

Meaningful & Measurable

A Collaborative Action Research Project

Developing Approaches to the Analysis & Use of Personal Outcomes Data

Supporting Use of Qualitative Data in
Service Settings: Collected Briefings
from the Meaningful and Measurable
Project

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May 2015



Supporting the Use of Qualitative Data



Background

Meaningful and Measurable was an ESRC funded collaborative action research project that ran from November 2013 until March 2015. The project was prompted because developing approaches to the recording, analysis and use of personal outcomes data had been found to pose challenges at all levels of health and social care organisations.

Adopting a personal outcomes approach requires a significant shift in the way data are managed, analysed and understood. Standard practice in most organisations has tended to focus almost exclusively on gathering, analysing and reporting quantitative information. During the lifetime of the project it became apparent that this focus has meant that understandings of what you can and cannot do with qualitative data remain very limited.

This resource has been produced in response to the following issues:

First, there is a widespread tendency to equate ‘qualitative data’ with ‘story’, resulting in the potential misuse of individual stories in informing different types of decision making.

In addition, when working with more than one ‘story’ or with different types of qualitative data, two different sorts of issue may arise:

- Quantitative data sampling assumptions and criteria are carried forward, resulting in the inappropriate use of large, ‘random’ samples;
- Uncertainty about the conditions under which qualitative findings might be applied more broadly results in myths about ‘how many’ cases are needed, and a lack of attention to selection criteria.

Finally, there is limited awareness of different approaches to qualitative data analysis, again coupled with a tendency to transfer assumptions from the quantitative tradition.

This resource attempts to engage with the above issues through four briefings, each of which can be read on a standalone basis, although they are best considered together:

- 1) Finding a Middle Ground Between Stories & Statistics
- 2) Sampling Qualitative Data
- 3) Generalisability of Qualitative Data
- 4) Analysing Qualitative Data: An Overview of Different Approaches

The resource is written with the understanding that many action research principles are relevant when working with qualitative data in service settings, particularly in support of a personal outcomes approach. The briefings draw on a comprehensive guide available online ([Ritchie and Lewis 2003](#)) and are illustrated with examples from the Meaningful and Measurable project. We have produced a separate set of briefings in a sister paper focusing on quantitative outcomes data ([Barrie and Miller 2015](#)), which is also available online.

This resource is not a ‘how to’ guide for people working with qualitative data. Further information on using qualitative outcomes data can be found online ([Miller and Daly, 2013](#)).



Briefing 1. The Middle Ground: Between Individual Stories & Statistics

“People must always come before numbers. Statistics, benchmarks and action plans are tools, not an end in themselves. They should not come before patients and their experiences”.

Robert Francis QC, The Mid Staffordshire NHS Foundation Trust Inquiry, 2010

This first briefing considers both the possibilities and limitations of using individual stories in service settings and makes the case for greater use of qualitative data analysis in support of a personal outcomes approach. It has been produced because throughout the Meaningful and Measurable project we found that often when people working in service settings heard the term ‘qualitative data’ they immediately thought ‘story’. The briefing recognises that stories have a role to play, but urges caution when using individual stories for decision-making. It also highlights the unique contributions of other largely overlooked approaches that sit between story and statistics.

Using Individual Stories: Possibilities

In recent years, making greater use of individual stories has been a key response to the increasing calls to put people at the heart of services, to listen to their voices, and to use these perspectives to drive improvements. Stories are integral to the way we communicate and make sense of experience. They can provide us with new and important information, and give a sense of the texture of experiences missing from conventional texts. Initiatives seeking to encourage the use of individual stories in care service settings have often encouraged us to consider stories in their entirety rather than as simply another source of data. When used in this way, stories not only offer powerful examples of what makes for good and difficult encounters in the context of services, but can also encourage a more holistic and integrative understanding of what matters to the teller in the wider context of his or her life.

Using Stories: Limitations

This does not mean assuming that all (and only) individual stories necessarily provide authentic insights into the everyday realities of human services. Story has long been used as a tool of influence and persuasion, including in the realm of policy formation and implementation. Recently the personalisation agenda has been particularly reliant on a combination of formal evidence, individual stories and common sense. Such an approach to policy evaluation has often drawn upon powerful stories of individual transformation, with case studies and testimonies regularly deployed in government documents and reports from other organisations promoting personalisation (Needham, 2011).

While the use of story to foster service improvements by showcasing possibilities is important, individual stories should not substitute other forms of analysis, but should complement them by providing illustrative examples. Needham (2011:59) cautions:

“It is interesting to observe the ways in which the individual stories and claims of self-evidence are layered onto policy evaluations, such that when the formal evidence proves somewhat ambiguous, common sense and/or resonant stories about individual transformation can be deployed to make the case”.



Much depends upon the way the story is presented, how it is positioned, the questions asked of it and subsequent dialogue.

