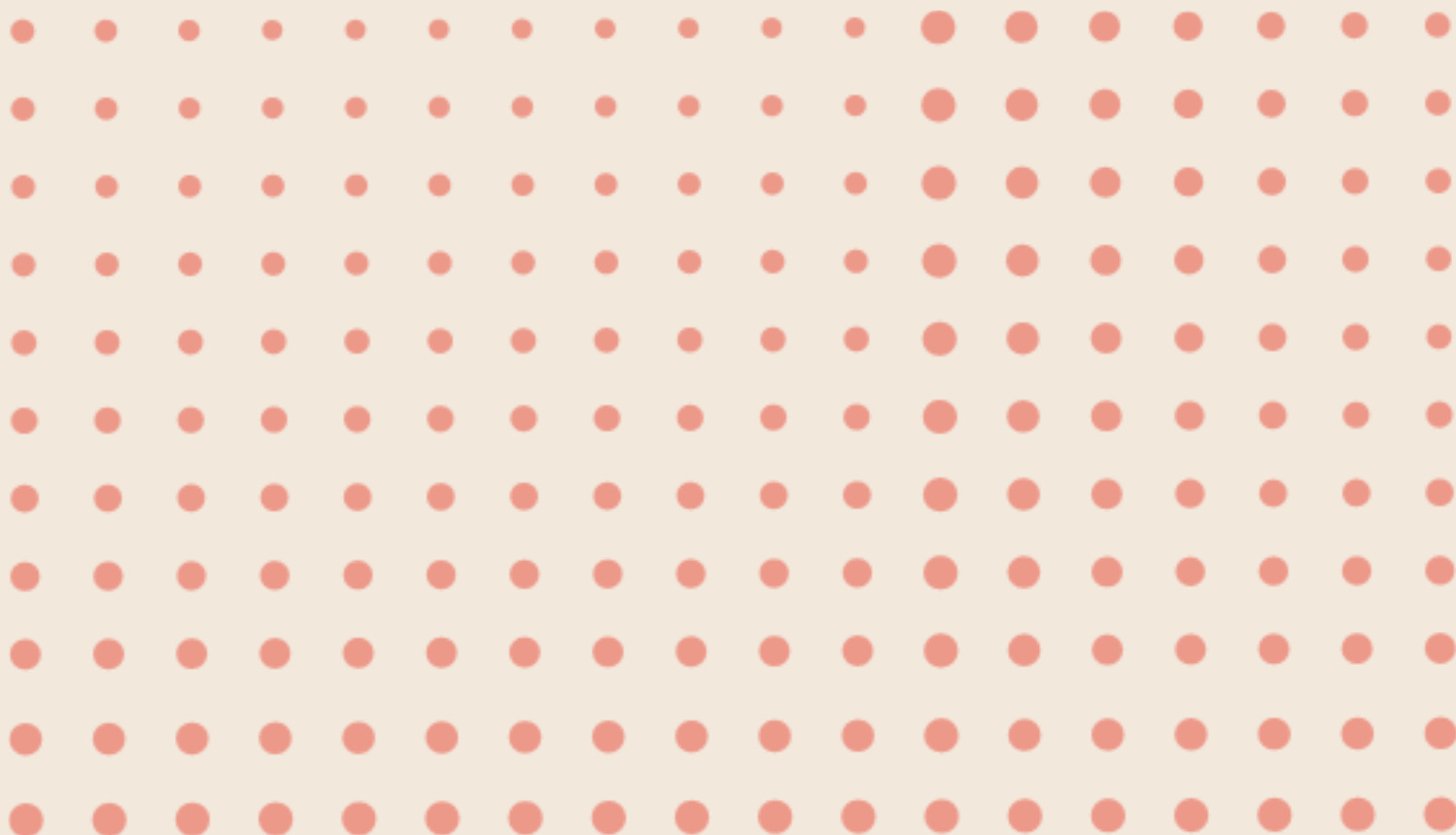

BCEPS Self-Evaluation 2023

27 March



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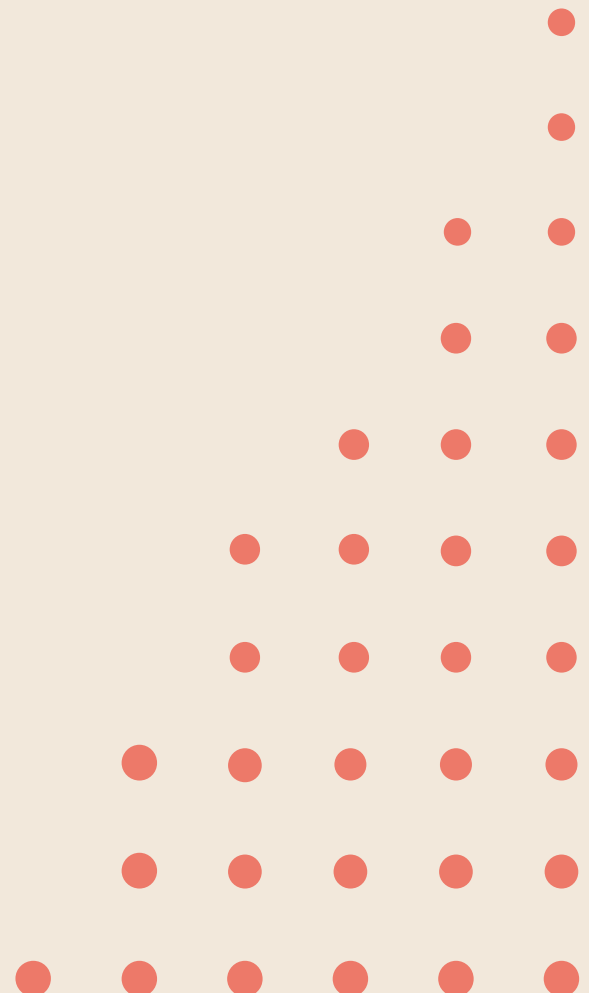
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This Document

BCEPS has prepared this self-evaluation of its own activities in the period June 2019 - March 2023 as a contribution to an external midway evaluation of the Centre commissioned by the Trond Mohn Stiftelse (TMS).

The external evaluation will be conducted from March-June 2023.



1 | Introduction

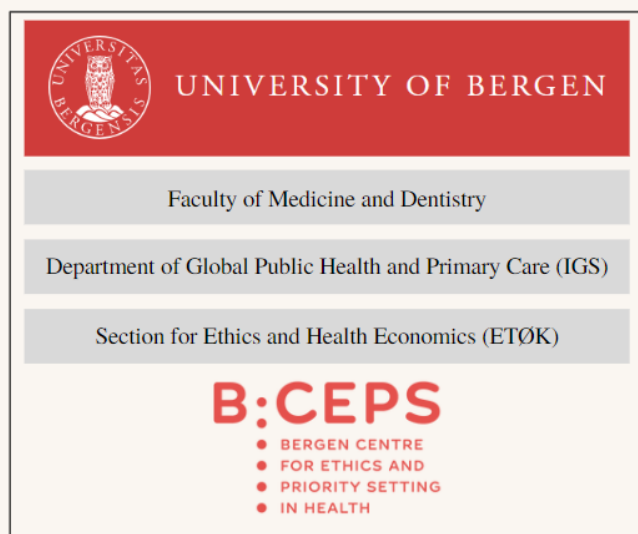
“Investing in health in low-income countries, particularly through priority interventions in primary health care and fair financing through expanded access to health insurance and prepaid care, will not only save lives but also help reduce inequity, alleviate poverty, and provide financial risk protection.”

This was the premise for the Bergen Centre for Ethics and Priority Setting (BCEPS) when it was established in 2019. As we pass the midway mark of the Trond Mohn Foundation (TMS) funding period, we have committed to carrying out a self-evaluation, which will feed into an external expert evaluation of BCEPS. This self-evaluation aims to provide an overview of BCEPS’ achievements to date, reflections on where we are today, and comments on plans for the future. We use the original project description and the relevant TMS assessment criteria (*Proposal Assessment Criteria for TMS Research Centres*) as points of reference to explore how the Centre has progressed relative to original plans and highlight factors that have influenced its path over the last three years.

2 | About BCEPS

BCEPS at the University of Bergen (UiB)

Within the University of Bergen, the Centre is part of the Section for Ethics and Health Economics at the Department of Global Public Health and Primary Care. We are located in Overlege Danielssens hus, Årstadveien 21.



VISION

“Better health for all, more fairly distributed”

BCEPS as a Centre

In 2019, the Trond Mohn Foundation (TMS) joined forces with the University of Bergen and the Norwegian Agency for Development Cooperation (Norad) to establish BCEPS, building on a platform of existing projects managed by the Global Health Priorities (GHP) Research Group and funded by earlier grants from the Bill & Melinda Gates Foundation, Norad, the Research Council of Norway (RCN), and the University of Bergen.

