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Evaluation of the personal health budget pilot programme

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www.pssru.ac.uk

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Personal health budget programme

Personal health budgets are an important part of the personalisation agenda

The aim is to encourage NHS to be more responsive by promoting greater choice and control

First proposed in the 2008 NHS Next Stage Review and in 2009 DH invited PCTs to become pilots

The underlying principles of personal health budgets are:

- Know the level of resource available within the budget
- People being encouraged to develop a support plan that details how the resource will be used to meet outcomes
- Choice in how the budget will be managed

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Deployment options

Notional

Budget is held by the NHS and buys or provides the services

Managed by a third party organisation

Organisation independent of budget holder

Direct payment

Cash payment to the budget holder

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What can a personal health budget be used?

A range of services/help that can help meet identified goals

- Personal care
- Equipment
- Physiotherapies
- Complementary therapies

What is not covered by the personal health budget

- Emergency care
- Care normally received from a GP
- Gambling
- Debt repayment
- Alcohol or tobacco
- Anything that is unlawful

www.personalhealthbudgets.dh.gov.uk

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Evaluation of the Personal Health Budget Pilot Programme

Pilot programme was supported by a three-year evaluation (2009-2012)

Overall 64 pilot sites at outset

20 form the in-depth evaluation with the remainder forming the wider cohort

Overall aim of the evaluation was to provide information on:

- How personal health budgets are best implemented
- How well personal health budgets work
- Where and when they are most appropriate
- What support is required for individuals

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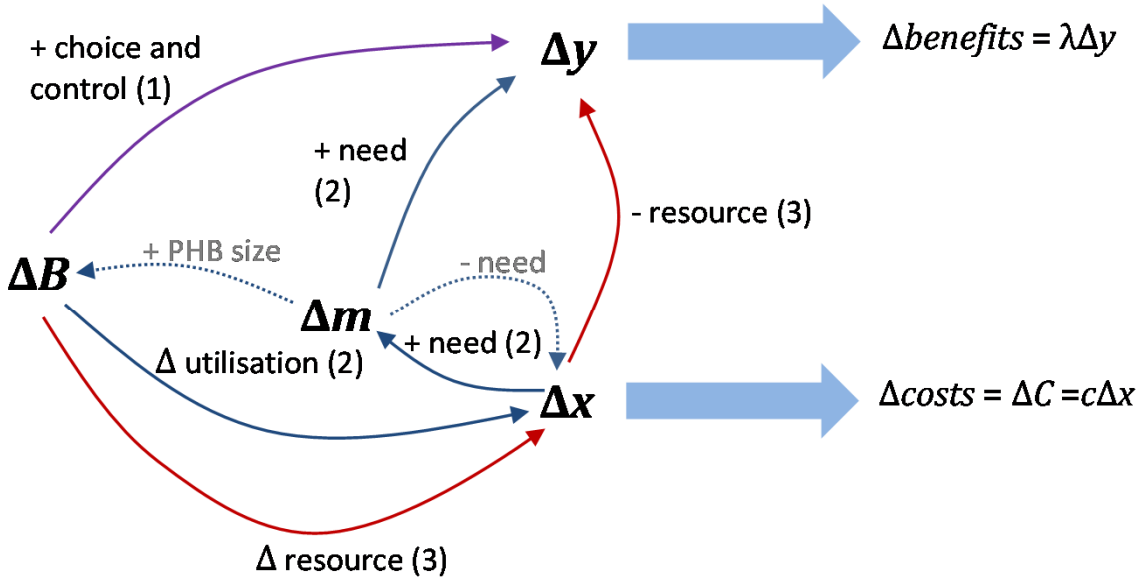
Expected impact of personal health budgets on costs and benefits

PHBs expected to have effects by:

(1) improving choice and control

(2) Allowing people to change services (better tailoring)

(3) being given with different (less?) funding levels than conventional services



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Research Team

PSSRU (University of Kent)

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Evaluation Design

Controlled trial with a pragmatic design

- Patient-level randomisation (whole site uptake)
- Between group comparison (selective PHB uptake)

The evaluation covered:

- NHS Continuing Healthcare
- Diabetes
- Mental health
- Chronic Obstructive Pulmonary Disease
- Stroke
- Long-term neurological conditions

1,000 people recruited to the PHB group
1,000 people recruited to the control group

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Quantitative data collection

Outcome interviews

- Care-related quality of life (ASCOT)
- Health-related quality of life (HRQOL) using the EQ5D scale
- Psychological health using GHQ12
- Subjective well-being

Primary care service use – GP medical records

- Service use for 12 months before and after consent date

Secondary care service use – Hospital Episodes Statistics

- Service use for 12 months before and after consent date

Analysis of PHB support/care plans – costing and service use

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Qualitative data collection

In-depth interviews: 3 and 9 months among budget holders and carers

Interviews with organisational representatives within the pilots.

