

Evaluation of the prescribing decision support system Synonyms in primary care: a mixed-method study

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Background

Primary care prescribers must cope with an increasing number and complexity of considerations. To assist prescribers, prescribing decision support systems (DSS) have been developed. The Drug Synonyms function ("Synonyms") is a DSS inherent in the electronic medical record system EMIS, which has been further developed by the NHS GGC Central Prescribing Team to promote safe and cost-effective prescribing. By entering a disease short code (e.g. AST for asthma), prescribers are presented with appropriate prescribing choices based on local/national guidelines and NHS GGC formulary recommendations for the identified condition. Synonyms is therefore an innovative method of ensuring consistent clinical and cost-efficient prescribing. As the functionality of Synonyms does not enable usage data to be collected, there is no current knowledge regarding the uptake or effect of Synonyms. A quantitative and qualitative analysis of Synonyms uptake and usage was undertaken to determine the impact Synonyms has on primary care prescribing; this will inform the continued maintenance and/or future development of this prescribing DSS.

Aim

To determine the uptake of Synonyms and explore prescribers' perceptions of its usefulness.

Design and setting

An exploratory sequential mixed-method observational study using quantitative questionnaires, followed by semi-structured interviews with primary care prescribers across NHS GGC.

Method

An electronic questionnaire (Questionnaire 1) accessible across 218 GP practices ascertained the uptake of Synonyms. Questionnaire 2 and interviews established its usefulness. Interviews were audio-recorded, transcribed verbatim and analysed thematically.

Results

Questionnaire 1 was completed by 201 prescribers from 43.1% of GP practices surveyed: 186 (92.5%) prescribers were aware of Synonyms, of whom 163 (87.6%) had used it and 155 (83.3%) continue to use it. Questionnaire 2 was completed by 104 prescribers: 90 (86.5%) indicated that Synonyms informs or influences their choice of drug prescribed; 94 (90.4%) reported that Synonyms changed their prescribing choice towards medication on NHS GGC formulary and 104 (100%) reported that they trust Synonyms. Six interviews generated suggestions for improvements, mainly extending the disease short code list and making Synonyms more easily identifiable.

Conclusion

Most respondents were aware of and continued to use Synonyms. Respondents perceived Synonyms to influence prescribing choices towards NHS GGC formulary medicines and improve adherence to local prescribing guidelines. This suggests that Synonyms is instrumental in

standardising the quality of prescribing care within NHSGGC. Potentially, the NHSGGC Synonyms function could be utilised by other health boards with supportive clinical systems; such collaboration could standardise the appropriateness and effectiveness of primary care prescribing throughout the NHS in Scotland.

Keywords: primary care prescribers, prescribing decision support systems (DSS), local/national guidelines, cost-efficient

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