

## Costs and outcomes of extra care housing

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**PSSRU**  
at the University of Kent at Canterbury,  
the London School of Economics  
and the University of Manchester

## Costs and outcomes of extra care housing

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- Extra care housing
- Project design
- Residents and outcomes
- Costs and cost-effectiveness
- Social well-being

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## What is extra care housing?

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- Type of Assisted Living
- Aims
  - To meet housing care and support needs while maintaining independence in private accommodation
- Features
  - Own front door to self contained unit
  - Tenant/leaseholder
  - Accessible buildings with AT/SMART
  - Communal facilities and community amenities
  - Domestic support
  - Meals/ catering services

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## Features of extra care housing continued...

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- Home for life
- Keeping couples together
- 24 hour care
- Flexible individual levels of care
- Promotion of independent living
- Culturally sensitive provision
- Mixed/balanced communities

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## Models of Extra Care

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- Design
  - Small housing development
  - Small village
  - Block of flats
  - Group of bungalows with resource centre
- Facilities
  - Lounges, meeting rooms, hobby rooms, gyms
  - Restaurant facilities
  - Assisted bathing, laundries
- Care
  - Joint or separate provision of housing and care
  - Dedicated team or variety of providers
  - On site or off site night cover

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## Characteristics

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- Multiple objectives
- Multiple agencies
- Multiple streams of funding
- Dispersed social costs
- High expectations

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## Policy

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- Longstanding commitments:
  - Independence
  - 'Own home' rather than residential care
  - Personalisation
- ECH Funding Initiative
  - £227million capital funding 2004 - 2010
- Current policies:
  - Partnerships
  - Plurality
  - Personalised support
  - Prevention

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## Levels of provision

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- Extra care housing
  - 21,000 dwellings in 2003
  - 43,300 dwellings in 2009
- Care homes 2009
  - Residential 276,000 places
  - Nursing 179,000 places

Sources: Elderly Accommodation Counsel 2009, Laing and Buisson 2009

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## Current context

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- Financial straightened times
- Capital investment required to expand provision
- Key questions –
  - Does extra care deliver better outcomes?
  - How much does it cost?
  - Productivity - is it cost effective?
  - Do people like it?

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## ECHI Evaluation

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- 19 schemes from first two waves of funding
- Aims
  - Short and long-term outcomes for residents and schemes
  - Costs and funding
  - Comparison with care homes
  - Factors associated with costs and outcomes

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## Linked Studies

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- JRF-funded
  - Study of social well-being
  - Single scheme costs and outcomes
- EVOLVE:
  - EPSRC-funded study of design evaluation (Sheffield/PSSRU)

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## Design

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- Comparable with longitudinal survey of people moving into care homes
- Resident data
  - ADLs, services, expectations & well-being
  - Moving in, and 6, 12 & 18 months later
- Scheme data
  - Contextual information on opening
  - Costs and context a year after opening

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## The schemes

- All new build, opened 2006-2008
- 1468 dwellings
- 3 retirement villages:
  - 770 dwellings (242-270)
- 16 smaller schemes
  - 716 dwellings (35-75)
- People with care needs
  - 909 dwellings

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## Residents

- Views on moving in from 950
- Baseline assessment data
  - 817 of those moved in during study period
    - 172 to care villages
    - 645 to smaller schemes
- 609 within first 6 months of opening
- Approx 67% response rate

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## Outcomes for Residents in Extra Care Housing

Robin Darton

Symposium: Costs and Outcomes of Extra Care Housing in England; 64th Annual Scientific Meeting of The Gerontological Society of America, Boston, 18-22 November 2011



## Presentation

- The PSSRU evaluation: data collection & response
- Characteristics of residents in extra care & care homes
- Outcomes for residents
- Summary and discussion

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## PSSRU Evaluation: Data Collection

- Resident data
  - Functioning, services, expectations & well-being
  - Moving in; 6, 12, 18 & 30 months later
  - Dates of moving in, leaving & death
  - Destination of leavers
- Comparison with 494 (personal) care home residents admitted in 16 authorities in 2005

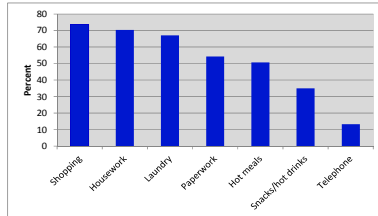
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## PSSRU Evaluation: Response (November 2010)

