Glossary of terms for eMERGe advisors and participants

eMERGe - Developing Meta-Ethnography Reporting Guidelines

Abstract - a concise summary of a journal article's or report's content that appears at the start of the document.

Aggregative synthesis (see also interpretive synthesis) - a category of synthesis methods that combine the data or findings of primary research in order to produce a summary or overall description of the phenomenon under study. There is no interpretation of how the context of the primary research influences the findings.

Aim of review/synthesis - the overall purpose of a review/synthesis.

Cochrane - is a not-for-profit organization consisting of a global independent network of researchers, professionals, patients, carers and people interested in health. Cochrane produce high quality reviews that summarize the best available evidence generated through research to inform decisions about health. In the UK, Cochrane Reviews are used to inform the National Institute for Health and Care Excellence (NICE) and the Scottish Intercollegiate Guidelines Network (SIGN) guidelines, NICE Clinical Knowledge Summaries and NHS Shared Decision Making – patient decision aids.

Cochrane review - Cochrane Reviews are systematic reviews of research in healthcare and health policy. Reviews are updated regularly and are published in the *Cochrane Database of Systematic Reviews*. There are five types of Cochrane Review and these cover reviews of both qualitative and quantitative primary research.

Comprehensive literature search - a search designed to generate as comprehensive a list as possible of **primary studies**, which may be suitable for answering the questions posed in the review. Topics and **research questions** are generally established in advance and searches are usually linear.

Concept - an explanatory idea.

Conceptual framework - the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your review, synthesis or research.

Conceptual richness – this has been described as going beyond a description of findings and interpreting them to develop **concepts**, theories or **metaphors**, or as findings that give rich insight on a research topic. However, there is currently no agreed definition of conceptual richness of which we are aware.

Configurative synthesis – configurative reviews or syntheses interpret and arrange (configure) information to develop new concepts by exploring and trying to identify new patterns in the data from primary study accounts. **Aggregative** reviews collect data to describe and test predefined concepts and look for similarities across data (Gough, Thomas and Oliver, 2012).

Constant comparison – a qualitative data analysis technique in which each new item of data is systematically compared with all other data to identify the similarities or differences between them. This enables all the perspectives in the data set to emerge. It is normally associated with **Grounded Theory** developed by Glaser and Strauss (1967) who referred to it as the "constant comparative method of qualitative analysis."

Content analysis- is a technique for systematically describing written, spoken or visual communication. It usually provides a quantitative (numerical) description but it can also provide qualitative description. Many content analyses involve media - print (newspapers, magazines), television, video, movies, the Internet.

Critical interpretive synthesis - an **interpretive synthesis** approach developed Mary Dixon-Woods and colleagues in the mid-2000s. It is based on **meta-ethnography** which they adapted substantially to synthesise a very large and diverse sample of papers using multiple methods (qualitative and quantitative).

Data extraction – in a **systematic review or synthesis,** the process of identifying and recording data (concepts/ themes/ metaphors/ explanations) from primary study accounts for the synthesis.

Epistemology - the theory or nature of knowledge.

Ethnography - Ethnography is a collection of qualitative methods used in the social sciences that generate a detailed description and interpretation of a cultural or social context, group or institution, such as a school, hospital, or business.

Evidence based health care/ medicine – is the integration of best research evidence with clinical expertise and patient preferences and expectations to optimize treatment, clinical outcomes and quality of life.

Exclusion criteria (see also **inclusion criteria) -** a list of objective exclusion (and inclusion) criteria allows reviewers to address the review question(s) and clearly define the boundaries of the review. Studies that are eligible for inclusion will meet the inclusion criteria and not meet the exclusion criteria. Two basic types of criteria are typically used in systematic reviews: (1) those related to publication

characteristics, e.g. inclusion of peer-reviewed publications and exclusion of duplicate publications; (2) those related to primary study design, conduct and reporting, and study relevance to the review question(s).

Field notes - notes created by the reviewer/researcher during the act of qualitative research to remember and record behaviours, activities, events, and other features.

First order construct(s) – see also **Second order construct(s)** & **Third order construct(s) –** a term taken from Schutz (1962) sometimes used in meta-ethnographies. How the research participants interpret their own experiences of, for example, a health service or health condition – as reported in a published study e.g. using quotes of what they said.

Full text review – in a systematic review, the process of reading an entire publication to check its relevance for the review or synthesis.

Generalisability - the extension of research findings and conclusions from a study conducted on a sample population to the population at large.

