



Good Practice Briefing

Data collection and analysis for M&E

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Introduction

Sharing Our Strengths

WRC and Women and Girls' Network (WGN) have been funded by London Councils to deliver a four-year project, Sharing Our Strengths, aimed at providing second tier support to London's violence against women and children sector through the sharing of knowledge, skills and good practice and the facilitation of networking and partnerships. The project will run from February 2009 to March 2013.

This support is primarily available free of charge to organisations funded under the London Councils specifications which cover violence against women and children (38, 42, 43, 59, 60, the combined 61 and 63, 62, 65, 69, 70 and 72).

What support does the project provide?

The support comes in a number of forms:

1. Accredited training for frontline workers
2. Professional exchange seminars
3. Good practice briefings and template policies
4. Training and 1-1 support on monitoring and evaluation and infrastructure issues
5. Monthly email newsletter - email IsabelM@wrc.org.uk to subscribe
6. 6-monthly discussion and networking meetings for funded organisations
7. Membership of WRC's online women's sector network

For more information, please see www.wrc.org.uk/sharingourstrengths

Good practice briefings

The purpose of the good practice briefings is to provide VAWG organisations with information to help them become more sustainable and contribute with making their work more effective.

Understanding monitoring and evaluation

This good practice briefing (GPB) is designed to help organisations develop a basic understanding of outcome-based monitoring and evaluation (M&E) as well as introducing and explaining a variety of data-collection methods, procedures for analysis and means for the effective presentation of information.

Monitoring and Evaluation constitute fundamental tools in the context of outcome-based management and can be employed by organisations to focus and make their work more efficient.

Monitoring and evaluation constitute interlinked, although distinctive processes.

Monitoring: Refers to the continuous and routine gathering information with the purpose of checking the progress of a project against a plan. Monitoring can be about activities of project, service users, or external factors affecting an organisation or project.

Evaluation: Constitutes a punctual in-depth study to answer strategic questions about the impact of the project and the aspects that need changing. Evaluation uses monitoring data (amongst other information) to make judgements on the overall direction and value of the project. This assessment of “value” –the worth of something—is what makes evaluation distinctive (CES, 2002)

The Charity Evaluation Services¹ highlights some basic points for successful monitoring:

- Build simple, user-friendly monitoring systems into everyday activities
- Collect data at the most natural point
- Make sure that all those responsible for monitoring have clear and consistent guidelines
- Make sure that monitoring records are completed fully and accurately
- Give people collective monitoring data feedback on their work
- Check that you are not collecting the same information more than once.

Monitoring and evaluation are essential processes that help organisations demonstrate results, enables the effective use of resources, gathers user’s views on an intervention, gives credibility to the organisation in the eyes of possible partners and funders and can provide a lever for further funding.

While monitoring and evaluation are separate processes, the collection and analysis of monitoring data constitutes a fundamental resource for a successful evaluation.

In this GPB, we will succinctly explain the process of monitoring outcomes, introduce methods to analyse data and introduce some of the best way of presenting monitoring information to different audiences. We will not discuss the issue of evaluation, which deserves a separate, in-dept, consideration.

A clarification of terms

¹ CES (2002) First Steps in Monitoring and Evaluation. Available online: <http://www.ces-vol.org.uk/downloads/firststepsinmonitoringandevaluation-738-746.pdf>

Monitoring and evaluation often provokes feelings of anxiety and fear amongst those in charge of it within organisations. Much of those negatives feelings arise from the prevalent confusion and inconsistency regarding monitoring and evaluation terms most frequently used, both by organisations delivering services and by those funding them.

In order to dispel those fears we will start here by clarifying the terms most commonly used in Monitoring and Evaluation and to which we will be referring throughout this GBP. We have adopted the terminology developed by the Charities Evaluation Services (CES), which can be checked on its website².

