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CONFERENCE ABSTRACT

Prescribing Tales from Middle Earth - Integrating a Pharmacist Prescriber into the primary healthcare team

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Background: The increasing prevalence of long term conditions, such as diabetes, is a major challenge to the sustainability of healthcare resources globally. Active service re-design within primary care is required to gain greater efficiency of the limited resources, without compromising the quality of care. In New Zealand (NZ) the role of the Pharmacist Prescriber is a 'novel' approach designed to be part of the solution to the current healthcare challenges. A Masters of Science in Prescribing Studies - an international collaboration between Keele University, (UK) and medical practices associated with Te Awakairangi Health Network (NZ) - evaluated the impact and feasibility of one of New Zealand's first Pharmacist Prescribers integrated into the primary healthcare team optimising medicines and managing patients with Type 2 Diabetes.

Aims and Objectives: The objectives of the six-month Independent Learning Project were to report on and interpret the interventions made by the Pharmacist Prescriber; and gain feedback on the process of integration and benefits of the service from the perspective of other members of the healthcare team. Over an extended time-frame, the aim was to evaluate the impact on measureable clinical markers (e.g. HbA1c, blood pressure and lipids).

Methods: Using a mixed methods methodology a Screening Tool (template) was designed and applied to every consultation enabling quantitative descriptive analysis of the number and type of the Pharmacist Prescriber's interventions. An on-line questionnaire was developed and distributed to 29 general practitioners and nurses within three medical practices providing qualitative and quantitative data for analysis on the integration process and benefit of the prescribing pharmacist-led service within primary care. Utilising the Screening Tool the mean reduction in clinical markers would be evaluated at 12 months.

Results: Over the six-month period 88 patients attended 69 clinics with 231 consultations. The Screening Tool analysed 215 prescribing decisions and 182 medicines related issues demonstrating that a prescribing pharmacist can optimise medicines and improve patient safety at the point of contact.

Fifteen participants completed the questionnaire with strong confidence expressed in the Pharmacist Prescriber's knowledge of medicines and ability to manage complex patients with poorly controlled diabetes. The integration process was reported as occurring without

significant challenges, there were multiple benefits to patients e.g. greater understanding and adherence to medicine regimen, engagement in decision making; and to other members of the healthcare team e.g. modelling collaboration, increased knowledge of medicine management. Overall, benefits of the service were reported to have outweighed any implementation challenges. The greatest threat to future service development was identified as sustainable funding streams.

The impact on Measureable Outcomes at 12 months demonstrated clinical benefits to improve patient outcomes with a mean reduction HbA1c (18mmol/L), systolic blood pressure (22mmHg) and lipid profile (TC 0.9mmol/l, LDL-c 0.6mmol/l).

Discussion and Conclusion: With a focus on medicine optimisation the integration of a Pharmacist Prescriber into the primary healthcare team is feasible, positively impacts the general practice environment and provides evidence of impact on Measureable Outcomes (e.g. HbA1c, blood pressure and lipids) over time. Recommendations to key NZ stakeholders would be to continue the service and expand to include other long-term conditions.

Lessons learned: In primary care without financial assistance the resource of a small number of experienced clinical pharmacists who have up-skilled to the advanced scope as NZ registered Pharmacist Prescribers may remain a 'novel' approach to medicine optimisation.

Limitations: In the initial study, the design and short duration could not extend the focus to include a review of the impact on clinical markers. Careful attention was given to minimising the potential for bias with the Pharmacist Prescriber as implementer and researcher.

Suggestions for future research: Within diabetes and extended to other long term conditions, to explore this innovation with a control and intervention arm over an extended time period reviewing the impact on clinical markers and understanding the patient's perspective.

Keywords: integration; primary care; pharmacist prescriber; medicine optimisation