



WALES AUDIT OFFICE  
SWYDDFA ARCHWILIO CYMRU

Archwilydd Cyffredinol Cymru  
Auditor General for Wales

# Review of Medical Equipment: Update on Progress – **Cardiff and Vale University Health Board**

Audit year: 2017

Date issued: June 2018

Document reference: 614A2018-19



This document has been prepared as part of work performed in accordance with statutory functions.

In the event of receiving a request for information to which this document may be relevant, attention is drawn to the Code of Practice issued under section 45 of the Freedom of Information Act 2000.

The section 45 code sets out the practice in handling requests that is expected of public authorities, including consultation with relevant third parties. In relation to this document, the Auditor

General for Wales and the Wales Audit Office are relevant third parties. Enquiries on disclosure or re-use of this document should be sent to the Wales Audit Office at [info.officer@audit.wales](mailto:info.officer@audit.wales).

This work was delivered by Nathan Couch.

# Contents

The Health Board has made progress in addressing recommendations made in our 2013 report, but more action is needed to improve the arrangements in place for managing medical equipment.

## Summary report

Introduction	4
Our findings	6
Recommendations	8

## Appendices

Progress the Health Board has made since our 2013 recommendations	10
The Health Board's management response to new recommendations on the management of medical equipment	21

# Summary report

## Introduction

- 1 Health bodies typically own and maintain thousands of items of medical equipment. Medical equipment can perform many roles such as diagnosis, prevention, monitoring, investigation and treatment. It is therefore vital that health bodies manage their medical equipment in such a way to ensure patient safety and high-quality care. Medical equipment, as defined by the National Audit Office, includes all medical devices connected to patients as part of their treatment and care in hospital, and medical devices used for diagnostic and laboratory purposes.
- 2 As part of the 2013 audit programme the Auditor General carried out a review of medical equipment in Cardiff and Vale University Health Board (the Health Board). The review sought to answer the question 'Is the Health Board managing its medical equipment effectively?'
- 3 We reported our findings in September 2013 and concluded that 'Day to day maintenance of medical equipment is well managed by the Clinical Engineering department. However, medical equipment does not have a high profile in the Health Board and the overall management arrangements need to be strengthened to ensure that the limited funds available are prioritised appropriately'. To support our conclusion, we found that:
  - despite Clinical Engineering maintaining equipment well, there is a lack of engagement among the Clinical Boards and available funds are not always well spent; and
  - the Health Board recognises medical equipment as a corporate risk although it will need to triangulate financial information, incidents and equipment condition to ensure achievement of objectives.
- 4 In 2013, our report made the following recommendations, set out in [Exhibit 1](#).

### Exhibit 1: recommendations made in 2013

Recommendations	
<b>Assurance and Internal Control Processes</b>	
R1	Strengthen assurance and internal controls for the management of medical equipment by putting in place effective committee structures at both the strategic and operational level to ensure clinical boards engage with medical equipment issues and address clinical risk.
<b>Medical Equipment Inventory</b>	
R2	A single inventory of equipment needs to be established, which brings together all the key data items and assesses clinical risk of out-of-life equipment both above and below £5,000.

Recommendations	
<b>Equipment Replacement</b>	
R3	Develop a Health-Board-wide strategic approach to prioritisation of equipment replacement needs ensuring collaboration, consultation and engagement of all areas.
<b>Incidents</b>	
R4	Put in place systems and processes to ensure incidents relating to equipment are fed through to Clinical Boards.
<b>Management of Wheelchairs</b>	
R5	Develop a clear approach to manage standard wheelchairs across the University Health Board.
<b>Integrated working</b>	
R6	Develop a strategic site plan to ensure that Information Technology, Estates and Equipment collaborate and undertake whole life costing of equipment replacement.
<b>Pathology Services</b>	
R7	Ensure that pathology services, in relation to medical equipment, are scrutinised, as these were external to this review.

Source: Wales Audit Office

- 5 As part of the 2017 Audit Plan, the Auditor General included local work to assess progress made by the Health Board in addressing the recommendations made in the 2013 [Review of Medical Equipment](#). This progress update started in December 2017 and asked the following question: **‘Has the Health Board made sufficient progress in response to the findings and recommendations made in the original review?’**
- 6 In undertaking this progress update, we have:
  - reviewed documentation including Medical Equipment Group minutes, Clinical Board Quality, Safety and Experience subcommittee minutes, reports presented to the Health Board’s overall Quality, Safety and Experience subcommittee, Capital Management Group reports, Risk registers) and
  - interviewed several Health Board staff to discuss progress, current issues and future challenges.
- 7 The following section provides a summary of the findings. [Appendix 1](#) provides further details.