When thinking about applying the key story messages in a particular care setting, it is crucial that other forms of evidence are considered that help to relate the story to the local context and culture.

Beyond this, qualitative investigations are concerned with inclusivity. There is a need to ask whose voices are not being heard and to attend to a range of different 'stories' so that we can build up a more complete picture of the diversity and complexity that characterise human services. To achieve this understanding we need a discipline that can engage with and interpret complexity in a meaningful, valid and, above all, useful way. This is the purpose and unique contribution of qualitative data analysis. It provides the middle ground between individual stories and statistics.

The Middle Ground: Between Stories and Statistics

As described in briefing 4, there is a range of approaches to qualitative analysis. Generally it requires detailed consideration of multiple stories within a given context in order to tell a new story. This entails sifting and interpretation. It fundamentally involves asking why things are as they are and moving from simple descriptions to understanding.

For instance, in the Meaningful and Measurable project, several partners carried out interviews and /or focus groups with practitioners as part of their local action research initiatives. Analysis of the transcripts involved considering different viewpoints and bringing them together to generate new understandings of the ways in which various influences and motivations impact on recording. One key theme to emerge was the importance of recording in relation to memory, which unfolded in three ways:

- Making notes to aid practitioner memory in the process of assessment (*that's important, I'll note that as we need to come back to that point before I leave*).
- Prompt and accurate recording to ensure that the person's priorities and words were recorded, to support relationship building by establishing flow between encounters (*hearing their words reflected back makes people feel listened to and encourages reflection*).
- To support 'organisational memory' by informing other practitioners (*my colleagues need to know that this person does not feel safe at night*).

This understanding in turn has contributed to recognition of the need to elevate the status of recording. Rather than recording being viewed as a transactional activity conducted solely for bureaucratic or accountability reasons, it should be viewed as relational practice integral to an outcomes approach.

Before going on to consider some of the different approaches to qualitative data analysis that may be applicable in the context of outcomes focused working, questions relating to the sampling and generalisability of qualitative data are considered.



Briefing 2: Sampling Qualitative Data

This briefing considers the issue of sampling qualitative data. It has been developed in response to the Meaningful and Measurable project observation that, in many service settings, the more familiar quantitative data sampling criteria and assumptions were carried forward when working with qualitative outcomes data.

The briefing makes the critical distinction between **probability** and **non-probability** sampling, before discussing the two main types of non-probability sampling in more detail. It then considers specific sampling implications when working with qualitative data generated through and about outcomes focused working.

Probability Sampling

Probability sampling is generally held to be the most rigorous approach to sampling for statistical research: units in the population are chosen at random and have a known probability. The aim is to produce a *statistically representative* sample, which is a kind of small-scale model of the population from which it is drawn. This approach is essential in quantitative research so that information generated by analysis of the sample can be used to provide statistical estimates of the prevalence or distribution of characteristics that apply to the wider population. However, it is largely inappropriate for qualitative research and when assessing the 'strength' of a qualitative data sample, it is important not to apply criteria that belong to a different research tradition. Indeed, the principles of probability sampling can actually work against the requirements of sound qualitative research.

Non-Probability Sampling

Qualitative research uses non-probability sampling, where the sample is not meant to be statistically representative of the population from which it is drawn: the chances of selection for each element are unknown and instead the desire to *include* key characteristics of the population is used as the basis of selection. This makes the approach well suited to small-scale, in-depth studies. The main non-probability sampling approaches for qualitative inquiry are purposive sampling and theoretical sampling.

Purposive sampling is precisely what the name suggests: sample units are chosen with a 'purpose', because they have characteristics or criteria enabling exploration and understanding of the themes the researcher wishes to study. This has two principal aims:

- 1) To ensure that all key characteristics of relevance to the subject matter are covered.
- 2) To ensure that, within each of the key characteristics, some diversity is included so that the impact of the characteristic concerned can be explored.

The units may be people, but can also be incidents, documents etc. Where the units are people, the characteristics of interest might be demographic in nature or they may relate to experiences, behaviours, roles etc. When qualitative researchers do decide to include people because of their age, sex or ethnicity, it is because they consider them good sources of information that will advance an analytic goal and not because they wish to generalise to other persons of similar age, sex, or ethnicity. Accordingly, only as many persons of a



particular sex are included in a study as is necessary to obtain that information. There is no mandate to include numbers of women or men in the proportions in which they appear in the parent population. Although there are choices to be made with purposive selection, objectivity is required so that the sample can stand up to independent scrutiny and suggestions of bias can be avoided.

Theoretical sampling is a type of purposive sampling linked to the development and testing of theory. This involves an iterative process whereby the researcher picks a sample, analyses the data, and then selects a further sample to refine emerging theories. This process continues until the researcher reaches 'data saturation', or a point when no new insights would be obtained from further analysis. Theoretical sampling is associated with the methodology of 'grounded theory' (Glaser and Strauss, 1967).

