

A multi-organisation aged care emergency service for acute care management of older residents in aged care facilities

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Abstract. This case study describes a multi-organisation aged care emergency (ACE) service. The service was designed to enable point-of-care assessment and management for older people in residential aged care facilities (RACFs). Design of the ACE service involved consultation and engagement of multiple key stakeholders. The ACE service was implemented in a large geographical region of a single Medicare Local (ML) in New South Wales, Australia. The service was developed over several phases. A case control pilot evaluation of one emergency department (ED) and four RACFs revealed a 16% reduction in presentations to the ED as well as reductions in admission to the hospital following ED presentation. Following initial pilot work, the ACE service transitioned across another five EDs and 85 RACFs in the local health district. The service has now been implemented in a further 10 sites (six metropolitan and four rural EDs) across New South Wales. Ongoing evaluation of the implementation continues to show positive outcomes. The ACE service offers a model shown to reduce ED presentations and admissions from RACFs, and provide quality care with a focus on the needs of the older person.

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Introduction

This case study describes a multi-organisation aged care emergency (ACE) service designed to enable point-of-care assessment and management for older people in aged care facilities. The objectives of the ACE service were to: (1) enhance and support the ability of staff in residential aged care facilities (RACFs) to meet residents' acute care needs within the facility; (2) determine residents' goals for care; (3) reduce the need for residents to be transferred to an emergency department (ED); and (4) where an ED presentation was required, provide proactive management of the older person and associated sequelae.

Methods

Setting and participants

The ACE service was implemented in the large geographical region of a single Medicare Local (ML) in New South Wales

(NSW), Australia. Design of the service involved consultation and engagement of multiple key stakeholders, including the ML, six EDs within the local health district (LHD) aligned to the ML's service boundaries, general practitioners (GPs) and practice staff of general practices, NSW Ambulance staff and the management and clinical staff of 85 RACFs. Several older people in RACFs and their families were also consulted about the development of the model and its evaluation.

Methodology and sequence of events

The ACE service was developed over several phases. In 2009, an analysis of presentations to the largest ED in the region revealed a high number of presentations from four RACFs. There were 453 beds at these four RACFs. The analysis found there were 571 ED presentations by 314 residents. In 2010, focus group (FG) interviews were held with RACF staff (10 Registered Nurses (RNs), six Enrolled Nurses, 15 Assistants in Nursing and 10 GPs)

in order to gauge the needs of stakeholders and to better understand the nuances of management of acute care needs of residents. Analysis of the FGs and ED presentation data revealed several presentations could have been avoided with enhanced acute care management in RACFs.¹ A prototype of the ACE service was developed during 2010–11 in consultation with RACF stakeholders and GPs. As a result, the ACE service was commenced in a single ED in partnership with four local RACFs.

The prototype ACE service included a dedicated ACE clinical nurse consultant (CNC) who coordinated the ACE service, providing telephone triage support between 0800 and 2000 hours Monday–Sunday (supported by ED RNs out of hours). Evidenced-based guidelines were developed and staff education provided to the four study RACFs. The ACE CNC also ensured coordination of resident care upon presentation to the ED when required. A case-control design evaluation of the ACE service model revealed a 16% reduction in presentations to the ED, as well as reductions in admission to the hospital following ED presentation.² Stakeholder satisfaction with the service was high and there were no adverse events or complaints. The evaluation highlighted the need for the ACE service to be implemented in other EDs and RACFs in the region. Recommendations from the evaluation included the need to transition the ACE service from the ED to primary and community care settings, such as general practices and GP after-hours services, in order to better integrate the ACE service and other elements of the healthcare system. Transitioning the service to involve another five EDs and 85 RACFs in the LHD, NSW Ambulance and primary and community care providers within the ML region required elements of the original ED-only model to be articulated and expanded.

Seven key elements of the ACE model

The current model is based on the shared commitment of each stakeholder to resident and/or patient benefit and incorporates the following seven key elements in implementation.

- (1) The ACE manual. RACF staff are supported with a suite of evidence-based resources available in hardcopy and online. This manual supports clinical decision making for common acute-onset events experienced by residents. The resources contain algorithms that identify actions that can be taken by health care workers through to RNs in RACFs. The algorithms also include actions that guide the GP or medical officer based in an ED and reinforce that all staff are working to, and are guided by, a consistent framework. Consistent with the need to include the wishes of the older person and their families, advanced care plans (ACP) and advanced care directives (ACD) have been incorporated into the ACE manual.
- (2) One point-of-contact telephone consultation. This is available at least 23 h per day, 7 days a week, for RACF staff to access clinical guidance and support as needed. The ACE service advice is provided by ED staff during business hours and the ML After Hours Patient Streaming Service call centre out of hours. All advice and support is provided by RNs with telephone triage training and using the ACE manual. GPs and ED medical staff are available for support.
- (3) Education about core aspects of the service, including enhanced clinical decision making aligned to each resident's goals of care, clinical handover and recognition of the deteriorating patient.
- (4) Making explicit each resident's goals of care. Goals of care are established before the patient's transfer to the ED and focus on the care that is required in the ED transfer as well as ACDs. The aims of the goals of care is to ensure that the RACF residents receive care that is consistent with their personal goals and values, and those of their family. Care can be provided at home in the RACF or on transfer to hospital.
- (5) Proactive case management within the ED according to the established goals of care.
- (6) Coordination of change management, to implement and support all the elements, by the ACE CNC in partnership with an emergency physician.
- (7) Ongoing maintenance of collaborative relationships with RACFs, GPs, ML, NSW Ambulance and the LHDs through regular interagency meetings.

