

Five Steps to Safer Surgery

Final Internal Audit Report

2025/26

Cardiff & Vale University Health Board



Reasonable Assurance

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Review Reference

Fieldwork

Executive Sign Off

Audit Committee

Executive Lead

Audit Team

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May 2026

1 September 2026

David Fluck, Executive Medical Director

Ian Virgil, Head of Internal Audit

Lucy Jugessur, Deputy Head of Internal Audit



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Executive Summary

Purpose

The audit was to establish if effective arrangements are in place to ensure all stages of the World Health Organisation (WHO) five steps to safer surgery checklist are consistently undertaken.

The World Health Organisation (WHO) Checklist for safer surgery involves a team based approach with five key steps:

- Briefing – to confirm the order of the operating list, to delegate tasks and to confirm that everyone knows their role during the procedure and support necessary preparations;
- Sign-in – to ensure all necessary preparations for surgery have been made and that it is safe to proceed with the operation;
- Time Out – to ensure that the surgical team is undertaking the correct procedure on the correct patient, and that all the correct measures are in place to prevent harm;
- Sign Out – to ensure that the surgical procedure has been completed in its entirety and documented accordingly; and
- Debriefing – to allow the surgical team to review their performance, to identify achievements along with any areas that may need improvement.

We previously undertook an audit of the Five Steps to Safer Surgery in 2021/22 with a 'Limited Assurance' rating. We undertook a follow-up review in 2022/23 and a 'Substantial Assurance' rating was provided as all actions were implemented.

The Health Board carried out an internal review of Theatres at the University Hospital Wales and there were six recommendations that required immediate attention including 'Audit adherence to policies and procedures for consent and 'WHO Checklist', ensure standardised application across all theatres and provide update training as required.'

Before the review had been published a WHO checklist safety collaborative initiative had been commenced, led by the Surgery Clinical Board Clinical Director and Director of Nursing. Since the review the organisation has reaffirmed its zero tolerance to non-compliance with the WHO safety check lists and reset its expectations regarding the 5 key steps.

Overview

We have concluded **Reasonable assurance** on this area. During the audit we were able to verify that the checks were being completed, however, we evidenced some inconsistencies in recording signatures within the Theatre care plans. There are further plans already in place around adding the team briefing onto whiteboards and in the longer term digitally recording all five steps on the Aqua Theatre man System.

The following matters were identified during our audit that require management attention:

- Many of the Perioperative Directorates Policies and Procedures including 5 Steps to Safer Surgery Procedure were out of date;
- There was a lack of awareness and staff 'buy-in' for the planned installation of team briefing whiteboards;
- Not all staff were present for the Team Briefing and Sign-out stages for the surgeries observed;
- The WHO checklists within theatre care plans were not always being fully completed and signed off at each stage; and
- There is no timescale for the implementation of the WHO checklist within the Aqua Theatre man system.

Scope & Assurance Summary

Objectives	The objectives and associated assurance ratings are not necessarily given equal weighting when formulating the overall audit opinion.	Related Findings	Assurance
1	Effective governance arrangements are in place which ensure the implementation of the Five Steps to Safer Surgery including appropriate procedures.	1	Reasonable
2	Systems and processes are in place at an operational level, on a day-to-day basis which ensure that all stages within the Five Steps to Safer Surgery are being undertaken throughout the Health Board.	2, 3, 4	Limited
3	Monitoring and reporting processes are in place which provide adequate and timely assurance that the Five Steps to Safer Surgery are being utilised effectively and on a consistent basis throughout the Health Board.	5	Reasonable

Management Actions

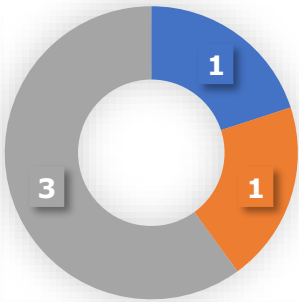


High Priority



Medium Priority

Themes



- Information, Data Quality & Data Accuracy
- Policies & Procedures
- Quality, Safety & Patient Experience

Risk Types

Quality or Safety Issues

Findings & Agreed Action Plan

Objective 1: Effective governance arrangements are in place which ensure the implementation of the Five Steps to Safer Surgery including appropriate procedures.

