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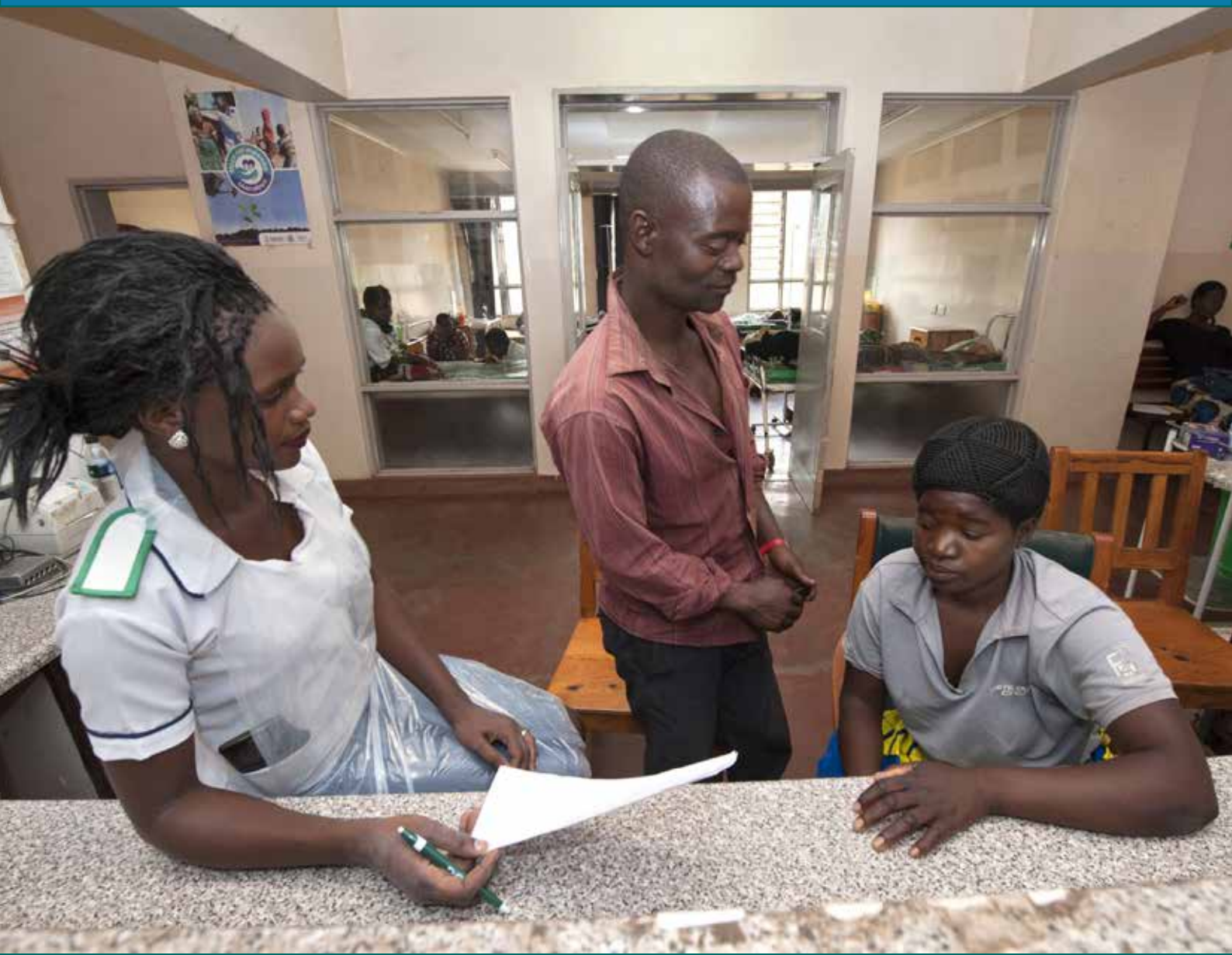
Norwegian Support to Strengthening Human Resources for Health

A review of financing mechanisms



Norwegian Support to Strengthening Human Resources for Health

A review of financing mechanisms

Final Report

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Hera - right to health & development
Nordic Consulting Group

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ACRONYMS

AFFU	Department of Research and Development, NTNU
CGH	Centre for Global Health
CISMAC	Centre for Intervention Science in Maternal and Child Health
CMI	Chr. Michelsen Institute
EDCTP	European & Developing Countries Clinical Trials Partnership
FORUT	Norwegian NGO
GHR	Global Health Research
GLOBVAC	Programme for Global Health and Vaccination research
MCNAH	Maternal, Child, Neonatal and Adolescent Health
MDG	Millennium Development Goal
MFA	Ministry of Foreign Affairs
NIPH	Norwegian Institute of Public Health
DIKU	Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education
HEI	Higher Education Institution
HELSAM	Institute of Health and Society
HISP	Health Information Systems Programme
HOD	Ministry of Health and Care Services
HRH	Human Resources for Health
HUH	Haukeland University Hospital
JPIAMR	Global Coordination of Antimicrobial Resistance Research
LMIC	Low and Middle-Income Country
MNCH	Maternal, Newborn and Child Health
NAC	Norwegian Afghanistan Committee
NOKUT	Norwegian Agency for Quality Education
NOMA	Norad´s Programme for Master Studies
NORHED	Norwegian Programme for Capacity Development in Higher Education and Research for Development
NORPART	Norwegian Partnership Programme for Global Academic Cooperation
NPHI	Norwegian Institute of Public Health
NRC	Norwegian Research Council
NRSGH	Norwegian Research School of Global Health
NTNU	Norwegian University of Science and Technology
NUFU	The Norwegian programme for Development, Research and Education
OUS	Oslo University Hospital

RCN	Research Council of Norway
SDG	Sustainable Development Goal
USAID	United State Agency for International Development
OFDA	Office of U.S. Foreign Disaster Assistance
UiB	University of Bergen
UiO	University of Oslo
UiT	University of Tromsø
SEFAS	Centre for Elderly and Nursing Home Medicine
SUM	Centre for Development and the Environment
TVEPS	Centre for Inter Professional Workplace Learning in Primary Care
UNN	University Hospital Northern Norway

EXECUTIVE SUMMARY

PURPOSE

The purpose of this report is to provide an overview of current funding arrangements for Norwegian health, academic and training institutions engaged in capacity building in developing countries, assess their strengths and weaknesses, as well as identify options for filling gaps in funding of (a) research, (b) higher education, (c) specialist training and (d) exchange programmes. The focus of the review is "financing mechanisms" for health capacity development – not the design, implementation and results of/from programmes.

METHODS

The study started with an identification of relevant Norwegian institutions involved in strengthening human resources for health in low- and middle-income countries. A survey with a few basic questions was sent to each of the institutions. A desk study was carried out of web sites and available documentation. Key informant interviews were organized with representatives from a sample of institutions. The list of institutions and programmes are not all-inclusive, but sufficient to address the questions about financing mechanisms for the major actors.

Each institution is presented in Annex 5 through institutional profiles with information from internet, available documents and feedback from the survey and interviews. Chapter 2 presents a summary analysis based on the institutional profiles – addressing questions in the Terms of Reference. Hence, chapter 2 and annex 5 belong together with the first based on the latter. Chapter 3 offers a list of strategic and operational recommendations.

The following presents some of the main findings:

WHAT INSTITUTIONS ARE INVOLVED?

- There is a broad range of institutions involved in strengthening human resources for global health – partly because capacity development is a broad concept as well as human resources for health.
- No overall mechanism exists for planning and coordination of global health support in general and for strengthening human resources for health in particular. At first sight – the landscape looks complex and fragmented with several independent institutions and funding arrangements, but with important variations.
- The research "system" is relatively well-defined with the Norwegian Research Council as the dominant player and GLOBVAC as the major programme. There are also European and other international financing mechanisms, but they are less important for Norwegian researchers.
- The "system" around capacity development in higher education is also relatively clear. NORHED has capacity development in the South as the overall objective and covers both research, higher education and postgraduate training while NORPART focuses more on student/staff exchange and mobility.
- Norec is designed with mutual exchange of experience and knowledge among participants below the age of 35 as the overall objective for Norec – not for training of health personnel as such – so it is not the optimal model for capacity development (and not meant to be either). It is used extensively by university hospitals partly because other opportunities do not exist.

- When NGOs are involved in capacity development of health personnel, it is often on the job training and shorter/targeted training as part of broader health projects, but with important exceptions.

WHAT ARE THE FUNDING MECHANISMS?

- When it comes to research and research capacity development, the Norwegian Research Council and NORHED are the two largest funding mechanisms.
- The schemes for funding higher education (PhD and MA) have varied over time. The Quota Scholarship scheme (supporting full-time MA and PhD students in Norway) was phased out in 2016 and partly replaced by NORPART with an emphasis on promoting internationalization and student mobility.
- There is no single dedicated financing mechanism for training of medical doctors – important for capacity development of health personnel in LMICs. Such training falls between different financing schemes, rules and regulations. University hospitals are in Norway responsible for training of medical specialists (doctors) with authorization from the Directorate of Health, while NORHED works with universities as their main partners.

WHAT IS THE LEVEL OF FUNDING?

- Most data are available on investments in global health research, less in the area of higher education and exchange and least on specialist training. Adequate data are not available. Some data and information have been gathered and are presented in this report.

WHAT ARE THE CRITERIA FOR FUNDING, CONSTRAINTS AND GAPS?

- Norwegian Research Council is the major and most significant funding mechanism for global health research. Uncertainty about future funding (GLOBVAC III) is currently a barrier to the continuation and scale-up of ongoing research projects and collaborations.
- GLOBVAC requires that project owners are Norwegian institutions, even though the principal investigator can be a non-Norwegian national. Such a requirement may limit the opportunities for country-driven research by low-and middle income countries.
- The thematic priority areas concerning health systems & policy research, implementation and innovation research are, at present, underrepresented in the portfolio.
- Research funding programmes are not optimally suited to sustainable and systematic capacity development in LMICs, because the funding is tied to specific projects that usually have a duration of around three to five years.
- Norwegian partners to NORHED must be higher education institutions accredited by NOKUT and offer accredited degree programmes. In other words, only universities and university colleges can apply directly to NORHED. University hospitals are not eligible and able to enter an agreement with NORHED/Norad on their own, but they can partner with and apply through universities. There are examples of such partnerships.
- NOREC supports job exchanges for young people from Norway and partner countries in the south through project grants to international partnerships - with several positive spinoffs for individual participants and institutions. However, it is not designed with capacity development as the overall purpose - and clearly not for training of medical specialists.

- The abolition of the Quota Programme for higher education (MA and PhD) and the establishment of NORPART meant a shift from support to individual students, based on institutional agreements, to a focus on institutional cooperation in partnership programmes. There are gaps in the mechanisms for funding higher education.
- In sum, there are financing mechanisms for research, higher education and exchange – each with their rules and regulations. Specialist training for medical doctors has not such a mechanism – and hospitals, committed individuals and groups have exploited existing and found new sources of funding for a variety of initiatives.

WHAT IS THE IMPORTANCE AND RELEVANCE OF THE FUNDING MECHANISMS?

- For those responding to the survey, predictability and size determined what was seen as the most relevant and essential financing mechanism – in other words NRC, NORHED (Norad) and Norec.
- Most institutions refer to global commitments and Norwegian priorities for global health in presentations and justifications of programmes.
- All programmes emphasise the role of mutual partnerships, but as discussed in the case studies level of mutuality and involvement in design and implementation from Southern partners vary significantly.
- Assessment of quality of research and higher education falls beyond the scope of this assignment.
- There is not sufficient data to prove, but developing capacity through research has become the dominant mode in Norway for strengthening human resources for health in low - and middle-income countries – followed by higher education and specialist training. This has not happened by design, but through an incremental number of decisions, availability of financing instruments and regulations of funding.
- The focus on global health research can document results – relevant and effective in its own right. However, an overall plan or strategy reflecting on and deciding the relative importance of research/higher education/specialist training as tools for capacity development is missing – including financing mechanism for research, higher education and specialist training.

STRATEGIC RECOMMENDATIONS

There is no direct line from description and analysis to recommendations. The way forward depends to a large extent on strategic choices – what Norwegian aid authorities want to achieve and prioritise resources.

The following recommendations are based on the assumption that "strengthening human resources for global health" or in other words developing the capacity of health personnel in low – and middle-income countries is an important goal for Norwegian development cooperation. The recommendations are further justified and explained in Chapter 3. The strategic recommendations are:

1. Develop an overall plan/strategy for strengthening human resources for health in low and middle-income countries through Norwegian institutional support.
2. Review the relevance and effectiveness of each financing instrument for capacity development and prioritise accordingly.

3. Ensure that each of the capacity development instruments (research/higher education/specialist training) have dedicated financing instruments and/or recognized funding opportunities.
4. Select or establish a mechanism for planning, coordination and monitoring - taking into consideration differences in mandates and sources of funding for institutions involved and include relevant indicators for global health in existing tools for monitoring.

SPECIFIC RECOMMENDATIONS:

5. Establish and support a new "GLOBVAC III" focusing on implementation research.[1]
6. Strengthen the role of capacity development for research in GLOBVAC III by undertaking the following actions:
    1. Reconsider conditions and practice when it comes to having only Norwegian institutions as projects owners.
    2. Suggest and support an independent country review/evaluation of capacity development – assessing roles and responsibilities in planning and implementation of projects and results from knowledge transfer/exchange at individual and institutional levels.
    3. Strengthen the role of capacity development in research projects in consultation with NORHED.
7. Keep Norec a youth exchange programme and leave out exchange of senior medical specialists. Strengthen supervision of and support to health personnel in Norec exchanges.
8. Open a window in NORHED for specialist training of medical personnel (in particular) doctors managed by University hospitals – in addition to joint projects between universities and university hospitals.
9. Keep the focus on capacity development in higher education (MA and PhD), but allow and support in particular PhD students from LMICS to study at Norwegian universities when required for maintaining sufficient standards and quality. This could include (a) sandwich programmes with double degrees or (b) degrees awarded by universities in the South or in some cases full time studies in Norway.

[1] Along the lines already proposed by the working group for the new programme.

1 INTRODUCTION

1.1 PURPOSE AND SCOPE OF WORK

Norad has decided to carry out *a mapping of existing financing mechanisms for Norwegian health, academic and training institutions in the area of human resources in health (HRH)*[2]. The *objective* is to obtain an overview of current funding arrangements for Norwegian health, academic and training institutions engaged in capacity building in developing countries and assess their strengths and weaknesses in meeting funding requirements, as well as identify options for filling possible gaps in funding of capacity building, specialist training and higher education for health personnel.

Findings should ultimately increase the understanding of how Norwegian funding mechanisms for HRH support contribute to strengthening the health sector and national demand for qualified human resources in the health sector. The study should discuss eligibility criteria, regulations and how funding is practiced, including constraints. The assignment should also assess whether arrangements are perceived as relevant and appropriate in relation to Norwegian global health priorities. A review of global funding channeled through the Working Party for Health Multi Partner Trust Fund will be carried out later this year.

The focus of the review is "financing mechanisms" for health capacity development – not the design, implementation and results of/from programmes. The purpose is not to provide a comprehensive overview of all institutions and programmes, but select a sufficient number of the most important institutions.

Capacity development is a broad concept and can in principle consist of all types of formal/informal education and training. The review has focused on:

(a) Research (including North-South and South-South partnerships).
(b) Higher education of students from the South (PhD and Master levels).
(c) Specialist training.
(d) Exchange programmes (excluding student exchange in basic training).

The capacity development could take place in Norway or in the countries/regions where students come from. Shorter, more ad hoc or on-the job training of health personnel (as part of broader health programmes) has not been included.

1.2 TARGET INSTITUTIONS

The study started with identification of relevant Norwegian institutions involved in strengthening human resources for health in low- and middle-income countries. As mentioned, the intention was not to cover all, but the most important institutions for reviewing strengths and weaknesses of financing mechanisms.

The study should include the following institutions:

(a) *Norwegian Programme for Capacity Development in Higher Education* (NORHED).

[2] See Annex 1: Terms of Reference.

(b) *Norwegian Agency for Exchange Cooperation* (Norec) - supporting exchange projects between Norwegian institutions and partners in low- and middle-income countries.
(c) *Norwegian Research Council* (NRC) – in particular GLOBVAC providing support to research within the field of global health and vaccination.
(d) *Universities* of Oslo and Bergen (including Center for Global Health Oslo and Center for International Health Bergen).
(e) *Directorates and institutes: Directorate of Health, Institute for Public Health, Christian Michelsen Institute and SINTEF.*
(f) *Regional health authorities* (university hospitals in Oslo, Bergen, Trondheim and Tromsø) and other selected hospitals.
(g) *Civil society organisations* such as Norwegian Church Aid, Norwegian Afghanistan Committee and CapaCare.
(h) *Private donors/foundations such as Trond Mohn Foundation, Laerdal Global Health, Kavli Foundations.*

The role of international donors such as EU, World Bank, Melina and Bill Gates Foundation etc. in funding Norwegian institutions/programmes has been dealt with in the presentation of the individual institutions.

