

New Priorities for Global Health Research

2021–
Portfolio for Global Development and International Relations



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Executive summary

A new research programme for global health should support high-quality research relevant to SDG 3 and its targets. The primary objective is to promote health equity by supporting high-quality research that can contribute to sustainable health improvements for disadvantaged populations in low- and lower-middle income countries (LLMICs). The societal impact of submitted research proposals should be assessed in terms of their potential to: (1) contribute, directly or indirectly, to substantial reductions in disease burden in LLMICs; (2) promote health equity in LLMICs, and; (3) produce higher-level insights of relevance to policy and practice beyond the specific setting and context where studies are carried out.

Most of the funding for a new programme will come from the Overseas Development Cooperation budget of the Norwegian Ministry of Foreign Affairs. The research must therefore be of particular relevance to low- and lower middle income countries (LLMICs) and SDG 3, which aligns well with Norwegian global health priorities: to prevent communicable and non-communicable diseases, reduce child and maternal mortality, strengthen sexual and reproductive health and rights, and to promote universal health coverage and global health security.

To maximize impact, a new programme should devote at least 50 percent of available global health research funding to the prioritized area of "implementation research", with the remaining funding allocated to thematically unrestricted calls for projects relevant to the programme's primary objective. The priority to implementation research reflects its significant potential to advance sustainable and equitable health improvement in LLMICs. Implementation research should be understood broadly to include research on interventions with proven efficacy as well as programmes and policies with the potential to substantially reduce disease burden and promote health equity. It encompasses assessment of "real world" impact of interventions, including on health outcomes such as illness, survival, physical growth, and cognitive development. It also focuses on acceptability, adoption, appropriateness, feasibility, fidelity, cost, coverage, scalability and/or sustainability of interventions, programmes and policies. It may encompass other factors that affect implementation, including overarching aspects such as the organization, financing, and governance of health systems and the impact of global-level institutions, financing mechanisms and policy processes, which often shape the parameters for health and health equity in LLMICs. Research need not be confined to the health sector but can also include the social, environmental, economic and political determinants impacting health and health equity.

Implementation research typically entails "real world" scientific investigation, has its origins in different disciplines and research traditions, and may require a range of different methodological approaches, from experimental or quasi-experimental studies to realist evaluations and policy analyses. A new programme should encourage and reward interdisciplinary collaboration where such collaboration more effectively answers the research question.

It is vital to pursue equitable research partnerships that promote the agency of partner institutions in LLMICs with equitable sharing of funding, institutional costs and credits. Proposals should include

concrete plans for how the project will contribute to strengthening both individual and institutional capacity in the collaborating institutions, and research projects carried out in LLMICs should demonstrate co-leadership of the proposed scientific agenda with investigators from LLMIC institutions.

Many Norwegian research entities across biomedical and life sciences, social sciences and humanities are engaged in important global health research. These funding needs cannot be met by the new programme alone and other relevant Research Council of Norway portfolios should also invest in such research activities. This is especially relevant for research on global public goods that confer health benefits to all countries, such as vaccines and other biomedical R&D, climate change and environmental risks, and international peace.

1 Introduction

1.1 A new research programme is pivotal for Norway's contributions to global health

Global health¹ is a major political priority in Norwegian development and foreign policy. Key Norwegian global health priorities are to prevent communicable and non-communicable diseases, reduce child and maternal mortality, strengthen sexual and reproductive health and rights, and to promote universal health coverage and global health security (3). Norway is a strong supporter of The World Health Organization (WHO) and its normative role. Together with Germany and Ghana Norway played a leading role in urging the WHO to develop the Global Action Plan for Healthy Lives and Well-being for All together with multilateral health, development and humanitarian agencies (4). Norway's ambitious goals for global health are reflected through the investments in the Vaccine Alliance GAVI, the Coalition for Epidemic Preparedness Innovations (CEPI), the Global Financing Facility (GFF), and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Norway has also been progressive in proposing to address non-communicable diseases (NCDs) through its international development strategy (5). Moreover, Norway consistently supports efforts to strengthen health systems and equitable access to health services, most notably through achievement of universal health coverage as defined in target 3.8 of sustainable development goal (SDG) 3. During the COVID-19 pandemic, Norway has played a pivotal leadership role in the Access to COVID-19 Tools Accelerator. A total of 3.9 billion NOK has been proposed to support global health in the Norwegian state budget for 2021 (3). Norway additionally invests in global health through multilateral institutions, civil society organizations and other actors. The funding for global health research should be commensurate with this investment in order to secure an evidence-base that can support Norway's contributions to global health and analyse, evaluate and critically assess these efforts (6).

Reflecting an age of increasing political priority for global health, the Norwegian government established the Programme for Global Health and Vaccination Research (GLOBVAC) in 2006 (7,8). This filled an important gap in a funding landscape where very little Norwegian funding for health research had been allocated to global health challenges. GLOBVAC was composed of two separate but linked sub-programmes. The first was a continuation and scaling-up of the Global Health Research (GLOBHELS) programme established in 2003. The second, the sub-programme for vaccination research, was added in 2006 as part of Norway's commitment to the fourth Millennium Development Goal (MDG) of reducing child mortality. GLOBVAC I prioritized research on poverty-related diseases and health problems that affect marginalised populations, especially children in low-and middle-income countries. Following a positive evaluation of GLOBVAC I, GLOBVAC funding was

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¹ In a new global health research programme, the emphasis is on health research of particular relevance to disadvantaged populations in low- and lower-middle income countries (LLMICs). This emphasis is primarily a consequence of the fact that the majority of the funds are expected to come from the development aid budget of the Norwegian Ministry of Foreign Affairs. These funds must be used in accordance with the OECD/DAC ODA rules (1), and have been designated for partners in least developed countries, other low-income countries, and lower middle-income countries and territories as defined in the OECD List of DAC Recipients (2). Research partners from high- and upper middle-income countries can receive a maximum of 30 percent of the total project budget from the Research Council of Norway. The geographic focus of a new programme does not exclude partnership with high- and upper middle-income countries, nor research with an empirical focus on global-level institutions and processes. However, the primary emphasis of the research must be on the health needs of LLMICs.

renewed for 2012-2020, with thematic priorities including communicable diseases (particularly vaccines and vaccination research), family planning and reproductive health, maternal and child health, innovation in technology and methods development, and health policy and systems research, while also encouraging proposals for implementation research (7).

