

Intermediate Outcomes Measurement Instrument (IOMI) toolkit

Guidance notes

Mark Liddle, in collaboration with Emma Disley, Mike Maguire, Rosie Meek, and Judy Renshaw

Ministry of Justice Analytical Series 2019

Preventing victims by changing lives

Her Majesty's Prison and Probation Service is committed to evidence-based practice informed by high-quality social research and statistical analysis. We aim to contribute to the informed debate on effective practice with the people in our care in prisons, probation and youth custody.

Disclaimer

The views expressed are those of the authors and are not necessarily shared by the Ministry of Justice (nor do they represent government policy).

First published 2019



© Crown copyright 2019

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at National.Research@noms.gsi.gov.uk

This publication is available for download at https://www.gov.uk/government/publications

Contents

List of tables

List of figures

1.	Intro	duction	1
	1.1	How to use these guidance notes	2
	1.2	The toolkit	2
	1.3	Development of the IOMI	3
2.	The	Intermediate Outcomes Measurement Instrument (IOMI)	4
	2.1	The dimensions	5
	2.2	Questions about relationships with staff	19
	2.3	Providing space for open-ended comments	20
	2.4	Instructions for administering the IOMI	20
	2.5	Timing of administration	22
	2.6	Use with different sub-groups	23
3.	Ente	ring, scoring, and analysing data generated by the IOMI	24
	3.1	Data entry	24
	3.2	Scoring	25
	3.3	Using the data entry tool	27
4.	Relia	bility and validity of the IOMI	34
	4.1	Reliability	34
	4.2	Validity	35
	4.3	Measuring change	36
5.	Using the IOMI as part of a wider evaluation		
	5.1	Linking change data to other data	37
	5.2	What would have happened if your project hadn't existed?	40
	5.3	How does your project 'work'? Using theories of change to help	
	unde	rstand the IOMI data	41
6.	Exar	nples of alternative front sheets for the IOMI	44

7.	Furti	her resources	48
	7.1	Evaluation guides	48
	7.2	Further information about theories of change	48
8.	The	costing tool	49
	8.1	Running costs	49
	8.2	Service users	53
	8.3	Summary sheet	55
	8.4	Setup costs	57
	8.5	Costing tool – worked example	58

List of tables

Table 2.1: Summary of the dimensions measured by IOMI	16
Table 3.1: Calculating dimension scores	26
Table 4.1: Reliability coefficients (α) for IOMI questionnaires	35
Table 8.1: Summary sheet	59
Table 8.2: Running costs – worked example	60
Table 8.3: Service users – worked example	62
Table 8.4: Set up costs – worked example	63

List of figures

29
31
32
40
43

1. Introduction

The Intermediate Outcomes Measurement Instrument (IOMI) toolkit was developed by a research team led by RAND Europe, in partnership with ARCS (UK) and the University of South Wales. The team was commissioned by the Her Majesty's Prison and Probation Service (HMPPS, formerly the National Offender Management Service) to deliver research focusing on ways of measuring the impact of programmes that work with offenders.

The key purpose of the work was to develop and test a robustly-designed but user-friendly instrument for the measurement of intermediate outcomes – these are outcomes that are directly or indirectly associated with reductions in reoffending over the longer term, and that in the shorter term indicate positive changes along an offender's pathway towards an offence-free future.

It was felt that the development of an instrument of this kind was both important and timely given recent developments in the fields of resettlement and rehabilitation, and in particular, some of the fundamental changes that are taking place in relation to services for offenders and how these are commissioned and funded. Such changes include an increasing focus on assessing effectiveness and value for money across different tiers of provision. A tool such as IOMI can play a key role not only in providing evidence to underpin assessments of effectiveness, but in helping to build an evidence base nationally. We provide further details about possible uses of the IOMI toolkit in our main report.

The research was designed to develop a toolkit for outcome measurement which could be adopted by organisations delivering mentoring and arts interventions to adult offenders. The final version is likely to have wider applicability to other forms of intervention and perhaps to other groups.

The team was supported in this work by a small advisory panel, made up of independent experts with considerable expertise in research focusing on offenders, resettlement and rehabilitation, and on desistance theory and the measurement of key outcomes. In addition, the research team maintained strong links with a wide range of provider organisations throughout the project, to ensure that their experience and views fully informed our design, testing and analysis work (further details concerning some of this consultation work are provided in the main report, but are also summarised below, in Section 1.3).

1.1 How to use these guidance notes

The guidance notes are designed to be a resource for providers who are using the IOMI or considering using it. Not all sections will apply to every reader. Some providers will not be using the costing tool for example, in which case they would not need to refer to Section 8. Similarly, providers that are using the data entry tool would not need to know how to undertake response scoring as described in Section 3.2, as the data entry tool does this automatically, although they may wish to know broadly how the tool does this.

There are some sections covering the development and key features of the IOMI that are of greater importance for readers to cover however, such as:

- Most of Section 2, which covers the main features of the IOMI, and includes important details about how it should be administered in practice.
- Section 4, which includes comment on the current stage of the IOMI's development, and highlights key features of reliability and validity.
- Section 5, which provides comments about how the IOMI might be linked to wider evaluation work that a provider might be interested in undertaking.

Some references to further sources of advice or guidance are also included at the end of these notes. Interested readers can follow these up to learn more about areas such as theories of change.

1.2 The toolkit

The toolkit has several components, as listed below:

- **The IOMI questionnaire.** A copy of the questionnaire is included in Appendix A of the Technical Appendices, published alongside this guidance; the questionnaire is also available as a standalone document for download on gov.uk.
- A data entry tool. This allows the user to enter responses onto an on-screen version of the instrument. The tool converts each response, such as 'strongly agree' or 'disagree', into a raw score, and groups and sums these by dimension (such as hope, or resilience). It then calculates a score for each dimension, which allows comparisons to be made across dimensions and reports to be generated on individual clients or on particular dimensions. To get access to the data entry tool contact research@arcs-ltd.com for a link and login details.
- A costing tool. This allows projects to gather information which can underpin assessments of the costs and benefits, or the cost-effectiveness, of their work. The costing tool is published alongside this report on gov.uk.

• **These guidance notes.** These include instructions for use of the toolkit, handling and analysis of data generated by the IOMI, comments about the background and development of the toolkit, and use of the instrument as part of a wider evaluation.

1.3 Development of the IOMI

Development of the instrument has involved extensive collaboration and co-operation with a range of provider organisations delivering mentoring and arts programmes for offenders, and with projects involved more generally involved in resettlement or other work with offenders.

The research involved several key strands:

- A systematic Rapid Evidence Assessment (REA) of empirical research to identify evidence to guide the construction of potentially valid intermediate outcomes in the areas of mentoring, and the use of arts in offender programmes.¹
- A mapping exercise to identify, and assess the robustness of, existing measures of intermediate outcomes and any existing tools for evaluating value for money.
- A detailed consultation exercise focusing on provider organisations involved in work with offenders; the consultation work involved a national online survey, an extensive interview exercise, and a series of focus groups.
- A series of team workshops to design draft instruments for measuring intermediate outcomes (emerging from the above process).
- Further consultation with providers about these drafts.
- Refinement and testing of draft instruments in the field, when the instrument was completed by a large sample of individuals in prison, and then with samples of participants in community-based services.²
- A test-retest exercise in an adult male prison.

Further details about all strands of the research can be found in the main report.

¹ For the review of arts projects, see: Burrowes, N., Disley, E., Liddle, M., Maguire, M., Rubin, J., Taylor, J., and Wright, S. (2013a). *Intermediate outcomes of arts projects: a rapid evidence assessment*. London: NOMS. <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/254450/Intermediate-outcomesof-arts-projects.pdf</u>. For the review of mentoring see: Taylor, L. Burrowes, N., Disley, E., Liddle, M., Maguire, M., Rubin, J., and Burrowes, N., Disley, E., Liddle, M., Maguire, M., Burrowes, N., Disley, E., Liddle, M., Maguire, M., Burrowes, M., Burrowes, M., Disley, E., Liddle, M., Maguire, M., Burrowes, M., Burrowes, M., Disley, E., Liddle, M., Maguire, M., Burrowes, M., Burrowes, M., Disley, E., Liddle, M., Maguire, M., Burrowes, M.

For the review of mentoring, see: Taylor, J., Burrowes, N., Disley, E., Liddle, M., Maguire, M., Rubin, J., and Wright, S. (2013). *Intermediate outcomes of mentoring interventions: a rapid evidence assessment*. London: NOMS. <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/254452/Intermediate-outcomes-of-mentoring-interventions.pdf</u>

² The community-based phase of piloting work involved 'before and after' administrations of the instrument by a sample of provider organisations involved in mentoring or arts work with offenders. The purpose was not only to explore the instrument's capacity to measure change, but also to examine implementation issues, and to assess (and document) the ways in which the instrument can be linked (or add value) to existing monitoring and evaluation work that provider organisations are involved in.

2. The Intermediate Outcomes Measurement Instrument (IOMI)

Throughout the design and consultation work, great care was taken by the research team to ensure that the final instrument:

- Would have strong anchorage in the research and practice literature (drawing on the best available evidence and on existing approaches to measurement of key dimensions).
- Would be defensible in terms of existing theoretical work focusing on desistance and other change processes associated with interventions for offenders and related groups.
- Would have broad accessibility (and so could be used by programme participants having widely differing skills and levels of understanding).
- Would be useable and relevant to as wide a range of practice areas as possible and be anchored in provider experience of evaluation and of outcome measurement specifically.
- Would be relatively quick and easy to administer (so that its use would be compatible with a wide range of practice contexts).
- Could be used for research purposes, for client management and for facilitating engagement.

The IOMI has been designed to assess an individual's change over time in relation to a number of key psychological constructs or 'dimensions', and also in relation to the perceived significance of specific 'practical problems' in the individual's life.

The instrument includes questions that are designed to measure change in relation to seven dimensions using 21 questions (or items), as follows:

- resilience (2 items)
- wellbeing (3 items)
- agency / self-efficacy (3 items)
- impulsivity / problem-solving (3 items)
- motivation to change (3 items)
- hope (3 items)
- interpersonal trust (4 items).

The 'practical problems' questions (8 items) cover the following areas: money, employment/prospects, health and fitness, housing, drugs, alcohol, relationships, and gambling.

There are five optional questions about relationships with staff, which could be used once an intervention is underway.

The instrument is designed for self-completion by project or programme participants, although data generated through use of the IOMI should usually be linked to information from other sources, and we suggest some ways of doing this in following sections.

2.1 The dimensions

As noted in Section 1, the key purpose of the research was to design ways of measuring changes facilitated by interventions with offenders, but focusing on changes that are 'intermediate' between these interventions and longer term outcomes such as reductions in reoffending. Some focus on longer term outcomes of that kind is obviously still important, but it was felt that ways of measuring changes that are themselves key signposts along longer-term pathways would both allow providers to capture greater detail about those pathways. This would therefore do more justice to some of the results of their work which might otherwise remain invisible, and allow researchers and evaluators to gain more understanding of change processes which are highly complex.

While broad longer-term outcomes such as reductions in reoffending or increased employment remain a key focus of many programmes, it was felt that a more nuanced measure of intermediate outcomes could help the field in the above ways.

The dimensions referred to in the previous section were selected after very careful review of the evidence, assessment of feedback from a wide range of providers who work with offenders, and detailed analysis of pilot data.

Further details are provided below for each of the dimensions in the IOMI. Each section includes comments on:

- The definition of the dimension.
- What scores relating to that dimension might mean.
- The evidence and justifications for singling out the dimension for measurement.
- Specific sources reviewed during the process of choosing questions for each dimension.

