AUSTRALIAN Ageing Agenda
MAY-JUN 18
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A focus on pharmacy

Goodwin pioneers a new model

AN ADVERTISING FEATURE

Goodwin Aged Care Specialist Nurse Practitioner Tamra Macleod, Goodwin Nurse Ian Pamintuan and Richard Thorpe, Accredited Pharmacist

Photo credit Eddie Misic

A focus on pharmacy Goodwin pioneers a new model

Results from ground-breaking research could lead to a complete change in the shape and direction the role a pharmacist has in residential aged care facilities in Australia. KYMBERLY MARTIN reports.

The research team involved in the pharmacist pilot (from left) Mark Naunton, Nikki McDerby and Sam Kosari

A reduction of hospitalisations, drug-related issues, and time spent on medications rounds are some of the key outcomes to emerge from the first trial of a pharmacist placement in residential aged care in Australia.

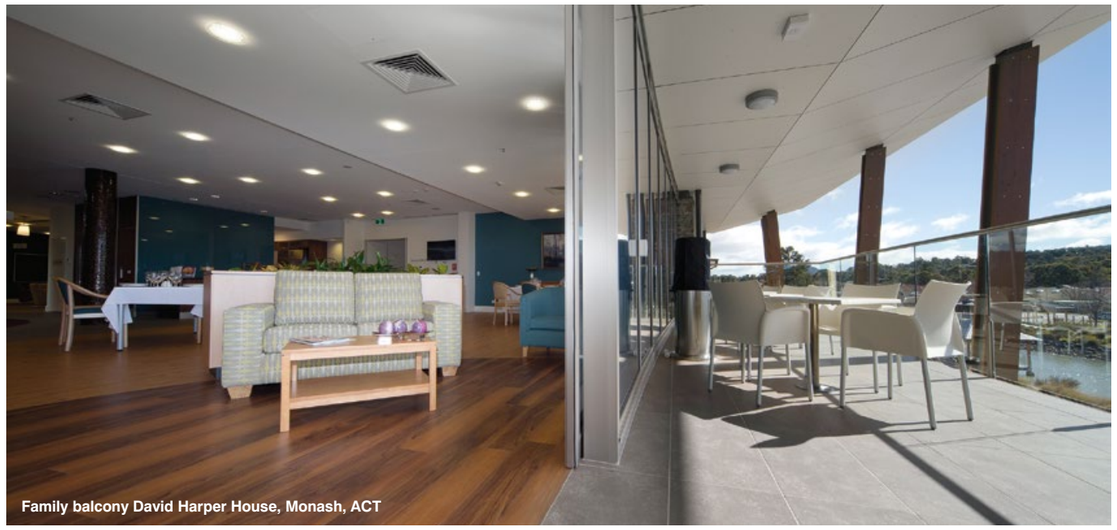
The trial is the latest instalment in Goodwin Aged Care Services work towards a restraint-free philosophy of care. The research pilot project was a partnership with the University of Canberra, Discipline of Pharmacy, Faculty of Health and Goodwin.

Goodwin is committed to research and translating evidence into practice in the clinical setting, CEO Sue Levy, tells *Australian Ageing Agenda*.

The pharmacist pilot feasibility study investigated integrating a clinical pharmacist into a residential aged care facility to improve the quality administration of medicines.

The three key areas the project aimed to address were:

- polypharmacy
- the efficacy and frequency of medication reviews
- staff education, attraction and retention.



Family balcony David Harper House, Monash, ACT

The trial involved two of the Canberra-based, not-for-profit organisation's facilities with Goodwin's David Harper House at Monash hosting the intervention and Goodwin House in Ainslie acting as the control site.

An experienced accredited pharmacist was integrated into David Harper House for the equivalent of two days a week for six months while standard care was provided at the Ainslie facility over the same period.

Mark Naunton, head of pharmacy at the University of Canberra, led the trial with his colleagues Dr Sam Kosari and Dr Alison Shield with their PhD Candidate Nikki McDerby.

Data was collected at both sites from three months before the intervention started until three months after it ended. Goodwin hand-picked the residential care pharmacist (RCP) to practice in its facility through the Pharmacy Guild of Australia.