The central M&E terms used within the CES framework are:

- Aims: Mission of the project
- Objectives: The activities or practical steps a project or organisation plans to carry out in order to accomplish its aims
- Outcomes: The changes that the project or intervention wants to bring about
- Outputs: All the products, services or facilities resulting from an organisation's activities

The CES has designed a “planning triangle” to help organisations clarify what they are trying to achieve and identify the different aspects of their projects. This planning triangle can help organisations understand the logical framework that underlies their project as well as recognise the different elements to take into consideration when planning a M&E system for their projects.

Figure 1



(CES planning triangle: <http://www.ces-vol.org.uk/index.cfm?pg=124>)

As it can be seen from the triangle, from the aims comes the **outcomes** and from the objectives come the **outputs**.

² <http://www.ces-vol.org.uk/downloads/jargonbuster-164-171.pdf>

What do outcomes tell us?

Outcomes tell us that the activities of the project are producing the **effects** we intended. They are a measure of the **effectiveness** of our work.

For this reason, gathering **outcomes data** is fundamental to know if our work is producing the changes we intend amongst the beneficiaries of our project, intervention or organisation.

The outcomes are the changes, benefits, learning or other effects that occur as a result of the project's activity. They are different to the outputs, which refer to all the services and products that are delivered as part of a project.

When identifying outcomes, it is fundamental to ask: "what is different, what has changed through the delivery of our project and its activities?"

It is often possible to identify outcomes by the presence of **words of change** such as 'reduced', 'increased' and 'improved'.

One way to formulate outcomes is to turn a statement of a problem into a statement of change.

Outcomes can be: wanted, unwanted, expected or unexpected. They can take place in a variety of sites: in the individual, community, organisation, environment or family.

Some funders prescribe the outcomes your work must generate as condition of your funding, but others leave each organisation to decide which outcomes they will be measuring and reporting.

An outcomes-based approach to M&E

From the 1990s, there has been an increasing trend amongst funding bodies and service providers to move towards selecting outcomes as key elements for performance measurement.

Apart from regulatory requirements to measure outcomes, funding bodies are increasingly demanding evidence of the success of projects and programmes in terms of the **benefits and changes** that they generate amongst their beneficiaries. Measuring outcomes is a clear way to demonstrate the effectiveness of your work.

Organisations such as London Councils and the Big Lottery are "outcomes funders". Local government and other public agencies are increasingly moving to outcomes-based commissioning³.

Some benefits of an outcome-based approach:

- Makes organisations more sustainable

³ Ellis, J. (2009) The case for an outcomes focus Charities Evaluation Services. Available online: <http://www.ces-vol.org.uk/downloads/thecaseforanoutcomesfocus-501-509.pdf>

Organisations that can demonstrate their effectiveness in promoting changes amongst their beneficiaries are more successful in attracting funding. Outcome information enhances record-keeping systems and these become the basis to show the organisation's impact on people's lives. Such accountability to funders, beneficiaries and stakeholders is fundamental to guarantee sustainability.

- **Brings clarity to mission and goals**
Defining anticipated outcomes in terms of changes amongst the beneficiaries brings clarity to projects and creates an intense focus on the result of our work on client's lives. It concentrates staff efforts on common goals and purposes. It functions as a powerful motivator for staff, who can observe the progress they are making with participants in a consistent and tangible way.
- **Helps to improve service delivery**
Outcomes-based information helps organisations understand achievement; identify effective practices, and direct future activities. As the focus on outcomes makes weaknesses starkly evident (when the expected changes fail to materialise), improvements can be made and changes can be closely directed to the areas that have been identified as weak.
- **Creates a single voice for the whole organisation**
Outcomes finding become the basis of brochures, public statements and persuasive communication that position organisations in the community as a successful one. This strong identity of organisations can become a powerful tool for recruiting staff and volunteers.

Outcome data can provide benchmarks and comparisons across programmes and organisations. This can support smarter decisions about resources and management and improved project design, which will contribute to improvement in the lives of project beneficiaries.