1.3 QUESTIONS AND METHODS

The key questions to be addressed are:

1. What Norwegian institutions are involved in strengthening human resources for health through research, higher education and specialist training?
2. What types of capacity development do they support:
    a. Research
    b. Higher education
    c. Specialist training
    d. Exchange programmes
    e. Others
3. What are the funding mechanisms (funding sources) for such types of capacity development:
    a. Public
    b. Internal (from the institutions own budget)
    c. Private
    d. International
4. What is the current level of ongoing funding from the different sources?
5. What are the criteria (guidelines) for funding?
6. To what extent do the criteria promote/facilitate and/or constrain access to and use of funding?
7. Are there any important gaps and additional needs? (Areas not possible to fund.)
8. What is the most important financing mechanism (source of funding) for each institution and why?
9. What is the importance (added value) of the programmes for Southern partners?
10. To what extent are the programmes:
    a. Aligned with and support global commitment and standards?
    b. Focusing on key priorities for Norway?
    c. Carried out in partnerships (North/South-South/South)?

d. Contributing to health systems strengthening?
e. Aligned with country level HRH policies including criteria for final national level authorization of education/training?
f. Maintaining sufficient levels of quality and standards?

11. Any recommendations to remove constraints, fill funding gaps and improve quality?

The study has been carried out as follows:

(a) The list of institutions and people contacted/interviewed were worked out in consultation with Norad and the Secretariat for Global Health Norway Annex 5 covers all institutions included in the study.
(b) A survey with a few basic questions was sent to all institutions through Norad – including a request for interviews of key informants (Annex 2).[3]
(c) A desk study was carried out of web sites and available documentation for all institutions.
(d) Key informant interviews were organized with representatives from selected institutions (Annex 4).

Each of the institutions are presented in Annex 5 through institutional profiles with information from internet, available documents and feedback from the survey and interviews. Chapter 2 presents the summary analysis for all the institutions based on the institutional profiles – addressing all questions in the Terms of Reference.

1.4 LIMITATIONS

The study does not cover all Norwegian institutions involved in capacity development for health in low and middle-income countries. However, we believe to have covered the most important institutions (covering 80-90% of all funding). and all funding mechanisms. The purpose was neither to do a complete mapping. All institutions did not provide new information. Hence, the institutional profiles in Annex 5 are mainly based on secondary sources. Adequate data on funding were not available.

Terms of Reference includes a set of broader evaluation questions. The Inception Note explained limitations in responding to those questions within the confines of this study. Data and information have been collected from (a) existing information from Internet and relevant reports – including evaluations when available), (b) a brief survey providing feedback from stakeholders and (c) interviews with a sample of stakeholders.

In other words, information is available from Norwegian institutions and a survey/interviews with stakeholder opinions and perceptions. Partners from low and middle income countries have not been interviewed on how they assess the value and relevance of programmes. Assessing the quality of research and education is also beyond the scope of this report.

[3] The questionnaire of the survey was sent to 22 institutions and 11 responded, but those responding are responsible for most of the activities (including Oslo, Bergen and Trondheim). In addition, 14 individuals were interviewed by phone or Zoom. Hence, the level of data and information vary in coverage and quality. There is considerable information from NRC, NORHED and NOREC, but much less from the Regional Health Authorities (hospitals) and universities – except for Haukeland and Oslo University Hospitals.

2 FINDINGS AND CONCLUSIONS

2.1 WHAT INSTITUTIONS ARE INVOLVED?

The first two questions are: What Norwegian institutions are involved in strengthening human resources for health and what types of capacity development do they support[4]?

A first observation: There is a broad range of institutions involved in strengthening human resources for global health – partly because capacity development is a broad concept[5] as well as human resources for health. Secondly, there is no overall mechanism for planning and coordination (at national level) of global health support in general and for strengthening human resources for health in particular. There is a broad range of actors and multiple independent funding instruments. The actors have considerable flexibility in where to work and what to do. At first sight – the institutional landscape looks complex and fragmented.

However, there are important variations between the types of capacity development. This report covers four types: (a) research, (b) higher education (c) specialist training and (d) exchange programmes[6]. The research "system" is relatively well-defined with the Norwegian Research Council as the dominant player and GLOBVAC as the major programme[7]. However, as explained in the institutional profiles (Annex 5), there are European and other international financing mechanisms, but less important for Norwegian researchers. NRC defines who are eligible institutions – universities and research institutes in Norway (as project owners) and the overall aim is *"to support high-quality research with a potential for high impact that can contribute to sustainable improvements in health and health equity for people in low- and lower-middle-income countries".* Capacity strengthening of research groups and institutions in LMICs is a secondary objective.

The "system" around capacity development in higher education is also relatively clear. NORHED has capacity development in the South as the overall objective and

covers both research and higher education[8] - so there is partly an overlap with NRC[9]. There have been several initiatives for developing capacity of higher education. NORPART replaced the Quota Scholarship Programme (1962-2016)[10] and its overall aim "*is to enhance the quality of higher education in Norway and developing countries through academic cooperation and mutual student mobility*"[11].

[4] We try to use the terms capacity development or strengthening – not capacity building building on the assumption that capacity is built from a zero-level.

[5] See Norad. "Evaluation of Norwegian Support to Capacity Development". Norad 10/2015.

[6] The categories are not mutually exclusive and partly overlapping, e.g. there are exchanges in all the other categories, but they capture important aspects of existing Norwegian institutions involved in global health.

[7] As mentioned in Annex 7, there are also other relevant NRC programmes, but GLOBVAC is clearly the most important.

[8] NORHED objectives:

To reinforce the capacity of higher education institutions in LMICs by:

- Producing more and better research in its priority areas.
- Producing more and better qualified graduates, both men and women.

[9] PhD training is to some extent included in NRC funded projects.

[10] See Annex 5.

[11] To reach this overall aim, the programme shall fulfil four objectives:

- Strengthened partnerships for education and research between developing countries and Norway.
- Increased quality and internationalisation of academic programmes at participating institutions.

Capacity development in the South is the overall objective for NORHED while student/staff exchange and mobility between Norway and partners for NORPART. There are also several other student/teacher mobility schemes such as Erasmus + (EU) and others with less relevance for capacity development and not included here.

The category of exchange is not a separate category of capacity development, but could be seen as a cross-cutting mechanism. However, it is used in this study for including Norec´s role in global health and the fact that several Norwegian hospitals benefit from Norec exchanges. However, mutual exchange of experience and knowledge among participants below the age of 35 is the overall objective. On the other hand, the individual benefits are meant to be combined with organisational outcomes as a result of strengthening capacities - as a secondary objective. There are also elements of learning through exchange in NORHED and NORPART and also in GLOBVAC (NRC) for that matter.[12]

Finally, training of medical specialists is the least organized. In Norway, specialist training of doctors ("spesialistutdanning") belongs to the mandate of Regional Health Authorities and is carried out by hospitals. There is no "system" in Norway around specialist training in low- and middle-income countries – strengthening the capacity of medical doctors in hospitals and other health service institutions. Neither is there any dedicated financial mechanism available as discussed later. Despite the lack of a system – there is a high level of activity from several Norwegian University hospitals – in particular in Oslo, Bergen and Trondheim and a few Norwegian NGOs. There is no clear overview of all efforts and no strong coordination and communication between Norwegian hospitals and between hospitals and universities (with exceptions mentioned later).

When NGOs are involved in capacity development of health personnel it is often on the job training and shorter/targeted training as part of broader health projects. There are exceptions: Norwegian Church Aid supported a capacity development programme for nursing education in Malawi. Norwegian Afghanistan Committee is the largest player in the education of female health professionals in Afghanistan. Since 2002, over a thousand women and men have studied in programmes supported by NAC to become midwives, community health nurses, nurses, pharmacists, laboratory technicians and physiotherapists. The Norwegian Association of the Disabled has funded and cooperated with SINTEF on several research projects. A small NGO - CapaCare in Trondheim works with St. Olav Hospital and NTNU on higher education and research in Sierra Leone.

However, there are no dedicated funding mechanisms for specialist training of medical doctors – which opens for considerable creative fund raising, flexible use of funding arrangements (set up for other purposes), initiatives from committed individuals and use of private donations. Such a "system" or lack of system can demonstrate important successes (at individual and institutional level), but with often limited synergies and wider/aggregate effects.

2.2 WHAT ARE THE FUNDING MECHANISMS?

What are the funding mechanisms (funding sources) for developing capacity for (a) research, (b) higher education, (c) specialist training and (d) other types of capacity development?

- Increased mobility of students from developing countries to Norway, including mobility in connection with work placements.
- Increased mobility of students from Norway to developing countries, including mobility in connection with work placements.

[12] It has not been possible in this study to document and assess potential and actual commonalities and overlaps systematically. It would have required a different study.

When it comes to research and research capacity development, the Norwegian Research Council and NORHED are the two largest funding mechanisms. However, researchers are creative and look for resources where it is available. The survey carried out as part of this report provided examples of international funding – from EU (Horizon 2020, EDCTP, JPIAMR), Bill and Melinda Gates Foundation and some UN agencies). There are also examples of a few private Norwegian donors providing support to research and higher education (see annex 5). Next to NRC and NORHED in terms of importance, it is the Ministry of Health and Care Services and internal budgets (in particular for university hospitals and universities).

The schemes in Norway for funding higher education (PhD and MA) have varied over time (see Annex 5). The Quota Scholarship scheme was phased out in 2016 and partly replaced by NORPART – with a strong emphasis on promoting internationalization and student mobility – not capacity development. *"Producing more and better qualified graduates, both men and women"* has been an explicit objective for NORHED. There are examples of Norwegian NGOs providing support to higher education of individuals, but numbers are small.

As mentioned, there is no single dedicated financing mechanism for "training of specialists". One of the objectives for NORHED cover post graduate training: *"To produce a more qualified job candidate, enabling a larger and more skilled workforce".* As becomes clear in the case studies (Annex 5) – specialists training of doctors falls in principle between different financing schemes, rules and regulations. University hospitals are in Norway responsible for such training with authorization from the Directorate of Health. However, hospitals are not eligible for direct support from NORHED (only NOKUT authorized universities). However, there is an alternative route. Haukeland and St. Olav university hospitals in Bergen and Trondheim have been able to access funds from NORHED for specialist training in Africa, but through partnering with their neighbor universities – holding the contract with NORHED. Oslo University Hospital has not used such an option and argued for the recognition of hospitals as the legitimate contract holder with NORHED – given current rules and regulations for training of medical specialists in Norway.

Data from Norec has shown that Norwegian hospitals (and in particular OUS and HUS) has used the exchange programme extensively for capacity development purposes. The regular age limit for participants is 35 years which in practice excludes medical specialists with sufficient experience and competence. Exemptions to the rules have been allowed, but Norec is not designed as a financing mechanism for training of specialists.

It is interesting that the dearth of funding for specialist training, has provided fertile ground for a (relatively) large number of initiatives from committed individuals – as an example - a group of Norwegian medical doctors training peers at hospitals in Ethiopia in internal medicine and infectious diseases – partly funded by Norwegian hospitals (travel grants and use of study leave) and a private donor. CapaCare works in Sierra Leone with training of surgeons combined with research – funded by Norad´s civil society grant and with support from UNFPA and private resources – including creative partnerships with St. Olav Hospital and NTNU. There is significant value in such initiatives, but the problems are twofold: The initiatives are many, but often small and uncoordinated and they do not substitute the need for a regular financing mechanism for specialist training of medical personnel.

There are also other types of capacity development – short term training of personnel included in broader health programmes – often through Norwegian NGOs, but such type of training is not covered in this report. There is also a significant level of international exchange of students and staff taking

place at university colleges funded by e.g. Erasmus +.[13] There are often capacity development intentions and spin-offs from such exchanges, but they are not included in this study.

2.2.1 CONTRIBUTION TO CAPACITY DEVELOPMENT?

Another more difficult question is to what extent the listed institutions – involved in research, higher education, exchange and training of specialists contribute to developing capacity for individuals, institutions and at levels of policy in low – and middle-income countries[14]. There are at least two sub-questions: (a) to what extent programmes are designed for capacity development and the empirical question (b) to what extent they have contributed to strengthening the capacity among Southern partners – the latter requiring solid country evaluations. We have looked at design and intentions and the picture is blurred.

The primary objective of GLOBVAC II is "*to support high-quality research with a potential for high impact that can contribute to sustainable improvements in health and health equity for people in low- and lower-middle-income countries*" while "Strengthen capacity of research groups and institutions in LLMICs by supporting collaborative research and training" – is a secondary objective.

The evaluation of GLOBVAC (2017) confirmed that *"The programme supports capacity strengthening within all relevant sectors and thematic areas".* – an overall conclusion with several caveats: (a) Although GLOBVAC funding recipients have collaborated extensively with partner institutions in the South, the extent to which these collaborations translate into meaningful skills transfer was found unclear. (b)The evaluation also concluded that despite GLOBVAC's commendable efforts in research capacity development in the South, this objective is potentially overambitious. By their nature, research funding programmes are not optimally suited to sustainable and systematic capacity development in LLMICs, because the funding is tied to specific projects that usually have a duration of around three to five years[15].

NORHED had from the outset a well-defined capacity development objective:

- To reinforce the capacity of higher education institutions in LMICs by:
- Producing more and better research in its priority areas.
- Producing more and better qualified graduates, both men and women.

For NORHED a more pertinent question is to what extent it has actually contributed to more and better capacity. The NORHED mid-term review (2018) concluded that: *"All of the projects funded have a very clear focus on capacity building in higher education…… The biggest achievements of the projects are reported to be in institutional capacity building",* but beyond such a general conclusion more specific assessments of country level results are required.

When it comes to Norec, the primary objectives of the exchanges are not capacity development as already mentioned – so from that perspective it is not fair to assess the exchanges from such a perspective. However, Norwegian hospitals have used the exchanges for such purposes partly due to the absence of other alternatives. There are clearly positive effects from the exchanges in terms of

[13] See: https://www.vid.no/nyheter/vid-soker-deltakere-til-erasmus-global-mobilitetsprosjekter/

[14] Such a three dimensional approach to capacity is often used when designing and evaluation CD programmes, e.g. Norad Results report 2010 and Kruse (2017).

[15] This is also confirmed in a new draft – New global health research initiative (NRC 2020): *"With respect to strengthening the institutional capacity in LLMIC´s, the experience with GLOBVAC I and II suggests that only some Norwegian academic institutions have substantially contributed to strengthening LLMIC research environments".*

knowledge exchange and sharing of experience, but placement of young people for not more than a year in a hospital without solid supervision and support is not the optimal model for developing sustainable capacity – for the individuals and organisations involved.

Higher education includes NORPART and NORHED in training MAs and PhDs in Norway and partner countries. The overall aim of NORPART is *"to enhance the quality of higher education in Norway and developing countries through academic cooperation and mutual student mobility"* – with a strong emphasis on student mobility. Capacity development is not an explicit objective for NORPART – more a potential spinoff. The ongoing evaluation of NORPART will hopefully provide more information on its design, implementation and results.

For NORHED, "producing more and better qualified graduates, both men and women" and "producing a more qualified job candidate, enabling a larger and more skilled workforce" are explicit objectives. The mid-term review provides also data on number – capacity to enroll and graduate students in NORHED programmes.

Knowledge transfer and exchange are key in most of the "specialist training" initiatives, but we have not been able to find any independent reviews/evaluations of such initiatives. The projects are likely to have immediate positive effects on people involved, while the more long-term institutional effects are less certain.

2.3 WHAT IS THE LEVEL OF FUNDING?

The next question is about level of funding through the various instruments. An overall provisional finding is: Most data are available on investments in global health research, less in the area of higher education and exchange and least about specialist training.

2.3.1 INVESTMENTS IN NORWEGIAN GLOBAL HEALTH RESEARCH

The "HelseOmsorg21-monitor" (HO21-monitor) was set up to show statistics on research and innovation activities within health and care in Norway. By showing statistics on, among other things, the population's disease burden, resources for research and innovation, and results from the activities, the monitor should contribute to a good knowledge base for decisions at all levels. However, we were informed that the Monitor does not yet cover global health[16].

Global Health Norway made in 2018 an effort to collect data on global health research from the Regional Health Authorities, the four largest universities (UiO, UiB, NTNU and UiT), SINTEF and the Norwegian Institute for Public Health. The report concludes that data and information were not complete and varied in quality and specificity. Some institutions included NRC funded research - others not. In other words, it was not feasible to conclude on the exact level of funding, but information on number and types of projects were presented and included here[17].