	No.	No. resid s	No. with data	No. with Res Q	No. with Assessment Q			
					Total	+ 6m	+ 18m	+ 30m
Smaller schemes	16	996	680	620	645	390	187	114
Villages	3	896	568	562	172	63	61	9
Total	19	1894	1248	1182	817	453	248	123

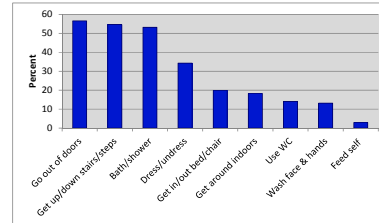
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### Entrants to Extra Care (2006-10): Require Help with IADLs



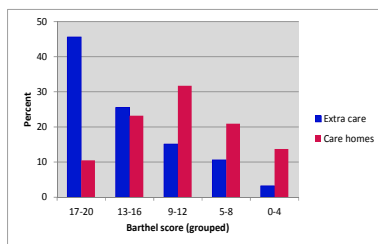
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### Entrants to Extra Care (2006-10): Require Help with ADLs



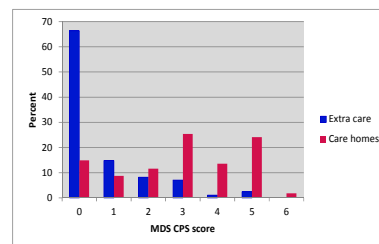
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### Entrants to Extra Care (2006-10) & Care Homes (2005): Barthel Index of ADL



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### Entrants to Extra Care (2006-10) & Care Homes (2005): MDS CPS



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### Entrants to Extra Care (2006-10): Change in Dependency by Follow-Up

	Follow-up	% deteriorated	% improved
Barthel Index of ADL	0-6 months	9	12
	0-30 months	22	8
MDS CPS	0-6 months	8	6
	0-30 months	6	14

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### Entrants to Extra Care (2006-10): Location at End of Study

	Number	%
Still in scheme	458	56.1
Moved	69	8.4
Nursing home	29	3.5
Care home	16	2.0
Elsewhere/not known	24	2.9
Died	161	19.7
Died in scheme	62	7.6
Died elsewhere	99	12.1
Lost to follow-up	129	15.8

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## Entrants to Extra Care: Dependency at Assessment by Location at End of Study

	Number	Mean Barthel score	Mean MDS CPS score
Still in scheme	458	15.2	0.61
Moved	69	13.2	1.23
Nursing home	29	12.2	1.37
Care home	16	13.2	1.79
Died	161	13.5	0.69
Died in scheme	62	12.8	0.97
Died elsewhere	99	14.0	0.52
Lost to follow-up	129	15.9	0.69

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## Entrants to 11 Extra Care Schemes (2006-07): Mortality & Survival

Number of individuals	374
Number of deaths	115
Mean time to death	20 months
% died by 30 months ( $\geq 65$ )	34%
Predicted median (50%) survival from model:	
Extra care ( $\geq 65$ )	32 months
Care home (2005)	21 months
Nursing home (2005)	10 months

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## Summary

- Average level of dependency lower than in care homes
- Substantial need for help with IADLs & mobility
- Very few with severe cognitive impairment
- Follow-ups demonstrate that can be home for life, but support for cognitively impaired less certain

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## Discussion

- Role of extra care in support of cognitively impaired
- Identifying residents who might need greater support
- Relationships between fit and frail, social groups etc: importance of support for all residents and managing expectations, especially in villages
- Sustainability of extra care model:
  - Pressure resulting from local authority nomination rights
  - Development of new schemes (provision relatively limited)
  - Public understanding/demand (downsizing)
  - Expectations of partner organisations and their staff

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## The Costs and Cost-Effectiveness of Extra Care Housing

PSSRU Evaluation of the Extra Care Housing Funding Initiative

Theresa Bäumker

Gerontological Society of America Conference  
Boston, 18-22 November 2011

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## Outline

- Costing principles
- Total cost and cost components
- Cost variation
- Cost-effectiveness of extra care housing
  - Comparator: 1995 longitudinal & 2005 cross-sectional PSSRU study of admission to care homes

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## Context

- Public funding cuts, need to justify expenditure
- Understanding of costs and cost-effectiveness (in comparison to alternatives) is important
- Need to measure costs and outcomes they were incurred to achieve

