

# Differentiating transitional care from subacute care and why it is important

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# Illustrative case

- There was recently an urgent ACAT referral from a community care services team about a 101 year old woman who the previous day had discharged herself against advice from RPH ED
- Whilst walking twisted her leg – tibial plateau fracture
- Home not ideal clutter +++ Patient had dementia
- Looked after by son – not ideal
- Admitted one week later to subacute care (after considerable coaxing) ? Suitable for transitional care

Which system is better able to cope with her and which system would better manage her needs?

# Format of Presentation

- **Some history of how subacute and transition care came into being**
- **Evidence of variable resource provision and role of these resources around Australia**
- **Brief discussion on how and why these resources fit together**
- **What future improvements may occur**

# **Aged Care - The Evidence**

## **Assessment & Rehabilitation Works**

- **Marjory Warren called for the establishment of geriatric assessment and rehabilitation wards as part of general hospitals in 1946.**
- **Like penicillin, the effect of rehabilitation on the chronically ill was so dramatic that it was not deemed necessary to subject this intervention to controlled clinical trials.**
- **In 1984, a randomised clinical trial of the effectiveness of a geriatric evaluation unit was reported. (Incidentally, this study was designed and funded in Australia but was never carried out here.) Rubenstein et al NEJM 1984;311 1664**

# Assessment and Rehabilitation

## Rubenstein et al 1984

- At one year, patients who had been assigned to the geriatric unit had much lower mortality than controls (23.8 vs. 48.3 per cent,  $P < 0.005$ ) and were less likely to have spent any time in a nursing home during the follow-up period (26.9 vs. 46.7 per cent,  $P < 0.05$ ).
- Patients in the geriatric unit were significantly more likely to have improvement in functional status and morale than controls. Direct costs for institutional care were lower for the experimental group, especially after adjustment for survival.

# Assessment & Rehabilitation in Aged Care - More Evidence

- Since that early study a meta-analysis, largely based on IPD has confirmed the benefits of inpatient geriatric assessment and rehabilitation with a reduction in death at 6 months, odds ratio (OR) of 0.65 [0.46, 0.91], with benefits on decreased rates of institutionalisation, physical and cognitive function Lancet 1993; 342:1032.
- Increased benefits were associated with medical control over recommendations and perhaps explains some of the heterogeneity between studies.
- Similarly organised inpatient stroke unit care has also shown benefits, with a reduction in death or institutionalisation of 0.76 [0.65, 0.90] and inpatient rehabilitation of older patients with proximal femoral fractures has demonstrated a trend for benefits, OR of death and deterioration in function of 0.83 [0.64, 1.07]. (Cochrane Library 1999)

# How did subacute care develop in Australia?

## ■ Two main methods

1. State run nursing homes – e.g. Lidcombe Hospital, Mount Royal Hospital, Mount Henry Hospital.....

These hospitals became more involved in people who did not stay forever but were admitted for a shorter period of 14 to 60 days.

2. Arose directly in a secondary or tertiary hospital often as a component of a regional geriatric unit

## ■ Various state programs followed to try and redistribute resources on a more equitable basis

Costing and other studies have tried to distinguish rehabilitation (often specific), geriatric assessment and management, geriatric rehabilitation.....

Costs: \$500 per bed day and distinguished by specialist medical care and comprehensive multidisciplinary teams

