



Acute Care of the Elderly (ACE)

NSW Department of Health

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Executive Summary

The population is ageing and older people represent a significant and increasing proportion of Emergency Department and hospital patients.

They often present with complex health issues or illnesses that underly chronic disease. In hospital, older patients have higher rates of adverse events and are more likely to become deconditioned.

Prolonging an older person's stay in hospital must be avoided at all costs. To improve the journey for older people, models of care that avoid deconditioning and promote functioning need to be systematically established.

In early 2002, Hornsby Ku-ring-gai Hospital had 70% of bed days occupied by people over the age of 70 years. The hospital had a high level of people waiting in the Emergency Department for more than eight hours and high occupancy rates in the Acute Medical and Surgical Wards.

This model of care is based on Hornsby Ku-ring-gai Health Service's Acute Care of the Elderly (ACE) Model of Care that was developed to address the above issues.

This model embraces the philosophy of 'total quality management'. Consideration must be given to the entire patient journey from admission, through the hospital stay and the discharge to appropriate community resources.

ACE is a shared care model between physicians, geriatricians and their teams. It integrates comprehensive geriatric assessment into the optimal medical and nursing care of patients in a multidisciplinary environment.

Under ACE the physical, chronic, psychological and other special conditions of the patients are managed by a multidisciplinary team. The team focuses on:

- providing the right care at the right place at the right time
- patient function
- patient safety.

As older patients recover medically before they recover functionality ACE requires a change of emphasis in care. The emphasis is on maintaining a patient's level of independent functioning, muscle strength and independence while in hospital to help them to return home quickly. Discharge planning, including liaison and referral with general practitioners and other community support services, occurs soon after admission.

Initial ACE evaluation results have shown the model can deliver a reduction in length of stay and readmissions of DRGS for Congestive Cardiac Failure and Chronic Obstructive Airways Disease. Other ACE outcomes included improved discharge planning, reduction in iatrogenic complications, increased patient and staff satisfaction as well as overall hospital reductions in both access block and occupancy rates.

The *ACE Model of Care* can help to meet the special requirements of the health system's most frequent users, the elderly. It can improve their journey when admitted to hospital and their overall health and well being.

Lorna's Story Prior to ACE

Lorna's Story

Lorna's Story

Lorna is 84 and lives alone in a unit. Lorna's only family is a niece who lives in Melbourne and visits her Aunt twice a year.

Lorna arrives at a hospital Emergency Department by ambulance with increasing shortness of breath, tiredness and swollen ankles.

This is her story.

This is based on a true story, only names have been changed.

Everyone in the Emergency Department seemed busy and rushed. It was terrible, not being able to breathe properly. Thankfully within minutes of arriving someone had put a mask on my mouth, and it was easier to breathe.

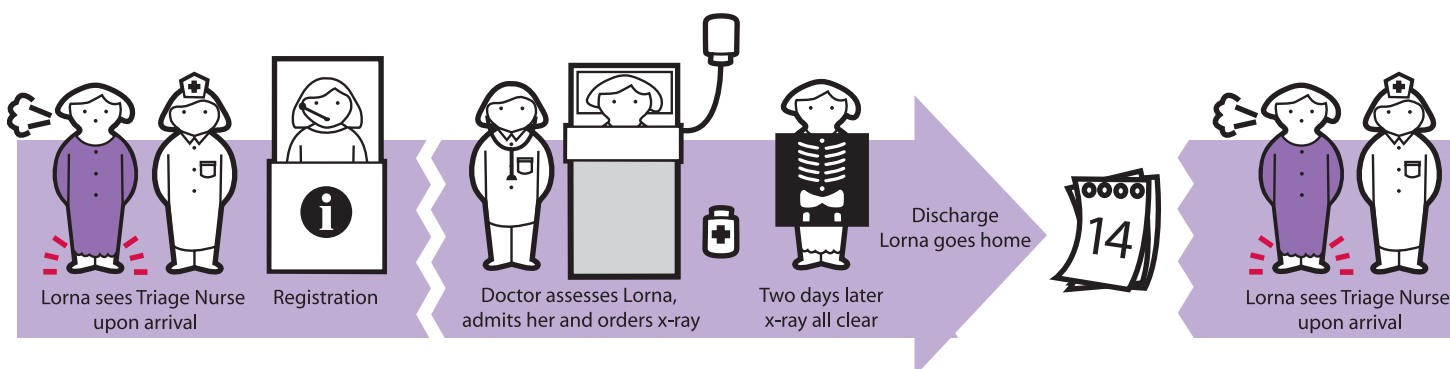
I sat for a long time on an uncomfortable trolley with my feet dangling over the edge. I couldn't understand why I couldn't sit in a chair with my feet up. That would have been much more comfortable. At one stage, a nurse rushed in and told me to lie down. Before I could answer, she had left again. I wanted to tell her that it felt harder to breathe lying down and the mattress was so thin I could feel the wire underneath.

A nurse eventually arrived and I told her about myself. I have a heart condition. My GP tells me that I have high blood pressure but "it isn't too bad". I told her about the medicines I take and that I have been taking them for a long time.

A doctor came to see me but I don't remember what she said. I was just tired and wanted to put my feet up. A man arrived with a wheelchair and I was taken up to a bed in the hospital.

Lorna appears unwell and confused in the Emergency Department. Once the diagnosis of heart failure is made, Lorna is admitted and treatment has a rapid impact. Within two days her chest is clearer, the swelling in her ankles declines and she is discharged home.

Two weeks later Lorna is back in the Emergency Department with exactly the same symptoms.



What's wrong with this story

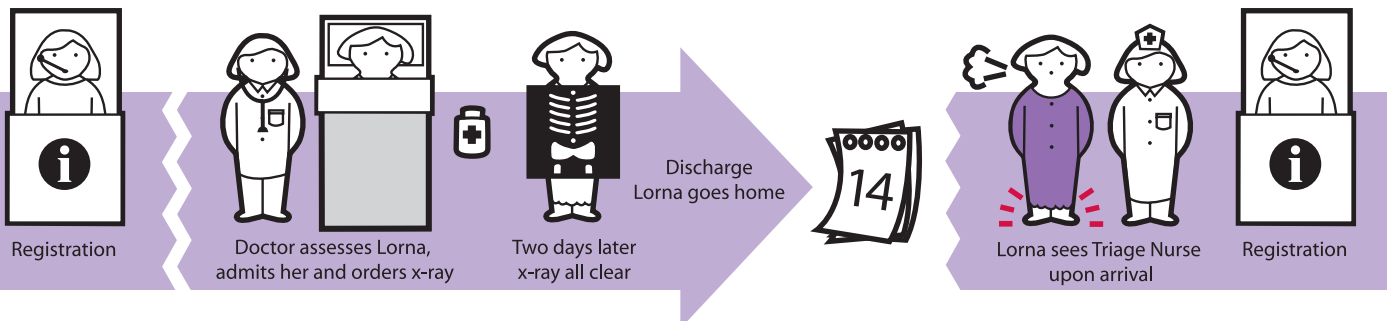
- Lorna waits a long time for someone to attend to her.
- No one introduces themselves to Lorna or asks her if she needs anything.
- Lorna isn't told what's happening to her and why, how long she has to wait, why she is being admitted to hospital, what she can expect to happen or when she might be able to go home.
- Lorna's medication is not reviewed while she is in hospital.
- Lorna's presenting illness is treated rapidly in hospital and she gets well, but the underlying cause of her illness is not established.
- Discharge planning is poor and occurs at the end of her stay in hospital.
- There is no referral to her GP for ongoing management of her illness.
- She is not referred to other community services.
- Her subsequent presentation is 100% avoidable.

Lorna's journey could have been much better.

She is treated for the illness she presents with at the Emergency Department and recovers quickly.

