HCAI Data Capture System Stakeholder Engagement Forum: 12th October 2021

Attendees:

Name	Title	Organisation
Julie O'Malley	Assistant Director Infection Prevention and Control/ Surveillance and Audit	Wigan Borough Clinical Commissioning Group
Judy Ames	Infection Prevention and Control Nurse	NHS Norfolk and Waveney Clinical Commissioning Group
Ryan George	Clinical Scientist/Senior Surveillance Officer	Infection Prevention & Control/Tissue Viability, Manchester University NHS Foundation Trust
James Waistell	Surveillance Nurse	County Durham and Darlington NHS Foundation Trust
Graham Verbrugge	Information Officer	Infection Prevention & Control Department, Norfolk and Norwich University Hospitals NHS Foundation Trust
Carrie Godfrey	National Clinical Infection Prevention & Control Specialist	Spire Healthcare
Catherine Tremlett	Consultant Microbiologist and Infection Control Doctor	Norfolk & Norwich University Hospitals NHS Foundation Trust
Ellie Gilham	Epidemiology and Information Analyst, Field Epidemiology	UKHSA
Kelly Osborne	Infection Prevention & Control Nurse Specialist	East Coast Community Healthcare CIC
Dawn Cursons	Senior nurse Infection Prevention and Control	Norfolk and Norwich University Hospital

UKHSA Mandatory Surveillance Team:

- Olisaeloka Nsonwu
- Russell Hope
- Dimple Chudasama
- Sobia Wasti
- Callum Pearson
- Graeme Rooney
- Miroslava Mihalkova
- Lababa Hasan

1.1 Welcome and Introduction

- ❖ **Olisaeloka Nsonwu (ON) -** This session of the Stakeholder Engagement Forum is to seek feedback on the mandatory surveillance of bacteraemia and *C. difficile* infection, making sure that we are meeting your needs for data analysis and for entering the cases, as well as looking for ways to improve the system for the users.

2.1 HCAI DCS updates and issues

2.1.1 PHE to UKHSA rebranding

- ❖ **ON -** informed the attendees that Public Health England (PHE) is no longer in existence. It has transitioned to a new organisation called UK Health Security Agency (UKHSA) and provided updates about rebranding the Data Capture System (DCS) to reflect this. Olisaeloka Nsonwu also stated that this will involve quite a bit of work. However, it will not interrupt with the day to day usage of the system as only the things such as the external look of the system like colours will change etc.

3.1 HCAI surveillance update

3.1.1 Presentation

Olisaeloka Nsonwu gave a presentation prepared by Russell Hope, Head of HCAI & AMR Division at UKHSA. The presentation provided an update on the mandatory surveillance of Bacteraemia and CDI over time. It included slides on:

1. Percentage change in Bacteraemia and CDI over time.
2. Incidence rate of cases reported over time
3. Patient distribution in GNBSI cases over time
4. Primary focus of hospital-onset infections in 2020/21
5. Observed and predicted trajectories of monthly counts of all reported Gram-negative (*E. coli, Klebsiella* spp. and *P. aeruginosa* bacteraemia in England, April 2012 to March 2024)
6. Observed and predicted trajectories of monthly counts of healthcare-associated Gram-negative (*E. coli, Klebsiella spp.* and *P. aeruginosa* bacteraemia in England, April 2012 to March 2024)

7. Incidence rate of cases reported over time
8. MRSA and MSSA cases patient distribution over time
9. Source of MRSA and MSSA infections reported over time
10. CDI incidence rate of cases reported over time
11. Percentage of CDI cases by healthcare-association

❖ **ACTION:**
   UKHSA will send the presentation to attendees upon request following the meeting.

