The Challenge:
"Together for Health – a Neurological Conditions Delivery Plan", was published by the Welsh Government in April 2014. It set out a framework for the planning and delivery of high quality person centred care for anyone affected by a neurological condition (a disorder of nerves and the nervous system).

Hywel Dda Health Board (HDd UHB) undertook this research work as part of the required response to “Together for Health”. Working with SAIL Databank, which is de-identified to comply with all data protection rules, the aim of this project was to use data in SAIL to estimate the number of patients with Neurological disease in HDd UHB.

The Research:
Out of the 54 GP Practices in HDd UHB, SAIL holds complete data for 22 practices.

To assess whether the data held in SAIL is representative of the health board as a whole, a comparison was carried out with data held in the Welsh Demographic Service (WDS), who hold data on all the patients registered in GP practices in Wales. This analysis revealed that 35% of all HDd UHB patients are registered with GP Practices whose data is held in SAIL.

Furthermore population estimates derived from SAIL were compared with population estimates from the Office of National Statistics (ONS) in order to validate their accuracy.

The characteristics of the 22 SAIL practices were compared with all 54 HDd UHB practices according to:
- age band (under 18; 18-65; older than 65)
- gender
- deprivation

The Results:
The results showed no obvious differences between SAIL and non-SAIL practices on gender or age. Therefore, it was felt that practices were sufficiently similar to suggest that data in SAIL can be used to extract figures for the total HDd UHB population.

A list of Read codes (primary care codes) was provided to SAIL to support the extraction of data from GP records. The results of the analysis were grouped into condition-specific categories according to the Read codes provided.

The Impact:
The project provided an estimate number of patients with specific GP events in their history, coded with the Neurological Read codes for the years 2008 – 2009 and 2013 – 2014. Data was grouped by age band and locality area (based on GP practice with which the patient is registered).

The data gathered in this research work provided HDd UHB with an estimated number of patients with Neurological disease in their health board, which they were previously unable to do. This in turn was used to inform a response to Welsh Government “Together for Health’s -Neurological Conditions Delivery Plan”.


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