Grey literature - materials and research produced by organisations outside of the traditional commercial or academic publishing and distribution channels e.g. reports by charities.

Grounded theory – Developed by Glaser & Strauss (1967), grounded theory is theory generated from qualitative research data (e.g. interview transcripts). **Themes**, ideas and explanations of a phenomenon to emerge from the data rather than using a pre-determined framework to code, analyse or interpret the data. Theory is generated through the systematic process of **constant comparison**.

Hand searching (of literature) - a manual page-by-page examination of the entire contents of a journal issue or conference proceedings to identify all relevant research studies.

Hypothesis - is an idea or explanation that you then test through study and experimentation.

Included studies – in a systematic review or synthesis, the **primary studies** to be synthesised.

Inclusion criteria (see also **exclusion criteria) -** a list of objective inclusion (and exclusion) criteria allows reviewers to address the review question(s) and clearly define the boundaries of the review. Studies that are eligible for inclusion will meet the inclusion criteria and not meet the exclusion criteria. Two basic types of criteria are typically used in systematic reviews: (1) those related to publication characteristics, e.g. inclusion of peer-reviewed publications and exclusion of duplicate publications; (2) those related to primary study design, conduct and reporting, and study relevance to the review question(s).

Independent double screening – a term used in systematic reviews for when a pair of researchers work independently to judge whether publications retrieved from the literature searches are eligible for inclusion in the review based on criteria agreed in advance. Having two researchers results in reductions in errors compared to just one person doing the screening, but it is more time consuming and expensive.

Index paper – the **primary study account** used as the starting point for the analysis and synthesis in a **qualitative synthesis.** This could be the earliest published account or one chosen for another reason, e.g. because it is **conceptually rich.**

Intellectual Property – intangible rights protecting the products of human intelligence and creation, such as copyrightable works.

Interpretive synthesis (see also aggregative synthesis) – a category of syntheses that try to interpret and understand the world by bringing together, interpreting and arranging the findings from different studies to gain deeper understandings of a particular phenomenon.

Iterative literature search – the search is a dynamic, non-linear process that takes shape as the review evolves and is repeated. The focus, breadth and depth of the review are not tightly defined and evolve in an iterative manner during the search(es).

Line of argument synthesis - a way of synthesising data used in **meta-ethnography** when the qualitative studies under review identify different aspects of the topic that can be drawn together in a new interpretation. According to Noblit and Hare, a line of argument synthesis goes further than **translation** and puts any similarities and dissimilarities into a new interpretive context - what we can say about the whole, based on selected studies of the parts. However, since their book there have been many different definitions and understandings of what a line of argument is. George Noblit has since defined a line of argument as the new 'storyline' or overarching explanation of a synthesis.

Literature search, comprehensive - a search designed to generate as comprehensive a list as possible of **primary studies**, which may be suitable for answering the questions posed in the review. Topics and **research questions** are generally established in advance and searches are usually linear.

Literature search, iterative - the search is a dynamic, non-linear process that takes shape as the review evolves and is repeated. The focus, breadth and depth of the review are not tightly defined and evolve in an iterative manner during the search(es).

Literature search strategy - in a **systematic review**, the process of how the searches for literature (studies) were conducted including which databases were searched and which search terms were used.

Meta-analysis - is a statistical technique for combining the findings from quantitative research studies. Meta-analysis is most often used to assess the clinical effectiveness of health care interventions (e.g. a new drug); it does this by combining data from two or more randomised control trials. Drawing on more data can enable stronger conclusions to be drawn about effectiveness and **generalisability** to the wider population.

Meta-ethnography – is an **interpretive** method of qualitative evidence synthesis developed by Noblit & Hare in 1988 and is currently the most common form of **qualitative evidence synthesis** used in health related research. Originally it was developed to synthesise the findings from **ethnography** studies, but since its development it has been used to synthesise other qualitative research. Meta-ethnography identifies concepts in the studies under review and systematically compares the meanings of the concepts in different studies, taking account of the different study contexts and examining similarities and differences between concepts. This process is called "**translation**" and the result of this process is an interpretive synthesis of the studies under review which aims to 'make a whole more than the parts alone imply'.

Meta-interpretation – an interpretive method of qualitative evidence synthesis developed initially by Finfgeld in the 1990s, which was guided by **meta-ethnography** and **grounded theory**. Subsequently a more specific method of meta-interpretation was proposed by Mike Weed in 2005. It is also closely based on meta-ethnography but claims to be different, for example, because it focuses closely on the context (e.g. where, when and how conducted) of the studies it synthesises and is able to synthesise a large number of studies.