The report showed that Norwegian investments in global health research has increased rapidly over the last twenty years. In 2003, only 5% of total resources for health research was allocated to global research (of a total 1.7 Bill NOK). The approximate investments in global health research from 2006 to 2018 was estimated to 1.2 Bill NOK[18].

The Norwegian Research Council with GLOBVAC as the most important instrument, has funded most of the projects. NRC has also other relevant programmes for global health, but they play a modest role.

[16] Higher education will not be part of the Monitor – only PhDs included in research projects.

[17] See Norwegian Research Council (2019). Notat om forskning på global helse 2019).

[18] ibid

Only a few Norwegian researchers have been able access international funding from e.g. Horizon 2020 and EDCTP, but some more in JPIAMR.

2.3.2 REGIONAL HEALTH AUTHORITIES (RHFS)

Research is one of four mandatory tasks for the specialist health services ("spesialisthelsetjenesten") and the regional health authorities have a special responsibility for client/patient research and clinical studies[19]. The Ministry of Health and Care Service provides an annual earmarked amount to research for the regional health authorities. The amount consists of a basic component (30%) and a results-based component (70%) – depending on the quality/level of research for the last three years.
However, data from actual funding are inadequate for all regions. In the overview[20], the RHF´s present 38 projects in the area of global health. Most of them are ongoing while others are recently completed. 21 are capacity/competence development projects – most often training personnel in African, South Asian and South East Asian countries (in surgery, acute medicine, mental health, cancer treatment and training of nurses).
Helse Bergen is responsible for the majority – 20 projects most of which are managed by Haukeland University Hospital and University of Bergen. The projects cover capacity development (11) and research projects (9) in infectious diseases, maternal/newborn and child health and surgery. Helse Nord and the University Hospital in Northern Norway has five capacity development projects while Helse Midt Norge has three projects with NTNU as coordinator – one on capacity development in Norway and two research projects on maternal, infant and child health and surgery. Helse Stavanger has the least with two research projects in infectious diseases.

2.3.3 UNIVERSITIES, UNIVERSITY COLLEGES AND INSTITUTES

The University of Bergen has most projects (69) including projects funded by NRC – eight capacity development and 61 research projects. The capacity development projects are funded by NORHED and NORPART[21]. Most projects cover infectious diseases, maternal, infant and child health, health systems and sexual and reproductive health and rights – not training of specialists. CISMAC is also at UiB with 17 research projects in maternal and child health, two projects funded by Bill and Melina Gates Foundation.
The University of Oslo reported 50 projects in global health – most of them are research based with funding from NRC. The most common themes are sexual and reproductive rights (18), global health policy and health systems (5), infectious diseases (3) and two projects in mental health, maternal health and nutrition. UiO has a strong focus on health systems and global health policy – also supporting an independent panel on global governance in health. UiO has also a well-established group in global digital health (HISP – Health Informastion System Programme) – operating in 80 different countries.
NTNU has 27 projects that can be characterized as global health including also the research school in global health. The remaining are research projects (with support from NRC) in maternal, infant and

[19] The long-term global health objective for the regional health authorities are:
"Increased level and implementation of clinical patient focused research, health service research, global health research and innovation contributing to improved quality, patient safety, cost effectiveness and more holistic approaches – through national and international cooperation and active user participation".

[20] Ibid NRC 2019

[21] NORPART supports cooperation in education and student exchange between Norway and low - middle income countries and is managed by Direktoratet for internasjonalisering og kvalitetsutvikling i høyere utdanning (DIKU).

child health (10), infectious diseases (9), health systems (2), sexual and reproductive health (2), diabetes (2) and acute medicine (1).
The University of Tromsø (UiT) reported five projects in global health. Two are competence development projects in infectious diseases and student exchange in physiotherapy, occupational therapy, and radiography. The other three projects are research projects on antibacterial resistance in Africa, community medicine in Colombia and trauma in South Africa.
The Norwegian Public Health Institute has also excluded NRC projects and report 10 projects in global health. Research projects in infectious diseases (6), maternal and child health (6) and digital health/non-infectious diseases – one each. The Institute has contributions from EU, World Bank, Bill and Melinda Gates Foundation.
SINTEF reported four projects – all research projects in the area access to health services for disabled – funded by NRC and the Atlas Alliance.

2.3.4 NORAD FUNDING

The Results Management Section provided an overview of relevant health projects with capacity development objectives – supported through Norad for 2018 and 2019[22]. Total investments in 2018 and 2019 are 167 Mill NOK and 145 Mill NOK., but numbers are indicative.[23] The list provides a considerable number of projects with capacity development components - in particular for Norwegian NGOs, e.g. Red Cross with several community based health projects). Exchange projects plays also an important role – exchanges with different levels of capacity development. Higher education and research add up to 44 Mill – mostly including NORHED projects.

2.4 WHAT ARE THE CRITERIA FOR FUNDING, CONSTRAINTS AND GAPS?

The questions in this section focus on criteria for funding within each financing mechanism, what the opportunities and constraints are and not least what arise as constraints and gaps.

2.4.1 NORWEGIAN RESEARCH COUNCIL

NRC is the major and most significant funding mechanism for global health research in Norway. The mid-term evaluation of GLOBVAC (2017) pointed out that the programme has "*filled an important gap in the Norwegian funding landscape"*. It has been particularly successful in boosting national capacity for global health and vaccination research. Uncertainty about future funding (GLOBVAC III) was mentioned as a barrier to the continuation and scale-up of ongoing research projects and collaborations.

The constraints and challenges to the Norwegian Research Council identified by the evaluation were mainly:

- The programme supports capacity strengthening within all relevant sectors and thematic areas. However, the majority of the funding in 2018 went to projects led by Norwegian Universities and University Colleges which received 54% of the funding. Projects led by the

[22] DAC-sector: 114 (only agreements with hits on "health"), 121.81 og 121.82, 122.61 og 122.81, 130.81, 140.81. Agreements in sectors 121, 122 , 123 and 130 (with all sub sectors) with hits on "capacity".
[23] It is difficult to ascertain the relevance and accuracy of the sample selection.

Norwegian research institutes received 30 %, while the Norwegian Regional Health Authorities received only 5 % of the GLOBVAC funding in 2018.

- At present, GLOBVAC requires that project owners are Norwegian institutions, even though the principal investigator can be a non-Norwegian national (preferably from a LMIC). The mid-term review argues that such a requirement limits the opportunities for country-driven research by LMICs. The research agenda essentially remains dictated by the donor country, a situation that is generally considered less than ideal[24].
- The thematic priority areas concerning health systems & policy research, implementation and innovation research are, at present, underrepresented in the portfolio. Of the 38 active projects in 2018, NOK 81,1 million went to medicine and health sciences[25], while a small portion went to social sciences (NOK 8,1 million).[26]
- Research funding programmes are not optimally suited to sustainable and systematic capacity development in LMICs, because the funding is tied to specific projects that usually have a duration of around three to five years.

2.4.2 NORHED

NORHED is Norad´s flagship programme for capacity development in higher education and research. The eligibility requirements for prospective partners in NORHED II are:

- Partners from developing countries must be higher education institutions accredited/recognised by in-country national authorities in countries registered as OECD DAC official development assistance recipients.
- Norwegian partners must be higher education institutions accredited by NOKUT (Norwegian Agency for Quality Education) and offer accredited degree programmes.

NORHED explains that other relevant actors (both in Norway and developing countries) can be included as project partners with an accredited higher education institution, such as hospitals, non-governmental organisations and private sector.
In other words, only universities and university colleges can apply directly to NORHED. University hospitals are not eligible and able to enter an agreement with NORHED/Norad on their own.

The Oslo University Hospital is critical to such criteria arguing that specialist training of medical doctors ("spesialistutdanning) is key in the education/training of health personnel in African countries. In Norway – the responsibility for such training rests with the regional health authorities and authorization comes from the Directorate of Health – not a university or university college[27]. Hence,

[24] Some interviewees for the evaluation suggested that the current focus of the programme is still primarily, and possibly too much, on supporting Norwegian researchers who are conducting parts of their research abroad, rather than on supporting local researchers in LLMICs.

[25] The programme is mainly geared towards curative strategies with a fairly biomedical focus. Several interviewees suggested that the programme should pay more attention to the broader determinants of health and health system factors that impede implementation of existing technologies and treatments.

[26] The draft proposal for GLOBVAC III suggests a focus on "*implementation research"* – research that can generate knowledge on how to deliver or implement health policies and proven health interventions effectively and equitably to populations in LLMICs.

[27] Rules and regulations for "spesialistutdanning og spesialist utdanning for leger og tannleger» are explained in «Spesialistforskriften»: Godkjenning av utdanningsinstitusjoner og spesialister ligger til Helsedirektoratet, underlagt Helse og Omsorgs Departementet. Universitetene har ingen formell rolle i spesialistutdanningen.

the logical solution for OUS when it comes to training of medical specialists - is university hospitals. OUS should be able to apply directly to NORHED as a main partner – with the University of Oslo and Oslo Met as cooperating partners – in other words – the opposite of the current system.

Another constraint – when it comes to NORHED procedures is the long duration between each call for proposals – six years. It would be better to have a more flexible application process – taking into consideration rapid changes in needs and opportunities.

2.4.3 NOREC

Norec had previously a special grant scheme for health projects up until 2018, through Norway´s membership in the Esther Alliance. Helse Bergen/Haukeland and Oslo University Hospital can still apply within the framework of this scheme, until the new grant scheme is in place.[28]

The overall goal of the ESTHER grant scheme is *"to contribute to contact and cooperation between organizations and institutions within the health sector in Norway and developing countries, built on reciprocity, equality and solidarity".*

This includes:

- Facilitate mutual exchange programmes between cooperating organizations, institutions and companies within the health sector in Norway and in developing countries.
- Stimulate and facilitate the exchange of experience and learning within the health sector and contribute to the return of knowledge and experience to one's own society.
- Contribute to the development and strengthening of civil society in developing countries.

At the outcome level, the exchange can be used to transfer and make available *"knowledge and skills, transfer of technology, technical competence, cultural competence, increased production, better design of project documents, better language competence, new methods used, increased knowledge of partners about selected fields, or new activities implemented by the partners".*

Selected award criteria are:

- The collaboration in the partnership must be structured in such a way that all partners are involved and have ownership of the project.
- The length of the participants' outdoor stay must be between 6 months and 3 years (normally no longer than 1.5-2 years). In addition, there is a preparation course under the auspices of the Peace Corps, and a month of follow-up work after returning home.
- The participants should generally have a young profile. As a general rule, participants should not be over 35 years of age, but a certain degree of flexibility can be demonstrated in the Esther program. The partners must help to ensure an even gender distribution among the participants.

Norec plays a significant role in Norway funding exchange projects primarily for young professionals with several positive spinoffs for individual participants and institutions. It was not meant for training of medical specialists, but has been used extensively by Haukeland and Oslo University Hospitals – partly due to a lack of other opportunities.

[28] Ordningsregelverk (2011). Fredskorpset, Helseutviklingsprogrammet ESTHER.

It has been difficult to attract and recruit medical specialists below the age of 35 – unmarried (or willing to leave the family behind since costs for family members are not covered by Norec) and expect a commitment for one year. Flexibility in application of the criteria has been practiced, but Norwegian hospitals have more recently experienced a tightening of the rules – both when it comes to age limits and maintaining a special scheme for sending resource persons for short assignments[29]. On the other hand, OUS and HUS do not follow Norec´s rules for salaries and compensations by topping up relatively modest Norec salaries to Norwegian levels illustrating further the difference between youth exchange and capacity development at higher levels.

There is no systematic information on criteria used by private donations/donors in Norway. Most have specific thematic interests and priorities. Haukeland University Hospital has benefited considerably from private donations – in particular one generous donor in Bergen. The donor has been willing to co-sponsor projects where Norad/Norwegian Embassies or national MoHs have taken the initial costs. The private donor has a preference for funding infrastructure and is as such a good match with Norad and other donor agencies not able or willing to fund infrastructure. Co-sponsorships between private and public donors are seen a great advantage.

When it comes to higher education, NORPART was set up to replace the Quota Scholarship Programme which was phased out in 2016. Foreign students received a scholarship and stipend within the Quota Programme and students from developing countries were forgiven their loans when they returned to their country. A large number of students did their degrees in Norway as part of that scheme.

The Quota Programme was evaluated in 2013. One conclusion was that the scheme worked well as a development measure, but did not contribute to better internationalization at universities and colleges. The latter was used as an argument for winding up the scheme.

Part of the released funds by replacing the quota scheme went to the Panorama strategy for higher education and research cooperation with the BRIC countries (Brazil, Russia, India, China and South Africa as well as Japan) and NORPART – for low and middle-income countries.

The abolition of the Quota Scheme and the establishment of the new programmes meant a shift from support to individual students to a focus on institutional cooperation in partnership programmes. It established also a distinction between cooperation with Brazil, India, Japan, China, Russia and South Africa on the one hand and developing countries on the other, and it has chosen to concentrate cooperation on fewer institutions and thematic areas.

Informants claimed that total number of foreign students in Norway has not been reduced, but numbers of full time students from African countries are cut because NORPART covers only a part of total costs for completing a degree in Norway while the sending university is expected to pay the rest – an often questionable condition. As a remedy, Norwegian universities have – when feasible - included training of PhD candidates in research programmes funded by NRC.

The reason for moving to NORPART was a deliberate shift in policy towards training more PhDs and MA´s in their own country (with support from Norway) – and not in Norway. This is also what NORHED does – in-country training of MAs and PhDs (with some exceptions) – with capacity development as the overall objective. This is a commendable shift, but a more flexible approach depending on institutional context and capacity in partner universities could have been an option. Several African universities still have problems in producing sufficient number of quality PhD candidates for a broad

[29] Norec has in 2020 supported partnerships beyond physical exchange – since Covid-19 has limited the opportunities for travel.

range of reasons (e.g. PhD candidates being overburdened with teaching and administration, weak or absent supervision, weak infrastructure, lack of time to complete the thesis etc.)[30] Another question is the potential added value of having a critical mass of full time foreign students in Norway including exposure to Norwegian politics and culture and building of personal and professional networks[31].

Norwegian NGOs play a relatively small role in this report – because shorter training and other types of capacity development are not included. Generally, Norad´s grant scheme for civil society support is found highly flexible, but Norwegian NGOs have also been able to attract funds from other sources (such as Norwegian Church Aid). CapaCare in Trondheim has effectively used connections with NTNU and St.Olavs Hospital and benefited from funding from UNFPA.

In sum, there are established financing mechanisms for research, higher education and exchange – each with their rules and regulations. Specialist training of doctors has not such a mechanism – and hospitals, committed individuals and groups have exploited existing and found new sources of funding for a variety of initiatives.

2.5 WHAT IS THE IMPORTANCE AND RELEVANCE OF THE FUNDING MECHANISMS?

Terms of Reference includes also questions about relevance, importance for Southern partners, alignment with global and Norwegian priorities and quality. In Chapter 1.4., the limitations in responding adequately to the broader evaluation questions are explained. The focus of this report has been financing mechanisms – not programmatic aspects so a broader evaluation would be required to analyse and respond to questions about country relevance and results.

The questions on relevance and importance have several dimensions such as:

- Relevance of the financing instrument.
- Relevance to global commitments and Norwegian priorities on global health.
- Relevance to country priorities and stakeholder needs.
- Relevance of design for effective capacity development[32].

For those responding to the survey, predictability and size determined what was seen as the most relevant and essential financing mechanism – in other words NRC, NORHED (Norad) and Norec. Flexibility was also underscored.

Most institutions refer to global commitments and Norwegian priorities for global health in presentations and justifications of programmes. There are no examples of initiatives falling outside such broad parameters, but we have not looked at policy coherence in any detail and potential discrepancies in implementation.

Partnership is a catchword in presentations. There are no examples of direct interventions. All programmes emphasise the role of mutual partnerships, but as discussed in the case studies (Annex

[30] This is documented and analysed in several evaluations of Swedish support to higher education and research in Uganda, Tanzania and Mozambique. See Kruse et. al. 2014 and 2017.

[31] The Swedish system for support to higher education/research builds on a sandwich model including Swedish and partner universities – recognising the value of visits to Sweden. Its strengths and weaknesses are discussed in the same evaluations mentioned in footnote 25.

[32] The relevance of design has more recently been added to the analysis of relevance (OECD 2020). The purpose is to add and deepen the discussion of other quality elements, e.g. to what extent the intervention is well designed to address relevant needs/priorities (objectives, theory of change, modus operandi, risk analysis, context analysis etc.)