# Trends in the use of hospital beds by older people in Australia: 1993–2002

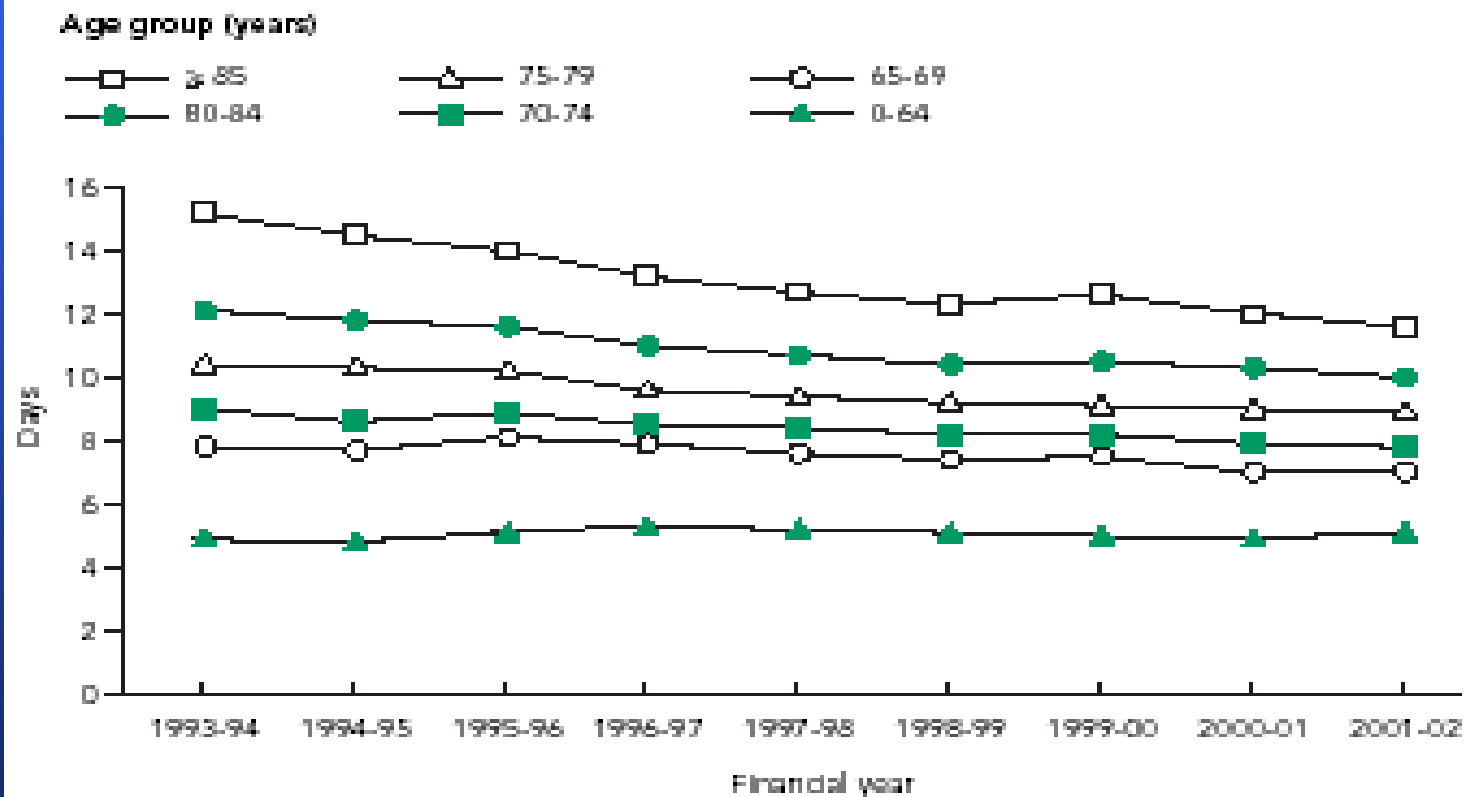
Gray LC et al, MJA 2004; 181:478 (3)

- Decline in availability of hospital beds in Australia of about 3% pa
- Residential care places declined from 99 to 82 places per 1000 population aged 70+
- Results: The Australian aged population (65+) increased by 18% compared with total population growth of 10%, yet the proportion of hospital beds occupied by older patients remained stable at 47%.
- Conclusion: These trends are contrary to common perception. Ageing of the Australian population was not associated with an increase in the proportion of hospital beds used by older patients.