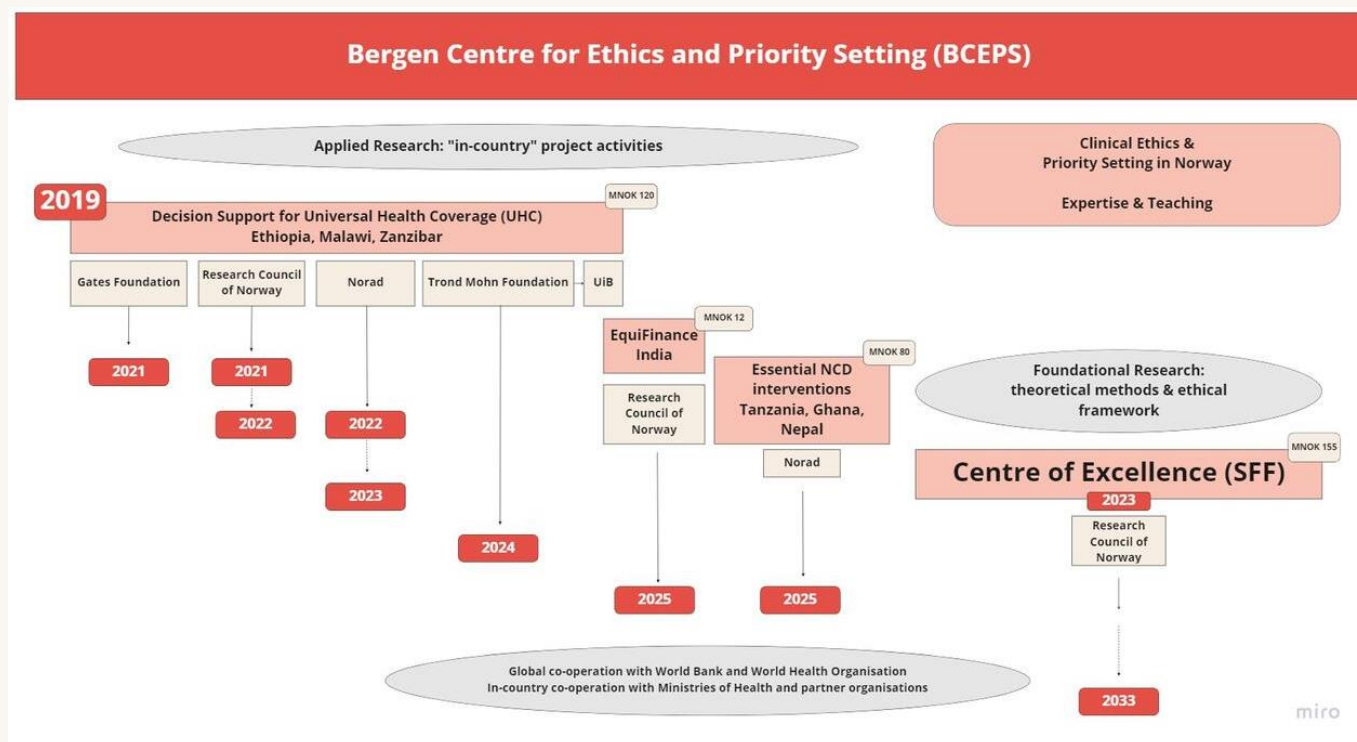
One of the pre-requisites for the TMS grant was the establishment of a research centre, which meant that “BCEPS” (a centre) took over from “GHP” (a research group). The creation of BCEPS as a centre has proved to be of greater significance than we anticipated. It has taken time to build, but the sense of a BCEPS identity is now tangible. We are recruiting young researchers, publishing widely, and winning new grants. The status and structure of BCEPS as a centre is a key contributory factor to this success.

BCEPS’ research activities are relevant in both a national and international context, with BCEPS researchers often being called upon to provide input to debates on priority setting in health in Norway and internationally. When the Centre was founded in 2019, funding was allocated to planned project activities in Ethiopia, Zanzibar, and Malawi.

Since then, it has attracted additional funding from RCN and Norad for activities that are now ongoing in India, Nepal, Tanzania, and Ghana. For the future, we look forward to expanding the theoretical and foundational elements of our research as we step up to become a Centre of Excellence (SFF) from September 2023.

Funding overview

The figure below provides an overview of BCEPS project funding from 2019 onwards and illustrates how the initial grant in 2019 has led to additional funding that will secure activities until at least 2033.



3 | People

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(all



Research capacity

Category	No.	Names
Professors, adjunct/ associate professors and principal investigators (PIs)	16	Ole Frithjof Norheim, Ingrid Miljeteig, Kjell Arne Johansson, Øystein Haaland, Stéphane Verguet (Harvard University), David Watkins (University of Washington), Solomon Memirie, Mieraf Taddesse, Dean Jamison, Alicia Yamin (Harvard University), Alex Voorhoeve (LSE), Jesse Bump (Harvard University), Richard Cookson (University of York), Jasper Littmann, Oddvar Kaarbøe, Lumbwe Chola (University of Oslo)
Senior researchers	4	Krishna Aryal, Amani Mori, George Ruhago, James Akazili
Postdoctoral fellows	6	Admassu Lamu (until 2021), Alemayehu Hailu, Peter Hangoma, William Msemburi, Gunjeet Kaur (until 2022), Andrea Melberg
PhD candidates	19	Eirik Tranvåg (until 2021), Anand Bhopal, Shoaib Hassan, Emily McLean, Omar Mwalim (also a PI), Mizan Mirutse, Wafa Aftab, Pakwanja Twea, Sanaa Said, Sindre Horn, Nina Kleven-Madsen, Tarun Choudhary, Leonie Schwarz, Mulu Kindanemariam, Sarah Bolongaita, Ritha Willilo, Kofi Aduo-Adjei, Pratik Khanal, Marta Terefe
Research assistant	1	Ingrid Azevedo

Technical and administrative support

Category	No.	Names
Research coordinator (100%)	1	Maria Sollohub
Programmer (100%)	1	Jan-Magnus Økland
Senior policy advisor (50%)	1	Austen Davis
Project coordinator (20%)	1	Ricky Heggheim

NB: The first PhD candidates to start their PhD after the establishment of BCEPS are due to complete their studies towards the end of 2023 or beginning of 2024. Eirik Tranvåg, who completed his PhD in 2021, was funded by a pre-BCEPS funding source.

BCEPS Team

Decision Support for UHC (TMS-Norad-UiB)



Ole Frithjof Norheim
BCEPS Director



Ingrid Miljeteig
Deputy Director



Kjell Arne Johansson
*Deputy Director, PI Fair
Choices & UHC Zanzibar*



Maria Sollohub
Research Coordinator



Solomon Memirie
ACEPS Director & PI



Mieraf Taddesse
PI ACEPS



Jan-Magnus Økland
Programmer



Elisabeth Hove
Project Finance



Øystein Haaland
PI Fair Choices



Alicia Yamin
PI Fair Process



Stéphane Verguet
PI Core Analytics



Omar Mwalim
*PI UHC Zanzibar
PhD Candidate*



David Watkins
*PI Translation & Essential
Surgery Malawi*



Alex Voorhoeve
Adjunct Professor



Dean Jamison
Adjunct Professor



Richard Cookson
Adjunct Professor



Jesse Bump
Adjunct Professor



Jasper Littmann
Adjunct Professor



Alemayehu Hailu
Postdoctoral Fellow



Peter Hangoma
Postdoctoral Fellow



William Msemburi
Postdoctoral Fellow



Admassu Lamu
*Postdoctoral Fellow
(until 2021)*



Gunjeet Kaur
*Postdoctoral Fellow
(until 2022)*



Emily McLean
PhD Candidate



Shoaib Hassan
PhD Candidate



Wafa Aftab
PhD Candidate



Pakwanja Twea
PhD Candidate



Nina Kleven-Madsen
PhD Candidate



Anand Bhopal
PhD Candidate



Mizan Kiros
PhD Candidate



Sanaa Said
PhD Candidate



Eirik Tranvåg
*PhD Candidate
(until 2021)*



Leonie Schwarz
PhD Candidate



Mulu Kidanemariam
PhD Candidate



Sindre August Hom
PhD Candidate

Essential NCD Interventions (Norad) and EquiFinance (NRC)



Oddvar Kaarbøe
PI NCD Tanzania



Lumbwe Chola
PI NCD Ghana



Amani Mori
*Senior Researcher
PI NCD Tanzania*



Krishna Aryal
*Senior Researcher
PI NCD Nepal*



James Akazili
Senior Researcher
NCD Ghana



George Ruhago
Senior Researcher
NCD Tanzania



Andrea Melberg
Postdoctoral Fellow



Ritha Willilo
PhD Candidate



Kofi Aduo-Adjei
PhD Candidate



Pratik Khanal
PhD Candidate



Marta Minwyelet
PhD Candidate



Sarah Bolongaita
PhD Candidate



Ingrid Azevedo
Research Assistant



Austen Davis
Senior Policy Advisor



Ricky Heggheim
Project Coordinator



Tarun Choudhary
PhD Candidate

4 | Scientific Leadership and Organisation

The planned organisation of BCEPS as set out in the project description is shown below, whereby the blue boxes indicate new units of governance and research teams, and the orange boxes represent pre-existing activities (funded by UiB, BMGF and Research Council of Norway).

