement plan target of £7.8 million for 2012-13 and the Surgical Specialties Directorate has a target of £4.7 million.
- The introduction of a new escalation protocol for critical care beds. The protocol sets out what should happen in instances where demand is elevated in critical care. Staff in some interviews told us about positive impacts from the protocol, around the prioritisation of discharges from critical care beds. However, there was also recognition from staff that further improvements were required to ensure capacity constraints do not arise within critical care beds.

Part 2: Despite considerable efforts, operating theatres performance has not improved as much as we would have expected

There has been little improvement in efficiency within main theatres

Overall utilisation of main theatres has improved but not as much as expected

22. Our previous report concluded that overall utilisation[4] of main theatres was generally poor and was resulting in loss of considerable operating hours. Exhibit 1 shows the overall utilisation has increased slightly at three main theatre suites and remained constant at the fourth. However, given the focus on operating theatres, we consider that this improvement is not quick enough and there remains considerable scope for improvement, especially given that the upper quartile performance across main theatres in all comparator organisations during our previous review was 86.2 per cent.

Exhibit 1: Overall utilisation has improved slightly at three units and is unchanged at a fourth

The exhibit shows the overall utilisation calculated as follows: 'Total used time' divided by 'Total planned time', expressed as a percentage.

Theatre Suite	July 2010 to June 2011	July 2011 to June 2012
Princess of Wales Main	86%	89%
Morriston Main	78%	81%
Neath Port Talbot	70%	70%
Singleton Main	67%	69%
TOTAL	**76%**	**78%**

Source: Data provided by ABMU Health Board, analysis by the Wales Audit Office.

[4] Overall utilisation is defined as 'Total used time' divided by 'Total planned time', expressed as a percentage.

Despite changes to processes, session cancellations continue to result in considerable loss of operating hours

23. Our previous report concluded that main theatres were losing considerable time due to session cancellations. Since the previous report, the Health Board has changed its processes for confirming and cancelling theatre sessions. As of 1 May 2012, specialties are required to give at least 28 days' notice to theatres if they wish to cancel a session. The previous requirement was 21 days' notice. Where 28 days' notice is not provided, specialties are required to complete a cancelled session proforma and generate an action plan for preventing such problems reoccurring.

24. However, these process changes do not appear to have had a positive impact on cancellation rates. Exhibit 2 shows that there has been no real change in the time lost due to cancelled sessions. This remains a key issue for the Health Board to address.

Exhibit 2: Planned list utilisation has remained largely unchanged, meaning that considerable time continues to be lost through session cancellations

The exhibit shows the planned list utilisation calculated as follows: 'Total list time' divided by 'Total planned time', expressed as a percentage.

Theatre Suite	July 2010 to June 2011	July 2011 to June 2012
Morriston Main	89%	90%
Princess of Wales Main	88%	89%
Neath Port Talbot	78%	78%
Singleton Main	77%	77%
TOTAL	**85%**	**86%**

Source: Data provided by ABMU Health Board, analysis by the Wales Audit Office.

25. According to a report provided to the May 2012 meeting of the Theatre Board, 108 sessions in April 2012 were cancelled outside the required notification period. Data for June 2012, show that despite rules that aim to ensure sessions are not cancelled at short notice, 46 per cent of session cancellations in the east happened within 28 days of their due date. Exhibit 3 shows that in five specialties in the east of the Health Board (Princess of Wales and Neath Port Talbot hospitals), the majority of cancelled sessions are cancelled at short notice. This is a particular issue in Gynaecology, Orthopaedics and Urology.

Exhibit 3: A large proportion of session cancellations are happening at short notice

The exhibit shows data for June 2012. Data were only available from the east of the Health Board.

Specialty	Number of sessions cancelled with < 28 days' notice	Number of sessions cancelled with > 28 days' notice	Percentage of cancelled sessions cancelled with < 28 days' notice
Cardio-thoracics	2	0	100%
Spinal	1	0	100%
Gynaecology	25	3	89%
Orthopaedics	28	15	65%
Urology	11	6	65%
Burns and Plastics	3	4	43%
Max-fax	4	9	31%
General Surgery	11	29	28%
ENT	11	19	28%
Ophthalmology	2	24	8%
Vascular	0	7	0%
TOTAL	**98**	**119**	**46%**

Source: Data provided by ABMU Health Board, analysis by the Wales Audit Office.

