

Abstract for Oral Presentation at PCSI Conference, Slovenia 2024

Title

Examining person level social determinants of health recorded in routinely collected healthcare data: insights into effects on healthcare utilisation

Introduction

It is widely recognised that social determinants of health (SDoH) impact on people's health and well-being. Indeed, they directly influence and shape individual social needs which may be expressed through digital social markers. These markers reflect the conditions and circumstances in which people are born, grow, live and work. Understanding and addressing social need is critical for health and care systems to improve health outcomes and successfully tackle health inequalities.

One data point routinely available in the United Kingdom (UK) are the Indices of Multiple Deprivation (IMD). IMD is a geospatial statistical measure used to assess and quantify the level of deprivation experienced by communities and areas. One major constraint is the fact that this is an aggregate measure, and the deprivation score may not accurately reflect a specific individual's social needs. With this constraint in mind together with advances in digital infrastructure and clinical documentation, it's both important and timely to investigate person level data and learn more about people's circumstances above and beyond the medical model.

Method

With the increasing availability of linked data assets across the UK we were able to examine the availability of person centric social markers. This study involved reviewing routinely collected primary and secondary care records, assigning specific concepts to domains of social need, and creating novel person level markers. This allowed us to measure the breadth and depth of social need markers and explore their utility as part of innovative decision-making processes.

Results

We will share three key insights:

1. Description of how many people have social markers together with the quality and completeness of those markers across different domains.
2. The association between individual social markers and IMD and how the two markers may be used in concert.
3. Examination of the utility of these markers, considering policy decisions, resource allocation, cohort identification and care model design and implementation at both a system and individual level

Discussion

This remains a relatively unexplored topic and there are clear gaps in the coverage of social needs available in routinely collected healthcare datasets. This is not surprising given that the datasets accessed were designed for a different purpose. However, there are still a considerable number of markers documented which represent genuine social need that was deemed sufficiently important and relevant to capture as part of clinical contacts.

These markers have a relationship with the relative deprivation associated with the area within which people live and a strong association with negative outcomes that are independent of clinical markers of risk. These novel social markers may well prove to have real-world utility, certainly in helping to describe additional needs of cohorts which will help tailor interventions more appropriately. The limitations of these markers should not be overlooked however as there are known gaps and they should be used with this element of bias in mind.