Public Health England

Protecting and improving the nation's health

A guide to social return on investment for alcohol and drug treatment commissioners

Supporting substance misuse treatment commissioners in using and understanding Public Health England's alcohol and drugs SROI tools and evaluations

Introduction

Focusing on social return on investment (SROI) can help local authorities make informed decisions about how to spend their money effectively on services that improve lives, opportunities, health and wellbeing.

This briefing is intended to complement future Public Health England's (PHE) alcohol and drugs SROI tools and evaluations by:

- describing what SROI evaluations are and why they are useful and important
- explaining the necessary stages to carrying out an SROI evaluation
- referring commissioners to resources available to support them
- providing a glossary of common economic terms/concepts used in SROI

Much of this briefing is taken from the Cabinet Office guide to SROI[1] but it has been tailored to support those commissioning and working in the alcohol and drug treatment sector.

Why do an SROI evaluation?

The Public Services (Social Value Act) 2012 recommends that all public bodies, including local authorities, consider how their commissioning decisions benefit society.

The Health and Social Care Act 2012 changed how public health funding is allocated and how local commissioning priorities are determined. An important part of that process is demonstrating to decision-makers and local stakeholders that alcohol and drug interventions contribute to public health and social care outcomes and cut crime and improve community safety.

An SROI evaluation of substance misuse prevention, treatment and recovery interventions can help support these requirements, because the framework focuses on identifying the social and economic values that matter to stakeholders and seeks to reduce inequality and improve wellbeing.[2]
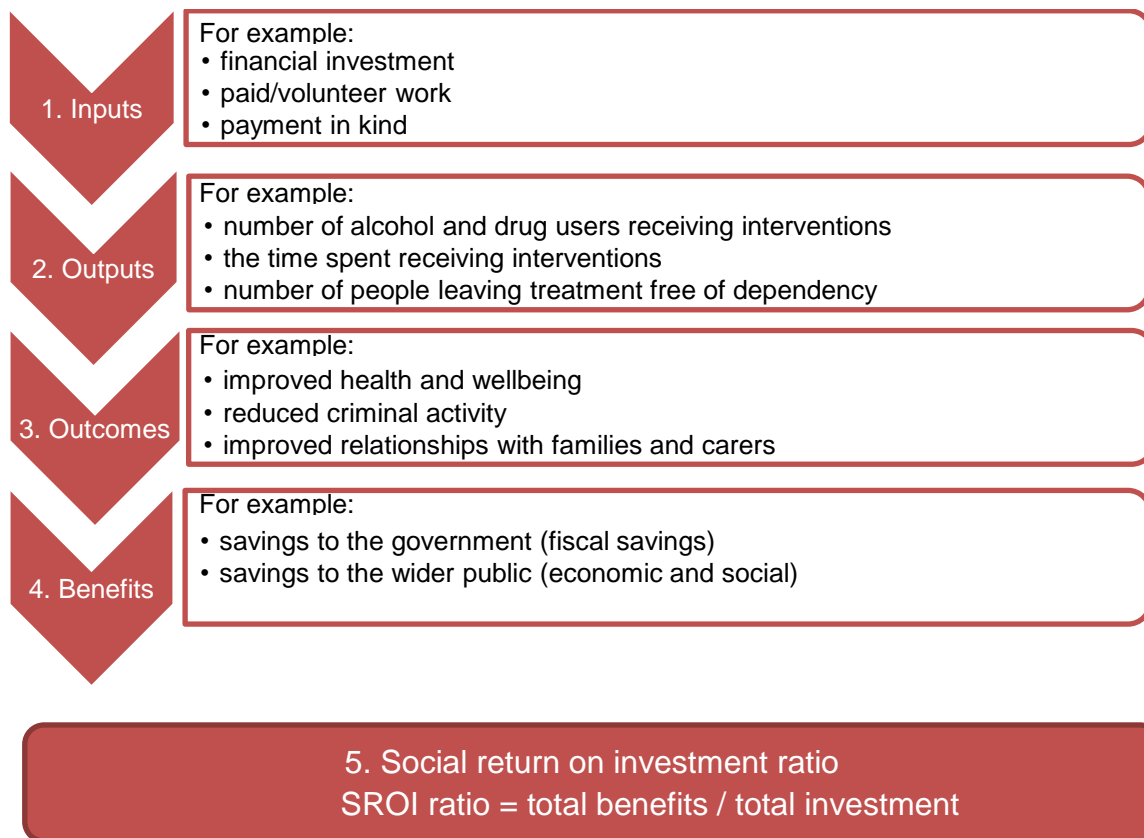
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[1] Cabinet office (2009). 'A guide to social return on investment'. Available from: www.bond.org.uk/data/files/Cabinet_office_A_guide_to_Social_Return_on_Investment.pdf

