Social care data – challenges and opportunities for evaluation

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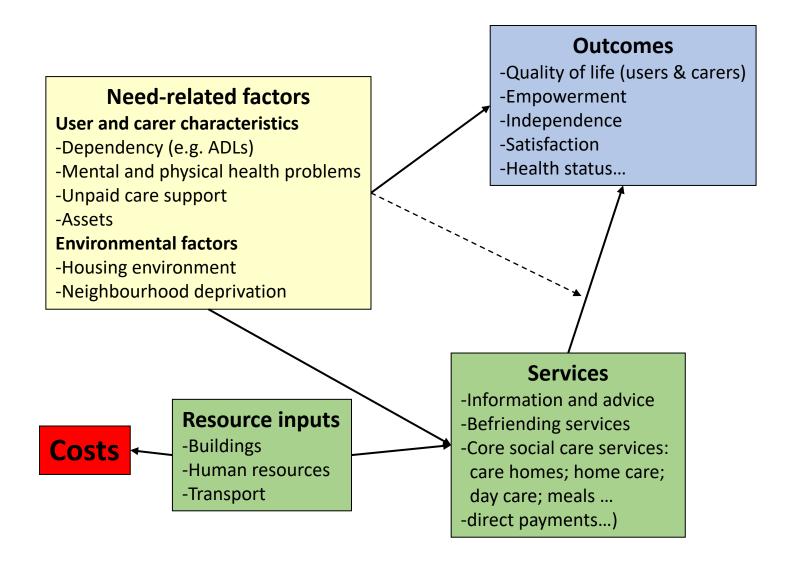
CPEC at LSE

14-07-2020

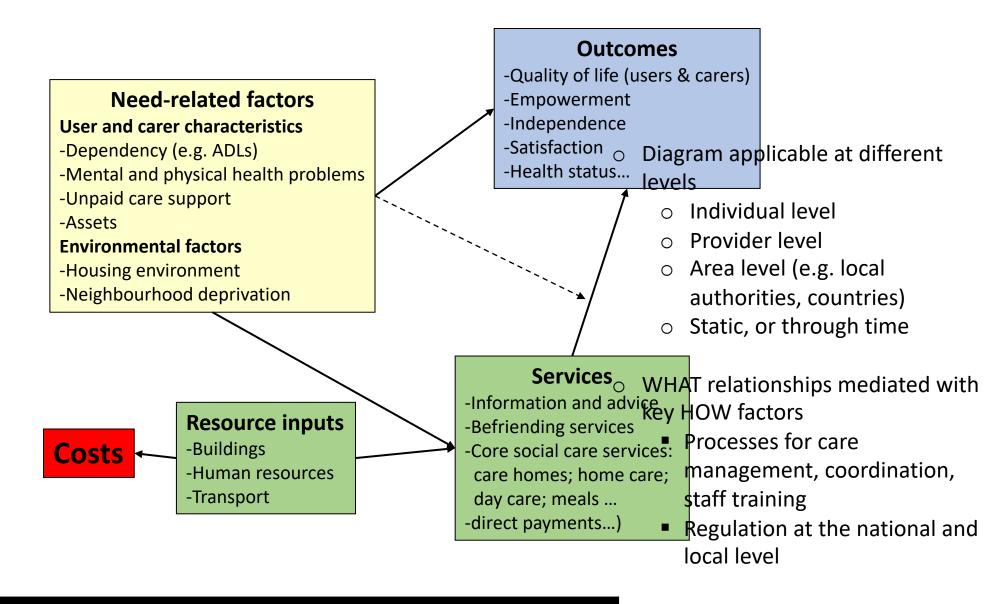




- Reflects joint work with: Javiera Cartagena-Farías; Francesco D'Amico, Sanna Read, Amritpal Rehill, Sam Rickman, Tom Snell
- 5 local authorities in England
- **Disclaimer**: This presentation summarises independent research funded by the National Institute for Health Research School for Social Care Research. The views expressed are those of the author(s) and not necessarily those of the NIHR SSCR, the National Institute for Health Research or the Department of Health and Social Care.





