

# 16<sup>th</sup> April 2015 Brno

Health, social services and third sector research in the United Kingdom -

An economic perspective

Guest lecture, Masaryk University, Faculty of Economics and Administration, Academic Club

# **Annette Bauer**

PSSRU, Social Policy Department London School of Economics and Political Science





# Todays' agenda

- 1. Brief introduction of PSSRU
- Research studies and methods employed by PSSRU in health and social care
- 3. Economics in third sector research



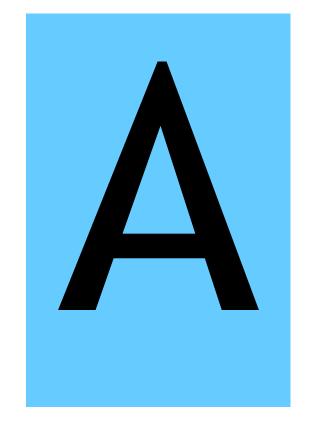


Acknowledgement: I want to express special gratitude to PSSRU colleagues in particular Martin Knapp and Adelina Comas-Herrera who generously provided slides to this presentation.









# Brief introduction to PSSRU





# PSSRU (Personal Social Services Research Unit); part of LSE Health and Social Care



# PSSRU

# 40 YEARS OF RESEARCH ON HEALTH AND SOCIAL CARE







### Who we are

PSSRU - Est 1974; at LSE since 1996

LSE Health – Est in 1993 at LSE

Came together in 2000 to form LSEHSC

### Joined by

- European Observatory on Health Systems and Policies
- NIHR School for Social Care Research

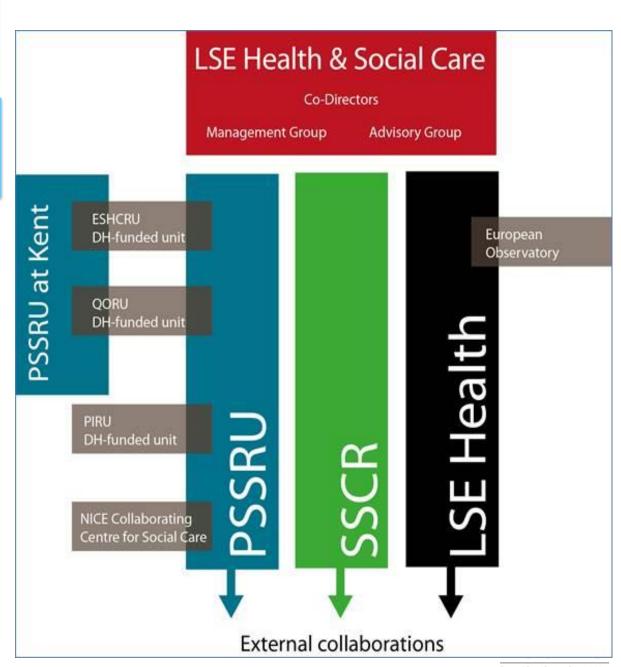
Mission: "the production and dissemination of high-quality research and policy analysis in health and social care"





### **PSSRU @ LSE**

October 2014





### **PSSRU @ LSE**

#### Research areas

- Social care service evaluation
- Modelling needs, funding & LTC
- Systems / policy evaluation
- Mental health economics & policy

#### Overarching emphases/aims

- Improving user, carer involvement
- Supporting staff development
- Impact & knowledge exchange

- Dementia
- Outcomes / performance meas't
- Children & YP's services
- Unpaid care
- Policy engagement
- Practice relevance
- Academic contributions
- International collaboration







## Some basic numbers

88 FTE staff members

### Since 2009:

- Over 260 new grants secured
- £31 million awarded
- c. 822 papers in peer-review journals
- c. 241 chapters in edited volumes, monographs and books, and publicly available discussion papers
- Over 700 presentations







# **PSSRU** Research









# **PSSRU** - policy impact

- Eligibility criteria to DH
- Funding of long-term care Dilnot Commission
- Projections models EC Ageing Report; local authorities; DH
- Carers and employment HM Treasury & others
- Dementia economics World Dementia Council;
   Prime Minister's Challenge; DH/BIS for PM
- Suicide Scottish Government policy
- Mental health national mental health strategy
- Prevention Local authorities
- Regulation Care Quality Commission
- Building community capacity social care policy
- Autism Scottish policy; international debates Inputs into Government Green and White Papers, Parliamentary debates, Select Committees















# **PSSRU** immediate future

### Number of large programmes:

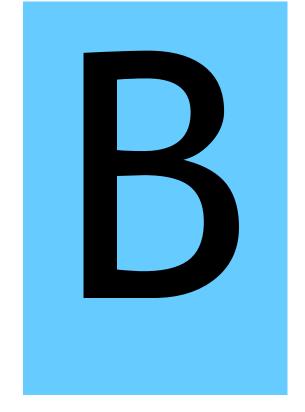
- Modelling the costs and outcomes of dementia
- Unpaid care and employment (longitudinal)
- Developing and testing a preventions evaluation framework
- Economic analysis of the Better Start programme (Big Lottery)
- Understanding the interactions between state pension and longterm care funding
- Evaluating direct payments in residential care

#### And initiatives

- International Long-term Care Network & development of Journal of Long-term Care
- Ongoing work on understanding knowledge exchange and impact in social care and "evidence-based practice"
- Social Care Elf





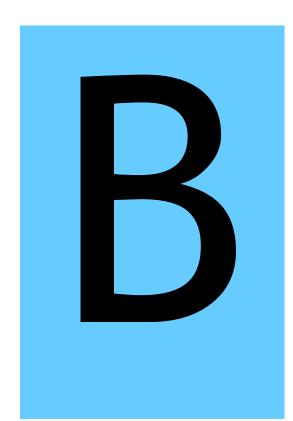




# Research topics and methods by PSSRU







- B1 Personal budgets health and social care/ Economic evaluation
- B2 Perinatal mental health/ Cost of illness
- B3 Advocacy for parents with learning disability/ case study approach
- B4 Long-term care finance/ macrosimulation
- B5 Building community capacity/ decision modelling





# B. 1

**Topic**: Personal budgets in health and social care

**Method**: Economic evaluation of personal budgets





# B. 1

- Principles and methods of economic evaluation
- Background to personal budgets in the UK
- PSSRU research: Economic evaluation of personal budgets





### **Economic evaluation: what does it mean?**

If the policy/practice question is:

### **'Does this intervention work?'**

Then the economic question is:

### 'Is it worth it?'

Which requires us to define what we mean by 'work' and by 'worth' – hence what outcomes and costs.

Which then usually requires difficult and maybe controversial trade-offs





# Imagine that you have an idea for a new service (call it 'Service 2')

You want to sell/recommend it so that it replaces today's usual service (call it 'Service 1')

The decision-maker has a limited budget. What will s/he want to know before deciding whether to purchase the new service?





### Is it more cost-effective?

### **Service 2**

**Effects** - on a user's needs, social functioning, quality of life

### **Service 1**

**Effects** - on a user's needs, social functioning, quality of life

### **Service 2**

<u>Costs</u> - cost of the service, costs of other services used, effect on employment

### **Service 1**

<u>Costs</u> - cost of the service, costs of other services used, effect on employment

An economic evaluation needs all 4 elements

### **Possible CEA results**

C = costs

**E** = effects

1 = old service

2 = new service

New service less effective and more costly

 $C_2 > C_1$ 

New service more effective but also more costly

 $E_2 > E_1$ 

 $E_2 < E_1$ 

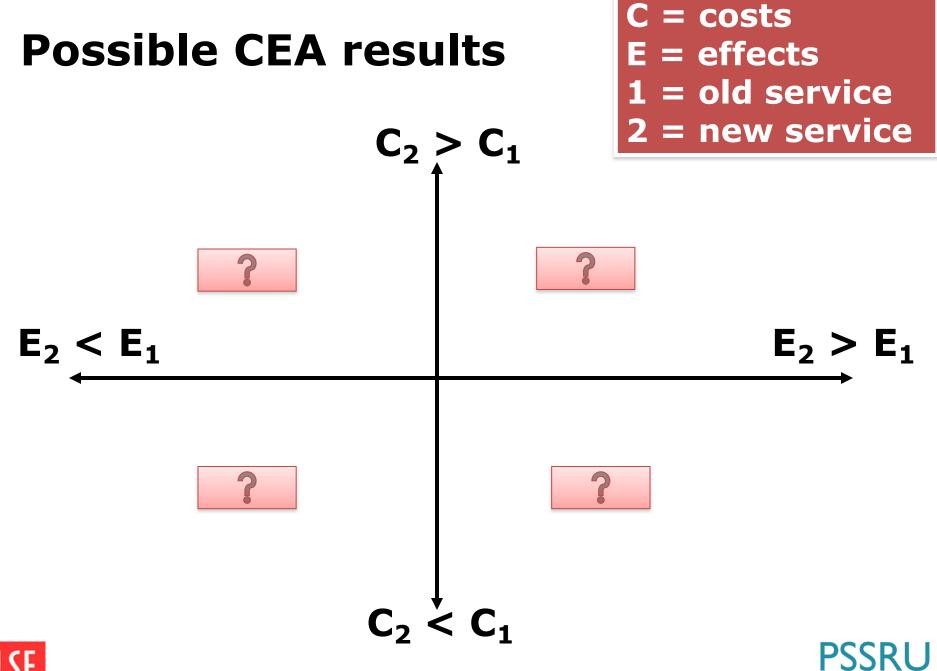
New service less effective but less costly

