





TABLE OF CONTENTS

ACRONYMS	03
INTRODUCTION	04
NUHRA 2023-2028: ALIGNING RESEARCH WITH HEALTH SYSTEM GOALS	05
PRINCIPLES OF NUHRA 2023-2028 DEVELOPMENT	06
THE NUHRA 2023-2028 RESEARCH PRIORITY SETTING METHODOLOGY	09
THE NUHRA 2023-2028 Disease Management Halal in Health Health Security, Emergency, and Disaster Risk Management Health Technology and Innovation Health of Vulnerable Populations Health Promotion Health Systems Strengthening Towards UHC Maternal, Newborn and Child Health Mental Health Nutrition and Food Security Sexual and Reproductive Health	13
REFERENCES	25
ANNEXES	28
ODC ANIZING COMMITTEE	



ACRONYMS

DOST Department of Science and Technology

HIS health information system

HRH human resources for health

ICC indigenous cultural community

IP indigenous population

LGU local government unit

MCDA multi-criteria decision analysis

NCD non-communicable disease

NUHRA National Unified Health Research Agenda

PCHRD Philippine Council for Health Research and Development

PNHRS Philippine National Health Research System

RHRDC Regional Health Research and Development Consortium

RPS research priority setting

UHC Universal Health Care

INTRODUCTION

The Philippines is committed to health research and development as a means of safeguarding the right to health and improving the quality of life of Filipinos [1]. Filipino health is fundamental to the country's socioeconomic agenda and remains a pillar of the vision of Ambisyon Natin 2040. Imminently, the Philippine government seeks to build livable communities by 2028 that guide Filipinos towards healthy choices and ensure access to health services [2]. Research is a powerful tool to advance health by enabling effective measures, new understanding of health phenomena, and development of interventions [3].

Central to the government's strategy for boosting health through research is the Philippine National Health Research System (PNHRS). PNHRS embodies inclusivity, excellence, equity, recognizing health's multidimensional impact across economic, political, educational, and scientific systems nationwide. The PNHRS was institutionalized through agreements among core implementing agencies: the Department of Science and Technology (DOST), the Department of Health, the Commission on Higher Education, and the University of the Philippines Manila - National Institutes of Health.

Research agendas aid research-to-policy translation, enhance research efficiency, strengthen health research systems, and harmonize research priorities across multiple stakeholders [4-7]. Research that is driven by a well-designed research agenda is likely to have a significant impact on knowledge or practice in the short- to medium-term [8].

The National Unified Health Research Agenda (NUHRA) is the prime instrument of the PNHRS to direct activities and funding for health research [1,9]. It serves as a platform to garner local, national, and global backing for health research priorities. The NUHRA aims to address the health needs of the population aligned with the nation's health sector goals. The periodic review and formulation of the NUHRA every six years is a response to the evolving nature of health issues, public policies, scientific progress and societal changes [10].

The NUHRA 2023-2028 is the fourth iteration of the Philippine health research agenda by the PNHRS. The NUHRA 2023-2028 is a response to intricate health systems and challenges, fueled by a growing research community, and evolving societal, political, and health dynamics in the Philippines.

NUHRA 2023-2028:

ALIGNING RESEARCH WITH HEALTH SYSTEM GOALS

Given its 6-year life span, the NUHRA is developed at a certain point in time, then continuously implemented through a changing health context. The NUHRA 2023-2028 comes at a critical juncture in the evolution of the Philippine health system. It recognizes major shifts and considerations so that it can contribute to the long-term goals of the health sector.

Universal health care and the role of local health systems

The implementation of Universal Health Care (UHC) marks a transformative step towards ensuring that all Filipinos have access to quality health services they need without suffering financial hardship. Central to this vision is the strengthening and empowerment of local health systems.

By fostering collaboration between national and local governments, healthcare providers, and communities, the Philippines aims to create a responsive health system that meets the unique needs of every Filipino. This recognizes the importance of local knowledge, resources, and leadership in achieving health for all. It also underscores the need for **research that informs policy and practice at the local level, ensuring that UHC is implemented in a way that is both effective and equitable.**

Holistic and intersectional research for health systems strengthening

The NUHRA 2023-2028 embraces a holistic and intersectional approach to health research. Health is influenced by a complex interplay of biological, social, economic, and environmental factors. There should be a commitment to supporting research that transcends traditional boundaries. This **means encouraging interdisciplinary collaboration and integrating insights from fields such as public health, economics, sociology, environmental science, and more.** By taking a whole-system view, research aligned with the NUHRA 2023-2028 can uncover the root causes of health challenges and develop solutions that are innovative and sustainable.

Evidence-based and participatory policy- and decision-making in health

The Philippine health system is committed to fostering a culture where evidence directly informs policy and practice, and diverse stakeholders participate in the decision-making process. By aligning research priorities with national health goals, the NUHRA 2023-2028 aims to ensure **that policies and interventions are grounded in sound evidence.** The involvement of diverse stakeholders means policy and practice are also **responsive to the needs and preferences of those they are meant to serve.**



PRINCIPLES OF NUHRA 2023-2028 DEVELOPMENT



Kingdon multiple streams approach

In the Kingdon multiple streams approach, policy change happens when three independent streams converge (Figure 1) [11]:

- 1. problems which are conditions that need to be changed,
- 2. policies that are ideas or solutions floating around, and
- 3. politics which are changes in a policymaker's perceptions of public opinion or national mood.

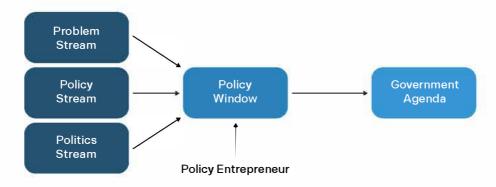


Figure 1. The Kingdon multiple streams approach [12]

Policy entrepreneurs pair their preferred solutions to problems in politically favorable conditions by waiting for a rare policy window to press for their ideas [11]. A rare policy window may open through an election or a key stage in a budgetary cycle [13]. The PNHRS' 6-year cyclical process to develop a NUHRA also presents a rare policy window for Filipinos to participate in the government's policy making process.



Bottom-up prioritization with top-down inputs

Describing the research priority setting (RPS) process as bottom-up or top-down refers to directionality of influence [14]. In the bottom-up approach, prioritization is delegated to the scientific community, firms, civil society organizations, or community representatives. On the other hand, top-down priority setting refers to governments deciding on which priorities to allocate resources to [14].

The bottom-up strategy may promote shortsightedness and the status quo as opposed to novelty. Conversely, top-down may cause tension with existing structures and capabilities of researchers and research implementing agencies [14].