## Key findings

- 8 Our overall conclusion is the Health Board has made progress in addressing recommendations made in our 2013 report, but more action is needed to improve the existing arrangements in place for managing medical equipment.
- 9 **Exhibit 2** shows the status of progress against the previous recommendations.

### Exhibit 2: status of 2013 recommendations

Total number of recommendations	Implemented	In progress	Overdue	Superseded
7	1	6	–	–

Source: Wales Audit Office

- 10 We found the Health Board has implemented one recommendation fully and made progress against the remaining six recommendations. However, the Health Board needs to complete further action to strengthen the existing arrangements.

### The Health Board has adequate assurance and internal control processes for medical equipment, however, there is scope for improvement

- 11 A single Medical Equipment Group has now replaced the Medical Equipment Management Group and Clinical Equipment Strategy Group. There are, however, concerns about the Medical Equipment Group's effectiveness.
- 12 Introducing the Medical Device Safety Officer (MDSO) role is a positive development, although this role is not yet having the intended impact.
- 13 A governance structure is in place and is now beginning to mature. This has helped to strengthen medical equipment arrangements. However, Clinical Boards have not yet developed medical equipment risk registers, resulting in a difference between the corporate and operational view of medical equipment risk.
- 14 The organisation has introduced Medical Equipment policies and procedures, however, the extent of compliance throughout the Clinical Boards is unknown.

### The Health Board has not introduced a single medical equipment inventory

- 15 The Health Board has not introduced a single inventory of equipment because of the resources needed for recording equipment under £5,000.

## There is no defined approach to the replacement of medical equipment under £5,000

- 16 The Medical Equipment Group has introduced capital bidding, which has encouraged Clinical Boards to rank their medical equipment needs and place bids for funding. This has resulted in greater scrutiny over the purchase or replacement of medical equipment over £5,000.
- 17 There is no defined approach to the replacement of equipment under £5,000. Clinical Board revenue budgets fund replacement of medical equipment. There are concerns that a lack of revenue budget funding could lead to significant clinical risk where services cannot buy business critical equipment.

## Clinical Boards do not review medical equipment issues/incidents

- 18 The Medical Equipment Group review medical equipment incidents regularly during meetings. However, it has made limited progress in introducing arrangements to ensure that Clinical Boards receive this information.

## The Health Board has developed a clear approach to manage standard wheelchairs

- 19 There is now a clear approach in place to manage standard wheelchairs and the Clinical Engineering department has introduced a maintenance programme. However, losses are an issue and there is no control in place to ensure accountability over wheelchair stock.

## The Health Board has introduced an integrated working approach for capital spending; however, collaboration across operational services regarding medical equipment is still a problem

- 20 The Capital Management Group and Capital Management Procedure ensure suitable arrangements are in place on capital spending. The group includes representatives from Information Technology, Estates and Facilities and considers reports from the Medical Equipment Group and Information Technology Board. However, collaboration across services is still a problem.
- 21 Evidence gained during the review suggested issues on the maintenance and replacement of beds and hoists, and difficulties in liaising with Procurement and Estates and the hoist supplier. In addition, introducing specific beds (Medstrom MMO 5000 ultra-low beds) into Critical Care in late 2017 has resulted in several adverse incident reports. Nobody consulted Critical Care staff before introducing the beds, despite it having faced similar issues with beds in early 2016.

## The Health Board has not evaluated the medical equipment arrangements within Pathology Services (Laboratory Medicine)

- 22 The organisation has not examined medical equipment arrangements within Pathology Services (Laboratory Medicine) and staff from this service do not attend Medical Equipment Group meetings regularly.

## Recommendations

- 23 In undertaking this work, we have identified concerns that merit further recommendations. **Exhibit 3** provides details of new recommendations. The Health Board also needs to continue to implement the outstanding recommendations identified in our 2013 review.