New service more effective and also less costly

 $C_2 < C_1$ 

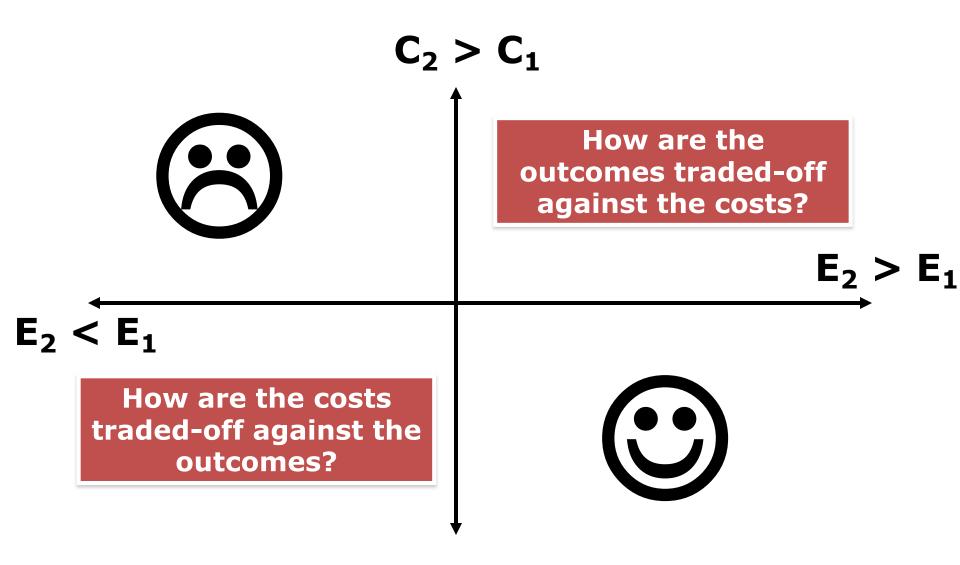








# If you are trying to sell Service 2 ...







### Trade-offs ... is it worth it?

If an intervention is more effective and also more costly, then calculate the cost per unit gain in effectiveness.

So we first need to calculate the cost-effectiveness ratio, which is ...

ICER = 
$$(C_2 - C_1)$$
  
 $(E_2 - E_1)$ 

= the cost of achieving an incremental improvement in an outcome measure





### Trade-offs ... is it worth it?

With the ICER we then have the following options:

- Show the decision-maker the cost-effectiveness of different ways to spend their money and get them to choose
- Or ask them how much they are willing to pay
- Or set a threshold, rigidly or as a guide (cf. NICE)

But then we need some way to compare across different 'areas' (e.g. across different need groups)

Hence QALYs in health; and ASCOT in social care.





## Cost-utility in *Health*

Quality Adjusted Life Years (QALYs)

- Incorporate quality and quantity of life.
- Calculated by multiplying the duration of a time spent in a health state by the Health Related Quality of Life weight (=utility score).
- HRQoL are preference weights that reflect desirability measured on a cardinal scale from 0-1.

Example: An individual spent 10 additional life years in health state associated with utility 0.6. how many QALYs are gained? What needs to be considered?





# **Utility weights for the EQ-5D**

EQ-5D score	Description	Utility weight
11111	Mobility – no problems, Self-care – no problems, Usual activities – no problems, Pain/discomfort – no problems, Anxiety depression – no problems	1.000
21121	Mobility – some problems, Self-care – no problems, Usual activities – no problems, Pain/discomfort – some problems, Anxiety depression – no problems	0.727
11223	Mobility – no problems, Self-care – no problems, Usual activities – some problems, Pain/discomfort – some problems, Anxiety depression – major problems	0.255
23323	Mobility – some problems, Self-care – major problems, Usual activities – major problems, Pain/discomfort – some problems, Anxiety depression – major problems	-0.086





Cost-utility in Social care

Domains
covered in
the Adult
Social Care
Outcomes
Tool (ASCOT)

Domain	Definition
Control over daily life	The service user can choose what to do and when to do
	having control over his/her daily life and activities
Personal cleanliness and comfort	The service user feels he/she is personally clean and
	comfortable and looks presentable or, at best, is dressed
	groomed in a way that reflects his/her personal preference
Food and drink	The service user feels he/she has a nutritious, varied and
	culturally appropriate diet with enough food and drink he
	enjoys at regular and timely intervals
Personal safety	The service user feels safe and secure. This means bein
	free from fear of abuse, falling or other physical harm and
	of being attacked or robbed
Social participation and involvement	The service user is content with their social situation, who
	social situation is taken to mean the sustenance of
	meaningful relationships with friends and family, and feel
	involved or part of a community, should this be important
	the service user
Occupation	The service user is sufficiently occupied in a range of
	meaningful activities whether it be formal employment, u
	work, caring for others or leisure activities
Accommodation cleanliness and comfort	The service user feels their home environment, including
	the rooms, is clean and comfortable
Dignity	The negative and positive psychological impact of supposition

and care on the service user's personal sense of significations research Unit



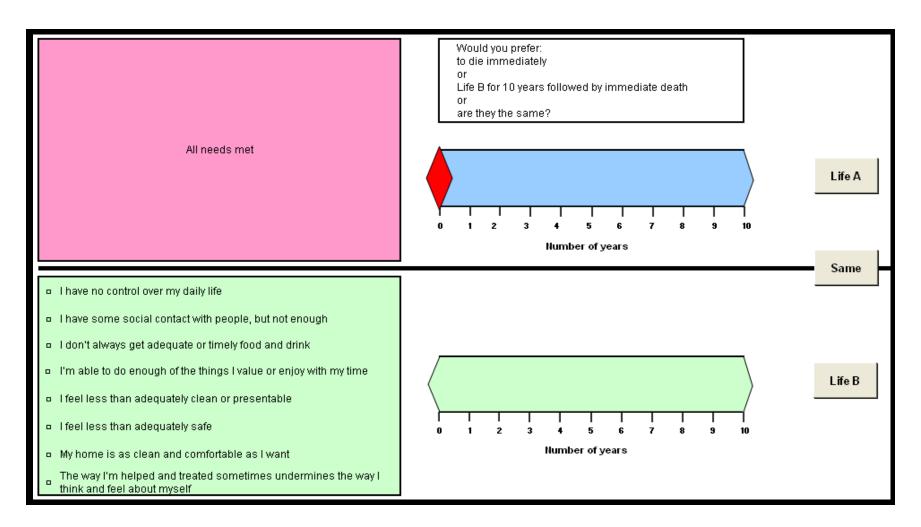
# Utility weights (1)...

Best (mark "X")	Aspect of life	Worst (mark "X")		
	I can get all the food and drink I need			
	I have poor personal hygiene, so I don't feel at all clean or presentable			
	My home is as clean and comfortable as I want			
	Sometimes I don't feel safe enough			
	Sometimes I feel lonely, but have some contact with people I like			
	I spend my time as I want, doing things I value or enjoy			
	I have adequate control over my daily life			
	The way I'm helped undermines the way I think and feel about myself			
	And I am living in my own home			





# Utility weights (2)...







## Personalisation in practice: social care

- Services tailored to the needs of the individual, rather than 'one size fits all'
- Services tailored to the preferences of the individual

Hence actions could include:

- Better information & advice on care & support
- Promotion of independence & self-reliance among individuals & communities (includes social capital)
- Prevention / risk-reduction strategies that emphasise personal strengths & responsibilities
- Direct payments and personal budgets (with brokerage & support as needed)



# Personalisation in practice: health care

- Treatment tailored to individual needs (e.g. symptoms & functioning)
- Treatment responsive to individual preferences (e.g. therapy type, location, timing, professional)
- Prevention / treatment strategy responsive to individual circumstances (e.g. genes, income, culture, resilience, age, ...)

### Hence actions could include:

- Better information & advice on care & support
- Promotion of self responsibility for health
- Encouragement of communities (social capital)
- Personalized medicine
  - Personal health budgets (with brokerage etc)





# Personalisation & choice policy in England

#### Social care

"Every person who receives support, whether provided by statutory services or funded by themselves, will have choice and control over the shape of that support in all care settings" (Department of Health 2010).

#### **Health care**

Patients must be given "real power to shape their own care ... We need to stop treating people as a collection of health problems or treatments. We need to treat to them as individuals whose needs and preferences should be seen in the round and whose choices shape services, not the other way round." (Simon Stevens, CEO of the NHS, 2014).