The combination of bottom-up and top-down approaches may mitigate biases in RPS activities through the involvement of more actors and interests [14]. Evidence shows that stakeholder diversity is a fundamental condition for successful priority setting [14,15]. Priorities receive greater attention from policymakers when co-produced by research implementers. Apart from generating priorities that are relevant to health needs [16,17], the bottom-up approach also facilitates ownership of priorities [14,16-18]. Complemented by top-down priority steering, the combination approach aids in minimizing research duplication and engendering shared responsibility in the eventual implementation of research priorities [14,18].



Nominal group technique

The nominal group technique is a consensus-building process that involves assembly of small groups, equal participation using round robin discussion, clarification of ideas with the group, and voting or ranking of ideas [19,20].

Round robin discussions promote tolerance of conflict ideas and facilitate maintaining a written record and guide [19]. Equal participation has the potential to manage power differences in multisectoral processes, such as those observed in the development of the NUHRA 2017-2022 [21].

The process of multiple round robin discussions enables the establishment of an important behavior pattern where, by the second or third round, each member becomes an achieved participant in the group [19]. Rounds of voting or ranking of ideas punctuated by discussions also increase judgmental accuracy by dissecting inconsistent voting patterns and providing the opportunity to rediscuss items which are perceived as receiving too many or too few votes [19].

Markers of consensus

Consensus-building processes are often ended when consensus is deemed to have been reached, but this condition is often subjective. It is advisable to declare the consensus threshold value a priori to maintain the validity and reliability of the final decision, as well as the transparency of the decision-making process [22].

In an analysis of controlled feedback provided in a consensus-building Delphi study, greater consensus was achieved with succeeding rounds and responses were more stable when participants were told beforehand of an established threshold of group agreement at 75% [22]. This number was also consistent with systematic reviews that found the median threshold of included studies at 75% [23,24].



Multi-criteria decision analysis

Multi-criteria decision analysis (MCDA) is a framework of analytical techniques that support decision-making in the setting of variable criteria that may be in conflict with each other. MCDA aids in promoting consistency, transparency and legitimacy of decisions [25]. The following MCDA approaches were applied to the NUHRA 2023-2028 development [25]:

- 1. Defining the decision problem
- 2. Selecting and weighting criteria
- 3. Ranking
- 4. Reporting results, deliberation, decision, communication, and implementation



Optimization of the RPS process

Recognizing the need for efficiency and accuracy, the NUHRA 2023-2028 development embraced the use of online tools and automation to streamline the RPS process. This allowed for easy data collection, collation, and analysis using spreadsheets, which may even be exported to more advanced statistical analysis applications. These tools create more opportunities for stakeholder engagement and inclusivity by amplifying reach and allowing individual participants to respond to the surveys independent of other stakeholders [26].

By leveraging digital platforms and automated calculations, NUHRA 2023-2028 development gathered insights, analyzed data, and identified research priorities with greater speed and precision. The optimization of the RPS process through technology is a commitment to innovation and continuous improvement, ensuring that research efforts are aligned with the needs and aspirations of Filipinos.



THE NUHRA 2023-2028 RESEARCH PRIORITY SETTING METHODOLOGY

The NUHRA 2023-2028 was developed in six steps aligned with previous RPS activities and frameworks, including the PNHRS Guidelines for Health Research Prioritization [10,26-28].

Information gathering

Contextualization through national health sector directions and regional health status

Synthesis of regional priorities

Thematic synthesis of 170 research priorities generated from the 17 regional workshops to form the initial NUHRA 2023-2028 themes and subthemes.

Validation of the NUHRA 2023-2028

Seeking feedback on the provisional NUHRA 2023-2028 with 55 national stakeholders



Participant identification

Identify participants to be part of the RPS process, with aid from the Research Agenda Management Committee, the Philippine Council for Health Research and Development (PCHRD), and all Regional Health Research and Development Consortiums (RHRDC)

Regional workshops

17 regional multi stakeholder workshops with 467 participants across the country to identify, score, and rank the top 10 regional health research priorities per region

Additional topics

Seeking additional topics not capture by regions from national stakeholders

Participant identification

Each RHRDC's member list and the NUHRA 2017-2022 stakeholder list served as the initial participant pool for the RPS process. These were updated with aid from the RHRDCs, who have a better understanding of the health research system in their area. Only 30 to 40 participants could be accommodated per region given available resources. Considerations in participants per region were the following [29]:

- Institutions/individuals that the consortium closely and frequently work with
- Institutions/individuals with power to represent interest groups (women, patients, indigenous people [IPs], differently abled, etc)
- Ideally a good mix of stakeholders from different backgrounds and institutions
- Institutions/individuals that wield influence to promote or hinder research agenda implementation
- Groups that are dependent on the outputs of consortium activities

Information gathering

Grounding RPS in real world context entails the production of materials that describe the country's current health system and status at the national and regional levels. The project team reviewed literature, policies, and strategies that shed light on national health sector directions [2,30-33]. For the 17 regions, this entailed rapid review of regional burdens of illness, health system status, and previous regional research priorities. Both outputs were summarized as and presented during workshops.

Regional workshops

Workshops were conducted in 17 regions from 17 April to 19 June 2023 for the identification of regional health research priorities. The workshops were attended by 467 participants from the public and private sector, non-government organizations, associations/societies, and academe. Most participants were from consortium member institutions (85.9%) and women (62.3%).



1. Contextualization

To ground stakeholders in a similar understanding of the prevailing problem structures, the project team presented the national health sector directions, regional health status. the region's 2017-2022 research priorities, and research funding opportunities.



2. Generation and consolidation of health research topics

Participants were divided into small groups then instructed to brainstorm up to 3 health research topics independently and individually. These topics were presented in round-robin fashion within each group.

After the round-robin, participants had the opportunity to express their opinions and thoughts on the topics presented by their peers. This discussion allowed the groups to deliberate and make decisions on whether to omit, consolidate, or retain research topics. Each group presented their brainstorming outputs to the plenary.

Facilitators consolidated the outputs to form the initial list of research priorities. These were presented to and approved by workshop participants.



3. Selecting prioritization criteria

Participants selected prioritization criteria lifted from the World Health Organization Special Program for Research and Training in Tropical Diseases - Research Priorities for the Environment, Agriculture and Infectious Diseases of Poverty ^[34]. This list was developed by an expert group as measures of performance against which research priorities could be classified and scored.