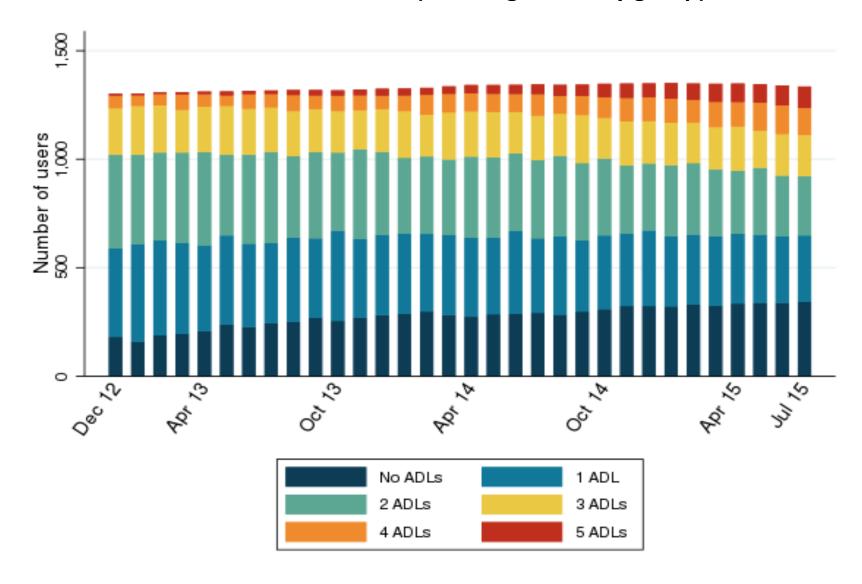






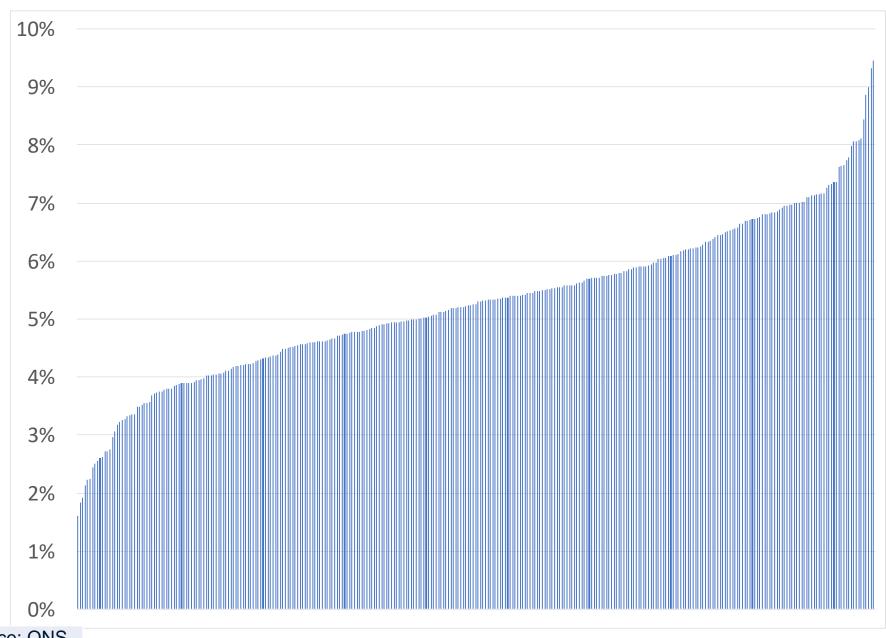
- Complexity of estimating relationship between services and outcomes
 - Disentangling the relationship between needs, services and outcomes
 - Effects take place over time
 - Different evaluative "traditions"
- Lack of large, quantitative evidence for analysis
 - Few large, longitudinal studies
 - Potential to use administrative data for evaluation?

Number of ADLs limitations (Learning Disability group) LA2



ADL activities: Eating, Washing, Dressing, Toilet, Transfer

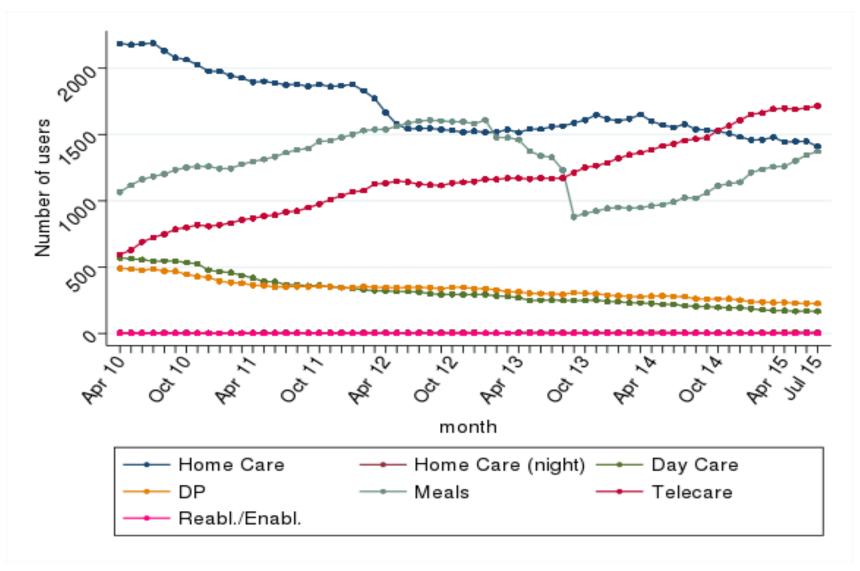
Proportion of the population aged 80 or above (local authorities, England mid 2018)



