

## CONFERENCE ABSTRACT

### Better than an iPad app, a Clinical Pharmacist in your practice

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**Introduction:** 2007-09 Hawke's Bay DHB experienced unsustainable growth in medicine volumes and costs. Analysis showed high levels of polypharmacy and high levels of weekly dispensing, with little evidence of equivalent health gain. Inappropriate polypharmacy is linked with medicine related admissions, falls and other harm for patients 65+.

**Implementing Practice Change:** In 2011 HBDHB employed two clinical pharmacists to integrate into three general practice settings, the aim being to be available on site, to support and influence medicine prescribing behaviours, address polypharmacy, manage patients with complex medicine regimes/adherence issues, and identify sub-optimal medicine related patient outcomes.

**Aim and Theory of Change:** Search of International literature confirmed that while the approach was increasingly supported (UK/Canada), no studies documented the actual gains made or indicated an optimal way of working within general practice. The objective was to show the benefits of having a clinical pharmacist integrated into the general practice team.

**Targeted Populations and Stakeholders:** Three practices with three different targeted populations were chosen for 'proof of concept'. The focus was quality prescribing, and safe and effective use of medicines. Financial savings were not the primary driver.

- Practice 1 (175 patients; over 65 years - Aged Related Residential Care(ARRC))

Aim: Reducing risk of medicine related harm in patients in ARRC facilities utilising medicine reviews/work with prescribers and ARRC facility staff, and medicine reconciliations during transition between services.

- Practice 2 (1200 patients; over 65 years living independently)

Aim: Reducing risk of medicine-related harm in community dwelling patients 65+, taking 8+ long term medications utilising medicine review, patient education and medicine reconciliations on discharge from hospital

-Practice 3 (7000 patients; high needs/Maori/ Pacific)

Aim: Population approach. Focus on Type 2 Diabetes Mellitus to reduce inequity/improve clinical outcomes through optimisation of medicine management and patient education.

**Highlights:** Programme evaluation occurred after two years applying the principles of the Health Quality and Safety Commission's 'Triple Aim' as a framework for the evaluation. The evaluation, confirmed the service delivered on all three aims:

- For the individual: by reducing inappropriate medicines, falls, hospital admissions and increasing patient satisfaction. Medicine changes as a result of medicine review prevented 2 admissions to ARRC.
- For the population: by improving equity of access to medicines and pharmacological advice. In practice 3, equity in achievement of hypertension targets amongst patients with diabetes.
- Value for money: for the health economy. Year 2 showed a 10.8% reduction in drug costs. A total of \$848,000 was attributed to the impact of CPFs – a 4:1 return on Year 2 investment.

**Transferability:** The evaluation confirmed, overwhelming practice and facilitator support for the service continuation, and expansion of the role in the practices. A generic model incorporating aspects from all three patient populations was the agreed approach to integrating clinical pharmacists into general practice.

**Conclusions:** On the basis of overwhelming support for extending the service, the HBDHB has invested in 8FTE practice based clinical pharmacist facilitators across Hawkes Bay, an outstanding result. This innovative service approach is leading the way in New Zealand.

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**Keywords:** pharmacist; multidisciplinary; prescribing innovation

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