# The potential contribution of linked administrative datasets to the assessment of long-term care system performance

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### Aims

 Update on recent trends in the social care system in England

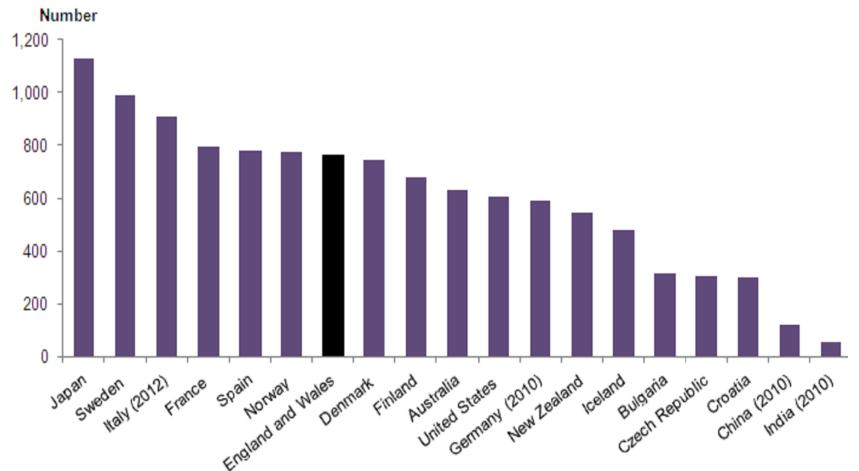
Description of key policy questions to be addressed

 Some ideas of the methodological approaches to address those questions, role of local administrative records for the evaluation of equity and efficiency in social care





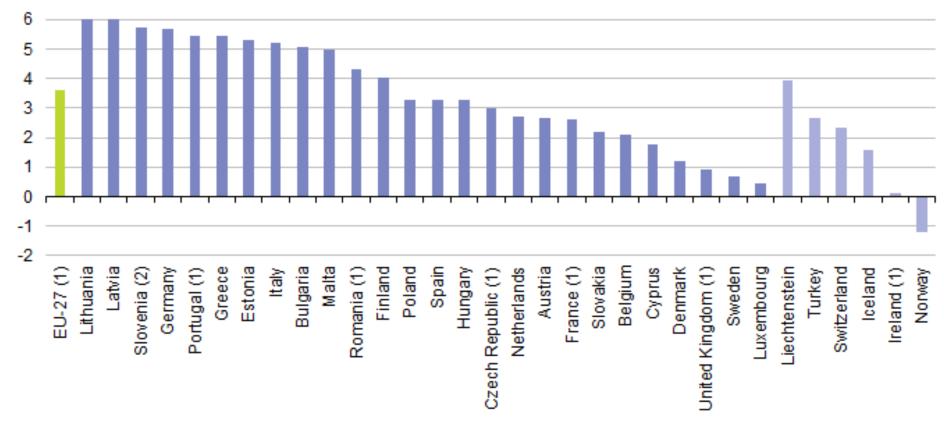
## Number of persons age 90 and over per 100,000 of the population, 2011







# Change in the share of the population aged 65 years or over between 1991 and 2011 (percentage points)



- Provisional.
- (2) Data may be affected by the change of population definition in 2008.
- (3) Excluding French overseas departments in 1990.

Source: Eurostat (online data code: demo\_pjanind)





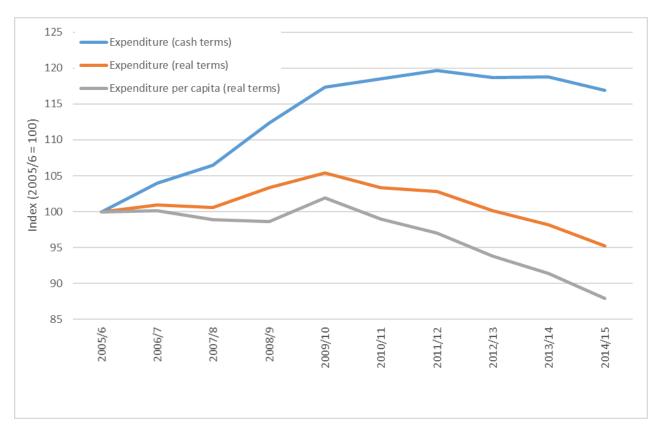
### Recent trends in statesupported social care





