Archwilydd Cyffredinol Cymru Auditor General for Wales



Operating theatres follow-up

Betsi Cadwaladr University Health Board

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The team who delivered the work comprised Sara Utley, Andrew Doughton and Stephen Lisle.

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There has been some progress made since 2011 but overall there has not been significant improvement, and fundamental challenges, many outside the control of theatres, are impeding further progress.

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Summary

Background

- 1. Operating theatre services are an essential part of patient care. Efficient management of theatres is cost effective, supports the Health Board in achieving its waiting-time targets and contributes to high-quality patient care. However, the efficiency of theatres is highly dependent on external factors: if pre/post-operative processes are suboptimal this will affect theatres.
- 2. In 2011, the Wales Audit Office reviewed the use of operating theatres across Wales. In Betsi Cadwaladr Health Board (the Health Board), we concluded that, whilst there are a number of initiatives underway to further improve theatre use and day case rates, local variation in performance is marked, and the underlying causes require concerted action across the Health Board.
- 3. The Wales Audit Office is following up theatres in all Health Boards (except Powys) in response to requests from Audit Committees, executives and others, and recognition that theatre performance in many areas across Wales remains suboptimal.
- 4. We sought to answer the following question: Is the Health Board building on our previous recommendations and delivering high-quality and efficient theatre services?

Key findings

5. The table below summarises our key findings. Detailed findings are set out in the slides attached to this summary.

Overall conclusion

6. There has been some progress made since 2011 but overall there has not been significant improvement and fundamental challenges many outside the control of theatres are impeding further progress.

Part 1 Has the Health Board made sufficient progress to implement our recommendations?

The Health Board has made some progress since 2011 but significant challenges remain

- Management structures within the theatre teams have been strengthened with substantive appointments now in all locations.
- Day Surgery performance has improved and is the second highest in Wales.
- Lack of a strategic direction or plan still affects the ability of theatres to implement change, or plan effectively.
- Issues are still prevalent with patient flow and there continue to be different processes in place for POAC at the three main sites.
- Quality of information and data upon which decisions need to be made is still variable in quality, with concerns regarding the accuracy, validity and consistency.

Part 2 Is the Health Board's surgical pathway efficient?

While the surgical pathway has a number of positive aspects, different operational practices, issues with capacity and the absence of robust data adversely affect theatre efficiency

- Pre-operative assessment has improved but remains inconsistent. There is good practice
 at Wrexham Maelor but issues at Glan Clwyd due to physical capacity and at Ysbyty
 Gwynedd due to limited medicines management support.
- Arrangements for list planning are variable across the Health Board with staff reporting both over and underutilisation as well as the need for more clinical engagement.
- Day Surgery rates have improved, with the Health Board having the second highest performance in Wales.
- Day Surgery admissions work well at Wrexham Maelor and Ysbyty Gwynedd. Capacity is limited at Glan Clwyd but issues with privacy and dignity have been addressed.
- Bed capacity and issues with patient flow across the Health Board are adversely affecting utilisation within theatres.
- Theatre utilisation at each of the Health Board sites is affected by a variety of issues.
- Theatre utilisation data is unreliable and there are issues with consistency.

Part 3 Has the Health Board focused enough on key quality and safety issues?

Despite good arrangements to ensure quality and safety within theatres, the Health Board has done little to monitor patient experience and implement learning from incidents

- The Health Board has implemented the WHO checklist well, with some notable practice, however, compliance with debriefs can be variable.
- New quality and safety arrangements are positive, with each site setting up their own processes and procedures, but more could be done to share incident information across the sites.
- Overall there is little work done to measure patient experience across the Health Board, although the patient surveys at Wrexham Maelor are positive.

Recommendations to the Health Board

R1 Theatre performance information

- Standardise all utilisation and data definitions across the Health Board to ensure consistency in reporting, and ensure theatre units are regularly validating performance data.
- Ensure cancellations data is being accurately collected across the health board and all theatre sites are consistently recording cancellation reasons.
- Collect, analyse and use a more balanced range of performance data, including outcomes, productivity and complexity measures.
- Improve reporting to staff in terms of performance by introducing an easy to understand performance dashboard that can be placed within the theatre units prominently to improve awareness of performance amongst all staff groups.