When the Centre was established in June 2019, the Director was joined by a Deputy Director and a Research Coordinator to form a core management team, while a group of Principal Investigators (PIs) were engaged to take responsibility for the work packages defined in the project description.

Over the course of the three years that have passed since BCEPS was established, the original existing projects have been completed and the planned research teams are well established. Many objectives have been achieved, and others are ongoing. Furthermore, new projects (with new funding) have been started. The fast growth and expansion of BCEPS led to a decision in 2021 to add a second Deputy Director to the BCEPS core management team.

An International Scientific Advisory Board has been in place since the start of the Centre, while a BCEPS

Board was in place by the end of 2020. In 2022, the Board was re-defined as a Steering Group. This is now common practice for centres of this type at UiB/IGS.

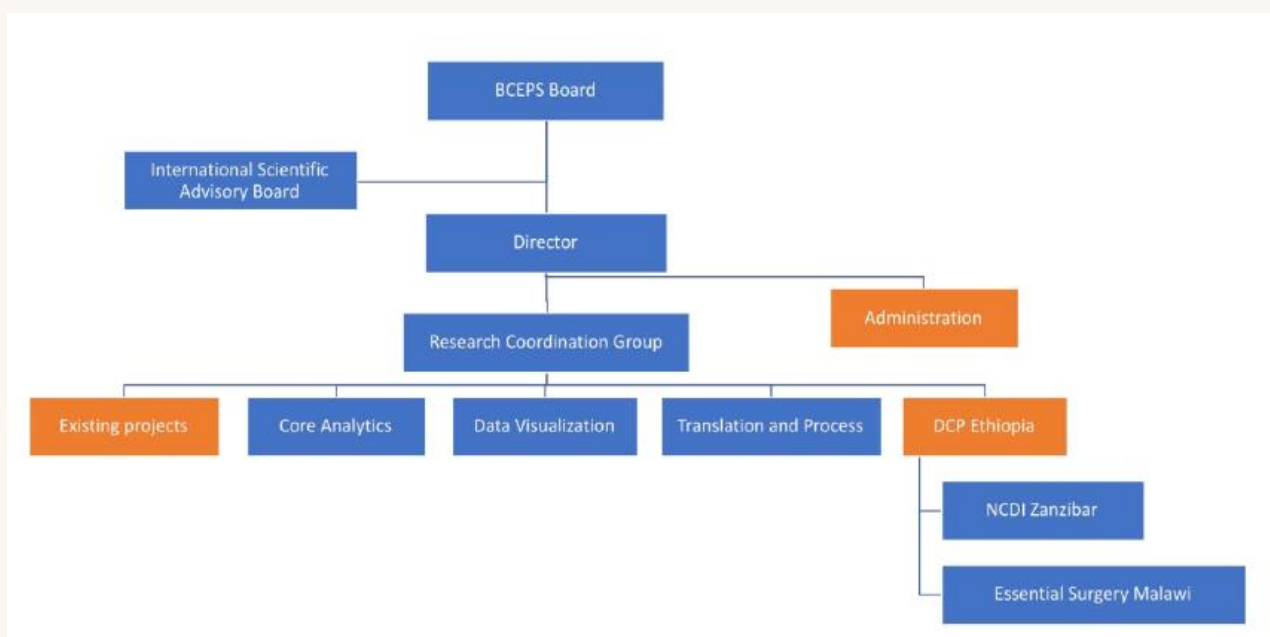
After some adjustments along the way, the scientific leadership of BCEPS is organised as follows:

Director: Ole F. Norheim, UiB

Deputy Directors: Ingrid Miljeteig and Kjell Arne Johansson, UiB

Principal Investigators:

- Core Analytics: Stéphane Verguet, Harvard University
- Translation: David Watkins, University of Washington
- Fair Process: Alicia Yamin, Harvard University
- Data Visualisation/Fair Choices DCP Analytics Tool: Kjell Arne Johansson and Øystein Haaland, UiB
- UHC Zanzibar: Kjell Arne Johansson and Omar Mwalim, UiB
- Essential Surgery Malawi: David Watkins, University of Washington
- Addis Centre for Ethics and Priority Setting (ACEPS): Solomon Memirie and Mieraf Tadesse Tolla



In addition, BCEPS engages in the following areas of research and practice:

- [Medical ethics and decision making](#): Ingrid Miljeteig, UiB
- Priority Setting in Norway: Ole Norheim, UiB

The scientific leadership is supported by a Research Coordinator.

Scientific Advisory Board:

- Kalipso Chalkidou (The Global Fund)
- Richard Cookson (University of York)
- Dean Jamison (UCSF)
- Tessa Tan-Torres Edejer (WHO)
- Alex Voorhoeve (LSE)

Steering Group:

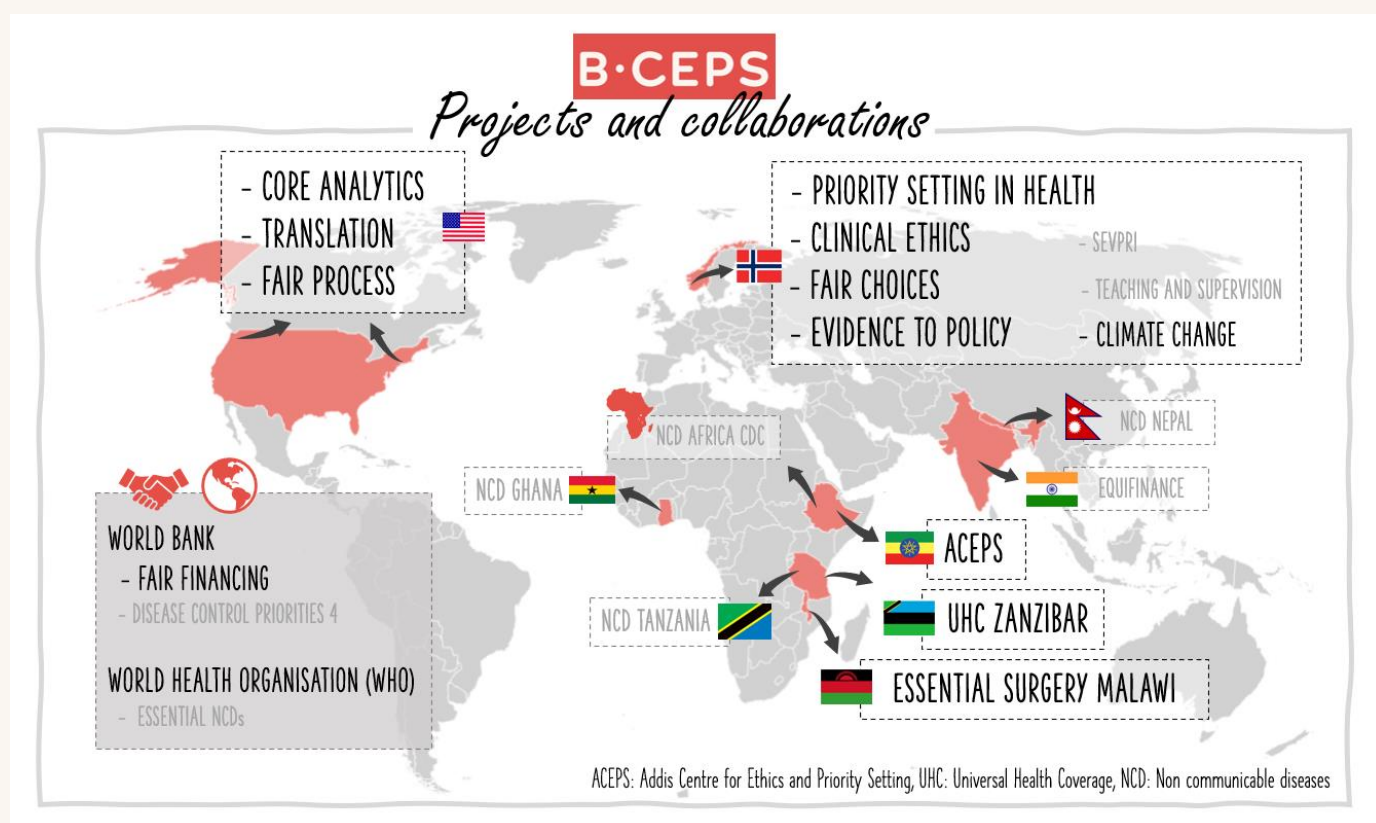
- Guri Rørtveit (Chair) (UiB Head of Department of Global Public Health and Primary Care)
- Solomon Memirie (Director of ACEPS)
- Trygve Ottersen (Executive Director of the Division of Infection Control, Norwegian Institute of Public Health)
- Emily McLean (BCEPS PhD Candidate - rotating position)
- Paul Fife (Norad Director of the Department for Human Development - observer status)
- Stener Kvinnsland (previously TMS - observer status)

Our rapid growth has made it challenging to define an organisational chart that reflects the current reality of BCEPS' governance. As BCEPS has expanded and its project portfolio has increased, there is an identifiable need to update and re-define its governance structure. This will be addressed in the process of transitioning to a Centre of Excellence from 1 September 2023.

