GACD e-Hub Advanced Programme: Glossary of terms

Core terms

These terms are used throughout the GACD e-Hub Advanced Programme.

Scale up-related terms

Scale up	The deliberate effort to broaden the delivery of an evidence-based intervention/ programme with the intention of reaching larger numbers of the target audience[1].
Scale out	The deliberate use of strategies to implement, test, improve and sustain evidence-based interventions/ programmes as they are delivered in novel circumstances distinct from, though closely related to, previous implementations[1].
Vertical	The institutionalization of the intervention in policies, structures, operational guidelines (e.g. budgets and strategies)[2].
Horizontal	It is where innovations are expanded to different geographies or to serve different populations (also, known as, expansion or replication)[2].
Diversification	It consists of adding and testing a new innovation to one that is in the process of being scaled up[3].
Spontaneous	Spontaneous scaling up refers to diffusion of the innovation without deliberate guidance[3].
Spread	It refers to replicating an initiative somewhere else[4].
Upscaling	The process of expanding a successful pilot programme or intervention to reach a wider population, essentially taking a small-scale project and implementing it on a larger scale across different settings, aiming to maximize its impact and benefit more people[4].

Context

Context refers to external factors that might act as a barrier or facilitator to implementation, or influence the effects of an implementation strategy. Context measures can include measures of the social, political, cultural, or economic environment that might influence implementation[5].

Equity

Equity is the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other dimensions of inequality (e.g. sex, gender, ethnicity, disability, or sexual orientation). Equitable implementation occurs when strong equity components—including explicit attention to the culture, history, values, assets, and needs of the community—are integrated into the principles, strategies, frameworks, and tools of implementation science.

Evidence-based intervention

Evidence-based interventions (EBIs) are broadly defined as programs, practices, processes, policies, and guidelines that have proven efficacy or effectiveness in a population and setting.

Non-communicable diseases (NCDs)

Non-communicable diseases (NCDs) are chronic diseases that are not caused by infectious agents (i.e. not passed from person to person), tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors.

Systems thinking / Systems approaches

Systems thinking is an approach to problem-solving that views problems as part of a wider dynamic system. It recognizes and prioritizes the understanding of linkages, relationships, interactions and interdependencies among the components of a system that give rise to the system's observed behaviour.

Sustainability

The ability to create structures and processes to allow an implemented EBI to be maintained and adapted in an organization or system and continue to produce benefits over time[6].

Core distinctions between related terms

Scale up vs **scale up research** vs **scale up science**

Scale up is the practical action of taking a proven intervention and applying it to a wider group of people or settings, often involving adapting the program to fit new contexts[7]. The ability to expand the coverage of successful interventions, including the financial, human, and capital resources necessary for the expansion. It is important to highlight that this is often undertaken by policymakers and practitioners rather than researchers/ scientists.

On the other hand, scale-up research focusses on investigating and studying the best-practices, strategies and methods that supported the successful scale up an intervention, including identifying barriers and facilitators, evaluating implementation fidelity, and assessing the impact of scaling up[7].

Finally, scale up science is the broader field of study that looks at the theoretical principles, evidence-based practices, and methodological approaches related to scaling up interventions across different contexts, including considering factors like sustainability, cost-effectiveness, and policy implications.

Implementation vs **implementation research** vs **implementation science**

"Implementation" refers to the act of putting a plan, strategy or intervention into practice within a specific setting while "implementation research" is the scientific study of the use of strategies to adopt and integrate evidence-based health interventions into clinical and community settings to improve individual outcomes and population health and lastly, "implementation science" is the broader field of study that encompasses research on how to effectively implement interventions, including identifying barriers and facilitators to adoption and developing strategies to overcome them, often with a focus on generating generalizable knowledge across different contexts[7].

Implementation Science intends to bridge the gap between research, practice, and policy by building a knowledge base about how health information, effective interventions, and new clinical practices, guidelines and policies are communicated and integrated for public health and health care service use so that it can yield benefits to communities and end users and reduce the time for translation to occur.

Policy (big P) vs **policy** (little p)

In policy analysis, "big P" refers to a policy enacted at a large, government-wide level (e.g. like a national law or a nation-wide hypertension policy). On the other hand, "little p" refers to more specific policies within an organization or system (e.g. a clinical guideline document or protocol on how to manage hypertension). Consequently, “big P” policies need significant legislative processes while “little p” policies can be more readily implemented in an organization.

Advanced Programme terms

These terms are introduced and used for frequently in specific modules and/or lectures in the GACD e-Hub Advanced Programme.

Complexity science | Module 2, Lecture 2C

Complexity science is a discipline which explores how complex systems behave and how we interact with them. It provides a framework and a toolbox to better address complex problems.

Contextual factors | Module 2, Lectures 2C and 2D

Contextual factors are aspects of the larger environment that may influence implementation efforts. In implementation science, contextual factors are important because they can affect the success or failure of an intervention.