R2 Improve patient experience

- Monitor patient experience through the roll out of patient experience surveys and take action to address any issues but also feed back positive responses to staff.
- Ensure lessons from incidents are taken on board and shared effectively across the Health Board and theatre units.

R3 Standardise pre-operative services

- Improve patient experience by standardising pre-operative processes across the Health Board to ensure equity of access for all patients.
- Introduce standard paperwork for pre-operative assessments to ensure patients can access these services closer to home as opposed to the hospital where treatment can occur.

R4 WHO checklist and briefings

- Roll out WHO checklist methodology currently in use at Ysbyty Gwynedd and Llandudno General to all sites as this is good practice.
- Focus on improving debriefings as this is the area of most concern identified by improving monitoring of the whole process of WHO implementation.

Further information can be obtained from Sara Utley, Performance Specialist (Tel: 01244 525978/<u>sara.utley@wao.gov.uk</u>).

Appendix 1

Action Plan

Recommendation		Update as at August 2014 Agree		AIB responsibility and actions	Completion date
	Standardise all utilisation and data definitions across the Health Board to ensure consistency in reporting, and ensure theatre units are regularly validating performance data.	Work ongoing to standardise reporting reasons for metrics such as late starts, session and on the day patient cancellations using existing coding.	Yes	 Roll out daily data validation process across all sites. Encourage on the day theatre data validation at source – Theatre Managers/Theatre Information Leads. 	December 2014
•	Ensure cancellations data is being accurately collected across the Health Board and all theatre sites are consistently recording cancellation reasons.	 Session and patient cancellation data reviews weekly at planning meeting. Ongoing work to address data input issues particularly in Centre. Myrddin module in East to resolve discrepancy between PAS and Theatre system. 		 Review process for recording and inputting of patient cancellation data particularly in Centre RW 	October 2014
•	Collect, analyse and use a more balanced range of performance data, including outcomes, productivity and complexity measures.	 Development of elective surgery pathway metrics to include efficiency, performance, financial and quality measures for pre, peri and post op. 		 Review of measures identified through dashboard and agree action to address – PMO/site specific sub groups (starting with Urology). 	October 2014
•	Improve reporting to staff in terms of performance by introducing an easy to understand performance dashboard that can be placed within the theatre units prominently to improve awareness of performance amongst all staff groups.	Dashboard for above is in the development stages in line with business intelligence model used in other areas of the Health Board.		 Population of dashboard throughout the service – BH. Review of current ToR for TUG and establish meeting in Centre – Theatre Managers. 	November 2014 November 2014

Recommendation		Update as at August 2014		AIB responsibility and actions	Completion date
R2	 Improve patient experience Monitor patient experience through the roll out of patient experience surveys and take action to address any issues but also feed back positive responses to staff. 	 Plan for roll out of patient survey used in Wrexham. Project support officer to facilitate starting in October. 	Yes	Develop programme for and carry out patient experience surveys in Centre and West - PMO led with support from SL.	January 2015
	 Ensure lessons from incidents are taken on board and shared effectively across the Health Board and theatre units. 	 Lessons learned form part of some department/TUG meetings. Standardised template for lessons learned being championed via Patient Safety Group. 		 Review of ToR for departmental/TUG to include lessons learned. – Theatre Managers. 	November 2014
R3	Standardise pre-operative services Improve patient experience by standardising pre-operative processes across the Health Board to ensure equity of access for all patients.	 Draft copy of North Wales POAC ICP approved by two sites but rejected by one. YG now leading on developing a new proposed POAC ICP for Generic use across all sites. ICP due back 1 September 2014 for North Wales consideration. 	Yes	Agreement of standardised POAC ICP for North Wales.	December 2014
	 Introduce standard paperwork for pre-operative assessment to ensure patients can access these services closer to home as opposed to the hospital where treatment can occur. 	 Generic practitioners being developed to assess every speciality. Plans for pool generation of patients for POAC who live on the borders of East and West. 			December 2014

