

# Driving Improvement in Healthcare Associated Infection Practices

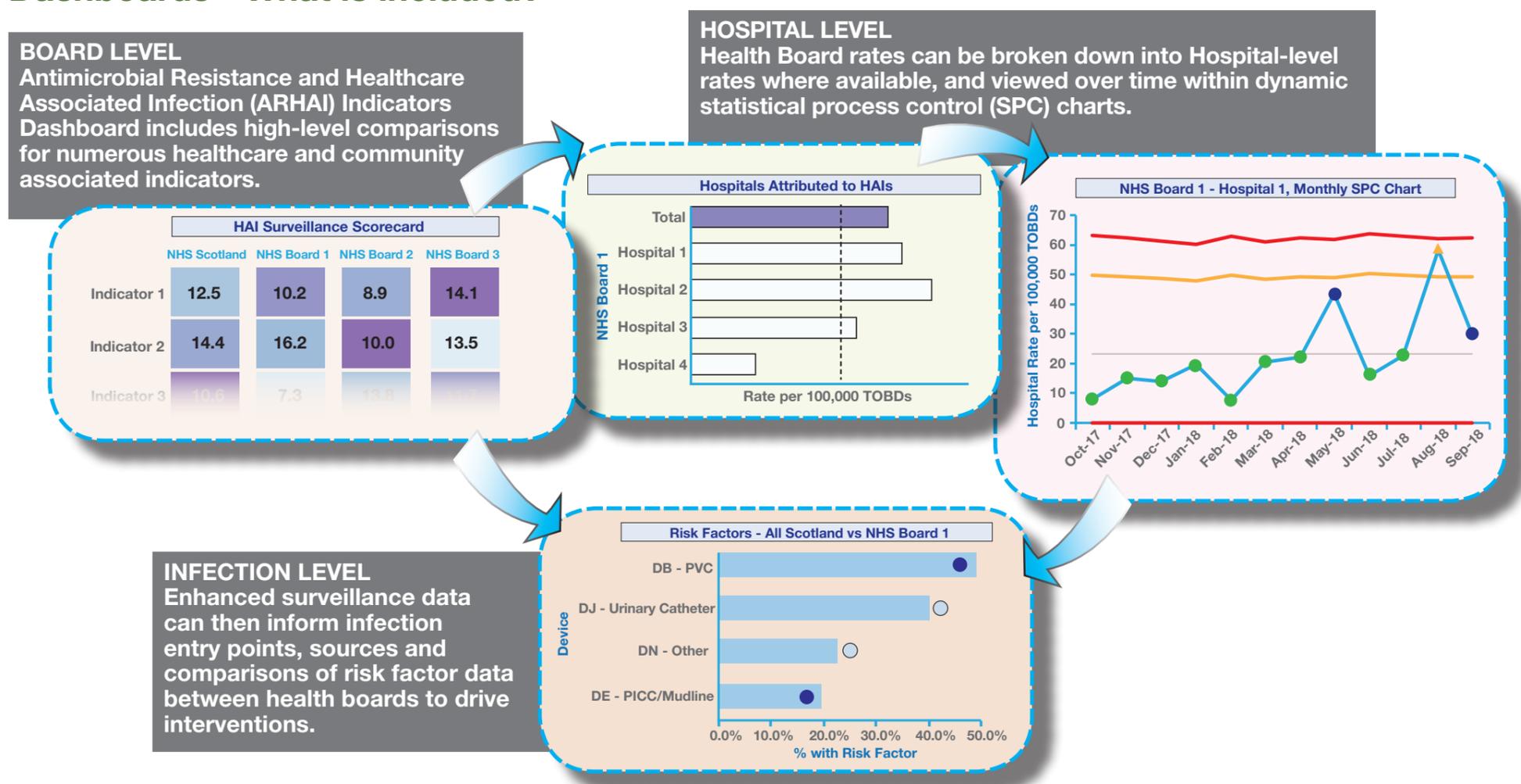
Through Visualisation of Enhanced Surveillance Data on NSS Discovery

Authors: Elaine Glass, Fiona Murdoch and Laura Imrie, Health Protection Scotland. NSS.HPSSSHAIP@nhs.net

**Background/Aim:** The NSS Discovery platform, using the interactive tool Tableau, has transformed Public Health & Intelligence. NSS Discovery provides NHS staff with a wide range of quality indicators by interactive and user-friendly dashboards through secure login. Surveillance data held by HPS is now reported through NSS Discovery, replacing the large excel reports which were limited in their functionality. The aim of this project was to produce dashboards that could both compare various indicators across multiple NHS Health Boards at-a-glance, and subsequently focus-in on hospital-level and enhanced surveillance data to inform local intelligence and intervention strategies.

**Methods:** HPS invested in Tableau training, in order to design, create and publish our own custom views. Dashboards were to be easy to use, be interactive and engaging, and encourage collaboration and discussion between Health Boards, since there would be no board-specific data restrictions. The first HAI dashboard was published in early 2017, and since then, dashboards are rolled out as and when ready, with new dashboards and features published regularly. Developments are still ongoing: taking health board feedback and usage into account, utilising new datasets, and experimenting with new and innovative dashboard techniques.

## Dashboards - What is included?



## Results/Outcomes - Feedback from our stakeholders

**Ann Kerr, NHS Greater Glasgow & Clyde:** "I have found the Healthcare Associated Infection dashboards to be very easy to navigate through and to customise searches e.g. date ranges, hospitals and comparison with Scotland. The dashboards are straightforward to understand and visually appealing. It's a great resource and one which I have used on occasions to display our SAB enhanced dataset at our local Infection Prevention & Control meetings."

**Keith Morris, NHS Fife:** "I look at the dashboard quarterly to compare Fife against other Health Boards, both for overall infection rates and particular types of infection i.e. PVC related SAB. I have then contacted colleagues to ask for advice if they are doing well, and see if I can learn anything from them to improve patient care here."

**Janathan Danial, NHS Lothian:** "These dashboards provide immediate access to healthcare associated infection data to the infection prevention control team and clinicians in NHS Lothian to help improve patient outcomes, with dashboard results discussed at the local infection control committees. These interactive dashboards provide different ways of visualising the data, are easy to access, can be viewed on big screens and avoid the need to print out or create long reports."

**Robert Wilson, NHS Ayrshire & Arran:** "The range of data available assists in the development of local priorities. It also helps to identify Board's who may be able to share their local initiatives within a specific area. The ability to manipulate the data on Discovery and the variety of visual presentations make it a valuable tool."