GLOBVAC I and II invigorated the field of global health research in Norway and strengthened Norwegian research groups' capacity and collaborations with research environments in LLMICs. Moreover, investments from the GLOBVAC-programme produced findings with significance for policy and programmes in LLMICs. Funding from the previous GLOBVAC programmes have contributed to the development of the Ebola and rotavirus vaccines (7,9), and the assessment of the impact of meningococcal vaccine rollout in sub-Saharan Africa (10). GLOBVAC I and II funded several large randomized controlled trials and other epidemiologic studies to develop effective health systems interventions for maternal and child health (11), laying the groundwork for Norway's first Centre of Excellence focusing on health in LLMICs (12). Systematic reviews and health systems research on the effectiveness of community health worker interventions have been instrumental to WHO guidance on optimizing health worker roles for maternal and newborn health (13,14). GLOBVAC-supported research was also instrumental in informing the design of the Coalition for Epidemic Preparedness Innovations (CEPI) and its priority-setting processes (15,16), and has supported internationally recognized critical social science research into health systems strengthening (17,18) and the political dynamics and power structures that shape global health policy (19). These and other successfully funded research projects strongly suggest that investments in a new research programme is pivotal for Norway's contributions to global health.

1.2 A new research programme should contribute to a broadened global health agenda

Global health can be defined as '...an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care' (20).

In the preamble of the WHO constitution health is defined as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (21). This definition takes a holistic approach in recognition that health includes the physical, psychological (or mental) as well social components of health, and that these are inter-related. No single aspect of health can be seen in isolation and/or prioritized over any other aspect of health. The WHO constitution also makes reference to health as one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.

In the context of global health and SDG 3 physical health includes communicable and non-communicable diseases. Mental health and wellbeing are explicitly mentioned in SDG 3.4. Social health includes gender-based or intimate partner violence (addressed in SDG 16) as well as substance abuse. Access to Universal Health Coverage implies access to services that address all aspects of health – physical, psychological and social. Health research includes research on the intersecting

social, economic, political, and cultural determinants of both health status and access to and provision of health services.

The global health agenda has for long been dominated by the MDG's focus on child and newborn health, maternal health, HIV/AIDS, malaria and tuberculosis (22). These health challenges remain leading causes of death and burden of disease, especially in low-income countries with low income per capita, low average years of schooling and high fertility rates (23). Over time, the proportion of burden due to non-communicable diseases and injuries have grown in LLMICs, and these issues are now reflected in SDG 3. The 2018 UN Political Declaration on NCDs promotes a 5 x 5 NCD agenda, focusing on five core diseases (cardiovascular disease, chronic respiratory disease, cancer, diabetes and mental and neurological conditions) and five core risk factors (unhealthy diet, tobacco use, harmful use of alcohol, physical inactivity and air pollution) (24). The inclusion of air pollution demonstrates the growing attention to environmental risk factors that contribute significantly to the burden of disease in LLMICs.

2 Primary objective

2.1 Contributing to SDG 3 by addressing disease burden, promoting health equity and producing high-impact knowledge

A new research programme for global health should support high-quality research relevant to SDG 3 and its targets. Focusing on SDG 3 aligns well with the core Norwegian global health priorities, i.e. to prevent communicable and non-communicable diseases, reduce child and maternal mortality, strengthen sexual and reproductive health and rights, universal health coverage and global health security.

The primary objective of a new global health research programme is to promote health equity by supporting high-quality research that can contribute to sustainable health improvements for disadvantaged populations in low- and lower-middle income countries (LLMICs). Beyond scientific impact, the societal impact of proposals submitted to a new global health research programme should be assessed in terms of their potential to: (1) contribute, directly or indirectly, to substantial reductions in disease burden in LLMICs; (2) promote health equity in LLMICs, and; (3) produce higher-level insights of relevance to policy and practice beyond the specific setting and context where studies are carried out. To evaluate the potential for impact these criteria must be seen together—individually they are insufficient to guide the programme's priorities.

Proposals should be evaluated for their *potential* to contribute to sustainable reductions in disease burden and not be expected to achieve such reductions within the limited timeframe of a funded project. Since a future programme should support the achievement of SDG 3 on health, it will need to encompass research that can contribute to continued progress on reducing infectious diseases, and increasing maternal and child health, i.e. the main priorities of the previous GLOBVAC programmes, *and* other health issues reflected in the SDG 3 targets. The latter include non-communicable diseases and mental health. Focusing on issues that contribute to the greatest disease burden is important to identify areas where research can contribute to the greatest impact.

However, a focus on total disease burden should not be the only guiding principle when determining thematic priorities because this risks neglecting the distribution of the disease burden and other parameters important for health equity. Further, to contribute to substantive health gains, it is important to focus on research that is likely to generate knowledge about how interventions that are effective and feasible can be delivered in a sustainable way. In which ways economic, social and political factors influence the implementation of interventions, programmes and policies, and how these factors shape the health of populations are also important questions that are tied to health equity, but which aren't immediately apparent by focusing solely on disease burden.

