Department RecFind No:	
Division/HHS:	
File Ref No:	**SPL_2555**

Deputy Director-General Brief for Approval

☐ Department ☐ Minister's office

SUBJECT: ***Long Stay Older Patients Steering Committee Meeting 6 June 2017***

Recommendation/s

It is recommended the Deputy Director-General Strategy, Policy and Planning Division:

1. **Approve** the run sheet with speaking notes for the third meeting of the Long Stay Older Patients Steering Committee meeting you will chair on Tuesday 6 June 2017.

APPROVED / NOT APPROVED

KATHLEEN FORRESTER
Deputy Director-General

Date: / /

Ministerial / Director-General Brief for Approval required ☐
Ministerial / Director-General Brief for Noting required ☐
Deputy Director-General's comment ☐

Issue/s

1. You are chairing the third and final meeting of the Long Stay Older Patients Steering Committee meeting on Tuesday 6 June 2017, 3pm to 5pm. Please find attached the agenda and your run sheet with speaking notes for the meeting (Attachments 1 & 2).
2. Steering Committee members include Graham Kraak, A/Senior Director, Strategic Policy and Legislation Branch and three Board Chairs:
    - Mr Michael Horan, Chair, Darling Downs Hospital and Health Board.
    - Mr Tony Mooney, Chair, Townsville Hospital and Health Board
    - Mr Clive Skarott Chair, Cairns and Hinterland Hospital and Health Board
3. Mr Horan, Mr Mooney and Mr Skarott will be attending via teleconference.
4. Dr Robert O'Sullivan, Co-Chair of the Statewide Older Persons Health Clinical Network has also accepted the invitation to attend the meeting again on behalf of the Network. Professor Ian Scott, Co-Chair of the Statewide General Medicine Clinical Network is an apology.
5. As per the action item decided at the last meeting of the Steering Committee in January 2017 (Attachment 3), a guest speaker from Redland Residential Care Service and an industry representative from Blue Care have been invited to discuss finding suitable residential aged care for older people with dementia and challenging behaviours.
6. Ms Margaret Broomfield, Director of Metro South Health at Home and Director of Nursing, Residential Aged Care, has accepted the invitation and will provide a brief overview of the Redland Residential Care Service.
7. Anne Cross, Chief Executive Officer of UnitingCare Queensland was invited to attend or nominate a representative to provide a brief overview of the issue from an industry perspective.

As it's UnitingCare Queensland's Board Meeting on 6 June, Anne Cross has nominated xxxx xxxx to represent BlueCare.

8. Mr Michael Zanco has accepted the invitation to attend from Clinical Excellence Division.

Vision

9. Addressing the issues around Long Stay Older Patients in Queensland's public hospitals aligns with three of the Directions in the Vision: Delivering healthcare; Connecting healthcare; and Pursing Innovation.

Results of Consultation

10. Following the last Steering Committee meeting Strategic Policy Unit has continued to keep in touch with Clinical Excellence Division to understand how their work aligns with the work of the Steering Committee. Healthcare Improvement Unit is currently considering the development of a 'FRAIL' Collaborative that will look at implementing a suite of initiatives for frail older people in the acute hospital setting. This initiative is likely to have an impact on long stay older patients in the hospitals were the FRAIL initiative is implemented.

Resource Implications (including Financial)

11. For the financial years 2011-12 to 2013-14 the Queensland Government was a signatory to the multilateral National Partnership Agreement on Financial Assistance for Long Stay Older Patients (NPA LSOP). The NPA LSOP recognised that the Commonwealth and State and Territory governments had a mutual interest in improving the outcomes in relation to LSOPs and they needed to work together to achieve those outcomes. Under the NPA LSOP the Queensland Government received $51.61 million as a contribution to the cost of providing care to LSOPs in public hospitals.

12. While the Commonwealth no longer provides this financial assistance for these patients, the information collected through this census is still beneficial for the Department in monitoring the impacts of aged care reforms.

Background

13. The 2017 Long Stay Older Patients Census was conducted on 10 May 2017, with HHSs returning their census reports on 19 May 2017. Strategic Policy Unit is currently working through the data and will have a Summary Report and HHS Factsheets prepared by August 2017.

Attachments

14. Attachment 1: Meeting run sheet with speaking notes

15. Attachment 2: Agenda

16. Attachment 3: Meeting notes from Long Stay Steering Committee Meeting on 18 January 2017

Department RecFind No:	
Division/HHS:	
File Ref No:	**SPL_2555**

Author	Cleared by: (SD/Dir)	Content verified by: (CEO/DDG/Div Head)
Emily Cross	Rachel Vowles	Graham Kraak
Principal Policy Officer	A/Director	A/Senior Director
Strategic Policy Unit	Strategic Policy Unit	Strategic Policy and Legislation Branch
3708 5589	xxxx xxxx	xxxx xxxx
1 June 2017	<date>	<date>

Long Stay Older Patients Steering Committee meeting 6 June 2017

Speaking points (key messages and actions)

1. The Long Stay Older Patients Steering Committee held its final meeting on Tuesday 6 June. The focus of the Steering Committee has been to build an understanding of the issues around long stay older patients and identify practical solutions that HHSs are trialling and that could be adopted or adapted by other HHSs across the State.

2. The focus of the meeting on Tuesday was to discuss a key challenge that has been identified by the Steering Committee of finding suitable placements for older people with dementia and challenging behaviours.

3. Representatives from Metro South HHS's Dementia Outreach Service presented to the Steering Committee on the role of the Dementia Outreach Service in supporting local community and residential aged care services to meet the needs of highly complex patients with dementia. Key components of the Service include facilitating timely access to multidisciplinary health care and assessment for people living in the community or residential care with suspected dementia; and providing on-going support and capacity building for residential aged care staff to manage residents within the residential aged care environment. A major aim of this service is to prevent unnecessary hospitalisations and improve patient flow. The Steering Committee will be provided with the budget for running this services as well as an evaluation of Service outcomes, which I will share with the Board Chairs.

4. An industry representative from BallyCara attended the meeting to provide a perspective on how the age care reforms over the last five years have affected the industry and may impact on the health system. Key challenges for the industry and its impact on the health system include:

    a. A stronger focus on the revenue obtained for each resident via accommodation payments and care subsidies. The impact is that clients at the extreme ends of the care spectrum are not being offered a place in residential care.

    b. The Commonwealth's agenda is focused on the growth of home care. The impact is that Emergency Departments will likely be the preferred referral option when home care arrangements fail.

    c. Increasing consumer control for community services. The impact is that more people will remain in the hospital system for longer if people can't get access to appropriate information and/or lack the capacity to make decisions.

5. A final report will now be drafted by the Department on behalf of the Steering Committee to be provided to all Board Chairs. The report will summarise the issues discussed around long stay older patients and identify a suite of initiatives and services, that have been successfully implemented or trialled, for Board Chairs to consider in their respective health service.

Queensland Health

Long Stay Older Patients Steering Committee

Meeting Notes

Queensland Health Long Stay Older Patient Steering Committee

Date: Tuesday 6 June 2017
Time: 3.00pm – 5.00pm
Venue: Level 9 Conference Room, 33 Charlotte Street, Brisbane
Teleconference: [redacted]

Attendees	
Kathleen Forrester (Chair)	Deputy Director General, Strategy, Policy and Planning Division
Michael Horan	Chair, Darling Downs Hospital and Health Board
Tony Mooney	Chair, Townsville Hospital and Health Board
Clive Skarott	Chair, Cairns and Hinterland Hospital and Health Board
Graham Kraak	A/Senior Director, Strategic Policy and Legislation Branch
Dr Robert O'Sullivan	Co-Chair, Statewide Older Persons Health Clinical Network
Margaret Broomfield	Director Metro South Health@Home, Director of Nursing, Residential Aged Care
Jayne Ashcroft	Nurse Practitioner, Dementia Outreach Service (DEMOS)
Paul Johnson	Chief Operating Officer, BallyCara
Laureen Hines	Manager, Healthcare Improvement Unit
Emily Cross	Principal Policy Officer, Strategic Policy Unit
Apologies	
Professor Ian Scott	Co-Chair, Statewide General Medicine Clinical Network
Dr John Wakefield	Deputy Director-General, Clinical Excellence Division
Michael Zanco	Executive Director, Healthcare Improvement Unit

Long Stay Older Patient Steering Committee

Key Messages and Actions

1. The focus of this third and final meeting of the Long Stay Older Patients Steering Committee was to discuss the key challenge of finding suitable placements for older people with dementia and challenging behaviours.

2. Jayne Ashcroft and Margaret Broomfield from Metro South HHS's Dementia Outreach Service (DEMOS) presented to the Steering Committee on the role of the Dementia Outreach Service in supporting local community and residential aged care services to meet the needs of highly complex patients with dementia (presentation and papers attached). Key components of the Service include facilitating timely access to multidisciplinary health care and assessment for people living in the community or residential care with suspected dementia; and providing on-going support and capacity building for residential aged care staff to manage residents within the residential aged care environment. A major aim of this service is to prevent unnecessary hospitalisations and improve patient flow.

3. Questions for Jayne and Margaret after their presentation on DEMOS included:
    a. How much it costs each year to run the service?
    b. Could DEMOS be transferred to other HHSs particularly to regional HHSs which may not have as many support services as a metro HHS?
    c. Has the service been evaluated?

4. Following the meeting, Margaret Broomfield has since advised that the full year budget for DEMOS is $1.033M; the service would be transferable to other HHSs as the service builds relationships overtime and strengthens local networks; and DEMOS has been evaluated and a number of research papers have been published on its effectiveness and efficiency (papers attached).

5. Paul Johnson from BallyCara attended the meeting to provide a perspective on how the age care reforms over the last five years have affected the industry and may impact on the health system. Key challenges for the industry and its impact on the health system include:
    a. A stronger focus on the revenue obtained for each resident via accommodation payments and care subsidies. The impact is that clients at the extreme ends of the care spectrum are not being offered a place in residential care.
    b. The Commonwealth's agenda is focused on the growth of home care. The impact is that Emergency Departments will likely be the preferred referral option when home care arrangements fail.

c. Increasing consumer control for community services. The impact is that more people will remain in the hospital system for longer if people can't get access to appropriate information and/or lack the capacity to make decisions.

6. Key Actions:

   a. Mike Horan will provide an update at the Board Chairs meeting on Thursday 8 June on the outcomes of the third and final Steering Committee meeting.

   b. A final report will be drafted by the Department on behalf of the Steering Committee to be provided to all Board Chairs. The report will summarise the issues discussed around long stay older patients and identify a suite of initiatives and services, that have been successfully implemented or trialled, for Board Chairs to consider in their respective health service.

Department RecFind No:	ST000652
Division/HHS:	SPP
File Ref No:	SPL_3265

Deputy Director-General Brief for Approval

☐ Department ☐ Minister's office

SUBJECT: Meeting Notes for Long Stay Older Patients Steering Committee Meeting 6 June 2017

Recommendation

It is recommended the Deputy Director-General Strategy, Policy and Planning Division:

1. **Approve** the attached Meeting Notes, from the Long Stay Older Patients Steering Committee meeting held on 6 June 2017, to be circulated to Steering Committee Members and attendees.

APPROVED

BRONWYN NARDI
Deputy Director-General
Strategy, Policy and Planning

Date: 20 / 06 / 2017

Deputy Director-General's comment

Issue/s

1. You chaired the third and final meeting of the Long Stay Older Patients Steering Committee meeting on 6 June 2017 and requested meeting notes be drafted to include key messages and actions from the meeting and circulated to Committee Members (Attachment 1).
2. The key action arising from the meeting is to draft a final report that will summarise the issues discussed over the course of the three meetings of the Steering Committee around long stay older patients; and identify a suite of initiatives and services, that have been successfully implemented or trialled, for all Board Chairs to consider in their respective health service. Strategic Policy Unit will draft this report on behalf of the Steering Committee.
3. Strategic Policy Unit will ensure that the final report aligns with other Departmental initiatives aiming to improve health services for older people, such as the Older Persons Health Care Strategy and the 'FRAIL' collaborative under development in Clinical Excellence Division.
4. As the Secretariat, Strategic Policy Unit will circulate the approved meeting notes to Steering Committee members on behalf of the Chair.

Vision

5. Addressing the issues around Long Stay Older Patients in Queensland's public hospitals aligns with three of the Directions in the Vision: Delivering healthcare; Connecting healthcare; and Pursing Innovation.

Department RecFind No:	**ST000652**
Division/HHS:	**SPP**
File Ref No:	**SPL_3265**

Results of Consultation

6. Strategic Policy Unit will work together with Clinical Excellence Division to identify the suite of initiatives and services to include in the final report.

Resource Implications (including Financial)

7. The key actions in the meeting notes will be fulfilled by the Strategic Policy Unit, within existing resources.

Background

8. On behalf of the Steering Committee, Michael Horan provided a brief overview of the outcomes of the final Steering Committee meeting at the Board Chairs Forum on 8 June 2017 (Attachment 2).
9. The impact of long stay older patients on public hospital service provision was raised at the Hospital and Health Board Chairs meeting on 25 November 2015. Members recommended establishing a Long Stay Older Patients Steering committee to develop options for managing this issue into the future, including negotiations with the Commonwealth and presenting papers to the Council of Australian Governments (COAG) Health Council.