Resilience

Resilience is a complex skillset or capacity which allows an individual to recover from adversity, and to move on in a positive manner to reconstruct or begin again. It is related to individual coping skills (and efficacy), but also to wider relationships and support networks. Those with low resilience are more likely to give up in the face of setbacks, and they take longer to recover from negative experiences – they are therefore probably more likely to disengage from programmes, and at the extreme end, there is a link between low resilience and depression.

There is also some evidence from the literature on trauma among offenders, that low levels of resilience are sometimes related to the impact of disproportionate levels of childhood and adolescent trauma in offenders' backgrounds. This impact creates a propensity for adverse experiences in the present to resonate with previous adverse events. In short, individuals with high levels of background trauma can develop in such a way that they have fewer psychological resources to draw from in order to recover from adverse events. Measureable improvements in resilience for some vulnerable groups are therefore of special importance, especially where a trend toward increased resilience is sustained over time.

Improvements in resilience are about increased capacity to move on and continue to try, even in the face of setbacks and adversity.

This area of change is also important because it is well documented that offenders tend to have a multiplicity of needs, and some setbacks in addressing these are inevitable, as is well known to most providers, and as commented on by them during our consultation work. Our rapid evidence reviews did not uncover any studies which looked specifically at impact on resilience, although in relation to mentoring projects there is tentative evidence from

studies scoring level 3 or lower³ which reported associations between mentoring and ability to cope with perceived life problems.

Resilience was mentioned directly as being of key importance by several respondents both in the interview exercise and the surveys, but many other comments made by providers – while not using the term resilience – were in essence about this notion. For example, one representative from a mentoring project highlighted the importance of "building recovery capital", and several described the importance of building a participant's confidence so that they would have the strength to continue to work toward changing their lives. Comments of this kind also highlight the close connections between resilience and self-confidence.

During the process of designing questions to cover this dimension, the team reviewed a range of existing measures/scales including the *Connor-Davidson Resilience Scale*, the *ER* 89 scale, the Resiliency Attitudes Scale and Adolescent Resiliency Attitudes Scale, the Resilience Scale (RS-14), the Changes in Outlook Questionnaire, the Brief Resilience Scale, and the Resiliency Attitudes and Skills Profile.

Wellbeing

This is a somewhat broader dimension than the others, which is usually defined in terms of general or overall mental/emotional/psychological health or balance. Our own construct involves a closer focus on positive self-regard, and confidence.

Those with poor scores for wellbeing would have low levels of positive self-regard or selfesteem, and low levels of confidence.

Improved scores would indicate improvements in self-perception and estimations of selfworth, and increased levels of confidence.

Wellbeing as an outcome was not focused on specifically in any of the studies that we assessed as part of the REAs, although confidence and self-confidence were singled out repeatedly in feedback gathered during our consultation work as being important intermediate outcomes of the work that providers deliver. The majority of respondents in our

³ The notion of a "level 3" study is taken from the Scientific Methods Scale, or SMS – which was developed initially in the United States in order to assess methodological standards in evaluation research. It involves five levels of methodological rigour. The scale begins with "Level 1" (being the lowest standard, applicable to studies that focus only on correlations between programmes and particular measures, e.g. offending, at one point in time) and ends with "Level 5" (the highest standard, reserved for studies that involve random assignment of programme and control conditions to units).

interview and survey work made reference to the importance of these or other factors related to wellbeing. The following reference is illustrative, made by a respondent from a mentoring provider organisation who commented on the way in which their work succeeded in generating "a personal sense of self-worth and self-respect" among participants.

During the design process, the team canvassed a range of existing tools that purport to measure relevant aspects of wellbeing, including the *Warwick-Edinburgh Mental Wellbeing Scale, WHO-Five Wellbeing Index Satisfaction with Life Scale R, Ryff's (1995) Scales of Psychological Wellbeing*, the Brief Life Satisfaction Scale, and the Psychological Distress, *Perceived Adaptability, Perceived Safety Tool.*

Agency/self-efficacy

This dimension is about whether an individual is able to make autonomous and independent decisions about their own life and to 'make things happen' in the outside world as a result of those decisions. It is also closely related to what is referred to in the wider literature as internal locus of control, or the perception by an individual that he or she drives events in their own lives.

Low levels of agency/self-efficacy reflect a kind of passivity in relation to decision-making about one's own life, and to a perception that 'things happen to me', rather than 'I make things happen'. It is also linked to a focus on the significance of luck or fate. Increases in agency/self-efficacy involve increases in the individual's confidence in their own ability to make decisions about their own future, and to implement plans that they make to bring about change.

Our rapid evidence review did uncover tentative evidence that arts programmes with offenders may be able to produce improvements in locus of control and self-efficacy. Locus of control was not mentioned directly within studies that we reviewed concerning mentoring interventions, although as noted in Section 2.1, there was some tentative evidence from studies scoring level 3 or lower which reported associations between mentoring and 'coping' with perceived life problems.

Agency or self-efficacy is strongly linked in cognitive-behavioural theories with the likelihood of reduced criminal behaviour, and these notions were also referred to as being important during our consultation work. Four interviewees from mentoring organisations mentioned outcomes related to self-efficacy and two mentioned outcomes related to locus of control. In

8

the survey, some of the provider feedback was clearly referring to these notions although again, they did not always use these specific terms to refer to it.

One mentoring scheme respondent made reference to how their project allowed participants to "become more confident about their own abilities to deal with release", and another noted how the project that they worked on allowed participants to have increased "confidence in themselves to progress" on the outside. Another respondent from a mentoring project described one of their key impacts in terms of "improvements in managing life problems and resolving issues which would otherwise have led to a crisis".

In making decisions about specific questionnaire items that could be used to measure changes in this dimension, the team assessed a wide range of existing instruments focusing on three areas related to this dimension. These are listed below, along with some examples of specific instruments related to each:

- Locus of control (Spheres of Control Scale, Internal External Locus of Control Scale, and the Levenson Multidimensional Locus of Control Inventory Prison Service Adaptation).
- Self-efficacy (Self-Efficacy Scale, General Self-Efficacy Scale, and the Poverty and Social Exclusion Survey 1999).
- Empowerment, agency (Agency for Desistance Questionnaire, Community Leadership Scale, Perceived Control Scale, Employee Empowerment Questionnaire, and the Rosenburg Self-Esteem Scale (modified).

Impulsivity/problem-solving

Impulsivity and problem-solving are closely linked. Impulsive behaviour is marked by a lack of reflection and planning, and therefore by a disregard of the consequences of behaviour. People who are highly impulsive also generally lack well-developed problem-solving skills. Reducing levels of impulsivity would also be expected to be linked to increased ability to make conscious choices from a range of options, increased planning and ability to think through options and consequences, and an increase in focus and discipline with the ability to concentrate on one thing for a period of time.

There was little evidence uncovered by the REAs in terms of links between arts or mentoring interventions and impacts on impulsivity. Two level 2 studies and one level 5 study highlighted in the arts REA looked at this dimension, but there was found to be no significant impact on problem-solving. The dimension was not focused on in studies of mentoring.

Connections between impulsivity and offending behaviour are well documented, however, and there is good evidence more generally that reduced impulsivity and improved problemsolving is associated with reduced reoffending.

In designing specific questionnaire items that could be used to measure changes in this dimension, the team assessed existing instruments focusing on two areas related to this dimension. These are shown below, along with some examples of specific instruments related to each:

- Impulsivity (Eysenck's Impulsivity Inventory, Barratt Impulsivity Scale, Teen Conflict Survey Impulsiveness Scale, Conflict Resolution, Impulsivity and Aggression Questionnaire, CRIAQ, and Crime-Pics).
- Problem-solving (Social Problem-Solving Inventory-Revised, The Problem-Solving Inventory, Problem-Solving Self-Efficacy Scale and Problem-Solving Skills Scale, and Means-Ends Problem Solving Procedure).

Motivation to change

There is now a substantial literature on motivation to change, and the notion is often singled out as having key importance to programme effectiveness.⁴

The notion is understood in a variety of ways in that literature, with some definitions giving it static, trait-like status, and others focusing on its malleability and its link to interpersonal relationships (in a treatment context, this is in particular in its link to the quality of provider/client relationships).

Our own conception involves a focus on motivation to change as an anchor for positive engagement, and on internal rather than external motivation. Programme participants may have very good attendance records for a particular programme for example, but be interested in attending only because they are offered an incentive or reward for doing so, or because they perceive that they would be treated less well if they did not attend. Motivations of that sort are external rather than internal.

Poor scores in relation to this dimension would indicate low levels of engagement with activities that may help with desistance (e.g. education, employment, programmes),

⁴ For readers interested in a useful overview, see McMurran (ed; 2002) *Motivating Offenders to Change – A Guide to Enhancing Engagement in Therapy*. Chichester: John Wiley and Sons.

engagement with activities through external motivation (e.g. a desire to kill time, play the game), and/or high levels of internal motivation to continue with offence-supportive activities.

Improving scores would indicate a shift from low or no motivation to high levels of internal motivation, a shift from external motivation to internal motivation (and/or an increase in levels of engagement in the project's work, or with other interventions), and/or reduced internal motivation to continue with activities which support offending.

Our rapid evidence reviews did generate some evidence from previous research in relation to this dimension, although the evidence could not be regarded as conclusive. In relation to arts programmes there was some evidence to suggest that participants became interested more broadly in other programmes after their involvement in the arts intervention, and there was also some evidence that mentoring projects can increase a participant's willingness to engage with services or other programmes.

The importance of this dimension was highlighted clearly in the theoretical desistance literature, and was also referred to in feedback generated by our consultation work with providers.

In generating questions for measuring this dimension, the team examined a range of existing tools including the *Perceived Commitment to Change Tool*, the *Intrinsic Motivation Inventory*, the *Processes of Change Questionnaire*, *SOCRATES*, and the *University of Rhode Island Change Assessment Scale*.

Hope

Hope is anchored in a calculation about perceived scope for positive future change. It is linked to motivation and to self-assessments of efficacy.

Individuals having low scores for this dimension will be those who have a sense that the future is hopeless, and perceptions of this kind would most probably be linked to low levels of agency, a lack of motivation, and low levels of resilience (a sense that since it is inevitable that things will not work out well for me, I should cut my losses and reduce my effort and commitment).

By contrast, a new sense of hope could be a catalyst for a number of other changes - e.g. a more flexible and positive perception of the future, and higher levels of internal motivation and agency.

In our rapid evidence reviews we uncovered one level 2 study that focused on arts interventions, which did find improvements in hope for the future among participants. Sense of hope was focused on by only one study in relation to mentoring work, and this study could not be graded (due to a lack of information about methods and sampling).

There is a substantial literature that links greater levels of hope (or optimism) in individual offenders with improved chances of desistance,⁵ although empirical evidence of a link between interventions with offenders and impacts on hope remain suggestive only. The notion of hope was singled out as being important by a number of our interview and survey respondents, and was referred to by some participants in our focus group discussions.

In generating questions for measuring this dimension, the team examined a range of existing tools including the *Adult Hope Scale*, the *State Hope Scale*, and the *Adult Dispositional Hope Scale*.

Interpersonal trust

This dimension concerns attitudes toward and connectedness with others, and in our own conception has strong links to notions of social capital.

Those having low scores in relation to this dimension tend to have a 'dog eat dog' attitude and feel that other people cannot be trusted, are essentially self-interested, and 'out to get me'. They might also convey a lack of interest in others, and have a sense of persecution or a feeling that 'no one cares about me'. Low scores would also be linked to feelings of being isolated and disconnected (indication of a lack of social capital, low interpersonal skills, and negative attitudes towards others).

Positive changes in this dimension are about increases in positive attitudes towards other people, and increases in connectedness (to a wider range of people, and to pro-social connections).