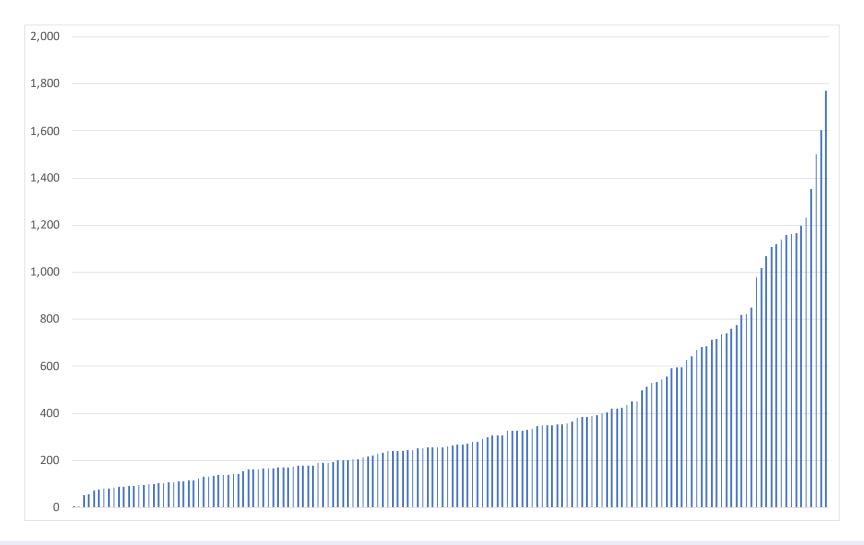


Source: ONS

Older community care users by service type – (LA 2)



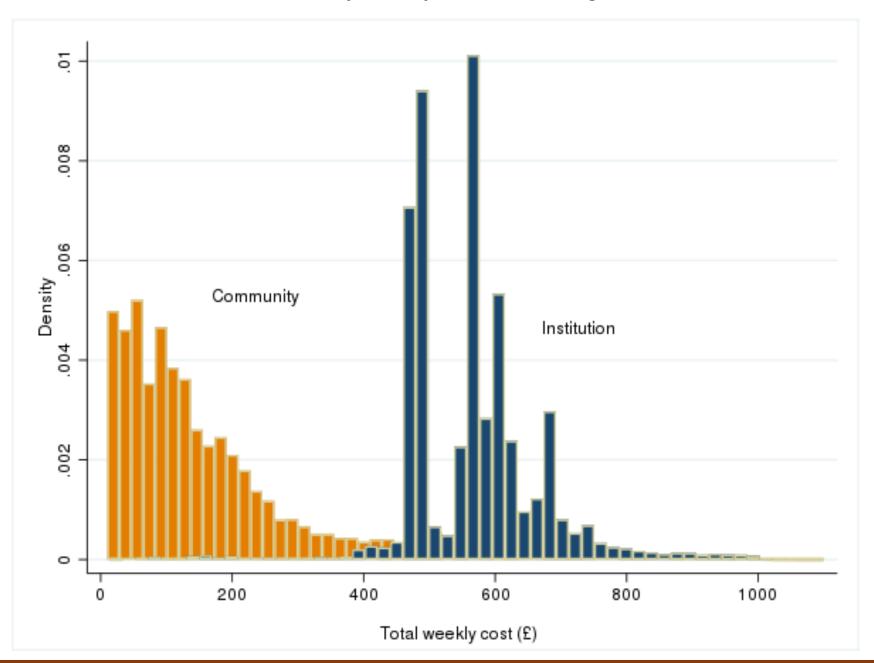
Long-term support needs of older adults (aged 65 and over) met by admission to residential and nursing care homes, per 100,000 older population (2018/19)



