

FOCUS ON RESEARCH

MEDICAL DECISION MAKING AFTER MYOCARDIAL INFARCTION

Researchers

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Aim

This study aimed to analyse aspects of the management of coronary heart disease by general practitioners in Tayside. It looks at variability between practices in management of disease, how this changes when patients suffer from more than one disease, and to examine aspects of the time delay between some tests and resulting treatment.

Project Outline/Methodology

The study was based upon the statistical analysis of data which is routinely produced throughout the NHS in the process of delivering of care. In order to analyse the information, datasets were collected by the Health Informatics Centre at the University of Dundee and linked together.

After the data linkage was conducted, any identifying information about individual patients was removed, so that the data could be passed to the researchers without violating data privacy and ethical rules.

Most of the analyses in this project were applied separately to data collected before and after the introduction of the new contract for general practitioners in 2004.

Key Results

The study found that, on the whole, there was very little variability between general practices in the management of coronary heart disease: most general practitioners are fairly consistent in the way that they prescribe medication for heart disease patients. However there does appear to be variability in the way that general practitioners refer patients for specialist hospital treatment, with the referral rate differing markedly across practices. There was more variability for younger heart disease patients than for older ones. The introduction of the new contract for general practitioners appears to have made no difference to the level of variability in referral.

Suffering from more than one disease seemed to make little difference to prescribing for patients with

coronary heart disease, although it is taken into account when patients receive heart tests.

When a patient has a cholesterol test, the period of two weeks after the test is the time in which they are most likely to start receiving medication. If they have not been started on medication in that period, the chances of it being started subsequently are lower.

Conclusions

There was relatively little variability between practices for most aspects of managing heart disease in general practice, so the new contract was able to make little difference to this aspect. But where there was variation, in referral for specialist investigations, the new contract made little difference. Doctors' decisionmaking about cholesterol prescribing is influenced by tests for a period of about two weeks, after which the influence of a test result declines.

What does this study add to the field?

Variability between general practices has been observed in many areas of medical practice, and in light of this it is surprising to find such little variability in prescribing for heart disease. The finding that there has been little change in the variability of referral between 2000 and 2005 adds to the debate about the effect of the new GP contract.

Implications for Practice or Policy

The substantial level of variability in referral for specialist treatment suggests that practice may need to be standardised among GPs, and that guideline implementation may need to be improved.

Where to next?

Further research using the data developed for this study could consider referral in more detail, possibly modelling the dynamics of patient treatment in time from diagnosis to specialist intervention.

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