[2] The principles are: involve stakeholders, understand what changes, value the things that matter, only include what is material, do not over claim, be transparent and verify the result. For more information, see: www.minney.org/what-social-return-investment-sroi

The SROI approach

Carrying out an SROI analysis involves understanding the relationship between the inputs, outputs and outcomes of alcohol and drug interventions, as well as evidencing the outcomes and giving them a value.[3] There are five key stages:

1. Inputs

For example:
• financial investment
• paid/volunteer work
• payment in kind

2. Outputs

For example:
• number of alcohol and drug users receiving interventions
• the time spent receiving interventions
• number of people leaving treatment free of dependency

3. Outcomes

For example:
• improved health and wellbeing
• reduced criminal activity
• improved relationships with families and carers

4. Benefits

For example:
• savings to the government (fiscal savings)
• savings to the wider public (economic and social)

5. Social return on investment ratio
SROI ratio = total benefits / total investment

Each of the above stages will be discussed in turn.

Stage 1. Inputs

Economic analyses must capture all the costs related to a programme, intervention or project. Disaggregating global substance misuse spend into specific alcohol and drug interventions can be challenging. Following consultation with local commissioners, economists and national policy leads, PHE has produced a cost calculator and supplementary guidance to help substance misuse commissioners breakdown their spend for use in the alcohol and drugs value for money tools. If you do not have access to these products or need more information, contact HealthEconomics@phe.gov.uk

Further information on approaches to estimating unit costs locally is available in appendix B.

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[3] SROI is about value, rather than money, though applying the framework can lead to financial benefits. Money is simply the common unit used to compare the benefits of different interventions.

Stage 2. Outputs

Having established the costs (inputs), the next step is to identify what was delivered (outputs). For simplicity, the outputs the alcohol and drug interventions SROI tool will capture include the number of:

- people receiving specialist/ non-specialist interventions
- days spent receiving specialist/ non-specialist interventions
- people assumed to be free of dependency and no longer requiring treatment

Where possible, factors that could affect client outcomes are considered, for example:

- the type of interventions people receive, eg, specialist and non-specialist services
- alcohol and drug using profiles, eg, opiate and non-opiate users, alcohol only clients

Stage 3. Outcomes

Outcomes are the changes resulting from an activity. There are many changes associated with substance misuse interventions including:

- improved health (eg, reductions in cost to the NHS, improvements in mortality risk and quality of life)
- reduced crime
- improved outcomes for families (eg, child no longer on child protection register)
- improved accommodation status (eg, no longer homeless)
- increased number in employment, education, volunteer work, training

The above list is not exhaustive. What outcomes are analysed in an SROI evaluation depends on the data available and may rely on several assumptions derived from academic, government or other data sources.

For the alcohol and drugs value-for-money products, we analyse anonymously matched treatment and convictions datasets to estimate the change in offending for people when they are in treatment and to estimate the benefits for those that leave treatment free of dependency and no longer require treatment. We are currently unable to do a similar analysis estimating the improved outcomes for families because there is no national dataset available.

Stage 4. Benefits
Fiscal benefits

Fiscal benefits are outcomes that result in savings to central and local government. Information on cost savings is often available in the form of unit costs. Central government, the Public Service Transformation Network and New Economy have jointly developed a database of unit costs derived from government reports and academic studies that can be assigned to improved outcomes. The costs cover crime, education and skills, employment, fire, health, housing and social services: neweconomymanchester.com/stories/832-unit_cost_database. Unit costs applicable to alcohol and drug use and treatment will be available in all PHE alcohol and drugs SROI tools, and where relevant, adjusted for market

forces to account for differences between local authorities in labour costs and business rates (ie, staff and buildings).