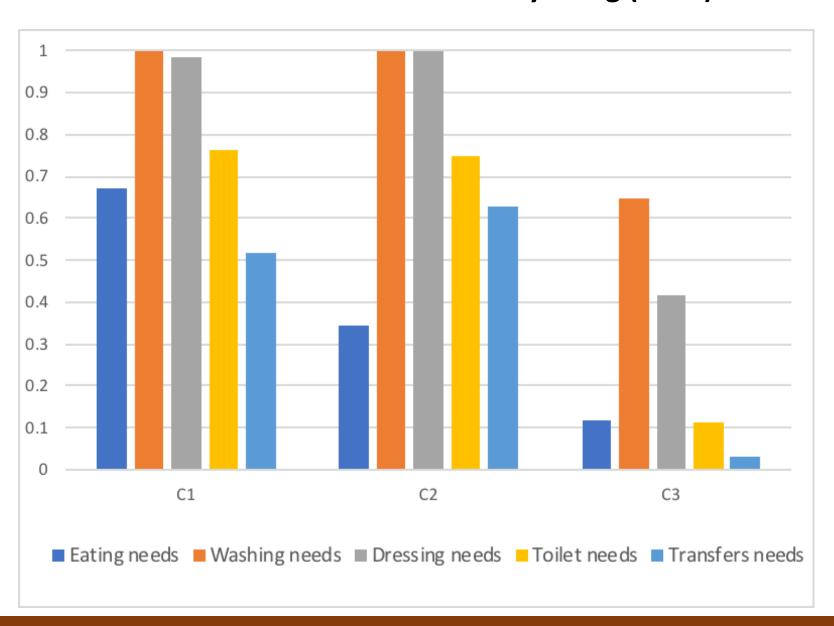


Number of council-supported older adults (aged 65 and over) whose long-term support needs were met by admission to residential and nursing care homes, per 100,000 population Source: NHS Digital

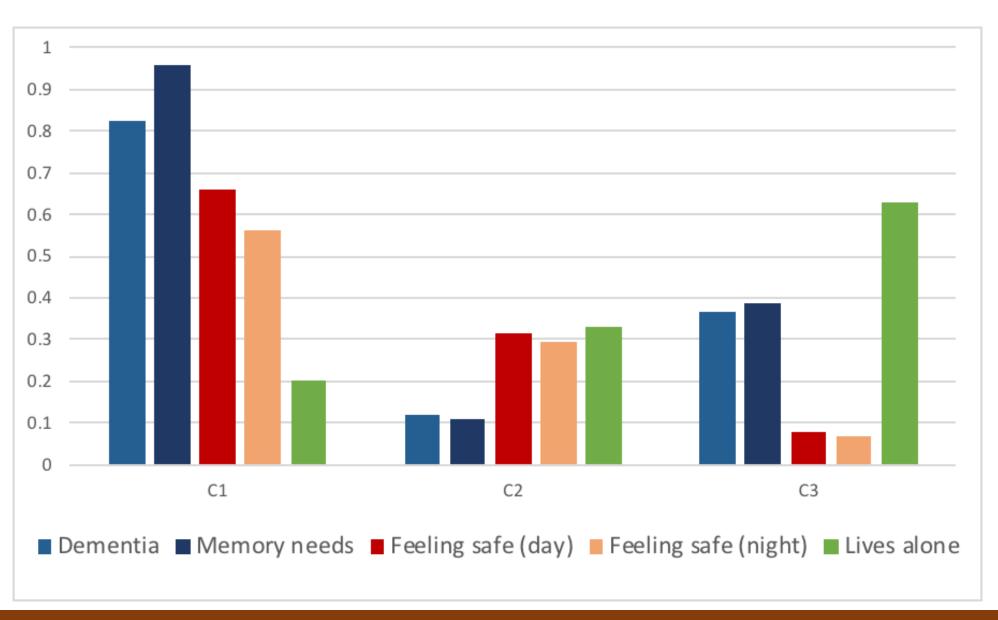
Distribution of total weekly costs by social care setting, older users – LA3



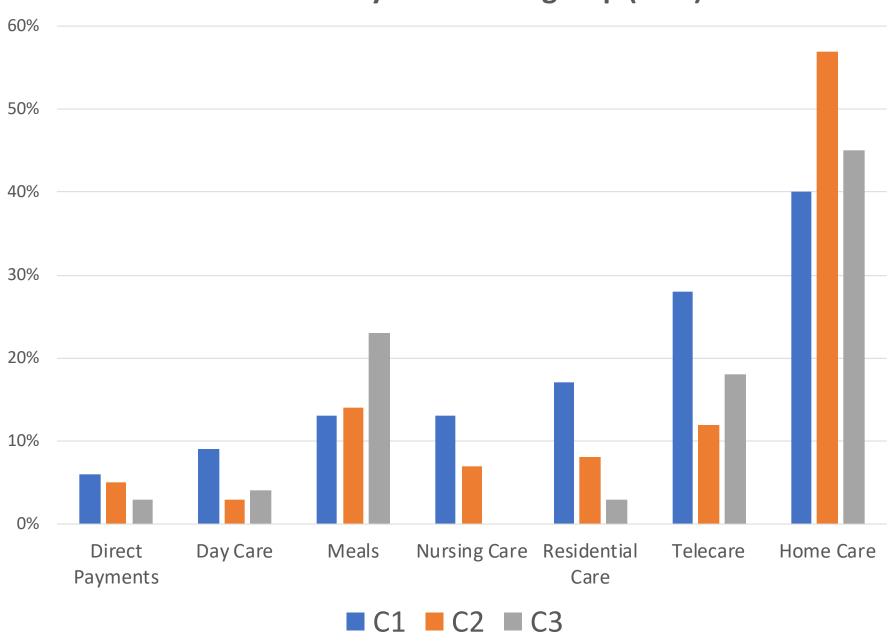
Typologies of older clients – LA 2 Problems with activities of daily living (ADLs)