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## Costing

- Greatest lack of evidence in terms of costs
- Costing methodology / 'rules'
  1. Comprehensive costs
  2. Reflecting variations
  3. Like-with-like comparisons
  4. Costs in relation to outcomes

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## Comprehensive Costs

Cost Component	No.	Mean	Std. Dev	Min	Max
Capital, incl. land	465	105.67	21.29	50.93	157.12
Housing management	465	52.76	15.90	21.17	77.67
Support costs	465	9.81	4.80	2.41	22.14
Activities cost	119	2.85	0.81	1.41	3.52
Social care	465	102.04	111.81	0.00	612.00
Health care	465	64.76	106.55	0.00	634.29
Living expense	465	79.95	3.38	73.80	81.80
<b>Unit Cost (p/w)</b>	<b>465</b>	<b>415.79</b>	<b>179.10</b>	<b>173.98</b>	<b>1241.70</b>

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## Reflecting Variation I

- 11 % of total variation was explained by differences between schemes
- Level-1 covariates (at individual-level)
  - Higher needs entailed higher costs
  - Positive association between costs and indicator of well being, CASP-19. Costs higher for individuals with better scores, other things being equal

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## Reflecting Variation II

- Level-2 covariates (scheme-level)
  - Estimates exhibited the expected signs:
    - Combined service delivery by housing and care providers was 13 % less costly than where care was separately provided
    - Model showed that problematic staff turnover predicted higher costs
  - However, larger RSLs, as measured by their annual audited turnover, associated with higher cost

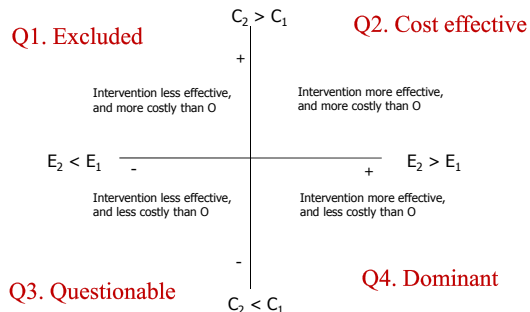
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## Like-with-like comparisons

- In the absence of randomisation
  - ECH younger, less likely lived alone, have longstanding medical condition, have problem behaviour, and less dependent (Barthel), less confused (MDS CPS) than 1995
- Propensity score matching:
  - 240 matched pairs with 1995 care homes group; achieve balance in baseline covariates
  - In 2005 data, more dependent admissions, 30% matched to an extra care resident (n=136 matched pairs)

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## Costs and Outcomes



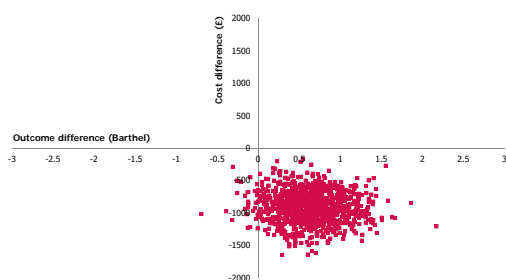
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## C-E Results (1)

		Mean	S.D.	Range (min, max)	Mean diff.	(p-value)
Cost p/w (£)	Extra Care 1995	374	131	172 892		
	Res.Care	409	65	310 663	-34.69	>0.001
Cost per 6M (£)	Extra Care	9,722	3,397	4,480 23,179		
	1995	10,624	1,685	8,059 17,239	-901.87	>0.001
Effect over 6M (Barthel)	Extra Care	0.28	3.27			
	1995	-0.37	4.33		0.64	0.007
<b>Incremental Cost Effectiveness Ratio (ICER)</b>		-1,406				

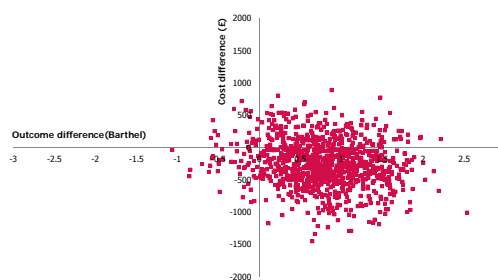
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## C-E Results (2) n=240 matched pairs



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## C-E Results (3) n=136 matched pairs



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## Conclusions

- ECH promising type of provision
- This raises the issue of cost
  - For improved productivity want both better outcomes and either the same or, ideally, lower costs
- This study found
  - Costs were lower when compared to equivalent people who moved into publicly funded care homes in 1995
  - Similar to more dependent type of person in 2005