Recor	mmendation	Update as at August 2014	Agreed	AIB responsibility and actions	Completion date
	WHO checklist and briefings Roll out WHO checklist methodology currently in use at Ysbyty Gwynedd and Llandudno General to all sites as this is good practice.	Trial ongoing in Maternity in East with imminent plans for roll out.	Yes	 Facilitate roll out across Centre and East - Theatre Managers/CoS. 	December 2014
•	Focus on improving debriefings as this is the area of most concern identified by improving monitoring of the whole process of WHO implementation.	 Audit of WHO quality undertaken at each theatre suite – awaiting findings. 		 Implementation of actions to address shortfalls identified in Audit and re audit – Theatre Managers/CoS. 	January 2015

Appendix 2

Presentation Slides







Background



- Operating theatre services are an essential part of patient care.
 Theatres should be cost effective, support the achievement of waiting-time targets and contribute to high-quality patient care.
- Theatres are highly dependent on external factors. If pre/post-operative processes are suboptimal this will affect theatres.
- The Wales Audit Office review in 2011 said that "Whilst there are a number of initiatives underway to further improve theatre use and day case rates, local variation in performance is marked, and the underlying causes require concerted action across the Health Board".
- The Wales Audit Office is following up theatres in the Health Board and all other health boards except Powys in response to requests from Audit Committees, executives and others, and recognition that theatre performance in many areas across Wales remains suboptimal.

Theatres follow up



Aims of the audit



The follow-up work has three focus areas:

Progress since 2011

- High-level review against our recommendations.
- Focus on barriers to improvement.

Theatre efficiency

- Measure aspects of theatre efficiency.
- Compare performance with benchmarks.

Quality and safety

- Review a small number of quality and safety issues.
- Focus on the WHO checklist, briefings and incidents.
- Main study question Is the Health Board building on our previous recommendations and delivering effective theatre services which are supported by an efficient inpatient pathway?



Our approach



- Assessment against previous recommendations.
- Document review.
- Analysis of nationally available data on incidents and efficiency.
- Staff survey: 158 responses
- Interviews with a range of staff across all sites (Pre-op, DOSA, Nursing, Theatre, Clinical Director, Scheduled care).
- But although the HB were able to provide us with theatre utilisation data, concerns regarding it accuracy meant we have not used it as part of our feedback



Main conclusion



There has been some progress made since 2011 but overall there has not been significant improvement and fundamental challenges many outside the control of theatres are impeding further progress

Theatres follow-up

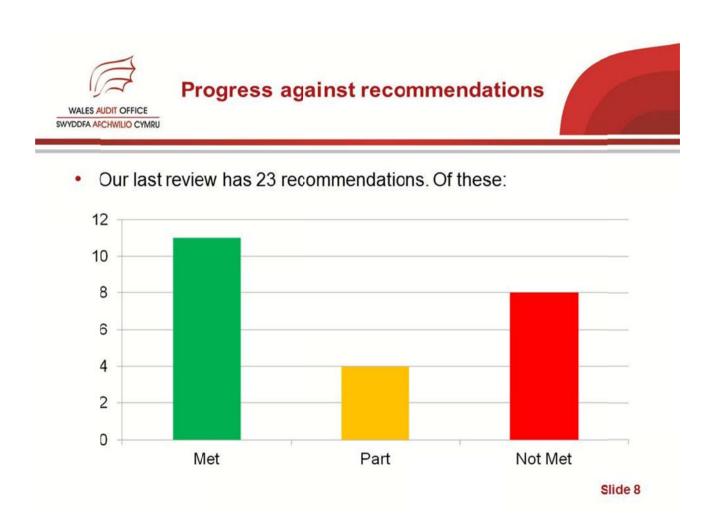


Sub conclusions



- Part 1: The Health Board has made some progress since 2011 but significant challenges remain
- Part 2: While the surgical pathway has a number of positive aspects, different operational practices, issues with capacity and the absence of robust data adversely affect theatre efficiency.
- Part 3: Despite good arrangements to ensure quality and safety within theatres, the Health Board has done little to monitor patient experience and implement learning from incidents

Theatres follow-up





Part 1: The Health Board has made some progress since 2011 but significant challenges remain



- Management structures within the theatre teams have been strengthened with substantive appointments now in all locations.
- Day Surgery performance has improved and is the second highest in Wales.