Non-Probability Sampling: The Question of How Many?

Although small is typically deemed to be beautiful in qualitative research, an inadequate sample can undermine the credibility of findings. Factors such as the aim, the type of sampling and research method can be considered to help decide whether enough data has been collected. A sample size of ten may be judged adequate for relatively homogeneous populations where few selection criteria apply, but too small for diverse populations and/or where multiple selection criteria are needed. Equally, sample sizes may be too large to support claims of having completed detailed analyses of data.

Sampling in Practice: Working with Qualitative Outcomes Data

Outcomes focused working typically entails using two broad types of qualitative data:

- *Pre-existing data* in the form of documentation collected for individual assessment and review purposes (including support plans and case notes);
- *New data* generated specifically to inform service improvements and planning, such as by conducting interviews or focus groups with service users, practitioners, managers, information officers or commissioners, or by observing practices.

This was the case with several of the partner projects and the following examples illustrate the application of the above sampling considerations in practice for both broad data types:

Study A: Understanding what good outcomes focused recording looks like and where outcomes are being recorded (sampling pre-existing documentation)

Several project partners sought to better understand what was meant by 'good' outcomes focused recording and whether or not good recording was happening within their organisations, and undertook initial case file analysis to support this. For instance, one project partner was particularly concerned about the lack of detailed supporting text commentary being recorded alongside outcomes scores within its outcomes recording tool and carried out an analysis of 9 complete sets of case files (outcomes recording and scoring tool, support plan and case notes). The sample sought to ensure a range of recording depth within the designated tool, from non-existent to more detailed commentaries. In order to understand any variation across the organisation, the case files were also purposively sampled across 3 different services working with people with diverse types and complexity of mental health support needs. The characteristics of interest to this study thus pertained to the documentation itself and to services.



Study B: Understanding outcomes for older people currently receiving 15 minutes of home care in a given locality (sampling pre-existing documentation)

The above home care study sought to contribute to a larger investigation of the ethics of 15 minute home care visits. It included analysis of pre-existing outcomes case notes and assessment documentation to understand the types of outcomes that were being supported. A deliberate sampling strategy was needed to ensure the inclusion of cases with particular characteristics that were expected to impact on the data, namely the gender, living situation and lapsed time since discharge for older people receiving home care. A possible efficient sampling matrix based on these 3 selection criteria is shown in Table 1 below:

Table 1 - Sampling Matrix for 15 Minute Home Care Visits

Gender	Living Alone	Living with Others
Male:		
Recently discharged (< 4 weeks)	2	2
Not recently discharged (>= 4 weeks)	2	2
Female:		
Recently discharged (< 4 weeks)	2	2
Not recently discharged (>= 4 weeks)	2	2

When working with pre-existing outcomes documentation (rather than directly with people), the sampling principles described in this briefing remain unchanged. In addition, working with existing data offsets issues such as:

- The need to exclude cases which might cause participant harm or distress
- Non-response to invitations to participate
- The risk of participant attrition during the study

However, as the available data are pre-determined and finite, the opportunities for ‘grounded theory’ developments can be limited.

Study C: Understanding the usefulness of outcomes data being recorded within a single reablement service in a given locality from different organisational perspectives (new data)

When conducting the study of the reablement service above, the project purposefully set out to capture the views people carrying out a number of different roles: practitioners, the team manager and a commissioning officer.

The practitioners were selected on the basis that they belonged to the same ‘group’ (i.e. they practiced within the reablement team). While no additional specific selection criteria were employed, it was recognised that, within the group, there would be different perspectives. Sampling therefore aimed to ensure a detailed, nuanced picture. A focus group with 6 practitioners proved sufficient to ensure a diversity of views, as well as eliciting core common themes.

For the team manager and the commissioning officer, individuals were selected on the basis that they held pivotal roles in the organisation, and their perspectives were *critical* to developing understanding of the usefulness of outcomes data. The views of the single team manager and one senior commissioning officer were sufficient for the purposes of this study.



Briefing 3. Generalisability of Qualitative Data

This briefing addresses the issue of the ‘generalisability’ of qualitative data findings. It has been developed in response to Meaningful and Measurable project observations that:

- Organisations make different assumptions and have very different understandings regarding the broader application of qualitative outcomes data findings.
- There is a general tendency to assess the utility of qualitative outcomes information by applying criteria developed for evaluating quantitative information.

The briefing provides an overview of the main considerations in addressing these issues, first reviewing what ‘generalisation’ means in the context of qualitative research, the different types of generalisation and the conditions within which they can happen, then considering the implications in the context of outcomes focused working.