26. We understand that the Health Board is now carrying out work to develop a tighter, electronic process for confirming and cancelling theatre sessions. Through the electronic system being rolled out at the time of our fieldwork, specialties will be required to confirm and cancel sessions via the intranet, which aims to reduce the current email traffic and telephone calls. Specialties that cancel outside the notification period will be automatically informed of the need to complete a non-compliance proforma.

The frequency of late starts has reduced slightly but early finishes are now more common

27. Our previous report concluded that late starts and early finishes were having a considerable impact on main theatre utilisation.

28. Staff told us during our fieldwork that the Health Board has placed a particular emphasis on trying to improve late starts and early finishes. However, Exhibit 4 shows that late starts continue to be a problem. Whilst there has been a slight improvement across the totality of main theatre suites, performance remains far worse than the 10 per cent target.

Exhibit 4: Nearly a quarter of all sessions start late

The exhibit shows the percentage of sessions that started more than 15 minutes late.

Theatre Suite	July 2010 to June 2011	July 2011 to June 2012
Morriston Main	38%	30%
Singleton Main	32%	25%
Princess of Wales Main	18%	16%
Neath Port Talbot	16%	14%
TOTAL	**28%**	**23%**

Source: Data provided by ABMU Health Board, analysis by the Wales Audit Office.

29. Early finishes are more frequent than late starts and performance has worsened in relation to this indicator. Exhibit 5 shows that nearly a third of all sessions finish more than 30 minutes early. This remains a key problem for the Health Board as the performance of main theatres remains well below the 10 per cent target.

Exhibit 5: Nearly a third of all sessions finish early

The exhibit shows the percentage of sessions that finished more than 30 minutes early.

Theatre Suite	July 2010 to June 2011	July 2011 to June 2012
Morriston Main	39%	37%
Princess of Wales Main	13%	25%
Neath Port Talbot	32%	31%
Singleton Main	32%	34%
TOTAL	**31%**	**32%**

Source: Data provided by ABMU Health Board, analysis by the Wales Audit Office.

Performance is particularly poor within day surgery theatres

30. Our previous report concluded that day surgery theatre utilisation was poor. Our more recent data suggest that this issue remains because overall utilisation of day theatres is considerably worse than main theatres. Main theatre utilisation was 78 per cent whilst day theatre utilisation was 67 per cent.

Exhibit 6: Overall utilisation in day units is low

The exhibit shows the overall utilisation calculated as follows: 'Total used time' divided by 'Total planned time', expressed as a percentage.

Theatre Suite	July 2010 to June 2011	July 2011 to June 2012
Morriston (Day)	70%	72%
Singleton (Day)	69%	69%
Princess of Wales (Day)	62%	62%
TOTAL	**66%**	**67%**

Source: Data provided by ABMU Health Board, analysis by the Wales Audit Office.

31. Whilst we have not carried out the full data analysis in relation to day theatres, our interviews with staff and document review suggest there are particular concerns about poor performance in relation to late starts in Morriston's day surgery unit and cancellation of sessions at the Princess of Wales day surgery unit.

32. Our previous report concluded that the Health Board's day case rate was amongst the lowest performing quarter of organisations in England and Wales. The July 2012 meeting of the Board was presented with data showing that the Health Board was falling just short of meeting the 80 per cent day case rate for the British Association of Day Surgery basket of 50 procedures. Particular scope exists to increase the day case rate in General Surgery and Oral/Maxillofacial Surgery. Day surgery does not feature in the Theatre Work Programme and most staff told us that improving day surgery rates no longer appears to be a priority for the Health Board.

The Delivery and Support Unit's involvement is beginning to have positive impacts which now need to be spread to other theatres

33. The Delivery and Support Unit has been working within the Health Board on a scheme that focuses on reducing turnaround times between surgical patients. This work focuses on improving the efficiency and productivity of orthopaedic theatres but its lessons are transferable to all types of theatres.

34. The Delivery and Support Unit's work has involved performance analysis along with diagnostic observational reviews and feedback reports. The work began in February 2012 and focused on Theatre 2 at Morriston Hospital.