Part 1: The Health Board has made some progress since 2011 but significant challenges remain



however...

- Lack of a strategic direction or plan still affects the ability of theatres to implement change, or plan effectively.
- Issues are still prevalent with patient flow and there continue to be different processes in place for POAC at the three main sites
- Quality of information and data upon which decisions need to be made is still variable in quality, with concerns regarding the accuracy, validity and consistency.



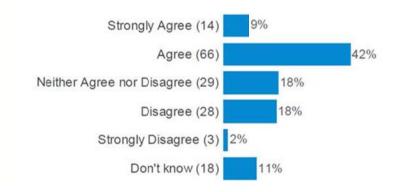


- Pre-operative assessment has improved but remains inconsistent.
 There is good practice at Wrexham Maelor but issues at Glan Clwyd due to physical capacity and at Ysbyty Gwynedd due to limited medicines management support
 - Standard pre operative assessment paperwork is being drafted to enable POAC to be undertaken across the health board regardless of the location of treatment which improves patient experience
 - Theatre cancellations are affecting POAC, monitoring is undertaken on repeat POAC patients which is a potential quality indicator for theatres.





There is an effective patient screening and pre-assessment process.



The staff survey results show general agreement that there is an effective screening and pre-assessment process





- Arrangements for list planning are variable across the health board with staff reporting over and under utilisation as well as the need for more clinical engagement.
 - Ysbyty Gwynedd get good notice of lists (currently working to 8 weeks), and there is positive engagement of theatre teams.
 - Wrexham Maelor get around 2 weeks notice of lists, and are able to provide input on the achievability or the potential for additional activity.
 - However, Glan Clwyd until recently had little engagement with list planning, receiving lists last minute, work is ongoing to address this.





Slide 14

 There are variations on who plans lists across the health board with potential utilisation at Wrexham Maelor due to inflexibility of booking protocols.

Ysbyty Gwynedd Lists are planned by consultants and sectaries Glan Clwyd Lists are planned by consultants and secretaries

Wrexham Maelor Centralised booking centre for lists

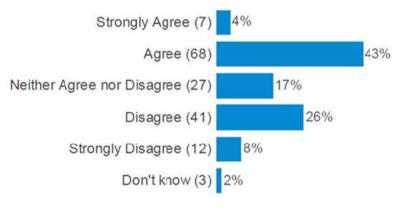
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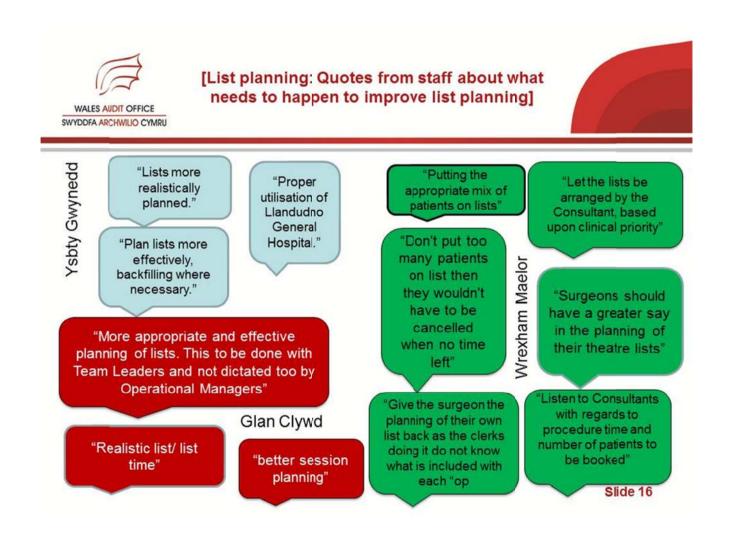




The majority of theatre lists are effectively planned.