Attachments

10. Attachment 1: Meeting Notes – Long Stay Older Patients Steering Committee meeting

    Attachment 1a: Presentation on the Dementia Outreach Service (DEMOS)

    Attachment 1b: Accompanying research article: Brodaty's Triangle

    Attachment 1c: DEMOS evaluation journal article: Perspectives in Public Health Journal

    Attachment 1d: DEMOS evaluation journal article: Contemporary Nurse Paper

    Attachment 2: Notes prepared for Mr Michael Horan for the Board Chairs Forum

Author	Cleared by: (SD/Dir)	Content verified by: (CEO/DDG/Div Head)
Emily Cross	Stephen Stewart	Graham Kraak
Principal Policy Officer	Manager	A/Senior Director
Strategic Policy	Strategic Policy Unit	Strategic Policy and Legislation Branch
3708 5589	3708 5587	3708 5535
		[redacted]
12 June 2017	14 June 2017	15 June 2017

Queensland Health

Long Stay Older Patients Steering Committee

Meeting Notes

Queensland Health Long Stay Older Patient Steering Committee

Date: Tuesday 6 June 2017
Time: 3.00pm – 5.00pm
Venue: Level 9 Conference Room, 33 Charlotte Street, Brisbane
Teleconference: [redacted]

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Dr John Wakefield	Deputy Director-General, Clinical Excellence Division
Michael Zanco	Executive Director, Healthcare Improvement Unit

Queensland Government

Long Stay Older Patient Steering Committee

Key Messages and Actions

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2. Jayne Ashcroft and Margaret Broomfield from Metro South HHS's Dementia Outreach Service (DEMOS) presented to the Steering Committee on the role of the Dementia Outreach Service in supporting local community and residential aged care services to meet the needs of highly complex patients with dementia (presentation and papers attached). Key components of the Service include facilitating timely access to multidisciplinary health care and assessment for people living in the community or residential care with suspected dementia; and providing on-going support and capacity building for residential aged care staff to manage residents within the residential aged care environment. A major aim of this service is to prevent unnecessary hospitalisations and improve patient flow.

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Dementia Outreach Service (DEMOS)

Jayne Ashcroft
Nurse Practitioner Dementia
Team Leader/Manager DEMOS

Dementia in Acute Care: What We Know

- Regardless of whether they live in the community or in aged care, people with dementia need access to appropriate health care.
- People with dementia are high users of acute care services with about one in four people with dementia being admitted to hospital every year, which is twice the rate of people of the same age who do not have dementia.
- People with dementia have unacceptably worse clinical outcomes with longer lengths of stay, higher mortality and a higher likelihood of readmission compared to people without dementia.

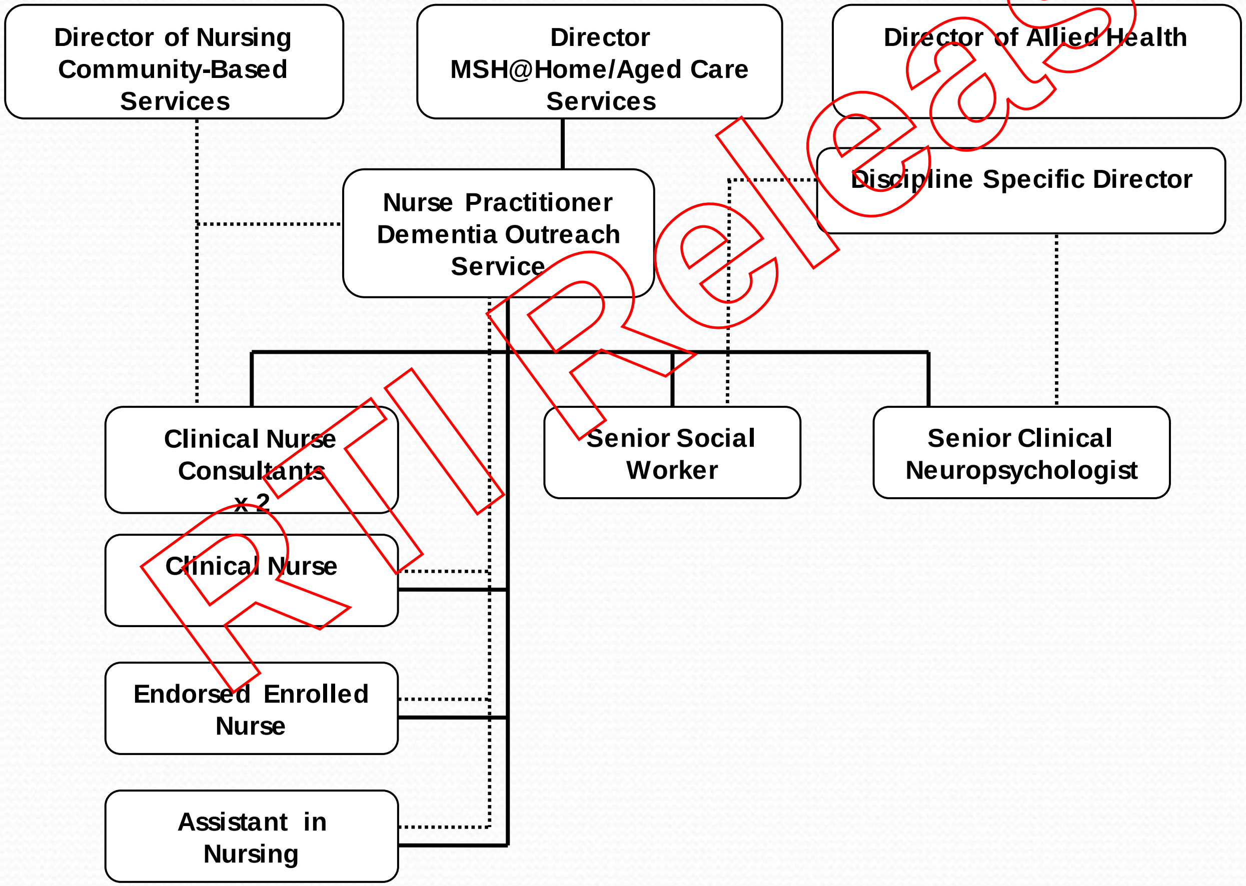
Dementia in Acute Care: What We Know

- People with dementia stay in hospital almost twice as long as those without dementia, averaging 16.4 days of care compared with 8.9 days for other patients.

- Average cost of hospital care for a person with dementia was $7,720 per episode compared with $5,010 for a person without dementia.

The above data has been drawn from *'Dementia care in the acute hospital setting: issues and strategies'*, Report for Alzheimer's Australia, Paper 40 June 2014.

Organisational Structure



Director of Nursing Community-Based Services

Director MSH@Home/Aged Care Services

Director of Allied Health

Discipline Specific Director

Nurse Practitioner Dementia Outreach Service

Clinical Nurse Consultants x 2

Senior Social Worker

Senior Clinical Neuropsychologist

Clinical Nurse

Endorsed Enrolled Nurse

Assistant in Nursing

DEMOS Team

1 FTE Nurse Practitioner

2 FTE Clinical Nurse Consultants

1 FTE Senior Neuropsychologist

1 FTE Senior Social Worker

1 FTE Clinical Nurse

2 FTE Enrolled Nurses

1 FTE AIN

Service Objectives

- Aligned with the objectives of the Aged Care and Rehabilitation stream with hospital avoidance and patient flow performance objectives.
- Stand alone service not a part of Redland Residential Care.
- Significant role in reducing avoidable hospital admissions/readmissions and lengthy hospital in-patient stays.
- Involvement in hospital discharge planning.
- Interface with other health services.

Model

- Two Components to service:

1. Community

2. Residential

Rationale for Service Development: Community

- In Metro South Health, there is no government or non government service provider that delivers a coordinated, responsive and specialist/MDT clinical service in a case management framework specifically to people with dementia and their carers.
- DEMOS has a mandate of hospital avoidance and patient flow and this, combined with detailed knowledge of health service infrastructure, differentiates the service from other NGOs.
- People with impaired capacity are amongst the most vulnerable members of our society (www.publicguardian.qld.gov.au). They often have reduced ability (due to poor insight, impaired capacity and/or social isolation) to access necessary healthcare and to manage other social factors impacting on their health and wellbeing.

Rationale for Service Development - Community

- People with dementia and their carers can experience situational crises such as delirium or severe behavioural and psychological symptoms of dementia (BPSD), which often leads to ED presentation.
- Non-government service providers often experience significant challenges in meeting the needs of highly complex clients with dementia (particularly those living alone, suffering neglect, living in squalor and hoarding, or with unmanaged BPSD) and require specialist multidisciplinary input. Without this clinical support, service providers are at risk of relinquishing care (generally to the hospital environment if there is no carer).

Rationale for Service Development: Community

- The major service provider for BPSD does not provide a service to people living alone with BPSD where there are no community services involved or an involved carer.

- For people with dementia (diagnosed or not) living in the community, there are no other options for providing diagnosis (for those who are unable or unwilling to attend a medical clinic), nor is there any other means of assessing their decisional capacity for the purposes of invoking substitute decision making arrangements for clients in high risk or crisis situations (e.g. loss of accommodation, pending legal cases, elder abuse) which would normally result in hospital admission.

Community Model

- Facilitation of medical assessment and access to healthcare for people living in community with suspected dementia/resistive behaviours or at risk of neglect, particularly people with dementia living alone.

- Service plays a critical role in facilitating direct placement from home to permanent care thus preventing costly and lengthy hospital in-patient stays awaiting placement.

- Post-placement support for people with BPSD (DEMOS Residential), thus preventing hospital readmission from facilities due to BPSD brought about by environmental change.

Community Model

- Crucial role in advanced care planning and future care planning and provides practical assistance to ensure processes are in place (e.g. facilitates appointments of EPOA), as part of a holistic case management framework.

- Provides responsive diagnostic and capacity assessment services in the home for people ‘refusing’ to access healthcare

Community Model

- Holistic approach to care of those with BPSD including pharmacological intervention and the associated clinical assessment, management and follow up, active linking and care collaboration with other health services (e.g. Older Persons Mental Health) and carer support.

- In-home specialist assessment by DEMOS nurses NP/CNC (when clients have started to refuse care providers or refuse to see a GP) enables care planning to either remain at home or transition to placement. Care planning and mentoring is given to service providers so they can continue to provide a service in the client’s own home.

Community Model

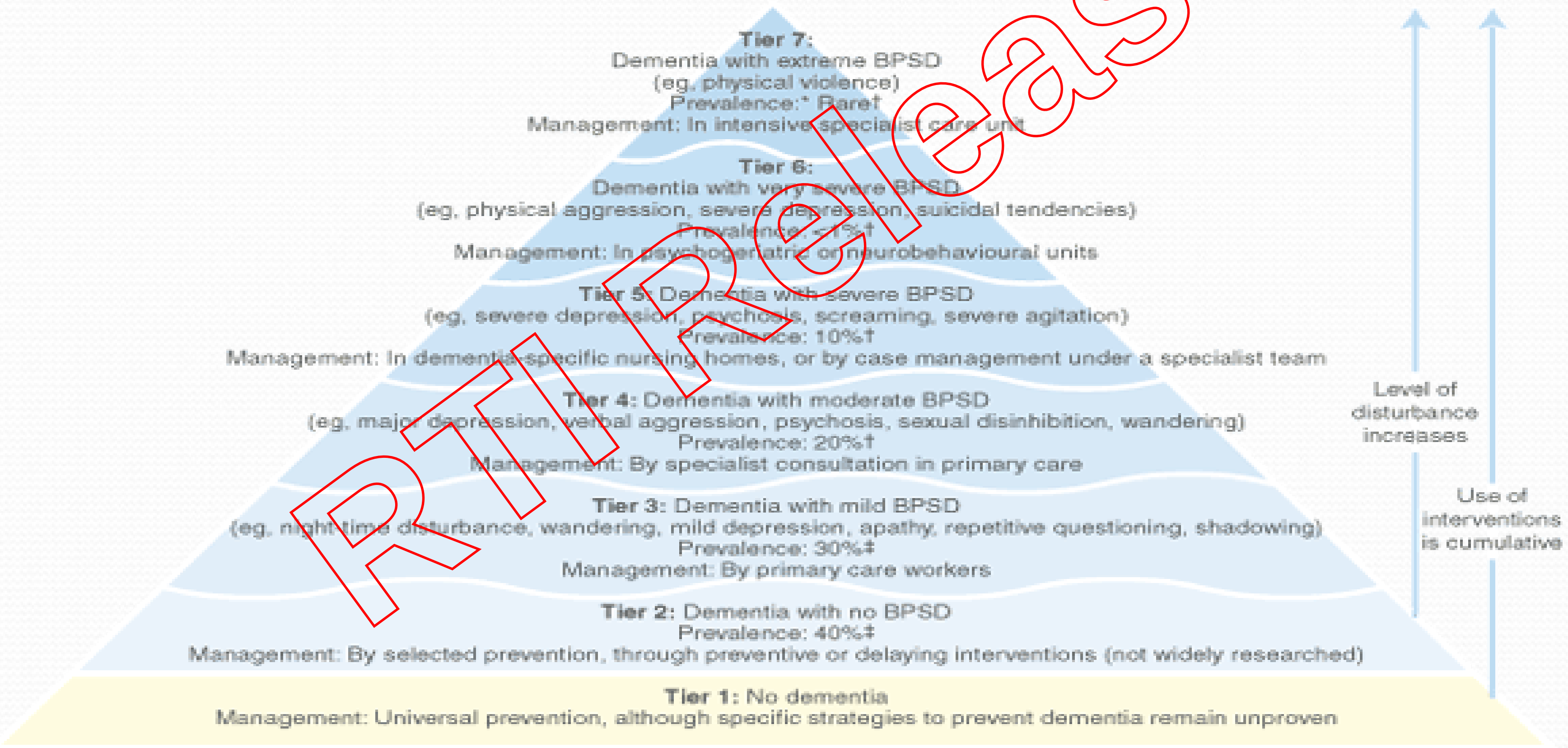
- Provides responsive follow up in the community through direct referrals from ED (CHIP nurse) thus preventing readmission.