35. The work aims to achieve turnaround times of 20 minutes[5]. Exhibit 7 shows that performance is beginning to improve at Morriston Theatre 2, across all three key indicators. As well as the small-scale performance improvements already achieved in Theatre 2 at Morriston, staff from the Delivery and Support Unit told us that there has been noticeable, positive, cultural change in the theatres involved in their work within the Health Board. The key will now be to translate this cultural change into further performance improvement and to spread the cultural change across all theatres.

Exhibit 7: The scheme has resulted in improvements in some theatres

The table compares performance during the baseline period (1 February 2011 to 31 July 2011) to the most recent data period (1 February 2012 to 30 March 2012).

Performance measure	Morriston Theatre 2	
	2011	2012
Turnaround time – minutes that 80% of turnarounds were completed within	45	43
Percentage of sessions that started late[6]	91	89
Percentage of sessions that finished > 30 mins early	65	53

Source: Data provided by the Delivery and Support Unit, analysis by the Wales Audit Office.

[5] The work aims to achieve 20 minute turnaround times in 80 per cent of cases.
[6] Whilst some measures of late starts consider only sessions that start more than 15 minutes late, the Delivery and Support Unit considers a session to be a late start if it begins even one minute late.

Part 3: Sustainable improvement in future will be extremely difficult if a range of key issues are not addressed as a priority

36. Part 3 of the report does not aim to discuss all of the issues and problems being faced by theatre services. We have attempted to cover only the most important issues that need to be addressed as a priority.

The problems in joint working between anaesthetics and theatres is a key barrier

37. The reorganisation of directorates within the Health Board appears to have resulted in a mixture of positive and negative impacts for theatre services. Some staff told us that the reorganisation had improved working relationships within the staff and services that now sit within the Surgical Services Division.

38. However, a significant drawback of the reorganisation is that Anaesthetics now sits in a separate directorate to theatres, as part of Clinical Support Services. The vast majority of staff acknowledged that this was problematic and some told us that relationships between Anaesthetics and Theatres had deteriorated since the restructuring. We were told of the following issues in relation to the relationship between Anaesthetics and Theatres:

- poor communications between the directorates resulting in anaesthetists turning up for operating sessions that have been cancelled;
- business cases for additional consultant surgeons being progressed without consulting or considering the impacts on Anaesthetics; and
- a lack of clarity around some budgetary matters causing disputes and delays in deciding which directorates should pay for some theatre equipment.

39. Whilst we were told that Anaesthetics were 'totally integrated' into the Theatre Board and Theatre Work Programme, some staff felt that there was scope to increase the involvement of Anaesthetics and ensure that the programme is delivered in a truly joined up manner.

40. We understand that new, regular meetings are due to be introduced between the general managers and clinical directors within Clinical Support Services and the Surgical Services Division. The focus of these meetings aims to ensure that problems are tackled as one entity, not as separate structures. We welcome this as a positive step towards ensuring these key partners begin to work more effectively together however we believe that there may be a need to develop a formal action plan for working across the directorates, and hold leaders from both directorates jointly accountable for delivering the plan.

There needs to be better understanding and management of capacity and resources

Work is underway to improve understanding of staffing levels but some staff said they felt overworked

41. In our previous report we said that staff had mixed views about the adequacy of staffing levels. Our benchmarking showed that the average whole time equivalent staffing levels were comparable to comparator organisations in England and Wales but we also concluded that there was an imbalance in staffing issues across hospital sites.

42. The Theatre Risk Register raises some specific, ongoing risks about staffing levels. The register lists the following issues as red risks:

- insufficient skilled staff for emergency activity taking place in different location/site to elective activity;
- unable to release staff for mandatory training due to clinical commitment and insufficient establishment; and
- insufficient staffing levels to meet demand of additional workload.

43. We have insufficient information to say whether the Health Board has the right staffing establishments but there are several issues that appear to suggest that staff resources are stretched at times. These issues include the following:

- Many of the operational staff we spoke to said they were concerned about staffing levels. Some staff used terms like ‘daily battles’, ‘fire-fighting’ and ‘constant pressure’. Feelings were stronger on this issue at Morriston.
- As mentioned in paragraph 21, sickness levels remain fairly high and are contributing to staff resources feeling overstretched.
- An increase in the number of operations and more frequent backfilling of lists appears to have increased workload pressures.
- We were told about particular concerns about the staffing resource within recovery at Morriston.
- Work is ongoing to quantify current capacity issues in anaesthetics but most managerial staff acknowledged that the number of consultant anaesthetists is less than is required.