Cost-effectiveness analysis | Module 5, Lecture 5C

Cost-effectiveness analysis (CEA) is a systematic approach used to evaluate the relative costs and outcomes of different interventions, particularly in health care and public health. It helps decision-makers assess the economic efficiency of various strategies by comparing the cost per unit of health outcome achieved, such as years of life saved, or quality-adjusted life years (QALYs) gained. By identifying trade-offs and opportunity costs associated with various implementation strategies, CEA can inform decisions about which approaches provide the best value for public health investments.

Coverage | Module 5, Lecture 5C

Coverage refers to the extent to which an intervention reaches its intended audience or population. In implementation science, achieving high coverage is essential for maximizing the impact of evidence-based interventions. It ensures that interventions are not only effective in controlled settings but also have real-world applicability and benefit a larger segment of the population.

Disability Adjusted Life Years (DALYs) | Module 5, Lecture 5C

DALYs measure the overall burden of disease, expressed as the cumulative number of years lost due to ill-health, disability or early death.

= YLD (years lived with a disability) + YLL (years life lost)

Fidelity | Module 4, Lecture 4C

Implementation fidelity is the degree to which an intervention is delivered as intended; it is critical to the successful translation of evidence-based interventions into practice. It represents the quality and integrity of the intervention as conceived by the developers.

Implementation strategy | Module 4, Lecture 4B

Implementation strategies are what we do to help people, organizations, and systems do the "thing" we are scaling up.

At scale (versus pilot), strategies may need to be introduced, expand or be adapted.

- Specific implementation strategies at:
  - multiple levels
  - broader policy
  - system levels
  - and determine where are how adaptation is needed
- Overall scale strategies.

Politics | Module 3

It refers to the flow of interaction (i.e. power relations and decision making processes) between key stakeholders that are behind formulation, adoption and implementation of policies. Politics focuses on actors (stakeholders), the materials, the process and the timing and how the various actors distribute and redistribute the available resources by using the power/ position they have in the system.

Policymaker | Module 3

An individual or group with the authority to create, enact, and oversee policies that influence the adoption and implementation of practices or interventions within a specific context (e.g. at a hospital or more broadly, at the state-level). In other words, they are decisionmakers who determine how a new policy or practice will be put into effect.

Policy dialogue | Module 3, Lecture 3C

Policy dialogue involves discussions among people from different interest groups on a topic that is of mutual interest. Key stakeholders such as policymakers, advocates, other nongovernmental stakeholders, other politicians, and beneficiaries raise issues, share perspectives, find common ground, and reach agreement or consensus, if possible, on policy solutions. Policy dialogue enriches policy- and decision-making processes through rounds of evidence-based discussions, workshops and consultations on a particular subject.

Process evaluation | Module 5, Lecture 5B

Process evaluations answer the question of for whom, how and why a certain complex intervention works.

Quality Adjusted Life Years (QALYs) | Module 5, Lecture 5C

QALYs measure both the quantity and the quality of life lived, expressed as the number of years of additional life adjusted by a weighted value.

= Additional number years of life □ HRQL (health-related quality of life) value

Scalability | Module 1, Lecture 1B and 'Further learning'

The ability of a health intervention shown to be efficacious on a small scale and or under controlled conditions to be expanded under real world conditions to reach a greater proportion of the eligible population, while retaining effectiveness.

Stakeholders | Module 3

Stakeholders include anyone who is directly involved with or impacted by the GACD research project, anyone who might use the findings from GACD research projects to directly influence health policy or programmes, and the beneficiaries of such policies and programmes. Specific examples include:

- the population targeted by the research, including research participants, NCD patients, and their families and carers;
- actors engaged in the research beyond the research team, such as health facility staff, community workers, educational facility staff, civil society groups, and non-governmental organisations;
- users of the research findings, inclusive of the above and health system and health service providers; and
- practice and policy influencers and makers.

Stakeholder engagement | Module 3

The process and action of identifying the appropriate people, groups, and organisations, involving them throughout the research process, responding to their input, and ensuring they can make use of the findings when the project is complete. Stakeholder engagement is critical to the success of implementation research because it:

- ensures a common recognition of priority issues;
- acknowledges that researchers and stakeholders may ask different questions and have different perspectives on what evidence is most useful;
- improves the sustainability of projects and interventions beyond the grant life cycle;
- increases buy-in for implementation of interventions;
- improves opportunities for scaleup of interventions;
- facilitates evidence-informed decision-making; and
- increases transparency and facilitates mutual accountability.

Stakeholder mapping | Module 3, Lecture 3A

Stakeholder mapping (also called stakeholder analysis) is a visual process that lays out all of the stakeholders involved in the research project. The map identifies each potential stakeholder, defines their roles and value with respect to the project, and analyses how much interest in and influence over the project outcomes they have.

Study design | Module 4, Lecture 4A

Study design refers to the approach and methodology used to conduct a research study, outlining how data will be collected and analysed to answer specific research questions. It essentially describes the structure and framework of a research project, including the type of study (e.g., randomized controlled trial, cohort study, cross-sectional study) and the methods used to recruit participants, collect data, and analyse results.

Theories, models, and frameworks (TMFs) | Module 2, Lectures 2A, 2B, and 2C

Theories, models, and frameworks (TMFs) provide a structured approach to understanding, guiding, and evaluating the complex process of translating research into practical applications, to ultimately improve healthcare and other professional practices.