Metaphor - an explanatory idea in the form of a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable.

Meta-study – an **interpretive method** of **qualitative evidence synthesis** developed in the early 2000s by Barbara Paterson and colleagues to capture the social, cultural and historical contexts of, and research methods and theories used in the studies to be synthesised. Meta-study uses meta-ethnography as a procedure to analyse data. There are three analytical phases in a meta-study which focus on the analysis of theory, analysis of methods and the analysis of data/findings.

Meta-summary - an **aggregative synthesis method** developed by Sandelowski and Barroso (2007) which was designed to aggregate qualitative findings from surveys. It focuses on the frequency of findings, so uses quantitative analysis processes.

Meta-synthesis - see also **Qualitative synthesis** & **Qualitative evidence synthesis -** In a meta-synthesis, the researcher identifies qualitative studies on a particular topic and pulls together – or synthesises - their findings. Merging or synthesising the findings of individual qualitative studies on a topic can enable us to

gain a richer and more comprehensive understanding of a phenomenon or health issue compared to any single study on its own.

Methodology - the general research strategy (practices, procedures, and rules) that outlines the way in which research is to be undertaken and, among other things, identifies the methods to be used in it. Offers the theoretical underpinning for understanding which method or set of methods to use.

Model – a **theory**, **hypothesis**, **paradigm,** representation or idea. There are various meanings specific to different academic disciplines. In psychology, a model is a **theory** to predict outcomes and explain specific psychological processes. In qualitative research in sociology, a model is a verbal or graphic form of representing data or knowledge.

Narrative synthesis - an approach to the **systematic review** and synthesis of findings from multiple studies that relies primarily on the use of words and text to summarise and explain the findings of the synthesis. It can involve the manipulation of statistical data. The defining characteristic is that it adopts a textual approach to the process of synthesis to 'tell the story' of the findings from the included studies. Its development is usually attributed to Jennie Popay.

Objectives (study/research objectives) - the specific steps you will take to achieve your aim.

Paradigm – a model or framework that is derived from a world view or belief system about the nature of knowledge (epistemology) and existence (ontology). Paradigms are shared by a scientific community and guide how a community of researchers act with regard to inquiry. The most quoted definition of paradigm is Thomas Kuhn's (1962, 1970) who described a paradigm as 'the underlying assumptions and intellectual structure upon which research and development in a field of inquiry is based'.

Philosophical stance / underpinning – this refers to the underlying world view or belief systems upon which different research **paradigms** are based. Qualitative and quantitative approaches are rooted in different philosophical traditions or paradigms.

Positivism (positivist) – positivism assumes there is an objective reality and that this reality can be accurately and objectively known, described and understood. The positivist **paradigm** provides an objective reality against which researchers can compare their claims and ascertain truth.

Primary research/studies - new research, carried out to answer specific issues or questions. It can involve questionnaires, observation, surveys, clinical trials or interviews with individuals or small groups.

Protocol – a carefully structured, written plan of a research study in order to ensure its smooth running and successful conclusion.

Purposive sample – also referred to as judgement, selective or subjective sampling. Used in qualitative research for the identification and selection of 'information-rich cases', e.g. key participants or journal articles related to the topic of interest. The researcher relies on his / her own judgement to select the cases based on his / her knowledge of the research topic.

Qualitative evidence synthesis – see also **Qualitative synthesis** & **Meta-synthesis -** In a qualitative evidence synthesis, the researcher identifies qualitative studies on a particular topic and pulls together – or synthesises - their findings. Merging or synthesising the findings of individual qualitative studies on a topic can enable us to gain a richer and more comprehensive understanding of a phenomenon or health issue compared to any single study on its own.

Qualitative research - Qualitative research involves collecting data which are detailed, rich and complex, and aims to generate in-depth understanding and explanation of processes and situations. Qualitative research can be used to describe in detail what it is like to be in a situation, to offer explanations and reasons for people's behaviour, to evaluate a phenomenon, and to generate theories, strategies and initiatives – the 'how' and 'why' questions.

Qualitative synthesis (See also **Qualitative evidence synthesis** & **Meta-synthesis) -** In a qualitative synthesis, the researcher identifies qualitative studies on a particular topic and pulls together - or synthesises - their findings. Merging or synthesising the findings of individual qualitative studies on a topic can enable us to gain a richer and more comprehensive understanding of a phenomenon or health issue compared to any single study on its own.