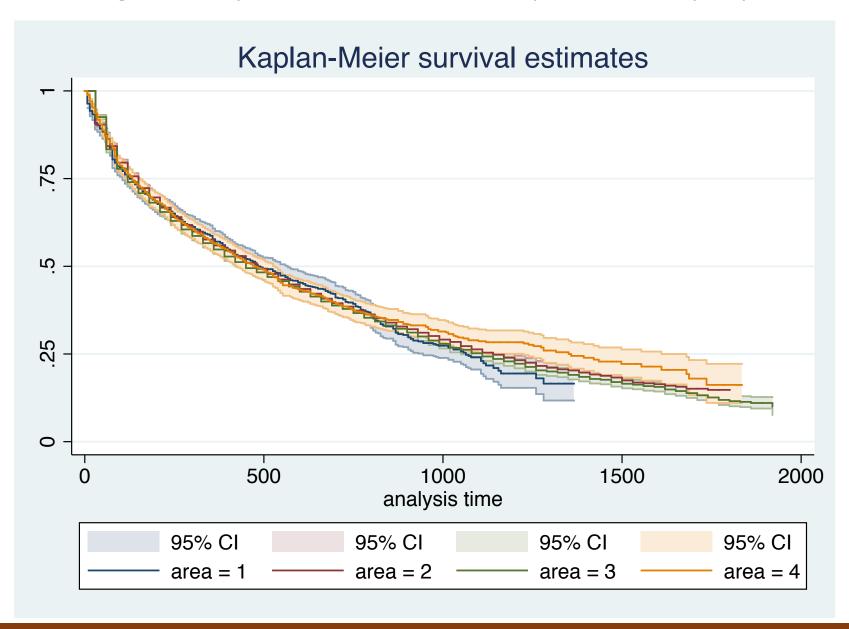
Typologies of older clients – LA 2 Other needs

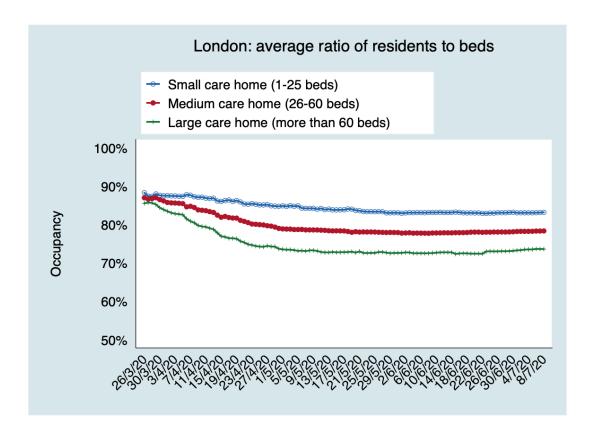


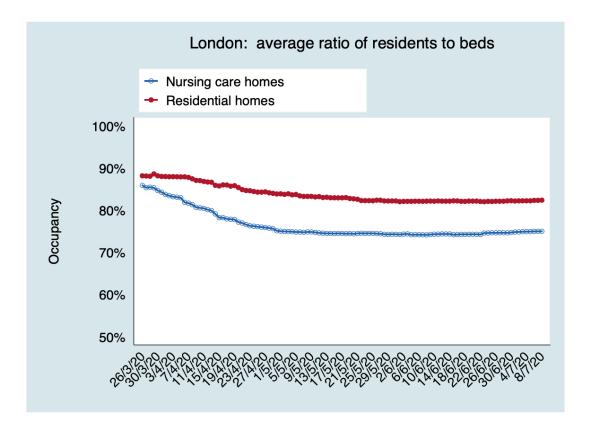
Service use by older Class group (LA 2)