- Carers are provided with contingency care plans that enable the carer to proactively manage potential issues with medical/behavioural problems and access appropriate care in the community that may otherwise result in ED presentation.

Rationale for Service Development: Residential

- Staff of residential aged care facilities are often confronted with a variety of behavioural challenges.
- Responses to these challenges may be limited due to workload demands on nurses and attending GPs, and as a result behaviours may become difficult to manage.
- As a result there is often a lack of timely response/intervention to behaviours causing escalation into a behavioural emergency.
- Limited timely access to dementia specialist assessment treatment and management.

Target Population



Tier 7:
Dementia with extreme BPSD
(eg, physical violence)
Prevalence:* Rare†
Management: In intensive specialist care unit

Tier 6:
Dementia with very severe BPSD
(eg, physical aggression, severe depression, suicidal tendencies)
Prevalence: <1%†
Management: In psychogeriatric or neurobehavioural units

Tier 5: Dementia with severe BPSD
(eg, severe depression, psychosis, screaming, severe agitation)
Prevalence: 10%†
Management: In dementia-specific nursing homes, or by case management under a specialist team

Tier 4: Dementia with moderate BPSD
(eg, major depression, verbal aggression, psychosis, sexual disinhibition, wandering)
Prevalence: 20%†
Management: By specialist consultation in primary care

Tier 3: Dementia with mild BPSD
(eg, night-time disturbance, wandering, mild depression, apathy, repetitive questioning, shadowing)
Prevalence: 30%‡
Management: By primary care workers

Tier 2: Dementia with no BPSD
Prevalence: 40%‡
Management: By selected prevention, through preventive or delaying interventions (not widely researched)

Tier 1: No dementia
Management: Universal prevention, although specific strategies to prevent dementia remain unproven

Level of disturbance increases

Use of interventions is cumulative

* Prevalence is expressed as estimated percentage of people with dementia who currently fall into this category.
† Estimate based on clinical observations. ‡ Estimate based on Lyketsos et al.[2]

DEMOS/SBRT – What's the Difference?

- DEMOS has a hospital avoidance and patient flow mandate for this district.

- DEMOS is about capacity building by providing our own staff to work on the floor to mentor/role model behaviour management strategies to RACF staff to allow them to independently manage the care plan themselves.

DEMOS/SBRT – What's the Difference?

- The nature of the client base (tier 6 & 7) often requires hospital admission due to RACFs inability to manage these clients in the facility environment. DEMOS staff work with Redland Residential Care to facilitate transfer to this facility instead of hospital.

Model of Service Delivery

Assessment, intervention and capacity building service for the management of clients with BPSD in both RACF and community.

- Two parts to the service for RACF model:

1. Consultation service.

2. Dementia Outreach Team intervention.

CNC Consultation Service

Service Elements for Referral

- Clients must have a diagnosis of dementia or cognitive impairment.

- Target population – residents of any residential aged care facility in the Metro South Health area. (DEMOS services 65-70 of the >80 RACFs in the area)

- Referral types include behavioural emergencies, falls, over sedation, medication reviews.

- Receive referrals from GPs, RACFs, CARE-PACT, Geriatricians, nurses, mental health, families.

Triage Categories

- Urgent – Seen within 72 hours.
- Priority – Contacted within 48 hours.
- Routine – Contacted within 7 days.

CNC Role

Identification of the main clinical subtypes of dementia as each presents with different clinical features.

Main clinical subtypes of dementia are:

- *Dementia of the Alzheimer's type*
- *Vascular dementia*
- *Dementia with Lewy Bodies*
- *Frontotemporal Dementia*
- *Mixed Dementia (Alzheimer's & Vascular)*
- *Dementia due to other causes e.g Parkinson's disease, Huntington's disease*

CNC Role

- Assist in the identification of related medical issues and potential triggers that contribute to an exacerbation in behaviour in the person with dementia. These include:
- *Urinary Tract Infection*
- *Pain*
- *Chest Infection*
- *Side effects of medications*
- *Constipation*
- *Medication Interactions*
- *Depression*
- *Delirium*

CNC Role

Medication management used in conjunction with nursing interventions.

Medication changes are recommendations to the GP as the primary care provider and the service has a high level of engagement from GPs.

Medications recommendations include both increases or decreases in use of:

- *Antipsychotics*
- *Benzodiazepines*
- *Antidepressants*
- *Mood Stabilisers*
- *Analgesia*
- *Antibiotics*
- *Aperients*
- *Polypharmacy reviews*

- *Referral to other health professionals.*

CNC Role

Referral to Dementia Outreach Team.

Priorities for team referral:

1. Absconding from facility
2. Facility considering relocating resident
3. Potential admission to ED
4. High level of aggression towards staff/other residents
5. Chemical/physical restraint
6. Facility willingness for engagement
7. Facility trialling nursing interventions with no effect

CNC Review

- Reviewing current medication with a view to cease &/or reduce medication, that may be contributing to deteriorating cognition, exacerbating behaviours, or causing falls.

- Identifying non-pharmacological interventions e.g. Nursing Interventions as a first line treatment to decrease the needs of pharmacological treatment.

- Establishing patient/staff education opportunities – targeted education of staff of Residential Aged Care facilities for appropriate management of BPSD.

- Treatment plan that is based on Evidence Based Best Practice in Dementia Care.

Benefits of the Role

- Timely management of behavioural emergencies.
- Avoidance of transfers for emergent medical care that manifests as difficult behaviours.
- Residents treated in a familiar environment.
- Improved timeliness and appropriateness of referrals.
- Use of minimal medication with emphasis on non-pharmacological intervention.
- Evaluation and follow up.

Dementia Outreach Team

- Provision of support to the staff of residential aged care facilities and attending GPs who wish to further develop their service foo people with dementia.

- Assists facility staff in managing the behavioural and psychological symptoms of dementia.

- Builds on the ability of residential aged care facility staff to manage these residents within the Residential Aged Care environment.

How will the Dementia Outreach Service help my resident?

- Identification of behaviours of concern and their potential triggers.

- Work with staff in the facility delivering hands on care.

- Working with members of the multidisciplinary team to provide individualised intervention.

How will the service help residential aged care staff?

- Work alongside facility staff to mentor them during the practical implementation of the resident's care plan.
- Staff debriefing re: difficult behaviours.
- Provide time for counselling and support for the facility staff enhancing their capacity to confidently manage difficult behaviours.
- Provide individual and consistent support as facility staff members gain the experience to manage the care plan independently.
- Provide targeted education that is facility specific to resident behavioural issues.
- Time limited – 3 days for 6hrs/day.

Nurse Practitioner Role

- Oversees day to day operational and clinical management of the team.
- Provides clinical management in conjunction with the Acacia management team of the case review process on Acacia at Redlands Residential Care (RRC) for 31 residents who are complex and have been asked to leave/refused entry to mainstream RACFs due to their behaviours.
- CNC refers to NP for clients that are complex and not responding to their treatment plans.
- NP works with RRC to directly admit residents of RACFs with high level behaviours who are unable to be managed within the RACF environment, and would otherwise lose their accommodation and be sent to hospital, thus avoiding a lengthy hospital admission.

New Service Linkages

- Dementia Nurse Navigator role at Redlands Hospital.
- Referral pathways between DEMOS and NN created to allow DEMOS to ‘follow’ patients with BPSD into RACFs for the first month of care to ensure they settle into the facility and are not readmitted to hospital.
- NN refers to DEMOS clients in the community who are at risk of re-presenting to hospital for follow up and introduction of services.
- QEII & Logan Hospitals are also developing Dementia NN roles and it is envisaged that DEMOS will link with these positions to provide the same service across the district.

Recent Developments

- Metro South Health Dementia Services Strategy published February 2016.
- 12 month project for roll out of the strategy completed February 2017.
- Project focus was on the development of Dementia Pathways and the development of an 8-10 bed Specialist Dementia Unit (SDU) Tier high 5, 6 &7 co-located with RRC.

Future Developments

- It is envisaged that DEMOS will provide an outreach service to the SDU to integrate clients of this service back into care at their discharge destination.
- Funding of the SDU is subject to discussions between the HHS and Department of Health

Thank You

Behavioural and psychological symptoms of dementia: a seven-tiered model of service delivery

Henry Brodaty, Brian M Draper and Lee-Fay Low

ABSTRACT

- People with dementia usually experience behavioural and psychological symptoms of dementia (BPSD) during the course of their illness. Currently, in Australia, there is a lack of comprehensive planning for managing and preventing BPSD, and the resources required for optimal care are inadequate and unevenly distributed.
- We propose a seven-tiered model of service delivery based on severity and prevalence of BPSD, ranging from no dementia through tiers of increasingly severe behavioural disturbance to the propensity for extreme violence in a small number of individuals.
- Each tier is associated with a different model of intervention. People with dementia may move up or down between tiers depending on their condition, their care and the intervention provided.
- Lower-level interventions may prevent the need for the more intensive interventions needed when disturbance becomes more severe.

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In 2001, Australia's population was approximately 19 million, of which an estimated 165 000 people had dementia. Projections are that by 2041 Australia's population will be 25 million, with an estimated 460 000 people with dementia.[1]

The management of dementia is complicated by behavioural and psychological symptoms of dementia (BPSD), such as psychosis, depression, agitation, aggression and disinhibition (ie, unrestrained behaviour resulting from a lessening or loss of inhibitions or a disregard of cultural constraints). BPSD is an umbrella term for a heterogeneous group of non-cognitive symptoms that are almost ubiquitous in dementia. Rates of BPSD vary according to how symptoms are ascertained, thresholds of severity, and setting. For example, rates of BPSD have been estimated at 61%–88% among people with dementia in a community setting,[2,3] 29%–90% in residents of Australian nursing homes,[4,5] and 95% among hospitalised patients in long-term acute care.[6]

The problems

BPSD create problems for the individual, the community and the healthcare system. They are associated with lowered functional abilities[7] and poorer prognosis, an increased burden on caregivers[8] and nursing-home staff,[9] higher costs of care[10] and earlier institutionalisation.[11] Hospitalised patients with BPSD are more difficult to discharge, because of the difficulty of placing them elsewhere.[12]

Currently, in Australia, services for people with BPSD are ad hoc and fragmented. It is unclear who should bear responsibility for this population. Should it be State or federal governments, geriatric or psychogeriatric services, generic mental health services or specialist mental health services for older people, primary or secondary health services? Some States have developed specialised facilities — psychogeriatric nursing homes in Victoria, psychogeriatric extended care units in Western Australia, and CADE (Confused And Disturbed Elderly) units in New South Wales — to accommodate people with dementia who cannot be cared for at home or in mainstream residential care facilities. However, these facilities are not equitably distributed and do not necessarily have special resources for people with dementia and severe behavioural complications.

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The management of patients with BPSD is a particular problem in rural and remote areas, where there is a dearth of specialist services and the many partners in care tend to work independently. Modes of delivery that have been investigated in rural areas include telemedicine and specialist fly-out clinics.[13] The Alzheimer's Association has also developed some services — for example, the Alzheimer's Association (SA) has run a behaviour advisory service telephone helpline since 1999. Funding for services in rural and remote areas is unreliable or non-existent. Previous federal government initiatives have not been sustained or incorporated into routine practice. The availability of psychosocial interventions is limited. Judiciously prescribed psychotropic medications can be effective, but there are legitimate concerns about the excess or inappropriate use of medications for residents in nursing homes.[15]

A comprehensive plan for service delivery to people with dementia

We propose a seven-tiered model to assist in planning services for managing people with BPSD (see Box). This model divides people with BPSD into seven tiers in ascending order of symptom severity and decreasing levels of prevalence — from people with no dementia (tier 1) to the most behaviourally disturbed patients (tier 7). Treatment is cumulative from the lowest tier upwards, with those on the bottom tier receiving the least intervention and those on the top tier receiving the most. In this plan, interventions aim both to stop patients from moving to higher tiers (prevention) and to move patients to lower tiers (treatment/management). The boundaries between tiers are not distinct, and movement between levels is not necessarily stepwise. For example, an infection may precipitate a severe behavioural disturbance (moving a person from, say, tier 3 to tier 6), and treating the infection may return the patient to tier 3 status. Intervention strategies recommended for lower levels should generally be tried before employing those from higher levels.

Tier 1: No dementia

The lowest tier comprises the general population without dementia. Health promotion interventions would aim at keeping most of the population in this tier by preventing the development or delaying the onset of dementia (universal prevention). To date, no specific intervention has been demonstrated in randomised controlled trials (RCTs) to reduce the incidence of dementia. There is replicated case–controlled evidence for the protective effects of antioxidants (eg, vitamin E, vitamin C), anti-inflammatories, hormone replacement therapy, antihypertensives, folate and statins.[16] Other factors reported to be protective include cognitively stimulating social and physical activities.[16-18] Reducing BPSD would be a secondary benefit of preventing or delaying dementia. Benefits would include better quality of life, reduced healthcare costs and increased productivity as caregivers remain in the workforce.