Promoting health equity implies that the programme should give priority to research that may improve the health of disadvantaged populations. The emphasis on equity aligns with the shift from the MDGs to the SDGs. The MDGs placed greatest emphasis on the achievement of average national metrics, with limited attention to the *distribution* of benefits. In comparison, the focus on equity is stronger in the SDGs (26). The programme's emphasis on equity implies prioritizing research that addresses the health needs of groups that disproportionally suffer from avoidable disease and premature death. It includes children, and it includes socially and economically disadvantaged groups, such as people living in poverty, rural populations and disadvantaged minorities. Focusing on equity also involves pursuing research on the social, environmental, economic, and political determinants that play a significant role in shaping health inequities. Moreover, promoting equity would also favour research that focusses on values that are indirectly linked to health equity—for example voice, agency, and accountability of citizens in health systems.

Finally, generating findings that are transferable across settings is important for high impact. A new global health research programme should prioritize research with the potential to produce higher-level insights of relevance to policy and practice beyond the specific settings and context in which the studies are carried out. Concrete examples are research that focusses on a policy promoted by a global institution to many LLMICs; that compares insights from across several of highly contextualized settings in order to form the basis of practical guidance for addressing barriers and facilitators to implementing interventions, programmes and policies in low-resource settings; or that is able to demonstrate effectiveness of a strategy for increasing the coverage of an health intervention with proven effects.

3 Priorities for a new programme

3.1 Overarching premise

A major premise when defining prioritized themes for a new global health research programme is that most of the funding is expected to come from the development aid budget of the Norwegian Ministry of Foreign Affairs, and these are designated for Official Development Assistance (ODA). The implication is that research funded through the new program must be of particular relevance to lowand lower middle income countries, as defined in the OECD Development Assistance Committee (DAC) list (2).

3.2 The Sustainable Development Goal 3

The targets for global health are now shaped by SDG 3 (27) and represent a broadened health agenda that covers almost every health issue that may affect a population. Many of the SDG 3 targets are issue- or disease-specific challenges (e.g., target 3.2 "end preventable deaths of newborns and children under 5 years of age" or target 3.4 "reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing"). The burden of disease from communicable, maternal, neonatal and nutritional diseases remains high in most LLMICs, and especially in low-income countries, despite substantial progress on these fronts in recent decades (23). At the same time, the burdens of NCDs and injuries are growing in importance. A new research programme should appreciate that the prevailing health policy priorities might differ geographically and over time. Within and across LLMICs, and depending on context, the different SDG 3 targets may be more or less relevant for addressing the health needs of disadvantaged populations. All the SDG 3 targets are therefore viewed as relevant for a new programme.

Reflected in several SDG 3 targets are systems-level issues that span across diseases (e.g., target 3c "Increase health financing and the recruitment, development, training and retention of the health workforce in developing countries" or target 3d "Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks"). The implication is that a new global health research programme should encourage research that can help strengthen health systems to deliver high-quality health services, ensure health preparedness, promote equity and meet health needs of LLMIC populations. A prominent target and political priority for many countries is target 3.8 on universal health coverage (UHC). The programme's definition of UHC is in line with WHO's definition: "that all people have access to the health services they need, when and where they need them, without financial hardship. It includes the full range of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care" (28). The goal of attaining strong health preparedness to promote global health security (reflected in target 3d and affected by progress on target 3.8) has the potential to accrue benefits to all countries, but research on this topic should only be given priority insofar the focus is on health needs and health systems in LLMICs. Finally, a new programme should also encompass research on population-based public health interventions that can prevent major health risks and contribute to reducing the burden of diseases and conditions represented in SDG 3.

Finally, tied to SDG 3 targets and the disease burden represented by these, are a range of challenges reflected in the other SDGs, such as education, poverty, inequalities, gender equality, nutrition and food security, air pollution, conflicts and climate change, which are generally described as the social, economic and environmental determinants of health. Accordingly, research that focusses on how health outcomes are influenced by interventions, programmes and policies outside the health system, and the political determinants that influence these, is also relevant for a new programme. This includes research on public health interventions that span across sectors, including addressing health challenges through intersectoral collaboration at the nexus of human, animal and environmental health (e.g., One Health) or responding to the health and health systems impacts of climate change (29). Relevant to a new programme is also the influence of global-level institutions and policy processes, and global governance and financing mechanisms, which often shape the parameters for health improvement in LLMICs.

3.3 Priority to implementation research

To achieve SDG 3, countries and regional and global health institutions face important barriers to effective and equitable implementation of interventions, programmes and policies. These barriers operate at the level of health service delivery or public health or in other sectors (e.g. education or social policy).

A new programme should respond to this challenge by prioritizing implementation research (30-35). Research for effective implementation (henceforth "implementation research") should herein be understood broadly to include research on interventions with proven efficacy as well as programmes and policies with the potential to substantially reduce disease burden and promote health equity. It encompasses assessment of "real world" impact of interventions, including on health outcomes such as illness, survival, physical growth, and cognitive development. It also focuses on acceptability, adoption, appropriateness, feasibility, fidelity, cost, coverage, scalability, and/or sustainability of interventions (25). It may encompass other factors that affect implementation, including overarching aspects such as the organization, financing, and governance of health systems and the impact of global-level institutions, financing mechanisms and policy processes, which often shape the parameters for health and health equity in LLMICs. Research on interventions and the factors affecting their implementation need not be confined to the health sector but can also include the social, environmental, economic and political determinants impacting health and health equity.

Focusing on implementation research will allow for a unique and impactful contribution and respond to evaluations of previous GLOBVAC programmes that identified implementation research as attracting relatively little support (7,8). A new programme should devote at least 50% of available funding to implementation research, with the remaining funding allocated on an open, competitive basis to excellent proposals that address the programme's overall aims.