The figure below illustrates the range of work taking place at BCEPS, both thematically and geographically.

For example, with the new Norad award "Defining and integrating essential NCD interventions in national health systems", BCEPS (in collaboration with the Norwegian Public Health Institute and WHO) has expanded its work to Nepal, Tanzania, Ghana and the Africa CDC Health Economics Programme (shaded grey in Figure). With support from Norad (and the SFF grant from RCN), we have been contracted by the World Bank to take on Disease Control Priorities, 4th Edition and have established its secretariat in Bergen. With the "EquiFinance" RCN grant, we have expanded our work to India and Nepal.

Later in this document, we report on existing and new national and international partners, and this will obviously have implications for the organisation of our activities, both in Bergen and abroad.



Insights from PIs and partners

Below are some snapshots from our PIs and partners that provide an insight into what the Centre has enabled them to achieve in terms of research, capacity building and decision support.

“The support from TMS has enabled me to advance innovative methods at the intersection of priority setting and decision science, with direct applications in low- and middle-income countries, while being able to strongly engage with a truly interdisciplinary global community of researchers, public health practitioners, and policymakers.” Stéphane Verguet, Core Analytics Team Lead

“TMS funding has allowed the University of Washington team to produce several important scientific outputs relevant to the objectives of the grant, influence policy processes, and support training of several masters’ and PhD students.

TMS support has allowed us to train 2 MPH students (both graduated) and 4 PhD students (2 graduated, 2 preparing to defend) at the UW. These individuals are all planning to work in academia or government/civil society with a focus on health in low- and middle-income countries. The scientific work summarized above would not have been possible without the hard work of all these students.” David Watkins, Translation & Malawi Essential Surgery Team Lead

“We are particularly excited that the Head of the government business came to officiate the whole event and the presence of our Minister of Health was instrumental in getting this through” Dr. Fatma Mrisho, Principal Secretary-Ministry of Health, Zanzibar

“Through TMS and the support from BCEPS, Zanzibar was able to do a comprehensive revision of the Essential Health Care Package, which was officially launched in November 2022.” Omar Mwalim, UHC Zanzibar Team Lead

“The launching of the EHCP marks a significant milestone. This policy document will serve as the cornerstone in providing healthcare services to our populace. It is the most crucial tool that will guide us in delivering optimal healthcare services to our people.” Hon. Nassor Mazrui, Minister of Health, Zanzibar

“The support for ACEPS has enabled us to provide training and short courses in health economics and priority setting for civil servants from the ministries of health in Ethiopia, Zanzibar and Malawi. Our Centre is now well established under Addis Ababa University, and this will enable us to be an active partner providing decision support to Africa CDC, and ministries of health in the region.” Solomon Memirie, Director, Addis Centre for Ethics and Priority Setting, AAU

“FairChoices has the potential to identify huge opportunity costs in health priorities in countries where much is at stake. This tool would never have been developed without the financial support of TMS”. Kjell Arne Johansson, BCEPS Deputy Director and PI of FairChoices and UHC Zanzibar

“Priority setting is tough – for the clinician saying no to a patient, for the Minister of Health saying no to highly beneficial health care services. The support from TMS has allowed me to participate in capacity building in medical ethics and priority setting for clinicians in our partner countries.” Ingrid Miljeteig, Deputy Director, BCEPS

“Our plan for BCEPS was to bring together researchers from philosophy, ethics, health economics, epidemiology, global health, and medicine around three common goals: to produce excellent research, train young talents, and to make a difference. I believe we have already succeeded with the first two goals; the third goal remains a constant challenge.” Ole F. Norheim, Director BCEPS

5 | Objectives and Achievements

The BCEPS project description sets out specific research questions and objectives that are examined more closely in this section.

Research questions

- how to optimise resource use for benefit package design, taking into account three inter-related health systems objectives: health maximisation, equity and financial risk protection;
- how to enable fair and legitimate processes, including stakeholder dialogue and public engagement, for benefit package design

Primary objective

The primary objective of BCEPS is:

“to understand and promote ethically acceptable, fair, and efficient priority setting in national health systems”.

To achieve our primary objective is an ongoing activity. We believe we are contributing to national and international debate and research on the ethics of priority setting, and we have actively generated evidence and provided decision support for fair and efficient priority setting in the countries where we work.

Secondary objective

We defined twelve secondary objectives in the original project description. Below we comment on the ongoing work, achievements so far, and necessary adjustments. We also provide examples of relevant publications or reports.

1. Provide decision support to countries for fair and efficient priority setting – on the path to Universal Health Coverage, for public health, and for intersectoral action – in partial fulfilment of the Sustainable Development Goals.

Ethiopia: Through the Addis Centre for Ethics and Priority Setting (ACEPS), we are providing decision support for the new essential benefits package defined by the Ethiopian Health Insurance Agency

(Community Based Health Insurance - CBHI). The final report will be completed in mid-2023.



Zanzibar: In response to a request by the Ministry of Health, and in collaboration with the regional WHO office, BCEPS supported the full revision of a national Essential Health Care Package (EHCP) for Zanzibar from 2019 to 2022. [The report was completed in November 2022.](#)



Malawi: The BCEPS Malawi team was an important stakeholder in the Essential Health Service Package revision process in Malawi from 2021-2022. BCEPS provided technical support in developing the central hospital sub-package and helped craft the Health Sector Strategic Monitoring and Evaluation Plan. At the request of the local Ministry of Health and College of Medicine collaborators, BCEPS broadened its focus from an essential surgery package to a tertiary orthopaedic care (central hospital) package. This work is ongoing.

In all countries, we have established good high-level co-operation with the ministries of health and relevant

universities. A formal collaboration agreement has been signed with Addis Ababa University and we have established Memorandums of Understanding (MoUs) with other key institutions.

2. Strengthen capacity to demand and use evidence from economic evaluations in Malawi, Zanzibar, and Ethiopia, and within their Ministries of Health.

With additional funding from UiB, BCEPS is training five PhD students [Ethiopia (1); Zanzibar (2); Malawi (1); Pakistan (1)] and supporting five postdoctoral/senior researchers [Ethiopia (3) (+1 Harvard Takemi fellow); Zambia (1)].

Several short courses in health economics and priority setting have been conducted with participants from Zanzibar, Ethiopia and Malawi. During the process of reviewing the EHCP in Zanzibar, a team of 12 individuals from the Ministry of Health received training on health economics and priority setting at ACEPS.



3. Develop and provide analytic methods and evidence for fair and efficient priority setting.

Since 2019, BCEPS researchers have further developed and refined methods for economic analysis that take fair distribution and financial risk into account. Our approach to priority setting in low-income countries is exemplified in two papers: “Toward universal health coverage in the post-COVID-19 era” (Verguet et al. 2021) and “NCD Countdown 2030: efficient pathways and strategic investments to accelerate progress towards the Sustainable Development Goal target 3.4 in low-income and middle-income countries” (NCD Countdown collaborators 2022).

Methodological contributions are mainly in five areas:

- a) Metrics for quantifying the equity and financial protection impacts of scaling up health interventions in resource-poor settings (Verguet, Niwa, and Bolongaita 2023; Chakrabarti and Verguet 2022).
- b) Analytics for optimising the design of a package of essential health services in low- and middle-income countries (Lofgren et al. 2021; Verguet and Norheim 2022; Haakenstad et al. 2022; Hendrix et al. 2023; Eregata et al. 2021; Eregata et al. 2020; Johansson, Okland, et al. 2020; Kiros et al. 2023; Watkins et al. 2020)
- c) Extended cost-effectiveness analyses, and related studies, in selected low- and middle-income country settings (Feldhaus, Nagpal, and Verguet 2021; Gibbs et al. 2022; Choudhary et al. 2022; Choudhary et al. 2021; Dhufiera et al. 2022)
- d) Novel metrics and analytics for priority setting and health system analysis (Hendrix et al. 2022; Verguet et al. 2022; Skarda, Norheim, and Cookson 2022)
- e) Ethics and economics: In addition to Verguet and his team's contributions to Extended Cost-Effectiveness, Cookson, Johansson, Norheim and others have worked on how to make trade-offs between concerns for equity and health maximization, and have formalised this approach in Distributional Cost-Effectiveness Analysis (Johansson, Coates, et al. 2020; Norheim et al. 2020; Cookson et al. 2020). Population-level bioethics has yet to provide a comprehensive framework for priority setting. Norman Daniels' *Fair equality of opportunity* approach justifies a moral right to health but is not fine-grained enough to provide substantial normative advice on how to set priorities efficiently and fairly. Utilitarianism (health maximisation) and egalitarianism (health equality) are each associated with well-developed policy tools: utilitarianism with CEA and egalitarianism with inequality metrics, respectively. Neither approach provides a comprehensive ethical framework to assess the impact of interventions on levels and distributions of health and income. BCEPS has worked on how to combine health maximising and egalitarian ethical principles. Prioritarianism is one ethical

theory that combines efficiency and fairness concerns, and it can inform and be informed by quantitative analysis. Prioritarianism, applied to health by Norheim and others, evaluates outcomes by giving more weight to well-being gains for the worse off relative to the better off (Adler and Norheim 2022; Norheim et al. 2020). This approach has been implemented in the Norwegian system for reimbursement of new drugs (Tranvag et al. 2022).