# Why this policy/practice emphasis? (1)

- Long-standing social work commitment to selfdetermination for (under-privileged) individuals and families – i.e. empowerment ...
- To encourage personal health responsibility e.g. for lifestyle, diet, tobacco, alcohol consumption, ...
- Empowerment could encourage services to be more responsive to individual needs & preferences.
- Social care, public health (and health care?)
   emphases on roles of families & communities ...
- ... particularly the benefits of social capital
- And the over-arching beliefs that individual, family & social outcomes will be better; and/or costs will be lower





# Why this policy/practice emphasis? (2)

- The citizenship agenda ground-level politics
- Rights-based advocacy by/for service users
- Flexibility: personalisation potentially offers different levels of independence & control
- 'Collectivization of welfare' encourages informal pooling of budgets.
- Political support:
  - from the Right encourages personal responsibility; accountability; market-like allocations (e.g. with personal budgets)
  - from the Centre Left encourages public confidence, social inclusion, personal rights



# Individual / personal budgets

	Public	Voluntary	Private	Informal		
Public	Hierarchy &	'Out-sourcing' or		Support for		
sector	quasi-mkts	contracting out		carers		
Charitz le		Foundation		Community		
		support		grants		
Corpor e				Paid leave		
				for carers		
Indivia 1	Individual / personal budgets					
– own use	1					
Individual	Donations			Support for		
transfers	to the state			neighbours		

Knapp (1984) The Economics of Social Care, Macmillan.





### Individual budgets (IBs) & personal budgets(PBs)

- Central to Labour Government's ambition to 'modernise' social care ...
- ... at the heart of its 'personalisation' agenda
- ... to promote choice
- <u>Pilot programme</u> set up 2005 evaluated in the IBSEN study (see later)
- PBs are more or less the same as IBs
- Putting People First (White Paper, 2007) proposed that 'all people who are eligible for social care and support should have access to a personal budget, including the direct payment option, with the intention that they could use it to exercise choice and control in meeting their agreed social care outcomes' (SCIE Rough Guide).





# Personal budgets - elements

- Give clear, early understanding of amount (£)
   available to the individual, so that they can influence
   or control how it is spent, in a way which helps them
   best meet their needs.
- Focus on providing for ongoing support and care needs.
- Implemented within self-directed support framework: self-directed assessment; 'up-front' allocation of funds; support planning to promote maximum choice and control.
- Include sufficient funding to cover costs in employing personal assistants directly, and contingency funding for emergency cover.





## Personal budgets - how?

- As a direct (cash) payment, held by the service user or, where there is a lack of capacity, by a 'suitable person'.
- An 'account' held / managed by local authority in line with user's wishes, to pay for community care services commissioned by the LA.
- An account with a third party (provider), 'spent' by user in direct negotiation with the provider. This 'managed option' allows the individual to draw on existing or new contracts to suit their needs without taking on direct budget management responsibilities.

Or some mix of the above.



#### The IBSEN evaluation

CORE QUESTION → Do individual budgets offer a better way to support disabled adults and older people than conventional methods of resource allocation and service delivery?

If so, which models work best and for whom?

#### **Evaluation dimensions**

User experience
Carer impact
Workforce
Care management
Provider impact

Risk & protection
Commissioning
Outcomes
Costs
Cost-effectiveness





# IBSEN - design

- Randomised trial IB and comparison groups (but lots of flexibility within those groups re deployment)
- Follow-up interviews after 6 months → some challenges (logistical, instrumentation, interviewee exhaustion, proxy respondents ...)
- In-depth interviews with 20% of users assessment and support planning
- Interviews with lead officers (in local authorities), providers, commissioners, other managers, Adult Protection, ...
- Interviews and diaries care managers, team leaders
- Add-on study of impact of IBs on carers

Glendinning et al (2008) *Evaluation of the Individual Budget Pilots,* SPRU, York University + numerous journal papers





# **IBSEN** - deployment of resources

# Considerable local and individual flexibility:

- Cash direct payment [67%]
- Care manager-held 'virtual budget' [20%]
- Service provider-held 'individual service account' [<1%]</li>
- Third-party individuals and trusts [13%]





# **IBSEN** - patterns of spending

		IB as direct payments	mar	IB as care- naged budget
	%	Mean annual expenditure	%	Mean annual expenditure
Personal assistant	64	£8,940	47	£7,420
Home care	20	£7,140	40	£7,480
Leisure activities	43	£2,020	24	£1,750
Planned short breaks	24	£1,750	15	£5,460
Other	23	£930	21	£270 PSSRI

# Personal budgets bought 'new' services

Accommodation	Employment and occupation	Health-related
Cleaning service	Going out: trips/cinema etc.	Private health care
Decorating service	Classes/arts and crafts	Massage for carer
Gardening service	Gym membership /swimming	Alternative therapy
	Computer maintenance	Dating agency
	Admission fees for service user and PA	





# The views of personal budget holders (1)

#### **Comment on <u>standard</u> care:**

"That's all they recognise, just your personal care, being washed and all that. And you know, other things are so much more important to your well-being." (Older person)

#### Personalisation – benefit:

"It's given me more say and I can do more."

(A woman with physical disability able to go on holiday, employing her sister as her carer)





# The views of personal budget holders (2)

#### Reluctance to take responsibility:

"I don't want to be dealing with that sort of thing at my age, dear." [I.e. the 'hassle costs' of choice]

#### **Anxiety or unwillingness to manage money**

"Carers are all laid on for me at the moment and I haven't got the time and I haven't got the brain really to work out financial details or anything like that, and I'm quite happy with the arrangement I've got."

#### Able and willing to handle finances without stress

"So I thought, right, I can do this cheaper myself so ... I went to a smaller, cheaper and far superior agency."





# Outcomes and costs (IBSEN evaluation)

Domain	Pooled sample	Subgroup differences?
Quality of life	No difference	IBs better for mental health subgroup
Psychological well-being	No difference	IBs worse for older people
Social care outcomes	No difference*	No difference*
Satisfaction	IB better	IBs better for physical/sensory disability group
Costs	IB lower (small diff)	No difference

\*IBs offered more 'felt control' when analysed for the overall sample and the learning disability group





#### Overall conclusions from IBSEN

- Positive effects of IBs
  - Quality of life, social care outcomes and satisfaction
- But much less positive for older people
  - Concerns about managing budgets
  - Early stages in the process, however
- Levels of support were found to influence the outcomes achieved ...
- ... with implications for cost-effectiveness.

**But** ... Government didn't wait for IBSEN results before proceeding with the national roll-out of Personal Budgets (short-term political imperative?)





## Personal health budgets (Alakeson BMJ 2008)

Interest stimulated by UK experience in social care, particularly for people with <u>both</u> social care & long-term health needs.

Patients often interested in **involvement** in managing their condition

PHBs won't work across all areas, particularly where needs are unpredictable or where treatments are complex (cf. market failure).

But where health and social care needs overlap, and service responses could also overlap, it makes sense to explore PHBs. She proposed 4 criteria to determine eligibility for PHBs:

- reasonably stable and predictable needs
- individuals have unique knowledge about their needs and how they can best be met
- genuine alternatives exist for meeting their needs
- alternative sources of supply exist or can be developed outside of local authority or NHS services.





## PHBs - pilot evaluation (Forder et al 2012)

#### Relative to the control group:

- Significant improvement in care-related quality of life and psychological wellbeing. Health status stayed the same.
- Benefits more marked for people with greater need.
- Worked better where people given more choice and control (over what they bought & how they received budget)
- No differences by gender, ethnicity or income.
- Positive impacts for budget-holders & other family members. Also changed relationships with healthcare professionals.
- Family carers better quality of life and perceived health
- PHBs were cost-effective, particularly for people who get NHS
   Continuing Healthcare and those who use mental health services.
- People chose to meet health needs in different ways that cost less (e.g. training their care staff to change dressings).
- In-patient costs fell for people with a personal health budget





## PHBs - policy roll-out in England

- PHBs introduced in England in April 2014 for 56,000 people with highly complex, long-term health needs eligible for NHS continuing healthcare (if they want to take them).
- In 2015 it is expected that PHBs will be extended to anyone with a long-term condition who could benefit from one.

#### **Future success will depend on:**

- Culture change and a shift in the relationship between health professionals and patients
- Giving people the right support, including clear information.