44. At the time of our fieldwork, the Health Board was carrying out a review of theatre staffing using guidelines from the AfPP. It will be important that the findings of that review are considered by the Theatre Board as a priority.

45. We also acknowledge that the Health Board has begun to deploy its staff more flexibly across hospital sites. This appears a pragmatic way of using the valuable staff resource but more may need to be done to secure support for this approach from operational staff. The Health Board could do more to standardise practices so that staff feel more comfortable and are better informed about working in unfamiliar clinical settings.

The Health Board has not fully understood its current theatre capacity and continues to have significant difficulties matching its anaesthetic and theatre resources

46. The size of the organisation and the large number of theatres and sessions it runs is a complicating factor when trying to understand the totality of theatre capacity. Nevertheless it has been a barrier to the effective use of theatres that the Health Board has not had a good understanding of its total capacity.

47. Centrally held, up-to-date information about the actual sessions that are carried out as well as the sessions' scheduled start and finish times, has not been readily available. At the time of our fieldwork work was ongoing to improve the understanding of theatre capacity and the baseline timetable. Each of the surgical specialties had been asked to provide information on all of their sessions, by day of the week and location, including start and end time, to a central information point. This is critical information and we welcome the decision that this information will now be required from each specialty on an annual basis.

48. Another major barrier to effective use of theatres continues to be the problems in ensuring anaesthetic and theatre resources are appropriately matched. When planning the staffing of theatre lists, the Health Board continues to struggle to ensure the anaesthetic, surgical and theatre staffing are aligned. There was widespread acknowledgement during interviews that this process must improve. Meetings are held between Anaesthetics and Theatres on Tuesdays to discuss the staffing of lists, in advance of finalising the month ahead theatre timetable on Fridays. However, Anaesthetics has been repeatedly unable to provide its staffing information in time for the Friday shut down of the timetable.

Bed availability issues continue to impact on theatres performance

49. We concluded in our previous review that problems in securing beds for surgical patients are having a significant negative impact on theatre performance.

50. Whilst we did not look at this issue in any detail during our follow-up, we were told by many staff about the ongoing problems in securing inpatient beds. Whilst it is right that we draw attention to this issue, we also feel it is important to emphasise that regardless of bed availability issues, there remains considerable scope to improve the efficiency and effectiveness with which theatres work.

51. An isolated issue that is further impacting on bed availability is the delay in fixing the tray storage carousel at Princess of Wales. The carousel has been broken for several weeks and staff were unsure about whether it would be fixed due to financial pressures. As the carousel can no longer be used for storage, trays are now being stored in alternative locations within the hospital, and this has resulted in the closure of one of the recovery bed bays. Staff were concerned that these arrangements were making it difficult to find equipment and were also further limiting the recovery capacity within the hospital.

Despite some improvements, there remains much work to do to improve communications and to engender staff support and engagement for what the Health Board is striving to achieve

52. Our previous review concluded that staff morale was not good within operating theatres. We recommended that the Health Board take a number of specific actions to improve two-way communications with staff and improve morale.

53. The Health Board has clearly attempted, on a number of fronts to improve communications and morale. The instigation of band 7 meetings and away days is a positive development, both for cascading downwards of corporate information, and for gaining the valuable views of band 7 staff. Staff involved in these meetings were generally positive about them and it is good news that these meetings will soon be extended to include band 6s. It is also positive that these meetings involve staff from all hospital sites. Some staff thought these meetings were beginning to create a positive environment where band 7 staff feel more able to challenge the norms and contribute towards improvement efforts.

54. The Surgical Services Directorate has also begun producing a briefing paper to aid communications and cascading of important information to operational staff. The paper gives information including issues discussed in the monthly executive team meetings, updates on some performance issues and details of changes to services. The directorate has also begun monthly road shows where senior managers and clinicians try to meet up with staff and discuss key issues. This is a positive development but at the time of our fieldwork these road shows had not yet been particularly effective due to small numbers of staff attending. Despite these initiatives, the vast majority of staff we spoke to were unaware of the briefing papers.