The staff survey results show a mixed picture on list planning

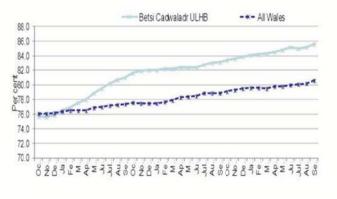


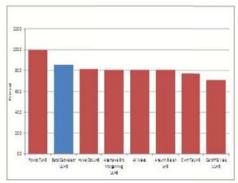






 Day Surgery rates have improved, with the Health Board having the second highest performance in Wales



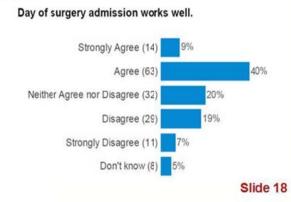






- Day of Surgery admissions work well at Wrexham Maelor and Ysbyty Gwynedd, and capacity is limited at Glan Clwyd issues with privacy and dignity have been addressed
 - Comments have been made about the chaos of DOSA by clinical and nursing staff at Glan Clwyd, and the issue of patients being brought to theatre on time.

Our staff survey shows that half felt DOSA works well. A third of staff at Glan Clywd disagreed or strongly disagreed







- Theatre utilisation at each of the Health Board sites is affected by a variety of different issues;
 - Ysbyty Gwynedd have a limited number of anaesthetists which is affecting their ability to staff lists, coupled with extremely low numbers of critical care beds.
 - Wrexham Maelor run half day lists which is seen as many to affect utilisation
 - Glan Clwyd have bed capacity issues across the hospital limited procedures
 - Utilisation of Llandudno is low, due to anaesthetic staff availability and issues with suitable patients, leading to low morale amongst staff
 - Abergele are also having difficulties due to anaesthetics grading limitations and grading inconsistencies affecting the types of patient they can operate upon





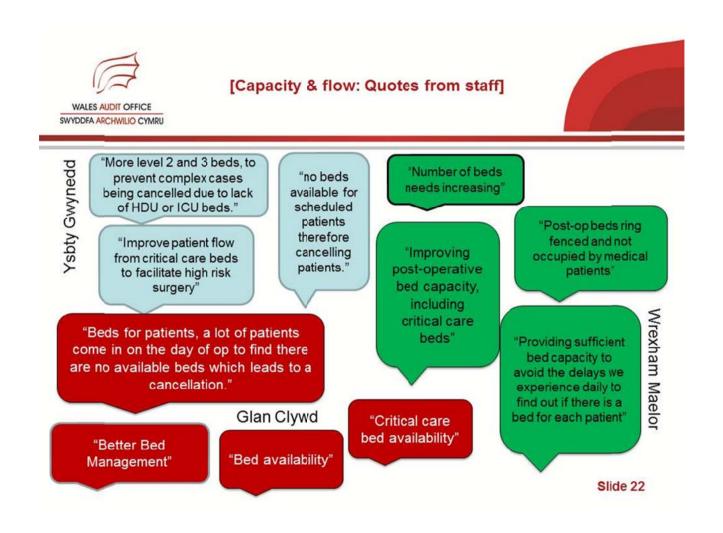
- Bed capacity and issues with patient flow across the health board are adversely affecting utilisation within theatres.
 - Bed availability for patients was raised as a concern across all sites, with Glan Clwyd having the biggest issues with inpatient beds and HDU beds, the result being the Health Board limiting the amount of inpatients who can be scheduled for their operation to 3 in any one day
 - Wrexham Maelor are experiencing issues with flow due to pressures at ward level and protected meal times which results in patients backing up in recovery
 - Ysbyty Gwynedd appear to have the biggest issues with patient beds, flow and critical care bed availability all affecting theatre utilisation