5) the level of mutuality and involvement in design and implementation from Southern partners vary considerably.
An assessment of quality of research and higher education falls beyond the scope of this assignment. Contribution to health systems strengthening is frequently mentioned as an objective, but a country level evaluation is required for providing a meaningful answer to what extent it has happened.
Relevance of design requires more attention: What instruments are prioritised by Norway as the most effective tools for capacity development of global health resources? Strengthening human resources for health in low- and middle-income countries require different types of interventions. Hence, it is critical to select the most effective instruments in order to reach long-term objectives such as: Achievement of SDGs, reduced disease burden in LLMICs, better health equity, etc. This study has looked at research – higher education and specialist training based on a belief that they are connected and depending on each other – and all contribute to the ultimate long-term results:

1. Higher education of individuals is a building block in capacity development – educating a sufficient number of individuals with a high level of competence.
2. Training for and doing research are prerequisites for sustaining quality teaching, recruiting competent teaching staff at universities and contributing to innovation.
3. Supporting specialist training is critical for updating skills of health personnel and safeguard performance.

A simple argument is that all three – research, higher education and specialist training are interlinked and important in building human resources for health, but not necessarily equally important. There is not sufficient data to prove, but a feedback from several informants claimed that developing capacity through research has become the dominant mode in Norway for strengthening human resources for health in low- and middle-income countries – followed by higher education and specialist training. This has not happened by design, but through an incremental number of decisions, availability of financing instruments and regulations on funding.
The focus on global health research can document results – relevant and effective in its own right, but the causal chain between investments and results in research are often long and complex. However, an overall plan or strategy reflecting on and deciding the relative importance of research/higher education/specialist training as tools for capacity development is missing – including financing mechanism for all of them - research, higher education and specialist training.
From a development cooperation perspective, it could be argued that the quality and effectiveness of front-line health workers should be more prioritized. Researchers could claim that quality comes from research and university academics that effectiveness is an outcome of the transfer of knowledge and practical skills through higher education.

3 RECOMMENDATIONS

There is no direct line from description and analysis to recommendations. The way forward depends to a large extent on strategic choices – what Norwegian aid authorities want to achieve and how resources are prioritized.

The following recommendations are based on the assumption that *"strengthening human resources for global health"* or in other words developing the capacity of health personnel in low – and middle-income countries is an important goal for Norwegian development cooperation. If so, the overall strategic recommendations for the Norwegian aid and authorities[33] are:

1. **DEVELOP AN OVERALL PLAN/STRATEGY FOR STRENGTHENING HUMAN RESOURCES FOR HEALTH IN LOW AND MIDDLE-INCOME COUNTRIES THROUGH NORWEGIAN INSTITUTIONAL SUPPORT.**

REMARK: Several independent financing mechanisms for strengthening human resources for health exist as pointed out in the report. From one perspective this is a strength and due to the different nature of research, higher education and specialist training. However, examples of fragmentation, gaps and overlaps were found. The intention with an overall plan/strategy is to ensure a stronger, more systematic, coordinated and effective support – if strengthening human resources for health is seen as an overall objective. There are also potential synergies (e.g. joint projects in the same countries) in better planning and coordination. Norad could initiate the process for preparing such a plan. Who is ultimately responsible for developing and monitoring such a plan must be resolved.

2. **REVIEW THE RELEVANCE AND EFFECTIVENESS OF EACH FINANCING INSTRUMENTS FOR CAPACITY DEVELOPMENT AND PRIORITISE ACCORDINGLY.**

REMARK: This review identified multiple objectives for each of the financing mechanisms. Capacity development was often one of them. If capacity development is the ultimate aim, a closer look at each of the funding mechanism is required. The intention is to ensure that the most effective interventions are chosen and prioritised.

3. **ENSURE THAT EACH OF THE CAPACITY DEVELOPMENT INSTRUMENTS (RESEARCH/HIGHER EDUCATION/SPECIALIST TRAINING) HAVE DEDICATED FINANCING INSTRUMENTS AND/OR RECOGNIZED FUNDING OPPORTUNITIES.**

REMARK: The report found unclear/insufficient arrangements for in particular training of medical specialists. The intention is to ensure that all capacity development interventions have access to funding.

4. **SELECT OR ESTABLISH A MECHANISM FOR PLANNING, COORDINATION AND MONITORING AND INCLUDE RELEVANT INDICATORS FOR GLOBAL HEALTH IN EXISTING TOOLS FOR MONITORING – TAKING INTO CONSIDERATION DIFFERENCES IN MANDATE AND SOURCES OF FUNDING FOR INSTITUTIONS INVOLVED.**

[33] Norad is the recipient of this report and its recommendations. However, some of the recommendations go beyond Norad´s mandate. In such a case, Norad can identify the need and ensure that a process is initiated to address the recommendation.

SPECIFIC RECOMMENDATIONS:

5. **ESTABLISH AND SUPPORT A NEW "GLOBVAC III" FOCUSING ON IMPLEMENTATION RESEARCH.**[34]
6. **STRENGTHEN THE ROLE OF CAPACITY DEVELOPMENT FOR RESEARCH IN GLOBVAC III BY UNDERTAKING THE FOLLOWING ACTIONS:**

a) Reconsider conditions and practice when it comes to having only Norwegian institutions as projects owners.

b) Suggest and support an independent country evaluation of capacity development – assessing roles and responsibilities in planning and implementation of projects and results from knowledge transfer/exchange at individual and institutional levels.

c) Strengthen the role of capacity development in research projects in consultation with NORHED.

d) Keep Norec as a funder for exchange projects for young professionals and leave out exchange of medical specialists above 35 years old. Strengthen supervision of and support to health personnel in Norec exchanges.

7. **OPEN A WINDOW IN NORHED FOR SPECIALIST TRAINING OF MEDICAL PERSONNEL MANAGED BY UNIVERSITY HOSPITALS.**
8. **KEEP THE FOCUS ON CAPACITY DEVELOPMENT IN HIGHER EDUCATION (MA AND PHD) BUT ALLOW AND SUPPORT IN PARTICULAR PHD STUDENTS FROM LMICS TO STUDY AT NORWEGIAN UNIVERSITIES WHEN REQUIRED FOR MAINTAINING SUFFICIENT STANDARDS AND QUALITY.** This could include (a) sandwich programmes with double degrees or (b) degrees awarded by universities in the South or in some cases full time studies in Norway.

[34] Along the lines already proposed by the working group for the new programme.

ANNEX 1: TERMS OF REFERENCE

1. Description of the Services requested (including place of delivery if applicable)

Norad requests *a mapping of existing financing mechanisms for Norwegian health, academic and training institutions in the area of human resources in health (HRH).*

The *objective* of the mapping is to obtain an overview of current funding arrangements for Norwegian health, academic and training institutions engaged in capacity building in developing countries, the strengths and weaknesses of these in terms of meeting funding requirements, as well as identify possible options for filling possible gaps in funding of capacity building, specialist training and higher education for health personnel.

The focus should include eligibility criteria, regulation and how funding is practiced, including constraints. The assignment should also assess whether arrangements are perceived as relevant and appropriate in relation to Norwegian global health priorities.

Norway has been actively involved and supported human resources for health for many years. At global policy level Norway has contributed in development of guidelines and strategies. Currently global level funding is channeled through the Working for Health Multi Partner Trust Fund (W4H MPTF - WHO, ILO and OECD). A review of the W4H MPTF will take place late 2020. Findings in this review will complement the understanding of how Norwegian funding mechanisms for HRH support contribute to strengthen the health sector and the national demand for qualified human resources in the health sector development aid through multilateral and bilateral channels should be aligned with broader overall priorities in global health, as well as global strategies to enable synergies and harmonization at country level.

Bilateral support at country level is channeled through Norwegian civil society organizations, academic and health institutions (university hospitals as well as other hospitals) addressing capacity building and basic training, as well as programs for exchange of personnel.

Bilateral funding for human resources for health is both included as an integrated part in of health programs and a more formalized approach to capacity development through Norec (exchange programs) and higher education funded by the Norhed program administered by Norad.

The former Norwegian Peace Corps (FK), now named Norec, has since 2001 supported exchange programs between Norwegian health institutions and institutions in low- and middle-income countries. The European Esther program[35] was a component of a larger FK health exchange portfolio. A review in 2011 concluding that it was fit for purpose and goals and contributed to strengthening of the health sector in countries. Fragmentation / lack of coordination is a well-known weakness in development aid, and it was identified as a challenge also amongst the different Esther partners. Norway decided to end its membership in Esther in 2018. Norec`s perspective is that withdrawal from the Esther

[35] https://esther.eu/

network has not affected funding possibilities on ongoing or future hospital exchange programs.

The former Norwegian Peace Corps (FK), now named Norec, has since 2001 supported exchange programs between Norwegian health institutions and institutions in low- and middle-income countries. The European Esther program[36] was a component of a larger FK health exchange portfolio. A review in 2011 concluding that it was fit for purpose and goals and contributed to strengthening of the health sector in countries. Fragmentation / lack of coordination is a well-known weakness in development aid, and it was identified as a challenge also amongst the different Esther partners. Norway decided to end its membership in Esther in 2018. Norec`s perspective is that withdrawal from the Esther network has not affected funding possibilities on ongoing or future hospital exchange programs.

The Norhed program support is directed towards training institutions in higher education. Funds are channeled through eligible Norwegian universities defined as those where degrees are approved by NOKUT. For specialization of medical doctors, the regional health institutions and approved university hospital are responsible and approve specialist certification. This implies that university hospitals are not eligible for direct funding through the Norhed program for higher education.

In addition, there are other potentially relevant funding channels that should be mapped, such as through Norad's support through civil society grants, Norwegian Research Council (e.g. Globvac), European Union/Commission, etc. Some hospitals also receive support from donors such as private foundations and may even self-finance some activities.

With the risk of decreasing global funding for health workforce and health systems and the added-value of institutional capacity-building involving Norwegian professionals, it will be increasingly important to ensure synergy, partnerships as well as close coordination among key stakeholders and partners at country level, when planning, implementing and reporting from programs.

Key institutions to be assessed:

Universities providing basic training in health professions

University hospitals, Oslo, Bergen, Trondheim and Tromsø

Selected other hospitals, such as Sørlandet, Diakonhjemmet, Betanien, St. Olav, Lovisenberg, etc.

Norwegian Church Aid

NORCAP (Norwegian Refugee Council)

Directorate of Health

The Assignment could be carried out with the support of:

[36] https://esther.eu/

- List and review existing funding opportunities for Norwegian health institutions, academic and training institutions in HRH, including major privately funded initiatives
- Desk study of available web sites, including available documents
- A short interview survey of institutions listed above
- Interviews with selected funding institutions
- What are the gaps and additional needs to meet the overall objective and ensure quality and minimum standard for capacity building, education and specialised training for health personnel?

2. Timeframe and relevant milestones (including start-up and completion dates, if applicable)

The mapping should take place between October and mid November 2020 with a total of 15 working days.

A brief inception report specifying the framework, methodology and plan, is requested within three days following this Call-Off order.

A draft report will be shared with Norad section for Global Health for comments by 10 November. The final report is expected 15 November.

Due to the Covid-19 and travel restriction the review will be done as a desk review, including interview with key stakeholders in Norway and their partners in third country.

ANNEX 2: SURVEY

MAPPING HUMAN RESOURCES FOR HEALTH

NORAD (Section for Health) has decided to do *a mapping and review of existing financing mechanisms* for support to human resources for health in low- and middle-income countries. The mapping should include Norwegian universities, hospitals, directorates and institutes, NGOs and private foundations and cover:

(a) Research (including North-South and South-South partnerships).
(b) Higher education of students from the South (PhD and Master levels).
(c) Specialist training of health personnel.
(d) Exchange programmes (excluding student exchange).

The objective is to obtain an overview of current support and in particular financing mechanisms and assess strengths and weaknesses in meeting funding requirements, as well as identify options for filling gaps in funding.

The research/education and training could take place in Norway or in the countries/regions where students come from. Shorter, more ad hoc or on-the job training of health personnel (as part of broader health programmes) are not included.

The work will be carried out by Stein-Erik Kruse, Nordic Consulting Group (Oslo). We would appreciate if you could answer all the questions, but you may skip those not relevant for your institution.

If you are not the right person to answer our questions, please forward this mail to the appropriate person.

Some of you will also be contacted and requested for an interview.

Deadline for submitting the survey - not later than Tuesday 20 October 2020. Please return responses to Stein-Erik Kruse - stein.erik.kruse@ncg.no – phone 91188096.

Best regards

Ingvar Theo Olsen

Policy Director Health

Norad

Mail: ingvar.theodor.evjen.olsen@norad.no

Phone: 23980065

QUESTIONS

1. Name of institution:
2. Name, telephone/skype and e-mail focal point to be contacted:
3. What types of capacity development for health do you support:
    a. Research
    b. Higher education
    c. Specialist training
    d. Exchange programmes (excluding student exchange in basic training)
    e. Others
4. What are your main sources of funding?
    a. Public (MFA, NRC, Norad, etc.):
    b. Internal/inhouse:
    c. Private donors:
    d. International (EU, WHO, Gates Foundation etc.):
5. What is the current level of funding of ongoing programmes from the different sources (total amount and funding period)?
6. What are the relevant funding criteria?
7. To what extent do the criteria promote/facilitate and/or constrain access to and use of funding? Provide specific examples.
8. Are there any particular constraints and gaps? (Areas where it is difficult or not possible to obtain funds.)
9. What is your most important financing mechanism (source of funds). Why (its added value)?
10. Any recommendations for removing constraints and filling gaps?

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ANNEX 4: PEOPLE CONSULTED

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ANNEX 5: INSTITUTIONAL PROFILES

THE NORWEGIAN RESEARCH COUNCIL (NRC)

The Norwegian Research Council supports global health research and GLOBVAC is the most important programme37, but ends in 2020 and a new programme is not yet decided. There is an ongoing process to discuss and agree on the future direction and scope for a third phase. The aspiring plan is that a decision should be taken at the end of 2020 with a deadline for applications in February 2021.

GLOBAL HEALTH AND VACCINATION RESEARCH (GLOBVAC)

The Programme for Global Health and Vaccination Research (GLOBVAC) was established in 2006 by the Norwegian government and has been administered by the Research Council of Norway. Under the first GLOBVAC programme (2006–2011), the Norwegian government disbursed close to NOK 377m to 70 research projects. The funding for GLOBVAC has since been renewed to fund a second round, which covers the period 2012–2020 (GLOBVAC II).

Although the Norwegian government has long been an important funder of health and development programmes in LLMICs and a contributor to international health efforts, the amount of research conducted in Norway prior to the first GLOBVAC period was relatively small and confined to a small number of institutions.

The primary objective of GLOBVAC has been to support high-quality research with a potential for high impact that can contribute to sustainable improvements in health and health equity for people in low- and lower-middle-income countries (LLMICs).

The secondary objectives are:

1. Strengthen internationally competitive and sustainable research groups and institutions in Norway.
2. Strengthen national and international research collaboration and partnerships.
3. Strengthen capacity of research groups and institutions in LLMICs by supporting collaborative research and training.
4. Increase awareness of the need for global health research among policy makers, researchers and the general public.

The thematic priorities for GLOBVAC are:

5. Prevention and treatment of, and diagnostics for, communicable diseases, particularly vaccine and vaccination research.
6. Family planning, reproductive, maternal, neonatal, child and adolescent health.
7. Health systems and health policy research.
8. Innovation in technology and methods development.

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[37] The other three other health related programmes in the Research Council are:

- Better Health and Quality of Life (BEDREHELSE), which is aimed at promoting research and research-based innovation of high quality and benefit to society that can help to improve public health, enhance quality of life and reduce social inequalities in health.
- High-quality and Reliable Diagnostics, Treatment and Rehabilitation (BEHANDLING), which is aimed at supporting clinical research activities to help to ensure that patients receive high- quality and reliable diagnostics, treatment and rehabilitation throughout their disease trajectory.
- Health, care and welfare services research (HELSEVEL), which is aimed at promoting research and innovation that enhances quality, competence and efficiency in health, care and welfare services.

The four thematic areas in GLOBVAC were chosen on the basis of several factors. Vaccines were considered to be among the most cost-effective interventions. Research to improve reproductive, maternal, newborn, child and adolescent health was one of the remaining global challenges after the MDGs. Health systems and health policy research are recognized as key to making sustainable improvements in health. Innovation and the development of affordable and appropriate technologies for resource-constrained settings will make important contributions to solving some of the health problems in these areas.

MODE OF CAPACITY DEVELOPMENT

According to the regulations, Norwegian institutions should enter into partnerships with local institutions and contribute to strengthening research capacity in the context of the project. Projects should emphasise the co-production of knowledge with relevant users and stakeholders, both in Norway and in LLMICss. Strengthening capacity through research collaboration remained as such one of the pillars of GLOBVAC.

LMICs' ownership of the research agenda has been important, and although the funding conditions require a Norwegian institution to be the project owner, LLMIC co-investigators are encouraged to have a leading role in project proposals. GLOBVAC allows researchers from LMICs to be PIs in research and Young Researcher Talent projects.

