Healthy Ageing and Service Trajectories

Hal Kendig[1], Louisa Jorm[2], Julie Byles[3], Scott Walter[2], Sonja Lujic[2]

[1] *University of Sydney*

[2] *University of Western Sydney*

[3] *University of Newcastle*

Presented to 2010 AAG Rural Conference

15 & 16 April 2010, Ballina NSW

THE UNIVERSITY OF SYDNEY

THE UNIVERSITY OF SYDNEY

Presentation Overview

1. Ideas and Policies for Healthy Ageing and Service Use
2. HACC/45and Up: Exploring Health and Home and Community Care Clients
3. MELSHA: Health and Service Trajectories and Predictors of Entry to Residential Care
4. Conclusions and Directions

1a Ideas and Policy Issues

- Understanding ageing changes as well as older people (trajectories)
- The importance of 'upstream' action (keep healthy) not only 'downstream' care, eg health promotion and maintaining independence
- Client centred program goals: continuity, integration, and timeliness for older people with multiple needs

- The value of 'whole of government' approaches delivered to each person appropriately.
- The fragmentation of program delivery across departments and levels of government.
- How do we know the combined effects of policies and outcomes for individuals over time? How can we organise the system better?

1b Why take the 'Pathways' Approach?

Allows us to better understand:

- Access to Services
- Multiple services usage
- Duration of services use
- Predictors of key turns on paths

and how it helps improve understanding of what is delivered by aged care systems

2a HACC/45 and Up

HACC/ 45 and Up: Exploring Health and Home and Community Care clients

Primary aim: to explore health-related factors associated with HACC use

Investigators led by Louisa Jorm including Julie Byles and Hal Kendig

Research funded by a competitive research grant from the Ageing, Disability and Home Care, Department of Human Services (ADHC) [Thanks especially to Noreen Byrne]

Conducted at the Sax Institute with its collaborators including the Cancer Council NSW, National Heart Foundation NSW, Beyond Blue, DADHC, and Uniting Care Ageing

2b The Research Methods

The 45 and up study:

- Largest cohort study in Australia (longitudinal) Baseline 2006 to 2008
- Recruited more than 260, 000 men and women aged 45 and up in NSW
- Medicare sample and self completion questionnaire (baseline) on social/demographic factors, health conditions and behaviours, etc

Data Linkage Strategy (for individuals, with permission, and confidentially)

Centre for Health Records Linkages (CHeReL)

Hospital Admitted Patient Data Collection and other administrative data

And the new element: for 100,000 45 and Up respondents

4977 in the HACC Minimum Data Set (confidentially) across the full range of services for one year before each person's survey completion

2c Preliminary results

› We compared clients of HACC services and non HACC service users :

- demographics
- lifestyle factors and
- health and functional status

THE UNIVERSITY OF SYDNEY

2d Demographic Factors in HACC Use

Table.1 Demographic Factors in HAAC Use

More likely to be HACC clients	Less likely to be HACC clients
• Women • Older (especially 75+) • Lower incomes • Live in regional or rural areas • Don't have a partner • Not in paid work • Aboriginal or Torres Strait Islander • Have no children • Have no or few people they can depend on within 1 hour travel	• Men • Younger • Higher incomes • Live in metropolitan areas • Have a partner • In paid work • Born in an Asian country • Speak a language other than English at home • Have children

THE UNIVERSITY OF SYDNEY

2e Life Style Factors in HACC Service Use

Table 2. Lifestyle Factors (after controlling for the demographic factors)

More likely to be HACC clients	Less likely to be HACC clients
• Underweight	• Healthy weight
• Obese	• Physically active
• Inactive	• Never smoker
• Current or ex-smoker	• Drink alcohol
• Don’t drink alcohol	• Eat vegetables
• Eat no vegetables	• Eat fruit
• Eat no fruit	

THE UNIVERSITY OF SYDNEY

2f Health and Functional Status

Table 3. Health and functional status (again after controls)

More likely to be HACC clients	Less likely to be HACC clients
• Fair or poor self-rated health • Moderate or greater level of psychological distress • Moderate to severe functional limitation • Help needed for day-to-day tasks due to disability • Fair or poor eyesight • Fair or poor memory • Fair or poor teeth and gums	• Excellent self-rated health • Low level of psychological distress • No or minor functional limitation • No help needed for day-to-day tasks • Good eyesight • Good memory • Good teeth and gums

THE UNIVERSITY OF SYDNEY

2g Preliminary Conclusion and implications

- There are differences between HACC and non-HACC clients within 45 and up
- Some modifiable lifestyle risk factors
- Health factors that are amenable to primary and secondary intervention

› Preventative care programs in the HACC service setting??

THE UNIVERSITY OF SYDNEY

2h Published reports and directions

- Policy briefs will be found at:
- www.saxinstitute.org.au
- Further analyses expected to be published by end of the year, this also includes:

1) How do hospitalisation rates differ between HACC users and non-users?
2) Among HACC users, how are services used? (different clusters and profiles of usage)

And longer term: examine changes over time (trajectories) and other service use outcomes (eg residential care entry?)