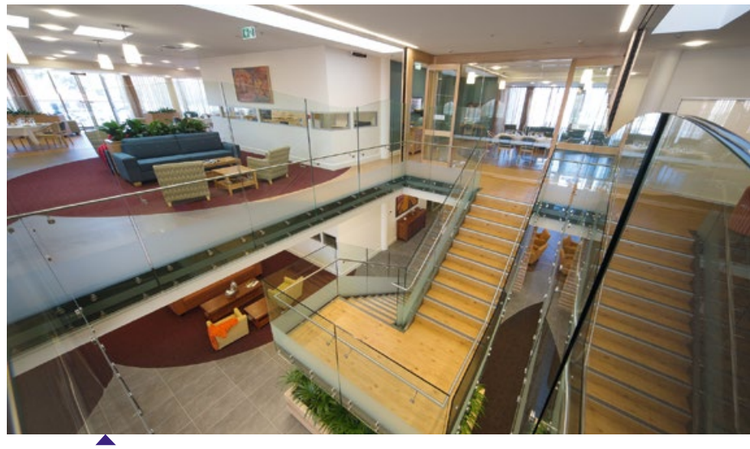
Outcomes were very positive across all the three project aim areas, with 85 per cent of residents and staff who participated in a survey following the intervention supporting the role of a RCP, while 91 per cent agreed that an RCP should be employed in facilities. None disagreed with this statement in the survey.

Results from the trial showed that four informal resident medication reviews likely prevented an adverse outcome requiring hospital admission if timely pharmacist intervention had not occurred. That resulted in an estimated saving of $25,460 to the public health system.

Comprehensive medication reviews by the pharmacist also resulted in preventing 85 potential incidences of drug related problems, for example, inappropriate administration or adverse reaction. Improved documentation of allergies and adverse reactions rose from 77 per cent to 100 per cent of participating residents while the rate of inappropriate drug dosage was reduced from 36 per cent to zero.

The average time spent on medication rounds dropped from 159 minutes to 121 minutes, saving on average, 38 minutes per round and 13.3 hours per week on medication administration.

To date there are no published studies that have investigated the feasibility of establishing a RCP model in aged care, nor the impact this model may have on improving clinical outcomes for residents and operational efficiencies for facility staff and organisations.



David Harper House, Goodwin village Monash, ACT

Goodwin Chief Executive Officer, Sue Levy

"It is important this novel role is explored to challenge the current landscape of medicines use in facilities in light of an ageing population, increasing co-morbidities and the changing care requirement," Levy says.

"The clinical, operational and economic evidence gained from this study will be useful to inform whether the integration of a RCP into aged care facilities is feasible, and may inform potential government or private industry funding models to support the role of the RCP as part of the clinical team within facilities."

The implementation of a new model for the delivery of clinical pharmacist services in a setting where people have complex co-morbidities is challenging. Deciding on the number of pharmacists needed depends on the size of the facility, she says.

As for implications for the industry as a whole, Levy says an on-site RCP model may improve medication use in older adults, impact of inappropriate polypharmacy, reduce adverse

drug events and improve transitions of care and communicable disease prevention.

"The RCP model may also provide the industry with more opportunities for consumer directed care medication management."

The pharmacist pilot has strong links to previous research that Goodwin has participated in on best practice evidence-based care. In 2014 Goodwin was involved in a project to reduce physical restraints and in 2015 with the University of Tasmania to reduce chemical restraints.

Other recent projects include the development of clinical journals, an in-house immunisation program and a joint project with UNSW on improved management of behavioural and psychological symptoms of dementia (BPSD) and non-pharmacological interventions.

All clinical research builds and integrates with previous projects and pilots and forms a part of the organisation's commitment to clinical excellence, says Levy.

Goodwin will jointly present the findings of this pilot at the 2018 ConPharm seminar in Brisbane in June with a residential care pharmacist and the University of Canberra.

More efficient medication rounds

Tamra Macleod, aged care specialist nurse practitioner at Goodwin, says families loved having the pharmacist around during the trial. Although there was initial resistance from some residents who had a hard time giving up their medications, which can provide a sense of security, she says.

"In the end, the trial and its results proved very popular," Macleod tells *AAA*.

Pharmacists are performing fewer medical reviews and being utilised as specialists less often now, she says. "Resident medication management reviews (RMMRs) are only being conducted every two years, so having a pharmacist on board is a good thing."

A knock-on effect from the RCP pilot was Goodwin reassessing operating procedures for medication rounds and training.

The integrated RCP role differs from that of the RMMR pharmacist by facilitating more frequent face-to-face collaboration between the pharmacist and existing care team, greater understanding of both resident-specific medication management decisions, and site-specific operational policies and procedures.

Previously Goodwin carers were performing seven medication rounds per day between 7am and 9pm. It would take up to three-and-a-half hours of the carer's day and risked fatigue-induced errors and miss-timed medication administration.

Goodwin is now several weeks into a pilot at Goodwin House, Ainslie. It involves splitting the large floors into corridors, serviced by care 'buddies' who are supported by ongoing training including on-site study groups lead by the nurse practitioner.

Through streamlined processes the medication round was reduced from 3.5 hours to 45 minutes within the first week. "Medication rounds don't dominate the day anymore or interrupt people's breakfast in the dining room," says Macleod.

"Carers can choose their own buddies and determine their own workflow and have more time in their day, so the feedback so far is extremely positive. Carers are enjoying their days more and that can only help raise the customer experience, too."