Although NRC stipulates that project owners must be Norway-based institutions, researchers from LMICs can act as (co-)principal investigators and there is no limit on the funding that can go to partners in LMICs. Nonetheless, the exact roles and responsibilities of the partner institutions in the projects could not be determined from the available data, so it is difficult to determine how widespread these benefits are and to what extent a truly sustainable capacity has been developed in LLMICs.

FUNDING MECHANISM AND BUDGETS

The main funders are the Ministry of Foreign Affairs (MFA) through Norad and the Ministry of Health and Care Services (HOD). The total budget for the programme period was NOK 354.2 Million, an average of NOK 78.8 Million per year from the Ministry of Foreign Affairs/Norad for the period 2017–2020 and NOK 9.8 Million per year from the Ministry of Health and Care Services. In 2020, GLOBVAC received NOK 40 million from MfA (Norad) and 10 Mill NOK from HOD.

The Research Council states that more funding must be secured to allow an expansion of the programme to fully encompass the complexity of SDG3, e.g. to include non-communicable diseases to a greater extent, health security and environmental health. Some of the projects GLOBVAC wants to fund are costly, e.g. multi-country clinical trials or large interdisciplinary studies. It is important that projects receive sufficient funds to cover all necessary costs in order to enable appropriate working conditions for research and thus optimise the potential for results. Applicants to GLOBVAC are encouraged to contribute substantially through own or international funding.

ASSESSMENT

The midterm evaluation of GLOBVAC II (2017) pointed out that the programme has filled an important gap in the Norwegian funding landscape. It has been particularly successful in boosting national capacity for global health and vaccination research. The number of research groups and institutions that are involved in the field has increased significantly. There is a much greater degree of collaboration, both nationally and internationally, with a clear emphasis on North-South cooperation. The latter has contributed to essential capacity development in the South.

The foremost strength identified lies in the programme's focus on global health and vaccination research within the Norwegian research funding landscape. The focus of the programme is also translated into its attention for capacity development, both within Norway and in the global South.

The programme supports capacity strengthening within all relevant sectors and thematic areas. However, the majority of the funding in 2018 went to projects led by Norwegian Universities and University Colleges which received 54% of the funding. Projects led by the Norwegian research institutes received 30 %, while the Norwegian Regional Health Authorities received only 5 % of the GLOBVAC funding in 2018.

Although GLOBVAC funding recipients have collaborated extensively with partner institutions in the South, the extent to which these collaborations translate into meaningful skills transfer was found unclear. At present, GLOBVAC requires that project owners are Norwegian institutions, even though the principal investigator can be a non-Norwegian national (preferably from a LLMIC). This requirement limits the opportunities for country-driven research by LLMICs. The research agenda thus essentially remains dictated by the donor country, a situation that is generally considered less than ideal.

The thematic priority areas concerning health systems & policy research, implementation and innovation research are, at present, underrepresented in the portfolio. Of the 38 active projects in 2018, NOK 81,1 million went to medicine and health sciences, while a small portion went to social sciences (NOK 8,1 million).

The evaluation also concluded that despite GLOBVAC's commendable efforts in research capacity development in the South, this objective is potentially overambitious. By their nature, research funding programmes are not optimally suited to sustainable and systematic capacity development in LLMICs, because the funding is tied to specific projects that usually have a duration of around three to five years. Some interviewees suggested that the current focus of the programme is still primarily, and possibly too much, on supporting Norwegian researchers who are conducting parts of their research abroad, rather than on supporting local researchers in LLMICs.

Current constraints on the development aid budget have also led to uncertainties about funding for a new programme period. Reductions to the budget could jeopardise the programme's ability to fully achieve its stated aims and objectives.

In terms of the programme's relevance within the broader landscape of global health research, its chosen thematic priorities are derived, in part, from key global health priorities and are aligned with, the Millennium Development Goals. Whilst this focus is considered important, a number of informants to the mid-term review advocated a rethink of future priorities. At present, the programme is felt to be geared mainly towards curative strategies and to have a fairly biomedical focus. Several interviewees suggested that the programme should pay more attention to the broader determinants of health and health system factors that impede implementation of existing technologies and treatments, including dimensions such as healthcare financing, governance, leadership and management or human resources and health information.

Uncertainty about future funding in particular was mentioned as a barrier to the continuation or even scale-up of ongoing research projects and collaborations. These concerns have been aggravated by recent budget cuts and the cancellation of particular calls.

The Norwegian Programme for Capacity Development in Education and Research for Development (NORHED I&II)

NORHED was launched in 2012 as a programme for building capacity of higher education institutions in the South. The first phase of the programme (NORHED I, 2013–2020) included 50 projects in 26 developing countries. These involved 60 universities in developing countries in collaboration with 13 academic institutions in Norway. NORHED II (2021-2026) builds on the first phase, has a stronger focus on research and seeks to complement Norwegian support to research (GLOBVAC) through the Research Council of Norway and higher education cooperation. As for all Norwegian development cooperation, the 2030 Agenda with its 17 Sustainable Development Goals (SDGs) constitutes the guiding framework of NORHED II.

NORHED I had the following objectives:

To reinforce the capacity of higher education institutions in LMICs by:

- Producing more and better research in its priority areas.
- Producing more and better qualified graduates, both men and women.
- To increase and improve levels of research administered by the countries' own researchers, thereby improving knowledge within each country.
- To produce a more qualified job candidate, enabling a larger and more skilled workforce.
- To enable evidence-based policy and decision-making.
- To enhance gender equality.

The intended impacts of NORHED II are:

- Better qualified workforce.
- Applied sustainable solutions and practices.
- Evidence-based policies.
- Enhanced gender equality and inclusion.

Interventions are expected to enable partner institutions in developing countries to produce:

- Higher-quality graduates
- More and higher-quality research
- More inclusive higher education

NORHED takes a holistic approach to capacity development of higher education institutions by supporting a range of intervention components that are considered interrelated and interdependent. The capacity development elements in NORHED projects should be based on a needs assessment at the relevant partner institution. Interventions should be proposed by partners based on jointly identified challenges and opportunities.

NORHED is a successor of two other initiatives providing financial support to higher education institutions in the South: NOMA (Norad's Programme for Master Studies) and NUFU (the Norwegian Programme for Development, Research and Education). NOMA was run from 2006-2010 and NUFU from 2007-2011. The 50 Norad funded projects are divided into six areas of focus or sub-programmes – the priority areas of the Norwegian government at the time of launching the 2013 call for proposal. Health is one of the priorities.

THE HEALTH PORTFOLIO

NORHED II has funded eleven projects one in Asia and 10 in Africa South of Sahara. Of the eleven projects, three projects are concerned with the improvement of maternal and baby care in childbirth. Another project in South Ethiopia aims to build capacity in universities to increase understanding of childbirth complications arising from malaria.

NORHED funding helps develop Master, PhD and postgraduate programmes at Southern universities which provide graduates with the research skills and necessary training to tackle the diseases challenging life expectancy in the project countries. One NORHED project thus aims to train young men and women in biomedical sciences in Malawian and Mozambique universities. Similarly, a project coordinated in Ethiopia aims to build the competence of health professionals in the country. With the help of a Norwegian

counterpart, universities in Ethiopia work towards improving the knowledge base of their staff, and in turn enhancement in research practices and health sciences understanding among graduates.

Existing projects in NORHED I cover a wide area of «postgraduate education and training» for health professionals (including nurses, midwives, doctors, pharmacists) in public health (e.g. sexual and reproductive health, nutrition, entomology, mother & child health), specialist education for doctors in surgery, AMR, health informatics, zoonotic diseases, occupational health and safety, in addition to a focus on research capacity, gender equality and female leadership training in academia.

PRIORITIES AND FUNDING

The following areas are prioritised under the health NORHED II sub-programme are:

1. Health challenges (burden of disease)

Capacity building of institutions and training of health personnel, including enhanced leadership and management, as well as assessing burden of disease and establishing evidence- based priority setting for action to enhance public health and ensure equity.

There is a special focus on:

- Prevention and treatment of communicable diseases.
- Prevention and treatment of non-communicable diseases and injuries, including rehabilitation.
- Sexual, reproductive, maternal, new-born, child and adolescent health services.
- Public health functions incl. malnutrition and health hazard, and meeting emerging health challenges of the future, e.g. population growth, climate change and epidemiological transitions.

2. Health systems and public health management and administration wwith special focus on:

- Universal Health Coverage (UHC) – Health sector leadership and management skills related to capacity to define, plan and/or implement essential health service provision and affordable and equitable financing.
- Human resources – planning, training, employing and retaining staff.
- Data and health information management - civil registration and vital statistics, surveillance systems and health information systems.
- Epidemic preparedness – capacity to detect and handle outbreaks of major epidemics, including but not exclusively transmission from animals to humans locally (health security).
- Cross sectoral interventions - across different sectors such as education, water and sanitation, environment, labour, social services, finance, etc. to meet future challenges requiring interventions that will most often be cross-sectoral in nature.

The tentative total budget frame for this call is 1 billion NOK, for the 2021-2026 programme period. Projects will have a tentative total budget frame of 10-20 million NOK. Projects may be for either a three-year or six-year project period.

PARTNERSHIP MODEL AND ELIGIBILITY CRITERIA

The NORHED partnership model supports collaborative partnerships between higher education institutions (HEIs) in Norway and developing countries. The programme is designed to stimulate long-lasting mutual North-South-South academic collaboration, with a strong emphasis on South-South regional collaboration.

The 17 Sustainable Development Goals – which came into force at the start of 2016 i.e. while NORHED was already ongoing - pledge to eradicate poverty, improve the standard of living globally, and protect the environment.

The eligibility requirements for prospective partners are:

- Partners from developing countries must be HEIs accredited/recognised by in-country national authorities in countries registered as OECD DAC official development assistance recipients.
- Norwegian partners must be HEIs accredited by NOKUT (Norwegian Agency for Quality Education) and offer accredited degree programmes.

Other relevant actors (both in Norway and developing countries) can be included as project partners with an accredited HEI, such as hospitals, non-governmental organisations and private sector. There are several examples from Bergen of partnerships between University of Bergen as the contract holder and Haukeland Hospital as the implementing partner. The following text box presents one example of a partnership between University of Malawi, College of Medicine, Queen Elisabeth Central Hospital, University of Bergen and Haukeland University Hospital.

CAPACITY BUILDING IN SPECIALIST SURGICAL TRAINING AND RESEARCH IN MALAWI.

The project aims to strengthen the capacity of College of Medicine at the University of Malawi in collaboration with Kamuzu Central Hospital and Queen Elisabeth Central Hospital to train a critical mass of Malawian surgeons to sustain training programmes, clinical service delivery and research in surgery in Malawi.

The project will build capacity for surgical training and research in Malawi through support to an on-going training programme, established through Norwegian government support in 2008. This will include education of surgical specialists through a 5-year training programme with College of Surgeons of East, Central and Southern Africa (COSECSA) as well as expansion of COM Master medical surgical program, which will focus on introduction to resercah early in the careers. At the end of the NORHED project period it is expected that 30 surgical specialists have graduated and will be involved in the training of new trainees.

The project will provide PhD Fellowships at University of Bergen (UiB) for some surgical consultants at KCH and QECH. They will be conducting their work and research in Malawi, but will attend PhD courses and mentorship at UiB. The candidates will teach and supervise the trainees in surgical specialization. Upon completing their degree they will bring additional academic capacity to CoM, which will be valuable if CoM succeed in establishing their own PhD in surgery, which is an aim during the NORHED project.

NORHED projects shall consist of minimum one partner institution in a developing country and minimum one Norwegian partner institution. Projects with more than one partner institution in a developing country (North-South-South partnerships) are preferred, in order to create and strengthen regional South-South academic networks. More than one Norwegian partner institution is also possible. The benefit of involving

multiple partner institutions must be balanced with the objective of the specific project, operational feasibility and considerations of the overall impact of the project.

A NORHED project may be established at various levels in the participating institutions, depending on the nature and the scope of the proposed project. The operational level of a NORHED project will normally be the department/faculty level. The project should as far as possible be established at a level that is consistent across the participating institutions in a project.

Norad's agreement partners in NORHED II shall be Norwegian HEIs, but NORHED II seeks also to include other Norwegian partners. The project shall ensure that each partner is responsible for implementing and quality-assuring activities taking place at the respective institutions according to the agreed plan, and the principles mentioned above.

All training at MA and PhD level should in principle take place in the South for capacity development purposes. NORHED explained that all MA students took the degree in their home country or at another university in a neighboring country. The intention is also to do all PhD degrees in the home country with short visits to Norway for compulsory courses, attending conferences or for finalizing the thesis. If higher education is not available or of insufficient quality, training could take in place in Norway. A couple of joint PhD programmes are developed where candidates are accredited both in Norway and home country.

ASSESSMENT

The NORHED mid-term review 2018 concluded that the NORHED programme design and activities were of very high relevance overall. All of the projects funded have a clear focus on capacity building in higher education. Notwithstanding the high levels of relevance of the project activities to the local needs, the study also found that there is a need to put more emphasis on linking the project activities more strongly with relevant national stakeholders from the outset.

Entrusting the LMIC partners with the management and coordination of the projects, a new feature in NORHED compared with its predecessor programmes, was regarded as an important stepping-stone towards the achievement of programme objectives. The biggest achievements of the projects are reported to be in institutional capacity building.

NORWEGIAN PARTNERSHIP PROGRAMME FOR GLOBAL ACADEMIC COOPERATION (NORPART)

The overall aim of NORPART is to enhance the quality of higher education in Norway and developing countries through academic cooperation and mutual student mobility. To reach this overall aim, the programme shall fulfil four objectives:

- Strengthened partnerships for education and research between developing countries and Norway.
- Increased quality and internationalisation of academic programmes at participating institutions.
- Increased mobility of students from developing countries to Norway, including mobility in connection with work placements.
- Increased mobility of students from Norway to developing countries, including mobility in connection with work placements.

The geographical concentration of projects is related to the long history of cooperation between Norway and partner countries within capacity building programmes in higher education. Ethiopia, Tanzania, Uganda, and Zambia were countries frequently represented in programmes like NUFU (1991-2012) and NOMA (2006-2014), the Quota Scholarship Programme (1962-2016), as well as in NORHED (2013-).

NORPART is funded through the Ministry of Education and Research and the Ministry of Foreign Affairs and administered by The Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education (DIKU). Two calls for application have been issued, the first one in 2016 and the second in 2018. A third call is planned to be issued in 2021.

NORPART was set up to replace the Quota Scholarship Programme. That programme started in 1994 and was phased out in 2016. Foreign students received a scholarship and stipend, and students from developing countries were forgiven their loans when they returned to their country.

The scheme was evaluated in 2013. One of the conclusions was that the scheme worked well as a development measure, but did not contribute to better internationalization at universities and colleges. The latter was used as an important argument for winding up the scheme.

Part of the released funds by replacing the quota scheme went to the Panorama strategy for higher education and research cooperation with the BRIC countries (Brazil, Russia, India, China and South Africa as well as Japan) and NORPART – for low and middle-income countries. The two programmes are managed by the Center for Internationalization of Education (SIU).

The abolition of the Quota Scheme and the establishment of the new programmes have meant a shift from support for individual students, based on institutional agreements, to a focus on institutional cooperation in partnership programmes. It has also established a distinction between cooperation with Brazil, India, Japan, China, Russia and South Africa on the one hand and developing countries on the other, and it has chosen to concentrate cooperation on fewer institutions and thematic areas.

At Norwegian universities and colleges, there are different perceptions of the reorganization. Particularly critical are academic environments that had many quota students, but do not have projects in the new schemes. The evaluation found that total number of foreign students in Norway has not been reduced, but from African countries they have.

It is argued that NORPART is first and foremost a programme for international cooperation and student mobility between Norway and partner countries which could include elements of capacity development, but it is not an explicit objective. NORHED on the other hand is primarily a capacity development programme and managed by Norad. All MA and PhD supported by NORHED are trained and take their degrees at their home universities with only some exceptions for PhDs.

The Norwegian Agency for Exchange Cooperation (Norec)

Norec is “a national centre of excellence for international exchange, network and the development of young leaders. We strive to create conditions for the reciprocal exchange of employees and volunteers”. Norec is a governmental agency under the Ministry of Foreign Affairs. In 2020, the total grant budget from MFA was NOK 145,8 Mill. Actual expenditure was drastically reduced due to Covid-19. In 2019, the total grant was NOK 142 Mill. Total amount distributed was NOK 122 mill, with 38% to health projects.

In 2018, Norec facilitated the exchange of more than 600 participants between partner organisations in Norway and countries in Africa, Asia and Latin-America. Norec facilitates more than 90 projects in 25 countries (Annual report 2018).

