

Hypothesis

The use of a central dashboard for healthcare providers working within the Welsh Prisons to access demographic details about their patients and determine the patients missing NHS numbers will improve the transfer of care patients receive outside of the Prison.

Project Aim

Increase the use of NHS numbers assigned to patients within the Prison to allow for a seamless transfer of care between Community, Primary and Secondary Care providers.

Objectives

- Understand the history and use of Business Intelligence (BI) software tools.
- Investigate the benefits of appropriate data visualisation and how a dashboard can be used effectively in the health care setting; a comparison of cases in England and Wales.
- Identify the current processes in place for Clinicians within the Welsh Prisons for data gathering. Focusing on a clinical system to identify patients without NHS numbers.
- Create a working system, to support the Prisons and stakeholders in sustaining and continuing the use of BI to improve the use of NHS numbers for seamless transfer of care.

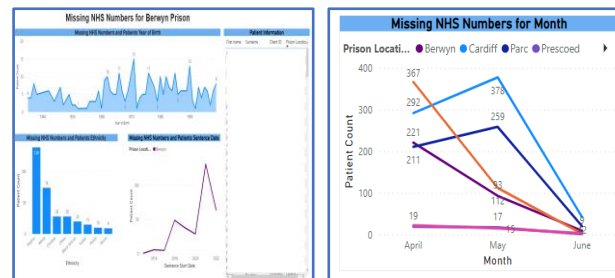
Related Work

The Organisation Patient Safety Incident Reports (OPSIR) workbook [1] for Wales identified 1,776 patients (3.5% of the Welsh population), had a documentation incident raised over a 6-month period. Breaches include processes around records and identification. It is hoped the level of risk is reduced within the Prison environment by using BI tools and reporting processes.

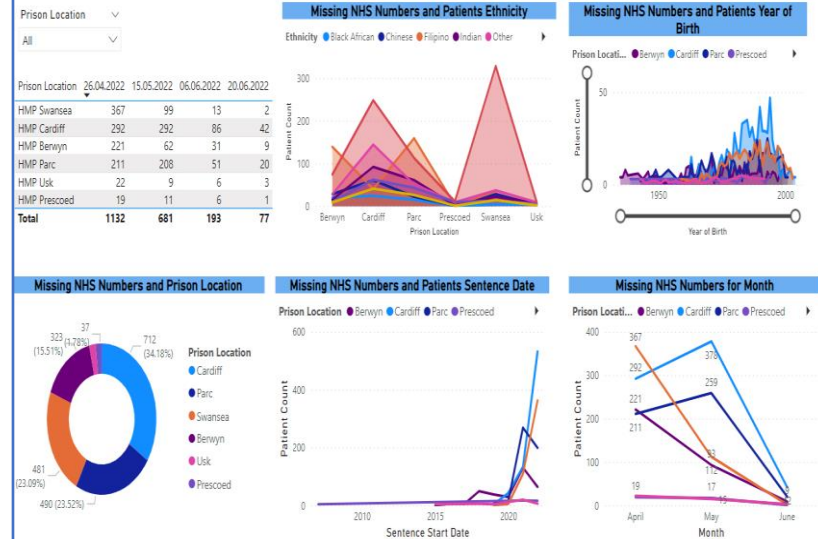
The Once for Wales NHS framework [3] and NICE [2] guidelines highlights the requirements to provide the same level of care to patients within the Prison to those in the community. A reporting dashboard will mitigate some of the risks associated with patients missing their NHS numbers and speed up the transfer of care outside of the Prison to ensure clinical data is available for the patient.

Methodology, Design and Implementation

Research was conducted and the Prison Stakeholders were presented two BI options- Tableau and PowerBI. The agile approach to the project enabled the incremental development and Power BI was the preferred option. An all Wales dashboard has been developed with specific Prison information available to identify the patient.



Missing NHS Numbers For All Welsh Prisons



Conclusion and Recommendations

The Hypothesis can be accepted as it has been proved throughout the implementation as the number of missing NHS numbers has decreased from **20%** to **1.4%** in the three months of project implementation.

Further development is recommended around the integration of the dashboard with the clinical system and Welsh Government has been provided information on data quality requirements to determine Key Performance Indicators for the Prisons. Once identified the scope of the BI dashboard is expected to incorporate additional information such as duplication of records and other data quality indicators.

References

- [1] NHS, "Organisation Patient Safety Incident Reports Workbook," 2019. [Online]. Available: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fgov.wales%2Fsites%2Fdefault%2Ffiles%2Fstatistics-and-research%2F2020-11%2Fincidents-reported-to-the-national-reporting-and-learning-system-october-2019-to-march-2020-050.xlsx&wdOrigin=BROWSEL>. [Accessed 23 06 2022].
- [2] NICE, "People in prison should receive the same level of care as those outside, says NICE." National Institute for Health and Care Excellence, 02 11 2016. [Online]. Available: <https://www.nice.org.uk/news/article/people-in-prison-should-receive-the-same-level-of-care-as-those-outside-says-nice>. [Accessed 27 06 2022].
- [3] V. G. A. Goodall, "NHS Wales National Integrated Medium Term Plan (IMTP)," Welsh Government, 2019.