Our rapid evidence reviews uncovered one study focusing on an arts intervention which suggested that participation on the programme had led to improved and positive relationships with wider groups. However, that study could not be scaled due to a lack of

⁵ See, for example, McNeiill, F. (2006) 'A desistance paradigm for offender management', *Criminology and Criminal Justice*, 6 (1), 39-62: Lloyd, C. and Serin, R, (2012) 'Agency and outcome expectancies for crime desistance: measuring offenders' personal beliefs about change', *Psychology, Crime and Law*, Vol 18 (6),543-65.

information. One level 4 study focusing on mentoring interventions did not reveal any significant relationship between mentoring and family and community outcomes.

The importance of interpersonal trust as an intermediate outcome is highlighted in the theoretical literature, where the dimension is regarded as being a key facet of social capital which is in turn a principal factor in processes of desistance.

In our consultation feedback from providers, the majority of respondents made reference to this or related dimensions, although they did not always use this precise term. Communication skills, cooperation, getting along with other prisoners or participants, feeling part of a group and becoming more comfortable with group interaction were all mentioned as important outcomes. Arts projects were more likely to focus on this outcome, which is unsurprising given that group work is often a key mechanism involved in the delivery of arts programmes.

In designing questions that could be used to measure changes in this dimension, the team examined a wide range of existing instruments focusing on two key areas related to this dimension. These are shown below, along with some examples of specific instruments related to each:

- Communication and interpersonal skills (Interpersonal Cognitive Distortions Scale, Interpersonal Communication Inventory, Interpersonal Communication Scale, Interpersonal Reactivity Index, Adolescent Interpersonal Competence Questionnaire, Teenage Inventory of Social Skills).
- Social capital (Prison Social Support and Outside Social Support, The Social Capital Inventory, Personal Social Capital Scale, Revised UCLA Loneliness Scale, and Citizen Audit Questionnaire 2001).

The practical problems dimension

This part of the instrument is designed quite simply to determine the extent to which programme participants regard the key areas referred to as being problematic for them at the time they provide feedback, and to measure changes in those assessments over time. The areas referred to in this section of the questionnaire are strongly linked to the 7 'resettlement pathways' commonly referred to by HMPPS and in the wider literature.

If many areas in a participant's life appear to be problematic, engagement in programmes or other interventions can be seriously limited. Reductions in the extent to which key areas of the individual's life are problematic should therefore be linked to a corresponding increase in the scope for effective delivery of work to facilitate desistance, and hence ultimately to reduced reoffending.

In our REAs there was evidence that mentoring projects may be associated with improvements in mentees' employment outcomes. There was more tentative evidence that mentoring projects may be associated with improvements in housing situation, but very limited evidence suggesting an association with reductions in substance misuse. There was no evidence of a link between mentoring and health outcomes.

There was very tentative evidence highlighted in the arts REA, that arts projects may be effective at improving educational outcomes and enhancing the effectiveness of offending behaviour programmes.

Feedback from our consultation consistently highlighted the impact that practical problems can have on the effectiveness of interventions, and very frequent references were made to the way in which "chaotic lifestyles" made it difficult to engage with some participants. When probed, chaos was often described by providers in terms of practical problems such as unstable accommodation or substance misuse.

In designing questions for measuring this dimension, the team examined a range of existing tools, but selected and modified a set of questions from the CRIME PICS II measure. The practical problems component of that instrument has been in wide use for many years and this section of the questionnaire has been properly validated and linked to reoffending.

'Connectedness' of the dimensions

The details provided above concerning each dimension should already make it clear that there are strong conceptual/theoretical connections between them. It is worth commenting separately on the way in which the dimensions as a set could provide a useful overall snapshot of where individual participants are positioned at the time of responding. Most projects that work with offenders and other vulnerable groups or groups with complex needs, are at least to some extent in the business of making people stronger, so that they engage with opportunities more effectively, stop offending, stop misusing substances, become more employable, and so on.

The dimensions that we have chosen are meant to highlight particular features of that kind of progress, but as a package, they also do not leave any major gaps that providers would need

to capture, in order to document that kind of change process (we return to this issue in Section 5, along with other information).

Further work will be required (and specifically, more detailed analysis of much larger IOMI datasets as they evolve) to allow us to understand the interactions across particular dimensions in more detail. We have provided a summary of the dimensions on the following table in Section 2.1, and an outline of how poor scores and positive change might be understood.

Dimension	Description	What poor scores mean	What positive changes might look like
Resilience	Resilience is a complex skillset or capacity which allows an individual to recover from adversity, and to move on in a positive manner to reconstruct or begin again. It is related to individual coping skills (and efficacy), but also to wider relationships and support networks.	Those with low resilience are more likely to give up in the face of setbacks ('what was I thinking – nothing will change for me'). Those with low resilience are also more prone to depression.	Increased capacity to move on and continue to try, even in the face of setbacks and adversity.
Agency / self-efficacy	This dimension is about whether an individual is able to make autonomous and independent decisions about their own lives - and to make things happen in the outside world as a result of those decisions.	Passivity in relation to decision-making about one's own life. A perception that 'things happen to me', rather than 'I make things happen. Prioritisation of luck, or fate.	Increases in the individual's confidence in their own ability to make decisions about their own future, and to implement plans that they make to bring about change.
Норе	Essentially, hope is anchored in a calculation about perceived scope for positive future change. It is also linked to motivation and to self-assessments of efficacy.	A sense that the future is hopeless (feeds into low agency, low motivation etc.). Low levels of resilience based on inaccurate perceptions and assumptions that are associated with a lack of hope. Sense that since it is inevitable that things will not work out well for me; I should therefore cut my losses and reduce my effort and commitment.	A new sense of hope – this could be a catalyst for a number of other changes e.g. a more flexible and positive perception of the future, internal motivation, and agency.
Wellbeing	This is a somewhat broader dimension than the others, which is usually defined in terms of general or overall mental/emotional/psychological health or balance. Our own construct involves a focus on positive self-regard and confidence.	Low levels of positive self-regard or self- esteem. Low levels of confidence.	Improvements in self-perception, estimations of self-worth. Increased levels of confidence.

Table 2.1: Summary of the dimensions measured by IOMI

Dimension	Description	What poor scores mean	What positive changes might look like
Motivation to change	This dimension is strongly linked to positive engagement, and a key focus within it is on internal rather than external motivation.	Low levels of engagement with activities that may help with desistance (e.g. education,	Shift from no motivation to high levels of internal motivation.
		employment, programmes, etc.). Engagement with activities through external motivation (e.g. a desire to kill time, play the game). High levels of internal motivation to continue	Shift from external motivation to internal motivation. Increase in levels of engagement – in the projec work, or with other interventions. Reduced internal motivation to continue with
		with offence-supportive activities.	activities which support offending.
Impulsivity / problem- solving	Impulsivity and problem-solving are closely linked. Impulsive behaviour is marked by a lack of reflection and planning, and therefore by a disregard of the consequences of behaviour. People who are highly impulsive also generally lack well-developed problem-solving skills.	High levels of impulsive behaviour. Poor problem-solving skills based on inaccurate perceptions, perceived limited range of options, no contingency planning.	Reduced levels of impulsivity. Increased ability to make conscious choices from a range of options. Increased planning and ability to think through options and consequences. Increase in focus and discipline and the ability to concentrate on one thing for a period of time.
Interpersona I trust	This dimension concerns attitudes toward and connectedness with others (with strong links to notions of social capital).	Other people are out to get me, dog eat dog attitude, people can't be trusted. Lack of interest in others.	Increase in positive attitude towards other people. Increase in connectedness (to a wider range of people, pro-social connections).
		Sense of persecution, no one cares about me. Sense of being isolated and disconnected (indication of a lack of social capital, low skills, or poor attitudes towards others).	

Dimension	Description	What poor scores mean	What positive changes might look like
Practical problems	This part of the instrument is designed to determine the extent to which participants regard the key areas referred to as being problematic for them at the time they provide feedback, and to measure changes in those assessments over time. The 8 areas listed are strongly linked to HMPPS' resettlement pathways and the wider literature.	A multiplicity of areas in the participant's life appear to be problematic, to the extent that any efforts to engage them in programmes or other interventions are seriously undermined.	Reductions in the extent to which key areas of the individual's life are problematic for them, and corresponding increase in the scope for effective delivery of work to facilitate desistance. Reduction in or abstinence from drug use, controlled drinking or abstinence from drinking. Stable and secure accommodation. Improved health and access to health care. Employment or training which may lead to employment.

2.2 Questions about relationships with staff

The instrument includes five questions designed to generate participants' feedback concerning their perceptions of project staff. Feedback of this kind is important because it is well-known that relationships between service provider staff and project participants can be strongly linked to positive progress. However, these questions should be regarded as optional.

The questions in this section were designed by the research team, based on previous research that included methods for gathering feedback on: client perceptions about being listened to; perceived fairness; the reliability of staff; and the extent to which project staff were perceived to have facilitated new ways of thinking.

The pilot work highlighted a particular need for clarity in relation to references to 'project staff', as in some intervention contexts there was some confusion on the part of participants about which staff were being referred to. In one example, where a particular course was delivered in a library, the library staff were perceived by the participants to have been very unhelpful, whereas they rated the actual project staff very highly once it was made clear to them who they were being asked to comment on.

More importantly, the piloting work suggested that project participants who continued their involvement with projects tended to rate their relationships with project staff very highly, and we did identify a 'ceiling effect' in relation to feedback generated by these questions. That is, those who completed the version of the instrument that included the five optional questions about relationships with staff were very likely to 'strongly agree' with each of the positive claims about staff relationships – in which cases the overall scores were not very discriminating.

The team would need to analyse a much wider dataset before we could assess properly whether this set of questions could usefully be amended. Amendments could provide a more nuanced measure of participants' perceptions of relationships with staff (and also test links between attrition and the perceived quality of participant/staff relationships, for example). But it was the team's view that the elimination of this set of questions could make the IOMI simpler, without in any way compromising measurement of changes in the dimensions described in earlier sections.

2.3 **Providing space for open-ended comments**

One of the findings from our piloting work with service providers was that some participants were keen to provide open-ended comments in response to specific questions in the IOMI, or at least, to be able to provide some over-arching comment at the end of the questionnaire.

Questionnaire data from some of the pilot sites where space was provided for such feedback did turn out to be highly useful for our analysis, and we would therefore encourage providers who use the questionnaire to allow participants to enter such comments if they wish. Some providers have done this by simply adding a section for further comments at the end of their questionnaires.

In some cases such input would not be possible within the time available for completion of the questionnaire – for some programmes delivered within prison, time may be allocated very precisely – but in some cases feedback of that kind could provide very useful supplemental data for the questionnaire and for a wider evaluation if one is undertaken.

2.4 Instructions for administering the IOMI

Arrangements for completion of the instrument and for the sharing and analysis of data also vary somewhat from project to project, but key details concerning administration are provided in the following sections.

Completion by individuals

As noted previously, the instrument is meant to be a self-report tool, but with support provided to participants who have literacy or related difficulties.

It is important that the questionnaire is introduced in a positive and consistent manner. Participants will usually respond positively if workers explain that the project has an interest in reviewing and improving its practice continuously, and that the IOMI is one way in which they can see what sort of impact they are having on people that they work with.

It is important to emphasise to participants that they should answer as honestly as possible, and that there are no right or wrong answers. It is also important to stress that they should answer every question, as missing data can cause problems for the analysis.

With all such tools there is a risk that participants might provide answers which they think a particular worker might wish them to give, and this is particularly the case when we are

asking them questions about the project itself or about their relationship with workers. It is therefore important that the participant be given a quiet space to interpret and respond to each question on their own, with no discussion about specific responses or questions unless the participant has some difficulty with reading or in understanding some of the content.

A worker or staff member should always be available however, in case the participant does have any questions about the questionnaire or its contents.