Tier 2: Dementia with no BPSD

In the community-based Cache County Study in Utah, USA, 39% of people with dementia did not display any behavioural or psychological symptoms.[2] Currently, no interventions have been proven effective in preventing or delaying the development of BPSD. Cholinesterase inhibitors may delay the emergence of symptoms,[19] but the development of specific drugs to prevent BPSD is a long way off, as the aetiology of BPSD is not well understood. There is anecdotal evidence that caregiver training programs[20] and social and environmental interventions (such as those suggested in the Living with Memory Loss program of the Alzheimer's Association Australia[21]) may possibly prevent or delay the development of BPSD.

Tier 3: Dementia with mild BPSD

Using a predefined threshold of severity, Lyketsos and colleagues[2] reported that 29% of people with dementia have mild BPSD, such as apathy, mild depression, repetitive questioning and shadowing (ie, following other people around very closely). These behaviours may respond to distraction and reassurance and may be prevented by altering interactions and the environment.

Tier 3 management strategies comprise psychosocial interventions, usually involving family caregivers or care staff. In an RCT involving community-dwelling patients with Alzheimer's disease, training family caregivers in behavioural management techniques (involving pleasant activities or problem-solving) to alleviate depression was found to be effective in reducing BPSD, with the effects being maintained for six months.[22] Psychoeducation for family caregivers (including problem-solving and behavioural interventions) has been shown to reduce agitation and anxiety in people with dementia.[23] Behavioural management techniques have also been shown in an RCT to be as effective as haloperidol and superior to placebo in reducing agitation among people with BPSD in nursing homes.[24,25] However, these techniques are seldom used by family caregivers or nursing-home staff because of lack of knowledge, skills or resources. The evidence for other psychosocial interventions for BPSD (applicable to tiers 3 and 4) has been reviewed by Opie and colleagues.[26]

In our model, interventions for tier 3 behaviours are provided by primary healthcare workers. Medications, while not the first resort, may be prescribed by a general practitioner. Pharmacotherapy frequently involves the use of antidepressants or antipsychotics. Several placebo-controlled studies have reported the efficacy of various medications for treating BPSD — such as haloperidol and risperidone to treat aggression, agitation and psychosis in dementia, and moclobemide, citalopram and sertraline for depression.[27]

Tier 4: Dementia with moderate BPSD

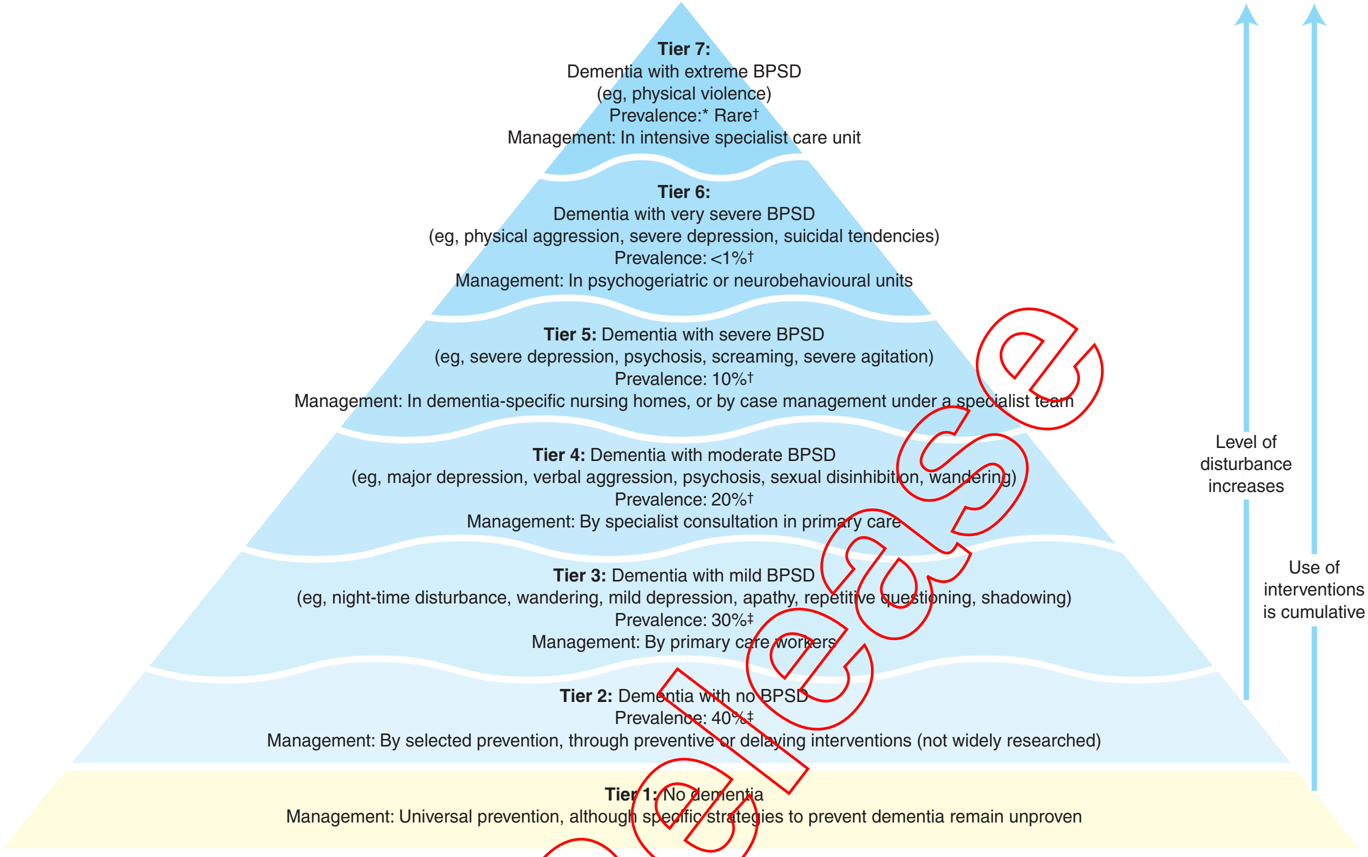
People with dementia would belong to tier 4 by virtue of the severity of their symptoms or because of the failure of tier 3 treatments. Moderately severe behavioural and psychological symptoms characteristic of people in tier 4 include major depression, verbal aggression, low-level (non-dangerous) physical aggression, psychosis, sexual disinhibition and wandering. It is difficult to determine prevalence rates of BPSD in this tier. In our study of Sydney nursing homes,[5] we found that 46.7% of residents with dementia had moderate BPSD requiring staff attention, and 38.8% had severe BPSD involving physical disturbance and/or requiring constant staff attention (unpublished data). Rates in community-dwelling people with dementia are likely to be substantially lower — we tentatively estimate that about 20% of all people with dementia may be at tier 4 level.

Tier 4 members require specifically targeted interventions. We would recommend specialist consultation (providing advice on medications), general staff and/or carer education, and tailored behavioural programs. If medical illness underlies the behavioural disturbance, referral to a geriatrician may be helpful. In hospitals, consultation–liaison approaches usually recommend prescription of psychotropic agents, further medical evaluation, advice about behavioural management and discharge planning (including transfer to a psychiatric facility if patients require tier 6 management).[28]

Tier 5: Dementia with severe BPSD

Mainstream facilities may be unable to cope with people with very severe BPSD. We estimate from our clinical experience that about 10% of people with dementia would fall into tier 5. The vast majority of people with dementia

Seven-tiered model of management of behavioural and psychological symptoms of dementia (BPSD)



* Prevalence is expressed as estimated percentage of people with dementia who currently fall into this category.
† Estimate based on clinical observations. ‡ Estimate based on Lyketsos et al.[2]

and very severe disturbances such as depression, aggression and marked agitation are likely to be in residential facilities. Consultation or primary case management has failed. More intensive care can be provided within a specialist case-management model, in which tailored programs are implemented by a specialist multidisciplinary team. For example, treatment may involve a psychiatrist (or geriatrician) reviewing the cause of the disturbed behaviour, a specialist doctor prescribing medication, a nurse liaising with staff, a psychologist developing a behavioural plan, and a social worker integrating the family into the care plan. RCTs have demonstrated the effectiveness of such teams in the community and in nursing homes.[29,30]

Tier 6: Dementia with very severe BPSD

We estimate that up to 1% of dementia patients will fit this tier. They come from three groups:

- People with dementia in general hospitals who develop a superimposed delirium. They are best managed in a special medical ward conjointly by geriatricians and old-age psychiatrists, usually for some days, until their acute condition abates.
- People with acute psychiatric problems complicating their dementia. If they did not have dementia their psychiatric condition would warrant psychiatric inpatient care (eg, people who have severe depression with suicidality, whose food or fluid intake is inadequate, or who fail to respond to specialist team case management). Admission to an acute psychogeriatric unit is required, usually for a few weeks. Such hospitalisation has been shown to reduce BPSD.[31,32]
- People with severe behavioural disturbance complicating their dementia, such as dangerous physical aggression or other behaviours that residential staff or family are unable to cope with despite assistance from other services. These patients require placement in special-care facilities (eg, psychogeriatric or aged-care neurobehavioural units) for some months before returning to mainstream care. These units require secure grounds, more and better trained staff than mainstream nursing homes, and support from multidisciplinary specialist mental health services for older people. They have been shown to reduce problematic behaviours and increase socialisation.[33]

For the 165 000 Australians currently estimated to have dementia,[1] up to 1650 tier 6 beds nationally would be needed.

Tier 7: Dementia with extreme BPSD

This level of symptom severity is rare, but when it occurs the situation has usually reached a crisis. Patients in this category are generally men under 70 years of age who are very strong and have been so violent that they have harmed other residents or staff. They often have non-Alzheimer-type dementias (eg, dementia from alcohol-related brain damage, frontotemporal dementia or vascular dementia). Management in hospital or special-care facilities has been unsuccessful, staff refuse to work with the patient, and no other facility will admit him. Such people require a high-security specialist care unit with a large ratio of male staff to patients. Only one such unit for each of the larger States may be required.

Discussion

Our model provides the basis for comprehensive planning of service delivery. We believe that it is representative of the prevalence of different severities of BPSD. Current funding is very sparse for intervention at tier 1 and tier 7 levels, even though the resource need per patient is greatest at the top and the population to be served is greatest at the bottom of the triangle (Box). Targeting funding to lower levels may reduce the demand for higher-level services — this is the principle of preventive medicine.[34] Thus, education for all staff working in residential-care settings has the potential to reduce the prevalence and severity of BPSD and the subsequent demand for more specialised (and more expensive) services.

Within Australia's healthcare system, the federal government is predominantly responsible for funding the bottom three tiers, whereas State governments are predominantly responsible for funding the top four tiers. There needs to be collaboration between State and federal governments to fund dementia and BPSD prevention education programs that will in the long term reduce the need for higher-level services, delay institutionalisation and improve quality of life for people with dementia and their caregivers.

We need to define who is responsible for whom with what level and type of disability. Avoiding the issue is costly — for example, people with dementia admitted to hospital have high rates of delirium and behavioural disturbance, have a longer length of stay, and incur higher nursing care time and costs.

Resource limitations call for a staged approach to implementing a comprehensive plan to provide services for each tier. Logic suggests that it would be best to start from tier 2 and proceed up the hierarchy, focusing especially on strategies that are evidence based.

Conclusion

We have proposed a model for the rational development of services to deal with the increasing problem of BPSD. It is time for discussions to occur in Australia at federal and State levels to formulate detailed plans for providing adequately resourced services.

Competing interests

None identified.

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Report of an evaluation of a Nurse-led Dementia Outreach Service for people with the behavioural and psychological symptoms of dementia living in residential aged care facilities

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Report of an evaluation of a Nurse-led Dementia Outreach Service for people with the behavioural and psychological symptoms of dementia living in residential aged care facilities

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Keywords

dementia; evaluation; nurse practitioner; outreach service; residential aged care

Abstract

Background: This paper describes the implementation and evaluation of a Dementia Outreach Service (DEMOS). The service is led by the first Nurse Practitioner in Dementia Care in the State of Queensland in Australia and is highly innovative in terms of its mode of delivery. The evaluation took place due to a perception that new models such as the DEMOS often fail to gain momentum due to a lack of data on their effectiveness and efficiency.

Method: The parameters of the project were to evaluate the extent to which the DEMOS met its key deliverables, focusing specifically on outcomes for residential aged care facilities (RACF) residents and staff. The study involved both quantitative and qualitative data collection. Qualitative data was collected through interviews, focus groups and reflective journals. A survey which was administered at three stages of the 12 months of the study was the main source of quantitative data. Additional statistical data was collected from relevant healthcare providers.

Findings: Twenty RACFs within a specific health service district participated in the study. This included an intervention group of 7 facilities (which received the service) and a control group of 13. A total of 320 RACF staff participated in Stage 1 of the study, although due to staff attrition this had reduced to 153 (54.6%) at Stage 3. Attrition rates were much lower in the 7 intervention facilities, with 67.9% of the original sample remaining at Stage 3. To augment the quantitative data collected as above, drawing on a range of qualitative techniques the researchers canvassed the perceptions, thoughts and opinions of differing stakeholders. The qualitative data proved extremely valuable in confirming the success of DEMOS.