# Trends in the use of hospital beds by older people in Australia: 1993–2002

Gray LC et al, MJA 2004; 181:478 (2)

4 Mean length of stay, by age group, for multi-day separations



**In the same period Subacute care beds increased  
in number but decreased on a per capita basis  
Aged Acute Care and Assessment beds by  
State/Territory**

	Total Aged Acute Care and Assessment beds	Beds per 1000 70+	Beds in 1992 survey	Beds per 1000 70+ in 1992 survey
ACT	28	1.53	24	2.23
NSW	945	1.55	863	1.93
NT	0	0.00	0	0.00
QLD	398	1.34	322	1.44
SA	258	1.60	137	1.17
TAS	6	0.13	27	0.79
VIC	961	2.15	980	3.15
WA	329	2.27	286	2.81
<b>Total</b>	<b>2925</b>	<b>1.69</b>	<b>2639</b>	<b>2.12</b>

# Aged Care Rehabilitation Beds per 1000 70+ for 2001 and 1992

	2001		1992	
	Aged Care Rehabilitation beds	Beds per 1000 70+	Aged Care Rehabilitation beds	Beds per 1000 70+
ACT	0	0.00	0	0
NSW	557	0.91	728	1.64
NT	0	0.00	0	0
QLD	97	0.33	196	0.87
SA	53	0.33	62	0.54
TAS	16	0.35	13	0.38
VIC	381	0.85	171	0.55
WA	112	0.77	150	1.47
<b>Total</b>	<b>1216</b>	<b>0.70</b>	<b>1340</b>	<b>1.2</b>

# **Residential aged care has continued to drive the development of subacute care in Australia**

- **Since 1963 federal funding was made available to the residential care industry and in particular nursing homes.**
- **In the ten years between 1963 and 1973 the number of nursing home beds doubled from 26 per 1000 population aged 65+ to 47 per 1000.**
- **In the 1970s and early 1980's there was continuing dramatic increase in Federal funding for residential care despite an attempt at controls and this was driven at least partly by inappropriate admissions to such care.**
- **After a series of successful pilot programs in the early 1980s funded by the Commonwealth, but utilising the expertise of regional geriatric teams, a developing system of integrated aged care services evolved which is in various stages of development around Australia.**

# Residential Aged Care caused the Creation of the Aged Care Assessment Teams

- Since the mid 1980s Aged Care Assessment Teams (formerly GATs) have been instrumental in providing a central resource to older people. The development of ACATs has been accompanied by massive increases in the funding for Community Care, through HACC.
- These ACATs, which have **SOMETIMES** been integrated in regional geriatric services, operate as “gatekeepers” to expensive resource items such as residential care places and “Aged Care Packages”.
- They also operate as central referral sources for
  - Inpatient Assessment acute sector or sub-acute sector
  - Rehabilitation -
    - » Inpatient, often called restorative Care
    - » Outpatient - Day Hospital or Domiciliary
  - Community Services
  - Psychogeriatric Services and specialised facilities

# **Crisis in Aged Care 1998-2001 The Perfect Storm**

- **New government recognized the problem in capital funding – tried loans for high level care - aborted**
- **Met the problem of inadequate numbers of nursing home beds by “Ageing in Place”**
- **Deregulated the amount of time for “nursing care”**
- **Introduced an accreditation agency**
- **Problems of very old stock in some states – particularly Victoria which struggled**
- **Problem compounded by State Governments, particularly Victoria, getting out of State funded nursing homes and foregoing licenses which never resulted in beds**
- **Exacerbated problems of Phantom beds- government were slow to act**
- **Sentinel events received widespread publicity Kerosene Baths**

**The problem produced was unexpected - Access to aged care beds for older people in acute hospitals produced major problems in EDs and the Acute Care/Aged Care system was in jeopardy**

THE COURIER-MAIL — 3+

# **Hospital facilities taken by the aged**

**Matthew Fynes-Clinton**

ELDERLY people with illnesses such as pneumonia are occupying surgical beds in winter — forcing hundreds of patients to postpone serious elective surgery for months.