Other relevant terms

Integrated care

While the details of the definition of integrated care management (also commonly known as coordinated care management or seamless management) vary in the literature, it is commonly used to describe patient-centred care that is comprehensive and regular, rather than fragmented and episodic. In the context of this grant call, we use this term to describe care that moves away from older models of treating each chronic disease within an individual patient as a separate, distinct condition, and that focus on reacting to health crises rather than improving whole-person health throughout the life course.

Intersectional

In the context of health research, intersectional analytical frameworks examine how social processes (*e.g.*, classism, racism, ageism, ableism, *etc*.) and social identity factors (*e.g.*, gender, class, race, age, disability status, *etc*.) interact to impact health outcomes.

Life course approach

The WHO emphasises the need to prevent and manage NCDs using a life course approach. While the term can have different meanings, for the purposes of this funding call, we use the term life course approach to mean targeting a specific critical period that impacts health over the lifespan and potentially into the next generation. Taking a life course approach is central to meeting the objectives of universal health care, as it promotes health at every stage of life, including at the end of life. In practice, taking a life course approach typically means adapting an intervention to improve acceptability and effectiveness among one or more specific life stages (preconception, pregnancy, infancy, childhood, youth, adulthood, and older adulthood), as well as during key transitions within or between life stages (such as high school graduation or retirement).

Multiple Long-term Conditions

Multiple long-term conditions (MLTC) are defined as the existence of two or more long-term conditions in a single individual. In the context of this call, one of these must be a chronic non-communicable disease of long duration, as defined below.

MLTC NCD // NCD multimorbidity

MLTC NCD or NCD multimorbidity is commonly defined as the co-occurrence of two or more chronic diseases in a patient. Chronic diseases include NCDs such as diabetes, hypertension, cardiovascular disease, respiratory diseases, musculoskeletal conditions, certain cancers, haematological disorders, sleep disorders, and mental illnesses, which can be complicated by chronic infectious diseases such as tuberculosis, hepatitis, HIV and long COVID-19. MLTC (multimorbidity), unlike comorbidity, does not distinguish between the first condition (index disease) that arises in the patient and later illness.

Within this call text, the GACD uses the term MLTC NCD to refer to cases of multimorbidity where at least one of the chronic conditions is an NCD.

Patient-centred

Patient-centred care emphasises treating patients with dignity and respect and including them in decisions about their health care. This is also referred to as 'person-centred care.'

Real world effectiveness

Evidence of the benefit of an intervention in a setting similar to that where the intervention will ultimately be offered, *i.e.* outside of the rigid environment of a randomised controlled or other trial with strict inclusion and exclusion criteria.

Universal Health Coverage

Universal Health Coverage means that all individuals, families and communities are able to access quality health services, when and where they need them, without incurring financial hardship. Such services should be available across the full continuum of essential health services, from health promotion to prevention, treatment, rehabilitation and palliative care.

For universal health coverage work requires skilled health workers providing quality, patient-centred care and policymakers committed to investing in universal health coverage. The universal health care should aim to prevent and treat disease and illness and improve well-being and quality of life.

See the WHO Fact Sheet on Universal Health Coverage for more information.

References

1. Aarons GA, Sklar M, Mustanski B, Benbow N, Brown CH. "Scaling-out" evidence-based interventions to new populations or new health care delivery systems. Implementation Science. 2017 Dec;12:1-3.
2. Bulthuis S, Kok M, Onvlee O, O'Byrne T, Amon S, Namakula J, Chikaphupha K, Gerold J, Mansour W, Raven J, Broerse JE. How to scale-up: a comparative case study of scaling up a district health management strengthening intervention in Ghana, Malawi and Uganda. BMC health services research. 2023 Jan 16;23(1):35.
3. World Health Organization. Nine steps for developing a scaling-up strategy. World Health Organization; 2010.
4. Greenhalgh T, Papoutsi C. Spreading and scaling up innovation and improvement. Bmj. 2019 May 10;365.
5. May CR, Johnson M, Finch T. Implementation, context and complexity. Implementation science. 2016 Dec;11:1-2.
6. Brownson RC, Shelton RC, Geng EH, Glasgow RE. Revisiting concepts of evidence in implementation science. Implementation Science. 2022 Apr 12;17(1):26.
7. Lee K, McKay H, Crane M, Milat A, Wolfenden L, Rankin NM, Sutherland R, Bauman A. Are they the same? Disentangling the concepts of implementation science research and population scale-up. Public Health Research & Practice. 2024 Oct 1;34(3).
8. World Health Organization. Regional Office for Europe. (2016). Integrated care models: an overview: working document. World Health Organization. Regional Office for Europe. https://iris.who.int/handle/10665/375502
9. Skou ST, Mair FS, Fortin M, Guthrie B, Nunes BP, Miranda JJ, Boyd CM, Pati S, Mtenga S, Smith SM. Multimorbidity. Nat Rev Dis Primers. 2022 Jul 14;8(1):48. doi: 10.1038/s41572-022-00376-4. PMID: 35835758; PMCID: PMC7613517.