Experiences in low-income countries, with tools and methods from BCEPS and others, have been documented in several papers (Alwan et al. 2023; Baltussen et al. 2023; Siddiqi et al. 2023; Hailu, Gebreyes, and Norheim 2021; Hailu et al. 2021; Verguet et al. 2021).

Taken together, we believe that these are the most important academic contributions from BCEPS to the development of new analytic methods for fair and efficient priority setting.

For generation of new evidence relevant for priority setting, please refer to the [BCEPS website](#) and the publications listed there.

4. Develop and implement data visualisation tools for disease burden, population in need, target coverage, costs, health gains, equity impact, and effective purchase of financial risk protection.



The [FairChoices DCP Analytics Tool](#) has been developed to:

- assist policymakers engaged in the revision of essential health service packages.
- assist researchers to develop and apply methods that combine fairness, efficiency, and clinical concerns in health care priorities.

The tool has been piloted and tested in Zanzibar, and later in Nigeria and The Gambia.

5. Country translation of economic evidence from DCP3 and other sources for essential benefit package design.

Our country translation work has three elements: i) local capacity strengthening through research, ii) tailored analysis with national data on demography, epidemiology, costs and (when available: effectiveness data), and iii) policy process.

Economic evidence from DCP3 and other sources have been used in all three countries.

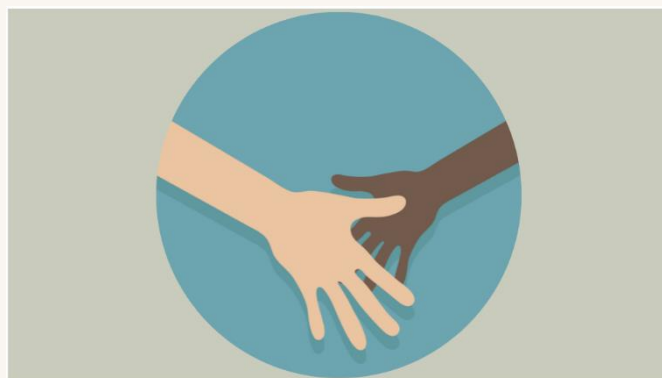


Photo: Colourbox

The FairChoices DCP Analytics Tool was used in the Zanzibar sub-project.

6. Country support for transparent and fair processes for essential benefit package design.

Through the country translation process, BCEPS has supported and promoted transparent and fair processes for essential benefit package design (Baltussen et al. 2023). The processes are being documented in Zanzibar, Malawi and Ethiopia (CBHI), and further manuscripts are underway.

The initial plan included more direct support and co-development of guidance documents. This became impossible to implement (except in Zanzibar) due to the Covid-19 pandemic.

BCEPS, in collaboration with the Norwegian Public Health Institute (NPHI) and the World Bank, has developed a report entitled "[Open and Inclusive: Fair Processes for Financing Universal Health Coverage](#)". Key findings were presented in Oslo on 16 March, and the report will be published by June 2023.

7. Provide decision support to define and implement an essential surgery package in Malawi.

Some of this work was delayed by the pandemic, modified to a tertiary orthopaedic care (central hospital) package, and is now well underway.

An additional PhD project on priority setting dilemmas and moral distress among health care providers and hospital leaders involved in trauma care in Malawi has recently been added (with support from BCEPS and the Trond Mohn funded LION project).

8. Provide decision support to define and implement a highest priority package for NCDs and injuries in Zanzibar.

The Zanzibar Essential Health Care Package report is complete and published on the [Zanzibar Ministry of Health website](#). Writeup and publishing (PhD work) is underway and will be completed by 2024.

9. Compare health care expenditure by delivery platform, with emphasis on primary care, in selected GFF countries.

BCEPS was unable to engage the GFF in this collaboration. We therefore adjusted this goal and now include health care expenditure by delivery platform in the FairChoices Analytics Tool. Comparisons of health care expenditure at primary care level can now be compared across countries where the tool is applied.

10. Support the GFF country platform in Ethiopia to monitor investment case impact.

BCEPS was unable to engage the GFF in this collaboration, partly due to the pandemic, partly due to other priorities in the GFF team.

11. Monitor implementation of essential health benefit packages in Zanzibar, Malawi, and Ethiopia by impact on health, equity, and financial risk protection.

A monitoring and implementation plan was incorporated both in the Ethiopian Essential Health Service Package, and The Zanzibar Essential Health Care Package report.

A plan for monitoring and implementing the tertiary surgical care package in Malawi will be developed.

12. Establish the Bergen Centre for Ethics and Priority Setting as a world-leading group for priority setting in global health and achieve WHO Collaborating Centre status on ethics and priority setting.

In 2022, BCEPS was awarded a 10-year Centre of Excellence grant from the Research Council of Norway in recognition of its status as a world-leading research group for priority setting in global health.

Also in 2022, BCEPS received an offer from WHO to start discussions to become a collaborating centre. This process is ongoing.

During the Covid-19 pandemic, we defined two additional sub-objectives:



Photo: Canva

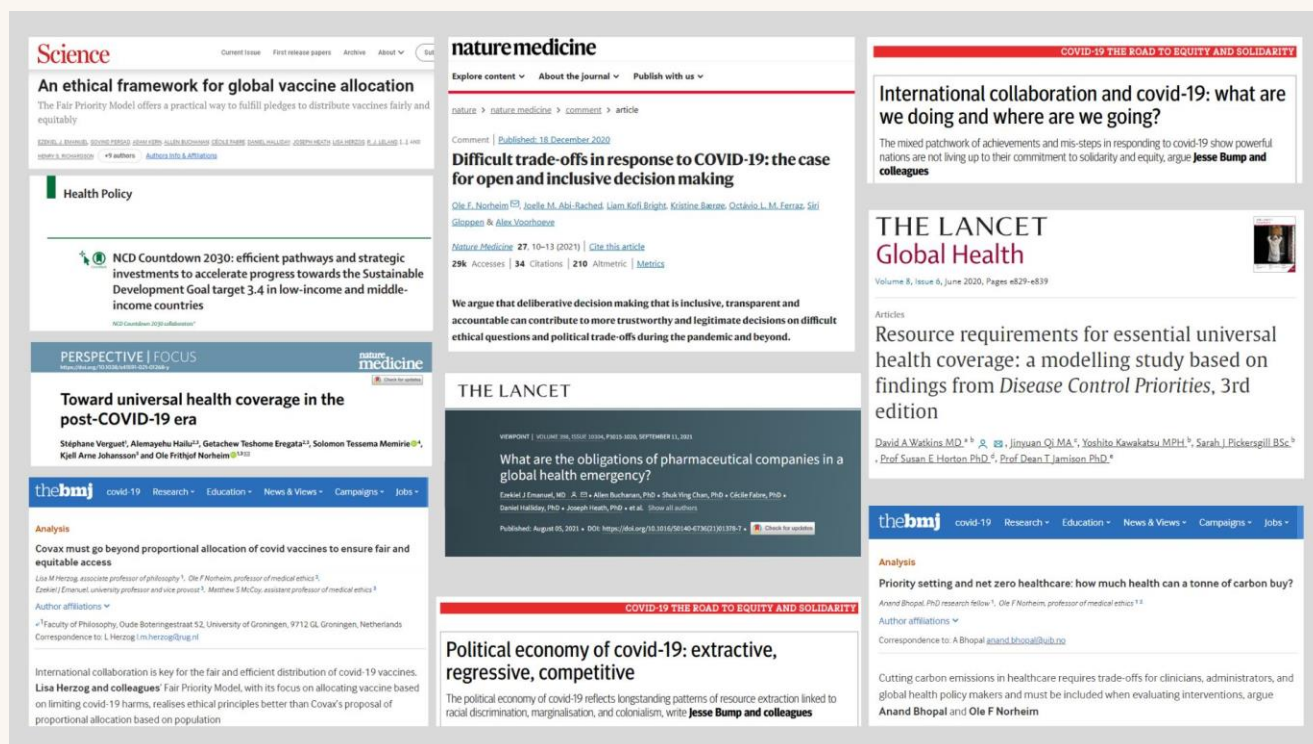
13. Provide normative guidance on pandemic response.