### Exhibit 3: recommendations

New recommendations	
<b>Medical Equipment Group</b>	
R1	Review the effectiveness of the Medical Equipment Group, focusing on: <ul style="list-style-type: none"><li>• Membership of the group</li><li>• Attendance</li><li>• Executive Support</li><li>• Reporting lines</li></ul>
<b>Medical Device Safety Officer</b>	
R2	Improve the effectiveness of the Medical Device Safety Officer role, by: <ul style="list-style-type: none"><li>• providing clarity on the purpose of the role;</li><li>• ensuring attendance at Medical Equipment Group meetings;</li><li>• ensuring attendance at Clinical Board Quality, Safety and Experience meetings;</li><li>• ensuring that MDSOs engage with their respective Clinical Board on medical equipment risks and issues;</li><li>• ensuring MDSOs have the necessary time and resources to perform the role; and</li><li>• giving MDSOs access to potential learning and development opportunities.</li></ul>
<b>Medical Equipment Risk Management</b>	
R3	Review medical equipment risk management throughout the organisation, ensuring alignment between the corporate and operational approach.
<b>Medical Equipment Inventory</b>	
R4	The Health Board should determine how it can develop an effective medical equipment inventory with available resources.



### New recommendations

#### Replacement of Medical Equipment below £5,000

R5 The Medical Equipment Group should assure itself that clinical boards operate effective systems and processes for the monitoring, purchase and replacement of medical equipment below £5,000.

#### Clinical Board Engagement

R6 Ensure that Clinical Boards include the Medical Device Safety Officer report as a standing agenda item at the Quality, Safety and Experience meetings to discuss and address any medical equipment risks and incidents that arise.

#### Integrated Working

R7 Ensure all relevant service areas collaborate, consult and engage on medical equipment issues. It should give particular attention to the arrangements in place for maintenance and replacement of beds and hoists.

#### Pathology Services

R8 Evaluate the medical equipment arrangements in place within Pathology Services (Laboratory Medicine).

Source: Wales Audit Office

# Appendix 1

## Progress the Health Board has made since our 2013 recommendations

Exhibit 4: assessment of progress

Recommendation	Target date for implementation	Status	Summary of progress
<b>Assurance and Internal Control Processes</b>			
<p>R1 Strengthen assurance and internal controls for the management of medical equipment by putting in place effective committee structures at both the strategic and operational level to ensure clinical boards engage with medical equipment issues and address clinical risk.</p>	<p>11 November 2013</p>	<p>In progress</p>	<p>In our previous review, we found that the Medical Equipment Management Group in the Health Board was not functioning well. The group lacked prominence, had unclear reporting lines and the current membership did not enable decision-making. The Medical Equipment Management Group reported to the Capital Equipment Strategy Group but this group had not met, as it had no capital funds to allocate. In addition, the recent revision to the Board's Quality and Safety Committee meant the minutes of the Medical Equipment Management Group were no longer received. Scrutiny of this group was unclear.</p> <p>Since our review, a single Medical Equipment Group has replaced the Medical Equipment Management Group and Clinical Equipment Strategy Group. The group's Terms of Reference dated 1 October 2014 (currently under review) outlines its responsibilities and purpose. Representation is broad with members chosen for their contribution to overall strategies rather than detailed technical expertise. The group provides reports to the Health Board's Quality Safety and Experience Committee as needed.</p>

Recommendation	Target date for implementation	Status	Summary of progress
<b>Assurance and Internal Control Processes</b>			
<p>R1 Strengthen assurance and internal controls for the management of medical equipment by putting in place effective committee structures at both the strategic and operational level to ensure clinical boards engage with medical equipment issues and address clinical risk.</p>	<p>11 November 2013</p>	<p>In progress</p>	<p>Health Board staff consider the new Medical Equipment Group as a positive development. There are now clear arrangements in place to manage medical equipment at a strategic and operational level. However, interviews suggested there was a mixed opinion on its overall effectiveness. Health Board staff expressed concerns about the lack of representation from key departments such as Estates, Procurement and Information Technology, Clinical Boards (Women and Children and Medicine) and clinical professionals in general. We found attendance at the group is not compulsory and contributes to poor representation. Health Board staff suggested there is a reactive approach adopted when issues arise.</p> <p>The Executive Director of Therapies and Health Sciences is the Executive Lead for Medical Equipment and was the Chair of the Medical Equipment Group. Since forming the group, the Executive Lead has only attended four of the ten meetings held. The Assistant Director of Therapies and Health Sciences now chairs the meetings for the group. We understand that he provides verbal updates to the Executive Director on medical equipment issues and helps in drafting reports on the executive director's behalf. Minutes of the Health Board's overall Quality, Safety and Experience and Performance-related<sup>1</sup> Committees suggest limited discussion of medical equipment issues at this level. There are only three occasions for both committees where significant discussion had taken place since 2013. We note the Director of Nursing, Assistant Director of Therapies and Health Sciences, or the Chief Operating Officer had led the discussion on each of the occasions. In addition, neither of the committees reviews the minutes of the Medical Equipment Group to ensure that it is fulfilling its role. We understand that the Health Board, however, has adopted the principle that where there is a Lead Executive there is no automatic reason to have minutes noted at a formal committee. If a Lead Executive has any concerns then they can request an item to go onto the Quality, Safety and Experience Committee agenda.</p>