The way in which service providers frame the IOMI and augment it with preliminary sections designed to gather identifying or demographic data on participants varies widely from project to project.

Most projects use hard copies of the questionnaire which have an envelope attached, and on completion, the participant places the questionnaire into the envelope, seals it, and hands it back to a staff member/worker. The projects that take this approach to administration usually then enter a unique project identifier on to the envelope, so that the responses can be linked later on to wider information which the project collects.

In other cases, the participant completes an identifying section at the front of the questionnaire, which asks for details about:

- Ethnicity.
- Date of birth.
- Gender.
- Date of completion.
- Whether the questionnaire was completed independently or with assistance from a staff member.

Participants from some of these projects also complete a short section on consent as part of the questionnaire.

Some examples of alternative front sheets for the IOMI are provided in the final section of these guidance notes.

The scope and value of the resulting analysis will be much enhanced if the above kinds of details can be secured for each participant and linked to questionnaire responses. It is

therefore important that at some point in each participant's involvement there is a clear procedure for gaining informed consent to be involved.

Administration to groups

Although our own piloting work did not involve any use of the questionnaire by groups, there is no reason in principle why the IOMI could not be administered in this way.

In relation to some interventions (e.g. some programmes delivered inside prison, involving more than just a few offenders), administration of the questionnaire to groups could be both practical and useful.

In such cases the administrators would need to ensure that the same key points raised in the previous section are conveyed to the group, for example: that there are no right or wrong answers; that it is important that they answer each question; and that they can change their responses by crossing out one choice and circling another.

Participants would also need to be aware that they should complete their own questionnaire without discussion and without copying, but also that they can have assistance if they are unsure about a particular question.

Administration to groups in such cases may require a bit more preparation, for example to ascertain whether any participants have literacy issues. Administrators should make sure that they have clear answers to give if asked about the purpose of the questionnaire, what will happen to completed questionnaires, who might see the responses, and so on. It would also be necessary for the administrator to oversee completion of the questionnaires.

2.5 Timing of administration

Since the IOMI has been designed to help projects keep track of changes in the lives of participants, the issue of timing is quite important.

Ideally, the instrument should be administered as close as possible to the start of a participant's involvement with the project, since measures taken at that point will be used as a baseline for measuring change. At this point, the optional questions about relationships with staff might not be used (as there is not yet likely to be a relationship to report on).

The ideal timing of administration beyond that point will vary from project to project. Some projects work with clients over many months or even years, and in those cases it would make

sense to use the IOMI at regular intervals (e.g. bi-monthly, or quarterly) as part of their regular participant reviews.

Other projects are involved in delivering very short pieces of work only, and in such cases it may only be practical to use the IOMI before and after a specific intervention or event takes place, and once when the intervention or event has completed.

In some cases it is very difficult for projects to estimate when a particular participant will cease being involved with their project, so particularly in relation to projects that deliver very short term work, it is inevitable that some participants will disappear at some point after the instrument is used for the first time, before it can be completed a second time. Some of this kind of attrition is inevitable, but steps should be taken wherever possible to ensure that each first use of the instrument is matched with at least a second completion.

2.6 Use with different sub-groups

The instrument was designed to be used primarily with adult offenders, but the evidence gathered during our design and consultation work strongly suggests that the instrument would be applicable to a wide range of offender groups and to groups such as substance misusers, people at risk of offending, or other marginalised/vulnerable groups.

As the IOMI dataset becomes broader and larger with continuing use of the tool, the team hopes to be able to undertake much more detailed analysis of questionnaire data by subgroup (and in terms of other key variables), so that more finely tuned assessments can be made of the instrument's applicability across such groups.

It does appear that the instrument is accessible across age ranges and by gender, and the team has taken steps to ensure that the piloting has involved providers who work with young people and with women only. However, more detailed analysis would be required before some of these applicability and reliability issues can be fully assessed.

3. Entering, scoring, and analysing data generated by the IOMI

There are a number of options for questionnaire responses to be captured and analysed, although the team would recommend the data entry tool that we have designed for this purpose. This tool is described in more detail in Section 3.3.

Our piloting work highlighted wide differences across providers in terms of their current arrangements for data collection and project monitoring. Approaches to the collection, storage and analysis of IOMI responses could also, therefore, vary widely across providers.

Some providers already have very sophisticated client management databases, and in cases of this kind, it should be fairly straightforward to incorporate the IOMI data entry tool. The advantage of such incorporation is that ideally, the IOMI data should be linkable to wider data concerning: project participants; their backgrounds and characteristics; their involvement with project activities; and their progress and outcomes. Linking IOMI data to these wider sets of information greatly enhances the scope for evaluation and analysis.

In other cases, routine data collection about project activities and outcomes may be fairly limited. In these instances the IOMI data entry tool could provide a standalone solution for handling questionnaire data, although it could also be incorporated into wider data collection systems at a later stage.

Each key stage involved in the process of generating and working with IOMI data is described below, although the way in which different stages are undertaken will depend to some extent on the methods used by each provider.

3.1 Data entry

The questionnaire is available in hard copy form, so there will be a data-entry stage no matter which approach is taken, where completed hard copy questionnaires are processed by service providers or their evaluation teams and converted into electronic format.

Although we would recommend using the data entry tool that we have designed, providers can capture data from completed questionnaires by other means. It is usually fairly straightforward to create a simple spreadsheet in a format such as Excel, which can be used by inputters to enter scores for completed questionnaire responses, or to enter responses (e.g. using drop-downs) and use cell formulae to score and scale on separate sheets. A

spreadsheet of that sort can also be designed to generate immediate presentations and graphs on separate sheets (as in the surveying instruments designed previously by CLINKS for example).⁶

Some existing databases can be augmented with new forms which allow the same tasks to be performed, such as web-based VIEWS tools.

However, because of the very wide range of data collection practice across organisations working with offenders and related groups, it is not possible for us to provide guidance in these notes for the full range of ways in which IOMI data might be incorporated into existing data collection systems.

We provide some further details on data entry using the IOMI data entry tool (and some screenshots of data-entry screens for that tool) in Section 3.3.

3.2 Scoring

The mechanics of scoring are the same whether done manually, within Excel, as part of an existing database, or using the data entry tool designed by the research team.

Individual questions

As noted earlier, the IOMI uses a five point Likert scale for the main body of questions. Answers to these questions are given scores of from 5 to 1 for responses ranging from 'strongly agree' to 'strongly disagree' respectively, or from 1 to 5 for the same responses if given to questions that are 'reverse scored'. There are 4 questions in the questionnaire that are reverse scored in this way: questions 4, 10, 14 and 16.

The practical problems questions use different response categories: 'big problem', 'problem', 'small problem', and 'no problem at all'. These are scored as 4, 3, 2, and 1, respectively.

Calculating scores for dimensions

Once scores have been generated for each individual question, overall scores can be calculated for each of the key dimensions referred to earlier. Scores for the dimensions are calculated by adding up the individual scores from questions that feed into that dimension,

⁶ CLINKS has designed a set of data-analysis spreadsheets for analysing information generated by a range of data collection instruments that they have also designed, to assist providers in evaluating the impact made by volunteers in criminal justice interventions. These and other evaluation resources can be accessed at: <u>http://www.clinks.org/support/evaluation-and-effectiveness</u>.

and dividing by the number of questions. In effect, the result of that calculation is a mean score for that dimension. It is important to note that in cases where a participant has missed a question (i.e. has not entered a response to a question), the overall score should be calculated only on the number of questions for that dimension that have been completed.⁷

The procedure for calculating overall scores for the dimensions is summarised in Table 3.1.

Dimension:	To calculate dimension score:
Agency/self-efficacy	Add scores for questions 8, 13 and 20, and divide by three (if the participant has completed all three questions)
Норе	Add scores for questions 4, 10, and 16, and divide by three (if the participant has completed all three questions)
Impulsivity/problem-solving	Add scores for questions 2, 5, and 18, and divide by three (if the participant has completed all three questions)
Motivation to change	Add scores for questions 15, 17, and 21, and divide by three (if the participant has completed all three questions)
Resilience	Add scores for questions 7 and 14, and divide by two (if the participant has completed both questions)
Interpersonal trust	Add scores for questions 1, 3, 6, and 11, and divide by four (if the participant has completed all four questions)
Wellbeing	Add scores for questions 9, 12, and 19, and divide by three (if the participant has completed all three questions)

Table 3.1: Calculating dimension scores

The above calculations will yield an overall score for each dimension, for each completed questionnaire.

For questionnaire responses concerning 'practical problems', users can simply monitor scores relating to specific problems over time (e.g. to keep track of changes in relation to housing issues, or issues concerning drug use), or they can pool scores in the practical problem section of the questionnaire and divide by eight, to generate an overall problem score which can also be tracked over time.

Scores for questions concerning participant/staff relationships (i.e. optional questions 22-26 inclusive) can also be tracked individually over time (e.g. to monitor changes in participants'

⁷ In a previous version of our scoring instructions, the team used 'scaled scores in the same manner as for other tools such as CRIME PICS II. We now use mean scores for dimensions instead, as this approach allows issues concerning missing data to be handled more effectively, and with no loss of precision. The data entry tool described in Section 3.3 calculates mean scores automatically, using only scores for completed questions.

perceptions about treatment by staff). Alternatively they can be pooled and divided by five to generate an overall participant/staff relationship score which can again be tracked over time.

More generally, our approach to scoring has been chosen to allow all subsequent presentations of questionnaire data to remain intuitive across dimensions. If a participant's hope scores go down between their first and second completed questionnaires for example, it ought to be the case that this represents a worsening of the participant's perceived situation, whereas an increase in these scores ought to be interpreted as a positive development.

Similarly, if measures for impulsivity start high and then steadily reduce over subsequent questionnaires, this would represent a positive move away from more impulsive to less impulsive behaviour.

And finally, if scores for perceived practical problems start high and then reduce in subsequent questionnaires, this represents a positive reduction in the extent to which the participant perceives key areas in their life to be problematic for them.

We provide some examples of reporting outputs in Section 3.3 below.

3.3 Using the data entry tool

In order to automate the scoring and calculations described in the previous section, the team has designed a data entry tool in ACCESS format, which can be used both to enter responses from completed questionnaires and to generate reports on the questionnaire data Reports can be generated on individual clients and their progress, or on groups of clients, or on specific dimensions of interest to the provider. To get access to the data entry tool contact research@arcs-ltd.com for a link and login details.

Further details on each task are provided in separate sections below, followed by some general comments about standalone and web-based use of the tool.

Entering and scoring questionnaire responses

One of the key strengths of the data entry tool is that it makes the data entry task very easy to undertake and also very quick to complete. Our own tests suggest that a completed questionnaire can be entered using the tool in around 30 to 40 seconds. (Data entry will take slightly longer if providers include space at the end of their questionnaires for the entry of open-ended text by participants, as referred to in Section 2.3.)

Data entry is made easier through the use of radio buttons and the use of drop-downs for all of the initial identifying fields.

In relation to the latter, the data entry tool has space for users to complete fields that cover the following for each individual participant:

- Name.
- Unique identifier.
- Date of birth.
- Gender.
- Ethnicity.
- Data of questionnaire completion.
- Manner of completion (i.e. whether the instrument was completed with assistance, or completed by the participant on their own)
- Whether the questionnaire includes the questions about relationships with staff.

A screenshot of the data entry tool is shown below, which covers the first 15 questions, and a few of the preliminary fields.

