Clinical effectiveness and cost-effectiveness of issuing longer versus shorter duration (3-month vs. 28-day) prescriptions in patients with chronic conditions: systematic review and economic modelling

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Plain English summary

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Plain English summary

General practitioners (GPs) in the NHS are encouraged to prescribe medication for no longer than 28 days to avoid dispensing drugs that patients may not use (drug waste). However, it is uncertain what evidence there is to support this policy. This project looked at whether or not 28-day prescriptions for patients with stable, long-standing health conditions would be better than longer prescriptions. We wanted to see if prescription length affected patients' health, how patients took their medication (adherence), drug waste and NHS costs. This project was in three parts.

- 1. We combined results from 16 studies that compared 28-day prescriptions with longer prescriptions and assessed how reliable the findings of these studies were.
- 2. We looked at prescription costs for five different patient groups in a large database of GP records.
- 3. We used mathematical equations (modelling) to work out the impact of 28-day versus 3-month prescriptions on patients' health over their lifetime in three different patient groups.

The quality of the 16 studies was poor; there was no evidence in any of the 16 studies as to whether or not prescription length affects patient health. However, the studies showed that patients with longer prescriptions were more likely to take their drugs as advised by their doctor. The GP records showed that although patients with longer prescriptions wasted more drugs (which may occur, for example, when a GP changes a medication midway through a prescription), overall, longer prescriptions were found to be cost saving because less time was taken up by issuing prescriptions. The mathematical models suggested that longer prescriptions may be associated with better health and lower costs in all three patient groups.

These findings suggest that 3-month prescriptions might be better than 28-day prescriptions for people with long-standing health conditions. Further research is needed to determine the best prescription length for patients with long-standing health conditions, and to determine whether or not this varies according to patient groups and conditions.

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