Understandings of the Generalisability of Qualitative Data

Generalisation in social research concerns the potential for drawing inferences from a single study to wider populations, contexts or social theory. It is sometimes referred to as the external validity of research findings. In qualitative research, the term transferability is often preferred.

There is much diversity among qualitative researchers as to the meaning attached to ‘generalisation’ and whether qualitative research findings are capable of supporting wider inference. There is no clear and agreed set of ground rules for the conditions under which qualitative research findings can be generalised or what this process involves.

However, if qualitative data analysis is carried out in an applied policy or service improvement context, some notion of ‘transferability’ has to apply if any wider inference is to be drawn from the data, otherwise there is little incentive to act on this evidence. Qualitative findings can be generalised to situations other than those under investigation, but what this means and the conditions within which this can happen require clarification.

Possible Types of Generalisation

The types of generalisation considered possible in qualitative research are as follows:

Empirical Generalisation

Empirical generalisation considers whether the findings from a study can be applied to the parent population from which the study sample was drawn (**representational generalisation**) or to other settings, services, interventions or contexts (**inferential generalisation**).

For many studies, especially those in an applied context, **representational generalisation** is a key concern, but this type of generalisation typically receives less attention within qualitative research texts. This is unfortunate as the basis for representational generalisation in qualitative research is quite different than quantitative research (which is closely coupled with the concept of *probability sampling*, as discussed in briefing 2).

Qualitative research cannot be generalised on a statistical basis. Essentially, in qualitative research it is the *collective nature* of the phenomena generated by study participants that we would expect to be generalised to other accounts, not the *prevalence or statistical distribution* of particular circumstances, views or experiences. Although individual variants of



views, circumstances experiences encountered in the study sample would undoubtedly be found within the parent population, it is at the level of categories, concepts and explanations that generalisation can take place.

Prevalence can be indicated in qualitative studies through ‘quasi-quantification’ approaches such as the use of terms ‘most, some, frequently’ etc. or through the inclusion of counts of occurrences. This can combat accusations of ‘anecdotalism’ and give a sense of the extent to which a given phenomenon occurs. However, there would be no suggestion that these frequencies [precise or approximate] would be expected to be found in the population from which the sample was selected.

Assessing representational generalisation in a qualitative sense turns on two broad issues:

1. The accuracy with which the phenomena have been captured and interpreted in the study sample. This will depend on the quality of data collection, analysis and interpretation.
2. The degree to which the sample is *representative* of the parent population sampled, where ‘representation’ is not a question of statistical match but of *inclusivity* (drawing on the concept of *non-probability sampling*, as described in briefing 2) .

There are also variations in the level of certainty that can be attributed to the generalisation, depending on the level of meaning or interpretation being assigned. As a very general rule, higher levels of aggregation of categories and explanations are more likely to be generalisable in representational terms than more specific items.

For **inferential generalisation** the central condition is similarity between the ‘sending’ and ‘receiving’ contexts. To allow others to assess this, it is necessary to provide in-depth description of the study context. This includes the views, processes, experiences or other phenomena that are the subject of study; the factors and circumstances that shape those phenomena; and how they appear or are experienced differently in different contexts or parts of the sample.

Theoretical Generalisation

Theoretical generalisation considers whether concepts or propositions to emerge from the data analysis can be *of wider or even universal* applicability. Qualitative studies can contribute to social theories where they have something to say about the underlying social processes and structures that form part of the context of, and the explanation for individual behaviours or beliefs. Contributing to theoretical understanding requires the use of robust research methods and quality in data interpretation.

Key Principles

There are strict limits on what can be generalised and a number of important principles should be borne in mind that apply to the three forms of qualitative generalisation described. These can be summarised as follows:

- Full and appropriate use of the evidential base;
- Appropriate study design and conduct;
- Clear and full description of analysis and interpretation;
- Validation of the inferences against other evidence / corroboration from other sources.



Generalisability: Implications When Working with Qualitative Outcomes Data

Many of the core concepts discussed in this generalisability briefing can be illustrated by drawing upon the research studies that underpin the Talking Points Outcomes Frameworks. The developments are described in full in Talking Points Personal Outcomes Approach: A Practical Guide (Cook and Miller, 2012). In brief, the initial research was carried out as part of a rolling programme of funding from the Department of Health at the Social Policy Research Unit (SPRU) at the University of York. The first phase of this research explored both the actual and desired outcomes of social care services through a mixture of focus groups and one to one interviews, largely with older people, but also with working age disabled people, frontline workers and managers. This work led to the categorisation of outcomes for social care service users under the broad headings of change, process and maintenance outcomes.

Subsequent research carried out at the University of Glasgow sought to refine the framework to reflect outcomes for a broader parent population, namely all adult users of health and social care services. It also sought to reflect outcomes delivered in partnership. Focus groups were conducted with older people, adults with mental health problems, and adult with learning disabilities across 15 partnerships, to assess the relevance of the SPRU framework.