Public value (economic and social) benefits

The importance of social impact should not be ignored in local and national decision-making, particularly as the Public Services (Social Value) Act 2012 requires commissioners to include economic and social benefits in their public service contracts considerations.

A quality-adjusted life year (QALY) is one such value. It is a health outcome measure, comprising life expectancy and quality of life. QALY measures play a key role in public health evaluations and resource allocation. The Department of Health (DH) uses QALY analysis to assess the costs and benefits of policy options, while the National Institute for Health and Care Excellence (NICE) use it to decide whether the NHS should provide new drugs. In PHE SROI work, we use QALYs to estimate how many extra years of reasonable quality an alcohol and/or drug user gains through treatment. This is then added to other benefits resulting from treatment, such as reduced crime, to determine the overall social benefits from alcohol and drug interventions. Mortality estimates are available from studies of alcohol and drug users both in and out of the treatment system. Quality of life (QoL) ratings come from self-reported questionnaires.[4,5]

While SROI is about value, rather than money, money is the common unit used to compare the benefits of different interventions, including intangible benefits. To assess the QALY benefits of treatment, it is therefore necessary to assign a financial value to QALYs. DH values one QALY at £60,000[6] and NICE value them at £20,000. A QALY of £60,000 refers to the value that society places on a life and should be used in investment appraisals when calculating the costs and benefits of specific projects/ programmes. NICE's value of a QALY at £20,000 refers to the maximum amount of money that the NHS can justify spending on a QALY due to the limited resources. As we value a QALY from a societal perspective, we use the £60,000 value.[7]

Stage 5. Calculating the SROI

In any economic analysis, it is important to establish how much of the changes in outcomes is the result of investment (inputs) and service delivery (outputs).

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[4] For example, the Drug Treatment Outcomes Research Study and the UK Alcohol Treatment Trial, both accessible online: www.dtors.org.uk/CostBenefitAnalysis.aspx and www.bmj.com/content/331/7516/544 (respectively).
[5] Participants assess their health across many dimensions ranging from their ability to complete everyday activities to severe depression and physical health problems. A year of life at perfect health is equal to one QALY while death is zero, though it is possible for some extreme conditions to be valued as worse than death. If an intervention lengthened someone's life by two years, but their QoL is 0.5, then the intervention provides one QALY (2 years x 0.5 QoL = 1 QALY).
[6] Research by the Department for Transport determined a Value to Prevent a Fatality (VPF) in the range £750,000 to £1,250,000 to reflect pain, grief and suffering, lost output and medical costs. The mid-point value, £1m, has formed the basis of the VPF, which accounting for inflation and other factors, is estimated at £1,648,390 (in 2007 prices). The same report estimated the average loss from deaths in road accidents to be 26.7 QALYs, taking into account the average gender and mix of road deaths. Dividing the estimated VPF (£1,648,390) by 26.7 QALYs gives an estimated willingness to pay (WTP) to prevent a fatality. Although, £1,648,390 / 26.7 is £61,363, the Department of Health rounds this down to £60,000 to avoid spurious accuracy. For more information please see: www.dft.gov.uk/webtag/documents/expert/pdf/unit3.4.1.pdf
[7] This approach has been agreed by economists from across government departments (Department of Health, Ministry of Justice and the Home Office). However, users are able to change the value of a QALY in our tools, to test the sensitivity of the assumption should they wish to do so.

Deadweight and attribution

Deadweight is a measure of the amount of outcomes that would have happened naturally if people did not receive any interventions. It is an important measure in economic evaluations, as it ensures as much as possible that evaluators do not overestimate the impact an intervention, project or programme has had. To calculate deadweight, comparison groups are needed. For an alcohol and drugs analysis, the ideal comparison group would be identifying substance misusers who have never received nor will receive either specialist or non-specialist interventions and observing what happens to them over time. This would obviously be unethical.