In addition, acknowledgement of the varying stakeholders' organisational funding structures, reporting and business rules is essential for this service to function. There is a mixed funding model. Costs for release of staff for training, in-house training and provision of the service within the RACF are borne by the RACFs. Support from the ED staff and the leadership available through the emergency physician and the local Patient Flow Unit is borne by the LHD.

The ML provided funding for the ACE CNC role, training resources and provision of training. The ML determined priorities for the roll out of the service based on a comprehensive needs assessment conducted in 2012.

Results

The ACE service was initiated and led by an ED nurse and staff specialist of one large tertiary referral hospital and is now a multi-organisational, regional and collaborative service. Preliminary evaluation data reports: (1) 323 calls to the service during 2013, resulting in 64% of residents being managed in RACFs; (2) RACF staff report feeling supported, skilled, equipped and empowered to care for their residents knowing an RN experienced in acute care is available for guidance via the telephone; (3) GPs report systematic management of residents in aged care as a result of improved communication between RACFs, EDs and GPs; (4) staff in EDs and RACFs have clear expectations for transfer and management of older residents and, by clarifying the patient's goals of care, many presentations of older residents have been avoided, many older patients return to the RACF and fewer older people are admitted to hospital; (5) the LHD, ML, NSW Ambulance and the RACFs have developed an enhanced understanding of the strengths and challenges of managing the care of this vulnerable group, either by providing care in the ED or in the aged care facility, and this has led to further cooperative initiatives; (6) there has been overwhelming positive feedback from the education sessions, with the staff of the RACFs appreciating the importance of effective communication skills, especially during telephone triage and handover instead of face-to-face communication; and (7) RACF staff have reported that discussion about the goals of care with the resident and their

family is valued and that it is a non-threatening approach to planning care for the resident.

Challenges and solutions

Key challenges in the development of the ACE service included the need to educate and increase confidence in RACF staff who respond to acute health events; embed a standardised approach to clinical handover that acknowledged the resident's wishes and/or goals of care; ensure effective communication about the ACE service; and, with dissemination of the ACE service model, ensure the service continued to operate in ways that met stakeholder expectations.

Increasing confidence of RACF staff

As part of the ACE service, all RACF staff, including health care assistants, have access to an RN with acute care knowledge and skills whenever they need support, particularly when deciding whether a resident needs transfer to hospital. In addition, RACF staff are supported with a suite of evidence-based resources, the ACE manual, which supports their practice and clinical decision making.

Extended after-hours support for the ACE service line was implemented following consultation with the RACFs. Since late 2013, calls from the ACE support line are diverted to the ML call centre after hours to enable extended ACE support for the RACFs. RACF home visits can also be arranged.

Clinical handover communication

Feedback from GPs and ED staff highlighted that there was variation in the quality of clinical handover when RACFs were escalating a deteriorating patient and that there was a lack of clarity in articulating the required goals of care for the residents.¹

To ensure a consistent approach to clinical handover, a 2-day education program was developed and implemented using 'train the trainer' methodology. The interactive program includes an overview of the ACE service, use of the ACE manual, communication and telephone skills, a protocol for clinical handover, recognition of unexpected deterioration in the older patient, clinical guidelines and algorithms, identifying goals of care and the processes required for accessing the NSW Ambulance service and transfer to the ED. Workshops included managers, nurses and carers from the RACFs, EDs and the local GP After Hours Patient Streaming Service.

Dissemination and communication about the ACE service and available resources

Multiple strategies have been used, including: (1) an electronic newsletter to GPs, RACFs and other stakeholders that is linked to the existing ML newsletters; (2) interagency meetings; (3) presentations at regional, state and national levels; (4) presentations to ML, GP practice nurse forums, LHD network and stream meetings, as well as meetings of local ED managers; (5) partnering of each of the 73 RACFs with their own 'home' ED and call centre staff, enhancing supportive and trusting relationships;

(6) consultation with relevant medical specialists and CNCs in the LHD and GPs from the ML as an important part of manual development and review, further supporting collaboration and shared responsibility; and (7) online resources linked to the local HealthPathways program for GP referrals (http://www.hnehealth.nsw.gov.au/innovation_support/programs_for_20102011/health_pathways, accessed 30 December 2014) to ensure care pathways are consistent.

Transferability and future scope

In 2012 there were a further 10 pilot sites (six metropolitan and four rural EDs) in other LHDs across NSW. Their individual reports sit on the Emergency Care Institute website (<http://www.ecinw.com.au/ace>, accessed 30 December 2014). A generic ACE website has been developed with resources including the ACE manual (see <http://www.ecinw.com.au/ace>, accessed 30 December 2014).

The service has been approached with multiple requests from other MLs and LHDs across Australia to share aspects of the model and outcomes. The provision of support for RACF staff is being seen as an important role for ED staff and other providers. The ML is now working with groups of practice nurses to develop their role in the process. An understanding is developing that all stakeholders have a role to play in ensuring that the service achieves its aims of managing vulnerable patients with complex needs in the most appropriate setting. Benefits to all stakeholders in the system are apparent.

Looking to the future, community nursing, disability services, chronic disease care coordinators and palliative care services are interested in the applicability to older people living at home. Telehealth is a logical partner for the ACE service. The technology is being piloted with an RACF and the LHD. NSW Ambulance, in partnership with the ACE service, aims to better utilise extended care paramedics to support the management of RACF residents and to transport patients to hospital in a timely manner when this is required. This will guide the model for smaller rural hospitals and services where medical staff are not always located in the hospital. Maintenance and further development of the ACE service model presents the opportunity to continue to reduce ED presentations and admissions from RACFs, and provide quality care with a focus on the needs of the older person.

Competing interests

None declared.

References

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