BCEPS researchers, with partners, co-authored several papers and reports on vaccine priority setting and rollout (nationally and globally), and on how to protect other essential services during the pandemic (Emanuel, Buchanan, Chan, Fabre, Halliday, Leland, et al. 2021; Herzog et al. 2021; Blanchet et al. 2020; Shadmi et al. 2020; Norheim et al. 2021; Emanuel et al. 2020; Emanuel, Buchanan, Chan, Fabre, Halliday, Heath, et al. 2021).

14. Generate new evidence relevant to pandemic response.

Papers published on ethical dilemmas, moral stress, and health-related quality of life during the pandemic, as well as cost analysis of Covid-19 sample collection, diagnosis, and contact tracing in low resource settings (Miljeteig et al. 2021; McLean et al. 2022; Bringedal et al. 2022; Isaksson Ro et al. 2022; Gebremichael et al. 2022; Kaso et al. 2022; Yigezu et al. 2022; Memirie et al. 2022; Chang et al. 2022; Jamison et al. 2021; Chumakov et al. 2021; Jha et al. 2021; Jamison et al. 2020).

6 | Publications



BCEPS researchers publish widely in peer-reviewed journals, editorials, commentaries, books, and book chapters. For a complete list, see the [BCEPS website publications page](#). The table below shows our scientific output in numbers. In addition, many BCEPS researchers are involved in producing reports and policy recommendations for health decision makers at national and international level.

Publications June 2019 – March 2023	
Scientific papers	134
Editorials and commentaries	5
Books	4
Book chapters	16

Selected and important publications in peer-reviewed journals

Since 2019, BCEPS researchers have been first, last or co-authors for 11 high-impact journal articles (see list below). Six of these papers were published in response to the Covid-19 pandemic, three were planned papers from BCEPS, and two were based on new ideas from our excellent PhD students:

Emanuel EJ. et al. An ethical framework for global vaccine allocation. *Science*. September 2020.

Emanuel EJ. et al. What are the obligations of pharmaceutical companies in a global health emergency? *The Lancet*, August 2021.

Herzog L.M. et al. Covax must go beyond proportional allocation of covid vaccines to ensure fair and equitable access. *BMJ*. January 2021.

Norheim OF et al. Difficult trade-offs in response to COVID-19: the case for open and inclusive decision making. *Nature Medicine*. January 2021.

Bump, JB et al. International collaboration and covid-19: what are we doing and where are we going? *BMJ* 2021.

Bump, JB. Et al. Political economy of covid-19: extractive, regressive, competitive. *BMJ* 2021.

Verguet S. et al. Toward universal health coverage in the post-COVID-19 era. *Nature Medicine*. March 2021.

Watkins DA et al NCD Countdown 2030: efficient pathways and strategic investments to accelerate progress towards the Sustainable Development Goal target 3.4 in low-income and middle-income countries. *Lancet*. March 2022.

Watkins, DA. et al. Resource requirements for essential universal health coverage: a modelling study based on findings from Disease Control Priorities, 3rd edition. *Lancet Global Health*. June 2020.

Bhopal A. et al. Priority setting and net zero healthcare: how much health can a tonne of carbon buy? *BMJ*. October 2021.

Bhopal A. et al. Fair Pathways to Net Zero Healthcare. *Nature Medicine* (in press), 2023.

Other important publications

We have also listed additional selected publications that we consider to be important and representative of the work BCEPS does. These publications appear in relevant journals for our field of research, even if not in journals with the highest impact factors:

Onarheim KH. et al. Adopting an ethical approach to migration health policy, practice and research *BMJ Global Health* 2021

Fadnes LT. et al. Estimating impact of food choices on life expectancy: A modeling study. *PLoS Med*. 2022 Feb 8;19(2).

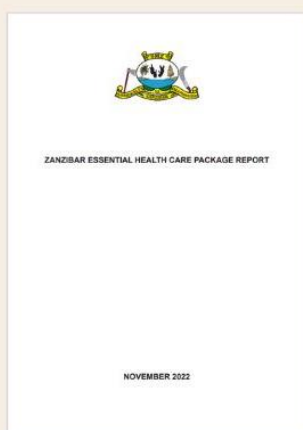
Fadnes LT. et al. INTRO-HCV Study Group. Integrated treatment of hepatitis C virus infection among people who inject drugs: A multicenter randomized controlled trial (INTRO-HCV) *PLoS Med*. June 2021.

Blanchet K. Et al. Protecting essential health services in low-income and middle-income countries and humanitarian settings while responding to the COVID-19 pandemic. *BMJ Global Health*. October 2020.

Tranvåg EJ. et al. Appraising Drugs Based on Cost-effectiveness and Severity of Disease in Norwegian Drug Coverage Decisions. *JAMA Netw Open*. June 2022.

Selected Relevant Reports

BCEPS researchers have contributed to the following reports, all of which are available via the [reports section](#) on the BCEPS website:



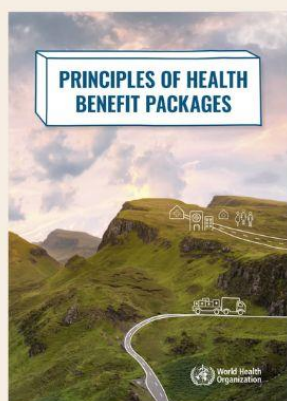
Ministry of Health Zanzibar 2022



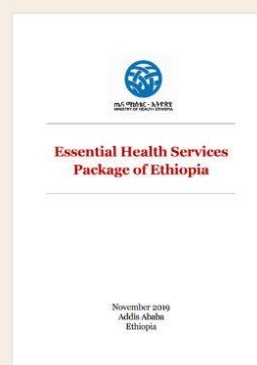
Background paper for the joint WHO-OECD report: "Sustaining lives and livelihoods: a decision framework for calibrating social and movement measures during the COVID-19 pandemic". Dec 2020.



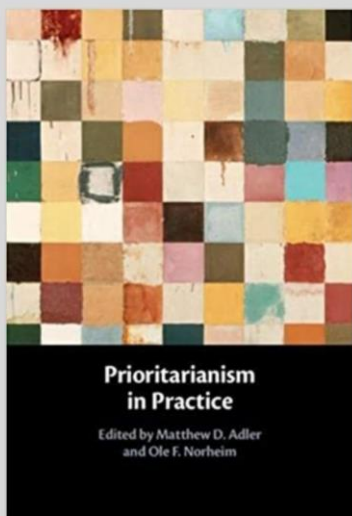
Norwegian Public Health Institute 2020.



World Health Organization 2020



Federal Ministry of Health 2019
[Launched after the establishment of BCEPS, funded by the Bill & Melinda Gates Foundation]

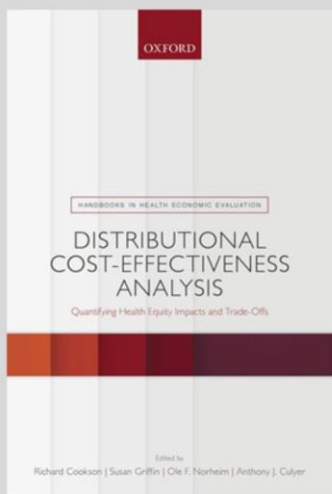


Adler, Matthew D. & **Norheim, Ole F.** (eds.)
Cambridge University Press; 2022.

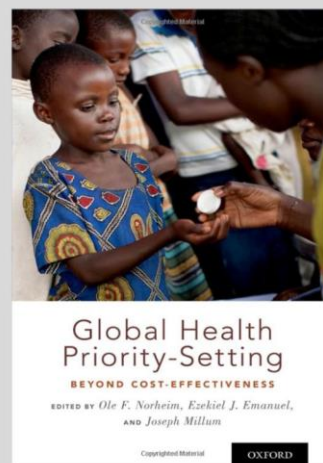


Espen Gamlund; **Carl Tollef Solberg.**
Universitetsforlaget; 2020.
[In Norwegian]

Books



Cookson, Richard; Griffin, Susan; **Norheim, Ole F.**; Culyer, Anthony (eds.)
Oxford University Press; 2020.



Norheim OF, Emanuel E, & Millum J. (Eds.)
New York: Oxford University Press 2020.
[Published and launched in 2020, work mostly completed prior to the establishment of BCEPS, funded by Norad]

7 | Events and Conferences

BCEPS as a contributor

BCEPS researchers are active participants in a wide range of local, national, and international events and conferences on topics such as priority setting, health financing, deliberative processes, clinical ethics, and research ethics. We have not counted individual contributions over the last three years, but some of the event organisers are listed below.

Norway: University of Bergen, Chr. Michelsen Institute (CMI), Haukeland University Hospital, the Norwegian Academy of Science and Letters, the Biotechnology Advisory Board, the Norwegian Institute of Public Health, University of Oslo, and Norad

Example: BCEPS was featured at the annual TMS event in the UiB Aula in December 2022, where Trond Viggo Torgersen presented BCEPS with locally produced videos from UHC Zanzibar and interviews with Ole F. Norheim and emergency care doctor and BCEPS PhD Candidate, Leonie Schwarz.