The priority to implementation research should encourage and reward interdisciplinary collaboration across biomedical and life sciences, social sciences and humanities, where such collaboration more effectively answers the research question. A wide range of qualitative and quantitative methodological approaches from these different fields, as well as systematic reviews that synthesize quantitative or qualitative data, are relevant for contributing to high-impact knowledge about how health interventions, programmes and policies can be implemented, scaled and benefit populations in LLMICs.

Implementation research typically entails "real world" scientific investigation, and this has implications for the types of studies that are feasible to undertake. Such research, which focusses on several aspects of implementation and has its origins in different disciplines and research traditions, may require a range of different methodological approaches, from experimental or quasi-experimental studies to realist evaluations and policy analyses. For studying the effects of health interventions, randomized trials are not always feasible, and depending on the research questions, quasi-experimental study designs or observational studies might be more appropriate for estimating the effect of an intervention on coverage and health or development outcomes. On the other hand, approaches following traditions in the social science and humanities might be more appropriate to answer questions on organization, financing, and governance of health systems and how global-level initiatives and global governance and financing systems influence national or subnational implementation of interventions. While interdisciplinary collaboration should be encouraged, the

research question should guide assessment of what methodologies and scientific fields are most appropriate.

3.4 European & Developing Countries Clinical Trials Partnership (EDCTP)

The European & Developing Countries Clinical Trials Partnership (EDCTP2) is part of Horizon 2020 and aims to fund clinical research for medical tools to detect, treat and prevent poverty-related infectious diseases in sub-Saharan Africa. GLOBVAC2s funding of projects within the thematic and strategic remit of EDCTP has been counted as part of Norway's contribution to the partnership. A third period of EDCTP, also called EU-Africa Global Health Partnership, is currently being developed under Horizon Europe. It is expected that Norway will participate, but the details are yet to be decided. A new programme on global health is expected to continue its support for the partnership. The programme should issue separate calls for funds earmarked for EDCTP-relevant research so that the amount of funding dedicated to EDCTP vis-à-vis other research areas is clear. Such calls can facilitate co-funding opportunities with research councils in other countries. To further strengthen this field of research in Norway, the portfolio boards on health and life sciences at the Research Council of Norway (RCN) should consider making EDCTP-relevant research eligible for funding through calls that they oversee.

3.5 Sustaining Norwegian global health research groups and improving national collaboration and coordination

Norway is a small country, yet many Norwegian research entities across biomedical and life sciences, social sciences and humanities are engaged in important global health research. These funding needs are unlikely to be met by the new programme alone and other relevant Research Council of Norway portfolios should also invest in such research activities. This is especially relevant for research on global public goods that confer health benefits to all countries, such as vaccines and other biomedical R&D, climate change and environmental risks, and international peace. The new programme on global health research should aim to sustain Norwegian global health research groups and secure recruitment of new researcher to the field.

There are several groups working for stronger national collaboration and coordination in global health. Global Health Norway is a national arena for global health research, education and capacity strengthening in LLMICs (36). The Norwegian Research School in Global Health (NRSGH) is funded by the RCN and has an overall aim to build capacity in global health to meet the challenges within education and research (37). The Norwegian Forum for Global Health Research is an interdisciplinary network of academics and others who work with or have an interest in global health (38). These organizations and networks can play a prominent role in improving collaboration among Norwegian research institutions, especially with respect to securing global health research funding from international sources such as Horizon Europe. Moreover, they can contribute to facilitate collaboration between research institutions and other Norwegian organisations engaged in global

health activities, such as the hospital sector, educational sector, NGOs, the private sector and the Norwegian Agency for Development Cooperation (NORAD). A new research programme on global health should encourage national collaboration and coordination.

3.6 Equitable research partnerships

A new global health research programme should promote *equitable research partnerships* between Norwegian research institutions and academic institutions or other research institutions in LLMICs. Such partnerships can also involve governments or NGOs, and regional networks and institutions. Strong partnerships with academic institutions in LLMICs are pivotal for research of high quality and securing the relevance of the research to the context being studied. Stronger LLMIC institutions are able to compete for national and international funding, ensure that evidence informs national health policies, and can promote and sustain efficiency, quality and equity in health programs. Strong institutional capacity is a prerequisite not only for genuine collaborative research, but also for providing a basis for long-term and sustainable implementation of evidence-based interventions contributing to SDG 3, as well as SDG 17 on revitalizing the global partnership for sustainable development.

In recent years, the idea of 'capacity-building' through research projects driven by high-income countries has been problematized (39, 40). As part of a broader movement to "decolonize" the global health agenda, there is an increasing emphasis on the limitations of focusing solely on capacity building and the benefits of moving towards fair and equitable research partnerships that promote the agency of partner institutions in LLMICs with equitable sharing of funding, institutional costs and credits (41-43). An important part of equitable partnerships is ensuring that LLMIC institutions and researchers are genuinely involved in defining the scope, relevance and priority questions of collaborative research proposals. Concrete examples include development of protocols, standard operating procedures and other tools (e.g. surveys, interview guides and other research instruments) as well as in the analyses of the data and publication and other dissemination of the findings. The allocation of funding to respective LLMICS partners should be commensurate with their expected responsibilities and the capacity-strengthening goals, from scientific leadership to grant management. Collaboration agreements governing the partnerships should, among other things, stipulate the responsibilities of Norwegian and LLMIC researchers as well as other partners in managing the grant and developing research studies, and how they collaboratively will manage data handling, scientific analysis, intellectual property rights and authorship.