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## Social Well-Being of Residents in Extra Care Housing

Lisa Callaghan

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## The social well-being project

- Focused on first year after opening
- Aimed to:
  - Explore development of social activities and community during first 6 months
  - Identify differences in social well-being after 12 months
- 15 schemes:
  - 2 villages: 258 and 270 units
  - 13 smaller schemes: 35-64 units

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## Methods & sample

- 6 months after opening:
  - Interviews with 2 staff members per scheme
  - Interviews with 4-6 residents per scheme
- 12 months after opening:
  - Questionnaires from 599 residents
  - Interviews with 166 residents
  - 'Indicators' of individual social well-being
    - Social life & loneliness, friendship, activity participation, social support

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## Quality of life & social well-being (1)

- Residents valued independence, security and social interaction offered by ECH

*'I think more people should know about [extra care]. We get together and talk about all sorts of things, there's entertainment. And you've got a bell to push if you need anybody. It couldn't be better.'* (Female resident)

*'I would have thought it's the best answer to everything – you've got privacy but you've got activities that are there.'* (Female resident)

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## Quality of life & social well-being (2)

- 12 months after schemes opened:
  - 2/3 rated QoL as 'good' or 'very good'
  - 90% had made friends since moving
  - 80% felt positively about social life
  - 70% took part in an activity at least once a week
  - 75% were fully occupied in activities of their choice

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## Social isolation

- Some residents were socially isolated
  - More likely to be in receipt of care
  - Rated health as worse
  - Mobility problems a barrier

*'The biggest problem is needing the carers to get you to anything'* (Female resident)

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## Overcoming social isolation

- Some schemes were addressing social isolation
  - Practical support for people with mobility problems
  - Encouragement to participate
  - Support for people with memory problems

*'We've also employed [member of staff] whose job it is to work with people on a one-to-one basis, primarily people with memory problems, but will also work with people who maybe just need a bit of support'* (Staff member)

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### Communal facilities

- Communal facilities play important role in friendship development
- Restaurants and shops key; importance of lunchtime

*'The shop has been a catalyst to getting people integrating well together.'* (Staff member)

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### Social activities

- Social activities valued by residents, and important for friendship development
- Friendship most important benefit of participation
- Some schemes encountered difficulties in providing for diverse group of residents: wide range of activities needed
- Residents valued organising and running activities, but resources to support this crucial

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### Local community links

- Residents valued maintaining or building up links with local community
- Local context important in determining extent of involvement

*'What we do find is used quite a lot is the restaurant and shop, because in the local vicinity there isn't anything. So you get school children at school time that come and use it, and you get people in and out during the day.'* (Scheme manager)

- Mixed opinions from residents about others coming in to use scheme facilities, join activities etc.

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### Villages and smaller schemes

- Overall, better social well-being in villages
  - Residents more positive about social life, less likely to report being lonely/isolated, participate more often, have more contact with friends
  - Villages may offer some social advantages
  - However, not a clear conclusion...

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### Provision of facilities and activities

- Villages:
  - Have a wider range of facilities e.g. gyms, craft/hobbies rooms, bars
  - Have larger variety of social activities
  - Have more resources (funding, staff) to sustain such facilities and activities

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### The residents (1)

	Schemes	Villages
Receiving personal care	57%	7%
Very low dependence	49%	93%
No cognitive impairment	66%	99%

- Village residents less dependent than those in schemes

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## The residents (2)

- Findings suggest villages suit more able, active older people very well
- But evidence not as clear for those with some level of disability
  - In villages, some links between lower social well-being and higher levels of dependency
- Attitudes to frailty

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## Attitudes to frailty

*'The village seems to me to be becoming a nursing home rather than a retirement village, which was not expected before moving here.'* (Male resident)

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## Conclusions

- ECH can provide an environment supportive of social well-being
- Communal facilities and social activities were valued, and were important for friendship development
- Resident involvement in running the schemes' social lives was beneficial, but staff support is crucial both early on and over time
- Local community links were valued; location is important in facilitating these links
- Smaller schemes and villages have different challenges to overcome to promote social well-being

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## Contacts

- PSSRU publications on the evaluation:
  - [www.pssru.ac.uk/projects/echi.htm](http://www.pssru.ac.uk/projects/echi.htm)
- Housing and Care for Older People Research Network:
  - [www.hcoprnet.org.uk/](http://www.hcoprnet.org.uk/)

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