One aim of the interviews was to develop implementation models

- Whether pilot site informed the budget holder of the PHB amount
- Degree of flexibility in what services could be purchased
- Flexibility in deployment options

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Quantitative Data Analysis

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Missing data

Missing data imputations

Highly complex evaluation – missing data

Missing at random – impute values for missing data using underlying patterns in the dataset

Active sample of 2,235 cases

1,171 in the personal health budget group

1,064 in the control group

Pattern of missing data:

Missing at random

1,656 cases (74.1% of the active sample) with outcomes data (at follow-up)

2,104 cases (94.1%) with at least some service data

2,133 cases (95.4%) with either outcomes data or service data

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Evaluating impact

Establishing the counterfactual

Study used mixed methodology…

both intervention and control groups could differ at baseline

… d*ifference-in-difference* approach

Net off any differences in experience (costs or benefits) at baseline from differences at follow-up

To safeguard against the possibility of bias between the two groups, multivariate difference-in-difference models

Baseline characteristics were 'controlled' for:

- socio-demographic factors (for example, gender, age, baseline dependency, accommodation, ethnicity);
- socio-economic factors (for example, education, benefit receipt); and
- health status (for example, health condition and comorbidities)

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The impact of personal health budgets on outcomes

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Key Objectives

To identify whether personal health budgets improved outcomes from the health and care system for people by giving them greater choice and control over the type of support they accessed and the way that support was organised and delivered

Three questions:

Was there evidence that personal health budgets led to better outcomes as compared with conventional service delivery?

Was there evidence to suggest that specific implementation models led to comparatively better outcomes for budget holders?

What other factors were associated with outcome change?

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The impact of personal health budgets on outcomes

Personal health budgets associated with an improvement:

- Care-related quality of life (ASCOT)
- Psychological well-being (GHQ-12)

Implementation models

- Positive impact
  - Budget holders know the resource level
  - Flexibility and choice as to services that can be purchased
- Negative impact
  - Less flexibility and choice

Budget size

- £1000 + budgets → positive impact on ASCOT and GHQ-12

Health conditions

- Chronic Obstructive Pulmonary Disease → positive impact on outcomes

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The impact of personal health budgets on health status and health related quality of life (EQ-5D)

Personal health budgets did not appear to have an impact on health status *per se* over the 12 month follow-up period.

No significant difference in mortality rates between the two groups.

Personal health budgets did not have a significant effect on health-related quality of life (EQ-5D) compared to the control group.

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The impact of personal health budgets on costs and cost-effectiveness

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Net monetary benefits

Potential impact of PHBs: on (a) costs and (b) benefits e.g. improved quality of life

What is the *net* effect?

Net Benefits:

Benefits:

Quality of life measured by EQ-5D or ASCOT

Apply a *willingness-to-pay* for unit gain in EQ-5D or ASCOT over a year

…. subtract **Costs** = NMB

Compare PHB and control groups…

$$\Delta NMB_t = (\lambda B_t^{PHB} - C_t^{PHB}) - (\lambda B_t^{CG} - C_t^{CG})$$

Is NMB higher for the PHB group (after controlling for baseline differences)?