Her underlying illnesses are not treated and she is not referred to appropriate community support services.

As a result, she is back in hospital two weeks later. Lorna's return to hospital could have been avoided.



Background to the Model

The population is ageing and older people represent a significant and increasing proportion of Emergency Department patients.

They present with complex health issues or illnesses that underly chronic disease. These are difficult to diagnose and treat in an Emergency Department.

In hospital, older patients have higher rates of adverse events and are more likely to become deconditioned. Older patients recover medically before they recover functionality.

Prolonging an older person's length of stay must be avoided at all costs. Models of care that avoid deconditioning and promote functioning need to be systematically established.

Impacts of an Ageing Population

Consistent with worldwide trends the NSW population is ageing. Population projections for NSW (Australian Bureau of Statistics, 2005) indicate that:

- between 2002-2011, there will be a 22% increase in people aged 65 years and over
- between 2002-2021, there will be a 65% increase in people aged 65 years and over.

By 2011, people over 65 years are expected to account for 52% of all bed days (NSW Health, 2004).

Advancing age is associated with increasing rates of chronic disease and complex medical and care issues requiring innovative models of care. Reduced mortality rates have resulted in a significant number of people living with chronic illnesses that have the potential to require repeated hospital admissions for episodic care (Williams, 2004).

In 2004/05, people aged 65 years and over accounted for 19% of all NSW Emergency Department presentations. Once an elderly person presents at an Emergency Department they are more likely to experience access block. That is, they wait in an Emergency Department for more than eight hours for a hospital bed.

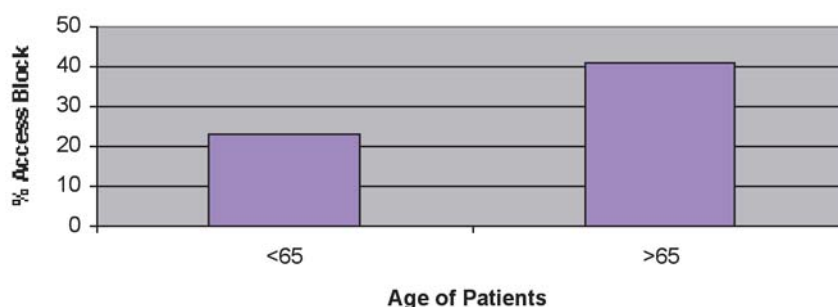
As Graph 1 below shows, in NSW, 41% of patients aged 65 years and over admitted to a ward or Intensive Care Unit experienced access block in the Emergency Department compared with 23% for people aged less than 65 years.

The NSW data is consistent with international experience. In England, people aged 65 years and over account for 18% of all Emergency Department presentations (Downing and Wilson, 2005) with the highest attendance rates for those aged over 80 years of age. Similar trends have been noted in the United States with the elderly accounting for the majority of the 26% increase between 1993 and 2003 in Emergency Department presentations (Roszak, 2005).

Elderly people coming to Emergency Departments have complex presentations. Roszak (2005) notes that there is an increased likelihood of co-morbidity and thus complexity with ageing that requires additional time in the Emergency Department to diagnose and treat.

Time is required to comprehensively assess the older person whose reason for presentation may mask underlying chronic disease processes. Emergency Departments are busy and noisy environments that may further disorientate

Graph 1: NSW Emergency Department Access Block by Age



Source: NSW Emergency Department Information System (EDIS) and Admitted Patient Data Collection (Year to Date March 2005).

and confuse elderly people. This in turn reduces their ability to fully disclose their medical history. Knowledge of the elderly person's functional status during the months preceding the Emergency Department presentation can greatly assist in determining the nature of the illness as either an acute event or as the end result of a gradual decline.

Once hospitalised, older people have higher rates of adverse events (falls, medication errors, infections) and are more likely to become deconditioned (Palmer et al., 1998). It has been estimated that each day spent in bed results in a 5% decrease in muscle mass. For example, the loss incurred with 10 days bed rest requires four months to restore (Creditor, 1993). For elderly people, unnecessarily extended bed rest can reduce the likelihood of being discharged from hospital with pre-morbid functioning. Table 1, on the next page, shows the interaction of hospitalisation and elderly people.

Prolonging an elderly patient's length of stay in hospital must be avoided at all costs. It is acknowledged that elderly patients recover medically before they recover functionality. Palmer et al. (1998) have conceptualised the functional decline in the elderly patient as they journey through the hospital system in Figure 1 below.

Models of care for elderly patients that avoid deconditioning and promote function are not systematically established within hospitals. Furthermore, Redelmeier et al. (1998) assert that when a person with a chronic illness is treated in a disease-specific model of care, unrelated diseases are more likely to be left untreated. This increases the likelihood of repeated Emergency Department presentations for elderly people.

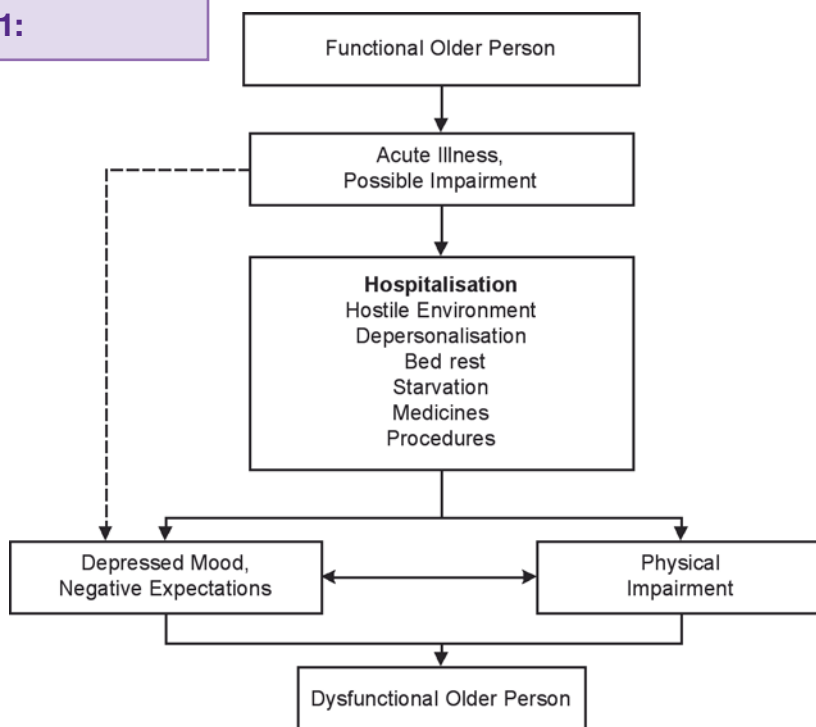
Facts

Older people account for around 20% of all NSW Emergency Department presentations.

By 2011 there will be 22% more people aged 65 years or more than there were in 2002. They are expected to then account for 52% of all hospital bed days.

Each day an older person spends in a hospital bed results in a 5% decrease in muscle mass. The loss incurred with 10 days bed rest takes four months to restore.

Figure 1:



Source: Palmer et al., 1998

Hospitalisation has a significant impact on elderly people.

Impacts can include deconditioning, falls, infections, fractures, incontinence, pressure sores and family rejection.