Since a perfect comparison is not possible, to account for deadweight, we model specific cohorts of people receiving interventions (eg, opiate users) and compare their outcomes during the intervention with what their outcomes were prior to the intervention using treatment data and evidence derived from longitudinal, mortality and other peer-reviewed studies. Using pre-engagement data allows us to estimate what the economic and social costs of people not receiving any specialist treatment or brief interventions are likely to be.[8]

Attribution is an assessment of how much of an outcome is due to the contribution of other organisations. For example, treatment alone is rarely enough to address families' complex needs: treatment providers, children and families services and other local support services all work together to provide a basis for recovery. Attribution (the proportion of the outcome that is attributable to an organisation) is calculated as a percentage. It will never be possible to get a completely accurate assessment of attribution, but it is important to note that an activity from a specific service may not be the only factor contributing to an observed change in a client.[9]

Time horizon, drop-off and discounting

In any SROI analysis it is important to determine the timeframe to be used. The nature of public health interventions means that most benefits are realised over a medium to long time horizon. The Treasury recommends a five-year assessment of costs and benefits to reflect the need to identify short-term savings of a project to the public sector. However, the time horizon can be extended for substance misuse interventions, as there is evidence to suggest that benefits continue for approximately ten years as a result of former drug users sustaining their recovery.[10]

Drop-off refers to the deterioration of an outcome over time, for example, while people's health may improve as a result of becoming abstinent, their life expectancy and quality of life will naturally reduce over time as they get older. Such considerations are taken into account when producing life tables for QALY models.

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[8] The absence of a direct comparison control group means it is not possible to say, with a high degree of confidence, that any observed changes in outcomes are solely the result of the substance misuse interventions. However, evidence shows that as new people engage with treatment and reduce or stop their substance misuse, they experience positive benefits, for which treatment is likely to play a critical role.

[9] If you are conducting your own SROI analysis, be careful not to attribute outcomes to organisations that are being paid out of the investment fund, as the investment already represents their contribution.

[10] The National treatment Agency for Substance Misuse (2012). 'Estimating the crime reduction benefits of drug treatment and recovery'. Available from: www.nta.nhs.uk/uploads/vfm2012.pdf

Discounting is the process by which future costs and benefits are recalculated to present-day values. It is a technique used to compare costs and benefits occurring in different time periods based on the economic principle that society prefers to receive benefits sooner and defer costs to future generations ('social time preference'). All future costs and benefits are discounted in standard economic and SROI evaluations. The standard real discount rate, recommended by the Treasury, is 3.5%. For intangible costs, such as QALYs, we use 1.5% rate as recommended by DH and the Treasury.[11]

Sensitivity analysis and optimism bias

It is recommended that a sensitivity analysis is carried out to understand whether potential errors in the data and assumptions have a significant effect on the estimated benefits. Much of the data and assumptions provided in the PHE alcohol and drugs SROI tools can be adjusted, where appropriate, so that users can be more pessimistic or optimistic about the impact locally commissioned services have on SROI. However changes should always be made with caution and drawn from research and evidence.

It is common in sensitivity analysis to check changes to estimates of deadweight, attribution and the size of and values assigned to outcomes. Users of SROI models should recognise there is potential for optimism bias as part of the sensitivity analysis (see appendix C for more information).

SROI ratio

Once the relationship between inputs, outputs and outcomes is comprehensively measured and analysed as described above, it is then possible to calculate the SROI ratio. The higher the ratio, the better the social return on investment. Put simply:

SROI ratio = total benefits/total investment

Resources

PHE alcohol and drugs value for money products are designed to support commissioners in making the case to their local stakeholders that investment in substance misuse interventions has social and financial value not just for the individuals receiving care, but also their families and the wider community. The tools can only go so far, however, and we recommend that the findings are used alongside PHE alcohol and drugs joint strategic needs assessments (JSNA)[12] products to help commissioners make recommendations to directors of public health and other local partners. From 2015/16, alcohol and drugs SROI tools will be released alongside the suite of JSNA documents in autumn.