<sup>1</sup> These are the Health Board's People, Planning and Performance Committee, which was disbanded in May 2017, its predecessor the People, Planning and Delivery Committee, and the subsequent Resources and Delivery Committee, which was set up in July 2017.

Recommendation	Target date for implementation	Status	Summary of progress
<b>Assurance and Internal Control Processes</b>			
R1 Strengthen assurance and internal controls for the management of medical equipment by putting in place effective committee structures at both the strategic and operational level to ensure clinical boards engage with medical equipment issues and address clinical risk.	11 November 2013	In progress	<p>Our interviews with Health Board staff have suggested that there is a lack of executive support on medical equipment issues. The limited medical equipment discussions held at Board Committees support this opinion. However, we understand that at an operational level, the Assistant Director and Executive Director of Therapies and Health Sciences do understand and raise the profile of medical equipment issues throughout the organisation. Although, not shown, the Assistant Director of Therapies and Health Sciences suggested there are regular visits to clinical areas to discuss medical equipment issues and medical equipment replacement requests. We also understand the Executive Director of Therapies and Health Sciences completes patient safety 'walkabouts' and attends Clinical Board performance reviews that discuss medical equipment risks.</p> <p>Introducing the Medical Device Safety Officers role during 2016 is a positive development. Clinical Boards have proposed staff representatives for the role, which includes their existing duties. The role profile outlines responsibilities with the expectation the Medical Device Safety Officer forms a link between the Medical Equipment Group and the Clinical Board to manage medical equipment properly. There is a mixed opinion among Health Board staff on the impact this role has had on managing medical equipment overall. Positively, the role has helped one Clinical Board to share risks on medical equipment issues, develop and present good business cases to gain capital funding for medical equipment. It has also raised awareness of other potential funding and acts as a good control for managing medical equipment. However, concerns raised by Medical Device Safety Officers from other Clinical Boards centred on a lack of clarity on the purpose of the role. In addition, a lack of enthusiasm from other Medical Device Safety Officers, lack of engagement from Clinical Boards on risks and incidents, and the inability to make necessary change. Some Medical Device Safety Officers also suggest that time and resources are an issue when trying to balance the responsibilities of the role with an existing full-time job.</p>

Recommendation	Target date for implementation	Status	Summary of progress
<b>Assurance and Internal Control Processes</b>			
<p>R1 Strengthen assurance and internal controls for the management of medical equipment by putting in place effective committee structures at both the strategic and operational level to ensure clinical boards engage with medical equipment issues and address clinical risk.</p>	<p>11 November 2013</p>	<p>In progress</p>	<p>Our analysis of minutes highlighted limited attendance from Medical Device Safety Officers from some of the Clinical Boards at Medical Equipment Group meetings and at Clinical Board Quality, Safety and Experience subcommittee meetings. We understand the Medical Equipment Group has asked that Clinical Boards make the Medical Device Safety Officer report a standing agenda item at Quality, Safety and Experience subcommittee meetings. Evidence suggests this has only happened in one Clinical Board with limited discussion on medical equipment in general. We also note that one Clinical Board had still not confirmed their Medical Device Safety Officer.</p> <p>Evidence gained during our interviews suggested there are potential learning opportunities on the Medical Device Safety Officer role in NHS England. We understand the National Medical Device Safety Network hold monthly WebEx events, which could potentially help to develop the role throughout the organisation.</p> <p>There is now a governance structure, which strengthens assurance and internal controls and acts as a guide for purchase or replacement of medical equipment. Interviews suggested it has been in place for two years; is starting to mature and is helping to improve arrangements. Examples being introducing the Radiation Protection Group and Ultrasound Governance group to respond to medical equipment risks.</p>