Criteria selection occurred in 3 steps that identified the number of criteria to be used, which criteria will be selected, and how important these criteria were (Annex A). This process was facilitated through the use of QR codes and supported by Google Forms, Sheets, and Slides linking and automation. The number of criteria used in regions ranged from 5 to 7. Across regions, 13 of the 15 criteria were selected (Annex B).



4. Scoring and ranking health research topics

Workshop participants prioritized and ranked health research topics. Through a QR code linked to a Google Form, participants independently, individually, and anonymously assigned a score of 0-100 to each health research topic per criterion. The score of each research topic was computed using a simple weighted-sum approach [25].



5. Presentation of the top 10 regional health research priorities

The top 10 health research priorities were immediately presented after all online forms were submitted. Results of each regional workshop are presented in Annex C.

Each RHRDC can accommodate more research priorities in their agenda after the workshop. However, only the top 10 priorities were considered as inputs to NUHRA 2023-2028 in the interest of fairness to other RHRDCs.

Synthesis of regional priorities

The 170 research priorities from the regional workshops were consolidated using qualitative research techniques such as content and thematic analysis to reveal common themes. This step was assisted by the Artificial Intelligence tool ChatGPT Plus with the plug-in LinkReader (version 4.0) [35,36]. To correct for the inherent bias observed in ChatGPT [37,38], the following steps were taken in its assistance of synthesizing regional research priorities¹:

- 1. ChatGPT Plus was provided context on NUHRA 2023-2028 development
- 2. It was asked to create themes and subthemes from the 170 research topics generated from 17 regional workshops in the Philippines, and to treat all topics as equals.
- 3. Each synthesis version was recorded on Google Docs.
- 4. Each synthesis was meticulously checked by the project team in case
 - a. priorities were misplaced or ignored,
 - b. subthemes were duplicated as main themes, or
 - c. subthemes were duplicated un
- 5. Project team finalized the themes and subthemes of the draft NUHRA 2023-2028.

Additional topics

National level stakeholders were sent a summary of the NUHRA 2023-2028 development, situational reports, and the draft NUHRA 2023-2028. Stakeholders were given an opportunity to propose additional research topics through a Google Form survey. The additional topics were incorporated into the draft NUHRA 2023-2028 with assistance from ChatGPT Plus (version 4.0).

Validation of the NUHRA 2023-2028

A total of 55 national stakeholders were convened for a validation of the NUHRA 2023-2028 themes on 19 July 2023. The project team oriented stakeholders on the methodology for NUHRA 2023-2028. Feedback was sought on the draft NUHRA 2023-2028, specifically on themes and subthemes. Comments were incorporated to create the final NUHRA 2023-2028.

The themes of the NUHRA 2023-2028 are presented in alphabetical order.

¹ This reporting is consistent with the WAME Recommendations on Chatbots and Generative Artificial Intelligence in Relation to Scholarly Publications



THEMES & SUBTHEMES

Disease Management

The study and implementation of strategies to prevent, diagnose, manage, and treat diseases, particularly chronic and communicable diseases.

Non-communicable Diseases (NCDs)

Studies on the burden, prevention, diagnosis, treatment, and management of these diseases, with an emphasis on:

- enhancing the quality of services in rural areas,
- addressing access to treatment barriers, and
- understanding the impact of chronic diseases on the population.

Communicable Diseases

- Disease surveillance at all levels of government, including the use of geographic information system mapping of disease incidence.
- The effects of climate change on health, particularly in relation to the increased risk of infectious diseases.

Diseases of Rapid Urbanization and Industrialization

The health impact of environmental changes, occupational health diseases, and the triple burden of disease (communicable diseases, NCDs, and injuries) in urban and industrial settings.





Halal in Health

The application of Halal principles in the context of health.

• Development and Production of Halal Pharmaceuticals

- · Research, development, and production of pharmaceutical products that comply with the principles of Halal.
- Exploring the use of Halal-certified ingredients in drug production.
- Investigation on the processes involved in certifying pharmaceuticals as Halal, and the regulatory frameworks that govern this.

Halal Food and Nutrition

- The integration of Halal principles into the food and beverage industry. It covers the entire food supply chain, from the sourcing of ingredients to the preparation and packaging of food products.
- The promotion of Halal food and nutrition in mainstream markets.





Disaster Risk Management

The study and implementation of strategies to prepare for, respond to, and recover from health emergencies and disasters. This applies the concept of One Health, which is a focus on crises that may originate in the interface between humans, animals, and the environments in which they interact.

- Disaster Risk Reduction and Climate Change Adaptation of Health Systems
 - · Capacity assessment to deliver health services during and after disasters or climate-related events.
 - Identification of disaster and climate change risks per region and tailoring health systems strategies and measures to these risks.
 - Research on improving health infrastructure adaptation.
 - Enhancement of health worker capacity to respond to emergencies.
- Environmental Health and Sanitation
 - The impact of specific environmental factors on health (air and water quality, waste management, exposure to hazardous substances) and developing strategies to mitigate these impacts.
 - Evaluating the effectiveness of current sanitation practices in preventing diseases and developing new practices based on identified gaps.



Health Technology and Innovation

The development and application of innovative solutions to health challenges.

- Drug Discovery and Development
 - Development of new drugs and therapies to address prevalent diseases in the Philippines.
- Biotechnology and Biomedical Devices

Development and validation of diagnostic kits, as well as the creation of innovative biomedical devices to improve health outcomes.

Frontiers in Health Technologies

The use of artificial intelligence, big data, machine/deep learning, and other 4th Industrial Revolution elements to develop a technology-driven future for the healthcare sector. Specific areas of focus could include brain health, nuclear and precision medicine, and space health.

Health Product Regulation and Assessment

The evaluation and improvement of robust regulatory frameworks for health products and technologies, as well as its impact on health outcomes.





Health of Vulnerable Populations

Research for the benefit of populations that are underserved due to factors such as socioeconomic status, geographical location, gender, race, ethnicity, age, or disability towards reduction of disparities and equitable health opportunities.

Health of Indigenous Cultural Communities (ICCs)

- The health status and health-seeking behaviors of these communities.
- Improving access to healthcare services.
- Development and evaluation of culturally appropriate health programs and interventions for ICCs

Transgender Health

- Understanding the specific health needs and challenges of transgender individuals.
- Experiences of transgender individuals in accessing healthcare services.
- The impact of social stigma and discrimination on health outcomes of transgender individuals.

Geriatric Health

- The impact of social, economic, and environmental factors on elderly health.
- Development and evaluation of interventions to address the specific health needs of the elderly, such as fall prevention programs, dementia care models, and health promotion activities tailored to this age group.