Data on outcomes needs to be interpreted and translated into changes in practices to improve the quality of services. Organisations need to develop the adequate expertise and systems to use findings about data in order to support their continuous organisational development.

Outcome measurement needs to be placed in the context of information about resources, activities and outputs.

Identifying different types of outcomes

Outcomes – the significant changes that directly result from your activities—can be split in two types: hard and soft.

Hard outcomes are those changes which are easily quantifiable, such as: attendance at a training session, number of children given accommodation at a refuge, the achievement of a qualification or getting a job. They can be expressed as a number or a percentage.

Soft outcomes are less quantifiable, more qualitative. Soft outcomes are usually defined as intangible, a matter of degree and more difficult to assess. They are commonly used for identifying changes in attitudes, self-perception or skills. They often constitute, but not always, intermediate outcomes.

Organisations need to be systematic when collecting data on hard *and* soft outcomes.

The first step for a successful M&E is to identify and list every outcome of your project and place in relation to the different aims and objectives of your project or organisation.

Some funders will give you specific outcomes to work towards, whereas others will expect you to design the outcomes for your project.

Sometimes, difficulties arise when identifying and measuring specific outcomes. These problems are often related with: quantifying small steps or changes, demonstrating prevention work, people 'going backwards' within the context of the project, working with very vulnerable service users (and accessing information about their situation) and attributing outcomes to your work.

It is important to devote some time to consider how these issues may arise in relation to your problem and find ways to address them effectively.

The achievement of an outcome is the confirmation of whether or not a particular change (in individuals, organisations or communities) has taken place. In order to identify progress towards an outcome, it is fundamental to be able to identify and measure (or register) change.

However, some outcomes do not describe change; they might involve preventing something from happening. For instance, an outcome for a successful VAWG service might involve helping women affected by domestic violence to remain in their homes. In this case, preventing homelessness would constitute a positive outcome of the project.

Intermediate outcomes and milestones

One common challenge when measuring outcomes is that progress towards an outcome can be slow and some clients might not have reached the desired outcomes by the end of the project. This does not mean that no progress has been made, as the client may have benefited greatly from the intervention. However, as outcomes often present idealised versions of change, they can represent huge changes for service users, which can take time –beyond the framework of the project– to be achieved. In these circumstances, it is useful to identify and measure intermediate outcomes.

Intermediate outcomes

Intermediate outcomes constitute smaller step-changes that take place between the initial contact with the service user and the achievement of the final outcome. Registering and measuring these intermediate outcomes takes into account the actual progress of clients on the way to the major outcome. It also reflects accurately the work carried out as part of the project and the changes it has promoted in the lives and conditions of service users.

Look at the main outcome and come up with the different changes which form the journey towards achieving the final outcome. Keep a note of these intermediate outcomes and do justice to your project's work and to your clients' progress towards their goals.

Milestones

Milestones are specific types of intermediate outcomes. They constitute **key** changes on the way to the desired outcome. When monitoring outcomes, it is essential to identify both intermediate outcomes and milestones that tell us that a fundamental change or a new stage has been achieved in the process of change.

In order to identify the milestones for an outcome, we can ask: what are *key steps* towards achieving the target?

Measuring a baseline

In order to register and measure change, we need to know what the situation was before the intervention took place. The measurement of situation we aim to change before any intervention, service or activity has taken place is known as the **baseline record**. The baseline measurement provides us with a starting point against which changes can be measured and compared.

However, on occasions, retroactive sources of data are not available. In those circumstances, it can still be possible to establish a retrospective baseline position, by asking service-users for changes over time. For instance, to establish a baseline regarding women's organisations involvement in local government one might include the following question in a survey: "Compared to three years ago, do you feel more or less involved in local decision-making?"

It is fundamental to gather baseline data against the same indicators that you will be using to assess change. For this reason projects must clarify their outcomes (and indicators) right from the start⁴.