Research projects carried out in LLMICS should demonstrate co-leadership of the proposed scientific agenda with investigators from LLMIC institutions and strive to include opportunities for mentorship and/or research training for junior researchers from Norway and LLMIC partners. The Research Council requires that a Norwegian institution is "project owner" with overall administrative and scientific responsibility. Projects implemented in one or more LLMIC should include institutional partner(s) in the relevant country or countries, and these should, where possible, hold senior

responsibility within the project as co-project managers², work package leaders or as project managers if employed in part by the Norwegian project owner.

Proposals should include concrete plans for how the project will contribute to strengthening both individual and institutional capacity in the collaborating institutions, thereby enabling researchers from the LLMIC institution to take on responsibility as project managers in the future. In clinical studies or other research projects in LLMICs that require a sponsor, the sponsor-<u>investigator</u>³ should be employed at the implementing institution in the LLMIC, unless there is a specific rationale for an alternative arrangement, e.g. in multi-country studies. Research projects should not be funded if a Norwegian institution simply intends to subcontract all centrally involved research entities in LLMICs to implement research after which the data are exported to Norway and analysed and presented from a Norwegian research organization.

Over the duration of a new programme, the Research Council of Norway should assess the extent to which Norwegian project owners have promoted equitable research partnerships (e.g., the extent to which projects has co-leadership, promote mutual learning and/or involved LLMIC researchers as lead authors and co-authors of publications).

4 Additional objectives

A new programme should promote a set of additional objectives: user involvement, gender equality and innovation. Each of these are central to achieving the programme's primary objective and should, where relevant, be assessed in relation to every submitted research proposal.

4.1 User involvement

User involvement refers to the involvement of end-users of research findings, during different stages of the research process, from defining the research priorities and questions to interpreting the implications of the research for policy and practice. Relevant users of global health research may include community members, patients, health professionals, health systems managers and other administrators of a health system, officials and bureaucrats in the ministry of health, politicians, other collaborative partners and officials in international organizations and local and international NGOs and social movements. It is likely that many research proposals will carry the potential for informing Norwegian investments and participation in global health initiatives with a sound evidence-base. Accordingly, dialogue with Norwegian policymakers should be sought where relevant.

User involvement has increasingly been a priority for the Research Council of Norway and has become integral to the evaluation of the "impact" criteria in the Research Council of Norway's proposals. A new programme should encourage user involvement at every relevant stage of the research process. Genuine user involvement goes beyond merely informing users about the proposed research to implement carefully planned and well-organized mechanisms that value the

² 'Project manager' is the term used by the RCN to describe the lead researcher who receives the grant and who is responsible for ensuring that the project is carried out in accordance with the grant contract. In this document, this term should be seen as synonymous with the term 'principal investigator'.

³ A sponsor-investigator is here defined as the researcher at the implementing institution who conducts or oversees the study.

knowledge and perspectives of different users when developing the direction and purpose of the proposed research. The proposed research should be sensitive to community needs and have plans for engaging fairly with community structures when the proposed research involves interventions and data collection that carries the risk of disrupting the daily lives of individuals in the communities. Researchers should articulate how they hope to engage with community structures, how they plan to create value for communities where the research will be carried out, and how disruptions to local people's daily lives will be minimized. For example, for implementation research that involves testing interventions in communities, regions or an entire country, it is relevant to explain the extent to which the proposed interventions have a chance of being financed, continued and implemented after the duration of the project. The proposed research should adhere to the same standards for user involvement as specified in the Research Council of Norway's policy on open science (45), with appropriate safeguards for academic independence.

4.2 Gender equality

Gender equality is an issue that cuts across the SDG 3 targets as well as the other SDGs. In recent years, several initiatives in global health—such as Global Health 50/50 and Women in Global Health—have been launched to more systematically examine and propose strategies for addressing different aspects of gender inequities in global health (46,47). These initiatives emphasize paying attention to asymmetries in power, privilege and resources that might affect gender inequities and motivate reflection on the role of research in addressing such issues. Gender also intersects with different forms of discrimination and marginalization (48).

A focus on gender and its intersectional nature should therefore be embedded in the overall focus on health equity, and a new programme should motivate research into policies, programmes or interventions that focus on gendered impacts. A new programme should adopt the measures the Research Council of Norway's "Policy for gender balance and gender perspectives in research and innovation" prescribe for research organizations and individual research teams (49), and promote gender balance and gender perspectives overall and in research proposals submitted to the programme. Research teams should be able to demonstrate concrete steps taken to promote gender balance and, where relevant, show how the proposed research question will address gender dimensions.

4.3 Innovation

A broad understanding of innovation includes significantly improved goods, services, processes, and concepts as well as ways of organizing and governing that generate value and societal benefits, including new models of governance, financing and delivery of health services and public health interventions. Innovation should also be about how research is conducted and a new programme should value innovation in research methodology. By recognizing that innovation is not restricted to the development of technologies and products addressing specific diseases, a new programme can motivate researchers to think creatively about how their research findings can contribute to innovations with the potential for contributing to SDG 3, reducing disease burden and promoting health equity. Such an understanding of innovation would align with the goals of recent strategies from the Research Council of Norway, such as the *Empowering ideas for a better world* (50), *Research for Innovation and Sustainability* (2015–2020) (51) and the *Strategy for innovation in the public sector* (52).

