8th GACD funding call
Call text

Note: Highlighted words and phrases are defined in the glossary at the end of this document.

Title

Implementation research targeting chronic non-communicable disease risk factors associated with city environments

Introduction

The Global Alliance for Chronic Diseases' (GACD) funding call will focus on **implementation research** proposals with the potential to equip policymakers and practitioners with evidence-based strategies for reducing the risk factors for **non-communicable diseases** in **cities** in disadvantaged populations globally. In the context of this funding call, 'cities' include urban centres, informal settlements and slums, and periurban areas.

Specific Challenge

Non-communicable diseases (NCDs) are the leading cause of morbidity and mortality in both low-and middle-income countries (LMICs) and high-income countries (HICs) [1]. The COVID-19 pandemic has brought these chronic diseases further into the spotlight, as the majority of those who have experienced severe illness and/or death have had one or more underlying NCD. Reducing the burden of NCDs is therefore critical to building more resilient, equitable, and healthier societies [2].

More than half of the world's population currently live in cities and this number is projected to rise to 68% by 2050 [3]. Air, water, and soil pollution; lack of greenspace; urban heat islands; lack of safe infrastructure for walking, cycling, and active living; and wide availability of tobacco, alcohol, and unhealthy foods and beverages drive the NCD epidemic in city environments [4, 5]. Recent climate related disasters, such as major flooding events, salinisation of fresh water supplies, and droughts, highlight how cities are at the forefront of the climate change crisis and point to the need for a shift towards a **planetary health** ethos that couples human development with environmental stewardship. To this end, local authorities and policymakers must be equipped with strategies for maximising the health-promoting potential of cities, while minimising or reversing environmental degradation and health inequities.

Despite the enormous challenges cities confront, there is room for optimism. Cities provide tremendous social, cultural, and economic opportunity, and have the potential to become engines of good health and support climate change adaptation [6, 7]. Innovative health-focused programmes, policies, and infrastructure, including, but not limited to, public smoking bans, bikeable streets, greenspaces, vehicle emission laws, and food policies targeting salt reduction, trans fats, and sweet beverages can shape the behaviours of millions of people and decrease exposure to environmental contaminants. City leaders are also demonstrating a political commitment to healthy cities and climate action, for example, through their participation in the C40 Cities network [8]. Applicants to the current call are invited to generate relevant and applicable evidence that leads to improved understanding of how specific interventions can be better

adapted to different city environments and/or scaled within and across cities, taking into account unique local social, ecological, political, economic, and cultural contexts.

Expected impacts of this call

The projects funded under this call will collectively:

- provide city leaders globally with evidence-based policy and practice recommendations that:
  - promote population health in equitable and environmentally sustainable ways; and
  - address the challenges of rapid urbanisation, growing social inequalities, and climate change.
- improve capacity for cross-sectoral implementation research.
- contribute to the UN Sustainable Development Goal 3.4 to reduce premature mortality from NCDs by one third by 2030.

Scope

Summary

The aim of this call is to fund **implementation research** focused on addressing **NCD risk factors associated with city environments** and related health inequities.

Applicants should review the definitions of '**non-communicable diseases'** and **'NCD risk factors associated with city environments'** in the glossary to ensure that the conditions and risk factors that they are studying are within scope.

Please note that the funding agencies participating in this call have specific requirements regarding the scope. Carefully review the agency-specific information on the GACD call webpage before applying.

Applicants must:

- select one or more **cities** in which the research will be conducted. Applicants must justify why a particular context is considered a city;
- select one or more evidence-based interventions known to reduce NCD risk factor(s) associated with city environments. Applicants should justify the choice of intervention(s) and provide evidence of the intervention(s)' effectiveness, acceptability, feasibility, and potential for long-term health and other impacts;
- adapt these intervention(s) for selected study population(s) based in one or more cities, taking into account the unique social, political, economic, and cultural context(s). Applicants should justify why these adaptations will not compromise the known effectiveness of the selected intervention(s);
- provide a research plan for investigating how to promote the uptake and/or scale-up of the intervention(s) in the selected study population(s), using validated implementation research frameworks;
- specifically address issues of equitable implementation to ensure interventions reach the populations that need them the most;
- have an appropriate strategy for measuring both implementation research outcomes *and* real-world effectiveness outcomes and indicators (related to NCD prevention and, if feasible, planetary health and/or non-health sectors);
- demonstrate best practices in **stakeholder engagement**;
- provide opportunities for implementation research capacity building within project teams;

- describe a pathway to sustain the proposed intervention after the funding from the GACD grant ends; and
- address how the team will minimise their environmental footprint when conducting this research project.