Questionnaire timing Start of programme O During		End of pro	gramme		
Completion method By client with assistance	Comments				
	Strongly		Neither agree		Strongly
1. I have close friends I can trust	agree	Agree	nor disagree	Disagree	disagree
	۲	\odot	0	\odot	\odot
	Strongly		Neither agree		Strongly
2. I don't really think about what I'm doing, I just do it	agree	Agree	nor disagree	Disagree	disagree
,	0	۲	0	\odot	0
	Strongly		Neither agree		Strongly
3. There are people who really understand me	agree	Agree	nor disagree	Disagree	disagree
······································	۲	\odot	0	\odot	0
	Strongly		Neither agree		Strongly
4. My problems will dominate all of my life	agree	Agree	nor disagree	Disagree	disagree
any prostents will dominate an or my me	0	0	0	۲	0
	Strongly	0	Neither agree		Strongly
5. I often do the first thing that comes into my head	agree	Agree	nor disagree	Disagree	disagree
5. Forten do the first tilling that comes into my head	(O)	0	©	0	©
		0			-
C. There are a scale to set to set to set the set of th	Strongly	Agree	Neither agree nor disagree	Disagree	Strongly disagree
6. There are people I can turn to when I have a problem	agree	-	noi disagree	-	(Isagree
		0	0	0	
	Strongly	Agroo	Neither agree	Disagroo	Strongly
7. I tend to bounce back quickly after hard times	agree	Agree	nor disagree	Disagree	disagree
	0	۲	0	0	\odot
	Strongly		Neither agree		Strongly
8. I make good decisions	agree	Agree	nor disagree	Disagree	disagree
	0	۲	0	0	0
	Strongly		Neither agree		Strongly
9. I feel confident	agree	Agree	nor disagree	Disagree	disagree
	0	۲	0	\odot	\odot
	Strongly		Neither agree		Strongly
10. I feel hopeless about my future	agree	Agree	nor disagree	Disagree	disagree
	\odot	\odot	\odot	۲	\odot
	Strongly		Neither agree		Strongly
11. There are some people who I trust	agree	Agree	nor disagree	Disagree	disagree
	0	۲	0	\odot	0
	Strongly		Neither agree	-	Strongly
12. I feel good about myself	agree	Agree	nor disagree	Disagree	disagree
	8	۲	0	0	0
	Strongly	0	Neither agree		Strongly
13. I feel capable of making decisions	agree	Agree	nor disagree	Disagree	disagree
2011 Certapare of maxing decisions	©	0	()	0	©
		0	Neither agree	0	Strongly
14. I have a hard time making it through strengful suggest	Strongly agree	Agree	nor disagree	Disagree	disagree
14. I have a hard time making it through stressful events	agree ©	-	nor uisagree		(Isagree
	_	0		۲	-
15 Janua itta musalfita akasa-	Strongly	Agree	Neither agree	Disagree	Strongly
15. I owe it to myself to change	agree	_	nor disagree		disagree
	0	۲	0	0	0

Figure 3.1: Portion of data entry screen for IOMI questionnaire

Generating reports on clients

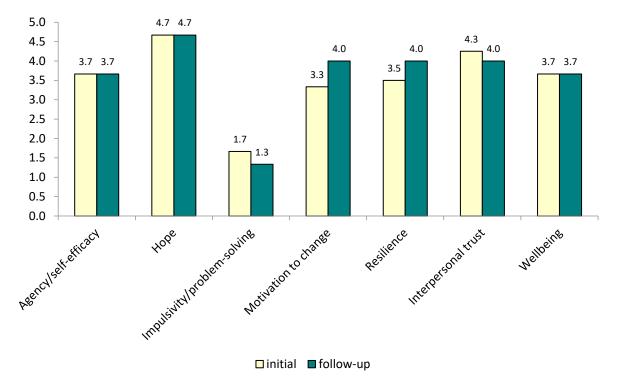
The data entry tool has been designed to generate reports on individual clients, which can be used by project workers to provide a focus for one-to-one discussions at regular intervals, if this is part of their practice.

Provider feedback during the research made it clear that some projects find it useful to feed results from questionnaires of this kind back to clients, as such material can provide a useful focus or framework for discussion and review. It can also provide evidence to the client in cases where positive progress appears to have been made.

At the individual level, reports can focus on results from single questionnaires, from pairs of questionnaires (such as initial results from a questionnaire completed at the start of an intervention and follow-up results from a questionnaire completed during or after an intervention), or from multiple readings for the same participant across longer periods of time.

An example of a report on a single client is provided below in Figure 3.2, comparing initial and follow-up scores for all dimensions. This example, and the second example below, is taken from questionnaire data collected and analysed by the team for an arts intervention with offenders lasting 8 weeks. The questionnaire was administered to a cohort of ten participants at the beginning of the programme, and to the same ten participants at the end of the programme.⁸

⁸ As noted above in Section 3.2, the way in which completed questions are scored was intended to be intuitive, in the sense that changes can be readily understood as being either positive or negative. Reductions in scores for practical problems or impulsivity for example are positive, whereas increases in scores for dimensions such as hope or resilience are positive.





Presentations can also be made for single participants who have had multiple questionnaires. In these cases, presentations could also be converted to line graphs if these would be more useful for illustrating broader trends.

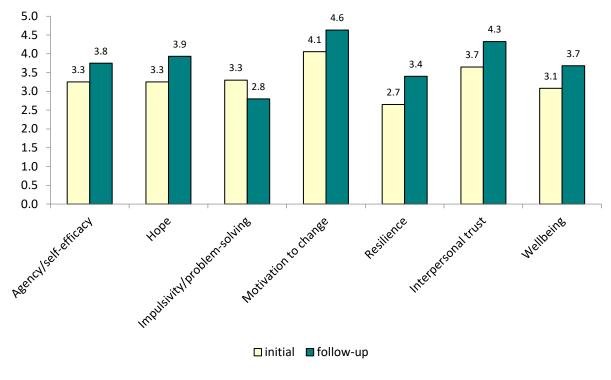
Generating aggregate reports

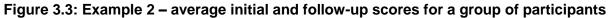
In reports focusing on groups of participants, providers may wish to generate presentations on whole cohorts of participants, comparing all scores for a particular dimension.

It is possible for presentations to be generated which show averages for specific dimensions, for a particular cohort of participants. Example 2 in Figure 3.3 provides an illustration.

It is worth noting that for this particular group of participants (the same group referred to above), there were increases in all dimensions where this would be expected (and decreases in the rest), although an interpretation of results of this kind is by no means straightforward (see Section 5, below).⁹

⁹ For this particular group of paired questionnaires, the changes were tested for statistical significance using paired T-tests. All changes were significant (p<.05).





(N=10)

A wide range of reports can be generated by using the inbuilt reporting wizard which forms part of the standard ACCESS package. Providers may wish to generate reports on all initial questionnaire scores by quarter, for example, or to compare average scores by dimension over time. Reports of this kind can be generated simply by specifying the key variables that the package will be instructed to use, to define the dataset to be pulled together in order to produce the desired presentation.

Full datasets can also be downloaded easily for more detailed analysis in other packages such as SPSS. If relevant details are recorded consistently and with few gaps, providers could examine multiple questionnaire readings over time and by sub-group, for example, or examine links between score changes and time periods between readings.

If fully linked to wider data concerning the form, intensity and duration of participant involvement, some very powerful analysis could be undertaken in order to understand how particular facets of programme content might be related to changes in sets of intermediate outcomes. Analysis could also help understand how attrition from point of referral to programme completion might be linked to participant characteristics and/or their change scores. We return to some of these issues in Section 5.

Standalone use

The IOMI data entry tool can be used on any single computer which has the ACCESS programme loaded onto it.

In cases where providers have teams of workers who will each need to use the data entry tool in their work, the package can be installed on an office server which is accessed by multiple users. We would recommend that the data entry tool be split in such cases, to separate the front and back ends of the database. This will both speed up worker access to the database, and increase its overall stability.

If the field for client name is to be used, then providers will also need to consider methods for securing the database itself, in order to be in compliance with requirements in data protection guidelines.

Provider teams should use encrypted drives or encrypted drive partitions for storage of client data, and should also ensure that transfers of sensitive data cannot take place from a protected environment into an unprotected one.

The ACCESS programme has its own internal encryption facility, and this facility works well if the data entry tool is to be used on one computer only, as it guarantees that an unauthorised person cannot access the information held on the database. The encryption applies to the file itself however (rather than to a storage environment), and can also conflict with some office server configurations. It can be useful to seek professional advice if the IOMI data entry tool is to be used in an environment where some of these issues are raised (e.g. an environment with complex existing systems and arrangements for data protection).

4. Reliability and validity of the IOMI

For an instrument of this kind to be maximally robust, it needs to have several key features:

- It ought to generate scores consistently for the same people if administered after a short passage of time (this relates to the instrument's 'test-retest reliability'), but also be capable of measuring real change in the lives of participants.
- Its components (in this case, the items which make up the questionnaire) need to cohere, and in particular, questions which together feed into the measurement of a particular dimension, need to point in the same direction (this is about the instrument's internal reliability or internal consistency).
- It needs actually to measure what it purports to measure, rather than something else (roughly speaking, this is about the instrument's validity).

Establishing that a particular instrument is reliable and valid in these (and other) key senses (and undertaking the full range of statistical analysis required to put clear figures to such features) is not a one off process. It can involve an incremental programme of research which in relation to some tools has taken many years and required detailed analysis of a range of large datasets (including comparison datasets).

The design team for the IOMI has generated evidence to suggest that the instrument is robust in several key respects. We provide details concerning these features in the following section.

4.1 Reliability

In relation to internal reliability, one of the standard ways to estimate the degree of internal consistency is to calculate an 'alpha coefficient' for each key dimension. It is generally accepted that an alpha coefficient of around .70 or above indicates acceptable internal consistency.

Alpha coefficients for the key IOMI dimensions have been calculated using data gathered during the research (see the main report for further details) and are summarised in the following table.

Prison sample Dimension (n = 264)		Stage 6 piloting with providers Time 1 (n = 107)	Stage 6 piloting with providers Time 2 (n = 63)	Test retest exercise Time 1 (n = 217)	Test retest exercise Time 2 (n = 217)		
Resilience	.56	.24	.47	.45	.55		
Wellbeing	.79	.83	.83	.80	.81		
Agency	.63	.72	.76	.75	.76		
Impulsivity	.82	.65	.76	.81	.89		
Motivation to change	.81	.61	.72	.75	.81		
Норе	.77	.74	.67	.79	.81		
Interpersonal trust	.82	.77	.75	.81	.82		

Table 4.1: Reliability coefficients	(α) for IOMI questionnaires
-------------------------------------	-----------------------------

As indicated on the table, the bulk of the figures indicate acceptable levels of internal consistency. Although a few of the individual estimates fall below the .70 threshold, the figures across all strands are encouraging by dimension overall. In particular, scores for resilience have consistently generated alpha scores that are lower than for the rest of the dimensions, and the research team may consider adding one or more carefully chosen items to that dimension in the future, with a view to increasing those alpha coefficients.

4.2 Validity

There are several types of validity that are discussed in the wider literature concerning tools of this kind, as noted above.

The IOMI has strong face validity, as its design is strongly anchored in consultation and feedback from providers and other professionals who work with offenders. In addition, a wide range of relevant experts had key input to that design, including experienced psychologists who have particular expertise in relation to the operationalisation and measurement of key concepts.

Another way to establish validity is to compare IOMI scores with measures from other already validated tools which measure the same or similar constructs, or to compare IOMI measures with official data held by criminal justice agencies (such as OASys, for example). Validity can also be assessed via longitudinal studies that collect data on actual behaviours, but there was not sufficient time (or resources) for tests of this kind to be undertaken.

4.3 Measuring change

There are two sets of issues in relation to measuring change in the dimensions covered by IOMI.

One is about the extent to which the IOMI dimensions themselves are subject to short-term change, and it is clear that more evidence will be required before these dimensions can be ranked precisely in that respect.

Impulsivity, for example, is a dimension that is not likely to change from day to day, and interpersonal trust might also not be subject to very short-term changes. By contrast, levels of hope and perhaps also motivation to change could change more quickly than the latter dimensions.