Table 1: Interaction of Ageing and Hospitalisation

Changes with Usual Ageing	Contribution of Hospitalisation	Potential Primary Effects	Potential Secondary Consequences
Reduced muscle strength and aerobic capacity	Immobilisation, high bed and rails	Deconditioning, fall	Dependency
Vasomotor stability	Reduced plasma volume	Syncope, dizziness	Fall, fracture
Baroreceptor insensitivity and reduced total body water	Inaccessibility of fluids		
Reduced bone density	Accelerated bone loss	Increased fracture risk	Fracture
Reduced ventilation	Increased closing volume	Reduce PO ₂	Syncope, delirium
Reduced sensory continence	Isolation, lost glasses, lost hearing aid, sensory deprivation	Delirium	False labelling, physical restraint, chemical restraint
Altered thirst, taste, smell and dentition	Barriers, tethers, therapeutic diets	Dehydration, malnutrition	Reduced plasma volume, tube feeding
Fragile skin	Immobilisation, shearing forces	Pressure sore	Infection
Tendency to urinary incontinence	Barriers, tethers	Functional incontinence	Catheter, family rejection

Source: Creditor, M.C., 1993.

Hornsby Ku-ring-gai Health Service

In the 2000 Census, Hornsby and Ku-ring-gai local government areas were identified as having the highest proportion of people over 90 years of age in Australia. In 2002, Hornsby Ku-ring-gai Health Service (HKHS) provided services to an ageing population with 70% of bed days occupied by people over the age of 70 years.

Patients over the age of 65 years have special needs that are not always recognised in the mainstream hospital system. Before implementation of the Acute Care of the Elderly (ACE) project at HKHS, the special needs of elderly patients were not always recognised and patient journeys were often unnecessarily prolonged.

In September 2001, the HKHS Care Process Working Party Review had identified significant organisational and clinical imperatives for change. There was significant frustration with the high levels of access block and the winter peak patient load.

In the Emergency Department, elderly people were seen as a lower priority for intervention. This often led to lengthy waits to access medical specialists that in turn resulted in delays in comprehensive assessment, diagnosis and treatment.

In the hospital ward, there was often fragmented care resulting from poor communication and working relationships between medical, nursing and allied health professionals. There were also high rates of adverse events such as falls, pressure sores and medication errors. These in turn led to loss of functionality and extended bed stays for elderly people.

At the time of discharge from hospital into the community, there was often poor communication and care planning between medical, nursing, allied health and community health professionals. This meant that elderly people were often discharged without the appropriate supports leading to repeated presentations at the Emergency Department.

Hornsby Ku-ring-gai Health Service has successfully implemented ACE.

In 2002, 70% of the service's bed days were occupied by people aged 70 years and over.

The ACE project at HKHS grew out of recognition of the increasing needs of the ageing population and the desire to improve elderly patient journeys.

Lorna's New Story Under ACE

Lorna's new Story

Lorna's new story

Lorna is 84 and lives alone in a unit.

Lorna's only family is a niece who lives in Melbourne and visits her Aunt twice per year.

Lorna arrives at a hospital Emergency Department by ambulance with increasing shortness of breath, tiredness and swollen ankles.

This is her story under the ACE Model of Care.

In the Emergency Department the Agedcare Services in Emergency Team (ASET) nurse identifies Lorna as an 'ACE' patient.

Lorna appears unwell and confused. The nurse quickly establishes that Lorna has a history of ischaemic heart disease and mild hypertension. Lorna tells the nurse she has been taking medicine for these conditions for many years. The diagnosis of heart failure is made quickly and Lorna is admitted under the care of a Cardiologist and a Geriatrician. Her treatment has a rapid impact.

In the ACE ward, Lorna's cognitive status is assessed and she is found to have a moderate degree of short-term memory loss and some cognitive impairment that are considered to be symptoms of depression.

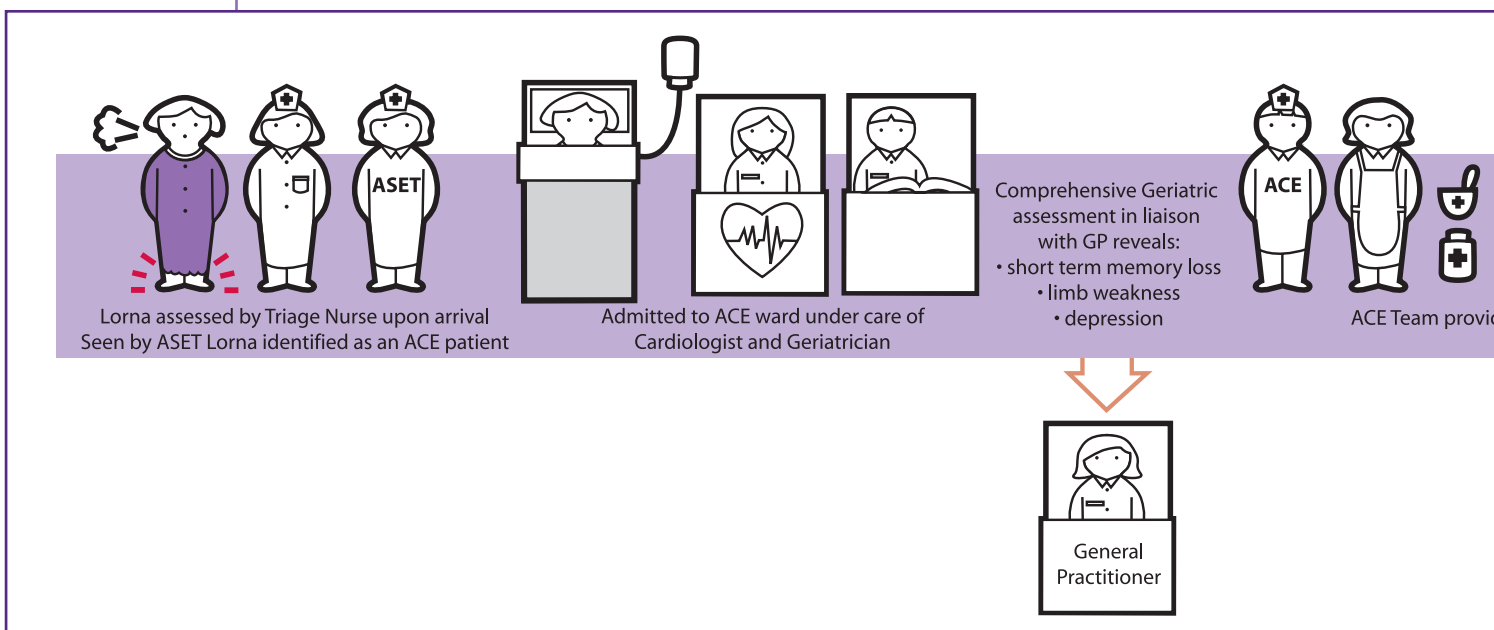
Staff contact Lorna's GP. He reports a gradual deterioration in condition over the previous six months but the cause is not clear. Six months ago Lorna used to enjoy a daily walk to her local shops. She has not been able to do this for some time.

Lorna is also found to have proximal muscle weakness. In hospital she receives regular walking and quadriceps strengthening exercises from the Physiotherapist and the Mobility Enhancement Team. She is also found to be Vitamin D deficient and is given supplements.

Lorna improves significantly over the next few days with improved exercise tolerance and decreased shortness of breath. Her cognitive impairment is diagnosed as early dementia rather than depression.

To prepare Lorna for her discharge from the hospital, the ACE team:

- makes a referral to the Aged Care Assessment Team for an assessment for community services
- makes a referral for an Occupational Therapy assessment of her home



- organises a Webster pack to assist Lorna with her medication
- contacts the Management of Cardiac Failure Team (MACARF) to help monitor Lorna's cardiac failure
- makes a referral to a local community activity centre to help Lorna with socialisation and meals
- liaises with Lorna's GP.

The Aged Care Assessment Team completes their assessment four weeks after Lorna's discharge. They organise assistance with housekeeping and monitoring of Lorna's medication.

Five months after leaving hospital Lorna is managing well at home with the Dementia Monitoring Service checking her medication compliance and a private cleaner visiting fortnightly. Twice a week Lorna attends an activity centre and Meals on Wheels provides meals on the other days. She has not presented back to the Emergency Department.

