

POPULATION HEALTH MANAGEMENT

Bradford and Airedale Clinical Commissioning Groups

Transforming out of hospital services through patient segmentation analysis



THE CHALLENGE

Bradford CCG's out of hospital programme is concerned with transforming out of hospital services to ensure improved outcomes, enabling people in Bradford with complex needs to remain happy, healthy and at home and to achieve maximum system benefits.

The programme required a better understanding of the patient cohorts using the most primary and secondary care resources. This would also enable services to be tailored to people within Bradford who would benefit the most from transforming out of hospital services.

Anecdotal information suggested focussing on people with two or more long-term conditions, patients living in care homes, and housebound patients, but there was little analysis/evidence available to back this up. In addition, due to information governance issues, Bradford CCG was unable to undertake an in-depth analysis linking primary and secondary care activity. Dr Foster has access to a linked dataset, used for the purpose of risk stratification, and was able to develop a bespoke population health analysis in partnership with Bradford CCG.

DR FOSTER'S APPROACH TO PATIENT HEALTH ANALYSIS

Dr Foster provided two stages of analysis:

1. Part 1 – Patient segmentation analyses across the CCG's population to determine the patients who were using the most emergency care resource.
2. Part 2 – Further patient segmentation analyses to establish key themes and eligibility criteria for accessing out of hospital services within the patient group identified in part 1.

For each age group (19-40, 41-64, 65-74, 75-84, 85+), Dr Foster undertook an analysis of A&E/non-elective admissions and costs, focusing on:

- Care home / non care home patients
- Housebound / non housebound
- Reasons for admission
- Long term conditions
- Risk stratification scorings
- E-frailty scorings
- Number / type of medications the patient is on

RESULTS

The initial analysis yielded interesting results, as Darren Rushton, Head of Programme Analytics at Bradford & Airedale CCGs, explains: "When the first report came back from Dr Foster it confirmed many of our assumptions around the cohort of patients who are being admitted non-electively to hospital. This included frail elderly patients with multiple long-term conditions and patients on multiple (5+) medications.

"The report also identified a number of patients admitted with conditions such as urinary tract infections, and skin and tissue infections and our 'out of hospital' programme is currently reviewing this to look at ways in which admissions could potentially be reduced."

“Dr Foster has currently provided a report for one of our community partnerships. These are groups of GP practices who are working together to improve the health services of their local communities covering populations between 30,000 and 50,000.

“This report has been very well received and as a result we are now in discussion with Dr Foster about producing these reports for the other 13 community partnerships across Bradford district and Craven.”

Darren Rushton, Head of Programme Analytics, Bradford & Airedale CCGs

BENEFITS

Dr Foster’s analysis confirmed many of the assumptions that the out of hospital programme had, while also highlighting some new themes and areas for further analysis. Darren says the report has been “very useful” in providing Bradford CCG with evidence to inform decision making and has enabled evaluation of the schemes currently in place.

The analysis has also highlighted the usefulness of risk stratification and e-frailty in identifying potential patients to target, and the importance of linking primary and secondary care data to provide a holistic view of patient pathways.

The results have provided Bradford CCG with a deeper understanding of service users that will facilitate targeted intervention and allow the CCG to better manage the health needs of the local population outside of a hospital setting.