References

- OECD. Development finance standards [Internet]. [cited 2020 Nov 10]. Available from: https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/
- 2. OECD. DAC List of ODA Recipients [Internet]. [cited 2020 Nov 10]. Available from: https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-of-ODA-Recipients-for-reporting-2020-flows.pdf
- Utenriksdepartementet. Prop. 1 S (2020 –2021) Proposisjon til Stortinget (forslag til stortingsvedtak). [Internet]. [cited 2020 Nov 10]. Available from: https://www.regjeringen.no/contentassets/cff8038d6bdd401bbfc43d34b7685b42/no/pdfs/prp 202020210001_uddddpdfs.pdf
- 4. WHO. Global Action Plan for healthy lives and well-being for all [Internet]. 2019 [cited 2019 Apr 1]. Available from: https://www.who.int/sdg/global-action-plan
- Ministry of Foreign Affairs and the Ministry of Health. Better Health, Better Lives. Combating Non-Communicable Diseases in the Context of Norwegian Development Policy (2020-2024). Government of Norway; 2019.
- 6. Forland F, T. Storeng K, Moen B. Hvor er global helseforskning i statsbudsjettet? Bistandsaktuelt [Internet]. 2019 Nov 8 [cited 2020 Dec 1]; Available from: https://www.bistandsaktuelt.no/arkiv-kommentarer/2019/viktig-med-global-helseforsikring/
- 7. de Thyra J, Varnai P, Svetachova M, Grudin M, van Barneveld J. Mid-term evaluation of the second Programme for Global Health and Vaccination Research (GLOBVAC2) [Internet]. Technopolis; 2016 [cited 2020 Oct 19]. Available from: https://www.forskningsradet.no/contentassets/c8cb7bcada6f4721b080043c79b14afe/evaluatio n_-of_globvac.pdf
- 8. Lambert P-H, Bhutta Z, Bloom B, Liu M. GLOBVAC Research and Capacity Building for Global Health Midterm External Review. Research Council of Norway; 2009.
- 9. Henao-Restrepo AM, Camacho A, Longini IM, Watson CH, Edmunds WJ, Egger M, et al. Efficacy and effectiveness of an rVSV-vectored vaccine in preventing Ebola virus disease: final results from the Guinea ring vaccination, open-label, cluster-randomised trial (Ebola Ça Suffit!). Lancet. 2017 04;389(10068):505–18.
- Bårnes GK, Kristiansen PA, Beyene D, Workalemahu B, Fissiha P, Merdekios B, et al. Prevalence and epidemiology of meningococcal carriage in Southern Ethiopia prior to implementation of MenAfriVac, a conjugate vaccine. BMC Infect Dis. 2016 04;16(1):639.
- 11. Bhandari N, Mazumder S, Taneja S, Sommerfelt H, Strand TA. Effect of implementation of Integrated Management of Neonatal and Childhood Illness (IMNCI) programme on neonatal and infant mortality: cluster randomised controlled trial. Bmj. 2012;344:e1634.
- 12. Research Council of Norway. Evaluation of the Norwegian Centres of Excellence (SFF) Funding Scheme [Internet]. [cited 2020 Nov 10]. Available from: https://www.forskningsradet.no/contentassets/6670e0a93d41463bb80a1310004dc568/sff_evaluation---main-report.pdf

- 13. WHO. Optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting. Geneva: World Health Organization; 2012.
- 14. Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, et al. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. Cochrane Database Syst Rev. 2010 Mar 17;(3):CD004015.
- 15. Gouglas D, Marsh K. Prioritizing investments in new vaccines against epidemic infectious diseases: A multi-criteria decision analysis. Journal of Multi-Criteria Decision Analysis. 2019;26(3–4):153–63.
- 16. Gouglas D, Thanh Le T, Henderson K, Kaloudis A, Danielsen T, Hammersland NC, et al. Estimating the cost of vaccine development against epidemic infectious diseases: a cost minimisation study. Lancet Glob Health. 2018;6(12):e1386–96.
- 17. Roalkvam S. Health governance in India: citizenship as situated practice. Global Public Health. 2014;9(8):910–26.
- 18. Storeng KT. The GAVI Alliance and the 'Gates approach' to health system strengthening. Global public health. 2014;9(8):865–79.
- Research Council of Norway. Evaluation of the Social Sciences in Norway. Report from Panel 5 -Social Anthropology [Internet]. [cited 2020 Nov 10]. Available from: https://www.forskningsradet.no/siteassets/publikasjoner/1254035786850.pdf
- 20. Koplan, JP, Bond, C.P., Merson, M.H, Reddy, S., Rodriguez, M.H, Sewankambo, N.K. Towards a common definition of global health, Lancet, Volume 373, Issue 9679, 6–12 June 2009, Pages 1993-1995)
- 21. World Health Organization. Constitution of the World Health Organization, Preamble 1948. [cited on 2020 Dec 10]. Available from: https://apps.who.int/gb/bd/pdf_files/BD_49th-en.pdf#page=7.
- 22. Dieleman JL, Schneider MT, Haakenstad A, Singh L, Sadat N, Birger M, et al. Development assistance for health: past trends, associations, and the future of international financial flows for health. Lancet. 2016 Jun 18;387(10037):2536–44.
- 23. Vos T, Lim SS, Abbafati C, Abbas KM, Abbasi M, Abbasifard M, et al. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet. 2020;396(10258):1204–22.
- 24. WHO. Follow-up to the high-level meetings of the United Nations General Assembly on health-related issues [Internet]. Geneva: World Health Organization; 2019 Apr [cited 2020 Dec 1]. Available from: https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_19-en.pdf
- 25. WHO, World Bank. Tracking Universal Health Coverage [Internet]. Geneva: World Health Organization; 2015 [cited 2020 Dec 2]. Available from: https://apps.who.int/iris/bitstream/handle/10665/174536/9789241564977_eng.pdf?sequence= 1
- 26. WHO. Gender, equity and human rights in the Sustainable Development Goals [Internet]. [cited 2020 Oct 19]. Available from: https://www.who.int/gender-equity-rights/news/ger-in-sdg/en/