Reasonable

Overview / Summary of Observations

The Health Board is required to adhere to the National Safety Standards for Invasive Procedures (NatSSIPs 2) which has been designed to reduce misunderstandings or errors and to improve team cohesion and was written by clinicians from multiple professions and specialties, led by the Centre for Perioperative Care. NatSSIPs 2 incorporates the WHO checklist which mandates key stop moments when the standard pathway is confirmed, and patient-specific details are clarified with the aim of improving patient safety and team working. The Perioperative Care Directorate has its own page on SharePoint. This has information in respect of NatSIPPS2 and links to Clinical and non-clinical procedures which include the Five Steps to Safer Surgery procedure.

The Perioperative Care Directorate has a Policy and Procedure group with governance as a standing agenda item. The Directorate also has a Quality and Safety group that meets bi-monthly. There is also a Health Board wide WHO collaborative group in place which is responsible for monitoring the implementation of the WHO Checklist and is currently working on updating the Five Steps to Safer Surgery Procedure. The WHO Collaborative report progress to the Directorate Quality & Safety Group and the Health Board Quality Committee and they have confirmed that they have undertaken two audits of compliance with required systems and processes.

Key Findings		Risk & Impact	Agreed Management Action
1	Policies and Procedures	Lack of effective governance arrangements has an adverse effect on implementation of the Five Steps to Safer Surgery.	Agreed Action:
	The Five Steps to Safer Surgery procedure is dated March 2022 and is overdue for review. We understand this is being reviewed by the WHO Collaborative, although there is no timescale for completion.		All of our out-of-date Directorate policies and procedures will be reviewed and updated, and we will resume posting the Policy and Procedure group minutes on SharePoint.
	Many of the clinical and non-clinical policies and procedures on the Perioperative Directorate SharePoint page are similarly overdue for review.		The terms of reference for the Perioperative Care Directorate Policy and Procedure Group and the Quality and Safety Group will be reviewed.
	The Perioperative Directorate Policy and Procedure Group minutes are published on SharePoint, however, the most recent published minutes are dated 23 rd March 2023, despite the Group continuing to meet.	High Priority	Expected Evidence of Implementation:
	The Perioperative Care Directorate Quality & Safety Group terms of reference provided to us for review was dated June 2011. The Directorate were unable to provide a copy of the Policy and Procedure group terms of reference.		Updated Five Steps to Safer Surgery Procedure and Directorate policies and procedures. Updated terms of reference for the Quality & Safety Group and the Policy & Procedures Group. Up to date Policy & Procedure Group minutes posted on the Perioperative Directorate SharePoint pages.
	Theme: Policies & Procedures	Control Operation	Officer: Lead Nurse for Perioperative Care Target Implementation Date: 30th June 2026

Objective 2: Systems and processes are in place at an operational level, on a day-to-day basis which ensure that all stages within the Five Steps to Safer Surgery are being undertaken throughout the Health Board.

Limited

Overview / Summary of Observations

The Five step WHO Checklist is incorporated into the Theatre Care Plan and covers step 2 (Sign-in), Step 3 (Time-out) and step 4 (Sign-out). Step 1 (Team Briefing) and Step 5 (De-brief) are not presently recorded. Sign-in involves checks carried out on the ward prior to being taken to theatre and in the anaesthetic room prior to surgery to confirm the patient's details. Time-out is undertaken immediately prior to the commencement of surgery to ensure the whole team understands the planned procedure and agrees it is safe to proceed. Sign-out is undertaken at the end of the surgery and is an opportunity for any staff to discuss or raise issues that may have occurred during the surgery. The De-brief (Step 5) is not mandatory, but if requested during sign-out allows the surgical team to review their performance, to identify achievements along with any areas that may need improvement.

A set of stickers is used to record stages two, three and four of the checklist, and these are signed off to evidence completion. The stickers are added to the relevant section of the checklist, and the checklist is retained in the patient's records. We were informed that the stickers were added as a short-term intervention following the move away from an electronic record and will be removed in the future.