Analysis of the focus group data resulted in a change to the way outcomes were themed, with 'maintenance outcomes' being replaced with the concept 'quality of life outcomes', which was more meaningful across all three service user groups. The process also allowed the overall number of outcomes to be reduced by grouping similar outcomes together. For example being clean and comfortable and having basic needs met (which were less applicable to people with learning difficulties and mental health service users) were grouped into an overarching outcome 'staying as well as possible'. New outcomes included living where you want and dealing with stigma and discrimination. The result was the *Talking Points framework of outcomes important to adults living in the community who use health and social care services*. Additional outcomes frameworks have since been developed for *older people living in care homes* and for *unpaid carers*.

The outcome categories within each framework have been found to be sufficiently high level to capture most outcomes important to most people within the respective parent population. This is not to say that all outcome categories will be applicable in all service settings. Equally, in some cases, experience of using the framework has led to the identification of specific additional outcome categories that, while not universally applicable, are relevant for inclusion by particular services (Cook and Miller 2012).

These developments are consistent with the premise that higher levels of aggregation of categories are more likely to be generalisable in representational terms than more specific counterparts. They also illustrate the importance of not generalising beyond the parent population from which the study sample is drawn.

More broadly, the research programmes also illustrate the application of theory in considerations of generalisability. Specifically, many of the distinctions in factors associated with different outcomes according to user group were found to relate to societal responses to impairment, or the way in which services are provided, rather than to the person's condition. This is consistent with the social model of disability, thus considerably extending the transferability of the research findings.



The core concepts discussed in this briefing can also be illustrated with reference to the Meaningful and Measurable project.

Study D: Understanding what supports good quality recording on personal outcomes

The above study was conducted by one project partner, which provides a range of support services to unpaid carers living in a particular locality. The study drew upon case notes and support staff focus group data.

Representational generalisation is a key consideration in applied research contexts and is therefore of particular importance when working with qualitative outcomes data in service settings. The key issues in such cases are the quality of the study design, conduct and analysis and inclusivity of the sample. In this instance, 15 support staff with diverse levels of experience were drawn from the three main carer support teams, including family support addictions.

A number of key themes were identified around why good quality recording was deemed important including feeling and appearing more integrated, improved sense of security, building a relationship with the carer and prompting subsequent carer reflection on the situation and its impact. It is these themes, not the specific individual issues that informed them, nor the prevalence or distribution of issues that the study seeks to apply to the population of support staff. For instance, there is no suggestion that because only 2 of 15 support staff called attention to the importance of recording the carer's strengths and own resources that this will only be deemed important by around 13% of carer support staff working across the organisation. This illustrates the key premise that it is 'nature rather than numbers' that we would expect to be generalised from the study sample to the parent population.

The concept of inferential generalisation can also be illustrated through this study, by calling attention to a context-specific finding. For instance, support staff stressed the importance of attending to feelings and emotions when recording outcomes focused conversations, and also the tone of what was said. This was deemed significant because the majority of conversations with carers take place over the telephone. This finding therefore may not be inferred to other carer organisations where support takes place face-to-face, but may be applicable in contexts working in outcomes focused ways by telephone with quite different user groups.

Finally, the premise that it is often at the level of explanation that broader inferences can be drawn, particularly with reference to the wider evidence base, can also be illustrated through this study. Support staff recognised that what was recorded played a critical role in supporting carer reflection and shaping self-perceptions and indeed the perceptions of others. However, it was found that carer strengths and assets, a prominent feature of outcomes focused conversations, tended not to be recorded in documentation and, as above, few staff members identified it as important. Instead focus group discussions emphasised the importance of recording actions, where you are in the process and what you last did, risks in the situation, as well as expressed emotions as described above. One possible explanation put forward is that that alongside the commonly espoused and valued motivations for recording, practitioners were also motivated by the need to justify and evidence inputs, actions taken and impacts. The impact of performance management regimes on recording practices has been a recurrent theme across practice settings, although manifesting in different ways across sectors, and this explanation locates this study conclusion within in a more far-reaching discussion.



Briefing 4. Qualitative Data Analysis - Possible Approaches

This final briefing provides an overview of some of the main approaches that can be used to ask different types of questions of different types of qualitative data. It does not offer guidance as to *how* to analyse qualitative data, but rather considers some of the important differences between quantitative and qualitative approaches and the key assumptions underpinning some of the more commonly used approaches that may be of interest in service settings. A key concern here is to counteract a common misconception amongst project stakeholders, which was that analysing qualitative data would necessarily involve reduction of meaning through quantitative aggregation. For more information on how to do qualitative analysis, with emphasis on personal outcomes data and research, see [Miller and Daly \(2013\)](#).