- 27. United Nations. Ensure healthy lives and promote well-being for all at all ages [Internet]. [cited 2020 Dec 2]. Available from: https://sdgs.un.org/goals/goal3
- 28. WHO. Universal Health Coverage [Internet]. World Health Organization. 2020 [cited 2020 Dec 1]. Available from: https://www.who.int/health-topics/universal-health-coverage#tab=tab_1
- 29. Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Boykoff M, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. Lancet. 2019 16;394(10211):1836–78.
- 30. Yamey G. What are the barriers to scaling up health interventions in low and middle income countries? A qualitative study of academic leaders in implementation science. Globalization and health. 2012;8(1):11.
- 31. Pantoja T, Opiyo N, Lewin S, Paulsen E, Ciapponi A, Wiysonge CS, et al. Implementation strategies for health systems in low-income countries: an overview of systematic reviews. Cochrane Database of Systematic Reviews. 2017;(9).
- 32. Ritchie LMP, Khan S, Moore JE, Timmings C, van Lettow M, Vogel JP, et al. Low-and middle-income countries face many common barriers to implementation of maternal health evidence products. Journal of clinical epidemiology. 2016;76:229–37.
- 33. Terry R, Charles E, Purdy B, Sanford A. An analysis of research priority-setting at the World Health Organization—how mapping to a standard template allows for comparison between research priority-setting approaches. Health research policy and systems. 2018;16(1):1–11.
- 34. Theobald S, Brandes N, Gyapong M, El-Saharty S, Proctor E, Diaz T, et al. Implementation research: new imperatives and opportunities in global health. The Lancet. 2018;392(10160):2214–28.
- 35. Jamison DT, Alwan A, Mock CN, Nugent R, Watkins D, Adeyi O, et al. Universal health coverage and intersectoral action for health: key messages from Disease Control Priorities, 3rd edition. Lancet. 2018 17;391(10125):1108–20.
- 36. Global Health Norway [Internet]. [cited 2020 Nov 10]. Available from: http://globalhealth.no/
- 37. Norwegian Research School of Global Health [Internet]. Available from: https://www.ntnu.edu/nrsgh/
- 38. Norwegian Forum for Global Health Research [Internet]. Available from: http://globalhealth.no/articles/norwegian-forum-for-global-health-research-1
- 39. Ward CL, Shaw D, Sprumont D, Sankoh O, Tanner M, Elger B. Good collaborative practice: reforming capacity building governance of international health research partnerships. Global Health. 2018 08;14(1):1.
- 40. Franzen SRP, Chandler C, Lang T. Health research capacity development in low- and middle-income countries: reality or rhetoric? A systematic meta-narrative review of the qualitative literature. BMJ Open. 2017 27;7(1):e012332.
- 41. Carvalho A, IJsselmuiden C, Kaiser K, Hartz Z, Ferrinho P. Towards equity in global health partnerships: adoption of the Research Fairness Initiative (RFI) by Portuguese-speaking countries. BMJ global health. 2018;3(5):e000978.

- 42. Parker M, Kingori P. Good and bad research collaborations: researchers' views on science and ethics in global health research. PloS one. 2016;11(10):e0163579.
- 43. Nordling L. Africa aims for research autonomy. Nature. 2015;520(7546):142-3.
- 44. Abimbola S. The foreign gaze: authorship in academic global health. 2019;
- 45. Research Council of Norway. Policy on Open Science [Internet]. [cited 2020 Dec 1]. Available from: https://www.forskningsradet.no/en/Adviser-research-policy/open-science/policy-for-open-science/
- 46. Hawkes S, Allotey P, Elhadj AS, Clark J, Horton R. The Lancet Commission on Gender and Global Health. The Lancet. 2020;396(10250):521–2.
- 47. Dhatt R, Kickbusch I, Thompson K. Act now: a call to action for gender equality in global health. The Lancet. 2017;389(10069):602.
- 48. Sen A. Gender equity and the population problem. International Journal of Health Services. 2001;31(3):469–74.
- 49. Research Council of Norway. Policy for gender balance and gender perspectives in research and innovation [Internet]. 2019 [cited 2020 Dec 1]. Available from: https://www.forskningsradet.no/contentassets/19527ed7d0b149d6b9b310f8bb354ce9/nfr_gender_policy_orig-1.pdf
- 50. Research Council of Norway. Empowering ideas for a better world [Internet]. [cited 2020 Oct 19]. Available from: https://www.forskningsradet.no/contentassets/0b1fe1ef42e7435fa7d37e3a4d7dfdc6/strategi_2020-2024_en.pdf
- Research Council of Norway. Research for innovation and sustainability [Internet]. [cited 2020 Oct 19]. Available from: https://www.forskningsradet.no/siteassets/publikasjoner/1254013244945.pdf
- 52. Research Council of Norway. Strategy for innovation in the public sector [Internet]. [cited 2020 Oct 19]. Available from: https://www.forskningsradet.no/siteassets/publikasjoner/strategy-for-innovation-in-the-public-sector.pdf

Annex 1. The working group's mandate and process

Background

The research programme GLOBVAC2 concluded in 2020 after running for eight years. The programme has had the following four overriding thematic priorities:

- Prevention and treatment of, and diagnostics for, communicable diseases, particularly vaccines and vaccination research
- Family planning and reproductive health, and maternal, child, neonatal and adolescent health
- Health systems and health policy research
- Innovation in technology and methods development

In 2019, the Research Council started to lay the foundation for a renewed initiative in Norwegian global health research when a memo was prepared on the needs for global health research after 2020. The memo was prepared by a working group comprising representatives of the Ministry of Foreign Affairs (MFA), the Ministry of Health and Care Services (MHCS), NORAD, the Norwegian Directorate of Health and the Research Council of Norway. Recommending thematic priorities for the new initiative was outside the group's remit. Based on the memo and subsequent dialogue with the funding ministry, the Research Council finds that there is support for starting up a new targeted initiative in Norwegian global health research. A dialogue meeting was held at the end of May with the research groups and ministries, and a working group comprising representatives of various institutions was then appointed to prepare a document on the thematic priorities for the new global health research initiative.

