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A pharmacist integrated into a general practice setting - quality improvement outcomes in the management of anticoagulants

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Abstract

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A pharmacist integrated into a general practice setting - quality improvement outcomes in the management of anticoagulants

2015 PHC RESEARCH CONFERENCE: POSTER ABSTRACT

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Organisation
University of Wollongong, Woonona Medical Practice, Illawarra and Southern Practice Research Network

Aims & rationale
Ongoing anticoagulation is managed predominantly in primary care, by General Practitioners and practice nurses. The aim of this collaborative research was to determine if the integration of a clinical pharmacist into the team could improve the quality of management for the individual patient and within the practice; and to investigate other benefits of the placement.

Methods
Following a retrospective review of anticoagulant practices, the pharmacist was placed within the practice for 5 months. Surrogate outcomes evaluated were measures of warfarin control for the individual patients and the practice, as well as the appropriateness of usage of the non-vitamin K oral anticoagulants (NOACs), apixaban, dabigatran and rivaroxaban, compared to previously collated measures. Significant clinical input into medication management, medicines information and quality improvement activities were documented.

Findings
A trend towards improvement in warfarin management was observed. At the end of the study, all usage of NOACs was appropriate in the study population. Clinically significant input was made into quality improvement activities for reducing bleeding-risk; point-of-care testing; management by the practice of those patients having external haematological monitoring; and routine renal function monitoring for patients receiving NOACs.

Relevance to policy, research and/or practice needs
Clinical pharmacists have input to the quality and safety of medications in traditional settings: this opportunity is currently unavailable in an interdisciplinary general practice due to funding constraints. Results beyond an improvement in measures of anticoagulant management were realised in this study which provides evidence for the benefits of a clinical pharmacist in primary care.

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A pharmacist integrated into a general practice setting - quality improvement outcomes in the management of anticoagulants

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Background and aim

GPs and their staff manage ongoing anticoagulation in primary care. The aim of this collaborative research was to determine if adding a clinical pharmacist into the mix could improve the quality use of anticoagulants; and to investigate other benefits of the placement.

Methods

Results: quantitative evaluation

Management of anticoagulants:

Warfarin (compared to stage 1) showed trends in improvement in:
- iTTRs for those patients having visit with pharmacist once only and also for those who saw the pharmacist more than once (range 2 – 16 times); See Figure 1
- mean TTR for the total warfarin cohort (74% vs 70% n.s.)

NOACS (compared to stage 1):
- All patients had recommended assessment of kidney function
- Significant improvement in appropriateness of use of NOACS (50% vs 100%, p=0.0245)

Qualitative use of anticoagulants - NOACS

All patients prescribed a NOAC have 6-monthly reminder to assess kidney function, using estimated creatinine clearance in Best Practice™ clinical management software

Standardised patient advice & resources:
- Counselling tools, alert cards, “MedicAlert” recommendations
- Change of practice management of patients not receiving PoCT - using practice nurses and “recall & reminders”

Qualitative use of all medicines, including anticoagulants

Clinical activities undertaken by pharmacist:
- Obtained best-possible medication history during consultations
- Ensured up-to-date medication lists
- Referred patients for GP consultation for other bleeding-risk factors (eg persistent hypertension requiring attention)
- Complex and not-so-complex medication management
- Medicines information
- Identified ONE THIRD of patients with use of diet or complementary medicines interacting with anticoagulants.

Implications for practice and policy

Clinical pharmacists have input to the quality and safety of medications in traditional settings: this opportunity is currently unavailable in an interdisciplinary general practice.

The placement of a clinical pharmacist into this general practice realised quality improvements in the management of anticoagulants. Evidence is provided for the benefits of pharmacist integration into the primary healthcare team, at a time when discussion between the relevant professional bodies is occurring.