Site visits were undertaken at University Hospital Llandough (UHL) and the University Hospital of Wales (UHW) to observe theatre staff to ensure they were adhering to the WHO checklist. We also reviewed a sample of patient records in the Recovery area to ensure the checklist was being fully completed and signed off.

During our site visits we spoke to staff at all levels to obtain their views on the usefulness of the WHO checklist, and the level of compliance on a day-to-day basis. All staff were fully supportive of the WHO checklist requirements and agreed it enhanced both patient safety and team working. However, some staff thought that the time-out stage could be improved, noting that staff may be hesitant to raise issues in the presence of senior theatre staff. We also sought staff views on the proposed installation of whiteboards in each theatre to document team briefings which form step 1 of the WHO checklist.

Key Findings		Risk & Impact	Agreed Management Action
2	Theatre Whiteboards Discussions with a range of staff during our theatre visits identified that many staff were unaware of the plan to install 'Team Briefing' whiteboards in every theatre to record step 1 of the WHO Checklist. Most thought they were unnecessary and could not see the benefits of installing them. Review of the proposed whiteboard format identified that there is some overlap between the information currently collected on the Scrub whiteboards and the proposed Team Brief whiteboards.	Team briefing whiteboards not used due to lack of staff 'buy-in'. The Health Board is unable to monitor or evidence compliance with step 1 of the WHO checklist.	Agreed Action: The white board has been developed by the WHO collaborative in co-production with theatre staff. Staff who opted not to be involved in the WHO collaborative will not yet be fully aware of how this initiative has developed or how it is intended to work. Additional communications and educational sessions will be co-produced and delivered alongside the introduction of the board. Expected Evidence of Implementation:

	In addition, during our theatre visits we observed that Scrub boards were not being utilised for every surgical procedure or operation.		Launched at theatres together way day by WHO collaborative on the 13th February 2026. Evidence of additional communications and educational sessions (video resources and example boards) for staff re use if white board and reminders to staff to utilise the swab and sharp board in accordance with procedures. QUAD audits are being used assess and use of swabs and sharps board in perioperative care as part of rolling audit schedule captured on Tendable
		Medium Priority	Officer: Lead Nurse for Perioperative Care Target Implementation Date: July 31st 2026
	Theme: Quality, Safety & Patient Experience	Control Operation	
3	Theatre Observations During our theatre visits, team briefings (step 1) were held at the start of each day, and steps 2, 3 and 4 of the WHO checklist were being carried out for each patient observed. However, the following observations were made during our visits: - Two theatre staff were late for one team briefing and were only present for discussion of the last patient on the list. - The Surgeon was not present for the Sign-out for one surgery observed. It was confirmed in discussions with theatre staff that it was not unusual for Surgeons to leave the theatre before the sign-out. - No de-brief's (step 5) were undertaken during our site visits. We understand that the WHO collaborative, with the support of the Executive Medical Director, determined that Step 5 ("Debriefs") is not mandated but should be undertaken where there is learning to share. However, no records are kept of whether or not a debrief has been requested or held.	Potential harm due to non-compliance with the checklist.	Agreed Action: All theatre staff will be reminded that the Five steps to safer surgery procedure requires all theatre staff to be present for the team briefing and sign-out stages. This will be done in person at the next upcoming Periop Audit session and will be monitored via the QUAD and tendable audit schedules The new WHO checklist will record whether a debrief has been requested by any member of the theatre team. It is up for the team to decide whether the debrief at the end of the case or at the end of the list. Staff will be asked to fill in a datix if a debrief is requested and does not happen. Medtrim De-briefs are held if significant issues are identified during surgery, and a separate record is kept of these
		High Priority	Expected Evidence of Implementation: Full compliance with the Five steps to safer surgery procedure.
	Theme: Quality, Safety & Patient Experience	Control Operation	Officer: Theatre Managers Target Implementation Date: July 31st 2026