But PHBs could be a vehicle to promote **integration** of social care and health care





# **B**. **2**

Topic: Perinatal mental health

Method: Cost of illness, decision modelling





#### Background

- Large proportion of women suffer: up to 1 in 5
- Children suffer too: Via genetic and environmental factors starting in the womb (e.g. .. cortisol levels produced when mother is stressed reach the fetus; mother less likely to be able to provide sensitive attachment after birth; ...)
- Negative consequences for children throughout life-time
- Evidence comes from cohort studies (e.g. ALSPAC, Millennium Cohort, South London Development Study)
- Service provision is highly patchy, treatment often inadequate: Less than 15% of localities provide specialist services at level recommended in NICE guidelines and 40% provide no services at all



# Initial economic work: Postnatal & perinatal depression

A small **cost-effectiveness** modelling study of *health visiting* based on published trials data (and other sets of evidence):

- Considered the <u>short-term health outcomes and costs</u> (health and social care expenditure);
- Intervention was likely to be cost-effective but not cost saving (in the short-term);
- Did not include long-term impact on mothers and children.
- \* Bauer, A et al (2010), Health visiting and reducing postnatal depression, In: Knapp M, McDaid D, Parsonage M (eds.) *Mental Health Promotion and Prevention: the Economic Case*, PSSRU, London





# Initial economic work: Postnatal & perinatal depression

Modelling study of <u>long-term costs of the impact on</u> <u>children</u> based on primary data from the *South London Development Study* (Susan Pawlby and colleagues from King's College)

Step 1: Logistic regression of effects of perinatal depression on child development outcomes at 11 and 16yrs

Step 2: Evidence reviews of studies of epidemiology, healthrelated quality of life, public sector costs and employment

Step 3: Modelling cost consequences of adverse outcomes over life-time (where possible)





#### **Findings**

• Indicated potential for large financial gains of investing into this area: For <u>each child exposed</u> to perinatal depression, public sector costs exceeded £3,030, costs due to reduced earnings were £1,400 and health-related quality of life loss was valued at £3,760.

#### **Limitations**

 Subset of adverse outcomes and economic consequences; small study sample; perinatal depression only

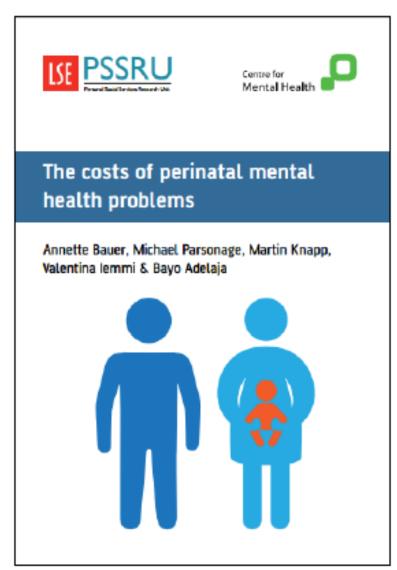
\* Bauer A, Pawlby S, Dominic TP, King D, Pariante CM, Knapp M (2015), Perinatal depression and child development: exploring the economic consequences from a South London cohort, *Psychological Medicine*, 45(1):51-61.





#### **Collaborative research**

- Commissioned by the Maternal Mental Health Alliance
- Part of Everyone's Business Campaign
- Funded by Comic Relief



- In partnership with the Centre for Mental Health
- In consultation with an expert reference group
- NICE clinical guideline updated at the same time
- Presented to Parliament in Oct. 2014





### Cost of illness study: Aims

General: To produce estimates of the overall costs of maternal perinatal mental health problems.

More specifically:... To investigate

- The distribution of costs between groups i.e. mothers & children; for different perinatal conditions;
- Life time costs at present value per case and per birth;
- Perspective of government: expenditure for public services in health and social care, education and criminal justice) and
- Perspective of **wider society**: government plus value for life years lost, health-related quality of life impairments and productivity losses).





#### Cost of illness study: Method

#### **Decision modelling approach - rationale**

#### Allows to

- Synthesise data from a variety of sources following principles of meta-analysis;
- Utilise information from a wide range of different cohort studies;
- Extrapolate data beyond endpoints of relevant studies and model life-time economic consequences;
- Link intermediate to final outcomes such as quality of life and productivity losses;
- Incorporate uncertainty around parameters;

... and avoids having to carry out primary data collection or analysis and to rely on single source.





#### **Method: Steps involved**

- Designing the pathway (model structure) based on initial evidence of adverse outcome
- In depth literature review of adverse outcomes
- Selection of studies, appraisal and information extraction
- Additional data searches
- Adaptions of model structure based on data, defining time periods
- Calculating additional risk (risk differences)
- Calculating annual cost of adverse outcome for identified time periods
- Calculating net present values





#### **Method: Literature review**

- 1. Cohort (and other types of) studies of **resource use or costs** linked to perinatal mental health problems
- 2. Cohort (and other types of) studies which measured the relationship between perinatal maternal mental health problems and mothers' and child's health and wellbeing outcomes
- 3. Systematic reviews and meta-analyses on prevalence and natural course of mental health conditions
- 4. Cohort (and other types of) studies which quantified resource use or costs linked to adverse child outcomes
- 5. Unit cost data, national statistics

Searches needed to be pragmatic! Quality not formally assessed; instead we applied certain criteria to prioritise e.g. large cohort studies from UK, published in peer reviewed journals





#### **Method: Decision modelling**

**Incremental** approach: additional costs associated with perinatal mental health problems;

Directly or from additional data sets (national averages)

Principles and standards of attaching monetary values (recommended by the National Institute for Health and Care Excellence (NICE) and other government bodies)

- Unit costs attached to public service use from PSSRU
   Unit cost book for health and social care and NHS Reference costs
- Mean weekly wage rates from Office for National Statistics
- Willingness-to-pay value for a health-related quality adjusted life year gained
- Value of prevented fatality for whole life lost (suicide or infanticide)
  - **Discount rate** of 3.5%; average growth of earnings of 2%





#### **Method: Decision modelling**

#### <u>Assumptions</u>

- Remission of an episode of mental illness occurring during the perinatal period => cutoff point at 10 years
- Average age of women at childbirth of 32 years
- Average remaining life expectancy of 44yrs (based on an average life expectancy for women of 76 years)
- Retirement age of 65yrs





#### MOTHER, cost of perinatal depression or anxiety

(1) 7.4%
Prevalence and remission 10yrs

# Perinatal period

= Pregnancy until 1yr after birth 2nd 3rd 4th 5th 6th 7th 8th 9th 10th

Step Additional costs of perinatal mental illness, annual costs of mental illness

£, perinatal period

Const. £ p.a.

Present value = 
$$\sum_{t=0}^{10}$$
 Mean prevalence  $_{t} \times \text{Costs}_{t} \times (1+i)^{-t}$ 





#### Impact on CHILD, Example outcome: depression

0.009pp

9.4% (postnatal depression)

Prevalence and remission 10yrs

0.05pp

Risk differences for child emotional problems

Birth ... 5<sup>th</sup> yr ... 10<sup>th</sup> yr.... 16<sup>th</sup> yr...

... 65<sup>th</sup> yr

Step

Step

**(1)** 

Additional costs of depression in child- and adulthood

Const. £, p.a., childhood

**Const. £, p.a., adulthood,** based on mean duration of condition and costs distributed over life time

**(3)** 

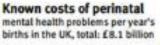
Present value = 
$$\sum_{t=5}^{55}$$
 Mean prevalence  $t \times \text{Costs}_t \times (1+i)^{-t}$ 



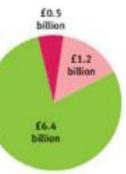


## **Key findings**

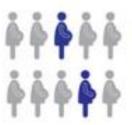








# Of these costs 28% relate to the mother 72% relate to the child

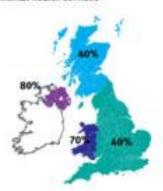


#### Up to 20%

of women develop a mental health problem during pregnancy or within a year of giving birth

#### Women in around half the UK

have NO access to specialist perinatal mental health services







#### Costs v improvement

The cost to the public sector of perinatal mental health problems is 5 times the cost of improving services.





# **Key findings**

Average cost to society of one case of *perinatal* depression £74,000, of which £23,000 relates to mother and £51,000 relates to child.

Perinatal anxiety (when it exists alone and is not co-morbid with depression) costs about £35,000 per case, of which £21,000 relates mother and £14,000 to the child.

Perinatal psychosis costs around £53,000 per case, of which about £47,000 relates to mother and £6,000 to child (=> lack of evidence of longer term impact on child).





#### ...a lot of media attention







# B.3

**Topic**: Advocacy for parents with learning disabilities

Method: Case study approach





#### Parents with learning disabilities

- At much higher risk of losing their children into care
- More likely to be involved in child protection cases: 15% to 22% of parents involved in child protection conferences and care proceedings have LD (Brandon et al 2009)
- Learning disability can be the main reason for child welfare issues but often not identified
- Less likely to seek help (Cleaver & Nicholson 2008)
- Additional support and responsive mainstream services needed
- Evidence shows that it is better to intervene early (e.g. Allen 2011)





# Our research: 'Investing in advocacy for parents with learning disabilities'

#### Method

- 2 workshops and a small survey with 4 advocacy projects working in England
- Information on case studies and organisation collected via semi-structured questionnaire
- Evidence reviews
- Simple decision modelling

We received information on 17 case studies





# Our research: 'Investing in advocacy for parents with learning disabilities'

#### **Findings**

Example 1 of a case study (in summary form)

Helen, a survivor of domestic violence, was referred to an advocate one week before the final hearing in child care proceedings for six of her children. She had felt unsupported by council staff during prior processes of assessment and case conferences. In turn, social services were concerned that she did not understand the process and its implications. With the advocate's help, Helen started to engage with social services and was able to keep her youngest child under a supervision order which was later lifted; she also improved contact with her children in foster care. Helen is now engaged with the school and a wide range of support groups, due she thinks to her increased knowledge and self-confidence. She also reports feeling less isolated, anxious and depressed.