Royal Brisbane Hospital medical staff association chairman Robert Hodge said

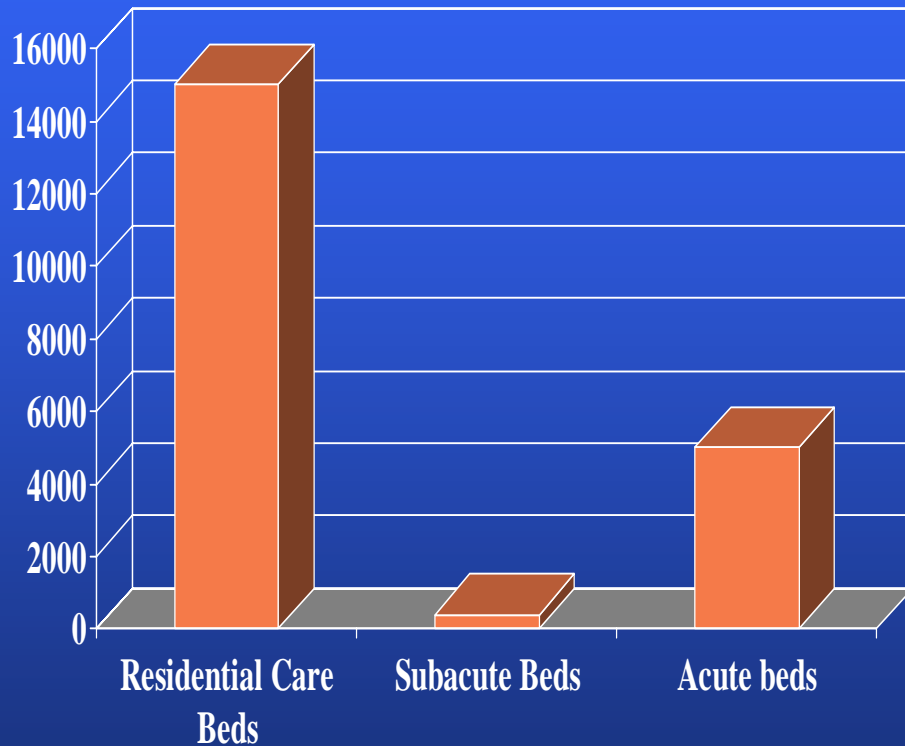


# **What did COAWG do? (with a little help from CRG)**

- **It commissioned a number of projects to seek real data to unravel the problem with minimal Australian government/jurisdictions squabbling. They included**
  - **Examination of Length of Stay for Older Persons in Acute and Sub-Acute Sectors included (1) Desktop Analysis, (existing National Hospital Morbidity) (2) Hospital Survey (3) Case Study Analysis (29) (Aged Care Evaluation & Management Advisors)**
  - **Service Provision for Older People in the Acute - Aged Care System (counting the beds very difficult because the jurisdictions obfuscate this) (Dorevitch, Gray et al)**
  - **Feasibility study on linking hospital morbidity and residential aged care data to examine the interface between the two sectors (AIHW)**
  - **Mapping of Services at the Interfaces of Acute and Aged Care (Howe & Rosewarne) There were LOTS!!**
- **It produced a National Action Plan**