#### Broad trends:

Index of net current expenditure on adult social services by financial year relative to 2005/6



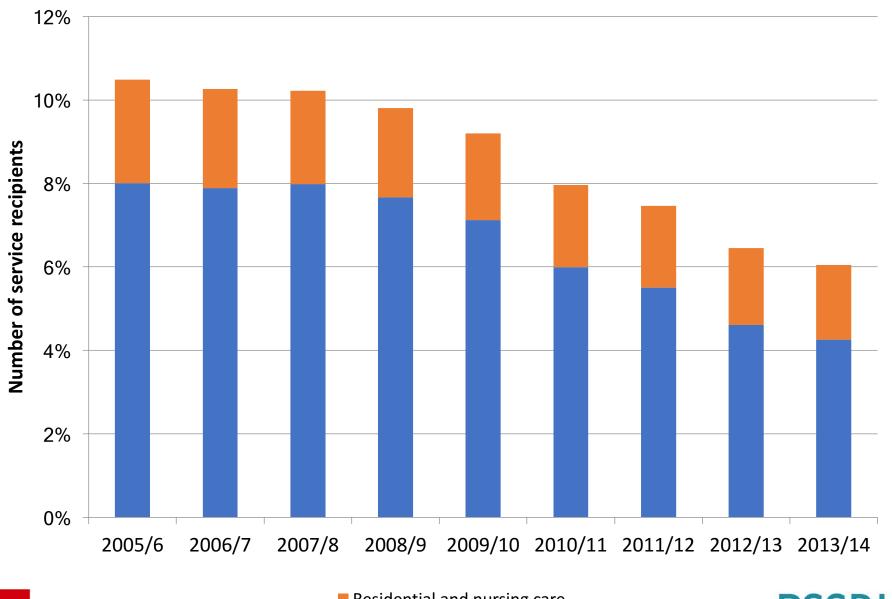
Real term figures calculated at 2014/15 prices (GDP deflator))



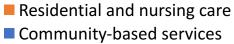
Source: HSCIC EX1 and ASC-FR annual returns (expenditure); ONS (mid-year population estimates)



#### Proportion of older people (adults aged 65+) receiving support by service type

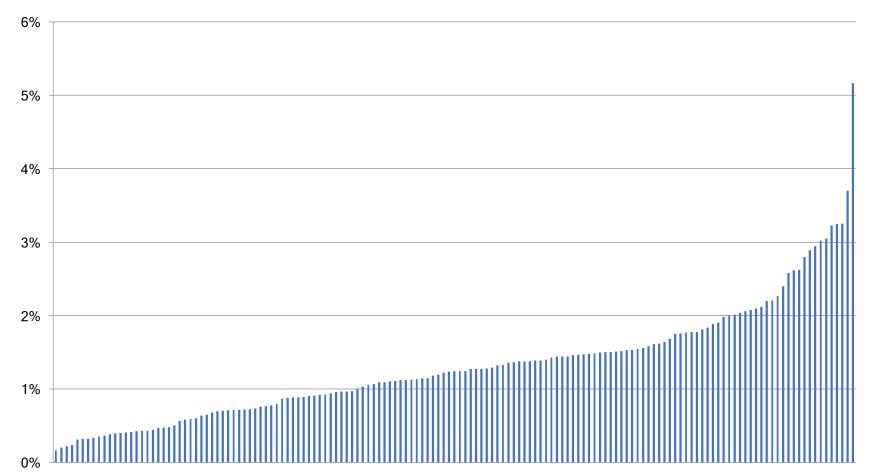








# Proportion of population supported to live independently by social care services across local authorities







## Reducing geographic variability: new minimum eligibility criteria (2015)

- More algorithmic criteria for defining the eligibility of care needs, based on a three-level test
  - Presence of physical or mental health problem
  - As a result cannot achieve two key outcomes of their daily life
  - This has a significant impact on the person's wellbeing
- Informal carer's needs are recognised in the same way as those of dependent people