Key Success Areas: Increased self-confidence among staff in dealing with residents with dementia; reduced stress among staff; reductions in the instances of difficult behaviours; reduced referrals to acute sector services; high levels of satisfaction among RACF management regarding DEMOS; and a process of continuous improvement of DEMOS based on stakeholder feedback.

Implications for Practice: Recommendations for the future directions of the service include:

- The continued support and expansion of DEMOS;
- An increase in the DEMOS service portfolio to actively assist facilities to change the culture of care amongst RACF carers; and
- Showcasing of DEMOS as an example of 'best practice' in dementia care to argue the need for provision of additional Nurse Practitioners specializing in dementia care.

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INTRODUCTION

The Dementia Outreach Service (DEMOS) is a Nurse Practitioner (NP) led service which aims to assist residential aged care facility (RACF) staff to better manage people with the behavioural and psychological symptoms of dementia (BPSD), while at the same time, building staff capacity. The service is referral based - referral types can include behavioural emergencies, falls, over sedation and medication reviews. The DEMOS service has been in operation since March 2009 and by May the NP had received over 170 referrals.

Anecdotal evidence suggests that many new initiatives such as the DEMOS fail to gain momentum and often disappear shortly after the first round of funding is spent. This evaluation came about due to recognition of the need to evaluate this new service to ensure its ongoing viability. The evaluation was undertaken by academics at a local university, in collaboration and consultation with the DEMOS team and their funding body.

The main foci of the evaluation were on whether the service was: (a) working efficiently and effectively; and (b) meeting a gap in service delivery which was not being filled by another service. The evaluation also provided opportunities for improvement to the current service, in that the research team offered formative feedback to the service providers based on observations of the service (DEMOS) and discussions with the DEMOS team and their clients.

DESCRIPTION OF DEMOS

The DEMOS service comprises a multidisciplinary healthcare team who work to assess and manage residents of RACFs that are experiencing cognitive deterioration as a result of dementia.

The service is led by a NP who specialises in dementia care.

A NP is defined as a registered nurse who has undergone higher education in order to become authorised to function in an advanced clinical role, that may include the prescription of medications and ordering of diagnostic investigations.[1] The DEMOS NP is assisted by a clinical nurse (CN), endorsed enrolled nurse (EEN), assistant-in-nursing (AIN), clinical facilitator, social worker and administrative assistant. The DEMOS program draws on a relational approach towards people with dementia attuned to the principles of person centred care.

Referrals to the DEMOS service generally come from general practitioners (GP), nurses, psychologists, mental health staff, families and directly from hospital emergency departments, and generally occur when a resident's behaviours become unmanageable. Following a call for assistance the NP firstly assesses the resident and his/her situation - identifying behaviours of concern, potential triggers for the behaviour/s and any related medical issues in residents (e.g. pain, constipation, and infection). Secondly, the NP provides comprehensive advice for action. Thirdly, if the suggested interventions have little or no effect, the NP refers the resident to the DEMOS team.

The DEMOS team intervention, which was the focus of the evaluation described in this paper, involves the EEN and AIN spending time in the facility working with staff on the floor to coach them in how best to manage the referred resident's behaviour. To complement this approach, the CN provides educational material and face-to-face instruction to facility staff, and is supported by a social worker who provides debriefing on either a one to one or group basis for those staff who have been struggling to manage the resident with BPSD. The team works not only with the nursing staff, but also GPs and other members of the multidisciplinary team to implement tailored intervention/s suited to the resident's needs.

The DEMOS service differs from other dementia behaviour management services in that DEMOS provides hands-on care and support. While other services focus on medical environmental and social factors which can contribute to difficult behaviours, often this does not extend beyond providing clinical support and information and advice via education sessions. On the other hand, the Dementia Outreach Service team work alongside facility staff to mentor them during the practical implementation of the resident's care plan. The service provides individual and consistent support as facility staff members gain the experience to manage the care plan independently. Additionally, the service provides targeted education that is facility & resident specific. The model utilised by DEMOS grew from recognition of the need to increase RACF staff confidence in implementation of the strategies recommended by the NP for improving the resident's quality of life.

RATIONALE FOR INTRODUCTION OF DEMOS

Dementia prevalence is increasing globally. The term dementia describes a range of symptoms which are indicative of a number of diseases or conditions that cause a decline in a person's cognitive function.[2] Symptoms associated with dementia include loss of memory, language, rationality and normal emotional reactions.[3,4] The most common form of dementia is Alzheimer's disease, accounting for between 50% and 70% of all cases. Alzheimer's disease has a prevalence of around 10% in the over 65 age group in Australia, and around 50% in those aged 85 and older.[5] Recent figures indicate there are 90,000 people suffering from dementia in Australian RACFs. This number is predicted to rise dramatically over the coming decades.[6] The increased prevalence of dementia among the RACF population highlights the importance of ensuring that adequate and appropriate services are in place to provide care for these residents. DEMOS aims to fill a gap in current service provision on dementia care by providing person centred care which can be delivered efficiently and effectively and which benefits both the resident and RACF staff.

The management of dementia is complicated by the behavioural and psychological symptoms of dementia.[6] BPSD consist of a range of symptoms including aggression, agitation, wandering, and persistent and repetitive questioning.[7, 8, 9] Caring for residents with BPSD is often stressful for nursing staff,[9-15] with various studies reporting low confidence levels among staff in managing BPSD.[16] Time and resource constraints also contribute to an inability to provide adequate care.[17] The problems faced by nursing staff translate into high turnover rates.[9-14] Turnover rates of up to 85% per year have been reported amongst carers.[18]

Bearing the above in mind, this evaluation aimed to determine the extent to which the DEMOS service succeeded in achieving its objectives in its first year of operation. In particular the evaluation focused on the extent to which the service led to an increased quality of life for residents, a reduction in inappropriate referrals to other healthcare services, improved management of residents in the RACF and increased capacity and clinical skills of staff.

ETHICAL CONSIDERATIONS

This project received ethical approval from the relevant district hospital authority and participating university. RACF management received an information pack outlining the purpose of the DEMOS. This pack also contained details of the research project. RACF management were briefed on the purpose of the research and were fully informed of what would be involved for carers. Written informed consent was sought from participating RACFs and an implied consent mechanism was utilised for participants who completed questionnaires. Participants were advised that all identifying information would be removed from the data prior to publication and that this information would be held in confidence.

METHODS

The research comprised of both qualitative and quantitative components. Below is a brief description of the various elements of the research.

Quantitative component

Evaluation involved the surveying of RACF staff in two (control group) and three (intervention group) stages to determine the impact of the DEMOS service. All survey tools utilised were amended versions of validated tools and measured quality of life [using an amended version of the Dementia Quality of Life,[19] self-confidence, stress and knowledge about dementia. In addition, demographic information about the respondents was collected and related to personal and professional characteristics. Surveys were also distributed to management of all participating RACFs regarding their expectations of, and satisfaction with the service. The sample group were divided into intervention and non-intervention groups with the intervention group receiving DEMOS upon referral. In order to determine the impact the service had on hospital admissions and referrals, data was also collected from a regional hospital regarding the types and numbers of referrals received from RACFs in the region.

Qualitative component

The qualitative component of the research consisted of focus groups and individual interviews with the DEMOS team and staff at participating facilities. The DEMOS team also completed reflective journals systematically over the course of the evaluation to record successes experienced, as well as any hurdles encountered.

Data collection and analysis

A total of 320 participants were recruited from 20 RACFs at Stage 1 (baseline). A return rate of almost 70% was achieved at Stage 2 (immediately following intervention). At Stage 3 (3-6 months following baseline) the response rate dropped to 55%. This may be explained by the lack of 'buy-in' from facilities that did not have direct contact with the DEMOS team (the intervention). This is illustrated by a breakdown by Intervention and Non-Intervention facilities which show a response rate almost equalling stage 2 of 68% among intervention facilities, while non-intervention facilities have a significantly lower response rate of 46%.

Quantitative survey data was entered in SPSS data analysis software on a systematic basis. An expert in quantitative methods and statistics assisted with the design of the study and provided analysis of the quantitative data at various stages of the study's evolution. Qualitative data was analysed by members of the research team. Open coding was used to extract the main themes from the data. When themes were identified they were examined in further detail to build a comprehensive picture of the operation of the service.

RESULTS

Thirteen RACFs (control group) completed repeated surveys at Stage 1 & 3 of the study while seven RACFs (intervention group) who received the DEMOS completed surveys at Stages 1, 2 & 3. Due to time lags in survey returns, not all respondents were included in the final analysis. For that reason, the analysis was conducted on an initial set of 295 carers for whom Stage 1 surveys were available. At least 95.4% (N = 271) of the participants were female (3.7% did not identify themselves by gender). Of the total, a majority (N=164; 56%) identified themselves as Australian. More than half of the participants (60%, N =177) were employed part-time. Regarding nursing qualifications, 59% (N = 171) reported their highest nursing qualification to be AIN. Most participants reported having worked in aged care facilities for 3 to 10 years. Participants with 3 to 5 years of experience were more likely to spend time working in a secure dementia unit whilst those with 11 or more years of experience were less likely to do so. The key findings of the research are discussed below.

1. Improvement in the quality of life of residents

Results from the surveys were inconclusive regarding the extent to which residents' quality of life improved as a result of the intervention proving to be statistically non-significant. This may be due to the way in which the original survey was modified for the purpose of this study, with some questions excluded. Nevertheless, analysis of responses showed the mean level of resident feelings based on an analysis of the changes in 'negative' resident feelings from the Quality of Life scale having a larger increase for the intervention group than for the control

Figure 1

Carers response reporting residents' negative feelings.

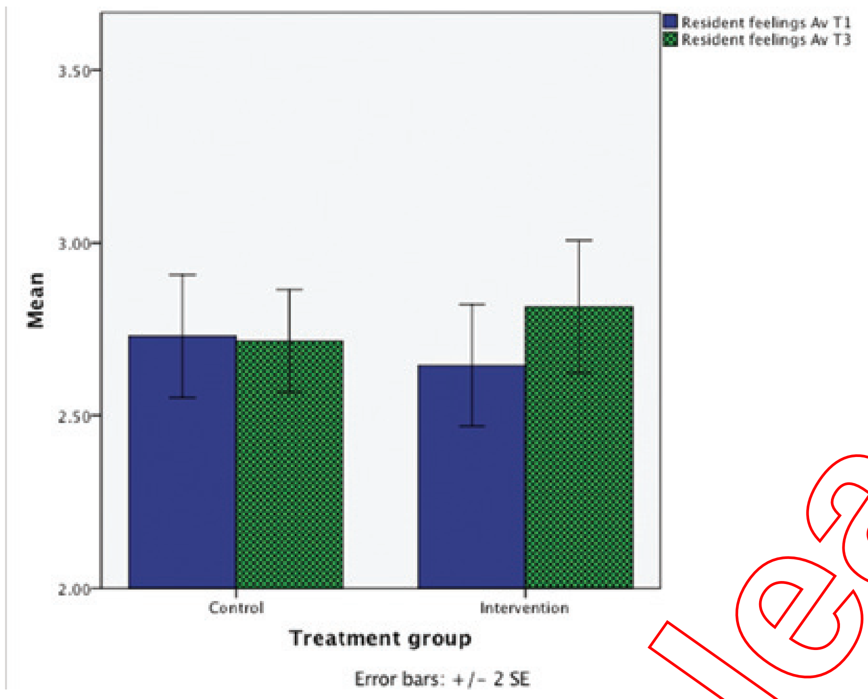
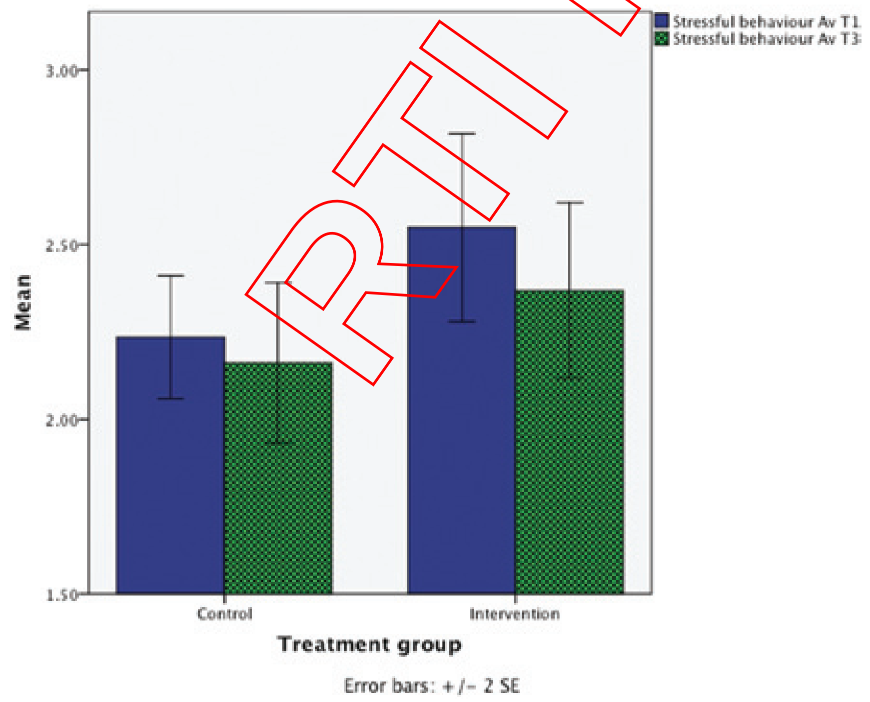


Figure 2

Carers responses on levels of stress when dealing with residents' difficult and stressful behaviours



group. This is possibly due to staff having increased awareness of resident feelings following the DEMOS team intervention and their learning experience.