❖ **Presentation Q&A:**
   Catherine Tremlett raised a question about the trajectories and wanted to understand how UKHSA defines the healthcare associated infections? Catherine also stated that the gram-negative reduction targets are not achievable once the COHAs and HOHAs are added to them and asked for it to be reviewed again and perhaps reconsidered.
   Olisaeloka Nsonwu advised healthcare associated infections are defined as per the mandatory surveillance protocol and explained the underlying methodology: Due to the unavailability of the data over previous periods, the infection cases have been linked to HES (Hospital Episodes Statistics Database). UKHSA derives the latest information on discharge of these patients from that database to determine whether it is a Community Onset case but previously discharged within 28 days. The exact definition includes Hospital Onset cases and Community Onset Healthcare Associated cases.
   Russell Hope indicated that a different procedure had been attempted in the past, where UKHSA reviewed specific procedures that exposed the patients to a risk of gram-negative bloodstream infections. However, it did not work, but it can be revisited to make it more beneficial to the Trusts.
   Ryan George asked a question regarding linkage of the prior admission data to the HES dataset and wanted to clarification on whether it was restricted to previous admissions to the same organisation or more?
   Olisaeloka Nsonwu confirmed that it is restricted to the previous admission to the same organisation.

3.1.2 Recent reports and publications
   ❖ **Olisaeloka Nsonwu** advised that UKHSA published the Annual Epidemiology Commentary on the bacteraemia's on 15th September, covering the data by financial year. UKHSA also produces a quarterly report with less details compared to the AEC. Attendees were encouraged to provide their feedback/ suggestions on these reports to improve and make them more beneficial to the audience receiving these reports.

3.1.3 Discussion and feedback
   ❖ **Carrie Godfrey** stated that the annual reports extremely useful to the Independent Sector Providers and inquired about the possibility of quarterly and monthly reports to assist them in aligning with the NHS with respect to attribution of the cases on the DCS.

- ❖ **Olisaeloka Nsonwu** stated that UKHSA will certainly review and explore this option if this information will be helpful to the Independent Sector colleagues receiving the report.
- ❖ The second part of the discussion and feedback focused on understanding the management structure of the Independent Sector.
- ❖ **Russell Hope** raised the question about how the reporting to the DCS will be impacted when the Clinical Commissioning Groups (CCGs) move to the Integrated Care Systems (ICS footprints) scheduled for April 2022.

4.1 Upcoming HCAI DCS projects

4.1.1 Random sampling
- ❖ **Olisaeloka Nsonwu** advised that the random sampling aims to reduce the reporting burden on the acute Trusts. The updated system will be able to trigger the reporting of additional questions for a random sample of cases. So, instead of reporting the risk factor information for every *E. coli* case, the DCS would trigger the requirement to report for just a randomly selected sample. It will also be compatible with the current surveillance. It can used to specify conditional reporting based on characteristics of a case, for example, it can be used to request particular risk factor questions for male patients. Currently, the DCS is unable to carry out this level of case capture.

4.1.2 Automated data imports – LIMS to HCAI DCS
- ❖ UKHSA is working on the implementation of an automated data pipeline from the laboratory LIMS systems to the DCS. Case information isolates, essentially tests that are in the LIMS systems are analysed, processed, and converted into cases based on the mandatory surveillance protocol and automatically ingested onto the DCS. The advantage of this would be that it would reduce the Trust's initial burden of reporting the original case. The Trust would then simply add the additional information that is not retrievable from the LIMS such as the risk factor and admission information.

4.1.3 Automated data imports – prior admissions
- ❖ This project will link the cases to HES to extract the prior discharge date and update that into the DCS. The objective is to see whether the DCS itself can be designed to run off data linkages to extract information where it already exists and upload that onto the DCS. This will eliminate the need for individuals spending a great deal of time finding this information and manually inputting it onto the DCS.
- ❖ **Russell Hope** advised that a marker for 30 days day all-cause mortality can also be produced via the data linkage. UKHSA produces mortality report every year but currently the information on date of death is not available on the DCS. This information can be integrated into the DCS using the data linkage group. Batch demographic service can be used to retrieve the DCS dataset and be traced to determine the date of death and link to the owner's death. **George Ryan** said it would be helpful as their Trust is currently using Spine to retrieve this information for each individual patient.

5.1 AOB
 ❖ Nothing to report.

6.1 Date for next meeting: TBC