Recommendation	Target date for implementation	Status	Summary of progress
<b>Assurance and Internal Control Processes</b>			
<p>R1 Strengthen assurance and internal controls for the management of medical equipment by putting in place effective committee structures at both the strategic and operational level to ensure clinical boards engage with medical equipment issues and address clinical risk.</p>	<p>11 November 2013</p>	<p>In progress</p>	<p>There is a disconnected approach to the corporate and operational view of medical equipment risk. The Medical Equipment Group is responsible for completing the corporate risk register entry for medical equipment. However, it does not have copies of the Clinical Board risk registers as they are still at various levels of maturity. Clinical Boards have been encouraged to develop their own medical equipment risk registers, based on an example provided by Surgery. However, this action remains outstanding. The group considered developing a single organisational risk register for medical equipment, however, there are no resources available to manage it.</p> <p>The Medical Equipment Policy and Procedure is a clear guide for managing medical equipment used in the care of the Health Board's patients and service users. They cover the life cycle of management of all Medical Equipment in use within the organisation. We understand the Medical Equipment Group has not sought assurance to understand the extent of compliance with the policy and procedure throughout the Clinical Boards. Interviews undertaken with Health Board staff suggested that this would be a useful exercise.</p> <p>The Capital Management Procedure ensures that the Health Board has appropriate management and governance arrangements in place around capital expenditure. The procedure specifies that the Medical Equipment Group is aware of any capital expenditure associated with equipment. The Medical Equipment Group provides reports to the Capital Management Group informing them of the medical equipment budget and approves any funding for medical equipment.</p>

Recommendation	Target date for implementation	Status	Summary of progress
Medical Equipment Inventory			
<p>R2 A single inventory of equipment needs to be established, which brings together all the key data items and assesses clinical risk of out-of-life equipment both above and below £5,000.</p>	<p>1 March 2014</p>	<p>In Progress</p>	<p>Our previous review identified there was no single inventory for medical equipment in the Health Board. An asset register was in place; however, this only captured capital items, ie of the value of £5,000 and over. The picture below £5,000 was less clear with confusion over responsibility and ownership of some equipment. The Clinical Engineering department maintain the Medusa System, which monitored maintenance of equipment and contained information on all items maintained through the department. However, there was a lack of information on all the monetary values resulting in difficulties when calculating replacement costs accurately. The lack of one source of complete information makes an accurate reflection of the position on fully depreciated equipment challenging. Since the original review, a single record of equipment is still not in place because of the resources needed for recording non-capital equipment (under £5,000). The Medical Equipment Group organised an audit of these medical equipment items but this was not deliverable because of the scale of the task and quality of information received from Clinical Boards. We understand the organisation has committed to develop a fixed term Medical Equipment Procurement Officer role in 2017-18. This role will collate a record of non-capital items from procurement Oracle records and will remain on a separate spreadsheet to the existing capital equipment inventory. The recruitment process for this role had not started as at February 2018.</p> <p>The Medical Equipment Group have not completed an exercise to identify good practice for medical equipment inventories in similar organisations. Interviews with Health Board staff also suggest there are issues on location and knowledge of non-capital medical equipment, which could make the task of developing the record for items under £5,000 difficult. The Medical Equipment Group will need to ensure that Clinical Boards fully engage with this task to develop an accurate record.</p> <p>The Clinical Engineering department still uses the Medusa System. The Head of Clinical Engineering suggested it now details monetary values for all new medical equipment items to help calculate replacement costs accurately where needed. Information may not be available for older items.</p>