When Helen understood that she had rights, too, this changed the way she interacted with social services. Helen also used the advocate to speak on her behalf in meetings when she felt too emotional to participate effectively.





### **Findings**

### Example 2 of a case study (in summary form)

The birth of Serena's first child was imminent when advocacy became involved in her accommodation and financial difficulties. A young person and a child in need plan was in place because her professional workers were concerned about her ability to parent. She was referred to advocacy to prevent escalation to child protection status. The advocate supported Serena to access early interventions including parenting classes, peer support groups, financial advice, and housing. The advocate also ensured she received counselling for symptoms of postnatal depression. When the advocacy intervention ended (after 15 meetings over an 8 months period), social services were no longer concerned about Serena's ability to parent. When she became pregnant again no further involvement was considered necessary.

In Serena's case the referral was made at an early point so that many more intensive and expensive interventions could be prevented including case conferences, court hearings and parenting assessments. Good multi-agency was reported to have been in place locally in particular between housing and benefit services.



### **Findings**

Project leads identified factors that constituted good practice and positively influenced outcomes:

- Early referral: Good practice meant receiving a referral no later than the initiation of a Section 47 enquiry
- LD (and associated communication and understanding difficulties, fears and defensive behaviours) as main reason for parents' disengagement from child safeguarding process;

Advocacy was also considered able to change professionals' awareness and attitudes and improve joint working with parents; an advocate's involvement could mean more time spent considering options and evaluating possible decisions. It could also lead to better interagency working around parents' needs.





#### **Findings**

- Possible reduction in safeguarding activities, care proceedings and arrangements, worth £720 per parent
- Possible economic benefits linked to increased access to early interventions, worth £3,130
- Costs of advocacy: £32 per hour, mean length of intervention 95hrs
- Wide range of outcomes: mental wellbeing, placement stability, better relationships with children who had been previously removed, school attendance and performance

Bauer A, Wistow G, Dixon J, Knapp M (2014), Investing in advocacy for parents with learning disabilities: what is the economic argument?, *British Journal of Learning Disabilities*. doi: 10.1111/bld.12089





Full standard child safeguarding process under continuing difficulties, concerns and a lack of parents' engagement.

Child in need		Child protection plan				Care proceedings						
Assess- ment	Meetings	Strategy meeting/ discussion, police referral	Section 47 enquiry* started, core assesment	Initial child protection conference	Case conferences, core group meetings	Review	Application for care proceedings, pre-proceeding meeting	First Appoint- ment	Case Conference	Issues Re- solution hearing	Final hearing	Care order
			Assessments (e.g. psychological, psychiatric, learning disabilities, parenting, etc. )									





# B.4

**Topic**: Long-term care finance **Method**: Macro-

simulation





## What is long-term care?

#### Aims to:

 reduce, lessen consequences of, or compensate for disability, cognitive impairment and loneliness; improve quality of life.

### Services are delivered in:

- peoples' own homes (home help, meals, nursing care)
- or in substitute care settings (residential care homes, nursing homes, hospitals)





## What is Long-Term Care (cont.)?

- Support is provided by:
  - Unpaid carers and formal care providers (public, private and voluntary sector), largely unskilled
- Support is provided in:
  - everyday tasks, including dressing, bathing, shopping, cooking, cleaning, therapy
- Main client group: older people





## Health Care vs. Long-Term Care

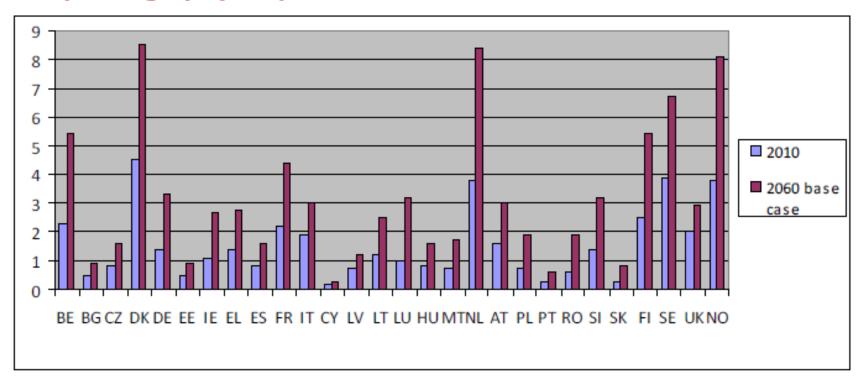
- Most people will need health care, and at more than one point of their life
- Health care costs are mostly covered by public system, considered public responsibility
- Health care is mostly delivered by highly specialised professionals

- 1 in 3 people will need longterm care (usually at the end of their life), many will not need it at all
- LTC is a **result** of health problems, but financed differently than health care
   => sense of unfairness
- Most LTC is provided by unpaid carers. Substitution between formal and informal care





## Public spending on LTC as % of GDP, 2010-2060. Base case (demography-led) scenario



Source: The 2012 Ageing Report: Economic and budgetary projections for the EU27 Member States (2010-2060). European Commission





## Financing long-term care

- All developed countries, unless there is a major breakthrough in the prevention or treatment of disabling conditions associated with old age, will need to devote a larger share of resources to LTC than they do currently.
- Relying on informal care or private savings to meet this additional costs would be inefficient and inequitable.
- Resistance to higher taxation suggests that a possible solution may lie in new public/private financing partnerships, with a potential role for compulsory insurance (public or private).
- The state's role could be to guarantee universal coverage and redistribution mechanisms to guarantee equity.





# Policy reform, DILNOT report 'Limited liability model of social insurance'; majorly informed by PSSRU projection modelling

- Costs of care in later life are shared between the individuals and the state
- Individuals pay for their own care until they reach a cap after which the state pays for their care (suggested cap was between £25,000 and £50,000, implemented cap was much higher at £75,000)
- Raised means test for residential care from £23,250 to £123,000 i.e. people entering a care home with less than £123,000, including the value of their home, will not have to pay the full cost of their care





## Modelling approaches and challenges

- Modelling future dementia care needs and associated expenditure presents two major challenges:
  - Capturing complexity
  - Data limitations
- Capturing complexity: there are many variables involved, some not easily quantifiable
- The ideal dataset on which to base a model (longitudinal, sufficient numbers of people with dementia and care users... with all the relevant variables) is rarely available, so creative data-linking and bridging is required.





# Health and Social care: funding divide vs. integration

- Health care is free at the point of use, whereas social care is often means-tested or attracts co-payment.
- The boundaries between health and social care are unclear and there is both opportunities and incentives for costshifting
- Different professional traditions and organisational structures make integration of health and social care very challenging.
  - Lack of integration results in less prevention than would be optimal:
    - Better management of chronic conditions by health sector => less need for LTC
    - Better social care can prevent costly hospital admissions.





# Algorithms assigning needs to benefits vs. care management

- Social insurance systems tend to have algorithms that assign pre-defined benefits to particular levels of need.
- In <u>tax-based systems</u> (traditionally) care managers assess individual needs and assign personal packages of care.
- Algorithms are clear and transparent, but may lack flexibility in the way resources are allocated, in particular difficulties reflecting needs arising from cognitive impairment.





### Simulation modelling

The projections model is an aggregate or "cell-based" model. This means we look at **groups of people** rather than individuals. The model categorises the older population using a series of variables such as age, gender, household composition, level of disability, and housing tenure. We end up with about 400 different groups of older people, and, using official population projections and other data, we estimate how many people will be in each group in the **baseline** and **future years**, e.g. 2010, 2020, 2030, 2040. We conduct analyses of various sources of data to estimate the proportion of people in each group who receive different types of care. We then assume in our baseline projections of future demand and costs that these proportions will remain constant for each group. These are projections not forecasts: we make a number of **assumptions** – for example about future population growth, annual increases in the costs of care, and disability levels by age and gender - and conditional on these assumptions we can then say expenditure is projected to rise from £X billion to £Y billion over a specified time period.





### The PSSRU LTC CI model

- Based on the England PSSRU aggregate LTC model
- Data from MRC-CFAS and PSSRU surveys of residents in care homes is used to estimate the prevalence of CI and the proportion of care users who have CI.
- Older people and users of services are divided into four disability groups:
  - No CI or functional disability (FD)
  - FD but no CI
  - CI only (used as proxy for mild stages of dementia)
  - CI and FD (proxy for moderate/severe dementia)
- Simulates the impact on demand of specified changes in demand drivers, or specified changes in patterns of care.
- Makes projections on the basis of specific assumptions about future trends.