A **performance matrix** constitutes a useful monitoring tool that can support organisations in the development of an outcome-based approach to management. It can be used to keep track of your achievements by comparing our actual outcomes against the targets by each of the outcome indicators.

Figure 2
Performance matrix

Outcome	Indicators	Baseline	Target	Actual outcome	Difference
1.					

Selecting outcome indicators

Indicators are signpost of change. They are the signs or clues that we monitor in order to assess progress towards our outcomes. Indicators must meaningfully capture key changes towards the outcomes.

⁴ CES (2010) Assessing Change. Developing and using outcomes monitoring tools. Available online: <http://www.ces-vol.org.uk/downloads/assessingchange-740-748.pdf>.

The key for choosing indicators is their **credibility**. In order to be credible, an indicator must be as direct as possible a reflection of the outcome itself, be precise and sensitive by changes in the outcome but remain relatively unaffected by other changes. Finally, indicators must be realistic in terms of the data collection methods they require.

When planning your project, it is important to identify as many indicators as possible for each outcome. Then, you can prioritize them and choose those that are more practical and economical for you to measure. Usually, 2 or 3 indicators per outcomes are sufficient.

Before starting to collect data on indicators, ask yourself: are we already collecting data on these indicators? Can we collect the necessary data just by adapting our current system? Do we need a new method for collecting this information?

Smart indicators

Once you have come up with all your indicators, you can decide which of them you will measure, taking into account your available resources and the practicalities of measurement.

Make sure that your outcome indicators are “smart”:

- S-pecific
- M-easurable (or Monitorable)
- A-chievable (and/or Attributable)
- R-elevant (and/or Realistic)
- T-ime-Bound

In order to be credible and relevant, indicators must reflect the perspectives of all those involved in the generation of project outcomes. For this reason, remember to involve as much as possible service users and other stakeholders in the selection and measurement of indicators.

A data collection matrix (as the one shown in Figure 3, below) can be useful to organise your data collection process.

Figure 3
Data collection matrix

Indicators	Data source	Data collection method	Who will collect the data?	Who will analyse the data?	Who will report the data?	Who will use the data?

Finally, decide which **record-keeping method** you are going to use to register your monitoring data. Setting up a record keeping system, computer-based or paper-based, is a key part of the project start-up and should be done early, together with planning the monitoring and evaluation system⁵.

Once you and your organisation have identified the outcomes of your work and the relevant indicators, you are ready to start collecting information.

Data sources for M&E

Deciding how to collect M&E data and what sort of data you will collect is crucial to your findings.

Data sources can be classified according to their source and according to their type.

Primary and secondary sources of data

According to their **sources**, it is useful to distinguish between primary and secondary data.

Primary data is new data generated and collected specifically for the M&E process, for instance, through interviews and questionnaires. The collection of primary data implies some form of contact with respondents.

Secondary data is data collected for purposes other than your study, as part of other research or evaluation processes, but is useful as a source of information for your M&E process.

Examples of secondary data include: population statistics from the census; police crime figures from the Home Office and school exam results. Collecting secondary data involves looking at other people's research, reports or statistics. If you are a campaigning organisation, much of your outcomes data may come from secondary, documentary sources, such as articles in the media, government papers and publications⁶.

Quantitative and qualitative data

According to their type, data can be divided into quantitative and qualitative data.

We can do different sorts of things with quantitative and qualitative data.

Quantitative data

Quantitative data can be expressed in numbers. It allows you to make numerical comparisons and look at their distribution. Quantitative data answers questions such as: who, how much and how many.

It answers to questions such as: who, how much and how many. Exclusive use of quantitative data risks leaving the resulting information out the context. For this reason, it is advised to accompany numerical data with information to provide **meaning** to the behaviours, changes or relationships that have been quantified.

Qualitative data

⁵ CES (2002) Practical Monitoring and Evaluation: A Practical Toolkit. Woodworks: London.

⁶ CES (2010), Assessing change. Developing and using outcome monitoring tools. , p. 9.

