

Cost Saving Analysis

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Outline

1. Why doing a cost saving analysis?
2. How to do a cost saving analysis
3. Using cost saving to build cost-benefit analysis for the State
4. Embedding data into broader approaches (e.g. SROI)

Why?

- Beyond an understanding of broader impacts, it is also important to analyse interventions from an efficiency angle.
- The question this type of analysis seeks to answer is: which interventions are the most optimal in delivering change from the point of view of the State/taxpayers.
- For example: investing in prevention can reduce the use of services for treatment of “effects” in the medium to long run. This delivers both value to the stakeholders in question but ALSO to State services.
- A cost saving analysis can tell us how many £ will be saved in the future for each £ invested today
- In the context of mental health interventions, this means investigating how many £ would have been spent in the State health system vs. how many £ are spent with the intervention.

How? (1)

In practice, we can start such an analysis by following two steps:

- *Measuring / estimating the use of health services and associated costs under a “business as usual” (no intervention) scenario.*
- *Measuring / estimating the use of health services and associated costs for participants in community growing programmes.*

The difference between the two is = the benefit of programmes (cost saving) as a consequence of reduced use of healthcare services. *Example:*

Benefits	Value (£)
Avoided prescription costs	258.27
Avoided medical consultation costs	408.92
Avoided diabetes complication costs	1,815.00
Avoided alcohol outpatient treatment	4,888.00
TOTAL	7,370.19

How? (2)

And we continue the analysis by considering cost savings in the form of avoided allowances and/or increased tax contributions as a consequence of moving into employment (if and when applicable):

- *If a beneficiary moves into employment, then there are avoided allowances (e.g. Jobseekers allowance, disability allowance etc.) brought about by the intervention*
- *If a beneficiary moves into employment, then she/he will increase receipts of the State through NI contributions and Income Tax contributions.*

Example:

Benefits	Value (£)
Avoided prescription costs	258.27
Avoided medical consultation costs	408.92
Avoided community psychiatric nurse costs	6,968.00
Avoided Jobseeker's Allowance	2,953.60
Avoided Disability Living Allowance	1,092.00
Increased tax contribution	572.90
Increased NI contribution	545.94
TOTAL	12,799.63

How? (3)

There are many sources one can use to estimate cost savings. However, a very important document is the PSSRU (Personal Social Services Research Unit) annual report of Kent University, *Unit Costs of Health and Social Care*.

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2.6 Cognitive behaviour therapy (CBT)

This table is based on costs estimated for a randomised controlled trial of interventions for adolescents with depression. The setting was two Child and Mental Health Services (CAMHS) teams in secondary care where CBT was delivered.¹ Barrett and Petkova summarise CBT costs over 21 studies in a short article at the beginning of this volume.

Costs and unit estimation	2012/2013 value	Notes
A. Wages/salary	£42,359 per year	Based on full-time equivalent basic salary of the July 2012-June 2013 NHS staff earnings estimates for a speciality doctor (midpoint), clinical psychologist (band 8) and mental health nurse (band 5). ² An average has been taken of these salaries.
B. Oncosts	£5,577 per year	Employer's national insurance is included plus 14 per cent of salary for employer's contribution to superannuation.
C. Qualifications		No information available.
D. Overheads		Taken from NHS (England) Summarised accounts. ³
Management, administrative and estates staff	£9,256 per year	Management and other non-care staff costs were 19.31 per cent of direct care salary costs and included administration and estates staff.
Non-staff	£20,119 per year	Non-staff costs were 41.97 per cent of direct care salary costs. They include costs to the provider for office, travel/transport and telephone, education and training, supplies and services (clinical and general), as well as utilities such as water, gas and electricity.
E. Ongoing training		Information not available for all care staff.
F. Capital overheads	£3,387 per year	Based on the new-build and land requirements of an NHS office and shared facilities, capital costs have been annuitised over 60 years at a discount rate of 3.5 per cent. ^{4,5} Based on the assumption that there is one office per team.
Working time	43.4 weeks per year, 37.5 hours per week	Unit costs are based on 1,626 hours per year: 225 working days minus sickness absence and training/study days as reported for all NHS staff groups. ⁶
Ratio of direct to indirect time on face-to-face contact	1:1	Fifty per cent of time is spent on face-to-face contact and 50 per cent on other activities.
Length of contact	55 minutes	Average duration of CBT session.
Unit costs available 2012/2013		
£50 per hour; £99 per hour face-to-face contact; £91 cost per CBT session.		

How? (4)

The biggest “problem” with this type of analyses is determining the counterfactual / business-as-usual / what would have happened anyway, *e.g. can we attribute the fact that the beneficiary found a job to the programme with certainty?*

Two ways to understand and capture business-as-usual:

- Assumptions-based approach
- Empirically-based approach

You’ll never get the “perfect” figure – so make your assumptions sensible and realistic. In other terms: don’t over-claim!

So what? (1)

Measuring the “wisdom of prevention”:

http://s.bsd.net/nefoundation/default/page/file/b8278023a5b025649f_5zm6i2btg.pdf

In other terms: are taxpayers better off under the current “standard” system or through more innovative and holistic interventions?

- Using figures to produce Cost-Benefit ratios from the point of view of the State
- Using figures in SROI analysis

Some case studies

You can check out:

- The Economic Benefits of Ecominds:

<http://www.mind.org.uk/media/338566/The-Economic-Benefits-of-Ecominds-report.pdf>

- Taking Stock: Assessing the Value of Preventative support:

<http://www.redcross.org.uk/About-us/~media/BritishRedCross/Documents/About%20us/Taking%20stock%20-%20assessing%20the%20value%20of%20preventative%20support.pdf>

THANK YOU!