International: Brocher Foundation, Harvard University, Addis Ababa University, IDSI/Center for Global Development, Geneva Centre for Humanitarian Studies, WHO, World Bank, and others.

Example: BCEPS Deputy Director Kjell Arne Johansson participated in an international panel discussion ("Which health services in humanitarian settings should we NOT provide during COVID-19?") hosted by the Geneva Centre of Humanitarian Studies in November 2020.



BCEPS as an organiser

BCEPS has also played an important role as organiser or co-organiser of several events in recent years. We have listed a few of these below:

a) Online pop-up conference on priority setting during Covid-19 (2020)



On 7 April 2020, BCEPS had the honour of hosting the online event, "[Exploring Priority Setting in the COVID-19 Pandemic](https://prioritiesinhealth.org/covid-seminar-series)", on behalf of the International Society for Priorities in Health (ISPH).

b) Online seminar series on climate change and priority setting in health (2021)



During Spring 2021, BCEPS organised an [online seminar series](#) on the intersection of climate change and priority setting in health ([recordings available](#)).

c) Priorities2022 – 13th International Society for Priorities in Health (ISPH) Conference (2022)

The Priorities2022 conference was organised by BCEPS on behalf of [ISPH](#), with the following co-sponsors: WHO, Decide, Africa CDC, Norad, Addis Centre for Ethics and Priority Setting, and Haukeland University Hospital. Digital participation was free of charge and around

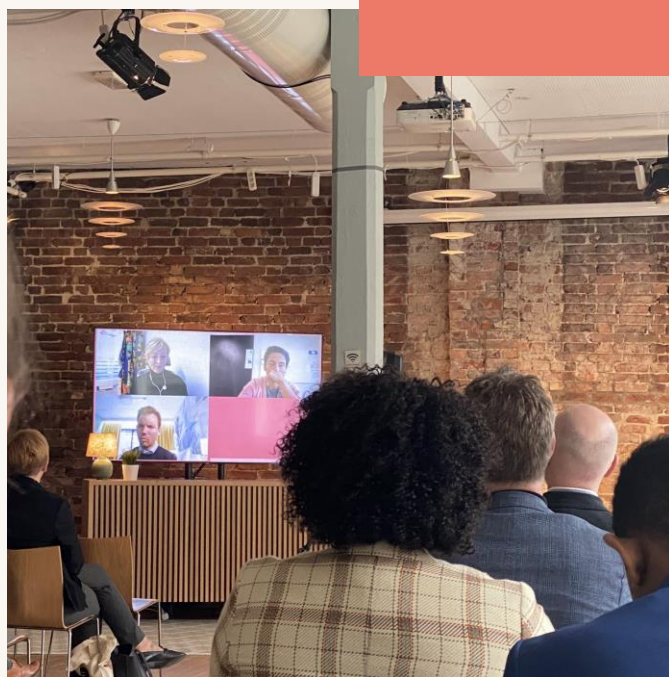
1000 people participated at the conference. In total, there were 7 panels, 24 organised sessions, a full UHC priority day, 14 abstract discussion meetings and 40 poster presentations. Furthermore, there were 10 in-person HUBs around the world (whereby the main coordinating HUB was in Bergen). We believe we managed to decrease some of the barriers for participants from LMIC to attend international conferences by making digital participation free of charge, providing funding for regional hubs, actively inviting speakers from LMIC, being strict on gender equity in panels and when accepting organised sessions, and purposely using all our networks in LMIC to encourage participation. Using our BCEPS network, we managed to recruit participants from over 60 countries, with many participants from African countries. There was a high level of engagement among policymakers and planners, and 46% of the speakers were female.

Until May 2022, BCEPS Deputy Director Kjell Arne Johansson was also president of ISPH, and several BCEPS staff are still on the ISPH Board and are involved in preparations for the 14th ISPH conference that will be hosted by ITHAP, Thailand, in 2024.





Events and Conferences



8 | Value Added

Even before BCEPS became a centre, individual researchers in the former Global Health Priorities group provided decision support based on their long-standing links with institutions and high-level decision-makers in relevant countries.

As a centre, BCEPS now collaborates even more widely, both nationally and internationally, often with researchers from other disciplines and for new target audiences. We believe that BCEPS has demonstrated concrete added value in the following areas:

Quality of research in the field

BCEPS goes beyond narrow technical approaches such as health technology assessment and cost-effectiveness by including experiences from priority setting in the Nordic countries and from systematic and context-specific research on ethics, equity, distributive justice, and fair process. Our unique contribution may be to bring ethics into the field of priority setting. Applied ethics informs almost everything we do in BCEPS.

We have collaborated with the Clinical Ethics Committee (CEC) at Haukeland University Hospital, and the national network of CECs, often with a particular emphasis on ethics at the intersection with priority setting decisions. Research collaboration with the Norwegian Institute for Studies of the Medical Profession is another strategy to increase knowledge on how priority setting stakeholders deal with resource scarcity and fairness concerns at the bedside

By bringing together a network of top international scholars in various disciplines and engaging a combination of younger and more experienced PIs, we feel that BCEPS' research in applied ethics has been able to benefit from close interaction with economists and epidemiologists.

Our contributions to the books, *Distributional Cost-Effectiveness Analysis (DCEA)* and *Prioritarianism in Practice*, are other examples of interdisciplinary

work that would not have been possible without a strong basis in ethical theory and experience from decision-making in clinical and public health ethics.

Academic training and recruitment of early-stage researchers

The synergies achieved by becoming a centre, with associated funding, new tools, and expanded networks cannot be underestimated. Our PIs have been able to attract young talent and ensure inclusive high-quality education for the next generation of researchers. Our PhD and postdoctoral fellows can now interact on a daily basis with a much larger group of experienced researchers than if they had just been part of isolated research projects. We believe this interaction will have far-reaching impact.

Innovation and translation

One way to look at innovation in global health is to examine whether new practices are fit for purpose. How well are evidence and norms relevant for decision-makers in global health translated into practice? We believe the "BCEPS approach" to translation – with emphasis on national capacity building, a strong presence in countries, local production of evidence combined with the FairChoices Tool, and strong commitment and ownership at the highest levels of ministries of health – is an approach that can be tested further and expanded. This was also the justification for the new award from Norad on "Essential NCD interventions" with an expansion to three new countries and Africa CDC.

In translating evidence into policy, we aim to create awareness of the need for transparent and fair priority setting. This is done by engaging in public debates and disseminating our results and recommendations to select target audiences such as the academic community, citizens who engage in public deliberation, and national and international decision-makers. Our ongoing interaction with key institutions in Norway, Ethiopia, Zanzibar and Malawi, as well the World Bank and World Health Organization, documents at least partial fulfilment of this aim.

9 | Research Environment

BCEPS has members from more than 10 nationalities, representing 5 different continents and an overall satisfactory gender balance. This diversity contributes to an inclusive and welcoming atmosphere, especially for new members joining the centre from outside Norway. It is also a multidisciplinary team with common shared bonds, which fosters collaboration and interdisciplinary exchange among researchers, enabling them to build on each other's work and generate new ideas.

BCEPS' leadership is supportive and open to new ideas, creating a safe space for discussions and development of academic expertise in a constructive and transparent way. Administrative staff, leaders, senior and early career researchers are in constant contact with one another. Simple measures such as weekly staff meetings and everyone eating lunch together on a daily basis facilitate communication and lower the threshold for organising academic and non-academic events and activities.

Every PhD candidate at BCEPS is expected to take two main courses: "Applied Economic Evaluation in Health Care" and "Equity and Fairness in Health – an Applied Approach to Ethics". These courses offer a great starting point for newcomers and give them the space and the opportunity to further develop their research methods and grow together. It is also a chance to meet other students and understand more about the research that is done at BCEPS.

Formal recurrent BCEPS staff meetings occur every Monday morning at 9 am, and every other Wednesday the UiB Section for Ethics and Health Economics organises a seminar series known as "MedPri" where PhD students are encouraged to present academic "work in progress". The seminars are designed to facilitate targeted feedback and useful comments for the PhD students to incorporate into his or her ongoing work. It is also used as a space for invited researchers to share their work and foster academic reasoning.

BCEPS organises an annual symposium at Solstrand Hotel outside Bergen for its staff and extended network. This is an opportunity to present achievements to a wider audience, including funders and guests from the extended research community. We also use the event to discuss the current status

of projects, share plans for the future, and receive feedback and advice from the group.

Another event that BCEPS staff members are invited to join is the annual seminar organised by the UiB Section for Ethics and Health Economics. This is usually held in the mountains of Western Norway and combines academic reflection with indoor and outdoor social activities.

At both the above events, there is a particular focus on nurturing our early-career researchers and providing them with opportunities to gain inspiration and advice from members of the wider BCEPS network.