Qualitative data provides an in-depth understanding of meanings. Qualitative data (such as life stories, drawings and interviews) tends to be easy to gather and time-consuming to analyse. Qualitative data usually responds to questions such as how and why.

There are certain computer packages that can be useful in organising and analysing qualitative data (such as Atlas.ti[®] and Nudist). However, apart from costly, these are only support tools: all the categorisation, coding and interpretation of the qualitative data remains a work of the person carrying out the M&E.

Qualitative data analysis identifies patterns and contradictions in subjective processes that involve interpretation of meaning. For this reason, it is fundamental to include service users and front line workers in the verification of these interpretations of qualitative data.

For a comprehensive M&E process it is advisable to gather both qualitative and quantitative data. This process of combining several data from different research methods is called **triangulation**. Triangulation provides a richer account of the situation by constructing an account from different perspectives and different sort of data.

Qualitative and quantitative methods can be effectively used to complement one another. For instance, a focus group (qualitative method) can be used to identify the core topics to include in a questionnaire (quantitative method). Also, qualitative analysis of in-depth interviews can be used to provide interpretations to findings of quantitative analysis of survey responses.

It is important to remember to pay attention to contradictions and inconsistencies in the data that may point us to problematic issues needing further consideration.

When deciding on data-collection methods, consider the depth of the information you need to provide evidence of success; what methods are most likely to allow you to gather accurate data; what methods fits best with you service delivery and how easy it is to collect, store and analyse the data.

Make sure your methods are:

- credible
- fit well with the way you work
- appropriate to your service users
- adequate to provide good evidence on outcomes

Some important points when collecting data collection are:

- Be consistent throughout the intervention – use the same (or very similar) instruments so you can compare progress in time
- Collect only the information that will need and use
- Fit the data collection with the normal work of your organisation. Make it part of the routine of the work rather than turning it into a separate activity.

Some data collection methods for M&E

Once the sort of data needed to demonstrate outcomes have been identified, it is necessary to decide the **methods** you will use to collect the data.

In order to gather **secondary data** on the population (health outcomes, crime incidence, income distribution and so on) documentary sources are fundamental. This secondary data is usually combined with primary data generated specific for the purpose of the M&E process.

Some of the most commonly used data-collection methods for M&E include:

1. Self-completion tools

Self-completion tools are used to collect data directly from people. They include questionnaires, tests, forms and diaries.

a. Questionnaires

Questionnaires are a form of data collection in a standardised way from a group of people. They can be presented on paper or online. Questionnaires allow you to collect information from a large number of people in a short time. Very frequently the answers are presented in the forms of scales, and people are asked to rate their knowledge or ability on specific issues. Online questionnaires are relatively cheap, provide facilities to analyse the data and are easy to fill.

b. Tests and forms

They constitute a good resource for assessing changes on skills and knowledge. It is possible to gather outcome data by asking service users to take a written or practical test. Forms can be used to enquire about people's employment situation, housing and other conditions.

c. Diaries

People can keep a daily record of their experiences, feelings and thought. Diaries can take many forms: as pre-set questionnaire that people are asked to fill or as blank pages without a previous structure. They can be a rich source of outcome data as small changes get registered on a continuous basis. They can be difficult and time-consuming to analyse.

2. Interviews

Interviews are meetings to ask questions to individuals or group (either in person or over the telephone). Interviews can be :

- structured – all questions are prepared and organised before the interview
- semi-structured – questions are presented within a fairly opened framework that allows for a flow of communication
- unstructured – informal, open-ended and flexible way of questioning

Interviews can be used in combination with other methods to gather outcome data, by asking people about changes in their lives, levels of knowledge and so on. It is possible to support interview questions with the use of visual prompts such as photographs, maps or newspaper clippings.