There are many additional resources on making the case for investment in substance misuse interventions, economic analysis and SROI modelling available to alcohol and drugs commissioners:

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[11] See Department of Health (2010). 'Quantifying health impacts of government policies: a how-to guide to quantifying the health impacts of government policies'. Available from: www.gov.uk/government/uploads/system/uploads/attachment_data/file/216003/dh_120108.pdf

[12] Available here: www.nta.nhs.uk/healthcare-JSNA.aspx

- Alcohol, drugs and tobacco joint strategic needs assessment support pack, which will include links to future PHE alcohol and drugs SROI products: www.nta.nhs.uk/healthcare-JSNA.aspx
- The Local Government Association's guidance on making the case for investment in public health interventions: www.local.gov.uk/publications/-/journal_content/56/10180/6530180/PUBLICATION
- DrugScope's practical guide to promoting substance misuse treatment and recovery services: www.drugscope.org.uk/Resources/Drugscope/Documents/PDF/Policy/MakingTheCase.pdf
- Joint work by central government, the Public Service Transformation Network and New Economy on Cost Benefit Analysis and the national unit cost database: neweconomymanchester.com/stories/1966
- The Cabinet Office's guidance document on SROI: www.bond.org.uk/data/files/Cabinet_office_A_guide_to_Social_Return_on_Investment.pdf
- The HM Treasury's Green Book: www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf
- The National Institute for Health and Care Excellence (NICE): www.nice.org.uk/

Appendix A. Glossary of common economic terms

Attribution	An assessment of how much of an outcome was caused by the contribution of other services/organisations.
Benchmarking	A method of gauging the performance of one organisation by comparing to the performance of another, typically of a similar size, demographic profile and deprivation level. Benchmarking information enables local authorities to see how their outcomes compare with other similar areas and the national average, helping them to identify where changes could be made to improve services and SROI.
Benefit-cost ratio	This is often presented either as the benefits for every £1 spent or as a ratio. For example, according to the National Audit Office, for every £1 spent on drug treatment there are estimated to be £2.50 of benefits, or simply 2.5:1. The higher the BCR, the better the return on investment.
Cash price	A 'cash' (sometimes known as 'nominal') value refers to the price of good in a given year. So, for example, because of changes to inflation, a loaf of bread cost 35p in 1982 and £1.80 in 2012.
Cost-benefit analysis	Identifying and quantifying in monetary terms as many of the costs and benefits of an intervention as feasible, including items for which the market does not provide a satisfactory measure of economic value (eg, QALYs).
Cost-effectiveness analysis	Comparing the costs of alternative ways of producing the same or similar outputs, eg, successful completions from treatment and non re-presentations.
Cost savings	The savings to public services, businesses or individuals because of people being in treatment and therefore placing fewer demands on the criminal justice system, NHS, etc. It is important to be aware that although cost savings reduce financial burden, they may not be 'cash-releasing'. A cash-releasing saving is one where another activity could replace that which has been freed up by drug treatment. Also, even if cost savings are cash releasing they might not be released at a local level. For example, if a prison closed due to a reduction in prison numbers, this would be a cash-releasing saving for the Ministry of Justice and not for the local authority.
Counterfactual	The assumed outcome if drug treatment was not available, eg, the length of a drug-taking career in the absence of drug treatment.