Figure 1 illustrates the difference in responses between the Intervention Group and Non-intervention Group from time 1 (pre-intervention) to time 3 (post- intervention) regarding negative resident feelings.

Research has shown that staff reporting of residents' behaviour/s is often inaccurate and 'relatively insensitive to change over time'[20] and that when staff observations are reported retrospectively they are often susceptible to errors in recall.[21] It has been suggested that in order to combat errors associated with staff observations, direct observation should also be used as a measure of nursing home resident's quality of life.[21] The use of reflective journals by the DEMOS team for reporting on changes in residents behaviours helped provide more in-depth information on resident behaviour in this study. One example of a tangible way in which one residents' quality of life was improved as a result of the service is provided in a later example.

1. Improved capacity and clinical skills of staff

Improved capacity was measured using a combination of stress, knowledge and self-confidence.

a. Stress

The stress survey asked respondents to rate both the frequency and stressfulness of dealing with a range of difficult behaviours. As outlined in the Figure 2, although both Control and Intervention groups noted a reduction in stressful behaviours over the course of the study, the reduction is markedly larger for the Intervention Group. This is indicative of the service contributing both towards a reduction in difficult behaviours, and in reducing staff stress associated with such behaviours.

b. Knowledge

Improvements in level of knowledge among the Intervention Group were higher than for the Control group

Figure 3

Carers' responses to dementia knowledge

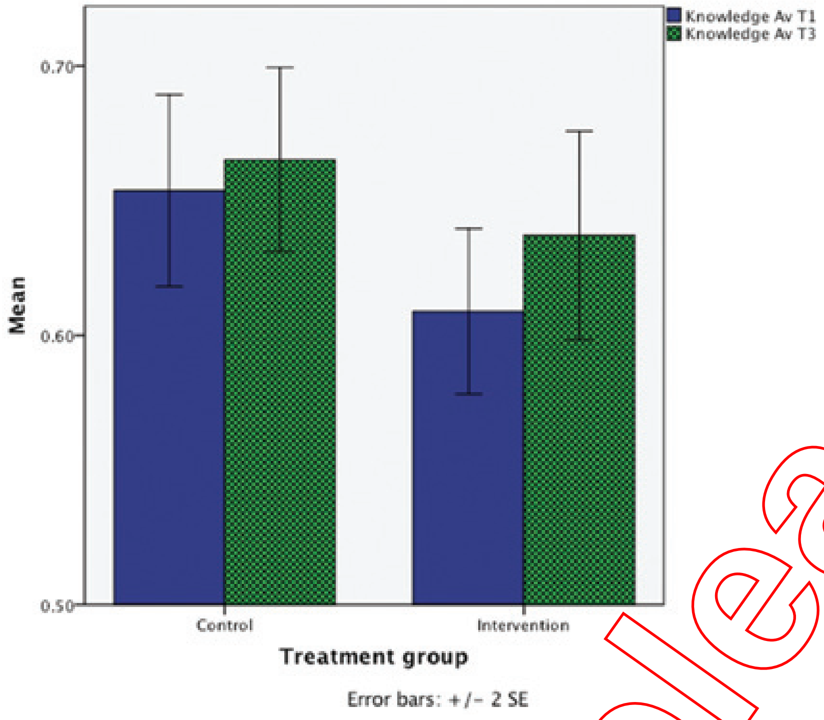
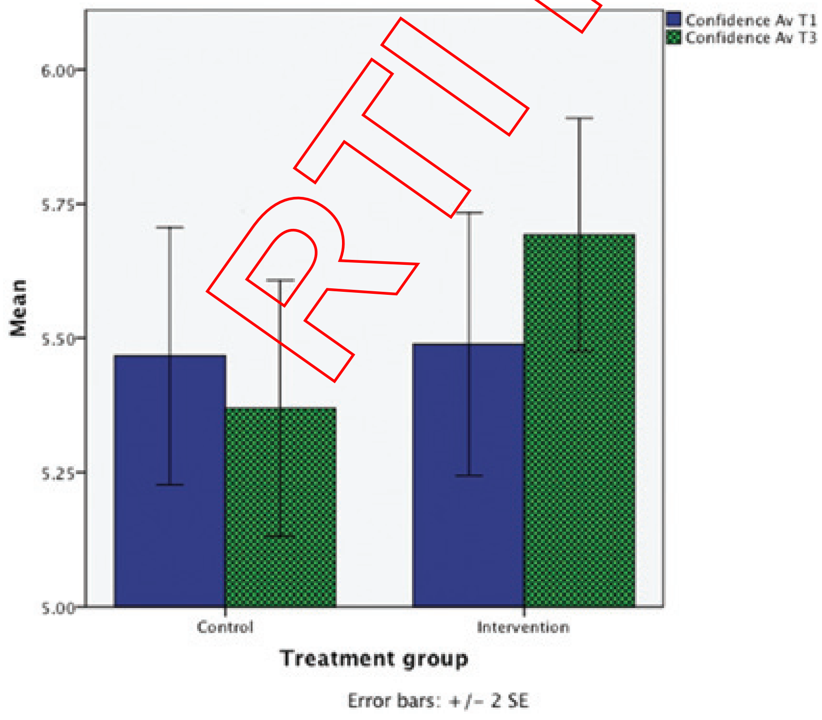


Figure 4

Carers' responses to levels of self confidence.



indicating that the service did have a positive effect on participants as shown in Figure 3. While the findings did not indicate any statistically significant changes in staff knowledge it is important to note that it is common for dementia caregiver interventions to bring about only small to moderate statistically significant outcomes.[22] In addition, research has shown that for knowledge to be applied in practice an extended length of time is required,[23] which was longer than the 3-6 months afforded in this study.

c. Self-Confidence

Results showed increased levels of confidence in the Intervention Group when managing residents with dementia as compared to carers in the non-intervention group across the same time period as shown in Figure 4. This increase was statistically significant ($P<0.05$). Such increases in the confidence of the intervention group, were consistent with their improved knowledge and indicates the positive effect of the intervention on group members.

2. Improvement in timeliness and appropriateness of referrals

Coinciding with the introduction of the DEMOS there was a sharp decline in both presentations and admissions to the Emergency Department of the main metropolitan hospital in the health district. The continued trend of low presentations and admissions over the months from March 2009 to July 2010 indicated that the DEMOS service was having a positive impact on levels of presentation and admission, due to the service circumventing possible admissions through its intervention.

3. Satisfaction with the DEMOS service

Some facilities completed satisfaction questionnaires on completion of the service. They stated they would use the DEMOS service again, and also recommend the DEMOS service to other RACFs. One RACF had already made recommendations to other facilities. The results showed that three of the facilities rated the service as 5 with the remaining three facilities rating the service as 4.25.

Overall satisfaction with the service was therefore high, with an average score of 4.625 from a possible 5 across all variables.

RACF staff responses recorded during focus groups indicated that the DEMOS service worked particularly well because the team worked on the floor with staff. This mirrors comments made by the DEMOS team themselves. One respondent commented:

> "They [DEMOS] were excellent towards my staff, they didn't intimidate anyone. They didn't make us feel as though we were stupid… They gave us nothing but compliments and the encouragement they gave us was excellent. And even the … [NP] she got down on our same level. She was absolutely so supportive. And she spent time listening to us to help us. I found they were excellent."

Additionally, respondents felt that the DEMOS team spent time getting to know the resident and the facility and working alongside staff, as highlighted in the comments below:

> "They were very helpful in the fact that they would get in and do the work and they just weren't there in an autocratic role- you know like delegating tasks- they were participating with the behaviour modification and they were coming up with suggestions some that we'd already tried, but they could observe the effects a lot longer than we could, to find out why something worked or why it didn't work. Whereas we tried it and thought 'oh well, it doesn't work, we won't try it again'. You know they could persevere for a longer period of time than we were able to. So we felt that that was beneficial."
>
> "They didn't come along all heavy and say 'oh move out of the way we're here now, we'll look after it', they wanted to belong to our team. And we wanted them to impart their knowledge to us. We recognise their ability."

Many staff stated that by integrating with the RACF staff the DEMOS team built confidence among staff to try different strategies and not feel 'stupid' if strategies didn't work. This was a key deliverable of the DEMOS service- to improve self-confidence and capacity among staff to manage behaviours. DEMOS also emphasised the need to share strategies that worked to ensure that the capacity of all staff at the facility improved:

> "I learnt if you found a strategy that worked you should tell people about it. So many people find strategies or do things that work but nobody knows about it. Now I say pass it on to other people to use ... it gives consistency to care and makes the residents and staff more comfortable."

4. Barriers to success

While the DEMOS team worked hard to engage facility staff there was reluctance from some individuals to participate. Entrenched behaviours among some staff led to a reluctance to alter routines.

Similar situations are widely reported in the literature. Research indicates that in many aged care settings problems occur due to the disruptive behaviours of staff that have become so 'entrenched in the culture – the 'kingdom they rule' they are unaware of the impact of their behaviours.[24] In 2005, a comprehensive review was undertaken of disruptive behaviours among staff in nursing homes in Queensland. The review found that 'dysfunctional behaviours including bullying, intimidation and a reluctance to share information' were frequently reported and confirmed amongst clinical staff.[25]

DISCUSSION

The results of the evaluation proved that the DEMOS service is achieving impressive successes both in terms of improved management of residents, in addition to improving the capacity and clinical skills of staff. However, it must be noted that the people behind the service are just as crucial to its success as the strategies that are modelled to the RACF staff. Many RACF staff commented that the DEMOS team themselves were excellent, and this was one of the factors leading to the success of the service. Respondents stated the service relied strongly on having a high-quality team with good knowledge and communication skills. The dedication of the team is highlighted in one team-members reflective journal where she speaks about spending her weekend researching a resident's past so she could spend time talking to him about it, copying CDs for him to listen to and buying sweets that he liked- this is clearly beyond what many people in the same position would do.

Another issue which has the potential to impact on the success of the service is the type of rapport that is built between the DEMOS team and the RACF staff who are being trained. This is highlighted in one instance where a lack of consensus between the RACF staff and the DEMOS team on how the behaviour of one resident should be managed led to some discomfort between the staff member and the team. Although the staff member could appreciate the value of the service, the usefulness of the care plans and the overall approach of the service they did not respond well to the team. This may have been due to a personality clash, or may be an example of the difficulty of new services challenging entrenched staff behaviours. The DEMOS team had to learn how to manage this type of situation.

A final issue which must be mentioned are the limitations of the study caused by attrition. From an initial sample of 320 participants at stage 1 of the project by stage 3 only 153 participants remained. This can be explained in part due to a high staff turnover. Research has indicated that high staff turnover is a problem which is not new to RACFs. Staff turnover rates have been of particular concern to RACF management over the past number of decades.[9-14] Attrition rates also had a negative impact on the analysis which was possible on survey data. While some interesting results have emerged, the small sample size meant it was not possible to conduct complex analyses to determine, for example, patterns regarding the impact of demographics on staff confidence, stress and knowledge.

CONCLUSION

This study drew on quantitative survey data and qualitative interviews to evaluate an innovative model for delivering a dementia outreach service (DEMOS) led by Queensland's first Nurse Practitioner in Dementia Care. Findings from the research reveal patterns that point to DEMOS having the ability to increase the knowledge and confidence of carers in RACFs to manage residents with BPSD. In addition DEMOS has the capacity to increase staff awareness of resident feelings and diminish levels of stress in carers faced with the aggressive behaviours associated with BPSD. Indications from the data support the idea that the service leads to reductions in aggressive and difficult behaviours in residents with BPSD, and a reduction in the number of referrals to other services, such as the Emergency Department and Older Person's Mental Health Services. Responses from both RACF management, staff and the DEMOS team indicate the service is having positive effects on improving RACF staff awareness of the various symptoms of dementia and how these are linked to residents' behaviours. This knowledge coupled with DEMOS coaching of better management skills has led to marked improvements in resident behaviour and perceived quality of life as demonstrated through case studies drawn from qualitative data. RACF management report high levels of satisfaction with the service and would use it again.

A major serendipitous finding of this study has been the realisation of the need for cultural change in many RACFs. While some facilities offer truly excellent care, it was often the case that care was approached by facility staff operating within a purely task oriented - physical needs frame of reference, objectifying the individual and having little understanding of dementia or thought to better management of BPSD through consideration of the needs of the individual themself. Person centred approaches to care were much less prevalent than institutional approaches to care. Nevertheless, through the case studies drawn from this evaluative study DEMOS has demonstrated an ability to effect positive culture change in RACFs if supported by the top layers of management within an organization. DEMOS can therefore promote itself as offering a partnership to best practice in the field. The potential for enthusiastic grassroots services like DEMOS to shape the future for health care policy and practice is excellent.

While the initial findings are promising, the research team acknowledge the need for continuous evaluation of the service. The NP leading this service is aware of the requirement to engage in continuous reflection, in order to ensure that the service evolves to meet client needs. This is in line with the requirement to engage in 'dynamic practice', as outlined in the Australian Nursing and Midwifery Council's Competency Standards.[26] Further evaluation may be required in future to ensure that the service remains viable.