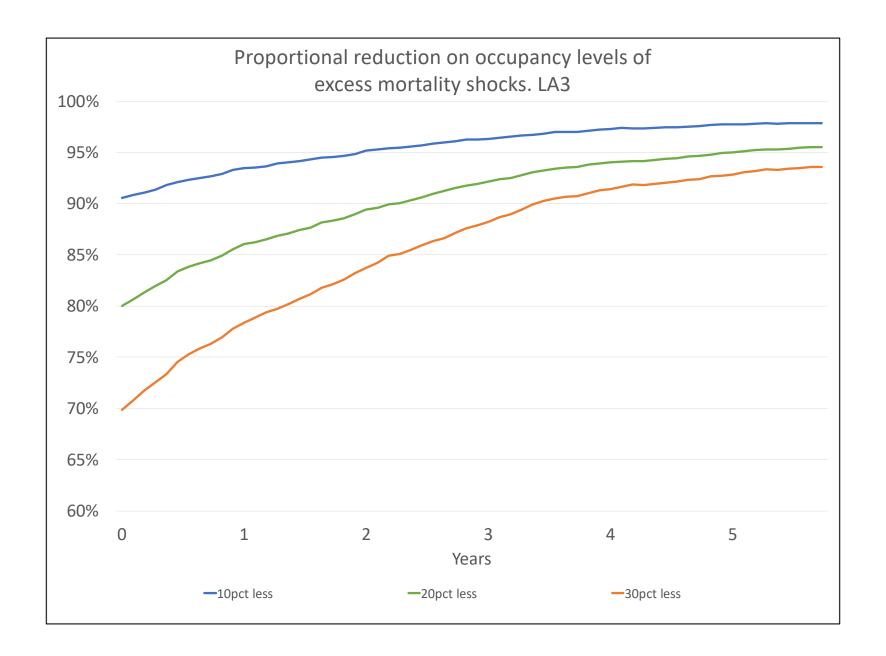
Length of stay in residential care (days) for older people