Deadweight	A measure of the amount of outcome that would have happened even if the activity had not taken place. To account for deadweight in the SROI of alcohol and drug treatment, for example, we model outcomes for people in treatment and compare what their outcomes would have been without treatment (the counterfactual) using NDTMS data and evidence derived from longitudinal, mortality and other peer-reviewed studies.
Direct costs	Costs that can be attributed to a specific activity, function or output, eg, those that relate directly to the delivery of treatment for alcohol and drug users, such as nursing staff cost.
Discounting	The process by which future financial costs and benefits are recalculated to present day values. Discounting is a technique used to compare costs and benefits that occur in different periods based on the economic principle that society prefers to receive benefits sooner and defer costs to future generations ('social time preference'): eg, given the choice of receiving £100 today or a year from now, the majority of people will pick the former.
Discount rate	All future costs and benefits are discounted in economic evaluations. The standard real discount rate, recommended by the Treasury, is 3.5%. For QALYs, we use 1.5% rate as recommended by DH.
Displacement	An assessment of how much of an outcome has displaced other outcomes, eg, a programme to create employment for former drug users counts towards the contribution of economic output, decreased benefit payments and increased taxes in its analysis. However, from the Exchequer's perspective these benefits would have a high displacement rate as these are most likely jobs that are now denied to someone else that could have made similar contributions.
Drop-off	The deterioration of an outcome over time, eg, while people's health may improve as a result of becoming abstinent, their life expectancy and quality of life will naturally reduce over time as they get older. Such considerations are taken into account when producing life tables for QALY models.
Duration	See 'Time horizon'.
Economic benefits	All fiscal benefits except payments such as job seekers' allowance and tax credits that just move money from one place to another ('transfer payments'), and net growth in the local economy.
Effectiveness	The extent to which objectives are achieved and the relationship between intended and actual impacts of an intervention – spending wisely.

Efficiency	The relationship between outputs and the resources used to produce them – spending well.
Fiscal benefits	Savings to the public sector (central and local government), resulting in reduced overall government expenditure that are due to the treatment intervention (eg, reduced government spend when payments for job seekers' allowance are reduced and reduced use of the NHS resulting from improved health).
GDP deflator	A measure of the general price level of all new, domestically produced, goods and services in an economy. Among other things, the deflator can be used to convert previous costs of goods and services to current prices (inflating).
Impact	The outcome of alcohol and drug interventions, taking into account what would have happened anyway (deadweight), the contribution of others (attribution) and the length of time the outcomes last (duration).
Indirect costs	Costs shared across several activities or functions (eg heating and lighting).
Inputs	The contributions made that are necessary for the activity to happen.
Market forces factor (MFF)	The MFF estimates the unavoidable cost differences across the country of providing healthcare.
Monetise	To assign a financial value to something.
Net present value	A measure of the additional value created by implementing an intervention. Determining the value of an intervention, particularly one which has long-term benefits can be challenging, because people prefer to receive benefits sooner and defer costs to future generations (see 'Discounting'). The present value (PV) of costs and benefits can be calculated to take this into account by applying a discount rate to estimate the current value of future costs and benefits. NPV is the difference between the discounted costs and discounted benefits: NPV = PV of benefits – PV of costs Interventions with higher NPVs should normally be considered first for commissioning. However, there may be funding constraints that could limit this approach.
Net social return ratio	Net present value of the impact divided by total investment.

Optimism bias	The tendency for appraisers to be over-optimistic about key project parameters, including capital costs, operating costs, works duration and benefits delivery.
Outcome	The changes resulting from an activity. The main types of change from the perspective of stakeholders are unintended (unexpected) and intended (expected), positive and negative change.
Outputs	A way of describing the activity in relation to each stakeholder's inputs in quantitative terms.
Overhead costs	Costs associated with the day-to-day operations of a treatment provider (eg, HR and finance). Such costs are not driven by the level of client activity but can be allocated on an activity basis.
Payment in kind	Exchange of goods or services for other goods or services (no money involved).
Public value benefits	Economic and wider social benefits, including improvements to health and community safety.
Present value	The future value expressed in present terms by means of discounting.
Proxy	An approximation of value where an exact measure is impossible to obtain.
QALYs	Quality adjusted life years (QALYs): the estimated additional quality and quantity of life due to an intervention. QALYs are calculated by determining the difference between mortality rates and quality of life for alcohol and drug users in different scenarios, eg, not in treatment, in treatment, in recovery.
Real price	A 'real' value has adjusted cash values to remove the effects of price changes over time, relative to a specified base year. Converting into real terms makes cost-benefit comparisons fairer, as they then reflect real changes in outcomes rather than changes in inflation. So for instance, a loaf of bread that cost £1.80 in 2012 was also worth £1.80 in 1982 and in 2022 (in 2011-12 prices), even though it may have actually cost 35p in 1982 and £3 in 2022.
Return on investment (ROI)	A general term for comparing the costs and financial benefits generated by an investment.
Scope	The activities, timescale, boundaries and type of analysis included in the SROI evaluation.