# Number of Beds in Western Australia

## Queuing Analogy



Length of stay

Res

Subacute

Acute

3 years

21 days

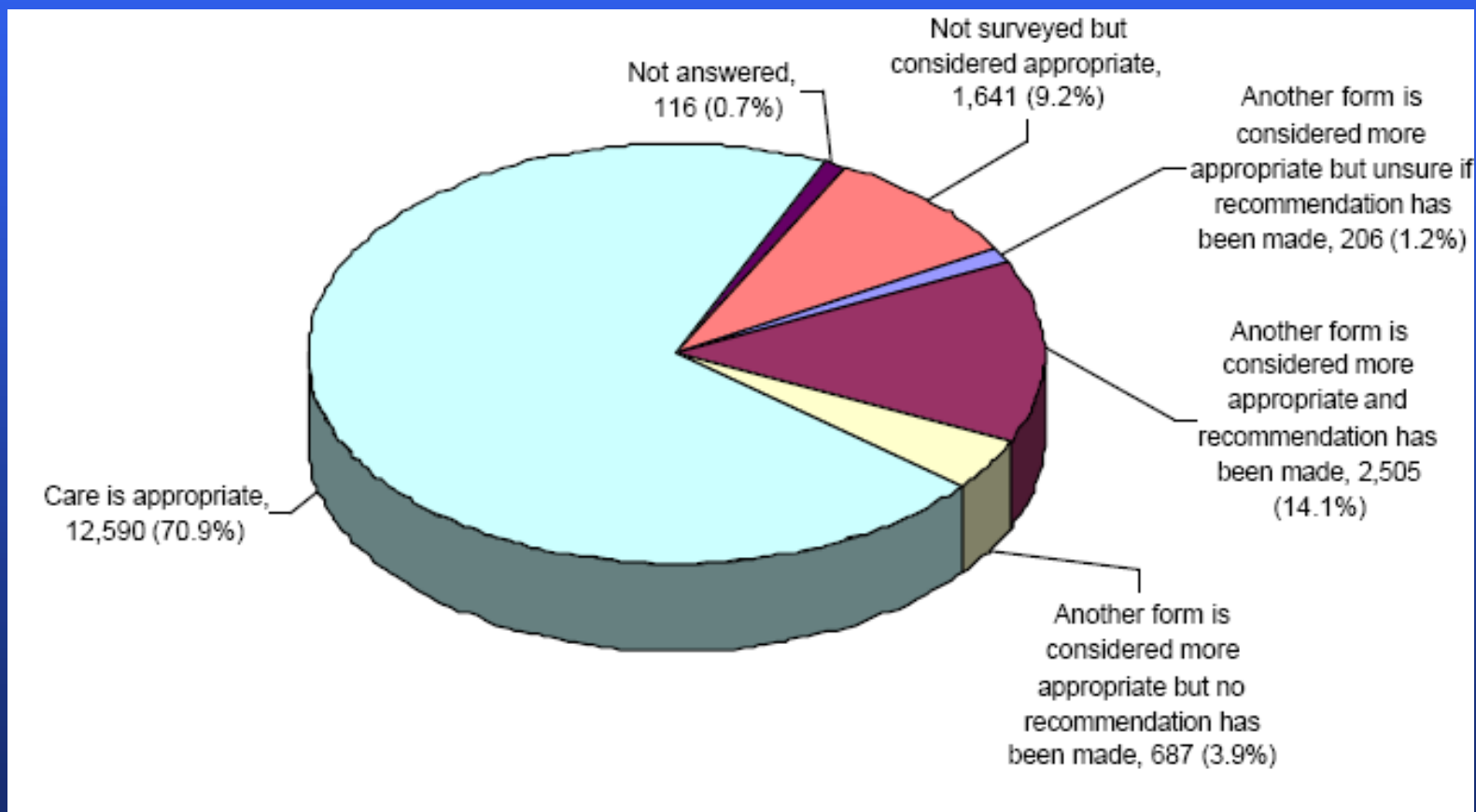
5 days

- A residential care bed is like a city parking spot
- Acute and subacute beds function as the highways (turning most of the people away from the city)
- Only 90 parking spots appear each week
- Closing residential care beds is like closing down a parking station
- Opening up new services e.g. transition care services opens up a new lane but if the service avoids residential care then we have bypassed the city