# New strategies for funding long-term care services: recent debates in the UK



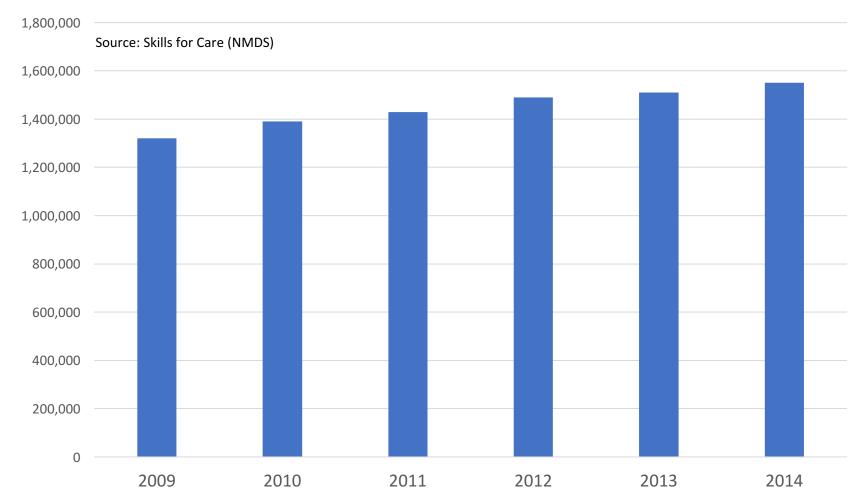


# So what is happening to the missing 40%?





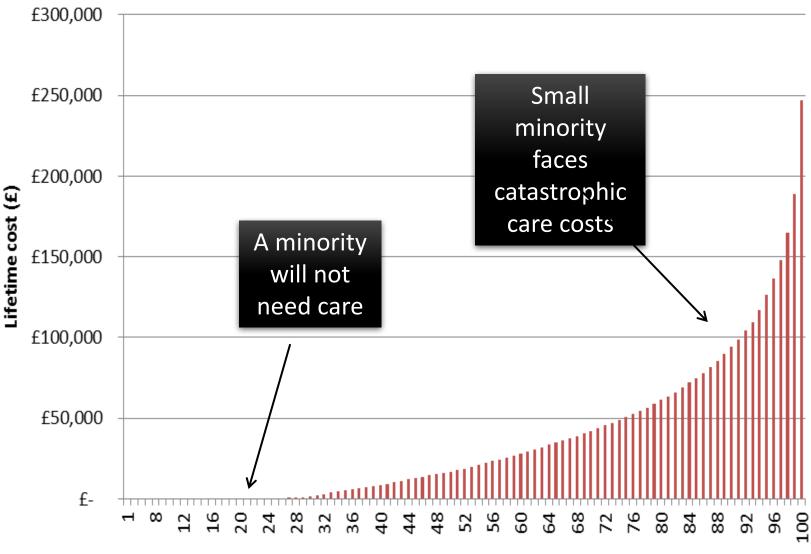
### Social care jobs in England







### Projected lifetime care costs at 65







Impact on the performance of the health care system (with a focus on the acute system)