Sensitivity analysis

Process to assess the sensitivity of an SROI model to changes in different variables. A range of possible values of uncertain costs, benefits and assumptions should be tested to see whether the project's outcomes are sensitive to these changes in values, eg, testing the impact changes in discount rates have on the net present value of a project.

Social benefits

Gains to society such as improvements to health, educational attainment, or reduced likelihood of being a victim of crime resulting from investment in an intervention or service. It is not always possible to monetise social benefits.

Social return on investment (SROI)

A general term for comparing the costs and public value benefits generated by an investment.

Social time preference

The economic principle that society prefers to receive benefits sooner and defer costs to future generations ('social time preference'); for example, given the choice of receiving £100 today or a year from now, the majority of people will pick the former.

Stakeholders

People, organisations or entities that invest in, or experience change because of, the activity that is being analysed.

Time horizon (also 'duration')

How long (usually in years) an outcome lasts after the intervention, such as length of time a participant remains in a new job. The treasury recommends a five-year assessment of costs and benefits to reflect the need to identify short-term savings of a project to the public sector. However, this time horizon can be extended. For drug treatment interventions we extend the timeframe to approximately ten years for those in recovery.

Transfer payment

Cash payment made by the government for which no good or service is expected in return. It is used as a way to redistribute income by giving out money under social welfare programmes such as job seekers' allowance, tax credits, pensions, etc.

Value for money

Widely used to describe the optimal balance between outputs and inputs. Good value for money gives **efficiency** (the relationship between outcomes and the resources used to produce them – spending well), **economy** (the purchase of resources at lowest cost – spending less) and **effectiveness** (the extent to which objectives are achieved and the relationship between intended and actual impacts of an intervention – spending wisely).

Appendix B. Estimating unit costs

A unit cost captures the total cost of providing one unit of a service, such as residential rehabilitation. Unit costs should:

- include all service provision costs – direct costs, indirect costs (eg, heating and lighting, time and travel costs) and overheads (eg, HR and finance). These costs should include goods and services which are free: payment in kind, free use of community centres/ venues[13] and volunteer staff time[14]
- include 'intention to treat' costs – such as triage assessment costs for people who choose not to engage with a treatment provider, drop out of treatment, or are referred elsewhere
- add up to the total cost of service provision

There are two approaches to estimating the unit costs of alcohol and drug interventions: top-down and bottom-up.

Top-down unit costs estimates

The top-down approach to estimating unit costs is relatively straightforward: divide total expenditure by total units of activity. For example, the top-down calculation for residential rehabilitation would be:

> Total spend on residential services/
> (number of people * number of days in residential services)

While this approach is simple, it cannot be used to identify what actually drives costs, other than number of people and time spent in treatment. This could lead to potential cost underestimation or overestimation. It also cannot reliably forecast cost variations resulting from changes in the way that people engage with services or improved efficiency.

Bottom-up unit costs estimates

The bottom-up approach requires greater detail than the top-down method: all resources used to provide a service, such as staff, prescribed drugs and premises, need to be identified and a value assigned to each. To calculate the unit cost, the values are then summed and multiplied by the unit of activity. Below is a bottom-up approach informed by the NHS costing manual and Monitor's costing guidance'.[15,16]

1. **Identify the key activities involved in delivering an intervention:** eg, counselling, group sessions, substitute prescribing, referrals to other agencies,

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[13] The convention is to establish the time spent using these services and multiply by the hourly rental rate.

[14] Valuing volunteer time can be tricky. The convention is to assign an hourly value equal to the average hourly rate for the type of work conducted. Assigning a value should occur irrespective of whether the volunteer receives any payment: it simply gives the input value that can be added up with other inputs. Volunteer inputs can also include an allocation of the costs that would be incurred if the person were employed, for example desk space, electricity and pension contributions.