4	WHO Checklist within Theatre Care Plans The WHO checklist within each Theatre care plan requires a signature to be recorded for steps 2, 3 and 4. We reviewed 17 Care Plans of patients in the Recovery Area and made the following observation: Signatures were present for all time-out and sign-out stages, but there were no sign-in signatures for 5/17 care plans.	Potential harm due to non-compliance with the checklist.	Agreed Action: The new WHO checklist will now capture a name/ Role and signature for the person who has completed that section This will be audited via QUAD audits and monthly Clinical leader and theatre managers audits on Tenable
			Expected Evidence of Implementation Full compliance with the Five steps to safer surgery procedure captured via QUAD audits
	Theme: Quality, Safety & Patient Experience	Medium Priority Control Operation	Officer: Theatre Managers Target Implementation Date: 31st July 2026

Objective 3: Monitoring and reporting processes are in place which provide adequate and timely assurance that the Five Steps to Safer Surgery are being utilised effectively and on a consistent basis throughout the Health Board.

Reasonable

Overview / Summary of Observations

Compliance with the WHO checklist is at present being monitored through Quad audits that are carried out quarterly at both UHL and UHW. These consist of following a patient from the ward through the surgery and to recovery and include a review of the patient's care plan to check that the WHO checklist has been fully completed and signed off. The results are recorded on the Tendable system. A summary report is then produced from the system for monitoring and reporting purposes. The results of each Quad audit are shared with the Lead Nurse, Theatre Managers & Senior Nurse for dissemination to clinical teams, and the summary report is shared at Directorate quality and safety meetings. We were provided with copies of the summary report for the Quad audits which encompassed the patient's journey upon arrival into the department through to the handover back to the patients' ward area and the results were in line with our testing.

The Health Board uses Theatreman which is a theatre management system designed around the needs of theatre and day surgery departments. The system has recently been redeveloped and re-launched as Aqua Theatreman. The previous version did not have the facility to record each stage of the WHO checklist, but this has been addressed in the upgraded system which has only recently been implemented and is not yet fully functional so is not presently used to record the WHO checklist. However, it is envisaged that the system will in the near future be used to record the WHO checklist data currently being recorded manually within the Patient Care Plans.

Key Findings	Risk & Impact	Agreed Management Action
5 Aqua Theatreman System At present Step 1 and Step 5 of the WHO Checklist are not being recorded. There are however plans to introduce a whiteboard to record the team briefing (Step 1). Although a debrief (Step 5) is often not undertaken, there is no record of whether or not a debrief was requested or undertaken. The Aqua Theatreman system has recently been re-developed and now has the facility to record each stage of the WHO Checklist, although this functionality is not currently being utilised. We were informed that the system will in the future be used to digitally record each stage of the WHO Checklist, but there is no plan or timescale for implementation.	Monitoring and reporting processes fail to address non-compliance.	Agreed Action: The WHO collaborative has not committed to using aqua to record the WHO checklist as the previous system Theatreman always showed good compliance despite the increase in incident continue We will continue to assess the need whether we need to capture the WHO checklist on Aqua when Aqua has the functionality to deliver this based on audit results. Expected Evidence of Implementation: All 5 steps of the Who Checklist are recorded on the WHO document and will be regularly as per the QUAD audit schedule

		Medium Priority	Officer: Clinical Director team for Perioperative care
	Theme: Information, Data Quality & Data Accuracy	Control Operation	Target Implementation Date: 30 th June 2026

Appendix A

Assurance Opinion

	Substantial	Few matters require attention and are compliance or advisory in nature. Low impact on residual risk exposure.
	Reasonable	Some matters require management attention in control design or compliance. Low to moderate impact on residual risk exposure until resolved.
	Limited	More significant matters require management attention. Moderate impact on residual risk exposure until resolved.
	Unsatisfactory	Action is required to address the whole control framework in this area. High impact on residual risk exposure until resolved.
	Advisory	Given to reviews and support provided to management which form part of the internal audit plan, to which the assurance definitions are not appropriate. These reviews are still relevant to the evidence base upon which the overall opinion is formed.

Prioritisation of Findings

Priority	Explanation
High	Significant risk to achievement of a system objective OR evidence present of material loss, error, or misstatement. Poor system design OR widespread non-compliance.
Medium	Some risk to achievement of a system objective. Minor weakness in system design OR limited non-compliance.

Website: [Audit & Assurance Services - NHS Wales Shared Services Partnership](#)

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