In addition, applicants are encouraged (though not required) to:

- use mixed methods to answer research questions;
- explore themes of **planetary health** in the context of their projects, investigating how to best implement intervention(s) known to positively impact both human and ecological health. In July 2022, the GACD held a workshop focused on implementation and planetary health; a summary report and presentations from the workshop are available here. Projects are also encouraged to deliver projects that will improve human resilience to the health impacts of climate change in city environments;
- conduct implementation research on how best to increase the uptake and/or scale up of multisectoral interventions that cut across health, environmental, social, employment, housing, and/or other sectors;
- take a **life course approach**, adapting interventions for particular life stages with the goal of promoting life-long health;
- explore the generalisability of implementation strategies by conducting studies in two or more cities;
- focus on those facing extreme vulnerabilities, such as individuals or communities living in informal settlements, urban post-disaster settings, or in situations of homelessness;
- explore how to best implement digital technology interventions. (In July 2021, the GACD held a workshop focusing on best practices for planning and delivering sustainable and equitable digital health interventions for NCDs in LMICs and Indigenous communities. A summary report, which may assist with proposal planning, is available here.).

The following types of projects will *NOT* be funded:

- proposals with the primary aim of informing the development and/or selection of an intervention to be implemented in a given context, where the implementation component will be explored in a future project. All proposals must contain a plan to implement and/or scale up an intervention known to directly impact human health or address the social determinants of health.
- studies that cannot feasibly be completed in the life cycle of the grant (typically limited to three to five years, depending on the funding agency);
- clinical trials, validation studies, or intervention studies of the efficacy of a new or established pharmacological agent and/or biomedical device.
    - Some, but not all agencies will accept proposals focusing on interventions that use pharmacological agents and/or biomedical devices. Proposals focusing on interventions that use pharmacological agents and/or biomedical devices must show evidence of their effectiveness and affordability in low-resource contexts.

Study population

GACD-funded projects address health inequities that exist within and between LMICs and HICs and/or health inequities that exist within the societies where projects are undertaken (Unless otherwise specified in the funding agency's agency-specific box on the call webpage, please refer to the World Bank's designation of HIC and LMIC countries). Each participating funding agency has specific requirements about which populations may be the focus of the research project; please refer to the call webpage.

In all cases, the selected study population(s) must live in **cities**, which may include informal settlements or slums near urban centres, peri-urban environments, and city centres. Applicants must justify why their study area of focus is considered a city.

The study population may include people with existing NCDs, those without existing NCDs, or a combination of both.

Evidence-based interventions

The research to be undertaken should focus on how to implement one or more evidence-based interventions known to prevent or reduce exposure to **NCD risk factor(s) associated with city environments.**

Applicants must describe the evidence that demonstrates that the intervention is effective and justify why the intervention is likely to also be effective in the selected study population(s). Ideally, evidence of the intervention's **real-world effectiveness** will be supported by a well-conducted systematic review where available.

The proposed interventions of focus may fall under one or a combination of the following themes:

Theme 1: Behavioural change interventions

These interventions comprise of innovative approaches to helping people living in cities maintain good physical and mental health *despite* infrastructural, environmental, climate, and social challenges. Behavioural interventions might include, but are not limited to, programmes and policies that target alcohol and tobacco use, sleep, exercise promotion, healthful nutrition, addressing the psychosocial impacts of climate change and climate change related disasters, and reducing human impacts on the environment.

Theme 2: Interventions that focus on modifying the built environment

These interventions focus on *modifying* the **built environment** to improve its health-promoting potential. Projects should aim to inform urban design such that it reduces NCD risks; for example, by improving a city's walk- or bike-ability, increasing green space to reduce the health impacts of air pollution or extreme heat, reducing environmental toxins, addressing homelessness or unsafe housing, improving accessibility of healthy foods, decreasing widespread advertising for tobacco and alcohol, or reducing noise and air pollution from road traffic.