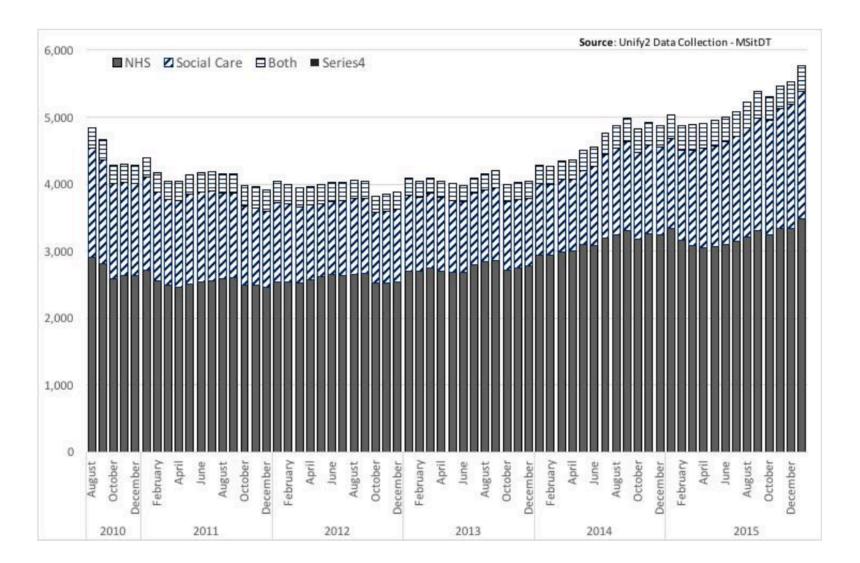
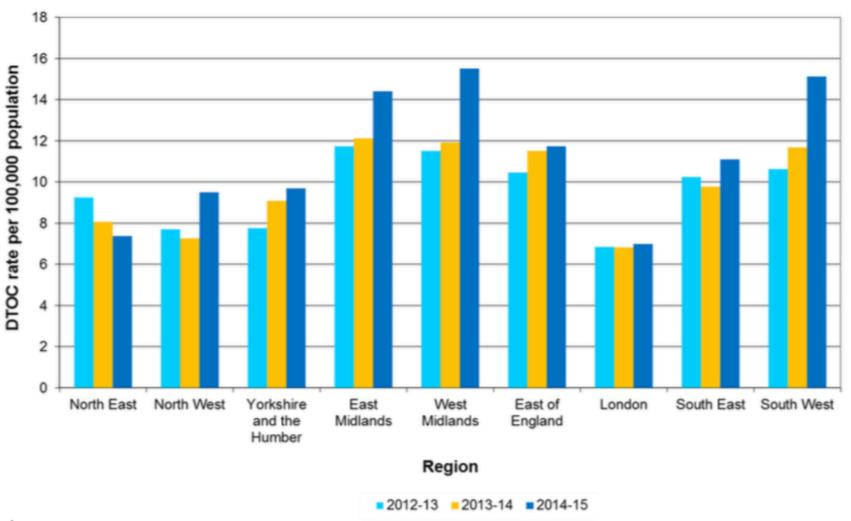


Figure 1: Number of patients with a delayed transfer of care in England by responsible organisation (three-month moving average)





Chart 7: Daily DTOC rate for all delays by region for 2012/13 to 2014/151



<sup>1</sup> 2013 ONS Population estimates have been used in the above calculations for both 2013/14 and 2014/15





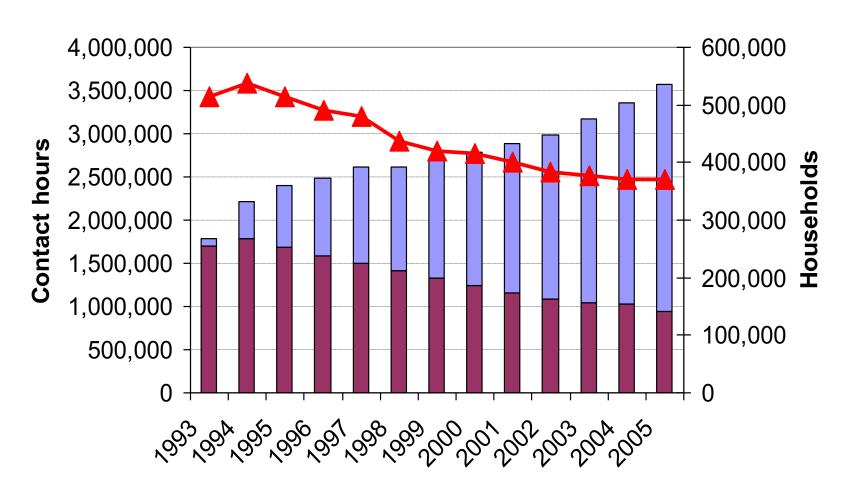
# How should we target available, scarce resources?

Have we gone too far when concentrating resources on the neediest?