Quality appraisal - systematic reviews usually include a detailed appraisal of the primary research studies identified which often focuses on their methodological quality. There is debate about whether quality appraisal is needed for a **qualitative synthesis** and what kind of appraisal should be conducted**.**

Quantitative research - involves measuring or counting things and generates numerical data or data that can be converted into numbers. Quantitative research aims to generate data which can be generalised to the wider population.

Reciprocal translation (see also **translation**) - a data analysis process used in **meta-ethnography** when concepts in one study can incorporate those of another because they are very similar in meaning.

Reflexivity - an attitude of attending systematically to the context of knowledge construction, especially to the effect of the researcher, at every step of the research process because the perspective of the researcher shapes all research.

Refutational translation (see also **translation**) **-** a data analysis process used in **meta-ethnography** when the concepts in different studies contradict or refute one another.

Review aim - the overall purpose of a review/synthesis.

Research question(s) - question(s) that you want to answer by doing a research study.

Review question(s) – question(s) that you want to answer by doing a **systematic review** or synthesis.

Screening (of studies/ literature) –in a **systematic review**, the process of identifying relevant research studies from all the literature identified through searches. It usually involves applying **inclusion and exclusion criteria** to the studies.

Search strategy - in a **systematic review**, the process of how the searches for literature (studies) were conducted including which databases were searched and which search terms were used.

Secondary research – research that makes use of information previously researched for other purposes. Reviews and syntheses are examples of secondary research as are research studies that, for example, interrogate existing data sets, such as those routinely collected by hospitals, government departments etc., to address a new **research question** or objective.

Second order construct(s) - see also **First order construct(s)** & **Third order construct(s) -** a term taken from Schutz (1962) sometimes used in meta-ethnographies. How the researcher interprets what a research participant has said, for example a **concept** developed by the researcher to explain a phenomenon.

Sensitivity (see also **specificity**) – a term used in systematic reviews to describe the accuracy of the search for relevant publications. A search that is sensitive is one which is broad and is likely to identify a large number of publications; many will be irrelevant to your topic but you are likely to identify most of the relevant publications. There is a need for balance between specificity (needed for efficiency) and sensitivity (needed for completeness).

Specificity (see also **sensitivity**) – a term used in systematic reviews to describe the accuracy of the search for relevant publications**.** A search that is specific is one which is narrow and likely to identify relevant publications efficiently but might miss some relevant publications. There is a need for balance between sensitivity (needed for completeness) and specificity (needed for efficiency).

Synthesis aim - the overall purpose of a review or synthesis.

Synthesising translations – this is the analytic synthesis process in a meta-ethnography. According to Noblit & Hare, the originators of meta-ethnography, it involves 'making a whole into something more than the parts alone imply,' i.e. the synthesis aims to provide a fresh interpretation of a phenomenon.

Systematic review - a way of summarising research evidence. A literature review focused on a **research question** that tries to identify, appraise, select and synthesise all high quality research evidence relevant to that question. Researchers use methods that are determined before they begin to frame one or more questions, then they find and analyse the studies that relate to that question. Systematic reviews may examine quantitative or qualitative evidence.

Theme(s) - patterns across data sets that are important to the **research question** you are asking.

Thematic analysis – this is the process by which **themes** in a data set (and the patterns within and between them) are identified, examined and elaborated on.

Thematic synthesis - Uses **thematic analysis** techniques and those from **grounded theory** and **meta-ethnography** to identify common themes or issues across studies. This method was developed to address specific **review questions** about need, appropriateness and acceptability of interventions (e.g. a new treatment), as well as effectiveness. People's views and experiences are taken into account, and **hypotheses** that could be tested against the findings of qualitative studies are generated. Developed by Thomas and Harden, who view the product of such a synthesis as informing practice or policy.

Theory – an organised set of concepts that explains a phenomenon or set of phenomena.

Third order construct(s)- see also **First order construct(s**)& **Second order construct(s)** – A term developed to help differentiate between different levels of interpretation in a meta-ethnography. How the researcher doing a meta-ethnography interprets what the primary researchers have said (the concepts or interpretations they have presented) in the qualitative studies in the review.

Translation - this is the analysis process in a meta-ethnography. According to how Noblit and Hare see it, it is about systematically comparing the meaning of the different studies, taking account of the different study contexts (e.g. where and when they were done and with whom). It is through exploring the similarities and overlap (**reciprocal translation**), differences (**refutational translation**) or different aspects of the topic contained in the various studies (**line of argument synthesis**) that an interpretive synthesis of the studies is achieved.