For projects that focus on modifying the built environment, applicants are encouraged to demonstrate that the intervention will a) be able to withstand expected impacts from climate change (*e.g.,* if a new bike lane is to be built in a city where rainfall is expected to increase, that the lane is not located in an area vulnerable to flooding); and/or b) improve resilience to the health impacts of climate change in city environments.

GACD grants do not provide funding for the building of the infrastructure (e.g., for constructing bike lanes or housing); GACD grants are intended for research that helps guide the implementation and/or scale up of this intervention. Research projects may be conducted during the roll out of the building project or as an evaluation after construction is complete, with the goal of informing future improvements or scale up. Project teams will be able to show that the city government or community-based organisation that they partner with has a dedicated budget for the construction, maintenance, and/or scale up of the project, especially for large infrastructure projects. Applicants must also be able to show that the timelines of the research and construction of infrastructure projects will align such that it will be possible to answer the proposed implementation research questions over the lifespan of the grant, and such that the research results will be available in time to inform stakeholder decisions about how the project is implemented, improved, and/or scaled up.

Theme 3: Interventions that improve access to primary and secondary prevention services

Applications may also focus on improving the delivery of primary and/or secondary NCD prevention services in urban or periurban health systems; for example, by conducting an HPV vaccine campaign and cervical cancer screening in informal settlements or testing novel ways of delivering services that prevent falls in older adults. Applications focused on this theme may also (but are not required to) explore how implementing prevention services can advance the 2021 COP26 Health Programme objectives of building health systems that are able to withstand the impacts of climate change and which are low carbon and sustainable [9].

Health equity

Poverty, colonialism, racism, ethnic discrimination, physical and mental ableism, ageism, and other inequities are directly associated with reduced potential for health promotion. All projects should consider the structural and social determinants of health and discuss their potential impact on the effective implementation of the intervention(s). If there is a focus on a particular population (*e.g.*, gender, race and/or ethnicity), then the reason for this should be justified.

In order to promote health equity, studies should aim to address differences in intervention access, uptake, and effectiveness in socially disadvantaged groups and develop strategies for reducing inequities. To facilitate this process at the data analysis stage, studies should be designed to address such differences (at a minimum, studies should capture sex and/or gender differences, though a plan for capturing **intersectional** impacts on health outcomes is preferred). Guidance for conducting sex and/or gender-responsive and intersectional research is available on the GACD call webpage.

Data standardisation and outcome measures

All proposals must include a plan for measuring **implementation research outcomes** *and* the intervention's **real world efficacy** in preventing NCDs. Examples of implementation research outcomes are listed in the glossary and are described on the GACD's implementation Science e-Hub.

Health outcomes might not be apparent over the duration of the study period, and applicants may therefore instead include plans to measure the intervention's impact on upstream health indicators, such as those related to the social determinants of health, or to measure other proxy health outcomes.

Applicants are also encouraged to develop a plan for measuring outcomes or indicators relevant to non-human health impacts, especially when conducting multisectoral projects (for example, relevant to themes or sectors such as planetary health, transportation, social services, waste management, *etc.*).

Stakeholder engagement

Working across sectors and ensuring the coherence of policies across different areas is key to creating supportive and enabling environments for health, which ensures that health and equity considerations are integrated throughout the planning process, investments, and policy decisions at the local level.

For implementation research evidence to have a strong likelihood of being taken up into policy or practice and informing the scale up of effective interventions, it is vital that project teams engage the appropriate **stakeholders**, including decision makers such as mayors, other policymakers, ministry officials, and non-governmental organisation and community leaders, who can help sustain the project's implementation, facilitate scale up, and use the knowledge generated from the project after the grant ends. Where relevant, project teams should work across different government sectors to facilitate the coherence of policy-making

decisions and their health, environmental, and equity impacts. Stakeholders also include end users and the direct beneficiaries of research; that is, the residents of the city.

Applicants are required to demonstrate that there is a local demand or interest in the proposed research question and that the appropriate decisionmakers and end users have been engaged in the development of the research proposal. Applicants must also provide a clear plan for continuing to engage with stakeholders throughout the duration of the project, and afterwards during the knowledge translation phase. More information about **stakeholder engagement**, including links to resources for planning such engagement, can be found on the GACD webpage.

Implementation research capacity building

Implementation research is a relatively young discipline and the GACD is keen to increase research capacity and capability in this field among researchers, health professionals, and public health leaders through skill building, knowledge sharing, and networking. Applicants should indicate plans for capacity building within their project, especially, but not exclusively, for early career researchers and for team members from lower resourced environments, such as LMICs or Indigenous communities.