55. There are inherent difficulties in communicating with the 1,500 or so theatre staff spread out over numerous locations. Whilst the Health Board has clearly rolled out a number of initiatives to improve communications, we found that there remains scope for improvement. For example, whilst senior managers told us they have begun a cycle of regular walk-arounds, operational staff told us that senior managers and clinicians were not very visible within theatres. Whilst all staff were aware of their theatre manager's name, many staff did not know the names and responsibilities of senior managers within the directorate. As mentioned in paragraph 15, operational staff's limited awareness of the Theatre Work Programme also suggests there is scope to improve communications and engagement.

56. When we asked operational staff about the strengths and weaknesses of communications within the directorate, there were mixed views. Some said that the use of a Sharepoint intranet site had been a positive development whilst others said that they found out the most valuable corporate information by word of mouth and rumours. Some mentioned the benefits of past arrangements that involved a staff forum for improving communications and giving staff and outlet for their concerns and views.

57. Nearly all operational staff we spoke to, and many of the managerial staff, recognised that morale has deteriorated during the past year. Whilst we recognise that much of this might be due to the ongoing reorganisation of theatre services and of the NHS more broadly, and also because of external factors such as the financial climate, many staff said the morale problems were due to staffing shortages. Some staff said they felt undervalued, overworked and that there was a lack of recognition of the work they do.

58. The Surgical Services Directorate is planning to develop a set of values. We welcome this work and suggest that one of the aims of the work should be to instil ownership of and commitment to improvement across theatre services, based on what is best for the patient along their entire pathway. The work on values could be used to reinforce the message that, whilst bed availability is a frequent problem for theatre services, there is considerable scope to improve the things directly within the control of the directorate.

59. Senior managers told us that success of the Theatre Work Programme is reliant on the organisation managing to bring staff along with what it is doing, and that they believed they have succeeded in getting the staff engaged. Our findings regarding communications and morale would suggest there remains much work to do in this regard.

Preoperative assessment has not progressed markedly since our last report and this remains a key problem area

60. Effective preoperative assessments should ensure that patients understand the risks of the procedure and that patients are medically suitable for surgery. If done well, these assessments should minimise cancellations from patients not attending for surgery and from patients arriving in an unfit condition for surgery.

61. Our previous report said that inconsistent approaches to pre-operative assessment were contributing to some theatre cancellations. We identified inconsistent and variable approaches, with differing facilities and staffing compliments available to support arrangements. Another particular problem was the limited anaesthetic involvement in preoperative assessment in Swansea because preoperative assessment is not included in funded job plans for anaesthetists.

62. Our follow-up work found that all of these issues remain and that there has been minimal progress in improving preoperative assessment. During interviews, staff said that preoperative assessment had not been a priority area for improvement and problems with current arrangements were resulting in poor patient experience and long waiting times, particularly at Morriston.

63. Whilst we found that there had been some efforts to update the nursing documentation completed during preoperative assessments, these documents are not used in all assessments.

64. Overall, we found that there is no corporate vision, no common principles, a lack of ownership of the issues and a lack of standardisation in the way that preoperative assessment should function. Preoperative assessment also does not feature in the Theatre Work Programme. These matters should be addressed as a priority.

There are safety, quality and efficiency issues associated with theatre trays

65. The Health Board's HSDU services appear to be experiencing considerable workload pressures, particularly at Morriston. Forty per cent of work in the HSDU is currently fast-tracked at the request of users. We believe this demonstrates a lack in confidence from users that without fast-tracking, equipment will not be processed quickly enough for user needs.

66. An options paper for addressing the future of HSDU services was being considered by the Health Board at the time of our fieldwork. The paper highlights concerns at Morriston's HSDU regarding long turnaround times. It states that whilst the acceptable turnaround time is 24 hours, 'there are many occasions when this is 48 hours in Morriston and frequent occasions when sets can be waiting to be processed for more than seven days'. We were also told about a worrying incident at Morriston in recent months when operations at the hospital had to stop because there was no more room in the HSDU for dirty trays.

