BOLTON CLARKE Be true to you

The new face of RSL Care + rdns

A clinical pharmacy model within a home nursing service: the Visiting Pharmacist (ViP) Project

Rohan A Elliott,[1,2,3] Cik Yin Lee,[2,3,4] Christine Beanland,[2] Dianne Goeman,[2] Neil Petrie,[5] Barbara Petrie,[5] Felicity Vise,[2] June Gray.[2]

[1]Pharmacy Department, Austin Health, VIC; [2] Bolton Clarke (formerly Royal District Nursing Service), VIC; [3] Centre for Medicine Use and Safety, Monash University, VIC; [4] Department of Nursing, The University of Melbourne, VIC; [5] PRN Consulting, VIC, Australia.

Background: Why a clinical pharmacy service is needed

- **>1 in 2** home nursing visits are for medicines management
- home nursing clients use an average of **10 medicines**[1]
- medication **error** recorded for **>4 in 10** clients[1]
- **1 in 5** errors are caused by a medication order discrepancy[1,2]
- **1 in 11** have a medication-related hospital admission (64% potentially avoidable)[1]
- **48%** use ≥ 1 high-risk medicine, such as opiates, antigoagulants, insulins[1]
- **<1 in 20 clients** receive a GP-initiated Home Medicines Review (HMR) despite nurses requests[1,3]

Aim To develop a clinical pharmacy model for a home nursing service

Methods

Study framework: Co-creation & participatory action research

Model framework: Based on extensive stakeholder engagement and consultation, and best practice clinical pharmacy and medication management standards and guidelines.[4,5]

Data collection: Feedback and reflections from minutes, notes and transcripts from: project team meetings, multidisciplinary stakeholder reference group meetings, client record audits, in-depth interviews and focus groups with 27 older people, 18 carers, 45 nurses, 15 GPs, 7 community pharmacists.

The model

Home nursing team
- Client / carer
- Community nurse
- **Clinical pharmacist**

Indirect care
- Medicines information for nurses
- Organisational policies and procedures
- Nurse education

Direct client care
- Home visits (direct referral from nurses)
- Medication reconciliation
- Comprehensive medication review
- Review of medication management care plans
- Patient & carer education
- Liaison with GPs and community pharmacies to address problems and update medication orders

"... [the pharmacist] is part of the [home nursing] unit so you've got sort of that much more collaborative type of approach to working together as opposed to the HMR I think" (quote from a nurse)

"I think the idea that somebody needs assistance with medication management is a pretty clear trigger that they need a pharmaceutical review, the two go together." (quote from a GP)

Results

84 clients (median: 86 years, 6 health conditions, 13 medications) were referred to the clinical pharmacists

70% clients had discrepancies between nursing treatment orders and the pharmacist's best possible medication history

- Median 4 medication-related problems per client
- Median 2 medication changes per client made by GPs
- Medication orders updated for 81% clients

Stakeholder feedback

Model well accepted by stakeholders, who reported that it addressed deficiencies with current medication management & the HMR model.

Conclusion

A collaborative, person-centred clinical pharmacy model that addressed the needs of clients, carers, nurses and other stakeholders was successfully developed, and is likely to have applicability to home nursing services nationally.

References

1. Elliott RA, Lee CY, Beanland C, et al. Drugs - Real World Outcomes 2016; 3: 13-24.
2. Elliott RA, Lee CY, Beanland C, et al. BMJ Open 2017 (in press).
3. Kyle G, Nissen L. Aust Pharm 2006; 25: 326-31.
4. Society of Hospital Pharmacists of Australia. Standards of Practice for Clinical Pharmacy Services. J Pharm Pract Res 2013; 43: S2-69
5. Australian Pharmaceutical Advisory Council. Guiding principles for medication management in the community 2006.

Acknowledgements

This study was funded by the RDNS Trust, Ian Rollo Currie Estate and Lynette Quayle Foundation. We thank the management, staff and clients of RDNS, and clients' GPs and pharmacists for their support and participation.

Austin Health

MONASH University