In the overview provided by Norec, there are 25 ongoing health projects (agreements between Norwegian and Southern partners). Most of them are projects with a health component or a health project with a training component and as such less relevant for this report. However, Oslo and Haukeland University Hospitals have several projects and partners (and University South Norway one project). The overview from Norad (excel sheet from the Results Section) lists 61 individual exchanges with capacity development components.

All projects are based on partnerships, with the parties involved working towards a shared goal based on a belief that the exchange of knowledge is a key to assuring long-term results and innovation across national borders.

All the projects are initiated and established locally. The Sustainable Development Goals (SDGs) constitute a shared global plan to end poverty, combat inequality and stop climate change by 2030.

Norec had previously a separate grant scheme for health projects up until 2018, through Norway's membership in the Esther alliance. Helse Bergen/Haukeland and Oslo University Hospital can still apply within the framework of this grant scheme, until the new grant scheme is in place. A new scheme is currently being developed.

Norec provides financial support to actors that offer new and creative solutions for ensuring good healthcare provision for all. Norec works with both established healthcare providers and various research and educational establishments.

Exchanges in the healthcare sector are intended to help ensure access to qualified personnel and provide safe healthcare services for everyone. The healthcare partnerships are based on the assumption that there is more to good health than simply having a healthy body. It also means knowing how to prevent the spread of diseases like HIV, tackle substance abuse and accommodate those with physical disabilities – and having access to the means to do so.

Norec does emphasise that mutual exchange of experience and knowledge is their overall objective – not capacity development and/or training/education of health personnel as such. On the other hand, the individual benefits are combined with organizational outcomes as a result of strengthening capacities.

The age limit for Norec participants is 35 years and the exchange period one year. It has been difficult to attract and recruit health specialist in that age range and expect that they commit themselves for one year. Norec has a dispensation and some flexibility in their regulations for the age limit, but not more than 50% should be above 35 years. One year is standard for the exchange, but Norec allows Norwegian partners to send resource persons /specialists for two to three weeks, but wants to keep such numbers low. There is also a practical constraint when recruiting young specialists since costs for family members are not covered by Norec (e.g. travel, school fees etc.).

The overall challenge as seen by Norec – is the lack of or weak overall coordination between the various Norwegian support channels to health. The individual partners in an exchange can easily be scattered and isolated and not sufficiently followed up and supported. There is also a limit to what Norec can do for and in a hospital or an institution in the South. Other types of support are often required, but missing due to a lack of a more systematic/overall plan.

UNIVERSITY OF OSLO (UIO)

University of Oslo (UiO) reported 50 projects in global health to the Research Council in 2019[38]. Capacity development projects are not separated in the statistics, but it is assumed that most projects are research projects. The projects cover sexual and reproductive rights (13), global health policy and health systems (5), infectious diseases (3) while there are 3 projects in mental health, maternal health and nutrition. UiO maintains a strong focus on health systems and global health policy by funding with their own resources an independent panel on global governance in health.

In response to our survey, the University of Oslo said that it is difficult to answer the question on current funding of ongoing programmes. However, UiO have two NORHED projects in health in the first period (18

[38] See Notat om forskning på Global helse 2019.

mill NOK each over 5 years) and three NORPART projects in health (ca 5 mill NOK over 5 years). Additionally, they have projects through the Norwegian Research Council and the EU Horizon 2020 programme, but no overview of the capacity development projects in Health under these fundings. Most capacity development cooperation projects have a degree of contribution from UiO to cover part of the costs.

The relevant funding criteria (mainly set by the funding agency): quality of research and education, relevance and feasibility. Some of the funding sources are better adjusted to the higher education sector than others. UiO prefers funding criteria that are rather similar to normal international cooperation in higher education and research, as the main partners are universities and research organisations.

Gaps and constraints are related to problems in funding administrative costs required for supporting core project activities. This is challenging for the Norwegian partners, but even more for the partners in the global south. It can also be difficult to get funding for international network activities that are running over time.

Centre for Global Health (CGH)

The Centre for Global Health (CGH) is an initiative of the Faculty of Medicine and hosted by the Institute of Health and Society (HELSAM). The focus of the CGH is to support and link the existing knowledge base of Global Health research at Faculty of Medicine to relevant networks, and human and financial resources, while further enhancing Global Health research capacity within the university. Another key function of CGH is to disseminate information to the wider community of researchers, decision makers and the public, while enhancing the Global Health profile of the faculty through high quality events, communication and reporting.

More concretely, CGH will build sustainable research excellence programmes in selected Global Health research areas that, in addition to its scientific value, reaches into society and influences policy in the Global Health Arena in Norway and abroad, thereby becoming a leading national and international Global Health network/institution.

Priority areas of capacity development in research and education

CGH recommends a specific focus on capacity development in Global Health research and education in two areas:

- Supporting innovative and upcoming research groups that are in an early phase, but have the potential for excellence, high impact and long-term sustainability. The support for these upcoming, young research groups will include a strong level of involvement in terms of networking, mentoring, i.e. grant writing, fostering a stronger global health focus, liaise people and groups into relevant research environments that can compete for the larger funding schemes.
- Ensuring long-term sustainability of already successful Global Health research groups. The Norwegian Global Health landscape has put an emphasis on global maternal & child health and infectious diseases. The Centre has a well-established sexual & reproductive health as well as an infectious diseases hub with a strong support base at Faculty of Medicine. CGH will offer mentorship, strategic advice, travel support, event organizing and institutional backing to selected groups.

The Centre supports the following educational opportunities:

- Master's Programmes
- International Community Health
- Health Economics, Policy, and Management
- European Master in Health Economics and Management
- Doctoral degree and PhD
- International Summer School
- ISSMF4205 International Community Health

FUNDERS

The Centre has several sources of funds (Annual Report 2018): SoU, UiO, PRIO, Institute of Phsycology, NRC, GLOBVAC, JPI-AMR (EU), Belmont Forum and Laerdal Foundation.

CENTRE FOR DEVELOPMENT AND THE ENVIRONMENT (SUM)

Centre for Development and Environment (SUM) is "a vibrant international research institution at the University of Oslo which promotes scholarly work on the challenges and dilemmas posed by sustainable Development".

Global Health Politics is one of their research groups. This research group brings together perspectives from anthropology, political science and development studies to examine the political dynamics and power structures that shape global health policy and practice

The group aims to advance a critical social science research agenda on global health, through research projects focused on:

- The transfer of health policies and evidence between global and local levels.
- Civil society's and other non-state actors' role within global health governance.
- Epidemic preparedness and response.
- Universal Health Coverage.
- The political and social determinants of health.

The research group hosts the Independent Panel on Global Governance for Health and convenes the Global Health Unpacked seminar series in collaboration with the University of Oslo's Centre for Global Health. The group also collaborates with the project group of the ERC-funded Universal Health Coverage and the Public Good in Africa project and finally convenes a Network for Social Science in Norwegian Global Health Research open to anyone interested in how social science perspectives can advance Norwegian global health research and policy.

UNIVERSITY OF BERGEN (UOB)

According to the information in the same Report from NTC, UoB has the most projects (69). UoB has included projects funded by the Research Council. UoB has 8 skills development projects and 61 research projects that are characterized as global health. The skills development projects are funded by NORHED and NORPART and are less about training in the specialist health service, but rather about the more classic topics of maternal, newborn and child health, infectious diseases and health systems. UoB has the SFF CISMAC, which researches interventions in maternal and child health, and here there are 17 research projects. The remaining 44 research projects also deal with maternal and child health (20), infectious diseases (15), health systems (3), occupational health (2), nutrition (1) and sexual and reproductive rights. UiB also has 2 unique projects within priorities in global health in that they receive funding from the Bill and Melinda Gates Foundation. Here, specific emphasis is placed on Ethiopia in one of the projects and a broader country focus with Ethiopia, Tanzania and Malawi in the other. Bergen also excels in that many of the research projects (14) are PhD projects within the collaboration they have with Hawassa University in Ethiopia.

THE DEPARTMENT OF GLOBAL PUBLIC HEALTH AND PRIMARY CARE

The Department undertakes research and research training in a wide spectrum of disciplines including: physiotherapy, occupational medicine, epidemiology, social pharmacy, genetic counselling, statistics, nursing, ethics and general practise. The Department also hosts several Centres: the Centre for International Health (CIH), the Centre for Elderly and Nursing Home Medicine (SEFAS), the Centre for Inter-professional

Work-Place Learning in Primary Care (TVEPS) and a Centre of Excellence, the Centre for Intervention Science in Maternal and Child Health (CISMAC).

The department also has two research schools: Research School in Public Health and Primary Health Care and the CIH-CISMAC Research School. They also offer Master, professional, PhD, researcher-training and continuing education programmes.

Centre for International Health (CIH)

The Centre for International Health was established in 1988. When the Faculty of Medicine was reorganised in 2010, CIH was merged with the Department of Public Health and Primary Health Care to become the Department of Global Public Health and Primary Care.

CIH undertakes research, education and leadership development aimed at improving the health situation in low- and middle-income countries. CIH initiates, co-ordinates and conducts research and capacity building in collaboration with partners from other departments and faculties at UiB, as well as other national and international partners. CIH is responsible for the UiB strategic focus area, Global Challenges, and hosts the Secretariats for the Norwegian Forum for Global Health Research and Global Health Norway.

In 2019, there were around 50 active projects at CIH, including 8 new projects. The projects involve networks and collaborations with many different international partners (both institutions and individual researchers). Research partnerships, collaborations and networks at CIH involve over 30 countries on 6 continents.

In 2019, the funding for the Research Council of Norway's (RCN's) GLOBVAC programme for research ended. It has been a major source of funding for global health research and training since 2006.

In 2019, the PhD and Master candidates at CIH rep resented 40 different countries on 6 different continents.

Degree programmes	Number of students	Number of countries
Master students (year 1)	31	18
Master students (year 2)	20	16
Master degrees awarded	11	8
PhD candidates	62	18
PhSs awarded	6	5

Funders of research

The Centre has a broad range of national and international funders of research such as: NRC, GLOBVAC, Nordforsk, Norplus, EU-EDCTP, Save the Children Finland, Meltzer Foundation, NORHED, Erasmus, GC Rieber Fund and Worldwide University Network.

Centre for Intervention Science in Maternal and Child Health (CISMAC)

The Centre for Intervention Science in Maternal and Child Health (CISMAC) was established as a Research Council of Norway Centre of Excellence in 2013. CISMAC researchers conduct research to improve maternal, newborn and child health (MNCH) in low and middle-income countries. CISMAC researchers develop and test promising interventions and help translate research findings into policy and practice.

CISMAC is a collaborative research consortium with partner institutions in Norway, Ethiopia, India, Nepal, Pakistan, South Africa, Uganda and Zambia. It also collaborates closely with the World Health Organization

(WHO). CISMAC studies generate results of high scientific quality that can be used to guide policies to equitably enhance maternal and child health, survival and development in low and middle-income countries.

There are currently 15 main CISMAC studies, which span a variety of topics in different geographical settings.

The Arctic University of Norway (UiT)

The Arctic University is a medium-sized research university that contributes to knowledge-based development at the regional, national and international level. The Arctic University is the northernmost university of the world. Its location on the edge of the Arctic implies a mission. The Arctic is of increasing global importance. Climate change, the exploitation of Arctic resources and environmental threats are topics of great public concern, and which the University of Tromsø takes special interest in.

UiT's key research focuses on the polar environment, climate research, indigenous people, peace and conflict transformation, telemedicine, medical biology, space physics, fishery science, marine biosprospecting, linguistics and computational chemistry.

There was a plan for establishing a Centre for Arctic and Global Health providing support to networking activities and cross-border collaboration in global health, to health researchers, practitioners and educators based in Northern Norway39. The centre is also presented on internet, but has not yet been established. However, the University is involved in global health activities and has as an ambition to increase level and scope of international cooperation. The Department of Health and Care Sciences has been able to access support from Erasmus Plus in 2020 (three-year grant 105 700 Euro for an exchange programme with partners in Lebanon). The Department allocates also 300 000 NOK (of internal resources) to an exchange programme with partners in Tanzania and Zambia.

In the feedback to the Research Council, UiT reports five projects in global health40. Two are capacity development projects in infectious diseases and student exchange in physiotherapy, occupational therapy and radiography. The three latter projects are research projects on antibiotic resistance in Africa, community medicine in Colombia and trauma in South Africa. There are no joint projects between the university and hospital in Tromsø.

The Department of Health Sciences submitted an application to NORHED for support in 2020 for projects in Zambia and Tanzania. They appreciate and commend the explicit link between higher education and research (explicit in NORHED funding criteria), but are less happy with the long interval (six years) between each call for proposals.

Norwegian University of Science and Technology (NTNU)

Health is one of NTNU's strategic research areas. The aim is to create innovative solutions to complex health challenges.

NTNU health has three priorities:

- Health promotion, prevention and empowerment.

  Knowledge areas: Health promotion - Preventive medicine - Housing and residential environment - Social, geographical and ethnic differences in health and welfare - Work and health - Health communication.

[39] The Centre is presented on the internet homepage for UiT.
https://en.uit.no/forskning/forskningsgrupper/gruppe?p_document_id=444193

[40] See Notat om forskning på global helse 2019.

- Diagnostics and therapy.

  Knowledge areas: Neuroscience - Bionanotechnology - Regenerative medicine - Biotechnology - Medical imaging - Palliative medicine - Inflammation - Age and lifestyle related diseases and major widespread diseases

- ICT systems, welfare technology and organization of health services.

  Knowledge areas: ICT in health services - Electronic patient records - Search engine and database technology - Welfare technology - Health service organisation - Health management and leadership - Health policy.

NTNU has 27 projects characterized as global health. They have not distinguished between different competence projects, but have entered the Graduate School of Global Health as a project. It is assumed that the remaining 26 projects are research projects. NTNU has also submitted projects funded by the Research Council of Norway. The projects fall within the themes of maternal, neonatal and child health (10), infectious diseases (9), health systems (2), sexual and reproductive rights (2), diabetes (2) and emergency medicine (1). NTNU has a "young" environment where 20 of 26 projects are PhD or postdoctoral projects.

The Norwegian Research School of Global Health (NRSGH)

The Norwegian Research School in Global Health (NRSGH) is funded by the Norwegian Research Council for a six-year period, starting in 2016. NRSGH is coordinated by the Faculty of Medicine and Health Science, NTNU.

NRSGH brings together the expertise from all Norwegian institutions with PhD-education in global health. The NRSGH also has an extensive international network. The overall aim of the research school is to build capacity in global health by a strong national team to meet the challenges within education and research.

The main objectives are:

- To establish a Norwegian research school of global health for PhD candidates.
- To provide relevant courses for members in the network
- to facilitate for candidates to participate in courses, by providing mobility grants.
- To build a network among the PhD candidates, by arranging annual conferences.
- To strengthen academic capacity, by arranging regional seminars in partner institutions in a low-income setting.
- To improve quality of supervision in order to increase the quality of PhD theses in global health.
- To increase awareness among academic leadership and policymakers to promote global health as a crucial research area.
- The NRSGH annual budget is about 3 mill NOK, made available through a grant from the Norwegian Research Council, Global Health and Vaccination Programme (GLOBVAC).

Global Health Norway

Global Health Norway is a network of the major Norwegian institutions in the educational, hospital and research institute sectors involved in global health activities, including research, education and capacity strengthening. It was established in 2017. It is currently located at NTNU.

The aims of the network are, among others, to

- Facilitate high quality in global health research and education in Norway
- Inform the public about Norwegian efforts and activities in Global Health
- Maintain an overview of global health projects and funding opportunities
- Promote interregional and intersectoral collaboration on research proposals.
- Promote collaboration between the hospital sector, educational sector, the national research council, NGOs, the private sector and Norad.

OSLO UNIVERSITY HOSPITAL (OUH)

Oslo University Hospital is a specialised hospital in charge of extensive regional and local hospital assignments and the provision of services for the citizens of Oslo. The hospital has also a nationwide responsibility for a number of national and multi-regional assignments and has several national centres of competence.

A major part of the total medical research carried out at Norwegian medical centres is performed at Oslo University Hospital. This is the result of the hospital's general research strategy and its international and national network cooperation.

In this way, the medical centre complies with the requirements of its owner and patients relating to its role as national reference hospital, responsible for introducing and developing new medical examination methods, treatment methods and follow-ups. Research that supports prioritised areas of commitment will also safeguard the operation and development of national and multi-regional assignments, as well as the functions of the medical resource centres.