Applicants must budget for the travel and accommodation costs of having two team members, at least one of whom is based in an LMIC or other lower-resourced context, participate in the annual two day face-to-face meeting of the GACD Research Network (location to vary annually). Teams are also strongly encouraged to include one junior team member in each annual meeting for the duration of their research grant.

Equitable research partnerships

Equity considerations also extend to the governance of project teams in order to ensure fair and equal collaboration, especially between HIC–LMIC and non-Indigenous–Indigenous partners (both collaborations within the research teams and with community partners). Resources for planning equitable research partnerships are available on the GACD call webpage. Proposals should outline equitable governance arrangements in place for your projects, provide evidence of joint leadership and management positions on the project team, and specify equitable approaches to data ownership.

Research team's environmental footprint

All project teams should endeavour to minimise the environmental footprints of carrying out their projects; for example, by replacing international flights with video calls where possible.

Compliance with international standards and best practices

It is expected that all research conducted under and funded by this initiative will comply with relevant internationally accepted standards and best practices. These include:

- Standards for Reporting Implementation Studies (StaRI) Statement;
- standards relevant to specific study designs including SPIRIT and CONSORT for clinical trials, and STROBE for observational studies. All standards can be found on the website of the EQUATOR Network;
- ethics, data, and other governance requirements and/or best practices as applicable in the countries and communities where the research will be conducted. In Indigenous communities,

these should include adherence to OCAP and CARE principles, or other community-specific data management protocols;
- UKCDR and ESSENCE guidance on equitable partnerships;
- registration of all systematic reviews in a publicly accessible registry before commencement of the review; and
- reasonable measures to ensure that sponsors, researchers, and institutions publish or otherwise disseminate the analysis of data and interpretation of research results (*i.e.*, the findings) in a timely manner without undue restriction.

Scoring criteria

Proposals will be evaluated against the following criteria, with each criterion weighted equally. The full criteria is available in **Annex 1.**

- Relevance of the project to this grant call and quality of the proposed work;
- quality of the team;
- feasibility of the project; and
- expected impact of the project.

Glossary

Term	Definition
Built environment	The man-made components of the environment, such as building, traffic, sewage, parks, and other infrastructure [10, 11].
City	Non-rural settings; a densely populated urban or peri-urban environment [12]. Cities may also include informal settlements and slums within or surrounding city centres. Applicants can justify why a particular context may be considered a city.
Implementation research	Implementation research is the study of methods to promote the systematic uptake of research findings and other evidence-based strategies into routine practice, and, hence, to improve the quality and effectiveness of health services and care [13]. The primary aim of an implementation research project is to explore how to improve access to, and uptake of, a **proven** intervention by the people who need it, with greater speed, fidelity, equity, efficiency, cost-effectiveness, and with attention to affordability, safety, sustainability, effectivity, and quality. Further information on implementation research methodologies and frameworks can be found on the GACD Implementation Science e-Hub. Questions addressed by implementation research include: ■ Which evidence-based policy or intervention is best for a new context or a target group? ■ What is the best way to implement it? ■ How can the target population be reached? ■ What factors might affect implementation and adoption? ■ How can uptake and health outcomes be improved? ■ Is the intervention cost-effective, affordable, and acceptable from the health system's, health care provider's, patient's, and/or other end user's perspective? ■ How can the policies or programmes best be sustained and scaled up?
Implementation research outcomes	These include implementation outcomes (*e.g.,* acceptability, adoption, appropriateness, costs, feasibility, fidelity, penetration, and sustainability); service outcomes (*e.g.,* efficiency, safety, effectiveness, equity, patient-centeredness, and timeliness); and client outcomes (*e.g.,* satisfaction, function, and symptomology) [14].
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 [15].
Life course approach	The WHO emphasises the need to prevent and manage NCDs using a life course approach [16-18]. 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).
Non-communicable diseases (NCDs)	The phrases 'chronic diseases' and 'non-communicable diseases (NCDs)' are often used interchangeably to refer to diseases that cannot be passed from one person to another [19]. Non-infectious cardiovascular diseases, hypertension, cancers (including cervical cancer), respiratory diseases, mental health and neurological conditions, and diabetes are the main target areas of GACD research grants. Applicants that wish to explore other chronic, non-infectious conditions or their risk factors should contact the appropriate funding agency to confirm that their topic is of interest. Infectious, chronic conditions such as tuberculosis, Chagas Disease, leprosy, HIV, *etc.* are ***not*** within scope. However, applicants may explore NCD prevention strategies within populations living with these infectious conditions.
NCD risk factor(s) associated with city environments.	Densely populated areas can introduce certain risk factors known to contribute to the onset and progression of **non-communicable diseases** (as defined above) [3, 5, 6]. Examples include, but are not limited to: ■ Noise, air, water, and soil pollution ■ Decreased physical activity, for example, due to lack of green space, walkable streets, or lack of handicapped-accessible infrastructure (*e.g.,* high rise housing or metro stations without elevators) ■ Increased social isolation ■ Increased access to and exposure to advertising for processed, unhealthy food and beverages ■ Increased access to and exposure to advertising for tobacco and alcohol ■ Insufficient infrastructure for delivering preventative health care, especially in rapidly growing informal settlements ■ Upstream risk factors related to colonisation (in Indigenous communities), racism, sexism, *etc.* Interventions that are ***not*** within scope include but are not limited to: ■ Interventions whose primary focus is reducing the spread of COVID-19. While growing evidence suggests that COVID-19 infection is an independent risk factor for chronic heart, lung, and neurological diseases [20-22], such interventions will not be permitted within the scope of this call as there are numerous other funding initiatives focused on this; ■ Interventions whose primary focus is to reduce road traffic accidents or injury; ■ Interventions whose primary focus are to reduce violence ○ The GACD recognises that high levels of societal violence can be a critical mediator of unhealthy behaviours (*e.g.,* lack of outdoor physical activity due to safety concerns), and can also be a risk factor for mental disorders and trauma. Applicants may therefore explore violence and injury in the context of the grant calls – as long as the ultimate goal of the project is to reduce NCDs, and there is a clear plan to measure NCD outcomes or proxy outcomes.