3. Group activities

Group activities can provide a rich opportunity to analyse what service users or stakeholders have to say about projects. Group activities can be very structured or more open and flexible. Amongst the most popular group activities used gather outcome information we can mention:

a. Focus groups

Focus groups are moderated group discussions around a specific issue. They require an observer to register the content of the discussion and a moderator to guide the dynamic of the group.

b. Group interviews

They are usually semi-structured and conducted with a small group of people. The data is gathered as videos or written records that then need to be turned into qualitative or quantitative information.

4. Observation

It entails systematically studying and recording information on changes you can see, hear or experience. Outcomes that can be observe include: changes in children's play style, improvement (or deterioration) of environment and changes in personal appearance. In order to increase the reliability of the data gathered, it is usually advised to have an structured observation schedule and more than one observer. This allows researchers to identify consistencies and inconsistencies in their reports.

“Mystery shopping” constitutes a popular way of generating observations for the purpose of monitoring and evaluation. It entails taking the place of a service user in order to experience services (o situations) as service users would. This generates a systematic account that can be compared with similar experiences at different times.

5. Audiovisual methods

These can be used to register information on outcomes in formats such as of videos, drawings and photographs. They are good for gathering qualitative data and can be included as part of routine group activities of a project. Audiovisual methods are an effective way of engaging children, for example, who relish the opportunity to take pictures or record a video.

Data generated through audiovisual methods tends to be relatively easy to gather and difficult to organise and analyse.

6. Social media

Social media refers to the content generated by users of the internet through tools such as Facebook, Twitter, Youtube, blogs, emails and podcasts. Social media can be used to collect outcome data. For instance, it is possible to record the times a specific message has been resent through twitter or posted on Facebook. Also, social media can be used to reach young audiences who can report on issues such as personal health, schooling and experiences of bullying. Other data that can be gathered from social media include: number of visitors to website per month, time spent on site, number of twitter followers, and numbers of viewers of a video or podcast.

6. Participatory data collection methods

Some methods of gathering outcome monitor data require a very active participation of the service users or beneficiaries of the project, rather than solely responding to the questions posed by a researcher. Amongst the most popular of these participatory data collection methods we find the following:

- Graffiti wall: A large sheet of paper hung on the walls and participants asked to write comments on them during the activity or event.
- Card sorting: Participants are asked to rank a group of cards according to preference or relevance.
- Evaluation wheel: A wheel drawn on a piece of paper, divided in sections that represent each aspect of the problem or issue. Participants are asked to tick the things they liked.
- Timeline: Each participant plots their journey on two axis, one indicating their time involved with the project and the other the scale of changes from positive to negative.
- The river of life: Participants are asked to describe their life story as if it were a river with meanders, islands, ports, bridges, and so on.
- Targets: A 'target' with concentric circles presented to participants, who are asked to rate their knowledge and skills at the beginning and at the end of an activity.

It is important to distinguish these participatory data collection techniques from participatory evaluation methods. Participatory evaluation is more than the use of specific techniques or tools for data collection: it requires establishing a partnership approach to M&E in which stakeholders are engaged throughout the process, identifying appropriate measures, data collection methods and gathering and analysing data⁷.

Once you have decided which method you will use for each outcome and indicator, it is advisable to draw a data collection inventory where you can organise the different data collection methods you will use for each outcome and indicator.

Figure 4

Data collection methods inventory

	Interviews	Case records	Evaluation questionnaire	Target - distance travelled	Who will report the data?	Who will use the data?
Outcome 1 Indicator 1						
Outcome 1 Indicator 2						

Designing data-collection instruments

It is important to take enough time to choose and design our data collection. Common difficulties are asking the wrong questions, collecting too much or too little information or collecting information that does not relate to our outcomes.

⁷ http://depts.washington.edu/ccph/pdf_files/Evaluation.pdf

Beware of collecting more data that you can analyse, data that has no place in your project framework or collecting data in different frameworks/formats.

In what follows we present some guidelines on designing scales and writing interview questions, which can be helpful for a variety of data collection techniques.

