

NHS Scotland Open Data: A data visualisation study about child health

Dr Natalie Polack, MSc in Big Data

The NHS Scotland Open Data portal

In 2015, the Scottish Government published their 'Open Data Strategy'. NHS National Services Scotland (NSS) took the decision to establish the 'NSS Open Data Working Group'.

NSS Information Services Division (ISD) decided to develop a single open data portal that would encompass data from all 14 Regional Health Boards, 7 Special Boards and one Public Health Body within the NHS.

Project Scope & Objectives

- (1) NHS Open Data will be accessed via the API to ensure that the application developed will always use the most up-to-date version of the open data.
- (2) R and Shiny will be evaluated as an alternative to Tableau for developing a data story
- (3) Feedback on the 'User Experience' of working with the NHS Scotland Open Data portal will be given to the host organisation, ISD.

Project Plan & Initial Results

The NHS Scotland Open Data portal contains a group of datasets related to infants and children that will be used to create a data story about Child Health in Scotland:

- (1) Births in Scottish Hospitals
- (2) Infant Feeding
- (3) 27 – 30 Month Review Statistics
- (4) Primary 1 Body Mass Index Statistics

Initial analysis has focussed on looking at the effect of factors such as SIMD and Maternal Age.

Figure 1: NHS Scotland Open Data portal

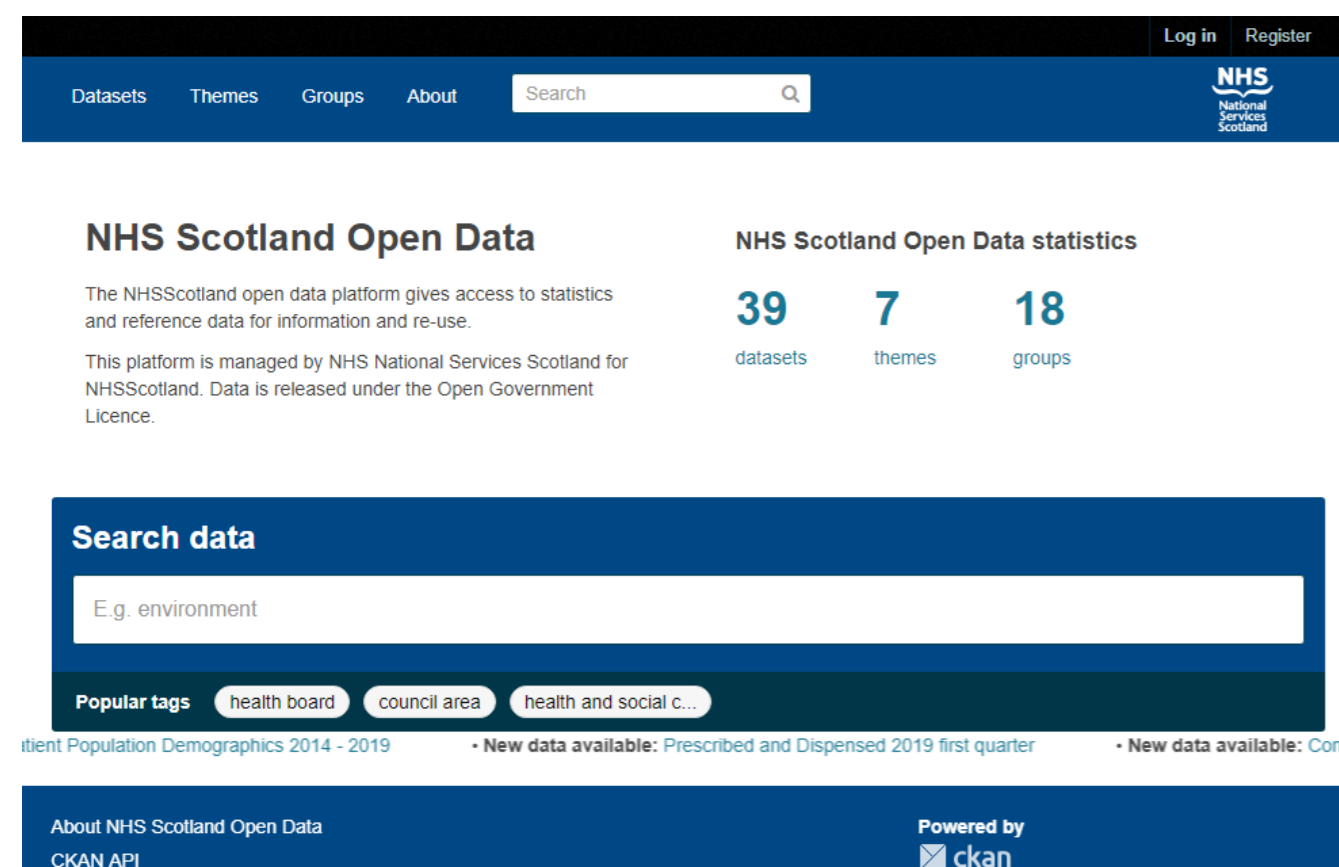


Figure 2: Scottish Births by SIMD Quintile and Maternal Age

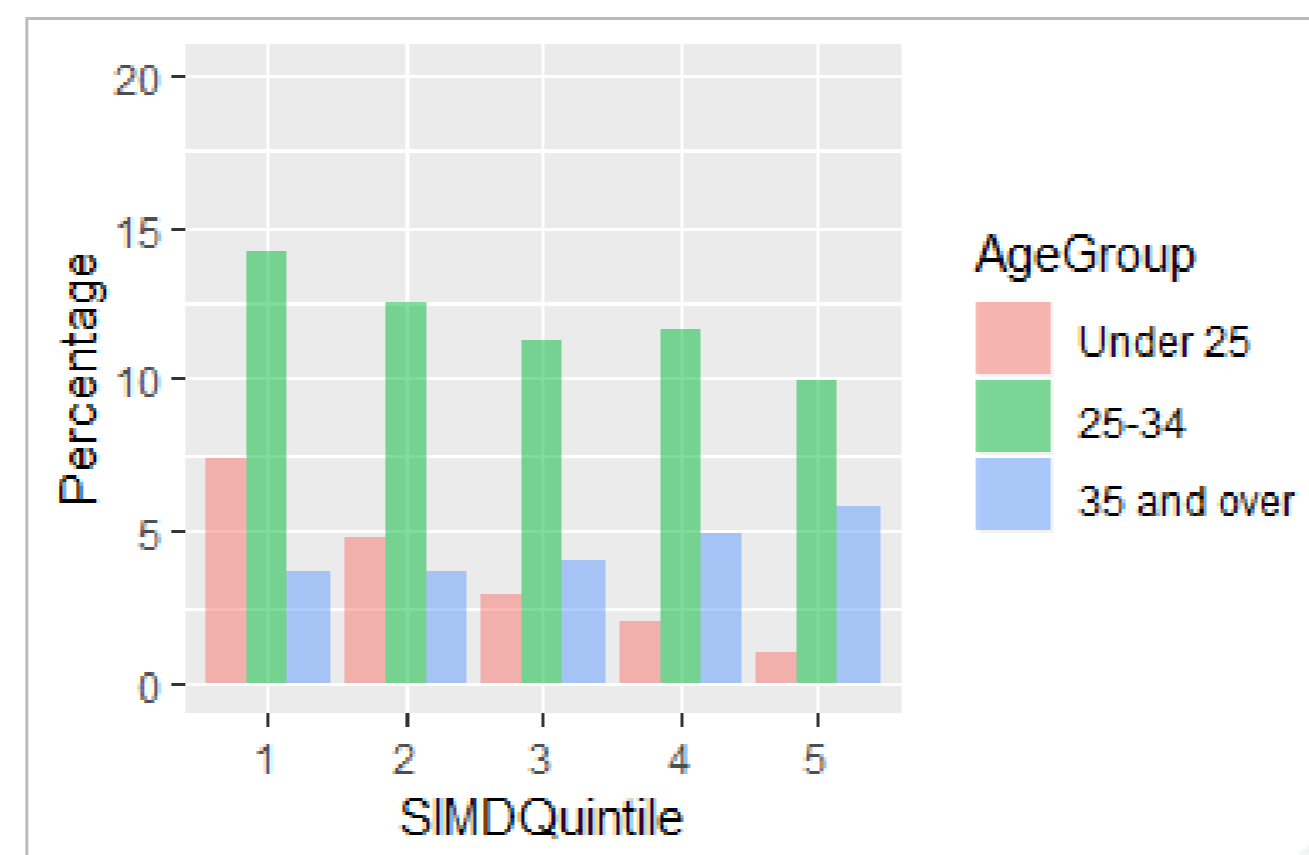


Figure 3: Breastfeeding rates by SIMD and drop-off over the first two months of babies' lives