What's good about this story

- Lorna is seen quickly by an ASET Nurse who obtains her medical history and makes her feel comfortable.
- Lorna is told why she is waiting, what she can expect and when she might be able to go home.
- Lorna is quickly taken out of the Emergency Department to a ward.
- Discharge planning commences soon after admission.
- Medication is reviewed in hospital.
- Lorna's presenting illness is treated rapidly and the underlying cause of illness is also diagnosed and treated.
- There is a focus on maintaining independence and effective functioning.
- Liaison with Lorna's GP and referral to ongoing services before discharge.
- Five months after discharge, Lorna is living well at home with a range of support services. She has not been back to hospital.

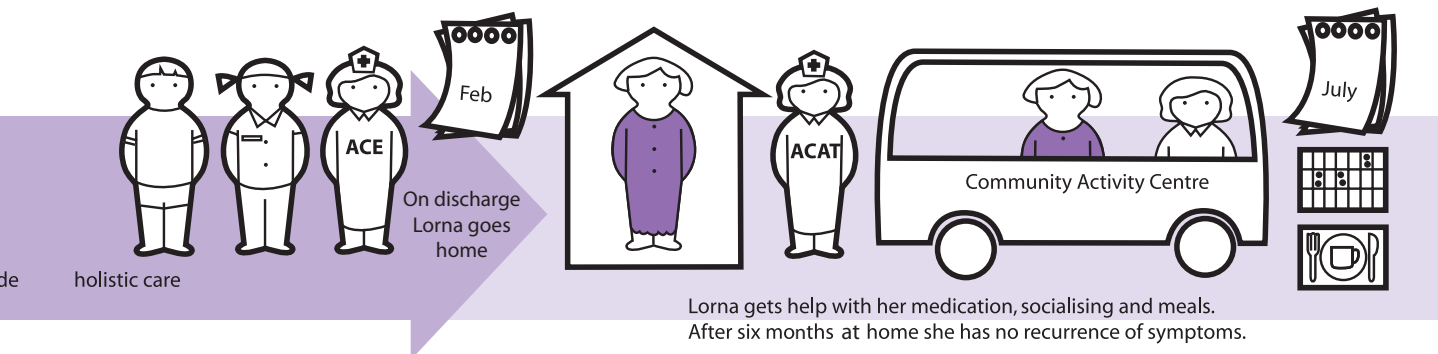
Lorna's journey under ACE is much better.

She recovers quickly under the care of a multidisciplinary team that includes a geriatrician and consultant physician.

Following a comprehensive geriatric assessment her underlying illnesses are treated and she is referred to appropriate community support services.

Lorna's function is improved in hospital. Discharge planning starts at admission so she is able to go home quickly.

Five months after leaving hospital Lorna is living well at home with support services.



What is ACE?

What is ACE?

ACE is designed to foster the independent function of patients. It is a multifaceted intervention that integrates geriatric assessment into the optimal medical and nursing care of patients in an interdisciplinary environment. It includes a patient friendly environment, multidisciplinary assessment, medical care review, pharmacological review and early discharge planning (Palmer, 1998).

Under ACE, the journey for patients is improved by focusing on four key principles.

Key Principle

Admission under dual speciality

- Shared care between the physicians, geriatricians and their multidisciplinary teams.
- Integrated geriatric assessment into the optimal medical and nursing care of patients in an interdisciplinary environment.

Key Principle

Comprehensive holistic geriatric assessment beyond the presenting illness

- A 'total quality management' philosophy recognises older people with an easily identified acute illness may have other chronic physical, psychological and social conditions.
- Focus is on the entire patient journey from illness to wellness and home, efficiently.

Key Principle

Optimise care by focusing on promoting independence and function

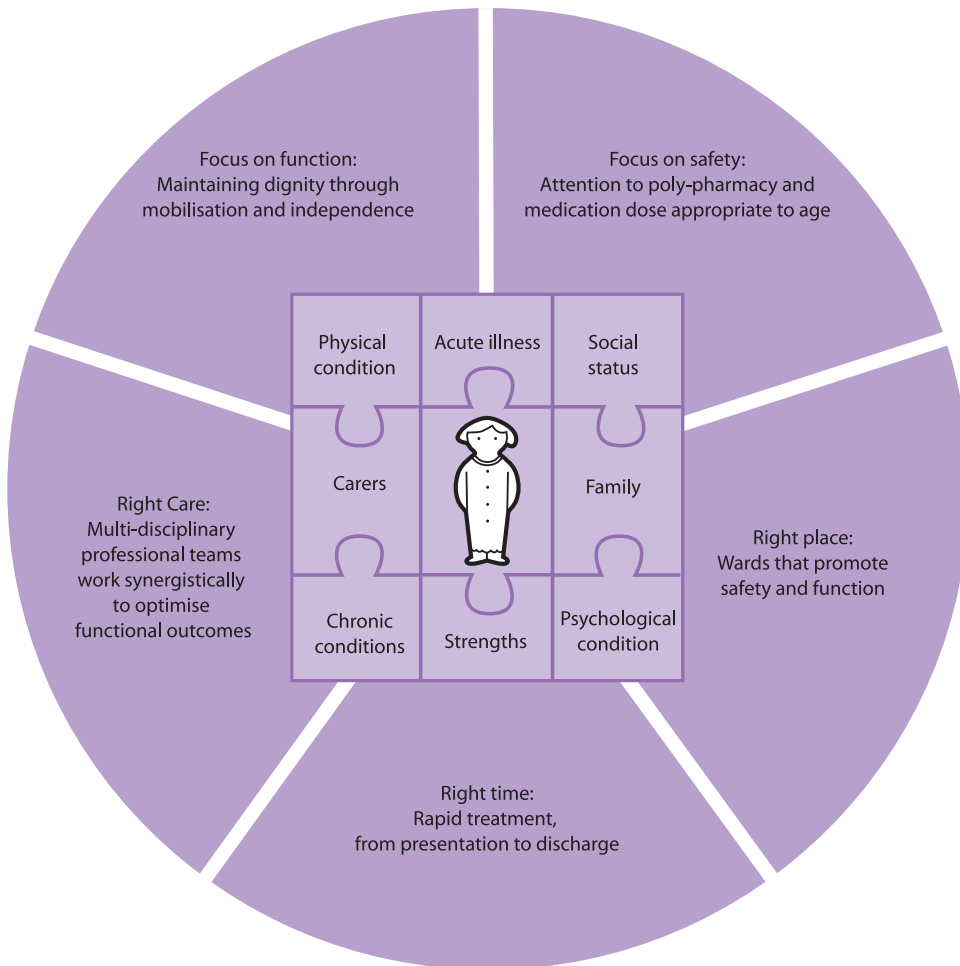
- Older people are medically well before they are physically able.
- Early mobilisation.
- Increased medication safety.

Key Principle

Early discharge planning

- Liaison with GP.
- Timely referral to appropriate community services.

Figure 2: Key Principles of ACE



Under ACE the ‘whole’ person and their unique circumstances are managed by a multidisciplinary team.

The team focuses on:

- providing the right care at the right place at the right time
- patient function
- patient safety.

How Does ACE Work?

Multidisciplinary teamwork

“If the Occupational Therapist says they are not ready to return home, they don’t go home – each team member has an equal say”.

Assoc. Professor Susan Kurrle, Geriatrician, Hornsby Ku-ring-gai Health Service

Early identification



Use eligibility criteria in Emergency Department to identify patients most likely to benefit from early geriatric assessment and multidisciplinary care.

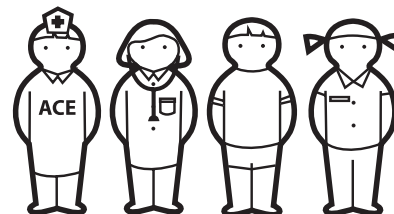
ED staff, Agedcare Services Emergency Team (ASET) Nurse, nursing and medical staff all identify ACE patients.

