Introduction

The Kent NHS Health Checks Health Equity Audit explores differences in uptake of the Programme across the local health economy. Data for the audit were retrieved from a linked person level database, known locally as the Kent Integrated Dataset (KID).

Purpose

The main objective of the audit is to assess the extent of 'adverse' access gradients and to use the results to shape the future deployment of the NHS Health Checks Programme. The audit also provided an opportunity to 'field test' the draft NHS Health Checks Health Equity Audit Guidance produced by PHE.

Methodology

A 20 month test cohort of patients were retrieved from the KID (01 April 2015 to 30 November 2016) where the event Read Code = '9mC1' (NHS Health Check invitation). Read Codes '8BAg' (NHS Health Check Completed by GP) or '8BAg0' (NHS Health Check Completed by third party provider) were used to identify completed checks within the overall invitation test cohort. Only NHS Health Checks provided to Kent registered residents were used in the analysis. Duplicate or 'null' pseudonymised NHS Numbers were also excluded from the analysis.

Results / key findings

The original extract identified 105,453 patients who had been sent a NHS Health Check invitation noted as Read Code '9mC1'. Following data quality checks (duplicate pseudonymised number, key attributes missing etc.) the original extract reduced to 105,305 patients. The final 'cleansed' extract was partitioned into checks not completed within the extract window n=69,866 (66%) and checks completed within the extract window n=35,439 (34%).

Key findings:

- 1. Females were significantly more likely to complete an NHS Health Check when compared to males and there was evidence that this imbalance increased with age.
- 2. Using the CACI ACORN segmentation tool, patient segments 'Financially Stretched' (OR= 0.883, p<0.001) or 'Urban Adversity' (OR= 0.748, p<0.001) were significantly less likely to complete a check when compared to segments 'Affluent Achievers' (OR= 1.108, p<0.001) and 'Comfortable Communities' (OR= 1.077, p<0.001).
- 3. Case detection rates for hypertension and especially for diabetes were lower than reported in a comprehensive synthesis of equity analyses elsewhere in the country. Detection rates for CKD were higher than those identified in the same publication.
- 4. Housebound people are less likely to complete a check compared with other groups.
- 5. No significant access differences were detected when comparing checks conducted in GP settings vs non GP settings.

Conclusions

Using the event level data in the KID, it has been possible to explore the extent of adverse equity gradients associated with access to the Health Checks Programme in Kent. This analysis which patient level data linked to the household segment attribute (ACORN) has proved especially helpful in signalling previously unknown gradients between affluent and deprived communities. These insights are currently being used to inform a nuanced NHS Health Checks Programme aimed at redressing inequity in access especially among deprived communities.

Gerrard Abi-Aad, Head of Health Intelligence, Kent County Council, January 2018