Planetary health	Planetary health is a solutions-oriented, transdisciplinary approach to assessing and addressing the impacts of human impact on both health and ecological systems [23]. A focus on planetary health acknowledges that human health is dependent on the health of the planet, which climate change and ecological degradation threaten to destroy. Planetary health is well-aligned with the philosophies of many Indigenous communities in that it embraces an egalitarian ethos that treats all life as equally important [24]. In this call, applicants must measure human health outcomes (or proxy outcomes); however, they are also encouraged to explore outcomes that indicate whether their selected intervention is improving the local ecology and environment, such as by measuring air or soil quality, vegetation coverage, water salinity, or any other indicator associated with the health not only of humans, but of the entire ecosystem.
Real world efficacy	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 [25].
Stakeholders	Stakeholders, or non-researcher collaborators, 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	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 scale up of interventions; ■ facilitates evidence-informed decision-making; and ■ increases transparency and facilitates mutual accountability.

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Annex 1: Complete call evaluation criteria

Relevance and quality of project

- The proposal is responsive and relevant to the funding call.
- There is sufficient evidence of the effectiveness of the intervention(s), in similar populations or contexts, from the literature, pilot data, or both.
- Proposal uses implementation research approaches that are justified and supported by the published literature to explore adaptation, scale up, and sustainability of evidence-based interventions.
    - An implementation research framework is selected and justified.
    - Specific implementation outcomes and impacts are identified, and there is a clear plan for how to measure these variables, using tools that are locally validated whenever possible.
- The proposal has appropriately accounted for ethical and context considerations that might arise, according to agency-specific guidance. Ethical considerations might be related to:
    - working with vulnerable life stages (such as youth, pregnant women or older adults);
    - working with other disadvantaged people (*e.g.,* members of the LGBTQ+ community, people living with physical or mental disability);
    - power dynamics and cultural differences between high income country (HIC) and low- and middle-income country (LMIC) team members and stakeholders;
    - power dynamics and cultural differences between non-Indigenous and Indigenous team members and collaborators.