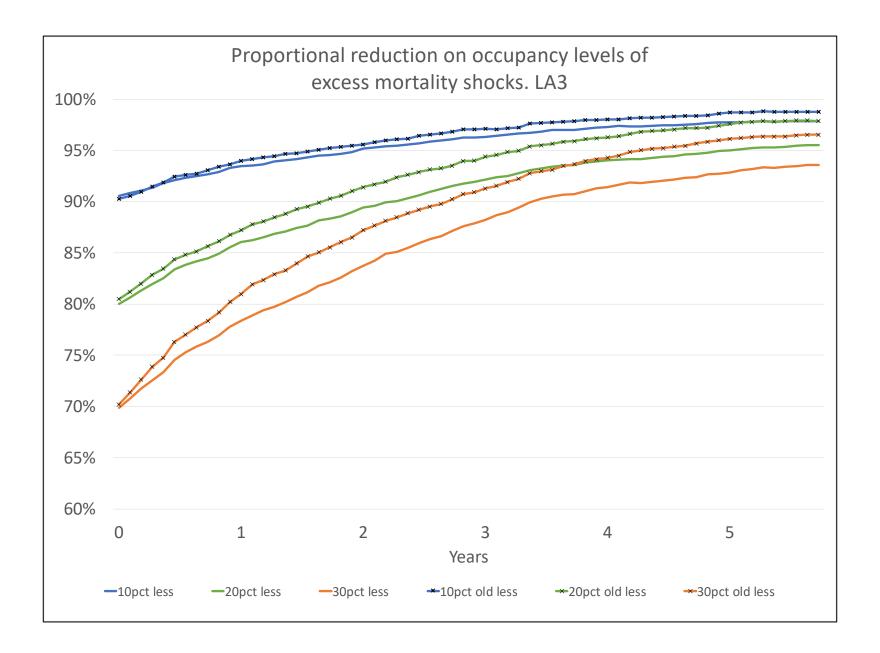








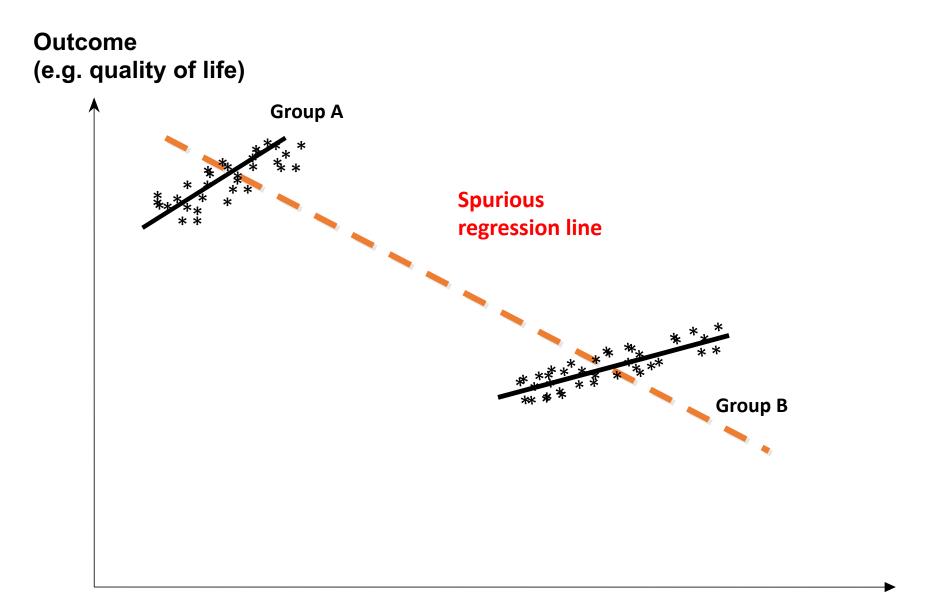








- Lack of indicators of outcomes collected systematically by the system
 - Destinational outcomes (e.g. care home admission)
 - Death
 - Changes in needs as reflected in assessment
- Challenges of estimation because of the interrelationship between services needs and outcomes
 - Needs have a positive relationship on service intensity
 - Services should have a positive effect on outcomes (hopefully!)
 - Needs have a negative effect on outcomes

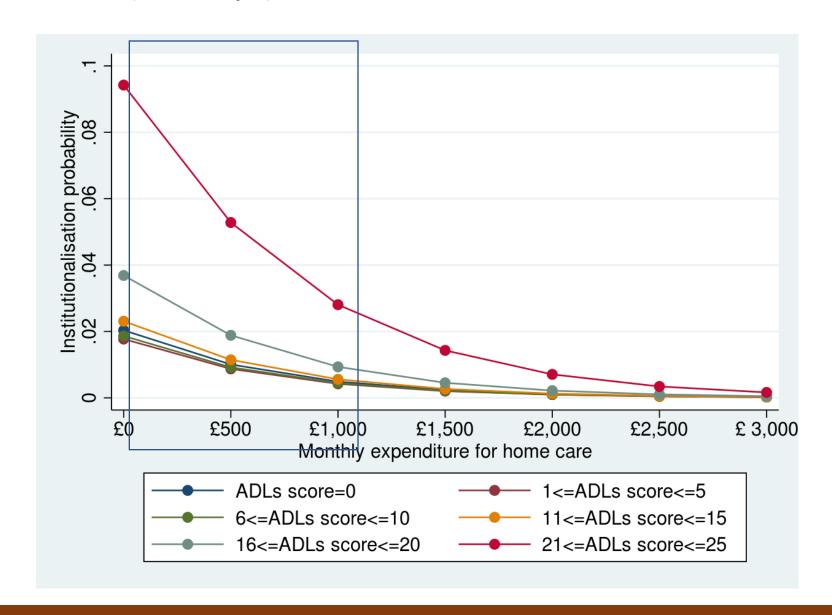


Probability of institutionalisation by user group at one-month since community services receipt

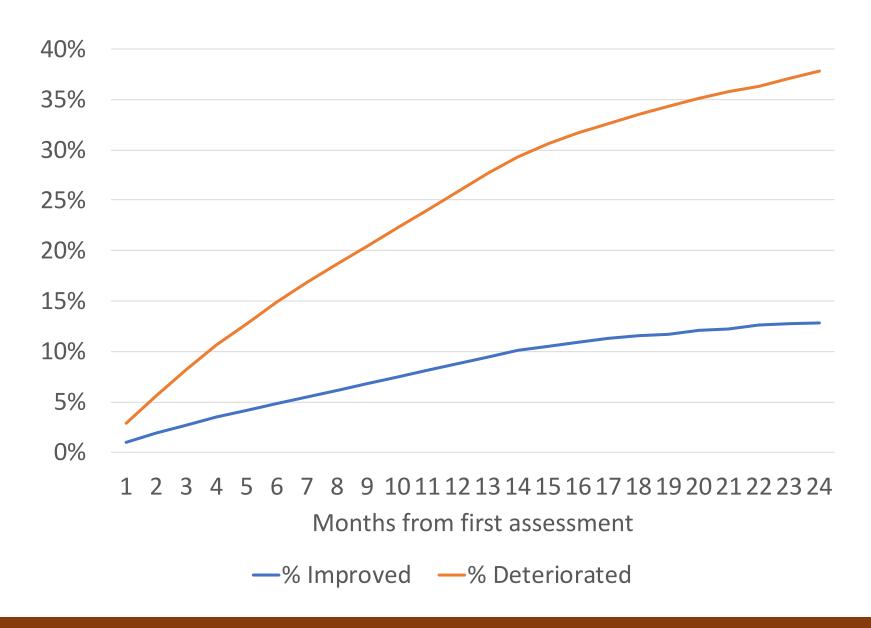
	Older People
Gender: Female	-0.2044***
Age	-0.1942***
Age squared	0.0013***
Learning disability	-0.1853
Hearing impairment	-0.9564***
Other sensory impairment	-0.0669
Other mental health impairment	0.2371***
Visual impairment	-0.1003
Autism	0.2416
COPD	-0.1166
Cancer	0.2861***
ADLs score	-0.1160***
ADLs score squared	0.0063***
IADLs score	-0.1826***
IADLs score squared	0.0086***
Cognitive needs	0.0062
Cognitive needs squared	0.0172***
Mood needs	-0.0702*
Mood needs squared	0.0244***
Support needed to feel safe	0.0099
Support needed to feel safe - squared	0.0012***
Personal care from unpaid carer	-0.0063***
Personal care from unpaid carer - squared	0.0000***
Day care (£/month)	-0.6918
Home care (£/month)	-1.4944***
Home care at night (£/month)	-0.6752
Direct payments (£/month)	-1.1436***
Meals (£/month)	-0.591
Sitting services (£/month)	-6.4717**
Supported living (£/month)	-0.7271***
Constant	3.1291
Observations	147,795