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Key Objectives

Analyse how net benefits compared between the personal health budget group and the control group, and therefore assess cost-effectiveness

Explore how the cost-effectiveness of personal health budgets varied for different sub-groups in the study

- Health condition
- Type of budget
- Budget level
- Personal characteristics

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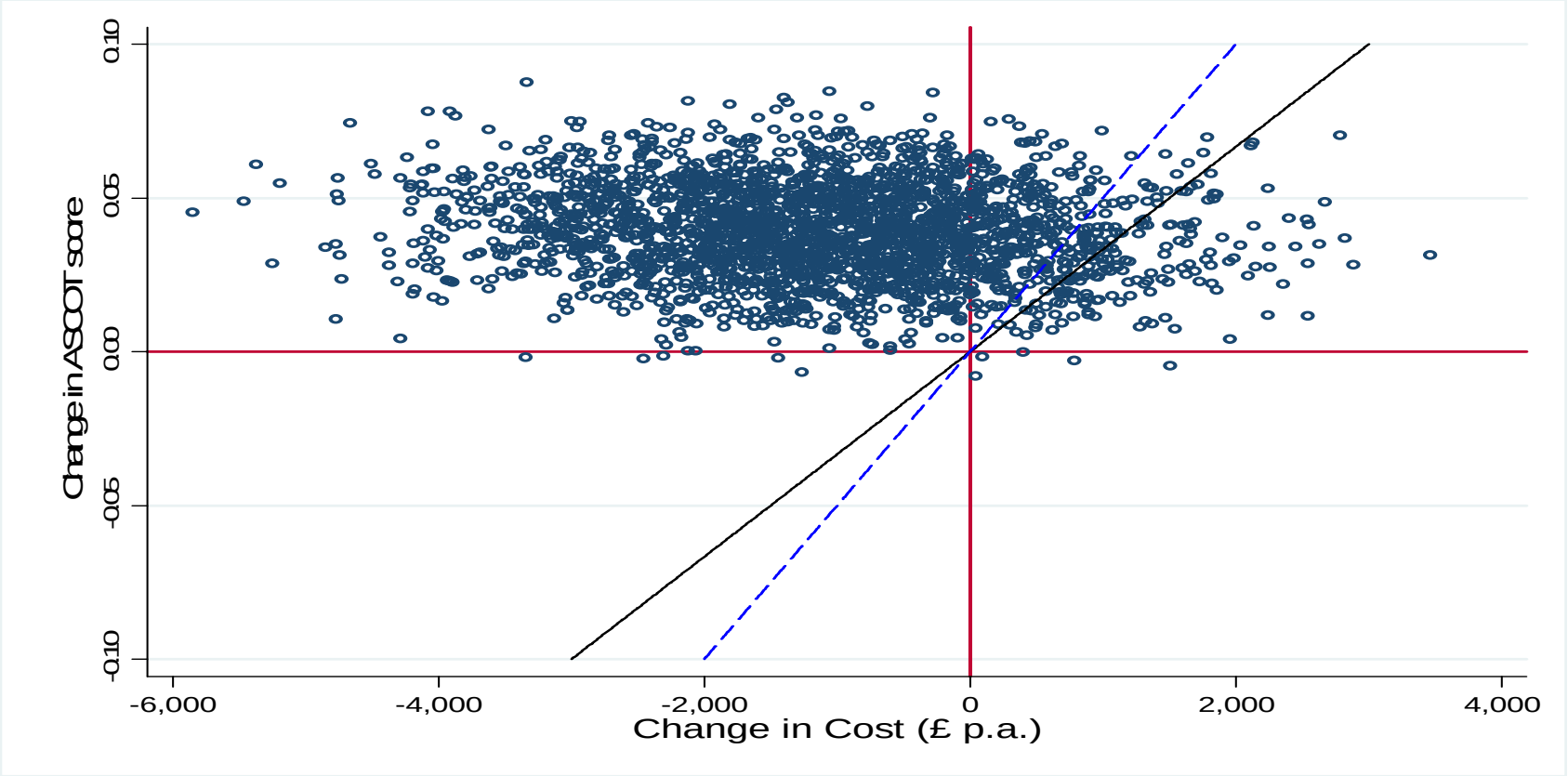
Cost-effectiveness plot – Care-related quality of life, whole sample