    This list is not exhaustive; other ethical considerations should be accounted for as appropriate.
- The proposal identifies social inequities that may impede access to or uptake of the intervention or limit its effectiveness and implementation potential in disadvantaged groups, and provides a plan for overcoming these threats to health equity.
    - If there is a focus on a particular population (*e.g*. gender, race and/or ethnicity), then the reason for this is well-justified.
    - Wherever applicable, any outcomes differences by sex and/or gender can be detected.
    - Applicants provide a reasonable plan to capture data about the socioeconomic status, race and/or ethnicity, and other relevant social determinants of health of their study sample and the population from which the sample was drawn in order to be able to consider the generalisability of their findings across different demographic, socioeconomic, and geographically disparate populations.
- Where feasible, the research will yield evidence on the cost-effectiveness of the proposed implementation strategies.
- Proposal adequately justifies the need to implement the proposed intervention or program by providing details about the current situation in the selected community or context that will receive the intervention.
- Proposal adequately addresses themes of planetary health and/or climate change where this is a focus of the proposal.
- Proposal provides an adequate strategy for minimising the environmental footprint of the project team.

Quality of team

The types of expertise that are required to be included on each team may vary by funding agency. However, across all GACD projects, the following criteria must be met:

- The team is transdisciplinary. The team collectively has all the expertise needed to undertake the proposed implementation research, including one or more implementation research experts.
- There is sound evidence demonstrating how stakeholders, such as decision-makers, service delivery partners, and community members, have been actively involved in the research process including the selection and adaptation of the intervention and the research design.
- There is a strong plan for continuous demonstrable engagement (from project ideation, through the duration of the project, and afterwards through the sharing of learnings) with public, patient, community stakeholders, and/or other beneficiaries of the project.
- There is a strong plan for continuous demonstrable engagement (from project ideation, through the duration of the project, and afterwards through the sharing of learnings) with policymakers, practitioners, non-governmental organisation leaders, and/or other relevant stakeholders.
- There is evidence of equitable partnership between HIC and LMIC team members (for projects taking place in LMICs) and between non-Indigenous - Indigenous team members (for projects taking place in Indigenous communities). This includes, but is not limited to, evidence of joint development of and consensus around governance plans; shared leadership and management positions on the project team; and appropriate approaches to ownership of the data generated through the study.
- Early career investigators are included as part of the team.
- There is a detailed capacity building plan for the professional development of researchers and practitioners on the project team, especially, but not limited to, in the field of implementation research and community engaged research approaches. Capacity building should extend to early career investigators and investigators from resource-poor contexts, but may also include more senior team members without implementation research expertise.
- Research teams will exhibit equity, diversity, and inclusion practices appropriate for the context(s) in which they are working.

Feasibility of project

- Major scientific, technical, or organisational challenges have been identified, and realistic plans to tackle them are outlined.
- Implementation strategies take into account the socio-political, cultural, policy, and economic contexts of their study settings. The proposal articulates how these factors and their impact will be analysed.
- Applicants identify any external factors that might disrupt their projects, such as COVID-19 travel restrictions or anticipated political unrest, and develop appropriate contingency plans.
- Appropriate measures of process and outcome evaluation (including for both implementation and effectiveness outcomes) have been included. Projects that are able to track clinical, public health, policy, and/or health system outcomes are expected.
- The proposal includes a clearly articulated governance plan.
- There is a clearly articulated and robust study design for addressing implementation research questions.
- Detailed, clear, and logical implementation and scale up plans are described. Timelines are realistic and achievable for addressing the proposed research question(s).
- The budget and budget justification are feasible and realistic for the context where the research will occur. Together, they account for the full range of costs necessary to complete the project.
- For projects that examine the implementation of a building project, there is strong evidence that an external partner will provide the necessary financial support for the construction, maintenance, and/or scale up of the project, especially for large infrastructure projects.
- For projects that examine the implementation of a building project, the timelines of the research and construction of infrastructure projects will align such that it will be possible to answer the proposed implementation research questions over the lifespan of the grant, and such that there is

a high likelihood the research results will be available in time to inform stakeholder decisions about how the project is implemented, improved, and/or scaled up.
- There is a clear plan for dissemination of findings and knowledge translation.

Potential impact

- There is strong likelihood of contributing to the outputs listed in the 'Expected Impacts' section of this call text.
- The project has clear value for the amount of funding requested.
- The project appropriately leverages existing programmes and platforms (*e.g.* research, data, delivery platforms), if relevant.
- There is potential for sustaining the intervention(s) at scale.
- There is potential for the translation of the findings, methodologies, and frameworks into different settings.