Agency/self-efficacy and resilience probably fall somewhere between the latter two groups in terms of their malleability or stability over time, perhaps along with wellbeing. The second set of issues concerns the extent to which the IOMI questionnaire is itself sensitive to any such changes – i.e. the extent to which actual changes in the dimension will be picked up by the tool. We discuss some of these issues in our main report, in relation to findings from our test-retest work.

It is worth noting that the job of interpreting measured changes in particular dimensions is seldom straightforward even if a particular tool is very accurate in charting such changes in an individual participant. We return to some of these issues in following sections. The evidence gathered so far does suggest that changes in some dimensions are strongly related to changes in other dimensions, and this resonates with feedback from the consultation work (for example, that increases in self-confidence or agency can generate greater optimism and hope for the future).

But more research and testing will be required to properly categorise each dimension in terms of its relative stability over time, and also to see whether levels of sensitivity vary across different sub-groups of participants.

5. Using the IOMI as part of a wider evaluation

It is important to point out that although the IOMI can allow providers to keep track of changes in key dimensions in the lives of their project participants, data generated through use of the instrument cannot be expected to speak for itself. In particular, positive changes measured by the instrument (such as those illustrated in the examples presented in Section 3.3) do not on their own somehow establish that an intervention has been effective, or even that the intervention itself (rather than something else) generated those impacts.

Even the best tools are only part of what is needed to answer questions about impact – they are not meant to, and never could, tell the whole story of change. At best, they offer only a partial snapshot at a particular point in time, and this applies no less to the IOMI than to any of the other tools that providers commonly use.

However, IOMI data could in principle provide good quality change evidence which, if linked properly to other data sources and analysed critically, could make a strong contribution to an evaluation or an understanding of impact.

These notes are not meant to provide general guidance for designing and implementing project evaluations, as our focus here is on the features and use of the IOMI. There are other resources available for providers if they wish to learn more about evaluation generally, and about how to design an evaluation of their own interventions specifically (see Section 7).

However, it is important to draw some links between the use of the IOMI and some wider issues about evaluation. Some comments concerning linking IOMI data with other data are provided below, followed by some brief comments about the importance of tracking, and some references to theories of change.

5.1 Linking change data to other data

No matter which approach to overall evaluation a provider might take, it is important that clear links are created across the key sorts of information that are required to understand changes brought about by a programme or intervention. In relation to project monitoring and management data, an evaluation would need to collect a range of information including:

- Details about who becomes involved with the programme (in addition to demographic information, this can include results from initial assessments, identified need, and so on).
- Details about how participants in the programme come to be involved in it (how are people referred to the programme, and what are the referral criteria?).
- Details concerning the type, intensity and duration of involvement that participants have with the programme.
- Information about the progress of participants on the programme.
- Feedback from participants themselves, where this is collected.
- Information about exit, completion, or case closure.

In addition to this kind of information, it is important that an evaluation involves the collection and assessment of information concerning outcomes for participants, preferably including short-term or intermediate outcomes as well as longer-term outcomes.

Providers may want to include some linkage of their project data to data concerning reoffending or reconviction. The Justice Data Lab allows providers to access the kind of data which may allow them to draw conclusions about the impact of their own work on reoffending.¹⁰

The consultation strand of the research (and our own collective experience in working with providers on issues around evaluation) suggests that while most providers will gather information about most or all of the above areas, they do not always make the best use of the data that they collect. For example, some will analyse feedback from participants, but will not take the analysis further to explore connections between feedback and types and duration of involvement in a programme, or the characteristics of participants.

The use of unique identifiers for individual participants allows for linkage of data from multiple sources, and is therefore very useful for any work to assess the impact or effectiveness of particular interventions.

¹⁰ See the resources at: https://www.gov.uk/government/publications/justice-data-lab

Who ends up on your project (and how)? The importance of tracking from referral to programme completion

Evaluators are usually interested in understanding which kinds of interventions have which kinds of impact with which kinds of people (and why), and it is therefore important to ensure that final datasets, including completed IOMI questionnaires, are not limited only to programme completers.

More often than not, the story of who ends up completing programmes is quite a complicated one, and it is usually the case that the group of programme completers is not the same as the groups initially referred to a programme, or even those who subsequently become engaged with it but then do no complete. It is also of key importance to know how potential participants were deemed to be referrable to an intervention in the first place, since at that point in the selection process it is entirely possible for referrers or providers to choose the most promising candidates.

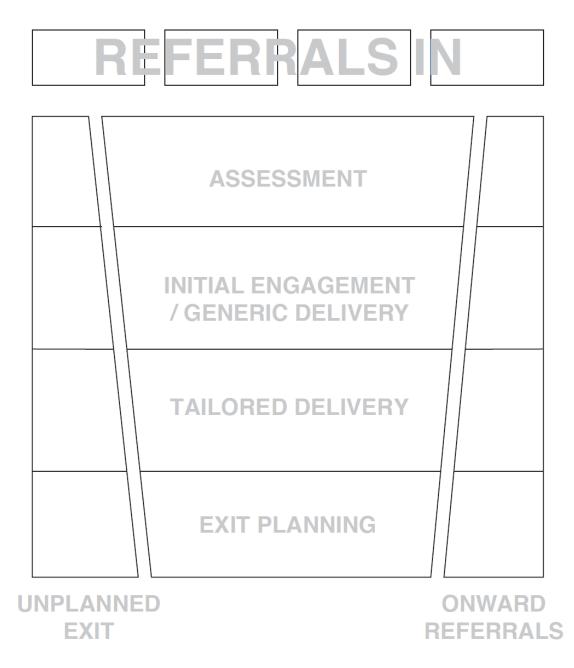
To put the above point differently, from the point of referral to the end of involvement (however the latter is defined in relation to a particular intervention) there is usually a process of attrition, and that process quite often involves changes in the overall characteristics of the participant group as the intervention develops.

There may be a set of potential participants who are referred but who do not show up for initial assessment. Among those who do reach a stage of initial involvement with a programme, some may disengage and not return. The latter cases are examples of attrition that is unplanned. There are also interventions that involve referral of clients to other services, and thus have some planned attrition.

Figure 5.1 provides a rough summary of what the attrition process might look like at different stages of delivery for many offender programmes, although programmes will obviously vary widely in terms of both the contents of each stage (some do not do tailored work for example), and the proportion of attrition (and the reasons for it) at different stages of delivery.

One benefit of the IOMI is that it can be used with individuals at each stage of the process being described in Figure 5.1 (subsequent to initial participation in the programme) and can therefore provide data which can be used to understand attrition and help evaluators to understand programme impact, by type of participant, at different stages of the intervention.

Figure 5.1: Participant attrition, from referral to exit



5.2 What would have happened if your project hadn't existed?

Most evaluation work involves measuring key changes brought by projects or programmes, but it also involves gathering evidence which can help us to demonstrate that it really was the project or programme – and not something else – which generated the changes being measured.

Some of these issues continue to be hotly debated within the evaluation research community, but there is broad agreement that it is good practice for evaluations to collect

information which can be used to draw comparisons between groups of people who participated in the project or programme being evaluated, and other groups who did not. It would obviously be difficult to use the IOMI to gather feedback from both participants and non-participants, but where such feedback for project participants is also linked to wider data about outcomes, it will often be possible to compare those outcomes with similar outcomes for non-participants.

National data can sometimes be used for comparison purposes as well, but the general point to make here is that reference to such material should form part of a wider evaluation.

Some of the sources referred to in Section 7 provide further details about the use of control or comparison groups in evaluation research.

5.3 How does your project 'work'? Using theories of change to help understand the IOMI data

Alongside the increasing interest that there has been in the notion of intermediate outcomes in recent years, there has also been a burgeoning literature on theories of change and increasing reference to such theories by commissioners. Some funders actually require providers to outline a theory of change in their funding proposals, and to say how they plan to capture information which they could use to assess service delivery against its key components.

The most useful project evaluations are those that help us to understand connections between what projects do and the changes that they bring about. While it is useful just to know that a particular project has a number of key impacts on participants, it is much more useful if we can also understand how these changes are brought about by projects. Does the project change attitudes, does it make people more confident, does it give them new skills, does it work with everyone or only some people, and could it work anywhere or just in one area?

In order to understand these kinds of things, evaluators sometimes do more than just measure the changes that projects seem to bring about. They engage with key stakeholders to try and identify theories of change, which can help us understand connections between what a project does and the changes that it might deliver. A theory of change is meant to help us understand how and in what circumstances a project brings about these kinds of changes.

Links of the above sort are important for allowing the evaluator to answer a range of key questions much more specifically, such as:

- Are there any connections between outcomes and the amount of time that participants spent on the project?
- Do particular kinds of participant appear to have done better than others, in terms of measured changes?
- Are there any differences in intermediate outcomes, between people on different rungs of the attrition ladder?
- Does our work appear to be having more of an impact on some dimensions than others?
- How are particular intermediate outcomes ordered in time, and does this differ by type of participant?

Theory of change models are quite diverse in terms of their focus and complexity, but we have included an example here which is drawn from a recent evaluation of the Women's Community Services programme. Figure 5.2 illustrates links between programme activities and the 'nature of provision', immediate outcomes or initial changes, and longer-term outcomes.

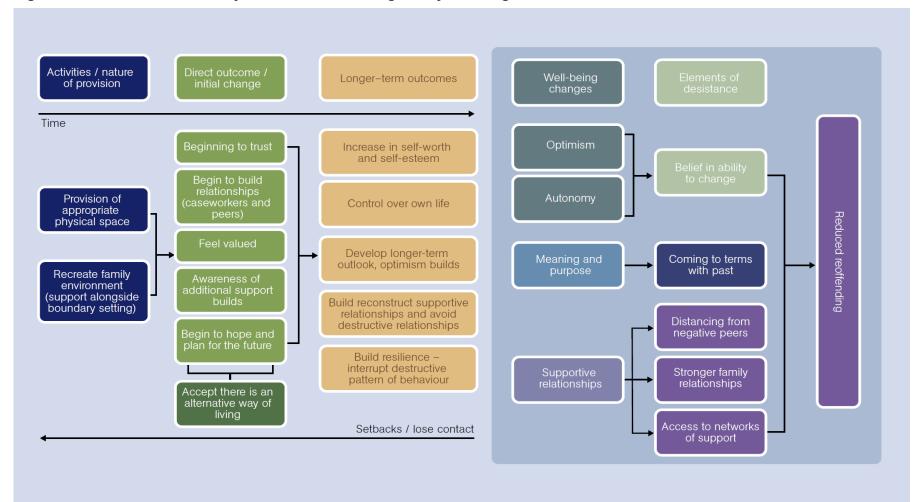


Figure 5.2: Women's Community Services: reoffending theory of change

6. Examples of alternative front sheets for the IOMI

The questions in the IOMI should not be changed in any way, but providers that are using the instrument have tailored the introductory section in a variety of ways to fit with their own administrative procedures.

For some projects, participants will already have provided basic information about themselves by the time that they complete their first questionnaire, and they will also have given their informed consent to participate. Projects in that category therefore sometimes require only minimal information in the introductory section to the questionnaire. The following is a typical example.

IOMI questionnaire

At **[INSERT PROJECT NAME]** we are keen to hear about changes experienced by people who get involved with our project.

This questionnaire is meant to help us keep track of how well we are doing (and to make our services better if we can), but also to help people who work with our project and to keep track of the way that things might have changed for them.

The questionnaire should take about 10 minutes to complete. Please complete the questionnaire, seal it in the envelope provided and return it to **[INSERT REFERENCE TO TEAM MEMBER, PROJECT WORKER, AS APPROPRIATE]**. If you have any questions about the questionnaire please ask your **[INSERT REFERENCE TO TEAM MEMBER, PROJECT WORKER, AS APPROPRIATE]**.