Patients aged 65 years + (55 years for Aboriginal and Torres Strait Islanders)* that:

- are acutely ill and need general or specialist medical management
- have pre-existing co-morbidities
- are at risk of functional decline whilst in hospital
- have experienced functional decline in the two weeks prior to Emergency Department presentation.

*Accept younger patients if pre-existing medical co-morbidities.

Multidisciplinary teams

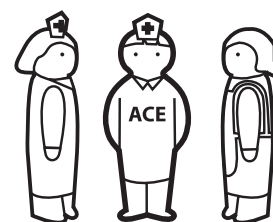


All staff work proactively to promote independence and functioning. Each team member has a role and a unique contribution.

- Geriatricians
- ACE registrar
- nursing staff
- allied health staff, and
- pharmacist[#].

Create Multidisciplinary Care Plans.

Good communication



Good communication is both informal and formal. Formal communication includes a:

- weekly multidisciplinary case conference and discharge planning review
- multidisciplinary ward meeting
- weekly pharmacy ward round where the pharmacist and the geriatrician work in collaboration.

Comprehensive geriatric assessment

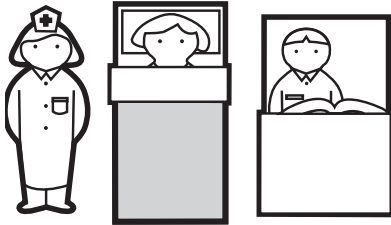


Occurs within 24 to 48 hours of admission to the ward.

Document the patient’s physical, cognitive, emotional and functional status with medication review.

[#]A pharmacist was added to the ACE team three months into the initial project because during the early stages of ACE, pharmacological contra-indications were uncovered that are unique to older patients. The weekly pharmacy review ward round, in partnership with medical staff, is vital to ensure pharmacological interventions do not inadvertently lead to iatrogenic events, delirium, confusion and falls.

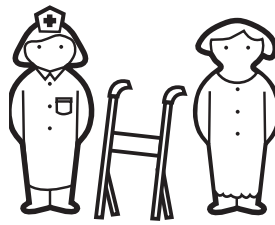
Shared care model



Admit patients under the specialist or sub-specialist medical team with the Geriatrician, or ACE registrar, being involved from admission day.

These two teams work together to integrate a comprehensive geriatric assessment into the medical care of the patient.

Maintain and improve function



Nurse patients out of bed where possible. On admission to the ward, nurses identify patient needs and make allied health referral.

Assessment and treatment begin on admission day.

Discourage medical treatment regimes that may have negative impacts on the patient (e.g. bed rest, use of indwelling urinary catheters).

Geriatrician and pharmacist review medication charts weekly to reduce polypharmacy and adverse events.

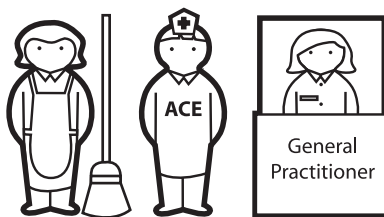
Promoting Independence

Promoting independence may be challenging for patients and be time consuming for nurses, particularly in the early days of admission. However time is saved over the entire length of the hospital stay.

Patient education is essential to avoid issues like the encouragement of physical exercise being seen by patients as nurses being “too lazy” to get them a bed pan.

Compromises can be made. For example, rather than patients walking both to and from the bathroom, they can walk to the bathroom for a shower and then return via a wheelchair.

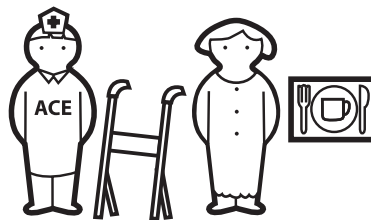
Early discharge planning



Start discharge planning at admission. The patient’s general practitioner, family and carers participate in discharge planning. Use *Risk Assessment and Discharge Planning Tool* (see Toolkit) to assist with:

- ongoing multidisciplinary assessment
- identification of discharge barriers
- discussion of care/discharge plans with the patient and carers
- early identification of rehabilitation needs including transfer to rehab
- liaison with the patient’s GP.

Promote patient independence



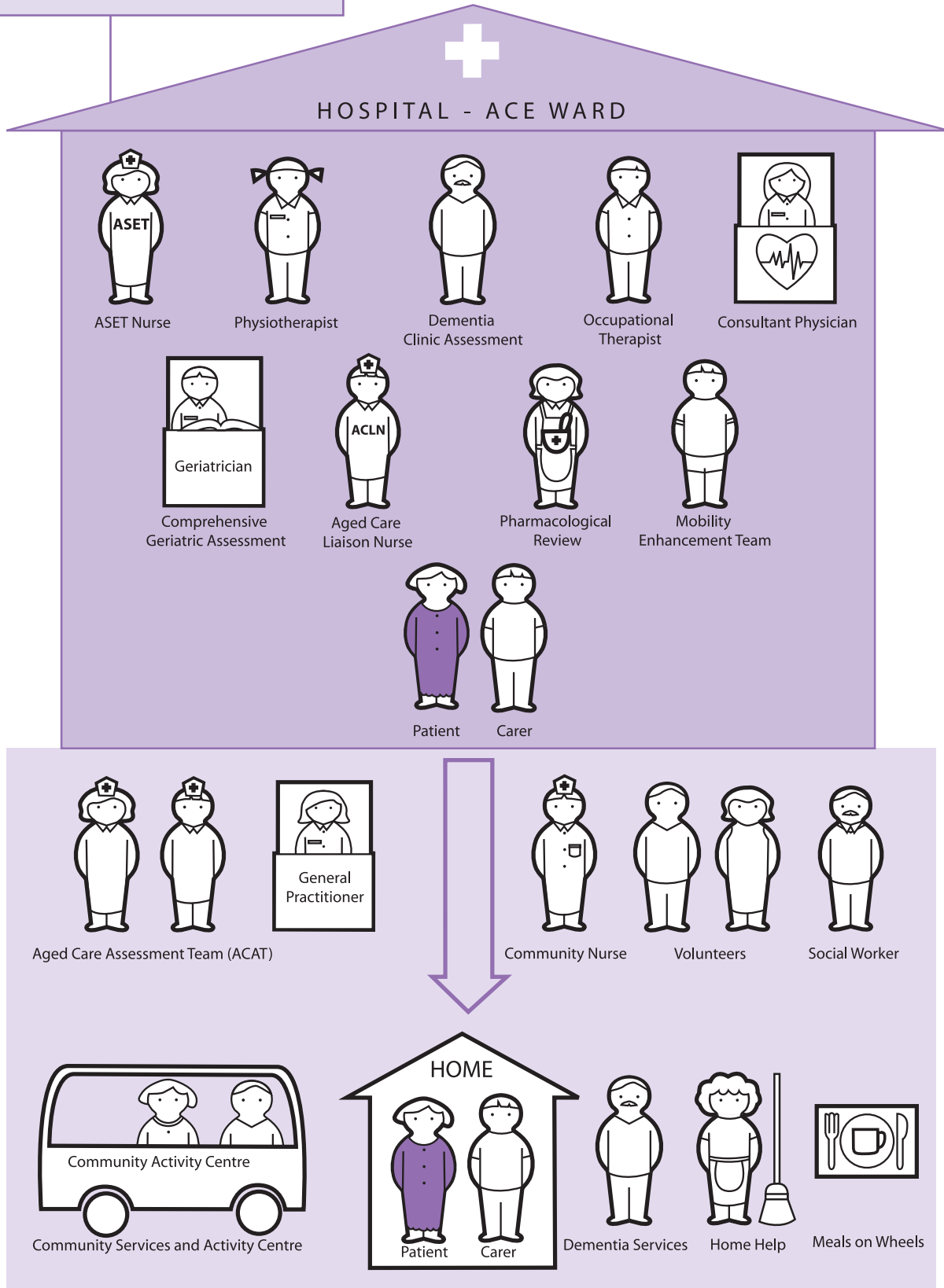
Encourage independence, mobility and activities of daily living.

