Supporting adherence to medicines in people with long-term conditions: New Medicines Service community pharmacy scheme

A pragmatic randomised controlled trial conducted in 46 community pharmacies in England has shown that the New Medicines Service improves self-reported adherence with newly prescribed medication in people with certain long-term conditions including hypertension, type 2 diabetes, chronic obstructive pulmonary disease (COPD) or people taking antiplatelet or anticoagulant therapy. However, compared with normal practice the absolute difference in the number of people who reported adherence was small (18) and self-reported adherence could be subjective and prone to bias. The New Medicines Service (NMS) was introduced in October 2011 and is provided by community pharmacies in England as part of their advanced services. The NMS supports the recommendations in the NICE guidelines on medicines adherence and medicines optimisation and the NICE quality standard on medicines optimisation regarding involving people in decisions about their medicines.

Overview and current advice

It is thought that between a third and a half of all medicines prescribed for long-term conditions are not taken as recommended. Good communication between healthcare professionals and patients can help ensure people are involved in decisions about their medicines should they wish to do so, and for supporting adherence. The annual economic impact of non-adherence for 5 long-term conditions (asthma, type 2 diabetes, coronary heart disease, hypertension and schizophrenia) to the NHS in England has been estimated at over £930 million. Estimates suggest that annual savings of £500 million could be realised if adherence were improved.

The New Medicines Service (NMS) was introduced in October 2011 and is provided by community pharmacies in England as part of their advanced services. The main aim of the NMS is to promote the health and well-being of people with long-term conditions by reducing symptoms and complications and identifying any problems with the management of the condition.

The NMS is targeted at people who have been newly prescribed a medicine for a long-term condition and is currently targeted towards people with asthma, COPD, type 2 diabetes, hypertension or people taking antiplatelet or anticoagulant therapy. People can be recruited to the NMS by a prescriber referral (which could include referral for medicines prescribed as a hospital inpatient or outpatient) or
opportunistically by the community pharmacy. More information on the NMS is available on the [NHS Employers website](https://www.nhsemployers.org).

NICE has produced guidance on medicines adherence: involving patients in decisions about prescribed medicines and supporting adherence and medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes. The NICE Pathway on medicines optimisation brings together all related NICE guidance and associated products on the condition in a set of interactive topic-based diagrams.

New evidence

A pragmatic randomised controlled trial (RCT) conducted in community pharmacies in England evaluated the effectiveness of the NMS in improving medicines adherence. Community pharmacies in the East Midlands, South Yorkshire and Greater London accredited to provide the NMS were eligible to take part. Forty-six community pharmacies took part in the study and 504 people aged 14 years or older and eligible for the NMS were recruited to the study. People were either randomised to receive the NMS (n=251; mean age 60 years) or normal practice (253; mean age 59 years) stratified by drug or disease group. The reason for eligibility to the NMS was either: a newly prescribed medicine for hypertension (121 people in the NMS arm and 128 people in the normal practice arm), asthma or COPD (59 people in the NMS arm and 58 people in the normal practice arm), type 2 diabetes (47 people in the NMS arm and 48 people in the normal practice arm) or a newly prescribed antiplatelet or anticoagulant (24 people in the NMS arm and 19 people in the normal practice arm).

The NMS (which could be conducted face-to-face or via telephone) consisted of a one-to-one consultation (the ‘intervention’) 7 to 14 days after initial prescription presentation and then a ‘follow-up’ 14 to 21 days after that. The main aim of the intervention and follow-up was to identify any problems with the treatment such as adverse drug reactions and to assist in resolving these problems. When necessary, people would be referred to their GP for review of their medication. Normal practice was the pharmacists’ usual advice when presented with a prescription for a new medicine for a long-term condition. No follow-up was offered to this group of people.

The primary outcome of the study was self-reported adherence at 10 weeks after initial prescription presentation. People were contacted by telephone and asked about adherence behaviour using the question: “People often miss taking doses of their medicines, for a wide range of reasons. Have you missed any doses of your new medicine, or changed when you take it?” Non-adherence was defined as missing any doses in the previous 7 days, without the advice of a medical professional. After 10 weeks, 378 people who were still prescribed the medication contributed to the analysis of the primary outcome (126 people had either had their medication stopped or changed, were withdrawn from the study or lost to follow-up).

Compared with normal practice, the NMS statistically significantly increased the proportion of people reporting adherence to their new medicine. In the NMS group, 70.7% (133/188) reported adherence compared with 60.5% (115/190) in the normal practice group (adjusted odds ratio 1.67; 95% confidence interval [CI] 1.06 to 2.62; p=0.027; adjusted for recruiting pharmacy, disease, age, sex and medication count).

The mean (median, range) total NHS costs (which included costs of primary care healthcare professional contact time and costs for secondary care such as outpatient visits or inpatient stays) for people randomised to normal practice and the NMS were calculated to be £261 (£121, £0 to £1669) and £239 (£135, £25 to £1483) respectively. There was no statistically significant difference between the costs in the 2 groups: £21 (95% CI −£59 to £150; p=0.1281).
Commentary

Commentary provided by Claire Thomas, Chief Officer Community Pharmacy Sheffield (Local Pharmaceutical Committee) and Relief Pharmacist

The study design was robust with bias minimised using Consolidated Standards of Reporting Trials (CONSORT) criteria. It included pharmacies covering a range of characteristics, reflective of pharmacies offering the NMS. There is no ‘gold-standard’ method for measuring medication adherence; the researchers chose two methods, providing validity.

The NMS significantly increased the proportion of people reporting adherence from around 60% with normal practice to around 70% with NMS. Results were consistent across the two methods of measuring adherence. This new evidence supports previous studies that suggest that other low cost interventions involving discussions with people about their medicines can improve adherence.\(^3^,^4\)

Engagement of people into the NMS is primarily by community pharmacists or support staff. Success of the NMS is facilitated by training support staff to identify eligible patients, making the most of every opportunity and having an organised system to manage intervention and follow-up appointments. In some areas, referral systems have been set up or commissioned to refer patients from secondary care, however this is not commonplace. For the NMS to have a greater impact, facilitation is needed at local levels to improve relationships, communication and the sharing of patient information.

The NMS is designed to improve adherence early on in therapy. However, it is not intended to be a one-off intervention isolated from care pathways, but to be integrated into longer-term medicines optimisation strategies. This study has demonstrated that the NMS can improve adherence to prescribed medicines. Community pharmacists should ensure they engage in providing this service and make every opportunity count. Prescribers should continue to ensure they refer people to the service where appropriate. Facilitating improved information sharing between prescribers and pharmacies together with integrating community pharmacy into primary care may provide a greater role for community pharmacists in medicines optimisation and management of long-term conditions.

Study sponsorship

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References

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