The date today_

Please tick a box to say whether you:

Completed the questionnaire on your own

Completed the questionnaire with assistance from your [WORKER ETC]

For projects in this category it is crucially important to ensure that unique identifiers are entered on envelopes that are used with the hard copy questionnaires – or indeed that names are used on the front sheet itself. If completed questionnaires cannot be linked

 somehow with individual participants, then it will obviously not be possible for the IOMI to be used to measure change.

The following is an example of a front sheet which asks for more detailed information than in the above example, and also includes a brief consent form:

IOMI questionnaire

At **[INSERT PROJECT NAME]** we are keen to hear about changes experienced by people who get involved with our project.

This questionnaire is meant to help us keep track of how well we are doing (and to make our services better if we can), but also to help people who work with our project and to keep track of the way that things might have changed for them.

We'd like you to answer the questions in the questionnaire and return it to [return it to project staff/place it in the attached envelope and seal it, then pass to project staff]. The questionnaire should take about 10 minutes to complete. If you have any questions about the questionnaire please ask [appropriate member of staff] before you begin.

Do you agree to take part in using this questionnaire?

Please read the following statements and indicate whether you agree by circling either 'yes' or 'no'.

I agree to take part.	Yes / No
I understand my participation is voluntary and that I do not have to take part.	Yes / No
I understand that my responses will be seen by the research team and [organisation name] staff.	Yes / No
I understand that my name or any other identifying material will not be used in any research report.	Yes / No
I am willing for the research team to access information held about me by [organisations name].	Yes / No

Please sign your name here	
Please print your name here_	
The date today	
Your date of birth	
Please tick a box to indicate	your gender: Male 🗌 Female 🗌
How do you describe your et	hnicity? (please tick the box that applies to you)
For [organisation member of	of staff] to complete:
White:	
British	
Irish	
Any other White background	
Mixed:	
White and Black African	
White and Asian	
Any other mixed background	
Asian or Asian British:	
Indian	
Pakistani	
Bangladeshi	
Any other Asian background	
Black or Black British:	
Caribbean	
African	
Any other Black background	
Chinese	
Any other ethnic group	

Client reference number (to be adapted for each organisation)

When was this form completed?

First session in the community/other (please provide details)

7. Further resources

7.1 Evaluation guides

There is now a very wide range of evaluation guides that have been produced for providers in particular, and resources of this kind have also been gathered together by some key organisations for online access.

The NCVO Charities Evaluation Services website (https://www.ncvo.org.uk/practicalsupport/consultancy/ncvo-charities-evaluation-services) allows access to a wide range of evaluation resources, including guidance on monitoring and evaluation frameworks and design, outcomes measurement, and costing approaches such as Social Return on Investment (SROI).

Other useful sources for evaluation guidance include:

- The Improving Your Evidence project http://www.clinks.org/support/evaluation-and-effectivenesshttp://www.clinks.org/support/evaluation-and-effectiveness.
- The knowledge base at http://www.socialresearchmethods.net.
- The information library at <u>http://betterevaluation.org</u>.

7.2 Further information about theories of change

A range of standalone and online resources focusing on theories of change has been developed. Useful sources include:

- Theory of Change, Basics A Primer on Theory of Change, developed by ActKnowledge, can be downloaded at <u>www.theoryofchange.org</u>
- Mapping Change Using a Theory of Change to Guide Planning and Evaluation, can be downloaded at <u>http://www.grantcraft.org</u>

8. The costing tool

As noted in Section 1.2, one of the project's aims was to design and test a tool which providers could use to estimate their costs, so that this information could be used to underpin wider assessments such as cost-effectiveness or cost-benefit studies, or assessments of 'social return on investment'.

The purpose of our costing tool is to provide a transparent and relatively easy to use method for estimating unit costs for different categories of service user.

The notes that follow in this section are linked straightforwardly to sections of the actual tool, which is available as an Excel spreadsheet. We have also attached an example of a completed version of the spreadsheet in Word format.

In all worksheets, only the white cells need to be completed. The grey cells will be calculated automatically.

The costing tool is published alongside this report on gov.uk.

8.1 Running costs

Staff costs

Staff costs are to be listed individually as this will provide information about how the project operates, how many staff at what level are needed for it to run.

The main **project staff** involved (**Rows 4-8**) should be listed in **Column (Col) A**. In **Col B**, the FTE (full time equivalent) salary and on-costs of each staff member should include their National Insurance and other costs such as pension.

In **Col C**, insert the proportion of time they spend on the project. For example, a project leader might work on the project for half of their time, so put 50%. If the project leader is fully employed but spends 50% of their time on the project and 50% on other work for the same agency, they should be counted at 50%. If there are 3 project assistants who work 3, 2 and 1 days per week, put 60%, 40% and 20% respectively for each of them.

Enter similar details for each subsequent year of operation, in the relevant columns from **Col E** onward.

Sessional staff (Rows 11-15) may need to be included in a slightly different way, depending on their hours. It is possible that their on-costs will also be different. It may be necessary to list each one and to state the overall costs of their employment in that year in **Col B**. If so, you need to put 100% in **Col C**. If it is not possible to identify the costs of each separately, list the number of sessional staff in **Col A** and put their overall costs for the year in **Col B** with 100% in **Col C**.

Enter similar details for each subsequent year of operation, the relevant columns from **Col E** onward.

Admin and finance staff (Rows 18-22) working on the project should be included in the same way as the project staff, with their FTE salary plus on-costs in **Col B** and the percentage of time they spend on the project in **Col C**. For example, an administrative officer who contributes a half day per week to the project should be counted as 10% of FTE.

Enter similar details for each subsequent year of operation, the relevant columns from **Col E** onward.

Management and supervision (Rows 25-29) may either be included as a proportion of senior managers' time in the same way as for project staff or as a percentage of the overall project budget. If it is possible to identify a portion of one or two senior managers' time, the section should be completed as for project staff. If it is classified in the budget as a single figure (representing a proportion of the project budget) the figure should be entered into **Col B** and 100% entered into **Col C**.

Enter similar details for each subsequent year of operation in the relevant columns from **Col E** onward.

Other costs

If there is no expenditure on any of the items listed or they are not relevant, simply leave the relevant cells alone (as each currently has a **zero** entered by default).

Office costs

Office costs (**Row 32**) would include items such as rent, heat, light, cleaning, phones, desktop computers, photocopying and stationery. If the project budget does not have a figure for this (as it may be provided by the host agency) an estimate of these costs should be included in order to reflect the true costs of the project. One estimate of such costs has been

made by the National Audit Office.¹¹ This gave a national average of approximately £10,300 per FTE worker at 2012 prices. The figure for small charities running mentoring projects is likely to be considerably lower than this.

The cost of using meeting rooms should also be included if this is a significant element of the work.

At **Row 33**, enter the costs of any laptops and mobile phones allocated to the project. This is not necessarily the purchase price if they were not purchased specifically for this project, but should include some estimate of their value as well as costs of contracts to use them.

At **Row 34**, enter the costs of staff recruitment, including advertising. In a short term project, this may be only a setup cost at the start. In longer projects, or those with high staff turnover, these costs may continue to be significant.

Row 35 – legal costs. In many projects this may be zero, but in some there may have been legal fees for setting up contracts and agreements between organisations.

Row 36 – volunteer recruitment. In projects such as mentoring schemes these costs are likely to be comparatively high. In other projects they may be low or zero.

Row 37 – volunteer expenses. These may also be comparatively high in mentoring project but low or zero in others. They may include travel and also activities and outings.

Row 38 – staff training. Costs may include venues, payment for professional trainers and food. If this involves significant time from people who are not already included in project staff costs, this should be added. But if the trainers are project staff or managers their costs should not be added as this would be double counting.

Row 39 – volunteer training. This may be a significant element in mentoring projects. Costs may include venues, payment for professional trainers and food. If this involves significant time from people who are not already included in project staff costs, this should be added.

¹¹ National Audit Office (2006), *The Office Accommodation of the DCMS and its Sponsored Bodies*, The Stationery Office, London.

But if the trainers are project staff or managers their costs should not be added as this would be double counting.

Row 40 – staff travel. This would include public transport and mileage for essential travel. For some mentoring projects this can be a significant area of expenditure.

Row 41 – publicity. This might include the costs of leaflets or advertisements to attract volunteers, and special events or meetings. Prevention projects may need to arrange publicity meetings with partner agencies in order to attract referrals.

Row 42 – activities. This might include any group activities such as outings, shared meals, sports or learning events. The costs might include transport, venues, food and payment of group leaders and trainers who are not project staff.

Row 43 – project equipment. This might include any learning equipment for use by service users, possibly including computers, sports equipment, kitchen equipment, arts and music equipment, fashion and beauty training materials, gardening tools and so on.

Rows 46 to 48 cover additional services from another agency. This would include any services that are arranged through the project and provided by an agency, which the service user would not otherwise have received (such as a specialist service to address substance misuse or family intervention). In effect it is a further cost to the public purse that would not otherwise have been incurred, even if the project does not actually pay for it directly. In this way, the full costs of the project intervention can be captured. Services that would have been received anyway, such as health care, social services and welfare benefits should not be included here, even if the project liaises with them. Please state what the services are in the space provided to the right.

Rows 51 to 53 are to specify other costs. This should cover any other categories of project expenditure that have not been included above. Please state what the items are in the space provided to the right.

Year definitions

In order to be able to relate all costs to a specific price base, it is important to enter definitions of 'year 1', 'year 2', and so on in the appropriate cells. For the example we have provided on the spreadsheet we have used the standard tax year definition (e.g. 2017/18).

You do not need to use definitions in terms of tax year, and for some projects, calendar years might fit existing accounting systems more easily.

There are two main reasons for specifying these periods precisely. One is to enable comparison with other projects or services that might have run at a different time. If such a comparison is needed, the total cost figure would need to be adjusted for the year base using a suitable measure of inflation such as the Retail Prices Index (RPI) or Consumer Prices Index (CPI). Without such consistency, it would be impossible to compare projects that have run at different times.

The second reason is to enable calculation of the economic benefits if this is wanted. This cannot be done unless the year is stated, so the monetary benefits can be adjusted (by RPI or CPI) to fit with the costs of the project.

Number of months' operation in each year

It is important to enter a specific number of months in each cell that relates to each year of your operation. If your project started in September 2017, the costs that you will detail on the spreadsheet will relate to a portion of the year 2017/18 rather than to a full year. Calculated cells on the summary sheet will ensure that part years contribute the proportionate amount of costs to the relevant totals.

Costs of project evaluation

These costs would normally be excluded from the unit cost calculation, since the latter are meant to inform planners about what it would cost for someone else to replicate this project and produce similar outcomes for users. The cost of evaluation is additional to that, and so should not be listed within the costs on the spreadsheet.

8.2 Service users

The purpose of this section of the spreadsheet is to enable calculation of the unit cost, or cost per individual service user of the services they receive. In essence it is the total cost of the project divided by the number of service users, but working this out is not always straightforward and requires some careful consideration as there will be different numbers involved at different levels of participation.

Projects are likely to have their own definition of service user involvement but all will have lists of individuals at different levels. At the minimal level, a referral to the project and

following up information from a range of agencies takes a certain amount of staff time. At the next level, the user having initial meetings with a caseworker or mentor, or attending three successive group sessions should be counted as some degree of participation (although unlikely to have much impact on outcomes). Finally, the individual attending on a regular basis, taking a positive interest, showing initiative and possibly completing a course towards a qualification may be considered full participation. The number of individuals will reduce at the more intensive levels.

If only the users with full participation are counted, the unit cost for most projects will appear high, as most users in contact with the project will not reach this level. On the other hand, if all those with referrals are counted, the cost may appear unrealistically low for the type of work that a project most often undertakes.

