

Conclusion.

Construction of a dashboard which met the aims and objects to supply visualisations that lead to discussions around prescribing habits and disease prevalence has proved to be successful. Expected outcomes changed although education and learning requirements were met. Specialised dashboard software was chosen and a bespoke information dashboard produced.

The Aim.

To explore Geographical Information systems and other dashboard software and how these can better highlight and help SBUHB to analysis and explore prescribing data within the Health Board highlighting areas of concern where C-difficile cases are found within Primary Care.

Introduction.

Clostridium difficile cases in Swansea Bay University Health Board have risen during previous years. The Health Board has a dedicated team tackling the increase in reported C-difficile cases. C-difficile is associated with the prescribing of antibiotics, by analysing the prescribing data the Health Board can identify areas of usage that may have contributed to this. The team introduced a set of restrictive antibiotic guidelines in June 2018 which significantly reduced the number of C. difficile cases for in-patient cases.

Method

Strategies including software development, experimental review and document review used with quantitative research assisted in choice of software, usability experience whilst ensuring reliability to design an informative dashboard to show correlations. Regular and consistent review allowed for development to ensure design features were met.

Waterfall development allowed for concept, initiation, design, construction, testing and implementation. Design concepts were shared and updated with multi factorial ideas. Data requirements and analysis were decided whilst ensuring that the visualisations were easy to understand whilst highlighting any correlations. Availability to drill down into the data to ensure further understanding is optional. Constant evaluation of the dashboard with peer group review allowed for changes to be made allowing for better understanding.

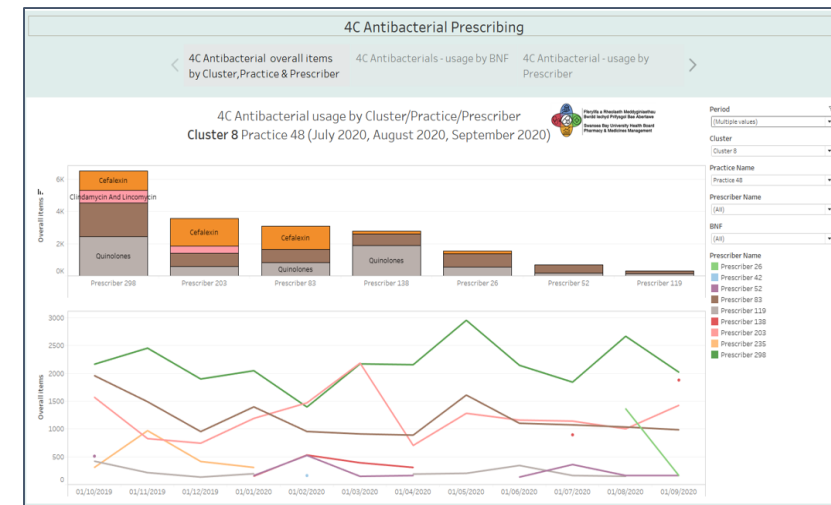
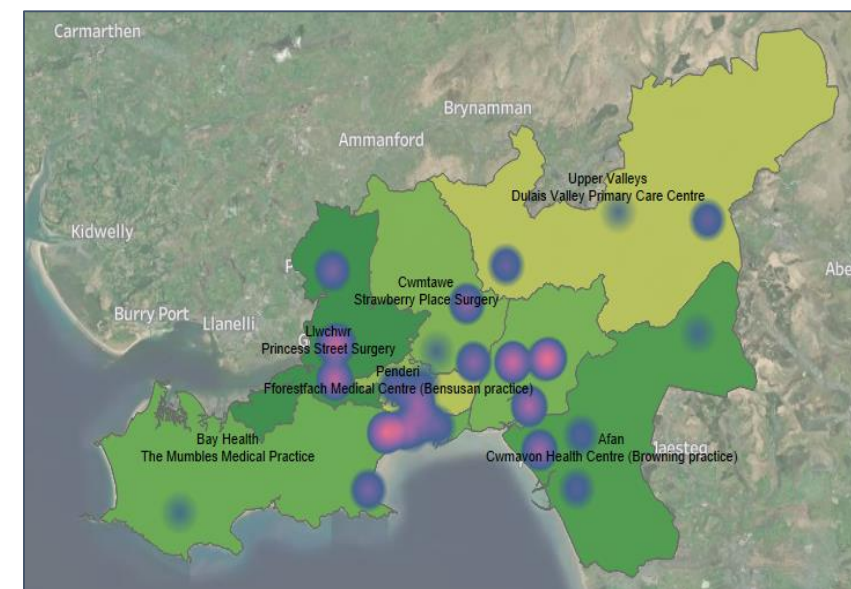


Tableau Interactive Graphs used to share 4C prescribing within practice



4C Prescribing (depth of area cover) with C-difficile prevalence (circle density)

Chart1. Swansea Bay UHB monthly numbers of C. difficile by location type, Apr 10 to May 21



SBUHB monthly numbers of C.difficile by location type (Apr10-May21)