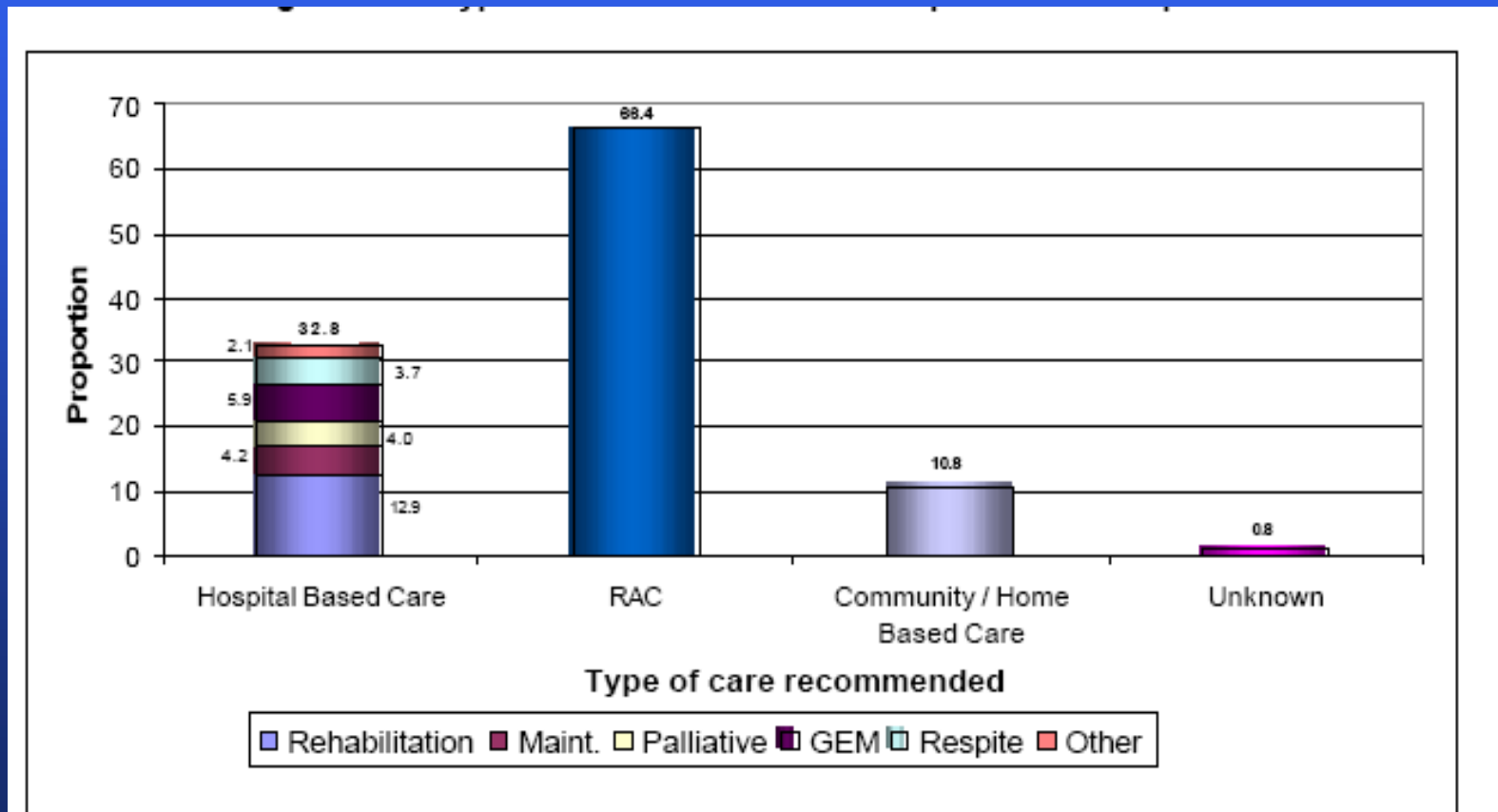
# **A Hospital Census of 65+**

- **On the 17<sup>th</sup> April 2002 a hospital census of over 65 year olds took place. The second part was completed for the same set of patients at midnight on 8th May 2002**
- **Of a total of 617 hospitals around Australia, 611 hospitals returned surveys covering 99.9% of hospital beds in Australia.**
- **16,104 of the estimated 17,745 patients in hospital were surveyed (1,641 patients were deliberately not surveyed as they were in ICU or other high dependency ward and/or had surgery on the day of the survey).**

# Proportion of older people for whom another form of care was considered more appropriate



# Type of care recommended for patients in hospital



# **FROM HOSPITAL TO HOME – IMPROVING CARE OUTCOMES FOR OLDER PEOPLE:**

## **National Action Plan for Improving the Care of Older People across the Acute-Aged Care continuum**

- **This is largely been adopted by National Health and Hospitals Reform Commission A Healthier Future for All Australians – Interim Report, December 2008**

Website: <http://www.nhhrc.org.au/internet/nhhrc/publishing.nsf/Content/interim-report-december-2008>

- **The National Action Plan identifies critical steps for reform and:**
  - **Recommends structural and system changes**
  - **Delineates responsibilities**
  - **Suggests resource priorities for achieving change to assist jurisdictions make decisions on resource allocation, and**
  - **Outlines actions and milestones that will determine progress towards achieving the proposed improvements.**

# **Principle 1: Older people have access to an appropriate level of health and aged care services that match their changing needs.**

