Pharmacy-Based Model Enabling Patient Self-Monitoring of Warfarin: Development and Evaluation

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Abstract:

Previous studies suggest that patient self-monitoring (PSM) of the international normalised ratio (INR) may improve the outcomes of oral anticoagulation therapy through increasing the time spent within the target range (TTR), and improving both consumer satisfaction and participation in healthcare. The purpose of this study was to develop, implement and evaluate a pharmacy-centred pathway to enable people taking warfarin to monitor their own therapy. A structured training program was developed to facilitate the transition of consumers from usual care to PSM using the existing Home Medicines Review (HMR) model. Consumers were recruited through their community pharmacies and, in collaboration with their general practitioners, received intensive one-on-one warfarin education and training in using the CoaguChek®XS point of care INR monitor by a trained HMR accredited pharmacist. PSM was undertaken for six months. Outcome measures included TTR, quality of life, warfarin knowledge, and consumer satisfaction. Twenty-eight consumers with a minimum six-month history of anticoagulation treatment were recruited through 13 community pharmacies in Tasmania and New South Wales. Participants showed clinically significant improvements in INR control and warfarin knowledge. Qualitative feedback from general practitioners, consumers and pharmacists has indicated a high level of satisfaction with both the training program and PSM. Using the proposed model, pharmacists successfully identified and trained suitable consumers to undertake PSM. This pharmacy-centred model could be used as the basis for a national program to enable PSM of warfarin therapy in Australia.