Questionnaires

Remember that the way you order your questions can affect people's responses. Try to start with questions easy to answer and non intrusive and move towards more difficult and personal ones at the end. Make a list of the issues you want to explore and then design the questions. Plan how you are going to analyse the responses to each question.

Scales

Use the same scales and rating to compare across time. Be consistent rating your scales. For instance, left to right, 1 to 5 or positive to negative. Use a scale of between four and seven points, with a maximum of ten.

Writing interview questions

Identify the outcomes that you want to measure and then write up questions to explore the issue. Draft an interview schedule with outcomes, indicators and questions to ask. *Remember, the question that you want to answer for your monitoring may not be the same question you need to ask your service users.* For instance, to explore changes in levels of confidence, rather than asking "How confident do you feel about applying for work", it would be more productive to ask about specific steps that service users are taking for finding a job. Try to combine different sort of questions (open, closed and scaled, for instance) keeping in mind the analysis that different sort of responses will require.

Before you adopt them as methods for data collection, test your instruments and make changes. Piloting your data collection tools is essential to make sure that you are gathering the data you need.

Consider how you will store and process the different sort of outcome data you will gather. Try to identify issues that require attention such as confidentiality and data protection procedures.

Analysing and reporting M&E information

The purpose of analysis of outcome data is to transform raw data into useable information. We will concentrate here on the basic analytical activities that nearly all those in charge of M&E can do by themselves. The emphasis should be on interpreting data to generate information useful for decision-making.

The key for analysing your data is to organise it in a logical, well-argued and persuasive way.

It is important to emphasise that although the analysis can be carried out by specialised staff rather than by direct service providers (who are usually overloaded with responsibilities), "direct service providers should be a major information source for explanations of key findings and for help in interpreting the data" (The urban institute, p. xi).

The fundamental method for the analysis of data and its transformation into usable information is comparison.

Each comparison provides a “benchmark” against which the latest values for outcomes can be measured.

Data collected using quantitative methods can be analysed for patterns: percentages, averages, ratios, ranges between lowest and highest levels, trends or rates⁸.

Data collected using qualitative data methods requires a thematic analysis. This can be done through using categories that have been previously established (for instance, gathering people’s understand domestic violence, gaps and contradictions) or by identifying emerging topics or themes in a text.

The Urban Institute⁹ suggests 10 steps for analysing outcome data. The first 3 steps describe the essential analysis that all project monitoring must carry out. The final 6 steps refer to more complex analysis that are not always required, but can be useful for decision-making processes as well as for reporting to funders. In what follows, we present a brief description of each of these steps:

Step 1

Calculate overall outcomes for all clients

Tabulate outcomes for all clients in the programme during the reporting period. Display outcomes both by percentage and number of clients.

Step 2

Compare the latest overall outcomes with outcomes from previous time periods

- The most recent year with the previous year
- The last month with the previous month
- The last quarter with a similar period in the last year
- The cumulative performance for x amount of time with past cumulative performances

Step 3

Compare the latest overall outcomes with pre-established targets

Indicate the extent to which the project is meeting, exceeding or falling behind set targets. The first set of outcome data can function as a baseline for future data.

Step 4

Compare the last overall outcomes with outcomes for clients in other similar programmes and to any outside standards.

Compare the outcomes of your project with outcomes of other similar projects. Here it is important to pay attention to the different definitions of problems, populations and targets, as well as differences in data-gathering procedure, sampling, context, funding and timing that can undermine or invalidate the comparison.

Identify ‘standards’ of desired values and compare outcomes with those standards.

⁸ CES (2002) Practical monitoring and Evaluation: A practical toolkit. Woodworks: London.

⁹ The Urban Institute (2004) Analysing outcome information. Getting the most from data. Available online: http://www.urban.org/UploadedPDF/310973_OutcomeInformation.pdf

Step 5

Compare client outcomes by demographic group

Examine outcome data broken out by client group – identify characteristics related to better outcomes.

Identify how effective the project has been for each client group – make changes to increase effectiveness to groups that show low-impact of the intervention.