67. The paper proposes that some of the work currently undertaken in Morriston should move to Singleton. Our interviews suggested that some staff have serious concerns about this approach, fearing that it will result in further delays to instruments and trays being processed and available for use. It is important that a decision is taken quickly and effectively regarding the future of HSDU. It is also important that any changes are properly communicated to staff and that the impacts of any changes are thoroughly monitored for their impact on theatre services.

68. Our previous review highlighted particular safety and efficiency concerns regarding dirty, damaged and wet trays. The report said that trays were often not able to be used because they were still wet and poor storage facilities for holding sterile trays was resulting in damage to tray packaging.

69. Our follow-up work suggests that incidents of wet trays and torn wraps/packaging remains a frequent occurrence and a matter of significant concern. The options paper mentions concerns at Morriston regarding dirty instruments, wet trays and tears in the wraps that are used to cover and protect the cleaned trays. Staff we spoke to remained concerned about the frequency with which trays were found to be wet or damaged. One member of staff at Morriston said that during the week in which they were interviewed, there had been four or five damaged wraps and three wet trays in their theatre alone.

70. The decontamination manager informed us that torn wraps appear to be a more frequent issue at Morriston and Neath Port Talbot Hospital. Stronger, linen wraps have been introduced to prevent tearing, and changes have been made to the storage and sign off arrangements regarding trays, but we were told that these incidents continue to occur.

71. Incidents of wet and damaged trays, as well as having patient safety implications, can result in cancellations, patients spending excessive times under anaesthesia, delays between patients on a list and higher costs of hiring replacement trays or of transporting replacement trays at short notice. We make specific recommendations to ensure these incidents are eliminated.

72. Staff also informed us that they believe there are risks associated with procedures where the Health Board holds only single theatre trays. Staff said that ideally there should be spare trays held in case the original tray needs to be replaced during surgery. Again, we make specific recommendations that this matter should be risk assessed and reported to the Theatre Board.

There is scope to improve performance monitoring and reporting and the forthcoming theatre system provides a significant opportunity

73. Our previous report found that there was scope to improve data collection and use within theatre services. We recommended that a single theatre information system should be introduced as soon as possible and that the wealth of information in the Health Board should be used more effectively to inform improvement.

74. We recognise that the Health Board has made proactive changes to the way it reports theatre performance to the Board and to the Theatre Board. These changes aimed to make the reports more user friendly. We also recognise that the use of performance monitoring sheets in theatres taking part in the ongoing work with the Delivery and Support Unit represents a positive change.

75. However, managerial staff during interview recognised that theatre performance reporting is still not as good as it should be and that current arrangements could be hiding pockets of poor performance. The Health Board continues to struggle with presenting data in a digestible and informative way and we acknowledge that there are difficulties associated with having such a large number of theatres and specialties across several sites.

76. Operational staff we spoke to said there was scope to improve the provision of performance data at all levels. We were told that data used to be put up on noticeboards at Morriston Hospital and Princess of Wales but this no longer happens. Some staff said that the data that used to be displayed was too complicated to understand. There may be some scope to improve the presentation of these data.

77. Whilst the team briefing mentioned in paragraph 54 gives staff some minimal information about patient feedback, our fieldwork and document review has not found any other meaningful consideration of patient experience and outcomes from theatre services. This remains a key area for the Health Board to focus on if it is to improve the way that patients experience services.

78. Whilst the Health Board is still using two separate theatre systems (Galaxy and Thesis), work is underway with the Myrddin All-Wales Group with the intention of rolling out a new national theatre system across Wales. The Health Board will be leading the roll out and this work aims to make significant progress over the next 12 months. Work is not ongoing to decide the optimal specification for a new system. This work provides a significant opportunity to standardise and improve data collection and reporting.

Appendix 1

Our original recommendations

R1 Strategy and planning

Develop a coherent, all-encompassing plan for its operating theatres.

This plan should:

- clearly set out priorities and the reasons for focusing on these issues;
- be underpinned by cohesive and joined up planning across directorates and services, resulting in clear action plans, with accountabilities and timescales;
- be consulted upon with operational staff, theatre-related groups and support services;
- set out the model of services and the role of theatres at a hospital level;
- set out the how the Health Board will move surgical activity for the future service transfers; and
- take account of the capacity across theatres.