See, for example, Comas-Herrera et al., 2007





## Probability of being in an institution for people aged 75 to 84, by gender, household type and dependency group.

		Group probability of being in an institution					
		CI only	ADL only	ADL & CI			
75-84 male	Alone	27	38	73			
	With others	37	49	72			
	Married	8	7	38			
75-84 female	Alone	9	26	87			
	With others	13	36	86			
	Married	4	3	74			

Source: PSSRU CI LTC model estimates (using MRC CFAS data).



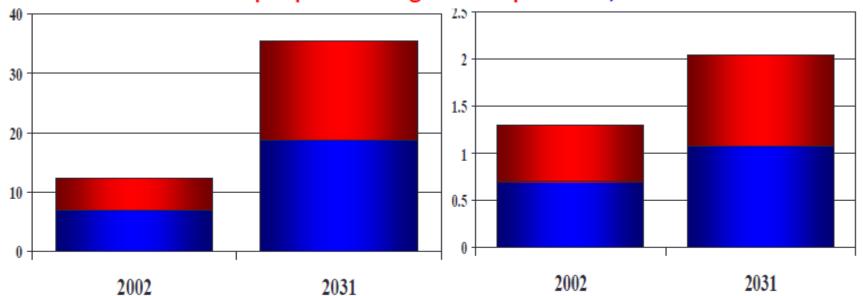


# Expenditure projections for people with dementia 2002 to 2031

Projected total LTC expenditure, at 2002 prices

LTC expenditure as % of Gross Domestic Product

Red – older people with cognitive impairment; Blue - not



Comas-Herrera et al, *IJGP* 2007





## Projections of future use of social care and associated expenditure under different assumptions about disability. England, 2007 - 2032

	2007	2032					
		Constant Disability prevalence	Hypothetical "Brookings" scenario	Constant Illness prevalence	Improved health	Continuation of previous trends	
Home care	298,000	514,000	413,000	543,000	530,000	560,000	
Institutional	332,000	609,000	365,000	800,000	715.000	896,000	
care	332,000	609,000	363,000	800,000	715,000	896,000	
Total LTC Expenditure (£billion)	17.5	49.8	35.5	59.1	54.9	63.8	
(EBIIIIOII)	17.5	45.0	33.3	33.1	54.5	03.0	
LTC Expenditure as% of GDP	1.4%	2.7%	1.93%	3.2%	3.0%	3.5%	





# Assumptions about future disability when projecting future LTC expenditure:

- 1. Assuming unchanged disability rates
- Extrapolating from past trends
- Projections based on hypotheses linked to changes in life expectancy (for example Brookings scenario).
- 4. Asking the experts for their views about the future.
- Linking with epidemiological models of chronic conditions and their mortality and disabling outcomes.





# Assumptions about future disability when projecting future LTC expenditure:

- 1. Assuming unchanged disability rates
- Extrapolating from past trends
- Projections based on hypotheses linked to changes in life expectancy (for example Brookings scenario).
- 4. Asking the experts for their views about the future.
- Linking with epidemiological models of chronic conditions and their mortality and disabling outcomes.





# B.5

Topic: Building community capacity
Method: Decision modelling







# Decision modelling





## A method that can combat some of the challenges of trial-based economic evaluations

3 Steps Instead of collecting new data over time ...

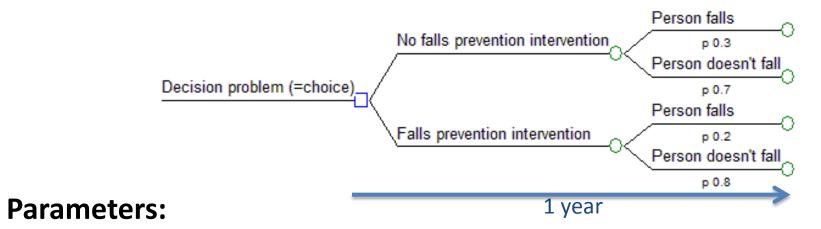
- 1. Use previous studies and routine data collections to simulate the impacts of an intervention.
- 2. Trace 'pathways' through a care system or a life-course
- 3. Estimate the associated outcomes and costs

## Advantages of this method are that it allows

- To use synthesised data,
- To combine different sets of evidence,
- To link intermediate to final outcomes and
  - To extrapolate beyond the observed time period

## **Decision tree and uncertainty**

**Simple decision tree**: suitable to model a limited number of events which happen in a short time period with no continuous risk (= follow-on events)



- Probability of fall for an 'average' person who received/ did not receive falls prevention
- Cost of the falls prevention intervention
- Consequences: Quality-of-life, resource implications of a fall (e.g. average cost of treating a fall)



### **Decision tree**

## State transition model (>Markov):

- Represent continuous risk in the form of repeating events over a long time horizon
- Events are modelled as transitions from one state to another

#### Death Markov Information Init Rwd: 0 Incr Rwd: 0 Final Rwd: 0 Fall Hospitalisation --- Markov Information --- Markov Init Rwd: 0 Term: Incr Rwd: 0 Final Rwd: 0 Care home admission --- Markov Information Init Rwd: 0 Incr Rwd: 0 Final Rwd: 0

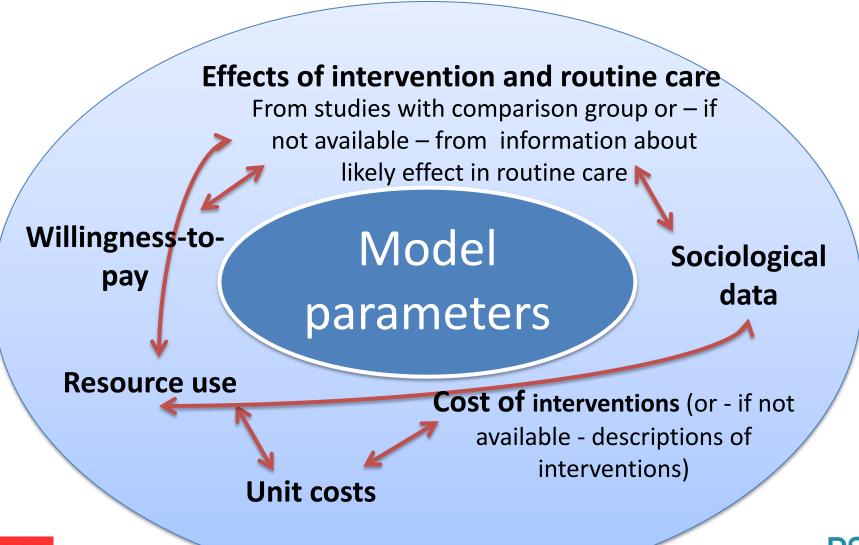
#### **Parameters:**

- Transition probabilities
- Cost of the intervention
- Consequences: e.g. quality-of-life associated with death, hospitalisation, care home admission; resource implications linked to these events





## **Model parameters**







## **Building community capacity**

Different names at different times, and supported by governments under different political agendas

- Active citizenship
- Prevention
- Local democracy
- Personalisation
- Decentralisation
- Integration
- ... budget control





## What is Community capacity-building -1-

### **Definition**

An asset-based, developmental approach which aims to:

- Combat obstacles that prevent people (and organisations)
   from achieving their goals
- Empower local people and neighbourhoods to initiate action themselves
- Lead to measurable and sustainable results at an individual, community, societal level
- Generate social capital





## What is Community capacity-building? -2-

"[...] social capital refers to the networks of social relations that provide access to needed resources and supports ...

Any study of social capital should encompass the investments that people make [...] and the returns to those investments in the form of economic, social and health outcomes for individuals, communities and societies."

Policy Research Initiative (2003), Social capital: Building on a Network Based Approach, Canada, October 2003





## Some exploratory study

We looked at three examples of **community** capacity building

© Oxford University Press and Community Development Journal. 2012. All rights reserved. For permissions, please email: journals.permissions@oup.com doi:10.1093/cdj/bss021 Advance Access Publication 26 September 2012

### **Building community capital** in social care: is there an economic case?

Martin Knapp\*, Annette Bauer, Margaret Perkins and Tom Snell

Abstract Current debates about the sustainability of public commitments include discussion of the adequacy and affordability of collective health and social care responses to the rapidly growing needs of ageing communities. A recurrent theme in England is whether communities can play greater roles in preventing the emergence of social care needs and/or helping to meet them. Various approaches have been suggested, including community development, community capacity-building and creating social capital. We investigated whether there is an economic case for initiatives of this kind, cognizant of the fact that there are many other objectives for any local scheme. We used a cost-benefit approach and decision-modelling techniques to examine potential costs and economic consequences in a context where evidence is limited and there is little opportunity to collect primary data. We conclude

Knapp, Bauer, Perkins, Snell, Community Development Journal 2013

# Why measuring the economic value of community capacity-building?

In a world of scarce resources we need to know: Is it good *value for money*?