Oslo University Hospital contributes to between 1,700 and 1,900 scientific articles per year, and around 130–150 PhDs are completed at the hospital each year. The University of Oslo is the most important partner in this work. Oslo and Akershus University College of Applied Sciences is expected to become an increasingly important partner in the field of health research. Oslo University Hospital participate in international research cooperation, and around half the research articles have co-authors from other countries. One strategic objective for the hospital is to "increase our international cooperation, among other things through network cooperation and researcher mobility" which means:

- Increase participation in international networks, for example in the EU's Eighth Framework Programme (Horizon 2020) and the European reference networks in healthcare.
- Strengthen researcher support in applications for international research funding from Oslo University Hospital or the Faculty of Medicine.
- Stimulate increased international researcher mobility.
- Recruit international top researchers in collaboration with the University of Oslo (Research Strategy 2016-2020).

DEPARTMENT FOR GLOBAL HEALTH

The Department coordinates all international health development projects at the Hospital focusing on global health and long-term cooperation with university hospitals in low- and middle-income countries. Existing projects are in Malawi, India, Ethiopia and Palestine (see textbox below).
The overall objective for the projects in Ethiopia and Malawi is to strengthen the capacity of partner hospitals

to train their own staff with the support of transfer of competence from Norway. The curriculum is developed in close consultation between the institutions.

The objectives for the projects in India and Palestine are to introduce new treatment methods, promote new evidence-based knowledge without a formal study programme. There is also exchange of personnel in all projects.

Most of the projects are financed by Norec, GLOBVAC and "Active against Cancer".

Norec:	Malawi with 6,2 Mill NOK per year (7 years)
	India with 3,2 mill NOK per year (7 years)
Active Against Cancer:	Ethiopia with 3 mill NOK per year (7 Years)

For Oslo University Hospital the relevant funding criteria are:

- Funding to support and build specialist training in Malawi, India and Ethiopia.
- Teaching and training health workers.
- Building systems and a sustainable infrastructure in the departments in the home countries with focus on basic knowledge.
- Health workers involved must be over the age of 35 years.
- Medical technical equipment and system for maintenance.

ASSESSMENT

The Centre for Global Health has developed a broad range of activities in countries supported – briefly explained below. They have received support and funding from Norec, from private donors/foundations and also benefited from direct support from the Hospital.

Their general observation is the lack of overall coordination, planning and not least financing instruments for strengthening human resources in health in low and middle-income countries – and in particular specialist training for health personnel at hospitals.

Norec has been a useful source of support, but is designed more for youth exchange (with an age limit of 35) than for specialized medical personnel with sufficient practical experience and high level of training. The Centre used to have an opportunity to send resource people for short-time assignments (with support from Norec), but that window has been closed or is being closed. The Centre strongly believes that both Norwegian and Southern participants require much better and more support and supervision than Norec is able to provide – before, during and not least – after the exchange.

The main challenges with Norec are seen as:

- Education (and capacity development) is not the focus for Norec.
- The age limit requirement is suitable for young people on cultural exchange, but not for the exchange of highly educated and specialized professionals. It is almost impossible to find Norwegian specialist both nurses and doctors under the age of 35, who have experience and who have enough competence to train health personnel in an other country.
- The six-month requirement is an obstacle for sending specialist doctors, while the financial framework will mean that only young people without a family will apply.
- The "Professional and volunteer" project at OUS has been going on for three years. On the Norwegian side, it has consisted of experienced resource persons from the Oslo hospitals, with leave

from the hospitals. They have worked side by side with local health personnel in developing countries, while at the same time providing specific training and coaching of their Malawian and Indian colleagues. This programme will no longer be funded by Norec.

The Centre has also discussed funding opportunities with NORHED, but was told that hospitals are not eligible for support and they were encouraged to apply for support through the University of Oslo – following a model used in Bergen and Trondheim. However, they see that funds are limited and there could easily become a competition between the university and hospital – with the latter as a project partner. There are also different systems for specialist training in Norway and countries such as Malawi and Ethiopia – in Norway hospitals and the Health Directorate while in the African countries it is the universities.

In their own words: *"The requirement for NOKUT-accredited applicants for NORHED II funding is a challenge for Norwegian University Hospitals, they are approved from the Norwegian Directorate of Health. Specialist training of doctors in Norway takes place at the hospitals, not the universities. Education of specialists is therefore not a university assignment, but a hospital assignment. No hospital in Norway is NOKUT accredited. The main partner in projects for medical specialist education must therefore be the health authority, not the university. It cannot be expected that all universities in Norway will submit such an application in competition with the university's own applications".*

In their view, a mandate for hospitals involvement in global health is missing or more broadly an overall coordination of global health support including a focus on human resources. It is up to each institution (hospital) to start and end projects and apply for funding wherever it is available. The Directorate of Health (and Ministry of Health and Care) are not involved at project level.

Malawi was used as an example of the lack of coordination of Norwegian assistance[41]: *"The Oslo University Hospital has been involved in training in neuro-surgery and anesthesia in Blantyre (Malawi) for several years, while Haukeland hospital intends to start a similar training – including building a hospital in Lilongwe. Haukeland's initiative is commendable, but should be coordinated with OUS' projects in the country, both in the application process and in practice, guidelines should be laid down for the division of responsibilities and work within the various subject areas. OUS wants a closer dialogue with HUS about this, and it is desirable that Norad also takes this into account in the NORHED II process.*

There must be no competition between partners from Norway. Lack of assistance resources for the OUS projects in Malawi could have very negative consequences for the ongoing work. Malawi is in great need of the new project, but a "magnetic hospital" in orthopedics and neurosurgery in Lilongwe can have adverse effects for the two OUS projects in the neighboring town of Blantyre. Recruitment of surgical specialist candidates in Malawi has been difficult in the past and can be a critical factor. Financing of the Blantyre projects will suffer if OUS has to compete for the same funds. The population around Blantyre will be at risk of losing the neurosurgical expertise to Lilongwe".

RECOMMENDATIONS:

- The University Hospitals in Norway should be accepted as education institutions for doctors in specialist training.
- Norec´s hospital exchange programme should be moved to a separate unit that has health professional expertise and whom will facilitate, coordinate and give mandate to the University Hospital collaboration`s from Norway.

[41] The text is shortened and slightly edited.

- It is desirable with health professional advisers from Norwegian authorities who will grant applications and reports. The desire is for a more flexible approach from Norwegian development assistance administration, where the needs and results of the recipient countries on the ground are given more weight than bureaucratic rules.
- The specialist environments in Norway are small and should operate as a team.

Cancer project in Ethiopia

The project aims to enable Ethiopia to train medical and nursing specialists in oncology. The Black Lion University Hospital in Addis Ababa receives Norwegian support from Oslo University Hospital (OUS) to develop the country's only cancer ward so that it is able to offer a full-fledged specialist education for doctors and nurses from all over Ethiopia.

Norwegian doctors from OUS have contributed to the education of oncologists at Black Lion Hospital since 2012. Several cohorts of Ethiopian doctors specializing in oncology have been in Norway, as well as completed courses in both radiation biology and chemotherapy. After four years of education, some will continue at the branch in Addis Ababa, while others will lead the construction of new cancer wards in other parts of Ethiopia.

In Addis Ababa, a master's degree in oncology nurses was started in 2015. Oslo University Hospital and Oslo MET contribute with teaching and practical guidance of the master's students. The first batch was completed in 2017. The autumn of 2019 was also the first batch of Ethiopian nurses on exchange in Norway. The project is funded by Active Against Cancer.

Surgery project Malawi

Since 2013, Oslo University Hospital has collaborated with Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi. The collaboration started with the exchange of nurses and doctors in neurosurgery and was expanded in the autumn of 2016 with pediatric surgery.

An important milestone for the first three years of the project was the establishment of a neurosurgical "high dependency unit". A number of nurses from Malawi have hospitated at OUS for periods of six months to gain the necessary competence, this has led to HDU now being self-run. In addition to the exchange of personnel between QECH and OUS, the necessary equipment has been sent down. The project is funded by Norec and the current benefit period runs from 2016 - 2020.

"Oslo-Delhi-Jaipur: Improved Newborn Care Program".

This is a collaborative project between the Norwegian and Indian authorities. In 2006, a co-operation agreement was entered into between former Prime Minister Stoltenberg and India's then Prime Minister Singh, Norway India Partnership Initiative (NIPI). NIPI is now in the third program period (2013-2020). Through the agreement, the Norwegian authorities undertook to assist India with technical assistance and financial support in the work of preventing infant death. OUS has assumed responsibility for the health professional follow-up, while Norec finances large parts of the project.

HAUKELAND UNIVERSITY HOSPITAL (HUH)

Haukeland University Hospital is one of the leading hospitals in Norway, participating in international collaboration with hospitals in the South.

The Hospital coordinates an increasing number of international projects. Their vision is to have a comprehensive and broad medical collaboration with selected partner hospitals in Africa and Asia. A strategy for international collaboration was approved by the board of the health trust in 2010, and subsequently renewed in 2013 and 2017. HUH allocates a yearly budget for international activities (8,8 mill NOK in 2020) to be used mainly for internal competence building.

The Department of International Collaboration was established in 2003. The Department coordinates the international activities towards partner institutions in the South and reports directly to the management at HUH.

The hospital is involved in all types of capacity development – research, higher education, specialist training and exchange – but with a focus on training health specialists.

The funding criteria vary among the different donors:

- For Norec: All organisations in Norway can apply for funding for their international exchange projects following Noreec criteria (35 years age limit, one-year mutual exchange, but with possible exemptions).
- NORHED/Norad: Supports university partnership with UoB, but with HUH as partner to the university.
- Private donations: Mainly 50/50 cost sharing with local Ministries of Health.
- 75% of the budget for international activities must be financed by external donors (private and public), as a requirement set by the board of HUH.

The Hospital has a broad range of donors: public, private, international and not least internal. Total funding for 2020 is close to 62 Mill NOK while the budget for all ongoing programmes is nearly 303 Mill NOK. The following tables provide an overview of the main programmes and donors.

Table 1. Public donors

Project	Project Period	Total Budget (NOK)	Budget 2020 (NOK)
Norec exchange projects (Malawi, SA, Zanzibar)	2019-2020	4 800 000	2 500 000
NORHED project	2013-2020	6 915 870	663 400
Bergen Center for Ethics and Priority Setting (BCEPS)	2019-2024	11 469 000	2 151 000
Equipment LION, Malawi (HJSF/MoH Malawi)	2020-2021	31 620 000	
TOTAL		54 804 870	5 314 400

Table 2. Internal/inhouse

Internal funding	Budget 2020 (NOK)
HUH	8 800 000

Table 3. Private donors

Project	Project Period	Total Budget (NOK)	Budget 2020 (NOK)
Construction of Lilongwe Institute of Orthopaedics and Neurosurgery (LION), Malawi	2018-2021	189 525 000	27 000 000
Construction of New mental hospital, Zanzibar	2018-2021	8 000 000	3 000 000
Neurosurgery project Malawi	2019-2024	4 000 000	800 000
Cardiac surgery project Ethiopia	2019-2024	9 000 000	1 800 000
PhD/master support- addiction medicine/psychiatry Zanzibar	2019-2024	2 500 000	500 000
Hip arthroplasty project Malawi	2019-2024	1 650 000	330 000
Blood bank collaboration Nepal	2015-2021	2 000 000	-
PhD/master support - Ethiopia	2017-2024	2 000 000	250 000
PhD/Master support Malawi	2017-2024	2 000 000	-
TOTAL		220 675 000	33 680 000

Table 4. International Donors

Donor	Project Period	Total Budget (NOK)	Budget 2020 (NOK)
AO Alliance, Switzerland- support for construction of LION, Malawi	2018-2020	18 600 000	14 000 000

Table 5. Total All Donors

	Total Budget (NOK)	Budget 2020 (NOK)
Total All Donors	302 879 870	61 974 400

ASSESSMENT

HUH has used Norec´s exchange programme extensively – mostly for nurses and other health personnel – not for medical specialists. They are most often more than 35 years and often not able to commit themselves

for a one-year exchange. However, Norec has allowed some exemptions (to the age limit) and also funded the use of short-term experts to some extent. HUH has decided to top up salaries for the participants in Norec exchanges – so they can maintain their regular salary in Norway – representing an extra cost for the hospital. This is judged as a good investment for the hospital later benefitting from motivated returning staff. The exchange programme works also as a recruitment incentive – the hospital is seen as an attractive place to work offering opportunities for international collaboration for staff.

Most of the medical specialists are included and covered through NORHED. HUH has extensive cooperation with the University and a separate proposal from HUH was funded by NORHED through the University of Bergen which is a NORHED requirement.

HUH has benefited significantly from private donations – in particular one generous donor in Bergen. The hospital has experienced willingness from their private donors to co-sponsor projects where NORAD/Norwegian Embassies or national MoHs have taken the initial costs. The private donor also prefers to fund infrastructure – building hospitals and as such representing a good match with Norad and other donor agencies not able or willing to fund construction projects. Co-sponsorships between public and private donors is seen a great advantage.

A regular internal budget from the Hospital gives the work predictability and stability over time. It reflects also that the hospital does recognise the value of international collaboration – what their staff learn from international change and bring back to their work and also the benefit for the hospital - making it into a more attractive workplace.

The various finance mechanisms are closely linked and often co-sponsors the same projects.

Overview countries and projects supported by Haukeland University Hospital

Malawi

Haukeland University Hospital (HUS) collaborates with Kamuzu Central Hospital (KCH), which is a public hospital owned by the Ministry of Health in Malawi. Since 2007, HUS and KCH have collaborated on a project in surgery / orthopaedics and mother-child health, in collaboration with Oslo University Hospital (OUS) and the University Hospital in Northern Norway (UNN). The project was funded by the Norwegian Embassy in Lilongwe and NOREC. Private donors from Bergen have supported the programme in Malawi with money for the purchase of equipment and support for educational programs.

An exchange program funded by NOREC has been an important support to the project to improve the infrastructure at KCH. Through the collaboration, several professionals have been on exchange, including midwives, laboratory technicians in pathology, radiologists and medical technical personnel. About 30 employees from HUS and KCH have been participants in the exchange project.

The collaboration within mother-child health was terminated in 2015, but the collaboration within surgery/orthopaedics continued, and is now funded via Norad as a NORHED project; "Capacity building in specialist surgical training and research in Malawi". The project is a collaboration between HUS, the University of Bergen, KCH, Queen Elisabeth Central Hospital and the College of Medicine.

Ethiopia

Haukeland University Hospital (HUS) has a collaboration with Black Lion Hospital (BLH) in Ethiopia. The hospital is affiliated with the Addis Ababa University School of Medicine, and is an educational institution for medical students, dentists, nurses, pharmacists and laboratory technicians.

The collaboration started in 2001 with a project within plastic surgery and burns. A ward for burn injuries at Yekati 12 Hospital in Addis Ababa was established as the first of its kind in Ethiopia, followed by a ward for plastic surgery. Ethiopian doctors received their specialization in plastic surgery and nurses, physiotherapists and laboratory technicians traveled on an exchange between HUH and Yekati 12 Hospital as part of their education.

Today, the project is completed, but continued by Ethiopian authorities. In the wake of the surgery program, several departments at HYY have become involved in Ethiopia; Neurosurgery, Cardiology, Anesthesia, Gastroenterology, Neurology and Medical Ethics.

India

Haukeland University Hospital collaborates with Christian Medical College & Hospital (CMCH) in India. This is an educational and research institute with primary, secondary and tertiary hospitals located in Vellore, Tamil Nadu.

Nepal

Haukeland University Hospital collaborates with Kanti Children's Hospital (KCH) in Kathmandu, Nepal.

South Africa

Haukeland University Hospital collaborates with Dr George Mukhari Academic Hospital in South Africa. This is the University Hospital of Sefako Makgatho Health Sciences University in Ga- Rankuwa approx. 30km north of Pretoria Gauteng province.

Zanzibar

Haukeland University Hospital has a collaboration with Mnazi Mmoja Hospital (MMH) in Zanzibar, Tanzania. MMH is the largest hospital on Zanzibar with 500 beds, and is directly subject to the health authorities on Zanzibar.

St. Olav's Hospital (University Hospital Trondheim)

Department of Research and Development (AFFU) is a co-organisation between St. Olavs hospital, Trondheim University Hospital (St. Olav) and Norwegian University of Science and Technology (NTNU) located in Trondheim. This "twin department" comprises co-workers working either, or both, at Division of Mental Health Care at St. Olav and Medical Faculty at NTNU.

AFFU runs extensive clinical research in collaboration with departments at St. Olav and other hospitals within the health region of Central Norway. The department facilitates a variety of research fields, participates in projects, or offers assistance to start projects in collaboration with researchers and clinicians at NTNU or St Olav. The department has established a network of local, national and international departments which participate in various collaborative projects and the transmission and dispersion of knowledge.

SINTEF - Applied Research, Technology and Innovation

SINTEF is one of Europe's largest independent research organisations. Every year they carry out several thousand projects for customers large and small. Health and well-being are one of SINTEF´s research areas. SINTEF is contributing towards good health and quality of life during all phases of life and through the steps of a patient's journey – from initial health promotion and prevention of illness and injury, to diagnosis, treatment, rehabilitation and follow-up. This takes place in collaboration with work life associations, health service providers, patient and service user organisations, and the business community.