Below are a few comments from some of our PhD candidates on their perception of the BCEPS research environment:

"The importance of the BCEPS family is evident to me every time I need to discuss a problem or an idea with someone who shares my interest and passion in the field of medical ethics! Grouping people together in BCEPS gives me constant access to invaluable inputs and discussion, which only improves the quality of my small contribution to this exciting and important field of medical ethics". Nina Kleven-Madsen, PhD Candidate

"BCEPS has well-equipped working spaces, supportive mentorship, opportunities to be involved in high-profile projects related to my PhD, and a good work-life balance. One of the biggest strengths of the research environment, in my opinion, is the large multidisciplinary network of researchers based at UiB as well as other universities across the globe. While they are a great resource for mentorship and input, incorporating them in more regular academic discussions and debates would enhance the academic research environment." Wafa Aftab, PhD Candidate

"BCEPS is an enjoyable place to work. The leadership values each and every member of the team. The Centre has a supportive atmosphere. We eat lunch together – it sounds so simple but for me it speaks volumes about the work culture." Anand Bhopal, PhD Candidate



Research Environment



“Having come from a policymaking background, I have found that BCEPS, as a multicultural research environment, allows us to learn from the experience of people in other settings, adding depth to my understanding. The diverse expertise of my colleagues and the available learning resources gives me access to many capabilities and tools, all of which enrich the learning experience.” Pakwanja Desiree Twea, PhD Candidate



Social Activities



10 | International and National Collaboration

In addition to its own diverse group of researchers, BCEPS also has an extensive network of collaborative partners in Norway and abroad. Not all of them are directly related to TMS funding, but they are all indirectly impacted in the same way as our research staff.

The figure below provides an overview of organisations with which BCEPS collaborates as per March 2023. This list goes beyond the formal partners named in the original project description but gives an indication of the reach of our projects and activities.



11 | Dissemination and Visibility

BCEPS aims not only to produce high impact science but also to influence decisions and improve policies through participation in policy processes. We invite end-users of our advice to our meetings and engage them in discussions of our research agenda. Co-production and user involvement are key elements in our Theory of Change (Norheim 2018). Our researchers participate actively (on committees or in other advisory roles) in policy processes both in Norway and in the countries where we work. Many of them are also directly involved in ongoing projects with the WHO and the World Bank. Our long-term goal is to see decision-makers empowered by evidence and guidance to achieve better and more legitimate priority setting.

Target audience

Our target audience is therefore not only news media and the general public, but also decision-makers and the academic community.

Strategy

Until now, BCEPS communications strategy has primarily been defined by commitments to funders and UiB. We use the communications channels we have available to reach as much of our target audience as possible in a relevant and informative manner. We aim high, and our target audience is broad, which is challenging given that we do not have a full position dedicated to communications. This will change as we transition to becoming a Centre of Excellence. A communications position will be advertised in the spring of 2023 to start in the autumn. This will enable BCEPS to formalise its communications strategy and professionalise its communications activities.

Channels of communication

Despite not having a dedicated communications officer, we are proud of our communications achievements over the last three years and feel that we are on the right path as we move forward:

Media outreach to citizens: BCEPS' leaders are already established names in the field and are

regularly interviewed in local and national newspapers, radio, television, and podcasts. In 2021, Norheim was the most widely cited researcher in news media among all researchers at the UiB Medical Faculty. Furthermore, national media in Zanzibar and Ethiopia broadcasted widely when our final reports were issued. In the future, we aim to become more visible in national and international media through targeted training of younger scientists at the Centre.

Publications in journals and conference contributions: The scientific work produced by BCEPS researchers is regularly published in national and international, high-impact peer-reviewed journals and presented at relevant conferences such as International Health Economics Association meetings, the bi-annual International Health Systems Symposium, the International Society for Priorities in Health conferences, and the Prince Mahidol Conference.

Public outreach to specific groups: Reports and policy briefs produced by BCEPS researchers have been presented regularly to policymakers in Ethiopia, Zanzibar, and Malawi, including Annual Review Meetings and stakeholder meetings.

Academic outreach to educational institutions: BCEPS researchers have organised and participated in seminars and webinars on priority setting, health financing, deliberative processes, clinical ethics, research ethics in Norway (with UiB, CMI, Haukeland University Hospital, Norwegian Academy of Science and Letters, Biotechnology Advisory Board), and internationally (with Brocher Foundation, Harvard University, Addis Ababa University, IDS/Center for Global Development and others).

Web and social media presence: BCEPS has an established digital presence with a [website](#) and social media channels ([Twitter](#), [Facebook](#), [Instagram](#), [YouTube](#)). All channels have displayed increased activity over the last three years and provide information about projects, events, scientific publications, and BCEPS-related media coverage. BCEPS researchers reach out regularly to the wider academic community through editorials, opinion pieces and blog posts in academic journals.

12 | Challenges and Opportunities

Our main challenges in the last three years have been the Covid-19 pandemic and a difficult political situation in Ethiopia. There were also some initial delays in hiring people and getting projects off the ground. During the pandemic, we defined two additional sub-objectives for our work: i) to provide normative guidance on pandemic response, and ii) to generate new evidence relevant to the pandemic response.

The pandemic demonstrated the relevance of BCEPS' work, and our researchers contributed substantially to achieving the two newly defined goals. This is also reflected in a high number of publications and reports that we had not initially planned in 2019. However, travel and field work were not possible, and this had an impact on the planned short courses at ACEPS, the organisation of open and inclusive processes in the benefit package work (especially in Malawi and for the Ethiopian Health Insurance Agency), data collection

for some of our PhD students and planned physical meetings and networking.

During this period, including the ongoing political conflict in Ethiopia, our interaction with the Ministry of Health was somewhat reduced and we worked mostly through ACEPS with weekly zoom calls.

New funding, from Norad and RCN, represents new opportunities. Our international networks are expanding and there can be increased mobility and exchange between partner institutions with south-south collaborations. We want to strengthen ACEPS' role, in close collaboration with the Africa CDC Health Economics Programme, as a hub for training, research and decision support for the region.

The Centre of Excellence funding will also make it possible to strengthen our dissemination and communications strategy. This is an area where we, as a primarily research institution, have substantial room for improvement.



13 | Conclusion

Since the BCEPS journey started in 2019, we have been in the process of defining ourselves and finding our role as an academic centre with emphasis on both high-quality research and societal impact. BCEPS is not a think tank and not a research institute for commissioned research only. With the new SFF (Centre of Excellence) 10-year grant for foundational research, our research aims have been clarified. We need further help to define our role and aims for social impact more clearly.

Establishment as a centre takes time and we now have a platform and identity to build on to become an attractive collaborative partner. The 2019 grant gave us a head start to win the SFF award in 2022 and further our aim to be a world leading centre for ethics and priority setting in health.

In terms of achievements, we have been fortunate to attract excellent partners and young researchers. We have published more than ten articles in high-impact scientific journals, a substantial number of other high-quality publications and edited books, and we have been able to contribute to theory and methods development in our field. BCEPS has provided decision support to the Ministries of Health in Ethiopia and Zanzibar, with tangible outputs. Our work in Malawi was delayed due to Covid-19 but has gained momentum in the last 12 months. We continue to advise on priority setting policies in Norway.

The value added from becoming a centre is clear to us: multidisciplinary research, more staff, well-coordinated collaboration nationally and internationally, a more attractive workplace to meet and socialise, a conducive research environment, and the potential for more professional dissemination and outreach. Our value added to the discipline and practice of priority setting is, we believe, to bring in normative perspectives, dilemmas, and – sometimes – recommendations. Our methodological contributions would have been difficult without a strong foundation in ethical theory and practice.

Our leadership structure and organisation will be further transformed in the coming year. Since we have grown so rapidly, and our project portfolio has increased, we need to update and re-define our organisation and governance structure. We welcome further advice on the best way to organise a growing centre like ours.

The number of national and especially international partners and collaborators has increased rapidly, and we are now in a phase where we are trying to consolidate our relationships without expanding more than planned (the new Centre of Excellence will bring in the University of Pennsylvania and two new partners from LMIC. Advice on direction and partners is welcome. One potential direction is to work more with partners from the Nordic countries.

As an academic centre, we believe we are doing well in terms of dissemination and communication. However, as we also aim for societal impact, we think there is room for improvement in terms of visibility, communication, and policy dialogue. We aim to become more visible in national and international media through targeted training of early-career scientists at the Centre. We have already engaged a senior policy advisor in a 50% position to engage with policy makers at national and international level, and we will recruit a full-time communications officer for our new Centre of Excellence.

We believe that our academic achievements are solid and that we have an excellent base upon which to build a Centre of Excellence. The speed with which we have expanded has been a challenge with regard to organisational structure and administrative resources. As we transition to become a Centre of Excellence, we look forward to a more stable and long-term perspective for our projects and are open to advice regarding possible choices of direction as we approach the task at hand.

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