Encourage the timely removal of patient “tethers” such as IV fluids, catheters, restraints and cot sides that reduce patient mobility.

As soon as medically possible walk patients to a communal dining area for meals as well as to the bathroom and shower.

Multidisciplinary Care

Figure 3: Multidisciplinary Care



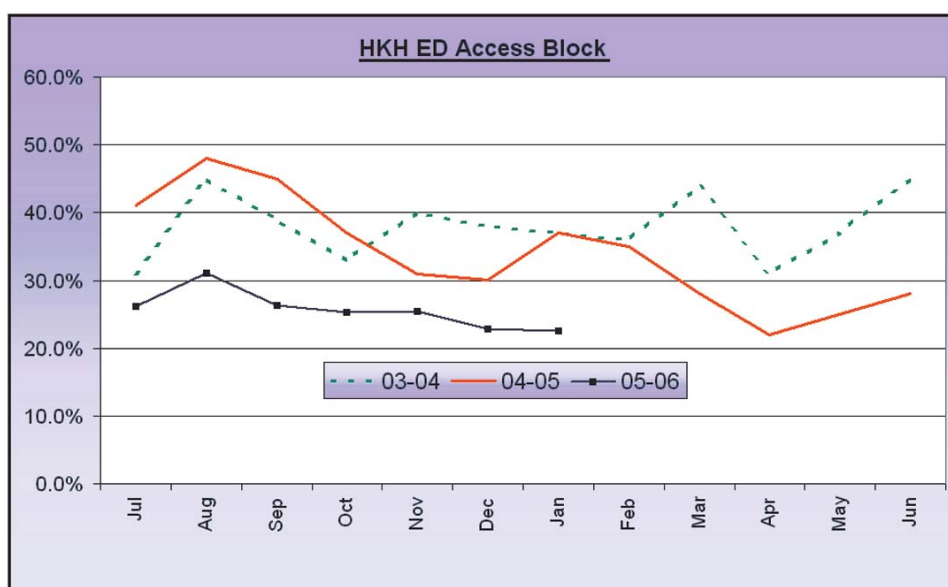
Benefits

After ACE was implemented at Hornsby Ku-ring-gai Health Service the following outcomes were recorded in 2002/03. (See Toolkit for more detailed data.)

- A reduction in re-admissions from 12.4% to 3% in the targeted Diagnostic Related Groups of Congestive Cardiac Failure and Chronic Obstructive Airways Disease.
- A three-hour decrease in the average length of Emergency Department stay for ACE patients.
- A significant reduction in adverse events including an 80% reduction in falls and elimination of the development of pressure areas.
- A 50% reduction in Nursing Home placement waiting times.
- A 74% compliance rate for the Risk Assessment and Discharge Planning Tool for ACE patients compared with a hospital wide uptake of 48%.
- Higher degree of consumer and staff satisfaction with the hospital and its services.
- Staff and physician support for the ACE Model of Care.

In 2005, the ACE Model at HKHS is able to demonstrate a reduction in access block (see Graph 2 below).

Graph 2: Hornsby Ku-ring-gai Hospital ED Access Block July 2002 - May 2005

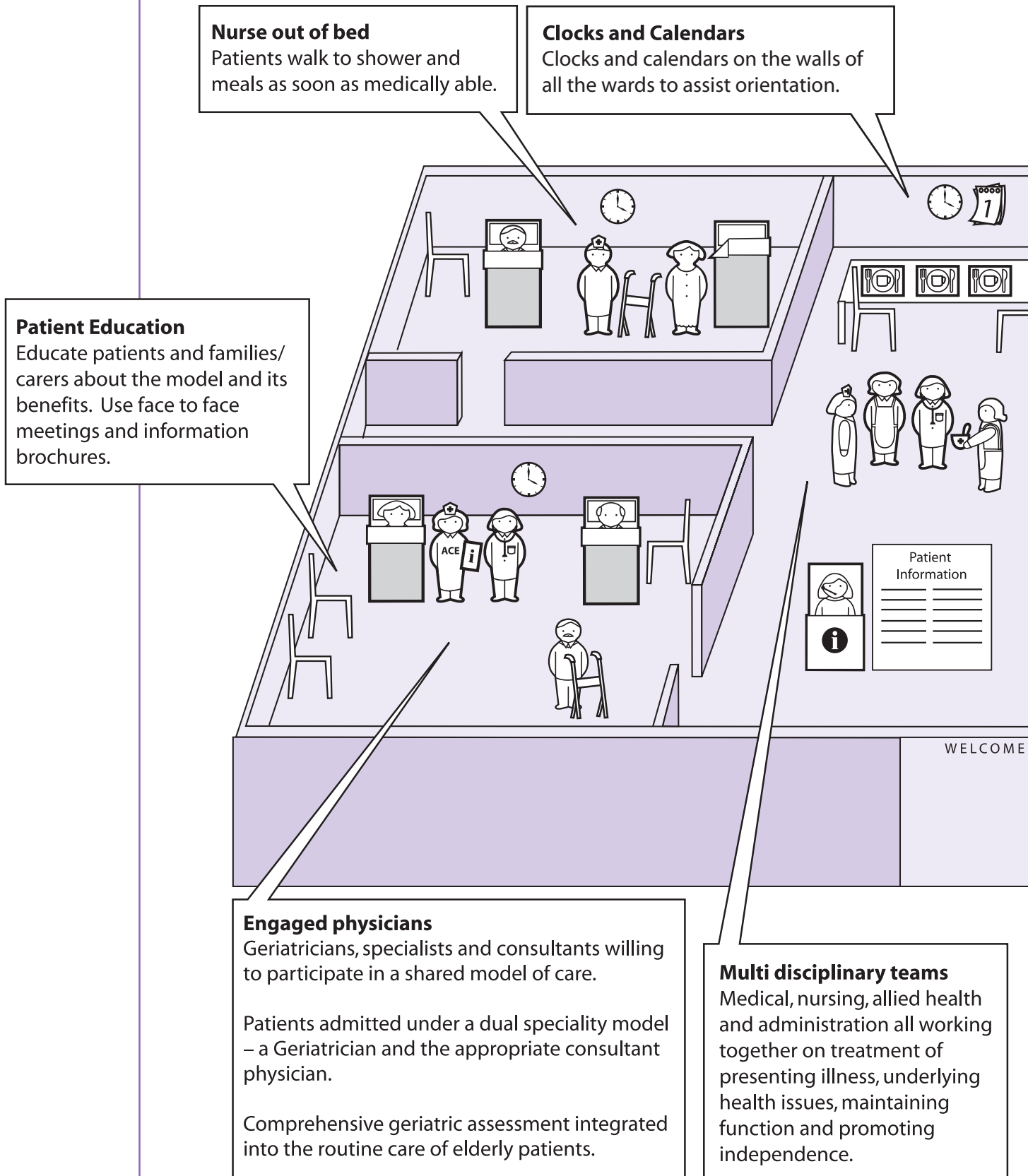


Source: Hornsby Ku-ring-gai Health Service

The ACE Model of Care has provided a range of benefits to patients, carers and staff at Hornsby Ku-ring-gai Health Service.

- Improved journey for patients and carers.
- Improved performance in key areas including: reduced length of hospital stay; reduced access block; reduced readmission rates; and improved patient and staff satisfaction.
- Allows specialists to concentrate on their speciality area with the ACE team providing the holistic care, management of co-morbidities and discharge planning.