Health Promotion

Empowering individuals and communities to manage their health through education, the creation of health-supportive environments, and organization of societal actions for health promotion and protection. This calls for multidimensional research, including the application of participatory action research methods.

Health Promotion, Communication, and Education

Development, implementation, and evaluation of strategies to promote health and prevent diseases at the community and population level.

- Effectiveness of health communication campaigns and health education programs.
- Barriers to health information access.
- The impact of social media on health-seeking behavior of Filipinos.

Health Literacy

- Assessment of health literacy in different population groups.
- The development and testing of interventions to enhance health literacy.
- Misinformation and/or disinformation's impact on health literacy.

Healthy Governance

- The impact and assessment of health policies and regulations on population health.
- The effectiveness of health governance structures and processes.
- The role of leadership in health promotion.

Healthy Settings

Studies on the healthiness of various settings (e.g., schools, workplaces, neighborhoods) and the development and evaluation of interventions to make these settings healthier.

- Innovative Approaches in Health Promotion and Education
 - The use of digital technologies in health promotion.
 - Development, implementation, and effectiveness of novel health education strategies.

Health Systems Strengthening Towards UHC

Understanding and improving the efficiency, effectiveness, quality, and responsiveness of health systems, all aimed at achieving UHC.

Health Governance and Policies

- Effectiveness of current health governance structures and policies in achieving UHC.
- Impact of governance structures on health system performance and health outcomes.
- The assessment of UHC implementation in across regions.
- Research on health research—its governance, effectiveness and efficiency of policies to support health research, and the use of evidence in policy- and decision-making.

Health Service Delivery

- · Implementation and effectiveness of different service delivery models, particularly primary care and health care provider networks.
- Impact of health care provider networks on access to care and health outcomes.
- The use, acceptance, and integration of traditional, complementary, and integrative health care practices in the health system and their impact on health outcomes.
- Development of clinical pathways and clinical practice guidelines.

Health Financing

- · Sustainability of health financing under UHC, with a focus on cooperative governance across stakeholders and health system levels.
- Strategic purchasing of health services and products under UHC.
- Feasibility of financial policies to cover under-5 immunization.
- Impact of the Mandanas-Garcia ruling on health programs.

Health Human Resources

- Assessing the welfare of healthcare workers.
- Research on and development of strategies for health workforce retention and strengthening.
- The inclusion of non-health professionals in the health workforce.

Health Information Systems (HIS)

Research on the integration of local and healthcare provider network information systems and the use of health information for decision-making.

Improving Access to Medicines, Including Enhancements in Quality and Affordability

Enhancing medicine quality and affordability through studies on optimizing the development, manufacturing, procurement, distribution, and utilization of essential medicines, vaccines, and healthcare products.

Evaluation of Health Systems and Programs

- Availability and use of evidence to inform policy and program implementation.
- The impact of health facility enhancement programs.
- Evaluation of community health team performance and impact on healthcare access.



Maternal, Newborn and Child Health

The health and wellbeing of mothers, children, and adolescents.

Maternal, Child, and Neonatal Health

- · Investigate the factors contributing to rising maternal, neonatal, and child mortality in different regions, with a special focus on geographically isolated and disadvantaged areas and IPs.
- Evaluate the effectiveness and accessibility of reproductive, maternal, neonatal, and child health services across the country.
- · Assess the impact of health policies and programs on maternal, neonatal, and child health outcomes.

Immunization

- Evaluate the availability, coverage, and effectiveness of immunization programs for under-5 children in different regions.
- Factors contributing to vaccine hesitancy and acceptance in various communities.
- · Assess the impact of health education and promotion strategies on improving immunization coverage.
- Examine the potential of technological innovations, such as digital health interventions, in improving the delivery and monitoring of immunization services.



Mental Health

The prevalence, treatment, rehabilitation/management of mental health conditions.

- Mental Health of Children, Adolescents, and Students
 - Understanding the unique mental health challenges in these groups, including prevalence.
 - The implementation and effectiveness of school-based mental health programs and interventions.
- Mental Health in the Workplace
 - The prevalence of mental health issues among workers in different industries and occupational groups.
 - The impact of work-related stress on mental health.
 - Implementation and effectiveness of workplace mental health programs.
- Mental Health Promotion

Studies on the effectiveness of mental health promotion programs and the role of community-based and digital health interventions in promoting mental health.

Mental Health and Substance Abuse

Prevalence of co-occurring mental health and substance use disorders and the effectiveness of integrated interventions for co-occurring disorders.

- Emerging Interventions for Maternal Health Across the Life Stages
 - The role of digital technologies and novel therapeutic approaches in mental health care, and the impact of these interventions on mental health outcomes.
 - Tailoring of novel mental health interventions to different life stages.

Nutrition and Food Security

Ensuring that all individuals have access to sufficient, safe, and nutritious food to maintain a healthy and active life.

- Food Security, Product Development, and Emerging Technologies
 - Developing innovative agricultural techniques to increase food production.
 - Studying the impact of climate change on food security.
 - Development of functional foods.
 - Creating new food products that are both nutritious and appealing.
 - Exploring the use of technology in improving food distribution and reducing food waste.
- Nutrition and Food Safety
 - The impact of dietary habits on health outcomes.
 - Developing educational programs to promote healthy eating.
 - Investigating the prevalence of foodborne illnesses and strategies to prevent them.
 - Evaluating the effectiveness of food safety regulations.
- Addressing All Forms of Malnutrition Across Life Stages
 - Identifying the causes of various forms of malnutrition.
 - Developing interventions to improve nutritional status.
 - The impact of malnutrition on health and development across different life stages.
 - Evaluating the effectiveness of policies and programs aimed at reducing malnutrition.
- Multisectoral Nutrition Interventions

Developing strategies to coordinate efforts across sectors to improve nutrition and evaluating the effectiveness of multisectoral interventions in reducing malnutrition and promoting health.

Sexual and Reproductive Health

Ensuring that all individuals can have a satisfying and safe sex life, the capability to reproduce, and the freedom to decide if, when, and how often to do so.

Adolescent Sexuality and Reproductive Health

- · Understanding the unique challenges and needs of adolescents in the context of sexual and reproductive health, including teenage pregnancy and sexually transmitted diseases.
- The impact of cultural, societal, and educational factors on adolescent sexual behavior and reproductive health outcomes.
- Effective interventions to promote safe sexual behaviors among adolescents.

Reproductive Health and Rights

- Effectiveness of current reproductive health policies and programs.
- Barriers to accessing reproductive health services across regions and communities.
- The impact of health governance on reproductive health outcomes.