Data Sources

As highlighted in briefing 2, outcomes focused work typically entails working with both *pre-existing* qualitative data collected for individual assessment and review purposes and with *new* data generated specifically to inform service improvements and planning, such as by conducting interviews or focus groups with service users, practitioners, managers, information officers or commissioners, or by observing practices.

The use of pre-existing documentary data has many advantages, including efficiency, comprehensive coverage of the population of interest, offsetting respondent burden and attrition. However, it also introduces a number of limitations, calling into question several assumptions made in many qualitative data analysis guides. These include that the data:

- a) Have been generated by the person conducting the analysis
- b) Have been generated using appropriate ‘research’ methods
- c) Take the form of in-depth, contextualised and nuanced accounts
- d) Generation and analysis happen concurrently and iteratively

The implications of challenging each of these assumptions are briefly considered in turn:

a) Data familiarity: When working with personal outcomes data it may often be the case that analysis will not be conducted by the practitioners who recorded the data. If the data lack sufficient context, it may be difficult to ensure a correspondence of interpretation between the persons responsible for collecting the data and those conducting the analyses.

b) Data authenticity and credibility: Assessment and review data are typically recorded with a number of distinct purposes in mind, including the prospective scrutiny of others, which can influence what is recorded. The data should be understood in terms of the context in which they were produced and their implied readership.

c) Data richness: Outcomes assessment and review data are recorded by busy practitioners and while core recording principles have been developed and refined through the Meaningful and Measurable project (Miller and Barrie 2015), expectations vary by context and a compromise is often sought to reduce the burden on practitioners. The recording skills, as well as the conversational skills of the person recording the data are critical.

d) A concurrent, iterative process: Concurrent data ‘collection’ and analysis may not be possible and it may be necessary to work retrospectively with a sample of assessments and/or



reviews conducted within a particular time period, such that the opportunity to ask new questions of participants is lost.

Identifying Possible Analytical Approaches

Based on the above considerations, the following approaches have been identified as being of potential use for analysing both pre-existing outcomes data and new data generated through the study:

- Quantitative Content / Text Analysis
- Thematic Analysis (Inductive and Framework Analysis)
- Discourse Analysis
- Narrative Analysis

Quantitative Content / Text Analysis

(Quantitative) Content Analysis is an approach to documents/texts analysis that seeks to *quantify* content in terms of predetermined categories in a systematic and replicable way:

- Objectivity in this sense refers to the fact that there is transparency in the procedures used for assigning data to categories (coding), so that the researcher's biases intrude as little as possible - the analyst is simply applying the 'coding rules';
- Systematic and replicable means that the rules are applied consistently - anyone could apply the rules and come up with the same result.

It may seem strange to begin a discussion of approaches to analysing qualitative data by considering a quantitative method. However, people used to working quantitatively often inadvertently carry across assumptions from the quantitative tradition into the qualitative domain, perhaps in the belief that because the data in question are textual in nature, then they 'must be doing qualitative data analysis.' Making the distinction between 'data type' and 'analytical approach' at the outset is critical in offsetting such misunderstandings.

Quantitative Content Analysis emerged from communication studies and has been used extensively in the analysis of mass media reports. Initially concerned solely with counting specific words or 'manifest content', it has expanded to include an emphasis on 'latent content' (the themes or ideas within the text). There is often as much interest in omissions as what does get reported. While some categorisations are relatively straightforward e.g. coding instances of service types or care professions, when the coding is thematic e.g. coding instances of enabling practices, a more interpretative approach is needed.

Quantitative Text Analysis or *text analytics* is a variant of content analysis that is expressly quantitative, not just in representing textual content numerically but also in analysing it, typically using computers. Increasingly, automated text analytics are accompanied by data visualisation techniques such as word clouds, word frequency timelines, word trees and phrase maps. The growth in computerised text analytics has been spurred on by the huge volumes of text available online. It tends to:

- Involve large-scale analysis of many texts, rather than close readings of a few texts
- Require no interpretation of texts
- Does not concern itself with the predispositions of the analysts



Strengths

- Transparency of approach
- Unobtrusiveness
- Efficiency / increasing scope for automation
- Attractive data visualisation techniques often supported
- Replications and follow-up studies feasible, supporting longitudinal comparisons

Limitations

- Often tends to simply consist of word counts without consideration of word usage
- Difficulties devising robust coding manuals, particularly to capture ‘latent’ content
- Can perpetuate the emphasis on what is measurable rather than what is important
- Is inherently reductive, particularly when dealing with complex texts
- Can only be as good as the documents worked on [there is a need to consider document authenticity, credibility and representativeness]
- Content may be the main focus of attention, overlooking the significance of documents in terms of the parts they play in organisations and elsewhere
- Is ultimately unable to answer *why* questions best addressed by qualitative analysis

Possible Applications

Quantitative Content Analysis supports identification of surface patterns across large samples or entire datasets. It could provide a useful starting point in ‘unpacking’ summary outcome scores by establishing the existence and frequency of concepts such as aspects of services, particularly if working with text descriptions recorded in a very similar way across cases.