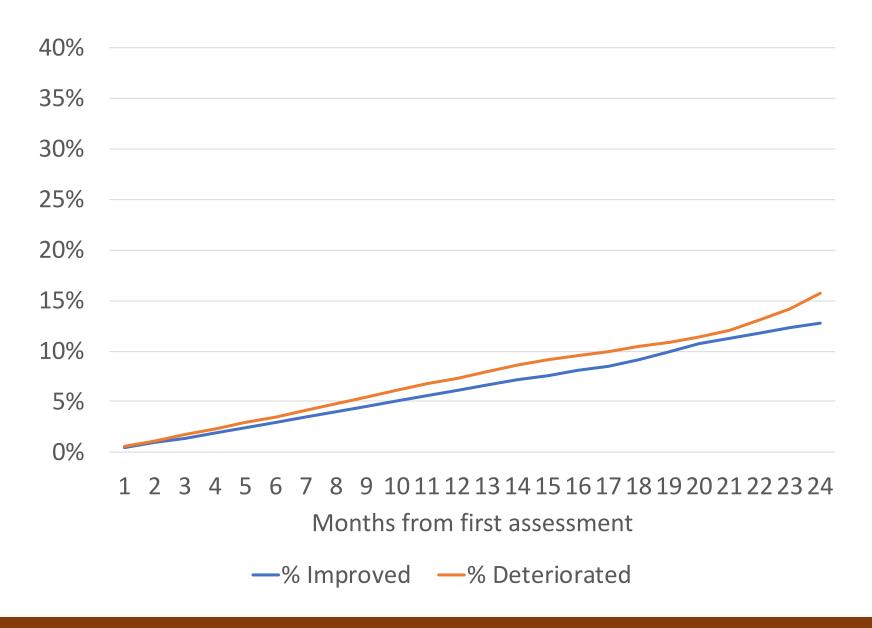
Probability of being institutionalised at one-month by ADLs score and intensity of home care (Older People) LA2



Proportion of older people showing an improvement/deterioration in I/ADLs, LA2



Proportion of people with LD showing an improvement/deterioration in I/ADLs, LA2



Do services change patterns of need through time?

VARIABLES	Older	Younger
xtreg	Coeff	Coeff
Risk factors and other need-related circumstances		
Previous total number of UA ADLs&IADLs	0.287***	0.331***
Age	0.093***	-0.001
Informal care (ref. without informal care)	-0.140**	0.037
Telecare could benefit (ref. telecare will not benefit)	0.029	-0.08
Higher safety needs (ref. lower safety needs)	-0.072	0.029
Higher personal care needs (ref. lower personal care needs)	0.029	0.117
Higher making decisions needs (ref. lower making decisions needs)	-0.06	-0.045
Sensory needs (ref. without sensory needs)	0.13	0.419***
Weekly social care costs (£)		
Home care weekly cost (£ thousands)	-0.303*	0.0708
Direct payments weekly cost (£ thousands)	-0.967**	-0.193
Constant	-1.8/	5.073***
Observations	6,491	3,293
Number of pseudo_id	2,801	1,582
Adjusted R-squared	0.189	0.818
AIC	10,042	4,288
SE in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		





- Administrative data has great potential for supporting the statistical analysis of the social care system
- But
 - Need to improve our understanding of how to interpret the data
 - Develop methods to assess impact of services on outcomes (data mostly non-experimental)
- Data gaps
 - Some services not covered: e.g. early intervention schemes (universal services; information and advice etc...)
 - Self-payers often not included
 - Outcomes: quality of life indicators not available
- Data comparability across areas is limited, which undermines our ability to learn across local experience
- Overcoming IG issues is very important, particularly with regards to:
 - linking of health and social care data (and from other systems: e.g. housing)
 - sharing data for research