Recommendation	Target date for implementation	Status	Summary of progress						
<b>Equipment Replacement</b>									
R3 Develop a University Health Board wide strategic approach to prioritisation of equipment replacement needs ensuring collaboration, consultation and engagement of all areas.	2 November 2014	In Progress	<p>Our previous review identified there was no strategic approach to replacing items below £5,000. The Health Board has many items below the capital threshold, such as weighing scales, and needed clarity on responsibility and management of the risk with these items.</p> <p>Since the original review, the Medical Equipment Life Cycle Risk Management Process ensures a strategic approach to procurement or replacement of medical equipment aligned to the organisation's overall strategy. It shows the Medical Equipment Group and Medical Device Safety Officers are key to decision making. There is also engagement with relevant departments such as Clinical Engineering, Point of Care Testing, and the Health and Safety Committee.</p> <p>The Medical Equipment Group has introduced capital bidding which has encouraged Clinical Boards to rank their medical equipment needs and place bids for funding, resulting in greater scrutiny over procurement of medical equipment (over £5,000). Evidence provided suggests there was a good response rate and Health Board staff see the approach as fair when allocating capital funds received from the Welsh Government. Although, we accept that this approach works effectively, the Head of Clinical Engineering estimated the Health Board should replace 30 to 40% of its medical equipment immediately because of its age (over seven years old). We understand that this is a guide as opposed to a specific target and Clinical Engineering considers manufacturer warranty periods and maintenance schedules when deciding if medical equipment is safe to use. <b>Exhibit 5</b> shows figures from the Medusa System highlighting the age profile of medical equipment (over £5,000) within the organisation.</p> <p><b>Exhibit 5 – Age Profile of Medical Equipment</b></p> <table data-bbox="884 1145 1859 1300"> <thead> <tr> <th data-bbox="884 1145 1400 1209">Active Items over seven years old</th> <th data-bbox="1400 1145 1859 1209">Active Items less than seven years old</th> </tr> </thead> <tbody> <tr> <td data-bbox="884 1209 1400 1257">16,755</td> <td data-bbox="1400 1209 1859 1257">20,858</td> </tr> <tr> <td data-bbox="884 1257 1400 1300">44.6%</td> <td data-bbox="1400 1257 1859 1300">55.4%</td> </tr> </tbody> </table> <p>Source: Cardiff and Vale University Health Board.</p>	Active Items over seven years old	Active Items less than seven years old	16,755	20,858	44.6%	55.4%
Active Items over seven years old	Active Items less than seven years old								
16,755	20,858								
44.6%	55.4%								



Recommendation	Target date for implementation	Status	Summary of progress
<b>Equipment Replacement</b>			
R3 Develop a University Health Board wide strategic approach to prioritisation of equipment replacement needs ensuring collaboration, consultation and engagement of all areas.	2 November 2014	In Progress	<p>One Medical Device Safety Officer has also stated the list of replacement medical equipment items within his department is significant. However, we recognise the organisation does face challenges with limited capital funds made available by the Welsh Government for medical equipment.</p> <p>There is no defined approach to replacement of equipment (under £5,000). Revenue budgets within Clinical Boards fund replacement of medical equipment under this threshold. Interviews suggested that a lack of revenue budget funding could lead to significant clinical risk where services such as wards cannot buy business critical equipment. We understand there have been unsuccessful attempts to secure a dedicated budget for replacement of equipment under £5,000 and there has been no formal benchmarking to understand the approach taken by other Health Boards.</p>

Recommendation	Target date for implementation	Status	Summary of progress
Incidents			
R4 Put in place systems and processes to ensure incidents relating to equipment are fed through to Clinical Boards.	9 January 2014	In Progress	<p>Our previous review identified that medical equipment incidents were recorded but not well communicated, nor did they inform risk management. Scrutiny of incident reporting by Clinical Boards was weak and incident information did not inform the statement of needs presented for replacement equipment.</p> <p>Since the original review, the Health Board has made limited progress with introducing systems to provide Clinical Boards with medical equipment risk/incident information. Our document review showed the Medical Equipment Group discusses incidents regularly as part of a standing agenda item at its meetings. Interviews suggested the group is to receive a regular report from the Datix system starting January 2018 that will provide further detail on medical equipment incidents and therefore strengthen arrangements. However, Clinical Board scrutiny of medical equipment incidents is still weak.</p>

Recommendation	Target date for implementation	Status	Summary of progress
Management of Wheelchairs			
<p>R5 Develop a clear approach for to manage standard wheelchairs across the University Health Board.</p>	<p>1 December 2013</p>	<p>Complete</p>	<p>Our previous review identified management of several items of equipment outside the core medical equipment arrangements, such as wheelchairs, patient beds and hoists, which needed clarification.</p> <p>Since the original review, the Clinical Engineering Department has introduced several improvements, which have helped to manage standard wheelchairs across the organisation. This includes an audit of wheelchair stock, development of an inventory and introducing a maintenance programme. Evidence provided suggests the programme is working effectively with no backlog noted. The Clinical Engineering Department have raised awareness of the service throughout the organisation using various publicity and educational documents, as well as developing guidance and wheelchair records for use.</p> <p>Interviews suggest that wheelchair losses are an issue. We asked for a report from the Medusa System that detailed the total value of wheelchair losses but the Senior Clinical Engineer could not provide the information. There is no control in place to ensure accountability, such as a budget recharge for losses and therefore no incentive for departments to take ownership for wheelchair stock.</p> <p>For other items of equipment managed outside the core medical equipment arrangements, our interviews and evidence gained during the review have highlighted issues with hoists and beds. These specifically concern the delays and difficulties in liaising with Estates, Procurement and the Hoist providers in securing repairs or replacement parts. In addition, we understand introducing specific beds (Medstrom MMO 5000 ultra-low beds) into Critical Care in late 2017 has resulted in several adverse incident reports. Nobody consulted Critical Care staff before introducing the beds, which were unsuitable for the service, despite having faced similar issues with beds in early 2016. It would be prudent for the Health Board to review the arrangements in place for hoists and beds to better understand the issues faced and take suitable action where needed.</p>