Establishing and Maintaining ACE



Activities room

Used for ward meetings and communal patient dining.

Bedside chairs

Appropriate chairs with arms and adjustable legs beside each bed support nursing out of bed to maintain function.

Estimated discharge date

A focus on ensuring rapid discharge. Early planning with community based services to ensure timely discharge.

Modified bathrooms

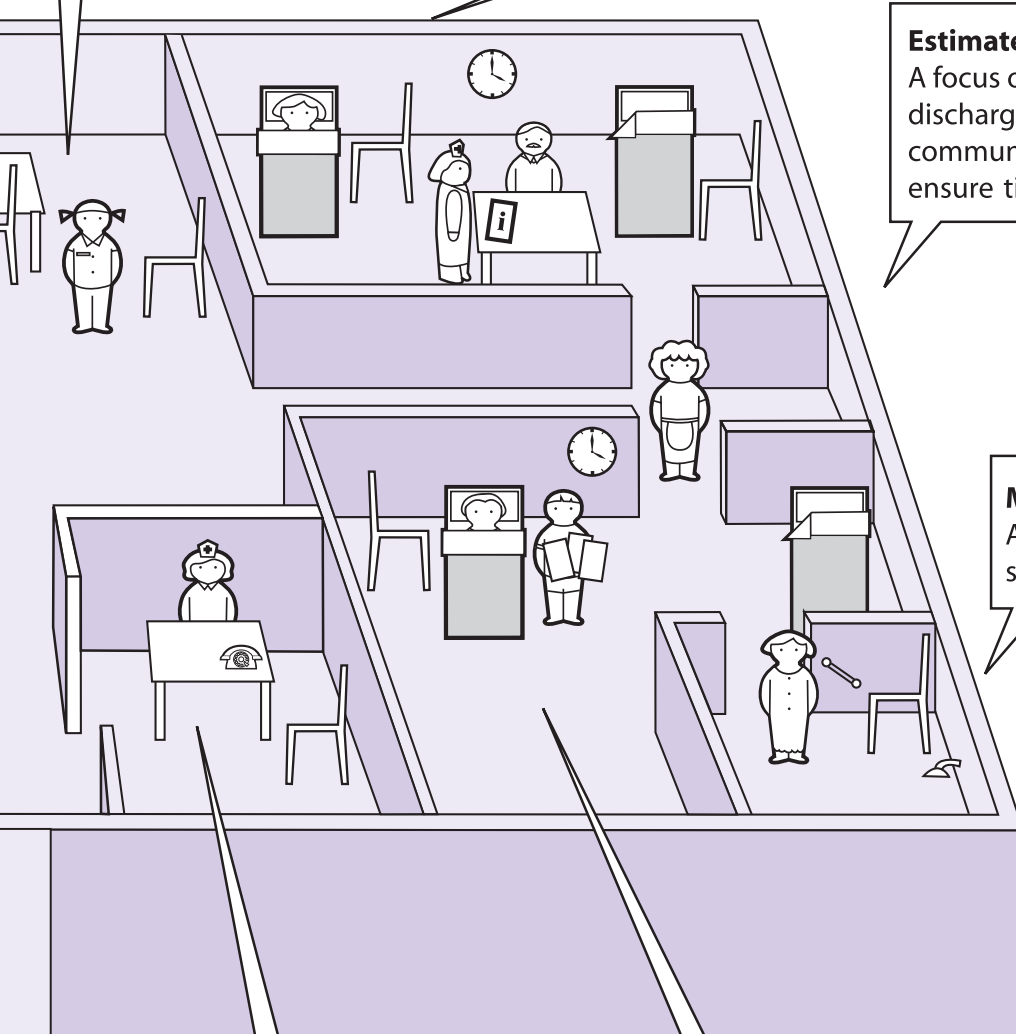
Allow room for patients to shower themselves.

Aged Care Liaison Nurse

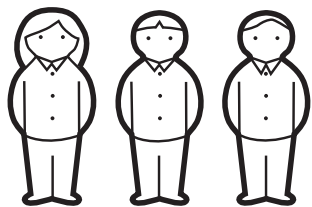
Aged Care Liaison Nurse improves the flow of patients out of the hospital into nursing home and hostels. (See Toolkit for role description.)

Volunteers

Volunteers encourage orientation and socialisation through reading newspapers and discussing current events.



Establishing and Maintaining ACE



Leadership and support

Find clinical, senior management, and nurse unit manager **champions** that will assist staff to work collaboratively.

Find a ward to “own” the model.

Collaboration with another health service can provide critical review and support.

Engage physicians. Geriatricians, specialists and consultants must be willing to participate in a shared model of care where patients are admitted under a dual speciality model. There must be acceptance of the integration of a comprehensive geriatric assessment into medical and surgical care.

Establish a **Steering Committee**. (See Toolkit for more information.)

Define project target group, location and milestones.

“Having consumers and carers on the Steering Committee, as well as community based service providers brought the community into the hospital.”

Jenny Houston, ACE Project Leader, HKHS



Project Management

A dedicated **project officer** is essential to pull people together, document, plan, monitor, report on targets and “put the legs on the ideas”.

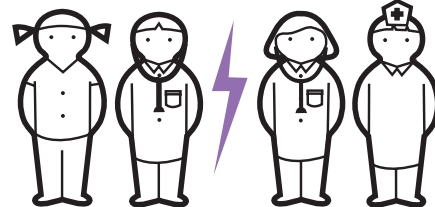
Create a **project plan** that staff own. Involve them in the development but don’t make it hard or time consuming. The plan should set out:

- the burning platform for change - evidence about the current patient journey problems
- the vision and ideal patient journey
- objectives and strategies
- roles and responsibilities
- baseline data and key performance indicators.

Set firm but realistic timeframes for implementation and stick to them. Allow time for initiation of the change process, obtaining staff support, orientation to process mapping, developing the model of care as well as documenting KPIs and baseline data.

Key performance indicators need to be developed and strictly monitored. These may include:

- reduced length of stay in hospital and ED
- increased patient and carer satisfaction
- decreased adverse events
- reduced access block.



Create tension for change

Talk up the need for change across all facets of the hospital. Create a folder of evidence that can be reviewed by hospital staff at any time. Speak on all wards - particularly at change of shift.

Describe the current patient journey and the need to prevent deconditioning if elderly patients are to return to their pre-morbid accommodation status.

Change management and cultural change takes time. Staff may find it difficult to conceive there is a better way to provide care, especially if they already feel that they are working beyond reasonable capacity.

Help staff to become change agents rather than objects of change.

Take the time to educate and inform people, particularly the key opinion leaders and the ‘nay sayers’. The Ward Clerk is highly valuable.

“I left a folder of information at the nurses desk so anyone could read what ACE was about on any shift.”

Jenny Houston, ACE Project Leader, HKHS



Commence Service

Marketing & Celebrate Success

Evaluate

Identify a ward for ACE.

Encourage local ownership of existing problems with the patient journey.

Define ACE team members*.

Commence with one or two specialities and Geriatrician.

Hold regular/weekly team meetings and review individual patient journeys.

* see next page for staffing.

This is a critical role for the Project Officer/Steering Committee.

Use ACE name badges. Produce patient information so they understand the model of care. Produce regular updates for the hospital and community sector.

Foster **good communication** through informal and formal means including newsletters, staff meetings, presentations, staff in-service and rotation.

- Encourage the team to find their own way of reporting on their journey and progress.
- Informal sessions over coffee can create the incentive for people to take time from their busy schedules to listen in a non-threatening and collaborative manner.
- Communicating during a change of shift when there is double the ratio of nursing staff and leaving written information in the ward is also useful.
- Establish methods for rapid feedback from patients and staff in addition to surveys. Respond directly to feedback.

