

# NHS Wales - Dashboard 5 - Quality and Safety

Documentation by Soham S. Amburle | 25-28 November 2025

The Quality & Safety Dashboard provides a consolidated, data-driven view of clinical safety performance across NHS Wales. It focuses on infection control, patient outcomes, and key quality indicators, enabling healthcare leaders to quickly assess risk, identify performance variations, and pinpoint areas for improvement. Through a combination of high-level KPIs, detailed specialty-level visualisations, and interactive slicers, the dashboard supports evidence-based decision-making to enhance patient safety and care quality.



## Description -

- Slicers:** Interactive filters allow users to narrow the analysis based on patient characteristics and organisational factors.
  - Admission Type:** Filters data by how patients arrived (elective, emergency, non-elective).
  - Specialty:** Focuses visuals on specific clinical departments to compare performance.
  - Age Group:** Allows segmentation of safety metrics by patient age categories.
  - Local Health Board:** Enables comparison across different regional health boards.
- KPI Cards:** High-level indicators provide an immediate snapshot of critical safety and infection-control metrics.
  - MRSA Infection Rate:** This shows the percentage of patients with MRSA infections.
  - C. Diff Infection Rate:** This reflects the rate of C. difficile infections within the system.
  - Overall Infection Rate:** This provides the combined infection incidence across all types.
  - Mortality Rate (%):** This displays the proportion of patients who passed away during care.
  - Readmission 30-day Rate (%):** This highlights the percentage of patients readmitted within 30 days.
- Infections Over Time (Line Chart):** This visual tracks infection trends across months or years, allowing users to observe how infection rates fluctuate over time. It helps identify seasonal peaks, long-term reductions, or sudden spikes that may signal outbreaks or lapses in infection-control practices. This chart is essential for monitoring improvement initiatives and understanding temporal risk patterns.
- Infection Type by Specialty (Heatmap):** The heatmap provides a detailed cross-sectional view of infection distribution across clinical specialties. By highlighting intensity with colour, it clearly reveals which specialties

- experience higher rates of specific infection types. This enables teams to pinpoint vulnerable service areas, investigate causes, and prioritise targeted intervention strategies for infection prevention and control.
- 5. **Readmission 30-Day Rate by Specialty (Clustered Column Chart):** This visual compares the percentage of patients who return within 30 days across different specialties. It helps uncover departments with recurring patient issues, potential gaps in discharge planning, or cases where post-treatment follow-up may need strengthening. The comparison supports quality improvement by highlighting where additional clinical attention or pathway redesign may be required.
  - 6. **Infections by Type (Stacked Column Chart):** This chart breaks down total infections into their individual types, showing their proportional contribution to the overall infection burden. By presenting infection categories side-by-side, users can see which infection types dominate, how distribution changes over time or across filters, and where targeted infection-control resources should be allocated. It provides a clear overview of the infection landscape within the organisation.

This dashboard consolidates essential infection-control and safety metrics into a single, interactive view. With detailed specialty-level comparisons, outcome indicators, and clear trends over time, it supports targeted quality improvement, risk reduction, and strategic planning across NHS Wales. It equips clinical and operational teams with actionable insights to enhance patient outcomes and system safety.

**Created by SOHAM S. AMBURLE**  
**25-28 November, 2025**