3a Service Trajectories and Entry to Residential Care (Melbourne Longitudinal Surveys on Ageing)

Study Directors: Colette Browning (Monash University) and Hal Kendig

MELSHA key collaborators for services analyses

– Prof Shane Thomas – collaborator in data collection strategies and health services analyses

– A/Prof Dave Grayson – statistical consultant

– Dr Matthew Carroll (now Monash) – community services use

MELSHA has had several dozen investigators from a range of disciplines and professions over its various rounds

3b MELSHA: funding rounds

Victorian Health Promotion Foundation

‘Health Status of Older People Project’, 1994-97

National Health and Medical Research Council (NHMRC)

‘Health Behaviours and Outcomes in Old Age’ 1998-2001

‘Functional Ageing, Health, and Services’ 2002-2004

‘Health, wellbeing, disability & service pathways’ 2008-10

THE UNIVERSITY OF SYDNEY

3c MELSHA: Key Study Questions

- What influences older people's health actions?
- Do health actions change through later life?
- What outcomes are predicted by health actions? (survival; community living; independence and feeling well at home)?

Answers to inform health promotion for older people

THE UNIVERSITY OF SYDNEY

3d MELSHA Research Design

- 1994 baseline survey of 1000 aged 65+ representative of the community in Melbourne (electoral roll sample)
- Instruments: face-to face interview, physical measures, and self-completion questionnaire
- Focus: health actions and attitudes, medical conditions (self report), service use
- Follow-up every 2 years (telephone) to 2002; 2004 face-to-face interview; telephone/mail 2005; death register checks

3e MELSHA Baseline Characteristics (1994)

Average Age of 74 years at baseline

- Capacities
  - Full instrumental independence (81%) at baseline
  - Good or better self rated health (81%)
  - Able to walk two or more kilometres (70%)
- Well-being
  - Frequently happy etc (80% plus)
  - High life satisfaction (80% plus)
- Risks
  - Most no energetic exercise
  - Less than half ate daily fruit, vegies, milk
  - A third of women had fallen in the previous year
  - 15% took five plus prescribed medications

THE UNIVERSITY OF SYDNEY

3f Outcomes after 11 years of the study

- Outcomes to 2006
- • 42% still in the community
- • 5% were living in residential care
- • 41% known to have died
  - (including 14% known to have entered residential care beforehand)

- [11% of the sample was lost to follow up and hence outcomes were not known]

THE UNIVERSITY OF SYDNEY

3g Who has help with daily living?

MELSHA wave	n	Family members or neighbours	Private service	Community service
1994	1000	13	5	7
1996	796	4	8	10
1998	649	17	6	10
2000	542	17	5	16
2002	398	11	8	17
2004	326	**	18	20

Notes:

Percentages of those known to still be in the community

* Includes people seeking help from multiple sources

** There was a measurement error with family/neighbour help for 2004. No estimate is available yet

3h HACC Service Types (%) by year of data collection

MELSHA wave	n	Home help	Home meals	Home nursing	Day care	Home maint
1994	1000	9	2	1	1	1
1996	796	10	3	0	0	1
1998	649	11	4	1	0	0
2000	542	15	4	1	0	2
2002	398	18	3	0	0	4
2004	326	21	4	1	0	5

Note: Percentages of those known to still be in the community

THE UNIVERSITY OF SYDNEY

3i Who becomes a community service user?

- More likely if at baseline they were relatively older, had a cognitive impairment, had low incomes, were IADL dependent, underweight or obese, and/or living alone or with others besides a spouse
- But overall baseline characteristics are not good predictors of service use up to 11 years later – this is not surprising!
- We need to examine changes just before or at the same time as becoming a service user

THE UNIVERSITY OF SYDNEY

3j What are the baseline predictors of entry to residential care?

- Multi variate models with blocks of socio-economic, health, and life style factors at baseline to build multivariate models predicting successful ageing
- Results show independent significance (after taking account of all other predictor variables).
  - Older age, IADL dependency, cognitive impairment, underweight, low social activity
  - For men, more determined by disease burdens and healthy nutrition
  - For women, more never having been married, IADL dependence, and underweight

Other life style factors – sleep, weight, social support – important indirectly through influence on health

Important not significant factors: socio-economic resources, living arrangements, physical activity, incontinence (not significant after controls)

4. Conclusions and Directions

Key Risk factors for health and care needs (targeting and interventions)

- **Social groups: Older age itself (indicator of multiple vulnerabilities)**
- **Health Factors: if we can treat effectively, use of services could lessen or be delayed**
- **Life Style Factors: How modifiable are they? (quite possibly never too late)**

Gender differentials:

- **his, her, and their (couples) experiences of ageing**
- **promotion and treatment geared to gender sensitive meanings**

Key findings for health promotion:

- **Healthy life styles in old age have longer term benefits through influences on health and hence serve use as well as quality of life**

Questions: Can life style interventions yield the same benefits as ‘natural’ variation?

How are service trajectories affected by service supply –and for whom?

What are the key factors in continuing, losing, or regaining healthy living?

THE UNIVERSITY OF SYDNEY

A Reference

- Kendig, H.; Pedlow, R; Browning, C; Wells, Y; Thomas, S.
- "Health, Social, and Life Style Predictors of Entry to Residential Aged Care: An Australian Longitudinal Analysis"
- Age and Ageing, Advance Access March 15, 2010, pp 1-7