The picture is further complicated by the fact that some projects do not undertake any intensive work with individuals, but instead act as a guidance and signposting service to other agencies.

In order to allow the unit cost calculations to be as transparent as they can, we have designed the spreadsheet to focus on three main levels of participation. We have referred to these as 'full', 'some', and 'minimal' participation, and space is provided (at **Col B**) for projects to enter their own definition of each.

There is also space on the form (at **Rows 5** and **6**) for projects to enter different categories of participant if the three bands referred to above do not capture everyone who is involved. Projects will need to make sure that they collect details about how many participants are involved at each of these levels each year in order to complete this part of the spreadsheet.

In addition to providing details about the number of participants involved at various levels, the spreadsheet asks projects to estimate the overall level of resources (as a %) allocated to participants in each group. For a project that does very intensive work with a small number of 'full' participants, that work might absorb 80% of project resources, referrals that are subsequently not acted on might only take up 20%, and no other category may involve any project resources at all. It is important to note that however these percentages are allocated to different groups of participant, they must total 100% for each year. The spreadsheet will flag up a warning if the values entered do not add up to 100%.

It is worth noting that these percentages are very basic estimates, which will to some extent hide some of the broad complexity that is reflected in the practice of many projects. This is because whether a service user is regarded as a full or less than full participant may be a function of several factors, including both the intensity and duration of their involvement.

Some individual participants will be involved in project work very intensively but across several short periods of time, while others might have moderate levels of involvement over longer periods of time, or more consistently. Because of this, identifying individuals as being in categories such as 'full participants' is also often not a straightforward exercise.

The research team looked at several alternatives capturing information about the intensity and/or duration of service user involvement, but efforts to incorporate a suitable range of this data made the spreadsheet far more complicated and harder to use.

If the cost share for a particular category of user is the same for each year of operation, then the same % will be entered for that category of user in **Col D, Col F, Col H**, and so on.

However, some projects find that the cost share changes as the project has developed. For example, in the first year the work may have consisted of dealing with referrals and users who did not engage, but in later years those who engaged fully took up a much larger share of project resources. In such cases, the apportionment of project resources to different categories of user will have changed from year to year, and different % figures will need to be inserted into the relevant cells.

These percentages are used to generate an average cost share (at **Col P**) for each type of participant (across the whole life of the project), and the latter percentage in turn is used on the summary sheet to calculate unit costs by type of participant.

8.3 Summary sheet

The summary sheet is meant to provide a clear snapshot of overall details concerning project costs – including overall setup costs, and running costs by year – and then a range of different unit costs.

Project setup costs are presented as an overall figure in **Cell B1** on the summary sheet. This figure is taken from the total arrived at on the 'Setup costs' sheet.

Running costs by year are then presented on the summary sheet, and these figures are calculated from the information entered onto the 'Running costs' sheet. They are calculated by year and then totalled for each year, and a weighted annual cost by year is then calculated (in cells **B10** through **G10**). The latter figure takes into account details entered onto the 'Running costs' sheet concerning part years.

Finally in this section of the Summary sheet, a figure is calculated for mean annual project cost. This figure is simply the average annual cost across all years.

Calculating unit costs

The summary sheet then presents calculated unit costs.

As noted in the above section, calculating a project's unit cost is not as straightforward as it might seem, because in practice there are different types of project involvement. Different types of involvement can be associated with widely varying costs.

We have therefore designed the spreadsheet to calculate unit costs in a variety of ways, such as by year and by type of service user involvement for example, and also to calculate overall unit costs.

Given that different calculations of unit costs will be relevant to different reporting contexts, we felt that it was better to have several estimates to choose from, than a single one which would be inaccurate for some purposes.

For each type of involvement, the unit cost is the total cost of the project (excluding setup costs) divided by the number of service users for a particular year (or overall), taking into consideration the % of project resources taken up by work with people in that group. The summary sheet first calculates unit costs by type of involvement and by year. It does this by dividing the number of service users entered into cells in **Col O** on the 'Service users' sheet' by the total costs for each year (at **Row 8** of the summary sheet), and by weighting these products according to the percentages entered into **Col P** on the 'Service users' sheet.

Overall unit costs by type of involvement across the whole project are then provided, and these are averaged across all years of the project's operation.

Finally, the summary sheet calculates a single overall unit cost for the whole project, at **Row 26**. This figure is a weighted average across all types of involvement and all years of operation.

8.4 Setup costs

These are the additional costs for developing a new project, which occur only once, usually before the project formally starts. They should not normally be added in to a unit cost calculation, which relates to the normal running costs and enables comparison of special projects with mainstream services. The setup costs show how much resource went into developing the project and can be compared with the overall cost of the project. For short term projects, the setup costs are likely to be disproportionately high.

Row 2 – project manager time. This is the time spent by the project managers before the project was up and running. The tasks could have included negotiations, meetings, bidding for funding, and publicity. In some cases this amounts to several months work, in others a few weeks.

Enter salary and on-costs as in the Operational costs sheet for relevant managers. Estimate the amount of time spent. For example, one week of a manager's time would be equivalent to 2.3% of their FTE cost (assuming approximately 44 working weeks in a year).

Row 3 – enter salary and on-costs, % of FTE and total cost as above for administrative and finance staff.

Row 4 – enter salary and on-costs, % of FTE and total cost as above for any senior managers who may have spent time on developing the project.

Row 6 – travel. Estimate the costs of any travel in relation to setting up the project.

Row 7 – room hire and associated expenses of meetings. Include meeting costs in relation to setting up the project, including meals, rooms and so on.

Row 8 – legal costs. Include any legal costs such as setting up contracts for joint work between different organisations.

Row 9 – recruitment and training. Include any of these costs that occurred before the project could begin.

Row 10 – other setup costs. Include any of these costs that occurred before the project began, and ensure that the total is broken down somewhere separately before entry.

8.5 **Costing tool – worked example**

The following tables are included to illustrate what the spreadsheets look like when populated with actual project data. The summary sheet presented below contains calculated values generated from data entered on each of the following spreadsheets. These are for running costs, service users, and set up costs respectively.

The summary sheet example is then followed by examples of the completed spreadsheets covering the latter areas. The values entered into the sheets for running costs, service users and set up costs feed into the calculations presented on the summary sheet.

Table 8.1: Summary sheet

Overall set up costs for project	£9,398.95
----------------------------------	-----------

Running costs by year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Staff costs	£89,012.50	£90,258.68	£91,522.30	£93,469.11	£0.00	£0.00
Other costs	£26,296.00	£26,649.64	£27,008.58	£25,352.91	£0.00	£0.00
Total costs	£115,308.50	£116,908.32	£118,530.88	£118,822.03	£0.00	£0.00
Weighted annual cost by year	£138,370.20	£116,908.32	£118,530.88	£118,822.03		
Mean annual project cost	£122,496.45					

Unit costs by year and service user group	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Full participation	£1,921.81	£1,948.47	£1,896.49	£1,901.15		
Some participation	£922.47	£350.72	£395.10	£237.64		
Minimal involvement	£288.27	£292.27	£296.33	£297.06		
Category 4						
Category 5						

Overall unit costs by service user group	
Full participation	£1,911.82
Some participation	£489.14
Minimal involvement	£293.48
Category 4	
Category 5	

Overall unit cost for project –	
weighted average	£1,483.23

Staff costs	Year 1			Year 2				Year 3		Year 4			
Position	Salary and on-costs	% of FTE	Costs										
Project staff													
Position 1	£27,554.00	100%	£27,554.00	£27,939.76	100%	£27,939.76	£28,330.91	100%	£28,330.91	£28,954.19	100%	£28,954.19	
Position 2	£23,999.00	100%	£23,999.00	£24,334.99	100%	£24,334.99	£24,675.68	100%	£24,675.68	£25,218.54	100%	£25,218.54	
Position 3	£14,677.00	100%	£14,677.00	£14,882.48	100%	£14,882.48	£15,090.83	100%	£15,090.83	£15,422.83	100%	£15,422.83	
Position 4	£14,677.00	100%	£14,677.00	£14,882.48	100%	£14,882.48	£15,090.83	100%	£15,090.83	£15,422.83	100%	£15,422.83	
Sessional staff													
Position 1	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 2	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 3	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 4	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Admin and finance staff													
Position 1	£16,344.00	20%	£3,268.80	£16,572.82	20%	£3,314.56	£16,804.84	20%	£3,360.97	£17,040.10	20%	£3,408.02	
Position 2	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 3	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 4	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Management and supervision costs													
Position 1	£48,367.00	10%	£4,836.70	£49,044.14	10%	£4,904.41	£49,730.76	10%	£4,973.08	£50,426.99	10%	£5,042.70	
Position 2	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 3	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	
Position 4	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	£0.00	0%	£0.00	

Table 8.2: Running costs – worked example

Other costs	Year 1	Year 2	Year 3	Year 4	
Office costs	£4,567.00	£4,635.51	£4,705.04	£4,775.61	
Mobile/remote laptops	£700.00	£700.00	£700.00	£700.00	
Staff recruitment	£800.00	£800.00	£800.00	£0.00	
Legal costs	£720.00	£720.00	£720.00	£0.00	
Volunteer recruitment	£500.00	£500.00	£500.00	£0.00	
Volunteer expenses	£0.00	£0.00	£0.00	£0.00	
Staff training	£0.00	£0.00	£0.00	£0.00	
Volunteer training	£0.00	£0.00	£0.00	£0.00	
Staff travel	£5,034.00	£5,109.51	£5,186.15	£5,263.94	
Publicity	£0.00	£0.00	£0.00	£0.00	
Project activities	£3,975.00	£4,034.63	£4,095.14	£4,156.57	
Project equipment	£0.00	£0.00	£0.00	£0.00	
Additional services from another agency					Describe additional service
Additional service 1	£10,000.00	£10,150.00	£10,302.25	£10,456.78	Training provision
Additional service 2	£0.00	£0.00	£0.00	£0.00	
Additional service 3	£0.00	£0.00	£0.00	£0.00	
Other costs					Describe additional cost
Other costs 1	£0.00	£0.00	£0.00	£0.00	
Other costs 2	£0.00	£0.00	£0.00	£0.00	
Other costs 3	£0.00	£0.00	£0.00	£0.00	
	Year 1	Year 2	Year 3	Year 4	
Specify definition for year (e.g. 2017/18):	2014/15	2015/16	2016/17	2017/18	
Specify no. of months' project operation in this year	10	12	12	12	

Table 8.3: Service users – worked example

Category of user	Definitions	Year 1	Cost share	Year 2	Cost share	Year 3	Cost share	Year 4	Cost share	Year 5	Cost share	Year 6	Cost share	Total	Average cost share
Full participation	Regular attendees; clients worked with most intensively	30	50%	45	75%	50	80%	50	80%	0	0%	0	0%	175	71%
Some participation	Clients involved only partially or intermittently	50	40%	50	15%	30	10%	50	10%	0	0%	0	0%	180	19%
Minimal involvement	Clients that are referred, but who end up having minimal or little involvement	40	10%	40	10%	40	10%	40	10%	0	0%	0	0%	160	10%
Category 4		0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Category 5		0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

Table 8.4: Set up costs – worked example

Item	Cost	Salary and on-costs	% FTE
Time of project managers, planning and administration, negotiation and publicity	£2,288.25	£45,765.00	5.00%
Administrative support	£2,456.70	£24,567.00	10.00%
Time of other senior managers	£0.00	£0.00	0.00%
Meetings with senior colleagues	£0.00	£0.00	0.00%
Travel	£0.00		
Room hire and associated costs of meetings	£0.00		
Legal costs	£0.00		
Initial recruitment	£4,654.00		
Other set up costs	£0.00		
Total set up costs	£9,398.95		