

## CONFERENCE ABSTRACT

# Developing a Regional Medicines Optimisation Model for Older People in Care Homes: Refinement and Reproducibility

17<sup>th</sup> International Conference on Integrated Care, Dublin, 08-10 May 2017

Ruth Miller<sup>1,2</sup>, Hilary McKee<sup>3</sup>, Anne Friel<sup>1</sup>, Carmel Darcy<sup>1</sup>, Rory McSorley<sup>1</sup>, Sabrina Parkhill<sup>1</sup>, James Nicholl<sup>3</sup>, Niamh McLister<sup>3</sup>, Claire Scullin<sup>4</sup>, Mike Scott<sup>3</sup>

- 1: Western Health and Social Care Trust, United Kingdom;  
2: Ulster University, United Kingdom;  
3: Northern Health and Social Care Trust, United Kingdom;  
4: Queen's University Belfast, United Kingdom
- 

**Introduction & Practice Change:** In 2012, the Northern Health and Social Care Trust (NHSCT) implemented consultant pharmacist led trust outreach medicines optimisation clinics for care home patients. This model required the consultant pharmacist to conduct clinics either alone or in collaboration with a consultant geriatrician with recommendations being communicated to General Practitioners (GPs) via a letter. This service resulted in a 14% reduction in Emergency Department (ED) admissions together with improved appropriateness of prescribing and drug cost savings<sup>1</sup>. Results (2012-2014) indicated the pharmacist working alone produced similar outcomes as to when working together with the geriatrician; the decision was therefore made for pharmacists to conduct clinics alone and to refer complex patients to a medical specialist only when deemed necessary.

**Aim:** The aim of this work is to refine the medicines optimisation care home model and reproduce it in another trust, thereby informing the potential to roll out this new pharmacy service throughout care homes in Northern Ireland.

**Target Population:** Patients aged  $\geq 65$  years residing in residential and nursing homes (care homes).

**Timeline:** In August 2015 two older people specialist independent prescribing pharmacists were recruited into the NHSCT service under the mentorship of the consultant pharmacist. The Western Health and Social Care Trust (WHSCCT) recruited two similar full time pharmacists who have delivered the same consultant pharmacist led model to care homes since September 2015. Data collection for patients seen over a 12-month period and followed up for 90 days is ongoing with full results to be reported early 2017.

**Highlights:** Interim results (February 2016) revealed improved appropriateness of prescribing [measured via the medication appropriateness index (MAI)<sup>2</sup>] with associated annual drug cost savings estimated at £273k to £382k across the two trusts representing an 'invest to save' return of £1.51 - £2.12 per £1 invested in drug cost savings alone. Post clinic healthcare

resource usage is being measured and an economic model is being developed to quantify the impact of the pharmacy service on these; interim analysis suggests reduced attendance at hospital ED and decreased GP callouts.

**Sustainability/Transferability:** Preliminary evaluation of the service suggests it is both reproducible and sustainable.

**Discussion/Lessons Learnt:** The WHSCT pharmacists tested different GP communication models where interventions may be actioned via letter, teleconference or direct access into GP systems. The method of communicating recommended clinical interventions between the trust pharmacist and GP can vary depending upon the size and location of the care home and the wishes of the GP responsible for patient care.

**Conclusion:** Consultant pharmacist led medicines optimisation trust outreach services for care homes are reproducible with positive clinical and economic outcomes achievable when transferring the service into another geographical area.

**References:**

1- McKee H et al. Nursing Home Outreach Clinics show an improvement in patient safety and reduction in hospital admissions in residents with chronic conditions. Accepted for Publication on 14.04.2016 and In Press, European Journal for Person Centered Healthcare.

2-Hanlon JT et al. A method for determining drug therapy appropriateness. Journal of Clinical Epidemiology, 1992; 45 (10): 1045-51.

---

**Keywords:** medicines optimisation; care homes

---