- **Despite a reported increase in the number of step down and rehabilitation hospital beds designated for older people from 1992 to 2001, there was a reported reduction from 3.2 beds per 1000 population aged 70 years and over in 1992 to 2.4 beds in 2001**
- **There are lots of people in acute hospitals waiting aged care services.**
- **The planning benchmark for residential aged care is not being met in a number of regions.**
- **The balance of the services delivered within the overall aged care planning benchmark has altered over the years in line with community expectations for greater community-based care.**

## Principle 1: (Cont'd)

- **Goal: There is an adequate supply of basic services to ensure a timely response to older people's needs when their health deteriorates and social support networks weaken. Including,**
  - rehabilitation and geriatric management services, both inpatient, outpatient and community **Benchmarks and Reporting**
  - specialised health programs that help older people stay independent in the community longer,
  - home support services, particularly Community Aged Care Packages, Extended Aged Care at Home and the Home and Community Care Program
  - residential aged care services, **Benchmarks and Reporting**
  - respite services,
  - palliative care services,
  - psycho-geriatric services.

## **Principle 4: Older people have access to transition care services within the acute-aged care continuum.**

- In 2002, approximately 2000 older people nationally were waiting in hospital beds for residential aged care.
- Goal: Transition care services are established through joint collaboration to cater for the needs of older people who are eligible for residential aged care and who may benefit from a time-limited non-hospital program of extended care following a hospital episode.
  - Have a focus on recovery or maintaining function as well as facilitating long-term care arrangements.
  - Are supported and coordinated by both the hospital and aged care sectors so that older people experience a smooth transition from acute/sub-acute services to aged care services, either residential care or care in the community.

# Transition care: will it deliver?

Gray et al, MJA 2008; 188 (4): 251-253

- The stated key goals of the program include both patient-oriented and health system objectives:
  - to optimise patients' functional capacity,
  - to ease transitions at the nexus between the hospital and aged care sector through improved service integration, and
  - to minimise inappropriate extended hospital stays and avoid premature admission to residential care.
- Our crude estimates show the estimated annual cost of transition care at \$150 million to be equivalent to:
  - around 400 acute hospital beds at \$1000 per day, or
  - 850 subacute beds at \$500 per day, or
  - 2100 permanent residential care places at \$200 per day.

# Transition Care: what is it and what are its outcomes?

## Cameron I Davies O. MJA 2007; 187: 197-198

### Comparison of background, status and outcomes for participants in three Transition Care Program (TCP) services

	Service A (community) (n = 30)	Service B (residential) (n = 30)	Service C (community) (n = 29)	Statistical significance*
Mean age (SD) in years	80.9 (7.9)	84.5 (5.1)	80.4 (8.0)	ns
Female	60%	47%	59%	ns
Living alone	40%	47%	62%	ns
Primary diagnosis — trauma (fractures and falls)	43%	20%	41%	ns
Barthel Index				
On admission to the TCP — mean (SD)	66.9 (13.8)	55.2 (26.8)	69.2 (19.1)	$F = 3.85;$ $P = 0.025$
On discharge from the TCP — mean (SD)	72.8 (17.6)	56.4 (34.2)	82.8 (22.0)	$F = 7.69;$ $P = 0.001$
Mean change (SD)	5.9 (21.3)	1.5 (19.0)	11.6 (13.3)	ns
Discharge status — in the community†	60%	20%	76%	$\chi^2 = 35.6;$ $P = 0.000$

\* Based on a comparison between the three groups ( $\chi^2$  test for categorical data, and analysis of variance [ $F$  test] for continuous data). † Patients were in the Program for 12 weeks unless they left early because of admission to hospital or permanent admission to a residential care facility. ns = not significant.

# The Future

- **Multidisciplinary assessment and management, the tools of subacute care, will be used in more and less disabled older people. eg falls clinics, incontinence clinics, ?RACFs**
- **Medical and technological advances will increase fiscal pressure on the total system e.g. 6 months course of cholinesterase inhibitor drugs for dementia = 6 weeks of physiotherapy treatment**
- **Older people will have more money**
  - **User pays**
  - **Multiple tiers of systems**
    - » **Rolls Royce versus the Holden**
    - » **Private health and long term insurance ? deregulate**
- **There will be more pressure to treat a wider variety of conditions at home or in the nursing home or hostel.**
- **The focus in residential and community care will become more focused on maintaining function.**