Example: What is the *relative significance* of interpersonal contact from support staff and more tangible service inputs in people’s accounts of the factors contributing to their *feelings of safety*?

Theme	Code ID	Code Value (Contributory Factor)	Big Imp’t	Small Imp’t	No Det’n	Worse	Non Issue
Interpersonal: Contact with the Care Team / Other Professionals	1	Checked regularly	12	4			
	2	Feeling supported / not alone	4	3			4
	3	Able to phone for advice / help	4	1			
	4	Seeing the same person	7	2			
	5	Contacts GP for me	1				
Tangible Service Inputs: (Equipment & Medications)	6	Equipment (frame / bed)	2				
	7	Alarm (CASS)		1			2
	8	Medication change (for anxiety)	1	1			
	9	Access to rescue medications	3	1			1
	10	Oxygen taken away				1	

It could also be of interest in understanding how reporting patterns are changing over time, or following on from specific service redesigns. Where the recorded data take the form of shallow, decontextualised summaries, it may not be possible to do much more than chart surface patterns across the data set, reaffirming the importance of good recording practices. However, where recording practices generate more detailed accounts and there is a desire to move towards understanding, a qualitative approach to analysis is needed.

Several approaches to qualitative data analysis are discussed overleaf.



Thematic Analysis

Thematic Analysis is one of the most common qualitative analysis methods. Indeed, the search for themes is an activity found in most approaches to qualitative analysis. It is not as dependent on specialised theory and is therefore more accessible than some other qualitative techniques (such as Discourse Analysis). While theoretical knowledge is not essential, it is important that the analyst is very familiar with the data if the analysis is to be insightful. This approach is therefore recommended where analysts have also carried out the data collection or fully understand the context. In simple terms the task of the analyst is to identify a limited number of themes which adequately reflect the data. This process involves coding individual cases, making comparisons and mapping connections between concepts *within* individual cases and *between* cases. Two broad approaches to Thematic Analysis can be identified:

- **Concept-driven** (a priori): where anticipated concepts (themes and codes) are identified in advance from research literature, previous theories, interview topics, hunches or early data familiarisation e.g. *Framework Analysis* (described below)
- **Data-driven** (empirical/in vivo): where codes emerge from data through *open coding* and are subject to ongoing revision through *constant comparison* between new and existing data, concepts and categories. Making connections between codes is typically not about inference of association and may for instance include the development of composite concepts. It can be a first step in generating theory (*Grounded Theory*).

Qualitative Coding and Concepts

Irrespective of the approach taken, it should be stressed that coding in thematic qualitative data analysis is not the same as coding in quantitative analysis and serves a different purpose:

- Quantitative analysis makes use of direct measures and *definite concepts*. Definite concepts, once developed, become fixed through the elaboration of *indicators* and are concerned with what is common to the phenomenon to be measured e.g. the EQ5D measures ‘quality of life’ using 5 standardised indicators
- Qualitative analysts typically resist the idea of fixing a concept in this way and prefer the notion of ‘*sensitising concepts*’, which offer a general frame of reference as to what to look for and a means of uncovering the variety of forms that the phenomena they refer to can assume.

It is important not to unintentionally extend quantitative logic into the qualitative domain. In quantitative research, analysis is generally concerned with counting, describing the frequency of patterns or inferring the strength of association between tightly defined concepts. In contrast, qualitative concepts are loose and flexible. It is important not to treat qualitative concepts as more concrete, uniform or static than they are.

In qualitative data analysis, the analyst typically has a central role to play in creating codes. A major challenge centres on how the analyst can be sure of not simply inventing or misrepresenting perspectives. This is the subject of longstanding debate. For some, including conversation analysts, reading *beyond* the data is discouraged, with analysis instead concentrating on actual utterances and interactions. Ethnographers on the other hand immerse themselves in the social setting and purposefully try to draw out their own experiences and perceptions, seeing these as part of the data. In service settings, sense checking emergent themes and codes with others can allay such concerns.



Concept-Driven Thematic Analysis e.g. Framework Analysis

Framework Analysis is a general strategy for the thematic analysis of qualitative data developed by the National Centre for Social Research for use in large-scale applied social policy research. It has however become increasingly popular in medical and health research. Themes are (in part) determined in advance, reflecting the aims and information requirements of the organisation. Additional themes and sub-themes may be identified as the result of a reading and re-reading texts. An index of central themes and sub-themes is constructed, represented in a matrix. The framework is then applied to the entire dataset. The advantage of the matrix is that while analyses of key themes can take place across the whole data set, the views of each research participant remain connected to other aspects of their account, preserving the context of the individual's views. The ability to compare with ease data across cases as well as within individual cases is therefore built into the process.