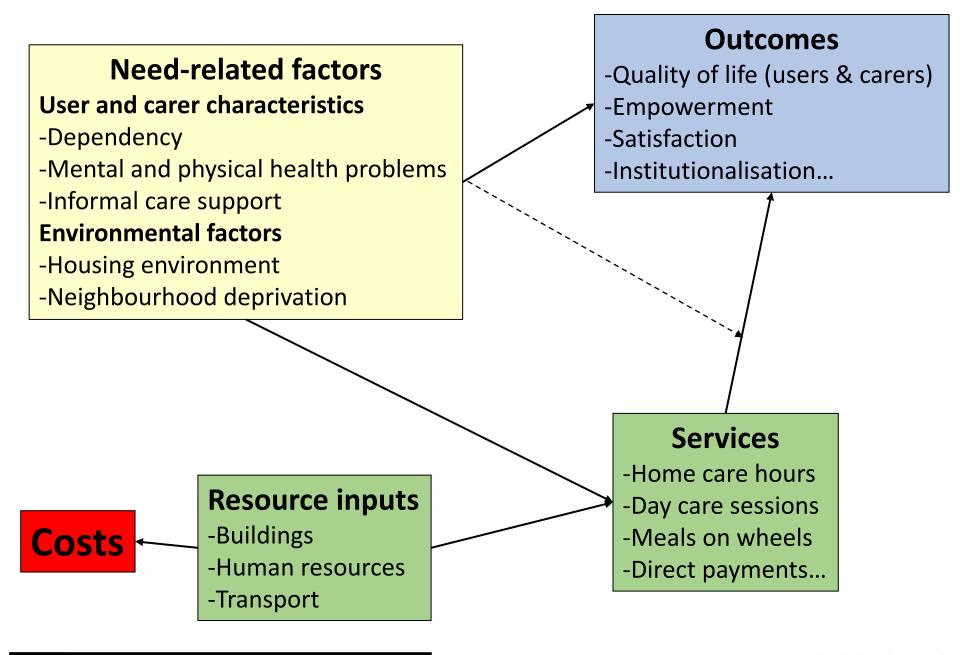
### Home care – LA supported contact hours and households (65+)