Celebrate and communicate every tangible achievement of the project through a variety of means including morning teas, awards, mentions at staff meetings, and BBQs. Nominate your model, champions and teams for internal and external awards.

Steering Committee and ACE project team review initial data results, including results of patient and staff surveys. Refine model as required. Consider additional specialities.

“Timing is critical. If you start too quickly you can get it wrong. If you start too late people think you are all talk. Finding the right time to start the project, once enough education and discussion has occurred is absolutely critical.”

Jenny Houston, ACE Project Leader, HKHS

Nurse rotation

Rotate nurses through the community based discharge services.

“Do not underestimate the value of nurses from the ward and community based services meeting face to face and understanding each others’ roles.”

The quality of collaboration is greatly improved when you know a face and a name.”

Jenny Houston, ACE Project Leader, HKHS

Implementing ACE

Process Map

Visit the online version of this process map on the ARCHI website at www.archi.net.au/elibrary/build/moc

Here you will be able to access more information on each of the steps in implementing the model. You will have access to tools and templates as well as hints and lessons learned by others who have implemented the model.

	Planning Where are you now?
Governance	Identify leaders. Develop a Process Map. Establish a Steering Committee.
Patient Journey How do patients flow through the model	Map the Patient Journey
Policies and Protocols	Identify and review current policies and protocols affecting care of the elderly.
People Understand who the staff are, how they function and what role they play in the patient journey	Engage key physicians Stakeholder Analysis
Resources	Survey current resources Identify resources needed to establish and maintain Acute Care of the Elderly (ACE) View literature that supports the ACE Model of
Communication	Develop communication plan

	<p>Develop a Governance Plan. Find a way to 'own' the model Develop Key Performance Indicators (KPIs) See the SESIAHS Lessons Learnt - Project Management</p>	<p>Monitor and Evaluate against KPIs Provide regular project reports and updates for senior management</p>
	<p>Incorporate findings from patient journey into TO BE process map</p>	<p>Regular monitoring of patient experiences via regular patient journey mapping.</p>
ols	<p>Develop policies and protocols</p>	<p>Implement and monitor compliance with new protocols. See the SESIAHS Lessons Learnt - Risk Management</p>
	<p>Develop position descriptions for staff allocated to Acute Care of the Elderly (ACE) Develop competencies and an educational program for staff</p>	<p>Develop a review process. Establishing and Maintaining ACE</p>
Care	<p>Deliver required resources</p>	<p>Monitor resource use</p>
	<p>Execute communication plan Identify how results will flow back to the project</p>	<p>Feedback and review process</p>

Staffing

Staffing for a 20 bed ward should include:

Geriatrician
Registrar
Clinical Nurse Consultant
Social worker
Physiotherapist
Occupational Therapist
Clinical Nurse Specialist
Psychologist
Therapy Aide.

Assumptions

- These nominal Hornsby Ku-ring-gai Health Services (HKHS) resource requirements for implementation of an ACE Model are additional to those required to run a "normal" acute care ward.
- The resource requirements apply to an average ACE patient load of 16-18 patients within a higher bed capacity acute ward.
- If an entire ward is proposed for ACE, the nominal 'extra' ACE resource requirements would cover a higher ACE patient load of 20 patients i.e. additional to the resources for a standard acute ward. This means that there are resource savings with a dedicated ACE ward.
- The resource requirements are likely to vary from site to site due to variations in existing staffing levels. The allocated 'therapy hours' for the designated ward in each hospital is likely to be a key component in the resource variations.

Staffing (in addition to standard acute ward staffing)

Staffing levels will depend upon the size of the unit and number of patients. These estimates are for the establishment of ACE within a metropolitan general hospital. They take into account the presence of dedicated ward therapy staffing.

- Geriatrician 16 hours (clinical) per week. This will increase to 20 hours per week if there is teaching, administration, education and paperwork to be carried out. This allows time for:
 - multidisciplinary ward meetings
 - three full ward rounds
 - a pharmacist round
 - a family conference each week.
- Registrar 0.8 FTE. This could be a full time position. For example at HKHS, the registrar also spends 0.2 FTE with the Agedcare Services in Emergency Team.
- Full-time Project Officer (Clinical Nurse Consultant).
- 0.3 FTE Social worker.
- 0.4 FTE Physiotherapist.
- 0.2 FTE Occupational Therapist.
- Therapy Aide 1.0 FTE. The Therapy Aide walks patients regularly, encourages patients to walk to lunch and generally supports the philosophy of ACE. They also support other therapists and the Registered Nurses.
- Clinical Nurse Specialist 1.0 FTE. Inclusion of a Clinical Nurse Specialist without a clinical load takes some strain off the registrar (select patients, check paperwork) and easily allows a load of 20 patients.
- Psychologist (preferably neuro) 0.2 FTE (optional but recommended).

NOTE: Speech pathology and dietetics advice are provided as part of standard acute ward care.

Resources

Allen, C. Glasziou, P. and Del Mar, C. Bed rest: a potentially harmful treatment needing more careful evaluation. *The Lancet* 1999; Vol 354, 1229-1233.

Australian Bureau of Statistics, 2005. Population Projections Australia 2004-2101, Catalogue No. 3222.0.

Counsell, S.R., Holder, C.M., Liebenauer, L.L., Palmer, R.M., Fortinsky, R.H., Kresevic, D.M., Quinn, L.M., Allen, K.R., Covinsky, K.E. and Landefeld, C.S. Effects of a Multicomponent Intervention on Functional Outcomes and Process of Care in Hospitalised Older Patients: A Randomised Controlled Trial of Ace Care for Elders (ACE) in a Community Hospital, *Journal of American Geriatric Society* 2000; 48:1572-1581.

Creditor, M.C. Hazards of Hospitalization of the Elderly, *Annals of Internal Medicine* 1993; 118:219-223.

Downing, A. and Wilson, R. Older people's use of Accident and Emergency Services. *Age and Ageing* 2005; 34:24-30.

Hoening, H.M. and Rubenstein, L.Z. Hospital associated de-conditioning and dysfunction (Editorial), *Journal of American Geriatric Society* 1991; 38:1296-1303.

Landefeld, C.S., Palmer, R.M., Kresevic, D.M., Fortinsky, R.H. and Kowal, J. A randomised trial of care in a hospital medical unit especially designed to improve the functional outcomes of acutely ill older patients, *New England Journal of Medicine* 1995; May 332:1338-1344.

NSW Health. *Framework for integrated support and management of older people in the NSW Health Care System* 2004; North Sydney.

Palmer, R.M., Counsell, S. and Landefeld, C.S. Clinical Intervention Trials The Ace Unit, *Clinics in Geriatric Medicine* 1998; 14:831-849.

Palmer, R.M., Landefeld, C.S., Kresevic, D. and Kowal, J. A Medical Unit for the Acute Care of the Elderly, *Journal of American Geriatric Society* 1994; 42:545-552.

Redelmeier, D.A., Tan S.H. and Booth G.L. The treatment of unrelated disorder in patients with chronic medical diseases. *New England Journal of Medicine* 1998; 338:1516-1542.

Rozzak, D.J. Americans concerned about overcrowding and boarding of patients in the ED, *Hospitals and Health Networks* 2005; 79:94-96.

Spear, S.J. Fixing Health Care from the Inside, Today, *Harvard Business Review* 2005; 83:78-91.

Williams, A. Patients with co-morbidities: perceptions of acute care services, *Journal of Advanced Nursing*, 2004; 46:13-22.

For more information about ACE visit the Models of Care section of the ARCHI website www.archi.net.au

Here you will find an electronic copy of this document, a resource toolkit and have the opportunity to participate in online discussion groups.