Strengths

- Framework Analysis is transparent and replicable.
- It is not aligned with a particular philosophical or theoretical position.

Limitations

- Framework Analysis is not suitable for all types of qualitative data or for answering all types of research questions, particularly those of a more open or exploratory nature.
- The data must cover similar topics or issues to support systematic categorisation.
- While the systematic approach and matrix format may be intuitively appealing to those trained quantitatively, the 'spreadsheet' look perhaps further increases the temptation for those without an in-depth understanding of qualitative research to attempt to simply 'quantify' qualitative data.

Possible Applications

Framework Analysis is often used for the analysis of semi-structured interview transcripts, but has been applied to other data types and could be used with assessment and review data.

Example: What does 'Feeling Safe' mean to people using services and supports?

Theme: Feeling Safe						
	Environmentally Secure		Physically Secure	Emotionally Secure		Safe Using Services
Int.	Home	Community		Present	Future	
1			Not interested in food / 'can't even be bothered to make a cup of tea sometimes'		'Terrified' of dying alone	Poor hospital stay - alcohol history referred to and felt vulnerable
2	More able to get out in a hurry, use to feel 'trapped'					
3		Uneven paths - it's hard to use my walker			Facing the future without fear now	
4		Good neighbours, nice kids, safe streets		Support from Jess (friend) when low		'GP is a star -he knows where I'm coming from...'



Data-Driven (Inductive) Thematic Analysis

While a purely inductive or data-driven approach to Thematic Analysis, particularly one concerned with generation of theory, may not be feasible or desirable within service improvement contexts, a combined approach would be appropriate where the project has some specific service or organisational issues to explore, but also aims to leave space to discover and explain other unexpected aspects of the participants' experiences.

Discourse Analysis

Discourse Analysis is an approach to studying language, where 'discourse' refers to the actual interchanges between people. Unlike *conversation analysis*¹, it is not restricted to naturally occurring talk, but can be applied to various forms of communication including interview transcripts, case notes or materials in the public domain. Different versions are shaped by different philosophical ideas, but in broad terms it is concerned with what discourse *achieves* rather than the content of an interchange. People seek to accomplish things when they talk or write and it is concerned with the strategies they use. It asks three basis questions:

- What is this discourse doing?
- How is this discourse constructed to make this happen?
- What resources are available to perform this activity?

Possible Applications

Discourse Analysis could be of interest in understanding the work done during assessment and review, for instance how outcomes focused conservation contributes to enablement or the achievement of specific outcomes.

Narrative Analysis

Narrative Analysis is concerned with people as social actors and sees people and their stories as data sources. It is an analytical approach that is sensitive to the sense of temporal sequencing. In Narrative Analysis, the focus shifts from what happened (content) to how people make sense of what happened and to what effect. It is concerned with seeking out the forms and functions of narrative, the stories that people tell to account for events, including the possible motives for telling particular stories, the social conditions that prompt them, and what they are supposed to be revealing. Narrative Analysis is frequently confined to life stories. Continuity and process can be important in accounts pertaining to specific episodes too. Often the answers that people provide in loosely structured qualitative interviews take the form of stories amenable to Narrative Analysis.

Possible Applications

Narrative Analysis may be of interest to investigations concerned with how personal outcomes unfold over people's lives and the roles that individuals see themselves playing in achieving outcomes. It could also be useful in understanding practitioners' learning journeys.

¹ Conversation analysis is a fine grained, action-oriented and highly sophisticated way of analysing talk as it occurs in interaction in naturally occurring situations.

Conclusion

This resource has been produced to address a number of issues which came to light during the Meaningful and Measurable project concerning the limited use of qualitative outcomes data in service improvement contexts. These issues centred on a reliance on individual stories and a tendency to carry forward assumptions from more familiar quantitative approaches.

To improve personal outcomes for everyone using services, listening to and learning from individual stories is of course vital. However, we also need to attend to a range of different 'stories' to build up a richer and more textured picture of human services than statistics can provide. Qualitative data analysis can provide the middle ground between stories and statistics. It engages with and interprets diversity and complexity in meaningful, valid and, above all, useful ways. For this to be achieved, a better understanding of its unique purpose is needed and a number of conditions must be met.

The resource has highlighted the strengths and limitations of a range of qualitative data analysis approaches that could be applied in the context of outcomes focused working. These approaches include those supporting identification of summary patterns, together with structured and more open forms of thematic analysis. This resource has also called attention to the importance of thinking carefully about whose voices are included and with what purpose, and the conditions under which findings can be applied more broadly. It is intended to complement existing 'how to' guides by highlighting specific issues with working with personal outcomes data.

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