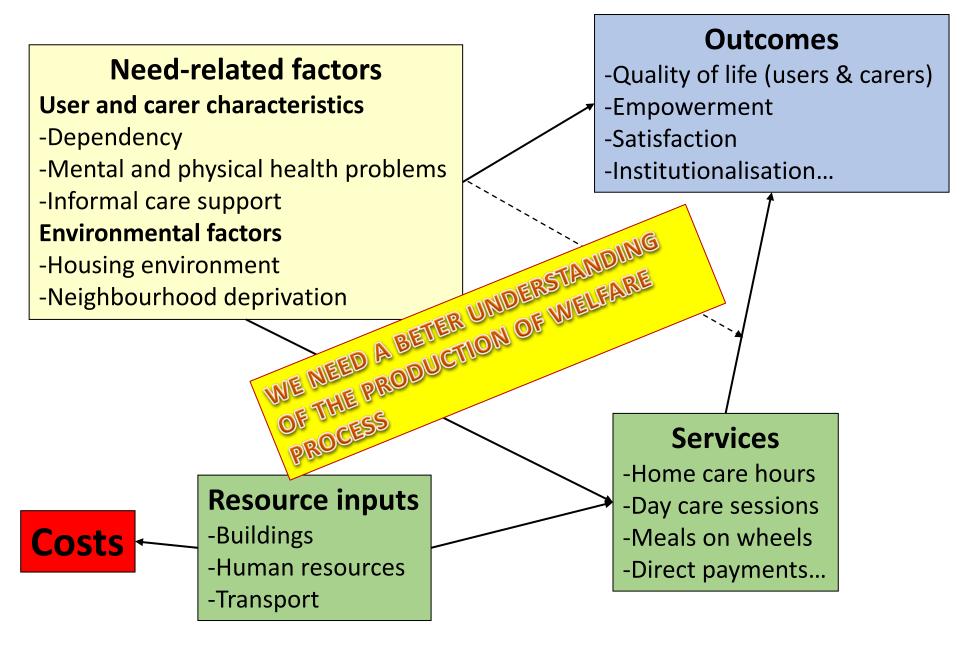
Personal Social Services Research Unit





The Production of Welfare





The Production of Welfare



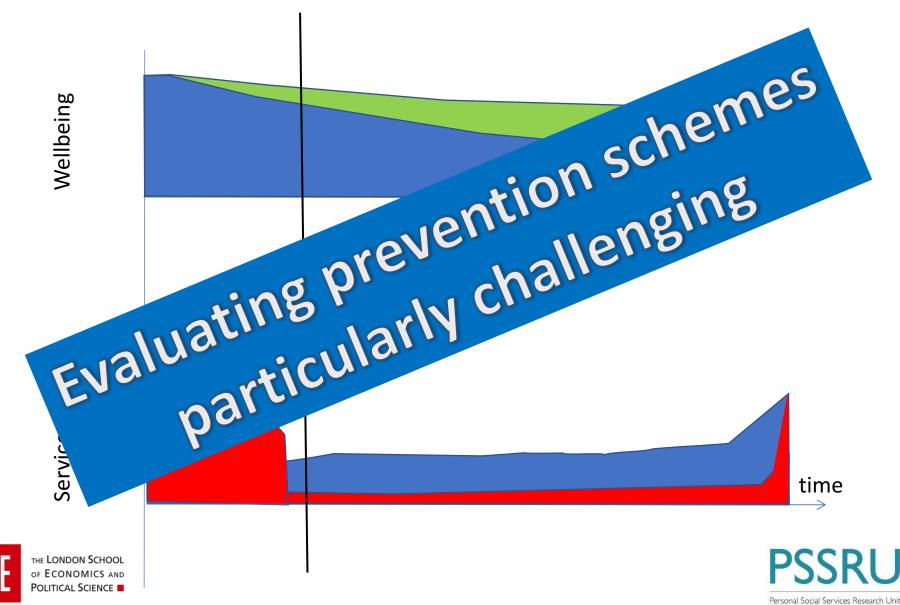
### Differences in the evaluation of between health and social care services

- NHS many more services, but narrow relationship between "need" and "input"
- In social care, smaller range of services, combined differently, to support individuals with different needs and preferences.
  - Greater flexibility relationship between "the problem" and "the solution"
  - Care package designed jointly with service user
- Raw outcomes determined to a greater extent by the needs of the person than by services
  - Disability, cognitive impairment, availability of unpaid care will have a dominant effect on the
  - Controlling for needs is fundamental





### The prevention evaluation challenge



### The available evidence pool

- Surveys
  - Certain surveys for evaluations: community care reforms (ECCEP), Individual Budgets (IBSEN), Technology (WSD)...
  - Small in size and fixed in time.
  - National surveys: ELSA, HSE
    - Small in size, poor longitudinal linkage
- Evidence "in the system": administrative social care records





### The prevention study

- Funded by SSCR
- Started in August 2015, will last 3 years
- Aims:
  - Understand the preventative effects of different services and schemes
  - To develop a prevention evaluation framework based on local administrative data
- "Prevention" understood in terms of the analysis of the optimisation of care investments across the lifetime of people with different care needs
- Involves 6 authorities in England





### Analysis approach

- Analysis of core administrative datasets
  - Assessment records
  - Service use and cost records
  - Proxy outcomes: changes in needs; institutionalisation; (hospitalisation?)
  - What is the relationship between needs, services and outcomes?
- Analysis of prevention schemes
  - E.g. handy person scheme; training of care staff; multi agency collaboration; reablement...
- Small process analysis component
  - How are local prevention policies conceptualised and implemented?





### Examples of data fields

- Need-related factors
  - Physical disability
  - Health conditions
  - Informal care networks
  - Risks
- Resources
  - Costs
  - Units of service
  - Timing of the service (frequency of visits, length of visit)
  - Provider id...
- Outcomes
  - Destinational outcomes (institutionalisation, hospitalisation, death)
  - Changes in needs between assessments