Sexual Health Education

- Effectiveness of sexual health education curricula in schools and community settings, focusing on their impact on knowledge, attitudes, and behaviors related to sexual health.
- Innovative, digital, or peer-led strategies to enhance accessibility and impact of sexual health education in underserved populations.

Gender-based Violence

- The prevalence, causes, and impact of gender-based violence, as well as factors that perpetuate it.
- Evaluating and improving current interventions and policies on gender-based violence.

REFERENCES

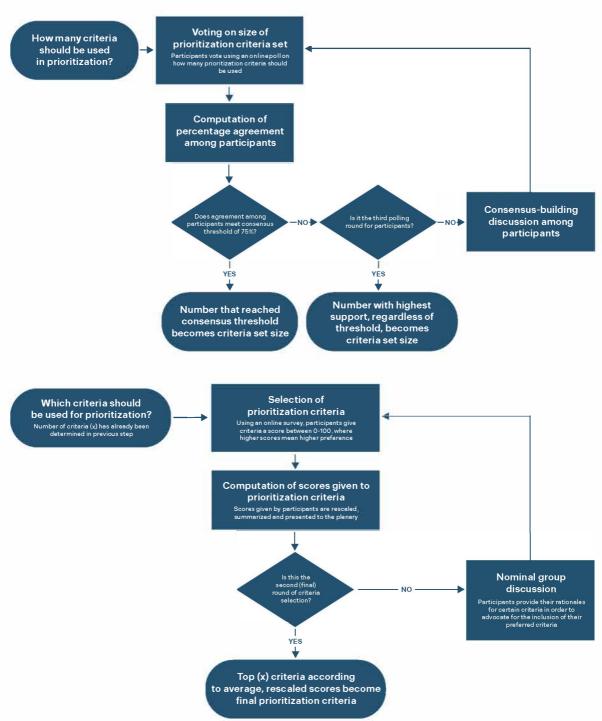
- [1] Implementing Rules and Regulations of RA 10532 2014.
- [2] National Economic and Development Authority. Philippine Development Plan 2023-2028. National Economic and Development Authority; 2023.
- [3] Commission on Health Research for Development. Health Research: Essential Link to Equity in Development. New York: Oxford University Press; 1990.
- [4] Ogilvie D, Craig P, Griffin S, Macintyre S, Wareham NJ. A translational framework for public health research. BMC Public Health 2009;9:116. https://doi.org/10.1186/1471-2458-9-116.
- [5] Lenaway D, Halverson P, Sotnikov S, Tilson H, Corso L, Millington W. Public health systems research: setting a national agenda. Am J Public Health 2006;96:410–3. https://doi.org/10.2105/AJPH.2004.046037.
- [6] Dorotan MMC, Estanislao RDF, Sales RKP, Magdaraog MAC, Geroy LSA. Operationalizing the Development of the National Unified Health Research Agenda 2017-2022. Acta Med Philipp 2019;53:224-8.
- [7] Ranson MK, Bennett SC. Priority setting and health policy and systems research. Health Res Policy Syst 2009;7:27. https://doi.org/10.1186/1478-4505-7-27.
- [8] Bryant J, Sanson-Fisher R, Walsh J, Stewart J. Health research priority setting in selected high income countries: A narrative review of methods used and recommendations for future practice. Cost Eff Resour Alloc 2014;12. https://doi.org/10.1186/1478-7547-12-23.
- [9] Executive Order No. 784, s. 1982. Official Gazette of the Republic of the Philippines n.d. https://www.officialgazette.gov.ph/1982/03/17/executive-order-no-784-s-1982/(accessed August 15, 2023).
- [10] Philippine National Health Research System. Guidelines for Health Research Prioritization. Manila, Philippines: PNHRS; 2016.
- [11] Kingdon JW. Agendas, alternatives, and public policies. 2nd. NY: HarperCollins College Publisher 1995.
- [12] Li H, Lu J. Legislation for early childhood education: A case study of China. Child Youth Serv Rev 2018;86:32–41. https://doi.org/10.1016/j.childyouth.2018.01.021.
- [13] Howlett M. Predictable and unpredictable policy windows: Institutional and exogenous correlates of Canadian federal agenda-setting. Can J Polit Sci 1998;31:495–524. https://doi.org/10.1017/s0008423900009100.
- [14] Brattström E. Facilitating collaborative priority-setting for research and innovation: a case from the food sector. Technology Analysis & Strategic Management 2021;33:742–54. https://doi.org/10.1080/09537325.2020.1841157.

- [15] Sibbald SL, Singer PA, Upshur R, Martin DK. Priority setting: What constitutes success? A conceptual framework for successful priority setting, BMC Health Serv Res 2009;9:1-12. https://doi.org/10.1186/1472-6963-9-43.
- [16] Tan A, Nagraj SK, Nasser M, Sharma T, Kuchenmüller T. What do we know about evidence-informed priority setting processes to set population-level health-research agendas: an overview of reviews. Bull Natl Salmon Resour Cent 2022;46:6. https://doi.org/10.1186/s42269-021-00687-8.
- Roche L, Adams D, Clark M. Research priorities of the autism community: A systematic review of key stakeholder perspectives. Autism 2021;25:336-48. https://doi.org/10.1177/1362361320967790.
- [18] Angulo A, Freij L, Haan S de, Rios R, Ghaffar A, IJsselmuiden C, et al. Priority setting for health research: toward a management process for low and middle income countries. Priority Setting for Health Research: Toward a Management Process for Low and Middle Income Countries 2006.
- [19] Delbecq AL, Van de Ven AH, Gustafson DH. Group Techniques for Program Planning: A Guide to Nominal Group and Delphi Processes. Green Briar Press; 1986.
- [20] McMillan SS, King M, Tully MP. How to use the nominal group and Delphi techniques. Int J Clin Pharm 2016;38:655-62. https://doi.org/10.1007/s11096-016-0257-x.
- [21] Libunao AM, Sales RKP, Lopez JCF, Alcido MRH, Geroy LSA, Oraño JV, et al. Effect of Personality, Power, and Emotion on Developing the 2017-2022 Philippine Health Research Agenda: A Case Study. Acta Med Philipp 2019;53.
- Barrios M, Guilera G, Nuño L, Gómez-Benito J. Consensus in the delphi method: What makes a decision change? Technol Forecast Soc Change 2021;163:120484. https://doi.org/10.1016/j.techfore.2020.120484.
- [23] Diamond IR, Grant RC, Feldman BM, Pencharz PB, Ling SC, Moore AM, et al. Defining consensus: a systematic review recommends methodologic criteria for reporting of Delphi studies. J Clin Epidemiol 2014;67:401-9. https://doi.org/10.1016/j.jclinepi.2013.12.002.
- [24] Foth T, Efstathiou N, Vanderspank-Wright B, Ufholz L-A, Dütthorn N, Zimansky M, et al. The use of Delphi and Nominal Group Technique in nursing education: A review. Int J Nurs Stud 2016;60:112-20. https://doi.org/10.1016/j.ijnurstu.2016.04.015.
- [25] Marsh K, Goetghebeur M, Thokala P, Baltussen R. Multi-Criteria Decision Analysis to Support Healthcare Decisions. 2017. https://doi.org/10.1007/978-3-319-47540-0.
- [26] James Lind Alliance. JLA Guidebook. JLA 2016. https://www.jla.nihr.ac.uk/jla-guidebook/.
- [27] Sales RK, Oraño J, Estanislao RD, Ballesteros AJ, Gomez MIF. Research priority-setting for human, plant, and animal virology: an online experience for the Virology Institute of the Philippines. Health Res Policy Syst 2021;19:70. https://doi.org/10.1186/s12961-021-00723-z.