The working group's composition

The Research Council of Norway appointed Atle Fretheim from the Norwegian Institute of Public Health (NIPH) to chair the working group and Unni Gopinathan from the NIPH as secretary. After expressions of interest, the Research Council of Norway sought to secure institutional representation across Norway, diverse disciplinary backgrounds and gender balance. The following individuals were appointed as working group members:

| Name | Institution |
|-----------------------|------------------------------------------|
| Atle Fretheim (chair) | The Norwegian Institute of Public Health |
| Halvor Sommerfelt | The University of Bergen (UiB) |
| Hanne Jørgensen | The Norwegian Veterinary Institute |

| Katerini Storeng | The University of Oslo (UiO) | |
|------------------|-----------------------------------------------------------|--|
| Magnus Steigedal | The Norwegian University of Science and Technology (NTNU) | |
| Nina Langeland | The regional health authorities | |
| Ottar Mæstad | СМІ | |

The representatives of the working group represented the interests of their institutions and were encouraged to discuss the group's work with stakeholders at their respective institutions. At the same time, it was important that the members kept a broad perspective and contributed to the group's overall strategic ideas.

The working group's mandate

The working group's mandate was to prepare a document that discusses and recommends thematic priorities for the new initiative in Norwegian global health research. The initiative should promote high-quality Norwegian global health research and innovation with particular relevance to developing countries⁴. The initiative should secure long-term enhancement of Norwegian research groups' quality and capacity as regards this field. The group's work should be based on the objective that future initiatives should support Norway's contribution to the global sustainable development goals, and particularly "Goal 3: Ensure healthy lives and promote well-being for all at all ages." This document will be included as a supporting document for the portfolio plan for the Global Development portfolio. Structural priorities for the initiative (budget, frequency of calls for applications, the use of policy instruments, duration etc.) are not included in the working group's remit. The Research Council will decide these priorities in consultation with the funding ministry and according to the Research Council's practice.

The working group's tasks and process

The following table presents an overview of the working group's process:

| Milestone | Date | Responsible |
|-------------------------------------------------|-------------|-------------------------|
| First dialogue meeting with the research groups | 25 May | The Research Council |
| First meeting of the working group | 15 June | The working group |
| Second meeting of the working group | 4 September | The working group |

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⁴By *developing country* is here meant 'least developed countries, other low income countries, and lower middle income countries and territories' as defined in the <u>OECD DAC list</u>

| Zero draft of thematic priorities | 19 October | The working group and the Research Council |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------|
| Send the document to Norwegian educational and research institutions and the GLOBVAC programme board for open consultation | October 19—October 28 | The Research Council |
| Third meeting of the working group | 4 November | The working group |
| Finished document on thematic priorities | 13 November | The working group |
| Send the document to MFA/NORAD/MHCS, Global Development portfolio board and a panel of experts from LMICs with a two-week deadline for providing comments | 16 November | The Research Council and MFA/MHCS/NORAD |
| Fourth meeting of the working group | 24 November | The working group |
| Implement comments from MFA/NORAD | 2 December | The working group and the Research Council |
| Finished document on thematic priorities, to be approved by the Global Development portfolio board | 10 December | The Research Council |

The group must include any input received after the dialogue meeting in its discussions. The first draft shall be sent to all participants in the dialogue meeting and the Global Development portfolio board for input and comments. The working group shall incorporate this in the document as far as possible. The finished document must be sent to the funding ministry and the Global Development portfolio board for comments. The document will be adopted by the portfolio board.

The working group held four digital meetings on the following dates: June 15, September 4, November 4 and November 24. The minutes from these meetings are available upon request to the Research Council. The Research Council participated in the initial meeting as an observer to provide information and answer questions about the mandate. After the first two meetings a first draft of the thematic priorities were released to a consultation with Norwegian educational and research institutions and networks, who were invited to submit written feedback. Eleven inputs were received. These were discussed during the working group's 3rd meeting and the document was as far as possible adjusted in response to these inputs. A revised document was shared for a second consultation with the MFA, MHCS, NORAD, selected members of the portfolio board for Global development and international relations and a panel of seven experts from low- and middle-income countries. To form an expert panel that could review the document from different disciplinary perspectives, each working group member was invited to suggest one candidate. Geographic

representation and gender balance were the other criteria used to determine the final composition. The panel was composed of the following experts:

- 1. Dr. Jorge Barreto, Researcher, Government School, Oswaldo Cruz Foundation Fiocruz, Brasilia, Brazil
- 2. Dr. Nita Bhandari, Director, Centre for Health Research and Development, Society for Applied Studies, New Delhi, India
- 3. Dr. Asha George, Professor, School of Public Health, University of the Western Cape, Cape Town, South Africa
- 4. Dr. Peter Hangoma, Head of Department of Health Policy and Management, University of Zambia, Zambia
- 5. Dr. Sabrina Moyo, Department of Microbiology and Immunology, School of Medicine, Muhimbili University of Health and Allied Sciences (MUHAS) Dar es Salaam, Tanzania
- 6. Dr. Benjamin Tsofa, Centre Director of the KEMRI Centre for Geographic Medicine Research Coast, Kilifi, Kenya
- 7. Dr. Barbara Wieland, Principal Scientist and Team Leader, International Livestock Research Institute (ILRI), Addis Ababa, Ethiopia

The inputs from the second consultation round were reviewed during the 4th meeting and the document was revised in response to these inputs. A final version of the document was submitted to the Research Council on December 2. The document was approved by the Portfolio board for Global Development and International Relations on December 8. 2020.