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A Nurse Practitioner initiated model of service delivery in caring for people with dementia

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ABSTRACT

The increasing number of people with dementia in aged care facilities is reported to have a high burden of care among staff. The Nurse Practitioner role can be beneficial in the provision of dementia care particularly when difficult and aggressive behaviour is being displayed. The model of service described in this paper is designed in such a way to make the outreach team contribute to staff sustainability. Such a service is different to other outreach services and focuses on a number of key deliverables. In practice, the service ensures that recommendations made by the team at the initial assessment are implemented. In addition, they work with the staff in managing the resident's behaviour, train and model suggestions for practice in interventions. Evaluation of the service is a work in progress and will highlight important aspects about the workforce for the improvement of quality of life for residents with dementia.

Keywords: dementia; Nurse Practitioner; nursing staff; training

INTRODUCTION

This paper introduces a new and innovative model of service delivery for residential aged care facilities that has been referred to as the Dementia Outreach Service (DEMOS); led by the first Nurse Practitioner (NP) specialising in dementia care in Queensland, Australia. A brief background to the historical development of the NP role, both internationally and in Australia, and the benefits of this role will be provided before focusing more specifically on the role of NPs in aged care, particularly in relation to care of older people suffering from dementia. Following on from this, a description of DEMOS as a contemporary model of dementia care and how it is conceptualised, planned and implemented by a NP is provided, together with vignettes of some intervention successes by way of illustrating how the service works. This model advances the role of the NP in the provision of care to residential aged care facility (RACF) residents with dementia. The model aims to have significant impact on the workforce in RACFs, specifically for the provision of care to residents with dementia.

Research undertaken in Australia has indicated there is a high burden of care among staff in RACFs, with nursing staff consistently reporting heavy workloads (Tuckett, 2007a; Tuckett et al., 2009; Tuckett, Parker, Eley, & Hegney, 2009; Venturato, Kellett, & Windsor, 2007). For example, research conducted in Queensland indicated that influxes of older people into nursing homes are causing increased workload pressures on staff, leading to concerns about stress, pay and emotional and physical demands among staff (Eley et al., 2007). The problems caused by a lack of available staff are intensified when considering the phenomenon of an ageing population, which is being experienced in many developed nations and has important consequences for the future care of older generations. In the Australian context, population ageing is leading to a rapid increase in the number and proportion of people who have dementia (Access Economics, 2009, p. 231). Projected figures indicate that the number of people with dementia in Australia is set to rise from approximately 230,000 in 2008, to 465,000 in 2030 and to over 730,000 in 2050 (Access Economics, 2009, p. 231). This will lead to an increased care burden among residential aged care staff, with the hours of direct care required for residents with dementia set to rise dramatically over the next 40 years, specifically in relation to the care provided by staff with lower qualifications (Access Economics, 2009). It has been estimated there will be a shortage of 58,887 paid dementia care staff (full time equivalence [FTE]) by 2029 (Access Economics, 2009). The impacts of increased workloads for a workforce that is already under pressure could have serious implications.

The DEMOS discussed in this paper has evolved out of a NP marshalling the resources to design and initiate a tailored model of service to bridge the gaps identified in the provision of care to residents suffering from dementia in RACFs (particularly those who have behavioural and pyschological symptoms [BPSD]).

BACKGROUND

Historical development of the Nurse Practitioner role

A NP is defined as a registered nurse who has undergone higher education in order to become authorised and be able to function in an advanced clinical role (Queensland Health, 2003). According to a report undertaken by Queensland Health (2003), in this advanced role, the NP assesses and manages clients and where appropriate refers them to other health care professionals. In the Australian context, NPs can prescribe medications and order diagnostic investigations, although their scope of practice varies, dependent on the context in which they are authorised to practice (Australian Nursing and Midwifery Council, 2006). The role has been shaped around core values espoused by the profession and provides health care that complements other health professionals, such as the general practitioner (Gardner, Gardner, Middleton, & Della, 2009; Gardner, Hase, Gardner, Dunn, & Carryer, 2008).

As a general rule, the NP role developed out of a necessity to provide care to sectors of the community that were disadvantaged in terms of their ability to access adequate healthcare (Burman et al., 2009; Carryer, Gardner, Dunn, & Gardner, 2007; Furlong & Smith, 2005; Gardner, Carryer, Dunn, & Gardner, 2004; Horrocks, Anderson, & Salisbury, 2002) as seen in countries like Australia, US and UK (Driscoll, Stewart, Worrall-Carter, & O'Reilly, 2005; Gardner, Hase, Gardner, Dunn, & Carryer, 2008; Hegney, Plank, & Parker, 2003a) and quickly became a popular choice for health care provision as it was recognised that NPs could fulfill the need safely and efficiently (Gardner & Gardner, 2005; Kinnersley et al., 2000; Lambing, Adams, Fox, & Divine, 2004). Over time the role has expanded from its original focus on primary health care towards a much broader provision. NPs now provide care across a range of settings, including paediatrics, mental health, dermatology, palliative care, holistic care, family health and emergency care (Burman et al., 2009; Gardner, Carryer, Dunn, & Gardner, 2004).

In Australia, the NP role has been slower to develop than in the US or UK (Driscoll et al., 2005; Gardner, Carryer, Dunn, & Gardner, 2004), not appearing until the 1990s in the State of New South Wales, again initially as a response to the need to provide care to those in remote and disadvantaged areas (Driscoll et al., 2005). The pace at which the role has expanded and developed has varied between other Australian States and Territories. Generally, developments have occurred on an *ad hoc* basis to meet the unique healthcare needs of specific regions. This unsystematic development of the role can be directly attributed to the fact that individual State governments, rather than the Federal government, are in control of legislating nursing practice. Over 30 separate Acts, regulate the role across the country (Allen & Fabri, 2005; Gardner, Carryer, Dunn, & Gardner, 2004). In 2004, five of Australia's seven States and Territories introduced legislation to protect the title of NP, and to legitimate this advanced nursing role (Gardner, 2004).

Queensland has been one of the last States to formally recognise the NP as a distinct entity within the nursing workforce (Gardner, Carryer, Dunn, & Gardner, 2004; Queensland Health, 2003). The changing health needs in the Queensland community coupled with recognition of the potential for NPs to reach individuals, families and communities across a range of age groups, illnesses and geographical contexts has nevertheless cemented support for NPs in Queensland (Queensland Health, 2008). Following a pilot project in 2002–2003, recommendations were made for the regulation of the NP role (Queensland Health, 2003). While initial trials focused on acute care and care in rural and remote settings (Queensland Health, 2003), advanced nursing roles have opened up in other areas including, as can be seen here, in dementia care.

Benefits of Nurse Practitioners

As early as 1978, there has been international recognition that the NP role has a number of benefits, including having a positive effect on user satisfaction levels and outcomes, in addition to being in many cases more efficient and cost effective than other forms of care (Allen & Fabri, 2005; Department of Health and Ageing, 2007; Driscoll et al., 2005; Kane et al., 1989; Lambing et al., 2004; Mauksch, 1978). Moreover, research in Australia, has indicated that NPs can indeed improve access to care for those in disadvantaged areas or from disadvantaged backgrounds, for example those in isolated communities or those on low incomes (Queensland Health, 2003).

Research conducted overseas has also shown that NPs can provide comparable and often enhanced care to that of other health professionals. For example, a study conducted in the UK consisting of a randomised controlled trial of NPs versus GPs in the provision of care to clients requiring 'same day' consultations, found that patients treated by NPs generally reported being more satisfied with their care, with longer consultations provided by NPs. The study found that NPs gave the clients more information, which could possibly facilitate client self-care in the future if the same symptoms arose (Kinnersley et al., 2000). A systematic comparative review of the role of NPs and doctors in primary care found that in the 11 trials and 23 observational studies examined, patients were more satisfied with the care provided by the NP (Horrocks et al., 2002). Similar to findings by Kinnersley et al. (2000), in this study, NPs were shown to provide longer consultations and a slightly higher number of investigations (Horrocks et al., 2002). The review also indicated that the health status of patients cared for by GPs and NPs did not differ, and that both GPs and NPs made the same decisions regarding prescriptions, return consultations and referrals (Horrocks et al., 2002).

Findings from research into the suitability of the NP in the provision of care in various health care settings has also been positive (Burman et al., 2009; Department of Health and Ageing, 2007). For example, in a trial of NP 'Scope of Practice' Gardner and Gardner (2005) found that NPs could provide adequate care to patients across a range of healthcare settings, including acute and long-term care. The trial of practice included patients with chronic health problems in addition to those with health maintenance issues in areas such as sexual health, wound care and mental health. Feedback from patients indicated they responded very favourably to the NP service (Gardner & Gardner, 2005). In another study by Wand and Fisher (2006), the examination of the NP role in the mental health sector in Sydney indicated the role was successful in the areas of using therapeutic techniques, prescribing, care co-ordination and referral. The research showed that the NP functions best in cases where strong partnerships are forged between different disciplines and where consultation and evaluation are essential (Wand & Fisher, 2006). Similarly, various studies of the NP role in the emergency department setting in Australia have indicated that the NP is accepted and supported by medical staff and patients and that the NP can provide high quality care to patients, comparable to that provided by medical officers (Chang et al., 1999; Jennings et al., 2008; Jennings, Lee, Chao, & Keating, 2009; Wilson & Shifaza, 2008). Notwithstanding previous research, there has been limited exploration of the role in the provision of care to people with dementia, especially those residing in a RACF.

NURSE PRACTITIONERS IN DEMENTIA CARE

Dementia is an umbrella term used to describe a range of symptoms that may accompany or indicate a number of diseases or conditions that cause a decline in a person's cognitive function. Symptoms associated with dementia include loss of memory, language, rationality and normal emotional reactions (Department of Health and Ageing, 2008; Sansoni et al., 2007). The most common form of dementia is Alzheimer's disease, which accounts for between 50 and 70% of all cases. Alzheimer's disease has a prevalence of around 10% in the over 65 age group in Australia, and around 50% in those aged 85 and older (Chrzescijanski, Moyle, & Creedy, 2007). In 2006, approximately 190,000 people in Australia had dementia and the vast majority of these people were aged 75 or over (Department of Health and Ageing, 2008) and most likely require residence in aged care facilities.

Dementia residents can sometimes display aggressive behaviours and nursing staff are often at high risk from aggression (Cubit, Farrelly, Robinson, & Myhill, 2007; Goodridge, Johnston, & Thomson, 1996; Hegney, Eley, Plank, Buikstra, & Parker, 2006; Hegney, Plank, & Parker, 2003b; Rodney, 2000). At times aggressive behaviour among dementia patients is related to an undetected underlying cause that worsens when the resident is restrained as a way of managing the behaviour (Cubit et al., 2007). Aggression is also associated with behavioural and psychological symptoms of dementia (BPSD)—a term used for a diverse group of non-cognitive symptoms that are considered 'almost ubiquitous' in dementia (Access Economics, 2009, p. 129; Brodaty, Draper, & Low, 2003, p. 231). Rates of BPSD vary dependent on how symptoms are determined, the extent of severity and the setting (La Trobe University – Australian Institute for Primary Care, Applied Aged Care Solutions, University of Melbourne and Access Economics [L.A.M.A.] Consortium, 2007). For example, rates of BPSD have been estimated at 61–88% among people with dementia who are living in the community, 29–90% among Australian nursing homes residents and 95% among long-term acute care patients (Brodaty et al., 2003). Staff may become reluctant to work with aggressive residents, which can lead to a high turnover of staff. Psychological distress among staff caused by aggressive behaviours may also lead to high incidents of long-term sickness and burnout (Hegney et al., 2006). Recently, an Access Economics (2009) report commissioned by Alzheimer's Australia *Making Choices – Future*

Dementia Care: Projections, Problems and Preferences reported that:

> The management of dementia is complicated by (BPSD), such as psychosis, depression, agitation, aggression and dis-inhibition (i.e., unrestrained behaviour resulting from a lessening or loss of inhibitions or a disregard of cultural constraints). BPSD create problems for the individual, the community and the healthcare system. Individuals with BPSD have lowered functional abilities and a poorer prognosis, and are more likely to be an increased burden on caregivers and nursing-home staff with higher costs of care and earlier institutionalisation. Hospitalised patients with BPSD are more difficult to discharge, because of the difficulty of placing them elsewhere. (Access Economics, 2009, p. 129)

In managing BPSD, staff often have insufficient assessment skills and this lack of knowledge and skill means that often the resident is transferred to an acute care setting as a way of managing their behaviour. In other cases, the resident's family is simply asked to remove the person from the facility. A review of some of the earlier international literature on the role of the NP has shown some important benefits of the NP in the assessment and management of dementia in the residential aged care setting. Three of these studies are from the US and include a study by Eisch, Brozovic, Colling, and Wold (2000). In this study, the NP provides a geropsychiatric consultation service with on-site assessment and follow-up treatment for behavioural and psychiatric problems for residents in five nursing homes. The study examined the impact of the NP intervention on residents' behaviours and found there were observable improvements in the behaviours of 62% of the residents. Another study by Kane et al. (1989) investigated the impact of a Geriatric NP on the outcomes of nursing home care and found the NP had positive outcomes in a number of areas such as nursing therapies, activities of daily living (ADL) and medication management. A similar study by Garrard et al. (1990) examined the effect of an in-house Geriatric NP on outcomes for residents. Findings showed that the presence of the NP led to a reduction in admissions to hospitals compared to RACFs without a geriatric NP. Only one study from the UK on dementia residential care was identified and this reported that the NP was the preferred form of care for reasons such as speed of assessment, accessibility and quality of care (Rolfe & Phillips, 1997).