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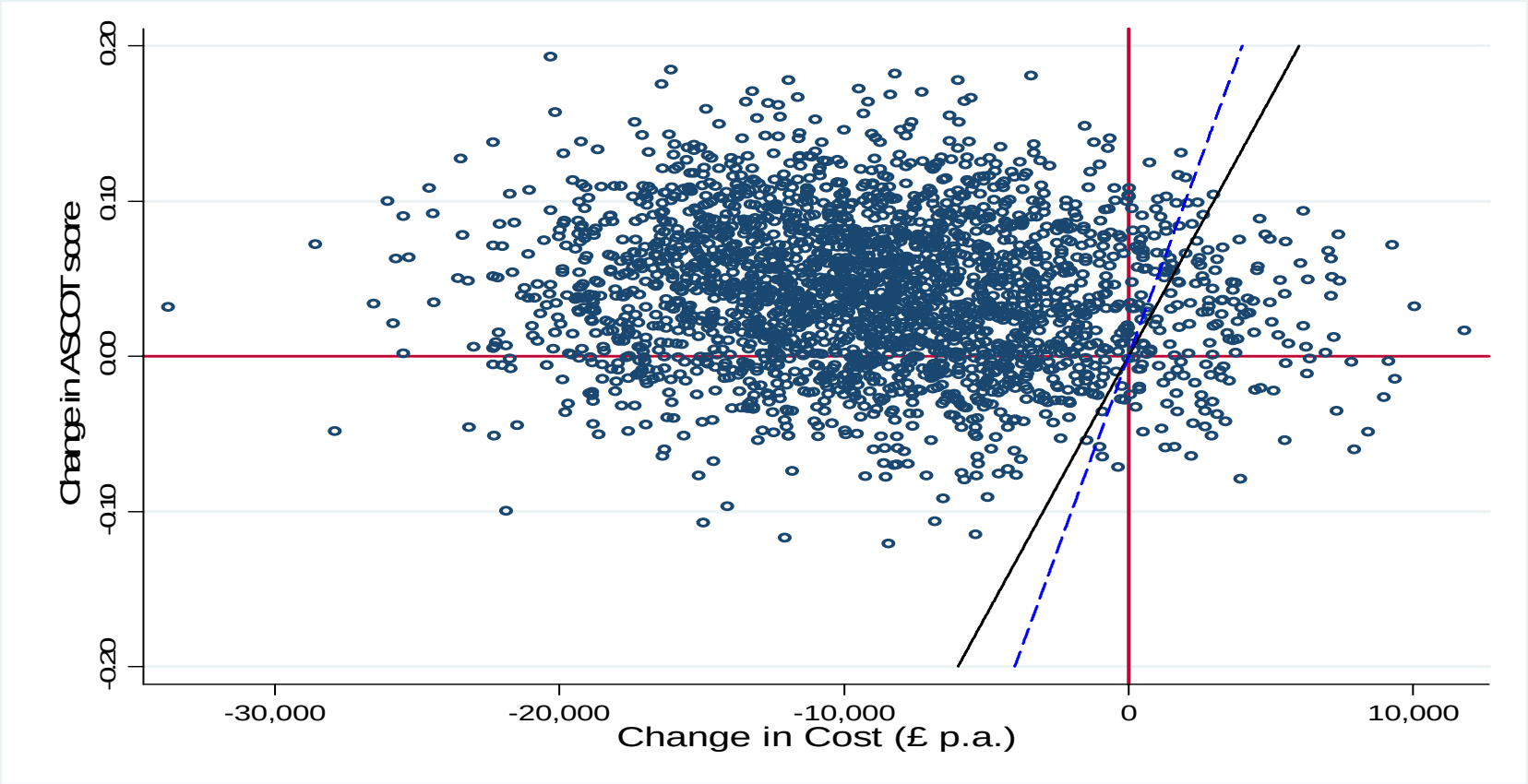
Cost-effectiveness plot – Care-related quality of life, NHS Continuing Healthcare sub-group



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Sub-group effects

Personal health budgets were cost-effective for:

- Mental health sub-group
- Budgets implemented following the main ethos of the policy (greater choice and control)
- Budgets containing £1,000 or more

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Recommendations for policy and practice

Finding that personal health budgets were cost-effective - supporting the planned wider roll-out

High-value personal health budgets were most cost-effective, suggesting that personal health budgets should be initially targeted at people with greater need

Personal health budgets were cost-effective for people with mental health problems and those receiving NHS Continuing Healthcare supporting the wider roll-out

Implementation of personal health budgets had an impact on both outcomes and costs

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Policy Update

Following the evaluation:

Individuals in receipt of NHS Continuing Healthcare have the right to ask for a PHB from April 2014

From October 2014 onwards, individuals in receipt of NHS Continuing Healthcare will have right to have a PHB

As of 2015, PHBs should be offered to anyone with a long-term health condition