- Can it stop needs before they arise, does it meet them when they do and is there active participation?
- Does greater community capacity and governance reduce the demand on the welfare system?





# Barriers towards building community capacity ...

Evidence is mainly qualitative, difficult to demonstrate value for money

Traditional evaluation designs are often not able to capture the wide range of long-term benefits

Many benefits are long-term (whilst commissioning cycles are typically short-term)

Benefits to wide range of public service sector (whilst costs often carried by a single commissioner)

=> Requires pooling of resources across public service sectors and long-term commissioning vehicles





## What the evidence tells us -1-

**social capital** -> better health, reduced level of (perceived) crime, higher educational achievement, economic growth (for example *The Hidden Wealth of Nations* by David Halpern 2009)

**volunteering** -> intrinsic motivation and benefits, health and wellbeing, pathway to employment (Ironmonger D 2006)

**social support** -> reduced social isolation, loneliness and depression (for example Steptoe A et al 2013)

**early intervention** -> preventing use of more intensive services, improved health and wellbeing (Allen G 2011)

**co-production** -> adaption of behaviours that improve individual's and service outcomes (*Engaging public sector clients* by John Alford 2009)

**independent living** -> improved functioning and prevented or delayed need for institutionalisation (Beswick AD et al 2010)

**personalisation** (personal budgets) -> improved health and wellbeing (Forder et al 2013, Glendinning et al 2008)





## What the evidence tells us -2-

### Time banks

- = Exchange of skills and help measured in hours of time rather than in £
- Social inclusion, self-esteem and confidence, reduced social isolation, wellbeing, increased access to assets, improved employment prospects, reduced reliance on services

Seyfang G 2001,2002, Boyle D 2005, Lasker J et al 2011





## What the evidence tells us -3-

## Befriending, older people

- Befriender (usually volunteer) offers emotional and social support to older person through regular visits or phone contacts
- Reduction in social isolation, loneliness and depression
- Additional benefits if schemes have particular focus on certain groups e.g. hospital discharge

Charlesworth G et al. 2008, Windle K et al 2009, Mead N et al 2010





## What the evidence tells us -4-

## Community navigator

- = Helps people to access the 'right' services and support; has networks & knowledge of community and public services
- Earlier and more appropriate use of services (Anderson & Larke, 2009)
- Evidence of early intervention such as housing support (Porteus et al 2011) and debt advice (Knapp et al 2011)





## **Example: Befriending**

- Intervention which "introduces the client to one or more individuals whose aim is to provide the client with additional social support" (Mead et al. 2010)
- Key elements: emotion focused, highly personalised, non-directive
- Belongs to a category of social interventions which are complex and difficult to evaluate; often linked to other interventions (including practical and technological support)
- Low cost (lay led schemes)





## The role of social relationships in Older Adults

 Aged > 65yrs: loneliness and social isolation (5-16%), Windle et al. 2011

### ..defined and measured ..

- Social support (real) availability of social resources approx. by: living with spouse, no. contacts with a confidant, involvement in social activities
- Loneliness individual's experienced dissatisfaction with the quality or frequency of social contacts
- Significant influence on mental and physical illness and on mortality (Hold-Lunstad *et al.* 2010; Steptoe *et al.* 2013)





## Evidence: Social relationships in older people

 Estimated prevalence of loneliness and social isolation in older people above 65yrs: 5-16%, e.g. Windle et al. 2011

### ..how is it defined and measured ..?

- Loneliness individual's experienced dissatisfaction with the quality or frequency of social contacts (=subjective)
- Social support (real) availability of social resources approx. by: living with spouse, no. contacts with a confidant, involvement in social activities (=objective)
- Significant influence on mental and physical health including mortality (Hold-Lunstad et al. 2010; Steptoe et al. 2013)

## **Evidence: Effectiveness of Befriending**

Modest but significant effect on depressive symptoms found in meta-analysis of RCTs by Mead *et al.*, 2010

# ..but size of effect strongly depends on study group, outcome (measures) and evaluation design:

For example, RCT with dementia clients found effect only in a particular group of carers (Charlesworth 2008)

Larger effects if (1) social isolation measured on complex scale versus one-dimensional; (2) study design is 'weaker' i.e. without control group or non-randomised control group (Masi *et al.* 2011)



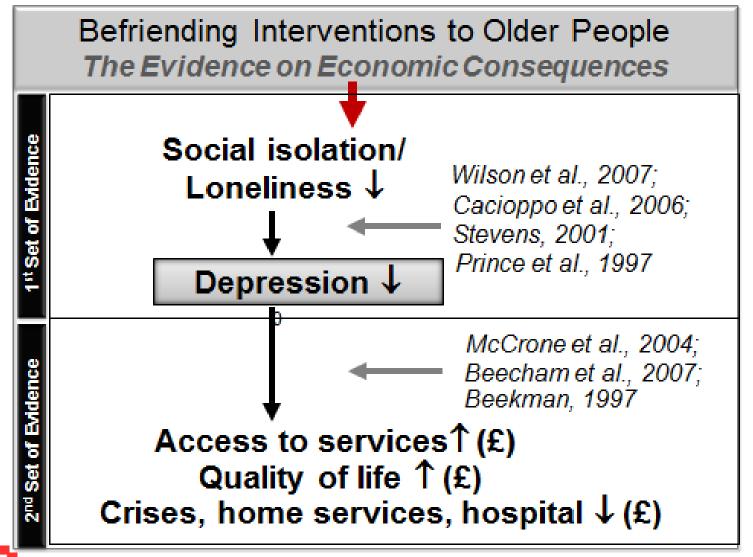
## Are befriending interventions costeffective...?

And are there potential cost savings to the public sector and benefits to wider society?

## Our modelling method

- Data/ information from literature & expert opinion
- •Costs estimated based on mean length and number of sessions typically provided per person-year and minimum cost per hour from data on resources required to support volunteers (conservative, this did not include opportunity costs)
- •Effectiveness estimated based on reduced loneliness and reduction in depression and expected use of health services

# Modelling means building a pathway of events based on logic and evidence





## **Our initial findings...**

### **Time banks**

- Cost per time bank member = £607 p.a.
- o Economic pay-offs = c.£1300 per member
- o ... of which £187 = short-term cashable to govt.

## **Befriending**

- o Cost per older person = £90 over 12 weeks
- o Economic pay-offs = £490 including QOL gains
- o ... of which £38 = short-term cashable to govt.

## Community navigators (benefit & debt advice)

- Cost per 'hard-to-reach' person = £611
- Economic pay-offs = £360 (or £1200 including QOL gains)





## Help@home, Age UK Shropshire

**Aims** to enable older people to live independently at home, reduce loneliness and isolation, improve mental and physical health;

**Targeted at** older people in Telford and Wrekin who do meet the formal eligibility threshold for publicly funded care

- <u>Volunteer-run befriending</u> scheme, free-of-charge, via telephone or personal visits;
- <u>Practical help</u> with gardening, shopping etc., for which older person is charged;
- Benefits advice service provided alongside;
- Referral to personal care if needed (not provided by scheme).





# Evaluating costs and outcomes – Research method

- (1) Explorative phase: expected outcomes, existing data, data that are readily available, capacity for data collection, expectations and (2) Evaluative phase: data collection and analysis phase (including literature review)
- Sources for outcome data: (1) ASCOT, n=40, applied when people started using the projects and follow up at about 6 months;
   (2) PSSRU questionnaire for survey with about 1,000 existing service users (plus 40 new service users at assessment stage); (3) project data from satisfaction surveys, volunteers, benefit claims
- Sources for cost data: (1) PSSRU questionnaire (as for outcomes),
   (2) budget and activity data (from which evaluated the costs of the scheme)
- Data from the literature for parameters required to establish monetary values and long-term consequences





## **Outcomes -2-: Health-related quality of life**

(1) **Self-perceived quality of life** (physical and mental) from PSSRU before/after questionnaire

Utility scores applied to health states from the literature:

- Mean health utility of UK population (>85yrs) for physically and mentally 'well' state (Kind 1998);
- •Utility of older people with high reablement needs for 'physically unwell' state (Glendinning et al 2008);
- Mean health utility of older people with anxiety and depression (Ara and Brazier 2011)
- (2) **Social support** (measured in number of social contacts) from PSSRU before/after questionnaire
- Based on additional annual risk of death among socially isolated individuals of 4.3% (derived from Steptoe et al 2013)

NICE willingness-to-pay threshold of £20,000 for one year in full health (=conservative)





## **Costs: Resource use**

### **Data collection**

- Established health and social care service use over period of 6 months before older people engaged with the project (n=40) and after (n= circa 1,000);
- Also covered unpaid care; perceived risk of care home admission (asked as hypothetical question);

## **Data analysis**

- Logistic regression analysis to adjust for differences in age, gender, living status between 'before' and 'after' groups;
- Change in annual service use costs an unpaid care (valued with home care rate following replacement cost approach);
- Annual savings linked to prevented care home stay based on average length of stay with the scheme, discount rate of PSS

## 2 additional elements of the scheme

## **Volunteering**

Costs included in budget data for the overall scheme;

We originally had planned to collect *quality of* life data from volunteers but time constraints prevented this;

Data were available on volunteers leaving into **employment**; valued with mean wage rate of people who move from Job Seeker's Allowance into employment (Adams et al 2013).