In the Australian context, more recent research into dementia care has focused on the acute setting or long-term hospitalisation as identified in studies by Borbasi, Jones, Lockwood, and Emden (2006) and Lambing et al. (2004). However, there is little work on dementia care interventions by NPs in residential aged care settings (Craig & Pham, 2006). The research that does exist, however, points to benefits of the NP role in the provision of care in the RACF setting (Arbon et al., 2009). In 2007, the Australian Government published the results of research into a pilot program of aged care NP services in which seven NPs were evaluated. The results of the research found that both residents and their families responded well to NP interventions, and that in most cases the interventions had a positive effect on the quality of care and outcomes. The research found that NPs interacted well with and helped educate staff and other stakeholders. These results called for further study into the role of aged care NP services, specifically in relation to licenced NPs who have authority to prescribe medications (Department of Health and Ageing, 2007).

Rationale for introduction of the dementia outreach service

Anecdotal evidence suggests residents in RACFs who have dementia and exhibit difficult or challenging behaviours are not well managed. Many staff simply do not have the knowledge and skills to effectively deal with their problems causing distress amongst themselves as well as residents. It is often the case the RACF will seek outside assistance to manage these instances which means increased costs. There are problems associated with finding suitable external services—for example, there tends to be a lack of focus on people with a diagnosis of dementia within consultation services provided by mental health services. Furthermore, the decline in coverage by GPs has a compounding effect.

In the context of the provision of care to older people in the primary care setting, the term 'outreach' has been defined as a service that is provided in addition to the usual care system, the goal of which is to 'identify unrecognised problems and people at increased risk and link those people to appropriate … support' (Ploeg et al., 2005, p. 1247). Outreach services/dementia liaison services such as DEMOS, which have been providing support to RACFs, have proved to be a successful model for assisting staff to manage the behaviours of their residents with dementia (Crotty et al., 2004; Draper, Meares, & Mc Intosh, 1998; Proctor et al., 1999; Seidel, Smith, Hafner, & Holme, 1992). However, most outreach services comprise of purely staff education, which is often not immediately available or sufficiently comprehensive. Research has indicated that when such programs are working well they can be successful in improving both quality of life for residents, and in improving knowledge, stress levels and emotional wellbeing for staff (Chang, Wykle, & Madigan, 2006; Chrzescijanski et al., 2007; Davison et al., 2007; Kuzu et al., 2005; Mc Callion, Toseland, Lacey, & Banks, 1999; Peterson, Berg-Weger, Mc Gillick, and Schwartz, 2002).

The DEMOS model

The DEMOS team is led by a NP specialising in dementia care, who is assisted by a clinical nurse (CN), endorsed enrolled nurse (EN), assistant-in-nursing (AIN), clinical facilitator, social worker, research assistant and administrative assistant. The model began operating in early 2009. It is an ongoing NP led DEMOS that provides specialist consultation and preceptorship to all RACFs within the Metro South Health Service District of Queensland. This area has a population of approximately 360,000 and a rapidly growing aged population. There are 33 RACFs within the alliance boundaries with approximately 2,587 beds. To date, the NP has received 106 referrals for assistance within this target group in the 7 months from April to October 2009.

In order to receive the service, the resident must have been diagnosed as having dementia or cognitive deterioration with one or more of the following criteria:

- history of absconding from/attempting to abscond from facility
- high risk of falling
- displays unmanageable aggression towards staff/visitors/co-residents
- over-sedated or chemically restrained
- will potentially be asked by facility to find alternative accommodation due to behaviour associated with dementia/cognitive deterioration, or admitted into an emergency department for behaviour management

The key deliverables of the service are to:

- improve the quality of life for residents
- reduce aggressive behaviour towards staff, carers and other residents
- reduce presentations to the Emergency Department
- reduce the number of inappropriate admissions or referrals to mental health services
- improve the medication management and management of difficult behaviours within RACFs
- avoid unnecessary transfers to emergency departments based solely on difficult behaviours
- build the capacity and clinical skills of staff in the management of clients with dementia in the residential care setting
- improve the timeliness, appropriateness and continuity of care between and within different services in the district.

The DEMOS service differs from other outreach service models in two main ways. Firstly, the DEMOS team works in the RACF over an extended period, providing ongoing training to staff while observing the residents' behaviours in order to make accurate assessments of what triggers behaviours of concern (e.g., aggressive behaviour or calling out). The DEMOS team can dedicate more time to individual residents as they are not counted as 'on the floor' staff. Secondly, the team 'practises' or models the new interventions with residents over the period of time they are in the RACF, demonstrating the interventions to the RACF staff who can then see the effectiveness of these interventions for the residents. In the past, anecdotal evidence has suggested that interventions often do not work as RACF staff often fail to understand the reasons for changes in practice and how to appropriately implement the change. By improving the understanding of RACF staff about BPSD and showing them that nursing interventions do work, these staff are more encouraged to persist with the interventions once the DEMOS team have withdrawn from the facility. The NP's experience has been that other outreach services historically have tended to enter a facility with the aim of only 'fixing' the problem (often while the RACF staff are involved in other routine work). The outreach team then leave with the potential for staff in the facility having little understanding of how to manage the resident's behaviour once the team are no longer there. Often the team will leave behind educational literature, but staff may not have time to read it or understand how to apply it to practice. The DEMOS model differs from other outreach services because it has been designed in such a way as to make the team's contribution to staff development sustainable by actively building staff capacity. Using the DEMOS approach, it is also envisaged that the RACF carers directly involved in the DEMOS team intervention will share their newly found knowledge and skills with other carers in the organisation, spreading good practice. Ultimately, these interventions should lead to a reduction in the number of hours/amount of care residents require and a reduction in the need to recall the DEMOS team. This service is currently being evaluated to this effect.

DEMOS in practice

The DEMOS Model is conducted in two phases. Initially, following a referral from a GP or the RACF, the NP visits the facility and comprehensively assesses the resident. The NP then makes recommendations based on her assessment and then may refer the resident to another health care service (Phase 1). In cases where the NP determines that the RACF staff are unable to manage the resident's behaviour and/or that the resident or others are at risk from the behaviours, she calls in the DEMOS team (Phase 2). The task of the team is twofold: firstly, to ensure that the recommendations made by the NP, following the initial assessment, are implemented, and secondly to work with the RACF staff to help them manage the behaviours of the client. Staff are trained on how to manage the difficult behaviours through the DEMOS team modelling suggestions for practical interventions that can be implemented with residents after the team have withdrawn. The service is specifically designed so that the RACF staff are involved in the management solution/s. In order to achieve this, the DEMOS team coach the RACF staff until they are sure the staff will be able to manage once the team withdraws. The DEMOS team hands-on interventions are generally conducted over a 2–3 week period. Initially, the team will work consistently in the RACF for 4–6 hours, 5 days a week, reporting back to the NP in a continuous cycle of assessment, planning, intervention and evaluation. Towards the end of the intervention cycle, the time spent in the RACF is generally scaled back as the team begins to withdraw, from which time they generally only enter the RACF every second day. This model of service allows RACF staff to implement the interventions independently of the DEMOS team, while also having the opportunity to call on the team should any issues arise. The quotations provided in Case Study 1 below come from excerpts of interviews conducted with the DEMOS team.

Case study 1: Behaviour management intervention

In one instance, the DEMOS team were referred to manage the aggressive behaviour of a resident whom they observed to be placed for long periods in a high backed chair. Because of the position of the resident in his chair, the team observed the necessity for staff to feed him his meals.

> I guess the other issues were that with him being in that chair, back in that position, it was impacting on so much – it was probably causing him back pain because he was in a strange position and also it was impacting on him being able to feed himself – making him physically aggressive because he was in pain.

DEMOS intervened by moving the resident to a lower more comfortable chair and providing him with a table. The team stated he was immediately more content:

> … his whole face changed. … It went from a pained look when he was on the high backed chair to just … relief. He started having eye contact with us and gave us a bit of cheek every now and then … he was so much happier.

The impact on the quality of life of the resident, and the reduced work load on the RACF staff were immediately apparent:

> We sat him in a more comfortable chair; put a table in front of him. You could tell from his feet … he was tapping his feet on the floor, he was feeding himself, and then once lunchtime or breakfast was finished we put activities in front of him – like blocks, different things … the change was amazing.

The hands-on DEMOS team that provide training to the RACF staff are usually at a similar level of nursing—i.e., they are either qualified as an EN or AIN. This means, in the words of one of the team members, they are capable of 'relating to them [RACF staff]' and 'actually hearing their problems'. This is a key feature of the DEMOS service—a one-on-one approach where the advice and mentoring is done on a client and facility specific basis. The following case study highlights again the approach utilised by the DEMOS team.

Case Study 2: Managing resistive behaviour

When conducting an initial assessment the DEMOS team discovered that staff were attempting activities of daily living (ADLs) with a resident before he had received his analgesic medication, meaning that the resident was being instructed to move his body while in all probability, he was suffering from pain. This factor alone may have led to his outbursts of aggressive behaviour both before and during the time he was being showered. The team implemented a new care plan where:

1. the resident would receive medication before ADLs
2. the resident would receive a sponge bath if aggressive behaviours occurred when showering
3. less restraint would be used when showering the resident

The DEMOS team showed staff how to implement the new strategies 'without offending them [RACF staff] or making out we knew more and were somehow superior'. The intervention led to a reduction in aggressive behaviours by the resident. The DEMOS team, speaking about the staff stated: 'they were surprised … they were actually shocked at how much his [the resident's] behaviour changed'.

Unlike existing dementia education services, the NP and DEMOS team is able to implement medication changes, and look at the 'whole picture', including the person's health profile, rather than solely at environmental and lifestyle factors. In the words of the NP leading the service, the philosophy underpinning the DEMOS intervention is to use 'minimal medication with maximal nursing interventions'. In many cases, the NP's initial recommendations are for a reduction/change in medications, as incorrect medication management can often exacerbate difficult or unmanageable behaviours. The benefit of the team going in post assessment is that they can ensure changes to medications recommended by the NP are being implemented. The NP observed:

> … because I ring and I say 'these are what I think needs to be done' and then [the DEMOS team] do a follow up to say for example, 'has the resident started on that pain relief?' They are monitoring what's happening with that as well to see if behaviour/s have actually improved with the interventions I've recommended. And then they work with the staff to do some routine nursing interventions. (NP)

Case study 3: Determining and managing triggers

In one instance, the NP suggested anti-depressant medications for a resident who was highly disruptive. In her initial assessment of the resident, the NP also advised his medications should be crushed. When the DEMOS team entered the facility, they observed the resident still receiving medications that were whole and in that event was refusing them. In cases like this, the DEMOS team seek to reinforce the benefits of implementing the NPs suggestions and will sensitively raise issue/s with key staff and if necessary, provide educational sessions. When this particular resident started to receive the medications crushed – and could therefore swallow them – his BPSD improved significantly.

DEMOS evaluation

At the time of writing this paper, the DEMOS service has conducted a total of seven team interventions in six facilities. The service is currently in the early stages of a longitudinal evaluation being conducted in conjunction with local university staff. The aim of the evaluation is to assess the extent to which DEMOS succeeds in achieving its key deliverables. Following the evaluation, the research team will provide advice on possible improvements to the service and ultimately make recommendations on the feasibility of expanding the service should it prove successful. Evaluation is seen as key to the sustainability of the service as so many services in the past have lost funding because they have been unable to produce sufficiently rigorous evidence of their sustainability. At the same time, the NP leading this service and her team engage in continuous reflection, in line with the requirement for 'dynamic practice', as outlined in the Australian Nursing and Midwifery Council's Competency Standards (Australian Nursing and Midwifery Council 2006), thus ensuring that the service is constantly evolving to meet the clients' needs.

Feedback from RACF management about the DEMOS team interventions to date is positive. Initial responses to a satisfaction questionnaire completed by staff from the first five facilities indicated satisfaction levels were high, with all responses indicating they were 'very satisfied' with the overall quality of the service. All of the facilities stated they would use DEMOS again and be willing to recommend the service to other facilities. The NP is in the process of developing user friendly care plans for best practice management of specific behaviours. DEMOS also provides resources to RACFs on issues common to the management of residents with BPSD. It is important to state too that the DEMOS team see instances of extremely good care for the residents to whom they are referred and are able to validate that care to staff giving them the confidence to continue the strategies they are trialling.

CONCLUSION

Dementia Outreach Service is a novel model of service delivery which is funded by Queensland Health and was specifically designed by an NP to address perceived gaps in the system. The service is a good example of the advances that can be achieved by experts who are leaders of change. If successful this model will advance contemporary nursing and may, as shown in previous research (Crotty et al., 2004; Draper et al., 1998), impact significantly on the RACF workforce, including reducing the workload of staff, improving the knowledge and skills of staff while at the same time reducing stress and burnout. Initial feedback from RACFs involved in the evaluation study indicates the service is highly successful, and in addition to improving the capacity and clinical skills of staff in managing behaviours of residents with dementia, is leading to improvements in the quality of life of residents. The results of the DEMOS evaluation project will provide data about whether the service is proving its worth and will make recommendations about the potential for such a model to be replicated.

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