Identify characteristics in clients that have a significant impact on outcomes.

This level of analysis requires the monitoring process to gather detailed data on clients and on the project.

Step 6

Break out and compare outcomes by service characteristics

Group subset of clients by service characteristics (sites, procedures, providers, service hours). Cross-tabulate service characteristics with sub-sets of clients for each outcome. This will tell us what service characteristics relate to better outcomes. This sort of outcome data can be used to identify best practices and to experiment with new or modified service delivery procedures¹⁰.

Step 7

Compare the latest outcomes for each break-out group with outcomes from previous reporting periods and with targets

Step 8

Examine findings across outcome indicators

Identify which outcomes require special attention

Step 9

Identify which numbers should be highlighted

Step 10

Seek explanations and communicate the findings

When analysing outcome data is fundamental to place it in context. Internal or external factors may affect the project outcomes. In some cases, these factors are outside the control of the project, but still need to be highlighted when unexpected (good or bad) outcome data emerges from the analysis.

Some external factors that can affect outcomes include:

- Changes in the conditions in the community (economic, statutory, environmental, political)
- Changes in the mix of beneficiaries of the project
- Changes in funding/personnel

Some internal factors that can have an impact on outcomes are:

¹⁰ The Urban Institute (2004) Analysing outcome information. Getting the most from data. P. 17 Available online: http://www.urban.org/UploadedPDF/310973_OutcomeInformation.pdf

- Problems or changes in the design of the programme
- Problems in the implementation
- Unexpected staff changes
- Changes in direction by the funding body

Presenting monitoring data effectively

It is important to present your data in a way that is useful and engaging. Remember to report both the numerical and the percentage value of clients and outcomes. Also, clearly present the actual outcomes values next to the targets.

Graphics can be useful to represent complex monitoring and evaluation data in simple ways that emphasise the key points. They are an effective way of telling a story, showing proportions, making comparisons and trends and in the case of photographs, putting a face on a project¹¹.

Before choosing the graphic to represent your data is fundamental to know our audience and the central issues we want to demonstrate in each case:

- What is the purpose of the report?
- Who will use the information?
- What are the key messages we want to transmit?

Three rules for presenting data using graphics:

1. Keep it simple
2. Choose a graphic that communicates the most important message
3. Don't assume people will read accompanying text

Include these elements in each graphic:

1. Title
2. Clear units of measure
3. Date(s) of data collection
4. Simple design
5. Font size 10 or larger
6. Data sources
7. Sample size

Figure 4

When to use common graphics?

	When to use	Trade offs
Bar chart	Versatile and good for comparisons. Relatively easy to construct.	Units on Y axis (vertical axis) can be too small to show meaningful differences.

¹¹ Minter & Michaud, 2003). Minter, E & Michaud, M. (2003) Using graphics to report evaluation reports. University of Wisconsin, p. 6

Line graph	Useful for showing trends and differences between groups.	Too many data lines can confuse.
Pie chart	Show proportions (percentages) of a whole.	Too many categories can mislead. Not ideal for showing trends.
Illustrations (diagrams, maps, drawings)	Presents lots of information in a small space. Shows technical and geographical data.	May take lots of space. Difficult to reproduce.
Photograph	Adds "human face" to data. Before-and-after images of an intervention.	Costly, may need special skills, may be difficult to reproduce.

(Minter, E & Michaud, M. (2003) Using graphics to report evaluation reports. University of Wisconsin, p. 6).

Checklist for the use of graphics.

Before you start the graphic:

- What audience are you trying to reach?
- What type of graphic is the audience used to seeing?
- What is the main message you want to convey?
- Is this graphic the most appropriate for this message?
- Will a text be needed to clarify the message?

After you create the graphic:

- Is it easy to understand?
- Is it easy to interpret for someone not familiar with the issue?
- Does it reflect the data accurately?
- Is it close to the relevant text?

Remember to tailor your report to the different audiences you want to reach.

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