R2 Communications and morale

Improve two-way communication with staff and address cultural and morale issues by:

- developing understanding and taking appropriate action about the issues affecting morale and perceptions of management and workload;
- ensure that executives, Board members and senior management are more visible to staff in the theatre department by for example, management walk around or drop-in sessions; and
- use the TTP teamwork module to rebuild team morale, particularly at Morriston main theatres.

R3 Preoperative and admission processes

Accelerate work to standardise preoperative assessment processes and anaesthetic criteria across the Health Board.

Evaluate current advice and work with general practitioners to improve ‘fitness for surgery’.

Ensure all patients are preoperatively assessed before getting a ‘to come in’ date.

Assess opportunities to streamline admission processes, including arrangements for day of surgery admission and staggered patient arrival.

Ensure theatre list preparation maximises the use of theatre time, for example, by providing training for staff preparing lists and encouraging use of consultant-specific procedure times to minimise under or over scheduled lists.

Ensuring that patient notes are consistently available at the hospital site where surgery is being performed, where different to the ‘booking’ hospital.

R4 Theatre utilisation

Working with the TTP, spread transferrable practices shown to improve patient flow across the Health Board.

Work with other parts of the hospital and Health Board to smooth patient flow through theatres:

- address any job plan conflicts which contribute to lists not starting on time and reduce over-running on morning sessions;
- improve co-ordination of bed management processes with theatre needs so that patients start to flow through the hospital earlier in the day, for example, the timing of bed escalation meetings, and reduction in the spread of patients throughout the hospital prior to surgery;
- model bed capacity against service reconfigurations to ensure bed availability does not cause cancellations;
- examine the delays in patients arriving or leaving theatre due to ward staff availability, and work with the assistant nursing director for workforce to identify and manage causes; and
- evaluate the different portering and patient transport arrangements, to ensure the most appropriate and efficient practices are in place across the Health Board's theatres.

Monitor the success of recently introduced processes such as daily CEPOD meetings and revise accordingly.

Robustly police the rules established to prevent late list cancellations, such as notice periods for annual leave, and the cancellation of lists.

R5 Day surgery

Reinvigorate efforts to drive up rates of day surgery and short stay surgery, using the data in this report to identify key procedures to target and ensuring that:

- opportunities to improve short stay surgery and day-case rates are considered across the whole BADS basket;
- that all patients with intended management as day-cases are coded as such; and
- that all BADS basket patients are listed as day-cases, unless clinically indicated as in-patients.

Given the current low utilisation of day surgery units, analyse the day surgery unit capacity to redistribute day case activity that occurs in main theatres and/or increase day surgery.

R6 Stock and equipment

Examine whether there are sufficient numbers of image intensifiers to support activity in each theatre suite.

The Health Board should assure itself that the HSDU problems identified in paragraphs 77 – 79 are now fully resolved.

R7 Staff issues

Agree the basis for setting theatre staffing levels within the revised service configuration.

Proactively manage down the current high levels of sickness absence amongst theatre staff and reduce reliance on overtime.

Ensure consultant job planning includes an allowance for covering anaesthetist annual leave and back-filling vacant theatre sessions wherever possible.

Implement more formal arrangements for anaesthetic input to preassessment at the Swansea hospitals, working to establish dedicated sessions within job plans.

R8 Data collection and use

Seek to introduce a single theatre system as soon as logistically possible.

Apply the wealth of existing information to more effectively inform performance improvement, by converting data into more useful outcome and productivity measures.

WALES AUDIT OFFICE

SWYDDFA ARCHWILIO CYMRU

Wales Audit Office
24 Cathedral Road
Cardiff CF11 9LJ

Tel: 029 2032 0500

Fax: 029 2032 0600

Textphone: 029 2032 0660

E-mail: info@wao.gov.uk

Website: www.wao.gov.uk

Swyddfa Archwilio Cymru
24 Heol y Gadeirlan
Caerdydd CF11 9LJ

Ffôn: 029 2032 0500

Ffacs: 029 2032 0600

Ffôn Testun: 029 2032 0660

E-bost: info@wao.gov.uk

Gwefan: www.wao.gov.uk