Recommendation	Target date for implementation	Status	Summary of progress
<b>Integrated Working</b>			
<p>R6 Develop a strategic site plan ensuring that Information Technology, Estates and Equipment collaborate and undertake whole life costing of equipment replacement.</p>	<p>11 November 2013</p>	<p>In Progress</p>	<p>Our previous review identified there was a lack of engagement in medical equipment issues across the Clinical Boards. Corporate departments and estates were not sharing risks or communicating effectively and there was limited involvement from Clinical Boards in completing Healthcare Standard 16 – Medical Devices. The lack of cross Health Board communication created issues, which affected the replacement costs for equipment, such as the Health Board’s MRI scanners, which were ‘trapped’ following new site developments meaning replacing these machines was a significant problem.</p> <p>Since the original review, we have found there is now executive oversight for both Medical Equipment and Information Technology. The organisation has tried to increase communication across the Clinical Boards by introducing integrated capital governance arrangements ensuring collaboration between Information Technology, Estates and Medical Equipment.</p> <p>However, evidence provided during the review suggests there are still issues with collaboration across the Clinical Boards, which have created issues. As already stated, there are delays and difficulties liaising with Estates and Procurement on repair and replacement of hoists. In addition, the lack of consultation with Critical Care on introducing beds that were unsuitable for the service.</p>
<b>Pathology Services</b>			
<p>R7 Ensure that Pathology Services, in relation to medical equipment are scrutinised, as these were external to this review.</p>	<p>2 November 2013</p>	<p>In Progress</p>	<p>We did not undertake a review of medical equipment arrangements within Pathology Services on the original audit and recommended that the Health Board should examine them.</p> <p>Since the original review, the Medical Equipment Group has asked that Laboratory Medicine (Cardiff and Vale University Health Board Directorate name for Pathology) attends its meetings. Representatives have included the Directorate Manager, the Head of the Genetics Laboratory, the Head of the Point of Care Testing (POCT) Department and member of the Clinical Diagnostics and Therapeutics Clinical Board, which hosts Laboratory Medicine. Despite some examples of attendance, our review of the minutes of the group identified limited representation from this area for most meetings held.</p>

# Appendix 2

## The Health Board's management response to new recommendations on the management of medical equipment

Exhibit 6: management response

Recommendation	AIB responsibility and actions	Completion date	Responsible officer
<b>Medical Equipment Group</b> R1 Review the effectiveness of the Medical Equipment Group, focusing on: <ul style="list-style-type: none"><li>• Membership of the group</li><li>• Attendance</li><li>• Executive Support</li><li>• Reporting lines</li></ul>	Review and Refresh ToR based on recommendations of this report.  Set out reporting mechanisms within UHB governance framework and reporting lines.	1 September 2018	Director of Therapies and Health Science