Goodwin resident Aileen Walsh and pharmacist Richard Thorpe

"The clinical, operational and economic evidence gained from this study will be useful to inform whether the integration of a RCP into aged care facilities is feasible."

One of the surprises from the trial was the positive effect the pharmacist's presence has on case conferencing, she says.

"It gave families greater confidence in recommendations coming from Goodwin staff, and we were able to challenge preconceptions of what we could achieve for individual residents. Where possible, the GP was also present at case conferences, and the joint specialists in the room created a sense of professional collaboration that seemed to raise the level of engagement for all concerned," Macleod says.

The research also found that on-site integration could increase the cross-disciplinary communication necessary to establish the assessment of complex illnesses for residents, including BPSD and to develop the trust and communication necessary in peer relationships for carers and nurses, to share the implementation of the medication plan.

It also provided nurses with educational support, says Goodwin executive manager of residential care, Robyn Boyd.

Residential aged care does not have onsite doctors like a hospital, so aged care nurses often miss out on exposure to expert discussion, direction and mentorship, and the reassurance and learning that these things bring, she says.

David Harper House, Monash ACT

"In aged care, it's the nurses who have to advise doctors, often by phone, on a resident's situation, which is not ideal. It is a sector-wide quandary that needs to be brought into the open and discussed," Boyd tells *AAA*.

"We found that the pharmacist-nurse collaboration provided the missing direction, advice and reassurance for nurses and we witnessed a constructive and respectful dynamic."

Promoting freedom

The residential care pharmacist research project is one of several research projects and trials underway at Goodwin towards fulfilling its key philosophy for residents to be restraint-free. Restraint includes:

- physical restraint, for example via equipment including sash belts and bed rails
- chemical restraint such as via sedatives and anti-psychotic drugs
- environmental restraint, such as restricted-access dementia care wings.

"We have to improve residents' quality of life, as a whole industry," says Boyd.

In 2014 Goodwin began a program of review and removal of all forms of restraint, starting with the physical. The use of physical restraints is down from 57 at the start of the program to only two residents now using bedrails, and those are at residents' request.

The next and current focus is chemical restraint, which is where the research partnerships come in.

In 2014-15 Goodwin partnered with University of Tasmania on their RedUSe program aimed at reducing the use of benzodiazepines and anti-psychotics in aged care. During this program, one Goodwin facility was able to reduce the number of residents on these medications from 18 to one.

Since 2016, Goodwin has partnered with Churchill Fellowship recipient Dr Moyra Mortby, originally at the Australian National University, on a four-year ARC-funded research project into increasing non-pharmacological interventions to manage BPSD.

"Often a behavioural outburst by a resident living with dementia is a call for help for an underlying problem they can't communicate, such as hunger, thirst, pain or restlessness," Boyd says.

The research project aims to reduce the reliance on benzodiazepines and anti-psychotic drugs by training care staff to first identify and assess the residents' unmet needs, potentially resolving the situation without pharmaceuticals.

By implementing lessons learned from these projects, Goodwin now follows a new policy that sees the nurse practitioner notified every time a resident is prescribed a benzodiazepine or anti-psychotic. It aims to guide the resident on a program to cease the medication within 12 weeks. ■

'Exceeded expectations'

Trial leader Mark Naunton says the project was something he wanted to do for a long time.

"The results exceeded my expectations with the feasibility of integrating pharmacists into aged care having the potential to become something greater as more discussion grows around this new model of pharmacy practice," Naunton tells *AAA*.

The next step will require a larger pilot to gather more evidence, he says. "This trial involved one pharmacist, at one intervention and one control site, so it was limited in some respects," says Naunton. "However, once people see the dividends everyone will want to be part of it."

The largest hurdle facing Goodwin is around funding, he says. "I believe it will happen eventually because of what is occurring in other elements of the profession and overseas, although I am not aware of any other countries implementing pharmacy within an aged care facility to this extent."

The pharmacist is the missing link in the residential aged care setting and this has been a major issue when it comes to conducting medication reviews.

"I can see a patient on 1 January and then not see them again for two years. There is no easy paid mechanism available to deal with this critical time lapse if it is necessary to follow up with the GP, nurse or carer."

Although the pharmacist was only available two days a week during the trial he was able to integrate easily with the facility GP, nurses and other allied health professionals such as physiotherapists, despite the time constraints, says Naunton. "I think the medical profession recognises the role pharmacy can play, not just within aged care homes, but also with their patients in the community.

"Pharmacists are looking at more career pathways and in the future working in a facility will present a new employment opportunity."

Flu vaccinations for residents and staff were another aspect of the trial. It was the first time a pharmacist was able to vaccinate outside community pharmacy, as the ACT is the only state or territory that allows for this, Naunton says.

He expects to see more advocacy for pharmacy to assist other healthcare professionals in raising the immunisation rates, which he says is a community priority particularly for the elderly and those with a chronic medical condition such as asthma or COPD.