## **Benefit advice**

A 'good' cost to the government and what we call zero-sum exchange of money from a society perspective;

Potential health and wellbeing improvements but lack of appropriate quantitative data.





# **Annual economic pay-offs**

7 minual economic pay one			
Per participant	Government	Individual	Societal
Malaurta and into annulaum ant	104	F.C.F.	740
Volunteers into employment	184	565	749
Health-related quality of life (physical and mental)	-	1023	1023
Service use	2026	1265	3291
Care home admission (service users and spouses)	330	1378	1708
Unpaid care	_	- 45	- 45
Cost of the scheme Local government	- 791	- 325	- 1116
Net benefit per service user	1565	3296	4861
Net benefit per volunteer	184	565	749
<u>Central government</u>			
Benefit payments	- 1752	1752	0
Net benefit per service user	- 187	5048	4861
LCE			PSSRI

## Summary -1-

Potentially cost savings linked to the scheme were £1.3 million (local government perspective); with wider benefits from a societal perspective of £3.9 million

### In particular

- Physical health improvements (or avoidance of worsening physical health);
- Reduction in *health services*, in particular hospital and district nurse;
- Reduced social isolation;
- Mental health improvements;
- Helping volunteers on their pathway into employment.





## Summary -2-

### In addition...

- The scheme helped to re-distribute £1.5 million of central government resources (which has been found to be difficult for older people, Wiggan and Talbot 2006); problematically, older people had increased financial worries despite the financial support.
- And to increase social care-related quality of life by on average 0.06 units on ASCOT (based on sample of n=24); this is relatively strong increase considering that change in study that evaluated home care was on average 0.07 (Caiels et al 2010).
- Satisfaction data showed that older people felt very positive about staff and volunteers; and they believed it helped them remain living in their own home and to improve their quality of life.

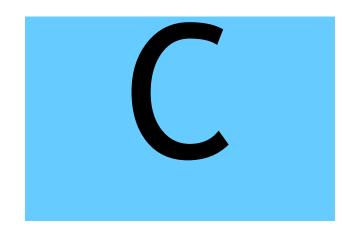
## Limitations...

We faced many **challenges and barriers** that are typical for evaluations of this type of relatively small scale, personalised and empowerment-based projects, in particular:

- Finding a suitable comparison group;
- Following individuals over time;
- Asking sensitive or difficult questions;
- Getting data.







# Economics and third sector research





# ... economic theory provide a possible explanation as to why the third sector exists ...

- Market failure and externalities: leaves most third sector activity unpriced or with prices that do not reflect full societal costs
- Rare conditions, small or heterogeneous groups: not enough demand for market or efficient government provision (lack of economies of scale)
- Information asymmetries and transaction costs: Trust/ experience goods
- Low start up and entry costs
- Vulnerable users or beneficiaries at risk of exploitation: possibly limited ability to exercise voice or exit rights
- Stigmatized groups for which public mainstream provision has failed
- Perception that third sector provides higher quality and/or lower costs, and ensures greater equity, is more innovative





# Examples of economic concepts, methods and approaches

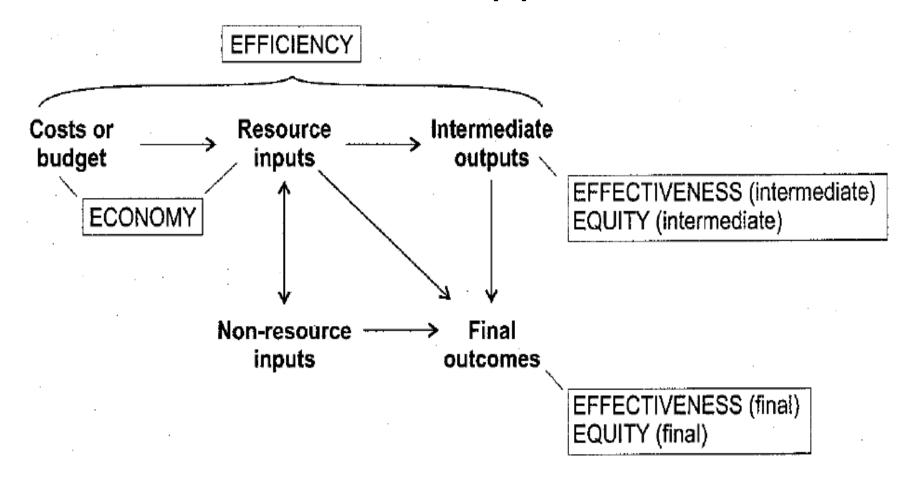
Production of Welfare Framework (Davies and Knapp 1981)

- => Foundation for performance evaluation
- Costs: include costs of resource inputs, total budget of the agency, opportunity costs (expressed in monetary terms)
- Resource inputs: e.g. staff, volunteers, members and capital
- Non-resource inputs: no-identifiable price but influence the achievement of outcomes. E.g. opinions, attitudes, ideologies which shape the contextual environment
- Intermediate outputs: volumes of service output (quality dimension)
- Final outcomes: changes in welfare, quality of life and field-specific status; externality effects-influenced by the volume and quality of services provided (user and carer satisfaction)





# Examples of economic concepts, methods and approaches







# Application of economic evaluation in a performance management context

Economics can contribute to all stages of the evaluation process:

- Clarifying objectives
- Convert objectives into measurable outcomes
- Distinguish between inputs, outputs, process and outcomes
- More systematic and rigorous assessment of outcomes, in particular causality
- Comprehensiveness, opportunity cost principle, societal and multiple perspective

Byford, S., McDaid D., and Sefton, T. (2003). *Because it's worth it: A practical guide to conducting economic evaluations in the social welfare field*. York, UK: Joseph Rowntree Foundation.





## Types of economic evaluations

**Cost-effectiveness:** consequences measured using single outcome in natural units e.g. life years gained

**Cost-utility:** consequences measured using a single outcome in terms of utility e.g. QALY (in health care) and social care QALY

**Cost-consequences:** consequences measured using multiple outcomes, one by one

**Cost-benefit:** consequences measured in £ i.e. assigning £ values to outcomes





# Cost benefit vs. social return on investment analysis (SROI)

- Both have in common that they aim to translate outcomes into monetary values
- Cost benefit analysis often focused on consequences that translate directly into savings (e.g. reduction in hospital admission)
- SROI has specific focus on involving stakeholders
- SROI uses method. non-validated proxy indicators with the aim to value all benefits including intangible
- SROI easier subject to manipulation and bias





## Economic evaluation of third sector projects: Measuring outcomes

- Outcomes often not clearly defined at the beginning of the intervention because of its personalised process-focused nature
- Many groups of beneficiaries: users, their families, volunteers, unpaid carers, community members
- Not one single outcome measure that is sensitive to capture all changes even for one group
- Many benefits occur only long-term
- Ideally all perspectives would need to be captured through different outcomes measures and over sufficiently long time periods to evaluate the full value or impact

...impractical/impossible, instead:

- Iterative process in consultation with key stakeholders
- Defining the most important objectives and tracing pathways between outputs, intermediate and final outcomes
- Utilise evidence from the literature and other sources to link outputs or intermediate to final outcomes and extrapolate outcomes beyond observed time periods





## Economic evaluation of third sector projects: Measuring costs

- Multiple funding bodies
- Different government budgets but usually perspective only taken from the government department that is responsible for funding the intervention (and commissioning the study)
- Multiple needs (co-morbidities): costs hard to disentangle
- Intangible costs such as volunteer's time, parent's time, carers' time
- Out-of-pocket expenditure
- Costs to communities
- Costs can persist for long periods
- Many costs are hidden from view





## Economic evaluation of third sector projects: *Identifying the counterfactual*

- No alternative provision by definition (... according to economic theory)
- So counterfactual is 'doing nothing'
- Ethical implications for study design
- Consideration of other sources that provide information about expected scenarios of what would have happened in the absence of the projects (e.g. neighbourhood statistics
- => Can be used also in decision modelling





# Performance indicators for third sector project, derived from Kendall and Knapp 2000

#### By dimensions measured

#### **EFFICIENCY**

- Resource inputs (by activity), expenditure, average costs; Number of volunteers and hours volunteered; Volume for example events organised, users seen
- ⇒ essential but narrow view on performance, many resource inputs without formal market price

#### **EFFECTIVENESS**

- Comparative impact on outcomes; Satisfaction ratings; Subjective measures of opportunity of impact; Quality; Outputs/volume
- => Often difficult to conceptualise; subjective; can be manipulated

#### **EQUITY**

- Market concentration index; Service targeting, Accessibility, Redistributive policy consistency; Benefit/burden ratio
- ⇒ Subject to manipulation and difficult to conceptualise