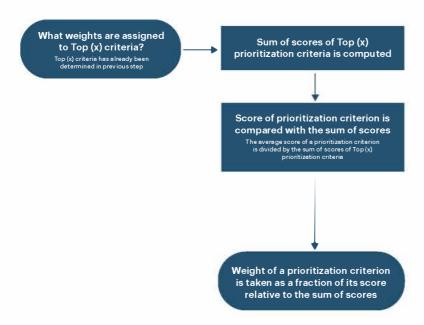
- [28] PCHRD. National Unified Health Research Agenda 2017-2022 2017.
- [29] Krick T, Forstater M, Monaghan P, Sillanpää M. The stakeholder engagement manual. The Practitioner's Handbook on Stakeholder Engagement AccountAbility, London 2005.
- [30] Department of Health. Health Sector Strategy for 2023-2028 2022.
- [31] Department of Health. Dissemination of the Medium Term Health Research Agenda 2023-2028 2022.
- [32] Department of Science and Technology. Harmonized National Research and Development Agenda 2022-2028. Department of Science and Technology; 2022.
- [33] Alliance for Improving Health Outcomes. Briefing documents. NUHRA 2023-2028 2023. https://sites.google.com/view/nuhra2023/briefing-documents (accessed August 15, 2023).
- [34] Thematic Reference Group on Environment, Agriculture and Infectious Diseases of Poverty. Research priorities for the environment, agriculture and infectious diseases of poverty. WHO-TDR; 2013.
- [35] Introducing ChatGPT plus n.d. https://openai.com/blog/chatgpt-plus (accessed June 7, 2023).
- [36] ChatGPT Plugin Link Reader. GPTStore n.d. https://gptstore.ai/plugins/-gochitchat-ai (accessed June 27, 2023).
- [37] van Dis EAM, Bollen J, Zuidema W, van Rooij R, Bockting CL. ChatGPT: five priorities for research. Nature 2023;614:224-6. https://doi.org/10.1038/d41586-023-00288-7.
- [38] Rahman MM, Terano HJ, Rahman MN, Salamzadeh A, Rahaman MS. ChatGPT and Academic Research: A Review and Recommendations Based on Practical Examples 2023.

ANNEXES

Annex A. Criteria Selection (Part 1)



Annex A. Criteria Selection (Part 2)



Annex B. Criteria selected across regions and their definitions

Criterion	Number of times selected in workshop	Definition
Potential for policy impact	15	Policy relevance and proactive involvement of/influence on policy-makers (including Millennium Development Goal and other targets)
Innovation	13	Novel concept, methodology, and/or technology (including appropriate technology)
Equity	12	Provides preferential benefits to poor and/or socially excluded groups, e.g. women and children, minorities
Feasibility/practicality	12	Achievable, credible, testable, replicable results
Impact on reduction of disease burden	11	Effectively targets diseases with high impact on human populations
Capacity-building potential	9	Improving knowledge and skill among service providers, policy-makers, communities (and students)
Preventing disease with high potential burden	7	Potential aversion of high impact, low probability events (e.g. human immunodeficiency virus)
Systems framework	7	Contribution to development of a systems framework which addresses health holistically (non-reductionist)
Community focus	6	Research attends to, engages, empowers and/or delivers benefits to communities involved
Interdisciplinarity	1	Involves three or more disciplines working continuously and interactively (i.e. not combing only at the end)
Financial sustainability	1	Reduces need for recurrent expenditure
Multi-level	1	Research focuses on individuals, households, populations and ecosystems and/or end-user, service provider, researcher and decision-makers
Potential for 'other benefits'	1	Benefits other sectors (e.g. livestock, trade, tourism, income generation, conservation, etc.)

Region 1

Number of participants: 25

- 1. Equity 17%
- 2. Feasibility/practicality 14%
 3. Impact on reduction of disease burden 18%
- 4. Innovation 20%
- 5. Potential for 'other benefits' 12%
- 6. Potential for policy impact 18%

Top 10 scored and ranked research priorities	
1. Disaster risk reduction and climate change adaptation for health	8.41
2. Technology and innovations for health	8.39
3. Mental health and substance abuse	8.24
4. Emerging and re-emerging diseases/infectious diseases	8.20
5. Nutrition and food security	8.14
6. Health systems strengthening	8.10
7. Health governance and policies	7.90
8. Lifestyle-related diseases/NCDs	7.87
9. Maternal, newborn, child, and adolescent health	7.69
10. Health of vulnerable populations and IPs/ICCs	7.63

Region 2

Number of participants: 48

- 1.Potential for policy impact 22%
- 2.Impact on reduction of disease burden 21%
- 3. Preventing disease with high potential burden 20%
- 4. Feasibility/practicality 20%
- 5. Community focus 17%

Top 10 scored and ranked research priorities	
1. Reproductive, maternal, child, and neonatal health	8.81
2. Lifestyle-related diseases/NCDs	8.72
3. Mental health and substance abuse	8.66
4. Health systems strengthening	8.59
5. Infectious diseases	8.48
6. Environmental health	8.32
7. Health economics	8.28
8. Health of vulnerable populations and IPs/ICCs	8.25
9. Food security and safety	8.20
10. Drug discovery	8.13

Region 3

Number of participants: 19

- 1. Innovation 26.58%
- 2. Feasibility/practicality 22.42%
- 3. Impact on reduction of disease burden 19.02%
- 4. Preventing disease with high potential burden 16.83%
- 5. Equity 15.15%