Recommendation	AIB responsibility and actions	Completion date	Responsible officer
<p><b>Medical Device Safety Officer</b></p> <p>R2 Improve the effectiveness of the Medical Device Safety Officer role, by:</p> <ul style="list-style-type: none"> <li>• providing clarity on the purpose of the role;</li> <li>• ensuring attendance at Medical Equipment Group meetings;</li> <li>• ensuring attendance at Clinical Board Quality, Safety and Experience meetings;</li> <li>• ensuring that MDSOs engage with their respective Clinical Board on medical equipment risks and issues;</li> <li>• ensuring MDSOs have the necessary time and resources to perform the role; and</li> <li>• giving MDSOs access to potential learning and development opportunities.</li> </ul>	<p>Fully embed MDSO in CB QSE structures.</p> <p>Review MDSO role profile and resourcing and communicate requirements of the role with Clinical Boards.</p> <p>Develop MDSO dashboard to include:</p> <ul style="list-style-type: none"> <li>• Attendance at MEG &amp; QSE meetings</li> <li>• QSE Med Equip reports, CB Datix reports,</li> <li>• CB med equipment risks</li> </ul> <p>Take learning from comprehensive specialist services' CB compliance audit against the UHB's Medical Equipment Management Policy to all CBs and audit as part of annual self-assessment process.</p>	<p>31 March 2019</p> <p>30 September 2018</p> <p>1 November 2018</p> <p>31 March 2019</p>	<p>Director of Therapies and Health Science</p>
<p><b>Medical Equipment Risk Management</b></p> <p>R3 Review medical equipment risk management throughout the organisation, ensuring alignment between the corporate and operational approach.</p>	<p>Ensure CBs capture medical equipment risks as part of their risk management processes. These will be monitored via MEG, and escalated through relevant strategic committees, eg Strategy and Resources/Capital Management/QSE/Management Executive as required.</p>	<p>1 April 2019</p>	<p>Deputy Director of Therapies and Health Science</p>

Recommendation	AIB responsibility and actions	Completion date	Responsible officer
<p><b>Medical Equipment Inventory</b></p> <p>R4 The Health Board should determine how it can develop an effective medical equipment inventory with available resources.</p>	<p>The MEG will review the WHO good practice guidance and determine what is feasible to introduce, with resources available, to improve medical equipment inventory.</p>	<p>1 April 2019</p>	<p>Director of Therapies and Health Science</p>
<p><b>Replacement of Medical Equipment below £5,000</b></p> <p>R5 The Medical Equipment Group should assure itself that clinical boards operate effective systems and processes for the monitoring, purchase and replacement of medical equipment below £5,000.</p>	<p>Ensure MSDOs include key under £5,000 items on their risk log and escalate replacement needs within the CB.</p> <p>Ensure medical devices procurement officer scrutinises under £5,000 items to identify opportunities for standardisation and efficiency.</p>	<p>31 January 2019</p> <p>31 January 2019</p>	<p>MSDOs</p> <p>Medical devices procurement officer</p>
<p><b>Clinical Board Engagement</b></p> <p>R6 Ensure that Clinical Boards include the Medical Device Safety Officer report as a standing agenda item at the Quality, Safety and Experience meetings to discuss and address any medical equipment risks and incidents that arise.</p>	<p>Develop MDSO metrics for reporting to their CB QSE meetings, and MEG reporting.</p>	<p>1 November 2018</p>	<p>Deputy Director of Therapies and Health Science</p>

Recommendation	AIB responsibility and actions	Completion date	Responsible officer
<p><b>Integrated Working</b></p> <p>R7 Ensure all relevant service areas collaborate, consult and engage on medical equipment issues. It should give particular attention to the arrangements in place for maintenance and replacement of beds and hoists.</p>	<p>Monitor attendance and engagement of CB MSDOs and other members at MEG, escalate non-attendance or lack of engagement.</p> <p>Monitor progress of action plan developed by Health and Safety Advisor following the Arjo Proact 2017 survey Health and Safety Committee 18/005 minute (25 January 2018).</p> <p>Maintain hoists within the Clinical Engineering Department at the end of external supplier contract.</p> <p>Ensure Clinical Engineering is represented at the Bed Management Group.</p>	<p>30 September 2018</p> <p>30 September 2018</p> <p>1 December 2018</p>	<p>Deputy Director of Therapies and Health Science</p> <p>Health and Safety Advisor</p> <p>Head of Clinical Engineering</p> <p>Deputy Director of Therapies and Health Science</p>
<p><b>Pathology Services</b></p> <p>R8 Evaluate the medical equipment arrangements in place within Pathology Services (Laboratory Medicine).</p>	<p>Agree Pathology MDSO role with CD&amp;T with same CB functions at a directorate level reporting through to CB MDSO.</p>	<p>1 November 2018</p>	<p>Deputy Director of Therapies and Health Science</p>





Wales Audit Office  
24 Cathedral Road  
Cardiff CF11 9LJ

Tel: 029 2032 0500

Fax: 029 2032 0600

Textphone.: 029 2032 0660

E-mail: [info@audit.wales](mailto:info@audit.wales)

Website: [www.audit.wales](http://www.audit.wales)

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: [post@archwilio.cymru](mailto:post@archwilio.cymru)

Gwefan: [www.archwilio.cymru](http://www.archwilio.cymru)