Issues most commonly mentioned when we asked staff how to improve utilisation



Category of Comment	Total mentions
Increase number/availability of <u>beds</u>	87
Increase <u>staff</u> (theatre staff and ward staff)	78
Improve list planning	41
Address issues with processes and flow	44
Better <u>communication</u> amongst staff	26
Additional equipment and more access to training	20
Change/Stick to start and finish times	14







- Theatre utilisation data is unreliable and there are issues with consistency;
 - Concerns were raised around the quality of information that was collected during our work.
 - There are issues with consistency within the data
 - Ysbyty Gwynedd are validating data which is positive
 - Inconsistency of supporting information systems means manual data manipulation needs to be undertaken
 - Cancellation data appears inaccurate and is not reported from Glan Clywd
- External consultancy work aimed at achieving efficiency savings and improve productivity is in early stages and will require changes which are outside the direct control of the theatres team.

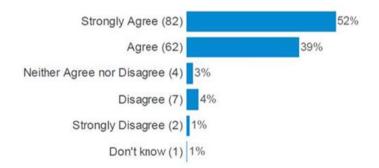


Part 3: Despite good arrangements to ensure quality and safety within theatres, the Health Board has done little to monitor patient experience and implement learning from incidents



 The health board use checklists well, with good practice at Ysbyty Gwynedd which could be rolled out across the Health Board.

Staff undertake surgical checklists before every theatre case.







 Use of whiteboard at Ysbyty Gwynedd improves staff communication and ownership and is good practice

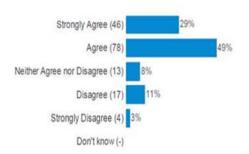


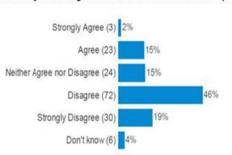


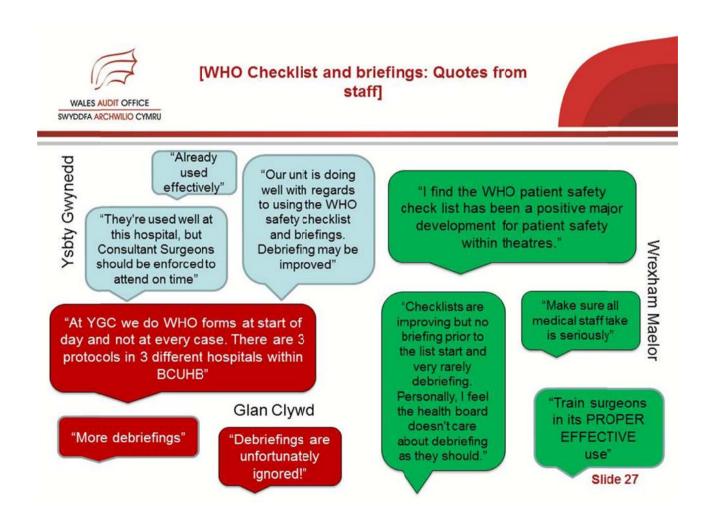


 Staff survey shows that briefing before a surgical procedure happens although post list debriefs are less common but this is in line with most Health Boards across Wales

Briefing theatre personnel before a surgical procedure always happens. Debriefings following shifts or lists are common in this operating theatres.





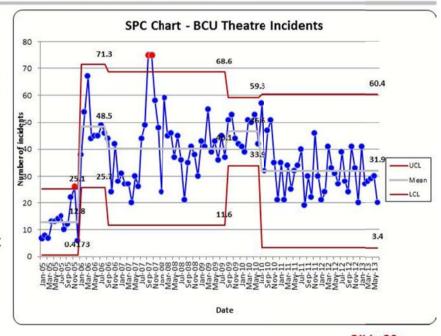




Part 3: Despite good arrangements to ensure quality and safety within theatres, the Health Board has done little to monitor patient experience and implement learning from incidents