[15] Department of Health (2012). NHS Costing Manual. Available from: www.gov.uk/government/uploads/system/uploads/attachment_data/file/216427/dh_132398.pdf

[16] Monitor (2014). Approved Costing Guidance. Updated February 2014. Available from: www.gov.uk/government/uploads/system/uploads/attachment_data/file/283450/ApprovedCostingGuidanceFeb2014.pdf

staff and volunteer training, administration, staff travel and subsistence. The duration of the activities should be noted

2. **Identify the relevant costs and assign costs to activities:** the minimum standard categorisation for costs are direct (eg, staff), indirect (eg, heating) and overhead costs (eg, finance and HR)[17]

3. **Calculate the costs per person per day:** sum up the costs for each activity and divide by the number of people accessing each activity multiplied by the duration of the activity (total days = number of people * number of days)

$$(\pounds Activity_1 + \pounds Activity_2 + \pounds Activity_{n...}) / (Total\ days_1 + Total\ days_2 + Total\ days_{n...})$$

Breaking down costs in this way establishes transparent and more robust estimates and allows commissioners to explore drivers of variation, such as whether some service users account for a disproportionate share of the costs. This method is more reliable for forecasting how costs can change as a result of a reduction in service usage or demand.

Tips for breaking down expenditure

1. Use the alcohol and drug prevention, treatment and recovery cost calculator, available from centre teams or via HealthEconomics@phe.gov.uk
2. Look at contract specifications: this should help determine how much is spent on different interventions
3. Speak to providers: they should have a good understanding of their spend and activity against each intervention
4. Refer to established guidelines such as the NHS costing manual
5. Sense check your estimates with published unit costs such as the 'Unit costs of health and social care 2013'[18]
6. Speak to your local alcohol and drugs centre team: they are there to advise and support if you need them

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[17] For definitions, please refer to the glossary section.
[18] Curtis, L. (2013). Unit Costs of Health and Social Care 2013. Kent: Personal Social Services Research Unit, University of Kent. Available from: www.pssru.ac.uk/project-pages/unit-costs/2013/#sections

Appendix C. Optimism bias confidence grades for costs and outcomes

The Public Service Transformation Network, government departments and New Economy have produced the following optimism bias confidence grades for costs (table 1) and outcomes (table 2).

Table 1. Confidence grade for costs data

Confidence grade	Colour coding	Cost data source	Age of data	Known data error	Optimism bias correction
1		Independently audited cost data	Current data (< 1 year old)	+ -2%	+ 0%
2		Formal service delivery contract costs	1-2 years old	+ -5%	+ 5%
3		Practitioner monitored costs	2-3 years old	+ -10%	+ 10%
4		Costs developed from ready reckoners	3-4 years old	+ -15%	+ 15%
5			4-5 years old	+ -20%	+ 25%
6		Uncorroborated expert judgement	> 5 years old	+ -25%	+ 40%

Source: Supporting public service transformation: cost benefit analysis guidance for local partnerships[19]

Table 2. Confidence grade for outcomes data

Confidence grade	Colour coding	Population/ cohort data	Evidence base (engagement/ impact)	Age of data/ analysis	Known data error	Optimism bias correction
1		Figures taken from agency data systems	UK randomised control trial (RCT)	Current data (< 1 year old)	+ -2%	+ 0%
2		Figures derived from local statistics	International RCT	1-2 years old	+ -5%	+ 5%
3		Figures based on national analysis in similar areas	Independent monitoring outcomes with a robust evaluation plan	2-3 years old	+ -10%	+ 10%
4		Figures based on generic national analysis	Practitioner monitoring outcomes with a robust evaluation plan	3-4 years old	+ -15%	+ 15%
5		Figures based on international analysis	Secondary evidence from a similar type of intervention	4-5 years old	+ -20%	+ 25%
6		Uncorroborated expert judgement	Uncorroborated expert judgement	> 5 years old	+ -25%	+ 40%

Source: Ibid.

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[19] Available from:
www.gov.uk/government/uploads/system/uploads/attachment_data/file/300214/cost_benefit_analysis_guidance_for_local_partnerships.pdf