Scottish Government Health Directorates Chief Scientist Office



FOCUS ON RESEARCH

The impact of quality and accessibility of primary care on admissions for Ambulatory Care Sensitive Conditions (ACSCs) in Scotland

Researchers

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Aim

Hospital admissions for Ambulatory Care Sensitive Conditions (ACSC) are those that could potentially be effective prevented by timely and disease management within primary care. ACSC admissions are increasingly used as NHS performance indicators. However, key questions remain about the validity of these measures. The aim of the project was to test the robustness of ACSC admissions as indicators of the quality of primary care in Scotland and where appropriate to propose methods for refining ACSC measures.

Project Outline/Methodology

The relationship between ACSC admissions and primary care performance was investigated using routinely collected data and multiple regression modelling.

The analysis used hospital admissions data (Scottish Morbidity Records) linked to practice records on Quality and Outcomes Framework (QOF) attainment, practice level data on access, and practice level covariates. The time period analysed was financial years 2005/2006 to 2011/12.

The main outcome variable was number of emergency admissions at practice level for ACSC conditions which are incentivised within the QOF. These were: asthma; chronic obstructive pulmonary disease; diabetes complications; stroke; hypertension; angina; cardiac congestive failure (CCF); and convulsions and epilepsy.

Measures of the quality of disease management were constructed using the practices' performance within the QOF Framework on indicators relating to chronic disease management. Access to primary care was measured using patient reported experience and drive time to nearest GP. Covariates included in the regression models identified the characteristics of GP practices and controlled for factors which may be correlated with admissions, quality indicators and access to primary care.

Key Results

We expected to find an inverse relationship - lower population achievement on the QOF indicators associated with higher ACSCs. This was found on at least one indicator for four conditions. We also found the reverse, higher population achievement on the QOF indicator associated with higher ACSCs, in the case of stroke, angina and CCF & angina. We expected better access to be associated with lower ACSC admissions. One or more of the access measures from the patient experience surveys were significantly associated with admissions for four conditions: asthma, hypertension, angina and CCF & angina.

Conclusions

This research showed that higher achievement in some measures of the clinical quality of primary care and better access to care is associated with reduced ACSC admissions. However, the effects were small and inconsistent. It was also shown that ACSC admissions are associated with a range of confounding factors. The results of this research therefore suggest caution in the use of crude ACSC admission rates as an indicator of primary care quality.

What does this study add to the field?

This was the first study to examine the relationship between quality and accessibility of primary care and admissions across a range of ACSCs in Scotland.

Implications for Practice or Policy

ACSC admissions are increasingly used within Scotland as performance indicators. This research suggests that crude rates of ACSC admissions should be treated with considerable caution when used as a measure of primary care quality.

Where to next?

Further research should explore the sensitivity of the results to changes in the definition of ACSCs and measures of quality of disease management.

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