Top 10 scored and ranked research priorities	
1. NCDs (chronic diseases)	9.23
2. Communicable diseases (tuberculosis, reproductive-health related)	9.17
3. Nutrition and food security	9.14
4. Technology and Innovations for Health (health equipment)	9.05
5. Maternal, newborn, child, and adolescent health (reproductive health)	9.02
6. Disaster risk reduction and management and climate change adaptation for Health	8.83
7. Health systems strengthening (health workforce, health governance, critical care, health facilities, health service delivery)	8.75
8. Mental health and substance abuse	8.67
9. Health promotion and education (prevention)	8.60
10. Financial risk protection	7.53

CAR

Number of participants: 25

- 1. Systems framework 22%
- 2. Potential for policy impact- 22%
- 3. Innovation 20%
- 4. Capacity-building potential 20%
- 5. Feasibility/practicality 16%

Top 10 scored and ranked research priorities	
1. Health systems strengthening	8.58
2. Health resiliency and surge capacity	8.22
3. Mental health and substance abuse	8.14
4. NCDs	8.13
5. Technology and innovations for health	8.09
6. Infectious diseases	8.08
7. Governance in health	8.05
8. Health of vulnerable populations and IPs/ICCs	7.95
9. Drug discovery	7.87
10. Maternal, child, and neonatal health and reproductive health	7.81

Region 4A

Number of participants: 25

- 1. Innovation 18%
- 2. Potential for policy impact 17%
- 3. Feasibility/practicality 16%
- 4. Preventing disease with high potential burden 13% 5. Capacity-building potential 13%
- 6. Community focus 12%
- 7. Systems framework 10%

Top 10 scored and ranked research priorities	
1. Health service delivery	8.65
2. Triple burden of disease	8.63
3. Environmental health	8.48
4. Drug discovery	8.38
5. Mental health	8.36
6. Across all life-stages	8.34
7. Health technology/innovation	8.33
8. Bio-behavioral and social dimension of health	8.23
9. Nutrition	8.00
10. Health financing	7.92

Region 4B

Number of participants: 25

- 1. Community focus 26%
- 2. Innovation 21%
- 3. Equity 20.66 %
- 4. Feasibility/practicality 18%
- 5. Capacity-building potential 15%

Top 10 scored and ranked research priorities	
1. Health researches on IPs	9.148
2. Health technology/innovation	8.679
3. Nutrition, food safety and security	8.638
4. Maternal health	8.634
5. Human resources for health (HRH)	8.557
6. Mental health	8.555
7. Health service delivery	8.405
8. Health statistics	8.402
9. Health behavior	8.299
10. Emerging and re-emerging diseases	8.236

Region 5

Number of participants: 28

- 1. Impact on reduction of disease burden 10.79%
- 2. Potential for policy impact 10.58%
- 3. Feasibility/practicality 8.62%
 4. Preventing disease with high potential burden 8.24%
 5. Capacity-building potential 8.03%

Top 10 scored and ranked research priorities		
	1. Health governance	7.89
	2. Communicable diseases	7.87
	3. Maternal and child health	7.76
	4. Health workforce	7.67
	5. Health service delivery	7.64
	6. NCDs	7.45
	7. Food scarcity and security	7.44
	8. Health seeking behavior	7.40
	9. Disaster risk reduction and management	7.37
	10. Mental health	7.35

NCR

Number of participants: 40

- 1. Equity 25%
- 2. Impact on reduction of disease burden 22%
- 3. Innovation 21%
- 4. Systems framework 17%
- 5. Potential for policy impact 16%

Top 10 scored and ranked research priorities	
1. Health access and equity	7.74
2. NCDs	7.62
3. HRH	7.52
4. Digital health	7.51
5. Health innovation and technology	7.50
6. One health	7.46
7. Health surveillance	7.44
8. Mental health	7.35
9. Health promotion	7.27
10. Emerging and re-emerging disease	7.23

Region 6

Number of participants: 29

- 1. Equity 22.89%
- 2. Community focus 21.10%
- 3. Preventing disease with high potential burden 20.48%
- 4. Potential for policy impact 19.65%
- 5. Feasibility/practicality 15.88%

Top 10 scored and ranked research priorities	
1. Maternal health	8.87
2. Climate change, disaster risk reduction and management & environmental health	8.67
3. Strengthening Local Health Systems (UHC): a. Health leadership and governance b. Health financing c. Medicines and technology d. Health informatics e. Health service delivery f. Health human resources	8.59
4. Healthy lifestyle management to prevent NCDs	8.58
5. Emerging and re-emerging diseases	8.50
6. Mental health	8.45
7. Functional food	7.99
8. Health for IPs	7.61
9. Drug discovery and development	6.89
10. Precision medicine a. Genomic biosurveillance b. Production of bio therapeutics c. Cancer genotyping	6.39

Region 7

Number of participants: 34

- 1. Feasibility/practicality 23.54% 2. Potential for policy impact 21.16%

- 3. Equity 18.82% 4. Capacity building potential 18.45% 5. Innovation 18.03%

Top 10 scored and ranked research priorities	
1. Healthcare service delivery for UHC	8.63
2. Maternal and child health	8.21
3. Infectious diseases	8.18
4. One health (human health, animal heath, environmental health, and plant health)	8.13
5. Disaster risk reduction and management	8.12
6. Patient safety	8.09
7. HIS	8.08
8. NCDs	7.93
9. Health human resource	7.93
10. Medical technologies	7.83

Region 8

Number of participants: 25

- 1. Community focus 16.44%
- 2. Impact on reduction of disease burden 15.06%
- 3. Innovation 14.54%
- 4. Capacity-building potential 13.98%
- 5. Potential for policy impact 13.52%
- 6. Systems framework 12.31%

Top 10 scored and ranked research priorities	
1. Health systems management research	8.34
2. Child and adolescent sexual reproductive health and development	8.32
3. Implementation research	8.28
4. Mental health	8.22
5. UHC implementation	8.16
6. Disaster risk reduction and management	8.10
7. Nutrition	8.10
8. Emerging and re-emerging infectious diseases	8.06
9. NCDs	7.95
10. Social innovations in health	7.92

Region 9

Number of participants: 15

- 1. Equity 22.58% 2. Feasibility/practicality 20.52% 3. Potential for policy impact 19.93%
- 4. Multi-level 19.89%
- 5. Impact on reduction of disease burden 17.08%