Digitalisation is seen as a key driver for public and private health service development, and digitalisation support of work processes and treatment will create opportunities to improve service quality and increase efficiency in the sector. New systems, services and care models offering better and more targeted methods of prevention, diagnosis and treatment will be the result. The health and wellbeing-oriented business sector in Norway will also be important in order to realize changes which will also provide jobs and increased export revenues.

High-quality data from health registries, biobanks and large population health studies give Norway significant advantages and opportunities in terms of research, innovation and business development. This is partly enabled the application of Big Data analysis using artificial intelligence and machine learning techniques on health data – which so far mostly is an uncharted territory with high expectation but where extensive familiarity with the techniques is a prerequisite in order to avoid a wide range of potential pitfalls.

Effective health and wellbeing solutions are essential if we are to ensure the economic sustainability of tomorrow's health services. SINTEF has a long tradition of research and development in relation to global health issues, all of which contributes towards meeting the UN's Sustainable Development Goals.

SINTEF submitted four projects to NRC – all research project in the area access to health services for people with disabilities funded by NRC and the ATLAS Alliance.

Christian Michelsen Institute (CMI)

Christian Michelsen Institute is an independent development research institute in Norway. With a staff of 70 people, the Institute "address issues that shape global developments and generate knowledge that can be used to fight poverty, advance human rights, and promote sustainable social development."

CMI's health research focuses on how to improve health and healthcare for vulnerable groups. They explore e.g. how the quality of health care can be improved with a particular focus on the interaction between patients and health care providers. The Institute also evaluate whether financial incentives or other interventions can be used to improve health outcomes.

The research and evaluation expertise covers:

- Health worker performance
- Performance-based financing
- Early marriage and pregnancy
- Health rights/sexual and reproductive rights

CMI is partner in a Centre of Excellence, the Centre for Intervention Science in Maternal and Child Health (CISMAC).

In the feedback to our survey, CMI informed that total funding of health research is 18 Mill NOK for the period 2015 to 2020. CMI is only involved in research – not exchange or capacity development as such. The Norwegian Research Council is the only source of funding – as it is the most accessible and relevant funding source.

The major constraint for CMI at the moment is the lack of a new and agreed programme in global health in NRC. CMI recommends establishing a new programme in NRC focusing on health systems research in general and health workers in particular.

Norwegian Institute of Public Health (NPHI)

NPHI is a government agency under the Ministry of Health and Care Services. The Institute is responsible for knowledge production and systematic reviews for the health sector and provides knowledge about the health status in the population, influencing factors and how it can be improved. The institute is a national competence institution in the following areas:

- Infectious disease control.
- Physical and mental health.
- Environmental factors, substance abuse, tobacco, nutrition, physical activity and other factors that affects health status and inequality.
- Health-promoting and preventive measures in the population.
- Global health.

Development Plan for Global Health

The Norwegian Institute of Public Health aims to contribute to better health globally and analyse how international trends influence health in Norway.

The three overarching goals are in line with goals in the WHO's work programme for 2019-2023:

a. Strengthen Norway's efforts towards obtaining universal health coverage globally.

b. Strengthen health security, preparedness and health during emergencies.

c. Strengthen knowledge about public health and health promotion programmes.

Goal 1: Strengthen Norway's efforts towards obtaining universal health coverage globally:

- Deliver solid evidence to decision makers in low and middle-income countries and to global decision- making processes
- Develop new digital tools and registry solutions to support health system's abilities to offer universal health coverage.
- Contribute to securing the proper documentation for and correct use of pharmaceuticals.

- Produce knowledge that will advance universal health coverage in synergy with other priorities in global health

GOAL 2: Strengthen health security, preparedness and health during emergencies Strengthen surveillance of infectious diseases and implementation of the international health regulations in low and middle-income countries

- Contribute to new digital solutions that can fill the need for health data in emergency situations.
- Contribute to new knowledge about health risk reduction and the impact of environmental factors on health in a global context.
- Contribute to the global fight against antimicrobial resistance.

GOAL 3: Strengthen knowledge about public health and health promotion programmes:

- Contribute to knowledge about suicide and the prevention of mental disorders in low and middle-income countries.
- Strengthen the institutionalisation of public health functions in low and middle-income countries.
- Work for reducing resistance to vaccination in order to reverse declining vaccine coverage.
- Increase knowledge about non-communicable disease among children in low and middle-income countries.
- Contribute to increasing knowledge about differences in burden of disease globally.
- Contribute to increasing children and youth's ability to make informed health choices.
- Strengthen our role as a knowledge broker providing evidence to the Norwegian authorities concerning global health questions.

PARTNERS AND FUNDING

NIPH cooperates and collaborates with partners on a national and international level. Projects are largely carried out in collaboration with universities, other public health institutions, NGOs, WHO and/or the health authorities in partner countries.

The global health activities are, to a large extent, financed through competitive funding from Norad, the Norwegian Research Council, EU, WHO and the World Bank. However, activities are also financed through the NIPH's core budget from the Norwegian Ministry of Health and Care Services.

The Norwegian Institute of Public Health is the headquarter of the global Coalition for Epidemic Preparedness Innovations (CEPI), and has offices in London, UK, and Washington DC in the United States.

The Norwegian Institute of Public Health has been a partner of the Centre for Intervention Science in Maternal and Child Health – CISMAC - since 2013. The main goal of CISMAC is to support research to improve health and survival of mothers and children.

The Norwegian Institute of Public Health has also taken out all projects that are funded by the Research Council and is left with 10 projects within global health. All projects are research projects within the topics of infectious diseases (6), maternal and child health (2) and health informatics and non-communicable diseases (1 project per topic). The Norwegian Institute of Public Health has a significant number of foreign funding sources, such as the EU, the World Bank, the WHO, the Bill and Melinda Gates Foundation and other foreign philanthropic organizations / patient organizations in the 10 projects.

INTERNATIONAL FUNDING SCHEMES

HORIZON 2020

This is the world's largest research and innovation programme with an overall budget of EUR 70–80 billion over a seven-year period. The framework programme is also an important source of funding for Norwegian institutions. The Norwegian government aims to access 2% of the funds in 2020. The target was achieved in 2018. However, only 3 projects with Norwegian participation was approved in 14 applications – amounting to 3.8 Mill NOK 42.

THE EUROPEAN & DEVELOPING COUNTRIES CLINICAL TRIALS PARTNERSHIP (EDCTP)

This partnership is part of Horizon 2020. Through European research integration and in partnership with sub-Saharan African countries, EDCTP intends to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria, as well as other poverty related infectious diseases in sub-Saharan Africa.

In EDCTP1, the University of Bergen - as the only Norwegian participant – was partner in one large clinical project on prevention of HIV/AIDS. In EDCTP2 UiB takes part in 4 clinical studies amounting to 7,2 Mill NOK for 3 projects (one cancelled).

ANTI – MICRO BACTERIAL RESISTANCE (JPIAMR)

This is a European programme focusing on challenges related to anti-bacterial resistance. Norway is an active partner and earmarked funds are managed by the Research Council. The funds originate from the Ministry of Health and amounts to 6,3 Mill NOK per year.

Norway has participated in all eight rounds of application. Norwegian institutions have accessed 51,1 Mill NOK in 12 projects.

NON-GOVERNMENTAL ORGANISATIONS

NORWEGIAN CHURCH AID (NCA)

NCA does mainly capacity building of health workers, mostly nurses and midwives, but also Community Health Workers and Traditional Birth Attendants have been trained. The focus for this training has been on reducing maternal deaths and neo-natal deaths in the countries NCA is working. NCA uses the Laerdal Global Health education materials: Helping babies breathe; Helping mothers survive bleeding after birth; and Essential care for Every Baby.

NCA has also trained nurses in Basic Emergency obstetric care. In addition, NCA has supported programmes under HIV and Aids and Cervical cancer where health workers have been trained in viral load testing, and follow-up and screening of cervical cancer using acid-based methodology.

When it comes to more advanced care, NCA has trained nurses in palliative care together with Oslo University Hospital (Radiumhospitalet) and VID Specialized University in several rounds. The last training was on palliative care for children, with staff from Augusta Victoria hospital in Jerusalem. NCA's partner Haydom Lutheran Hospital is implementing the "Safer Births Bundle" under a current grant from Global Financial Facility (GFF). This model has been replicated with some of NCA's other partners in Tanzania.

The main sources of funding are: Norad and MFA and international: EU, WHO, Gates Foundation, ICCO (ACT); USAID/OFDA; The Global Fund to Fight AIDS, Tuberculosis and Malaria; FORUT and KWF.

[42] See «Notat om forskning på global helse etter 2020 (2019)».

For 2020 NCA's total budget allocated for health is NOK 56, 875, 205. See attached table for more details.

Access to funding for projects directly targeting adolescents is very limited. Particularly, when it comes to funding to be able to pilot innovative solutions such as cash for increasing adolescents' access to Sexual and Reproductive Health Rights (SRHR) services.

NCA's most important funding comes from Norad and MFA. Both Norad and MFA show great flexibility. NCA appreciates Norway's Humanitarian Strategy which promotes integration of SRHR in GBV responses.

NCA would like to see more funding made available for pilot work and programme development. Testing is a crucial part of programme development. NCA sees that the opportunity to test out new approaches has value for possible scale up. NCA would also recommend that more funds are set aside for research that follow projects and programmes to secure lessons learned are evidence-based.

CapaCare

CapaCare is a non-profit humanitarian organization dedicated to medical education and training in developing countries. Capacare´s Surgical Training Programme enables students to handle the most common surgical and obstetrical emergencies that without treatment would lead to disability or death. This is an interesting example of combining a demand from the health authorities in Sierra Leone, with training of health personnel and research.

All candidates in Sierra Leone are initially trained for 6-9 months at the Masanga Hospital in Tonkolili districts. During this period, the students are supervised by resident surgeons and are thought a series of training modules by visiting national and international trainers. Upon completing the initial training, the students are posted on six months rotations to a number of partner hospitals in Sierra Leone. After two years of training, the students have to pass the final exams and for Community Health Officers the training is followed by a one year surgical and obstetrical housemanship.

There are obvious needs for innovative strategies to address the huge unmet needs for surgery in rural parts of low-income countries. Task shifting in surgery and obstetrics has proved itself as a safe and cost-effective strategy to increase availability of health services in rural areas and are recommended by the WHO.

CapaCare started originally with two MSF doctors/surgeons in Liberia with the conviction that more long-term training of health personnel was required. Hence, they started working in Sierra Leone – helped to establish a local counterpart organization collaborating with hospitals and health authorities in the country. CapaCare was first supported by private foundations such as Kavli Foundation, Lions and other in Norway. A breakthrough came in 2014 when UNFPA started to fund the work in Sierra Leone.

Currently, Norad through the civil society grant support CapaCare with a four-year grant of 7.2 Mill NOK (annual amount from UNFPA is USD 178 000.) CapaCare has also secured 3 Mill NOK for starting a similar programme in Liberia possibly starting in 2020.

The programme has two parts: education and research. The academic part is implemented through collaboration and agreement with NTNU and St. Olav Hospital – and the research is funded partly by NRC. The training/education is supported by Norad, UNFPA and private donations.

CapaCare is a Norwegian NGO with a small counterpart organization in Sierra Leone, but operates more at a higher institutional level. It is not a typical civil society partnership – and as such NORHED would have been a more "correct" funding partner for CapaCare in Norway – if such funding had been channelled through NTNU.

The Afghanistan Committee

NAC works to give all Afghans equal rights to decide on their own lives and their own sexual and reproductive rights. Women´s access to education, health care and work are fundamental to achieving the goal of good health and quality of life for all.

NAC is the largest player in the education of female health professionals in Afghanistan and all programmes are with the Afghan government. Since 2002, over thousand women and men have studied in programmes supported by NAC to become midwifes, community health nurses, nurses, pharmacists, laboratory technicians and physiotherapists.

More than 250 young people are currently studying health sciences at the three state colleges supported by NAC. They are also working to strengthen the technical expertise of the colleges responsible for education in health sciences, while at the same time working to improve the administrative and professional competence within the Ministry of Public Health, both at national and sub-national level.

PRIVATE FOUNDATIONS

Trond Mohn Foundation

Trond Mohn Foundation gives grants towards research and research supporting activities at the University of Bergen (UiB) and Haukeland University Hospital (HUS) and other Norwegian research institutions who cooperate with institutions in Bergen.

The Foundation was founded in 2004 by means of a donation from Trond Mohn. In the years to come, the capital of the foundation has increased significantly, primarily as a result of new gifts from Trond Mohn, Marit Mohn and Frederik Mohn, and due to the merger of the three foundations; the Bergen Research Foundation, the Bergen Medical Research Foundation and the Frank Mohns Foundation, in 2014. Bergen Research Foundation changed name to Trond Mohn Foundation on 1 January 2019.

Since the foundation was established, a total of NOK 1,139 million has been allocated for statutory purposes (as of 31 December 2019). At year-end 2019/2020, the Foundation's assets was NOK 2,807 million.

The Foundation establishes different thematic initiatives in collaboration with the University of Bergen, Haukeland University Hospital and other research institutions. Calls for applications are announced for some of the initiatives, while, for other initiatives, expert communities are invited to submit applications. Important criteria are high international quality, further development of existing strengths, young promising researchers, team effort, triggering and strengthening research, independent evaluation and a multidisciplinary approach.

The Kavli Trust

Kavli Trust owns the dairy product company group Kavli with Primula Cheese, Q-Meieriene and other Kavli businesses in four countries: Norway, Sweden, Finland and United Kingdom.

"Kavli Trust is the owner who makes a difference by not only giving a part of the profit, but all of it for good causes". Over the last three years, the Trust has donated £24.3m to good causes, with 2019 seeing a record-breaking donation of £10.2 million.

The majority of the funds, 70 %, are allocated to projects in the four countries where the companies operate. The remaining 30 percent is allocated to projects in health, education and entrepreneurship in a selection of countries in sub-Saharan Africa and Asia.

In the four countries where they operate the following are prioritised: mental health for children and youth, work for inclusion and prevention of loneliness, health research, and projects that give more people the

opportunity to take part in and experience cultural events. In developing countries, we prioritise projects within education for children and youth and health.

LAERDAL GLOBAL HEALTH AND LÆRDAL FOUNDATION

The Laerdal Foundation for Acute Medicine[43] was established in 1980 to provide financial support to practically oriented research and development in acute medicine. In recent years, there has also been a focus on projects related to saving lives at birth in low-resource settings. The Laerdal Foundation wishes to contribute to an understanding of practical needs within both of these areas.

Grants are awarded in five different categories: Project Support, Saving Lives at Birth in Low-Resource Settings, Center Support and Programme Support.

Until now, the Laerdal Foundation has provided financial support to about 1600 projects totaling about NOK 300 mill. The Board expects to allocate annual appropriations of over NOK 30 mill in 2016-2020 as follows:

- 50% for projects in developing countries (mainly through programme support).
- 20% for program support with international collaboration in developed countries.
- 15 % for research projects
- 15% for other purposes (including Bjørn Lind fellowships long-term commitments to support professorships etc.).

The Foundation welcomes applications within the following areas of interest:

- Better reporting of data, as basis for improved care – using the Utstein Formula for Survival.
- Promising hypothesis relating to updating of ILCOR guidelines. for Emergency Cardiac Care and Cardiopulmonary Resuscitation.
- International/multicenter collaborations for improved education.
- Implementation of the Global Resuscitation Alliance.
- Projects at or in collaboration with the SAFER simulation center in Stavanger.

Saving Lives at Birth area: The support will be focused on practical-oriented projects helping achieve the UN Sustainability Goal no 3, aiming at:

- Reducing infant and child mortality by 2/3 from 2010 to 2030
- Reducing maternal deaths by 2/3 from 2010 to 2030

The Board particularly welcomes applications relating to:

- Innovative approaches to more efficient education and implementation
- Collaborative initiatives, such as the HELPING BABIES SURVIVE and HELPING MOTHERS SURVIVE and SURVIVE & THRIVE Global Development Alliances.
- Projects in selected focus countries; Tanzania, Ethiopia, Malawi, Bangladesh, India and Nepal.

[43] Laerdal Medical is the for-profit arm, while Laerdal Foundation has supported research and Laerdal Global Health training solutions linked to their medical products.

Matching funds: Applications for Center support and major grants in developing countries will have an increased chance of being funded by the Laerdal Foundation when matching funding can be obtained from other sources.

THE MELTZER RESEARCH FUND

The purpose of the Fund is to promote the academic activities of the University of Bergen and to support especially gifted students at the University. Grants can also be awarded to applicants from other Norwegian universities and specialized university institutions.