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## Development of case scenarios to support decisions on polypharmacy reviews

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### Background

National guidance provides support for undertaking polypharmacy reviews<sup>1</sup>. *Knowledge and experience* is required to interpret the guidance in individual patients. Training materials using case examples developed by experts may help the application of guidance for less experienced practitioners.

### Objective

Obtain consensus among consultant physicians and senior pharmacists on decisions to continue, modify or stop medicines in three different polypharmacy case scenarios.

### Methods

Case scenarios were designed using examples from Medicine of the Elderly hospital practice which included at least three co-morbidities in patients from a range of social care settings. Cases one, two and three included 22, 19 and 25 medicines respectively. A questionnaire was developed to allow an expert panel to record whether they would continue, modify or stop each medicine for each scenario. The questionnaire was piloted with one consultant physician and specialist pharmacist. An e-mail invitation letter and copy of the STOPP/START criteria<sup>2</sup> were sent in April 2014 to 37 consultant physicians and 19 senior pharmacists in one regional NHS board with a link to the online questionnaire. A reminder email was sent to physicians from the clinical director and to pharmacists from the specialist pharmacist one week prior to the questionnaire closing. Responses from the final panel of 8 (22%) physicians and 14 (74%) pharmacists were collated using SurveyMonkey<sup>®</sup>. Consensus was defined as 75% of the experts reaching the same decisions. This study did not require ethics approval.

### Results

Consensus (i.e. 75% of the panel) was reached for 13/22 (59%) medicines in case one, 17/19 (89%) medicines in case two and 19/25 (76%) in case three (overall consensus 74%, 49/66 medicines). Situations where consensus was not reached included anticholinergics in dementia patients, vasodilators in patient with recurrent falls, and laxatives. Panel comments included importance of considering additional patient details (e.g. pain scores, bowel charts) and family/patient wishes that would aid decision making.

No apparent difference was observed between the two professional groups but physician variability was evident. For example in case one, one consultant stopped 6/22 medicines whilst another stopped 16/22 medicines, case two 4/19 medicines were stopped versus 12/19, and for case three 4/25 medicines stopped versus 10/25. Similar physician variability was observed for continuing/modifying medicines.

### Conclusions

Consensus was reached to continue, modify or stop for 74% of medicines within three polypharmacy case scenarios. A range of practice opinions were captured which are unlikely to be broader with a larger panel. It is proposed to use the case scenarios in facilitated discussion/teaching sessions, supported by a facilitator's brief incorporating the additional comments from the panel, for training junior members of the multidisciplinary team to carry out polypharmacy reviews. Evaluation will include review and development of scenarios.

## References

1. Scottish Government Model of Care Polypharmacy Working Group. Polypharmacy Guidance (2<sup>nd</sup> edition). March 2015. Scottish Government
2. Gallagher, P., Ryan, C., Byrne, S., Kennedy, J., O'Mahony, D.; STOPP (Screening Tool of Older Person's Prescriptions) and START (Screening Tool to Alert doctors to Right Treatment). Consensus validation. *International Journal of Clinical Pharmacology and Therapeutics*. 2008; 46(2):72-83