- Incident reporting looks stable
- The Wales Audit office generated this statistical process control (SPC) chart using a Public Health Wales tool. It is available to the HB.
- SPC charts help distinguish genuine, significant changes in the frequency of incident reporting from changes that are just due to normal variation

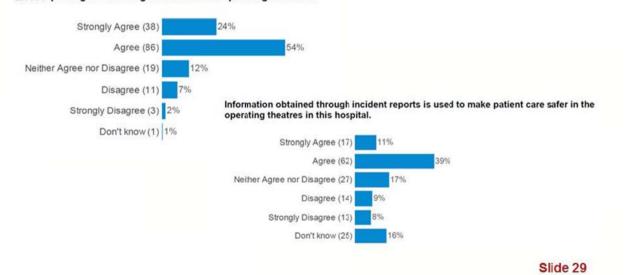






 Error reporting is encouraged but staff have mixed views about learning from error reporting

Error reporting is encouraged within these operating theatres.







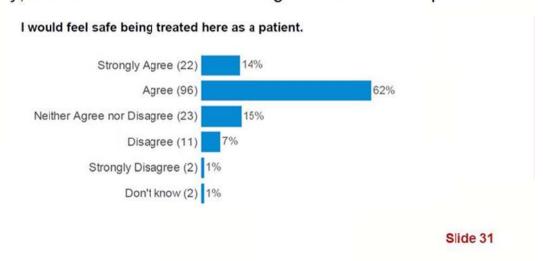
- New quality and safety arrangements are positive, with each site setting up their own processes and procedures, but more could be done to share incident information across the sites
 - Each site operates in isolation
 - Theatre managers meet regularly but could disseminate information more
 - Welsh risk pool found there were key indicators in place to monitor improvements in surgical services and give an early warning of risk.



Part 3: Despite good arrangements to ensure quality and safety within theatres, the Health Board has done little to monitor patient experience and implement learning from incidents



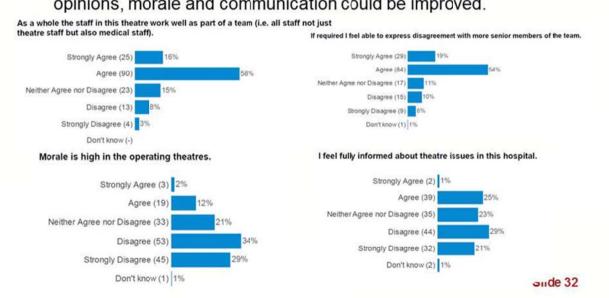
- Overall there is little work done to measure patient experience across the Health Board, although the patient surveys at Wrexham Maelor are positive
- · Positively, most staff would feel safe being treated here as a patient







 Staff feel they work a part of a team and are able to express their opinions, morale and communication could be improved.





Recommendations to the Health Board



R1 Theatre performance information:

- Standardise all utilisation and data definitions across the health board to ensure consistency in reporting, and ensure theatre units are regularly validating performance data;
- ensure cancellations data is being accurately collected across the health board and all theatre sites are consistently recording cancellations reasons;
- collect, analyse and use a more balanced range of performance data, including outcomes, productivity and complexity measures;
- improve reporting to staff in terms of performance by introducing an easy to understand performance dashboard that can be placed within the theatre units prominently to improve awareness of performance amongst all staff groups.



Recommendations to the health board



R2 Improve patient experience

- monitor patient experience though the roll out of patient experience surveys and take action to address any issues but also feedback positive responses to staff; and
- ensure lessons from incidents are taken on board and shared effectively across the health board and theatre units.

R3 Standardise pre-operative services

- improve patient experience by standardising preoperative processes across the Health Board to ensure equity of access for all patients; and
- introduce standard paperwork for pre-operative assessment to ensure patients can access these services closer to home as opposed to the hospital where treatment can occur.



Recommendations to the health board



R4 WHO checklist & briefings

- roll out WHO checklist methodology currently in use at Ysbyty Gwynedd & Llandudno General to all sites as this is good practice; and
- focus on improving debriefings as this is the area of most concern identified by improving monitoring of the whole process of WHO implementation.

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