Yearly assessments or when significant change takes place

Continuous description of changes in support. Frequent changes



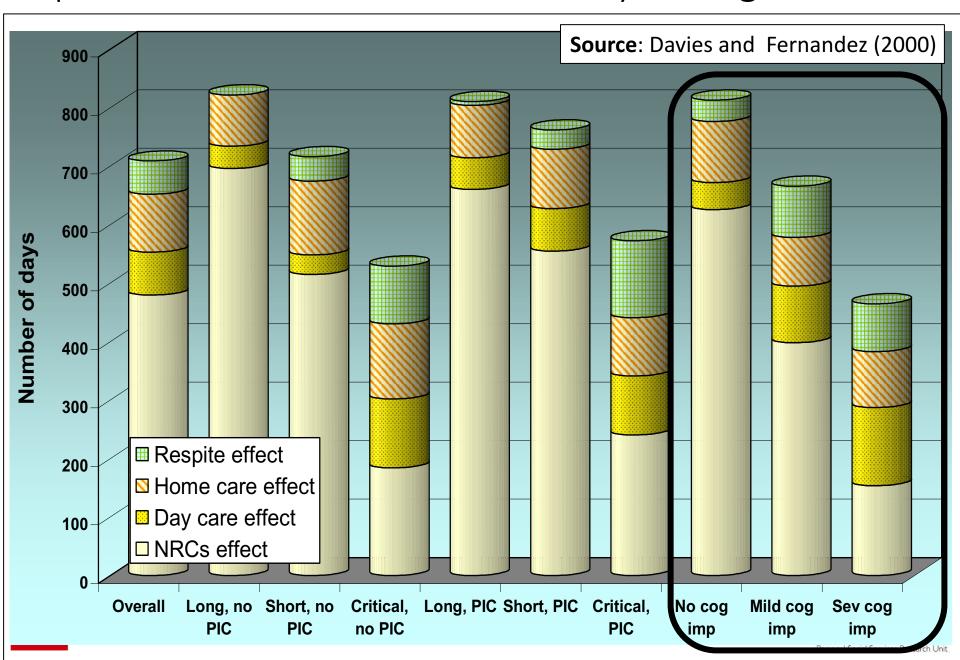


Case	Month	Needs1	 Needs2	Service1	 Service5	Outcome 1	Outcome 2
1	1	0	 1	15	 4	0	0
	2	0	 1	15	 4	0	0
	24	1	 0	20	 4	1	0
2	4	1	 1	14	 2	0	0
	5	1	 1	14	 3	1	0
	33	1	 1	14	 3	1	1
3	10	0	 0	2	 1	0	0

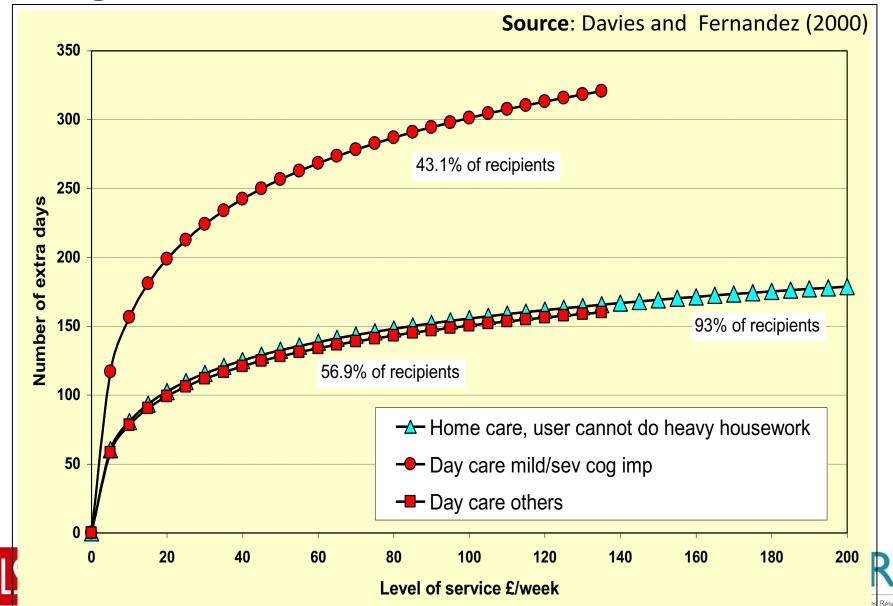




#### Impact of needs and services on Days Living at Home



## Home care and day care effect on Days Living at Home



### Next steps

- Using wide range of techniques for different evaluations (e.g. DiD; Synthetic controls; Regression discontinuity models; Simulation models...)
- Analysis by subgroups, interaction between services:
  - How can we optimise the use of resources?
- Testing validity of data
  - Data not designed for evaluation purposes: needs recorded when relevant to the case; limited comparability with survey data/ study data
  - Usually data does not cover all population with social care needs (relatively low needs; people that fail the means-test).
  - Relatively limited final outcome indicators
  - Recording systems change regularly (e.g. Care Act 2014)
  - Use of unstructured data





### Key questions

- To what extent can we control for need?
- Do we get unbiased estimates of the effect of services?
- Can we use assessment data to examine changes in dependency through time?
- How can we summarise the findings/methods so that they can be used by service commissioners?