Top 10 scored and ranked research priorities	
1. Health care delivery system	8.81
2. Access to basic needs (safe water, development of functional food, food safety and technology)	8.71
3. Non-communicable, communicable, and infectious diseases	8.69
4. Maternal and child health	8.50
5. Occupational health diseases	8.44
6. Mental health	8.44
7. Health literacy	8.28
8. Health remedies for IPs/ICCs	8.25
9. HRH development	7.95
10. Investing in health financing	7.29

Region 10

Number of participants: 25

- 1. Impact on reduction of disease burden 24%
- 2. Equity 21%
- 3. Potential for policy impact 20%
- 4. Innovation 18%
- 5. Capacity-building potential 17%

Top 10 scored and ranked research priorities	
1. Health service delivery	8.42
2. Infectious diseases	8.30
3. Food safety and nutrition	8.19
4. NCDs	8.07
5. Epidemiology, surveillance, and control	7.87
6. Natural therapeutic products and ethnobotanical research	7.82
7. Mental health	7.79
8. Disaster risk reduction and emergency health	7.71
9. Monitoring and evaluation of health programs	7.69
10. One health	7.61

Region 11

Number of participants: 24

- 1. Potential for policy impact 17.65%
- 2. Community focus 15.29% 3. Innovation 15.03%

- 4. Equity 14.48% 5. Preventing disease with high potential burden 14.36%
- 6. Interdisciplinarity 11.89%
- 7. Systems framework 11.30%

Top 10 scored and ranked research priorities	
UHC a. Financial policies b. Strengthening health workforce and wellbeing c. Ensuring health service delivery at all levels of care d. Research on UHC implementation	9.00
2. HIS a. Transition from paper-based systems to electronic medical records b. HIS integration c. Application of block chain technology d. Use of HIS data for monitoring and evaluation	8.71
3. Technological innovations in health a. Telemedicine b. Space medicine research applications c. Artificial intelligence & robotics d. Data analytics and modeling for decision support systems e. Biotechnology (e.g. vaccine development)	8.70
Gender-based violence a. Rising incidence of sexual abuse especially in children	8.59
5. Disaster risk reduction and management a. Best practices (phenomenological studies, qualitative studies) b. Update disaster maps c. Disaster level of preparedness	8.55
Surveillance of emerging and re-emerging diseases a. Zoonotic diseases profiling b. Genomic biosurveillance	8.48
7. NCDs a. Sampung halamang gamot for NCDs endorsed by the Department of Health b. Health literacy on NCDs	8.27
Health promotion and education a. Smoking cessation programs b. Health literacy on communicable diseases and NCDs	8.24
9. Mental health a. Early diagnosis and prevention b. Persisting effects and unmet mental health needs due to COVID-19	8.17
10. Monitoring and evaluation of health programs a. Use of health analytics to inform program implementation, especially programs for i. IPs ii. Geographically isolated and disadvantaged areas iii. Displaced communities iv. Healthcare providers b. Use of health analytics to assess impact of Mandanas-Garcia ruling on health programs c. Ensuring the use of HIS data for monitoring and evaluation	8.16

Region 12

Number of participants: 15

- 1. Potential for policy impact 21.60%
- 2. Innovation 18.24% 3. Feasibility/practicality 16.55% 4. Systems framework 16.04%
- 5. Impact on reduction of disease burden 14.54%
- 6. Equity 13,02%

Top 10 scored and ranked research priorities	
1. UHC implementation	9.23
2. Health innovation	9.22
3. NCDs	9.21
4. HIS	9.12
5. Health service delivery	9.08
6. Health equity and inclusion	9.00
7. Infectious diseases	8.93
8. Nutrition	8.92
9. Environmental health	8.85
10. Disaster risk reduction and management	8.85

CARAGA

Number of participants: 44

- 1. Impact on reduction of disease burden 17%
- 2. Innovation 17%
- 3. Capacity-building potential 15%
- 4. Community focus 13%
- 5. Potential for policy impact 13%
- 6. Equity 12%
- 7. Preventing disease with high potential burden 12%

Top 10 scored and ranked research priorities	
Infectious disease a. Hospital acquired infection b. Climate change affecting the incubation period of K. pneumoniae c. Zoonotic disease	8.64
Child health a. Under 5 immunization b.Malnutrition status of island barangays and hazard prone areas in the region c. Revising policies for vaccines d. Increasing demand for breastfeeding	8.54
3. Strengthening local health systems/governance on Health a. Preparedness of local government units (LGUs) to manage emerging and re-emerging diseases in terms of policies and protocols and resources b. Standardization of Medical Assistance Allocation from funding agencies c. Research on the impact of leadership and governance on health service delivery d. Evaluating the LGUs' spending on health and how it affects the health status of its constituents/locality e. Effectivity of government policies and programs on health f. Strengthening Special Health Fund g. LGU policy alignment to health h. Local health policies initiative anchored to the national health policy i. Evaluation/assessment of policy research studies; implementation of magna carta benefits j. Contributing factors to the functionality of Interlocal Health Zones towards UHC k. Health system readiness assessment using the who health system model l. Social impact assessment mainstreaming m. Assessing private sector engagement/integration towards UHC implementation	8.49
4. Development and enhancement of health facilities/infrastructure a. Availability of health services and facilities b. Strengthening of health facilities for chronically ill and aging patients/ Research on strengthening the local health service delivery network c. Impact evaluation of health facility enhancement program	8.41
5. NCDs a. Tobacco Use, Alcohol Use, Physical Inactivity, Unhealthy diet, and other factors b. Survey on tobacco use across all age groups c. Impact assessment of community based drug rehabilitation program	8.38
6. Maternal health a. Maternal mortality i. Higher regional rate than national ii. Identification of factors contributing to higher mortality rate for CARAGA b. COVID-19 among pregnant mothers c. Improving social determinants of health i. Factors affecting mothers' decision towards prenatal care and its impacts on maternal and child health, and morbidity	8.28
7. Improving HRH a. Policy on the implementation of nursing/allied medical program curriculum to address the quality of health care professional stock b. Evaluation of community health team performance and its impact on access to health care c. Distribution/supply of professionals for Autism Spectrum Disorder	8.27

8. Health financing a. Strategic purchasing and patient medication b. Revising financial policies to cover under 5 immunization	8.25
 Human immunodeficiency virus/acquired immunodeficiency syndrome a. Impact of the disease on children and young people b. Social determinants c. Virus transmission 	8.21
10. Environmental health and sanitation a. Climate change affecting the incubation period of k.pneumoniae b. Eradication of schistosomiasis and other endemic neglected tropical diseases in Caraga c. Water-borne diseases in wetland communities d. Availability of potable water sources	8.11

BARMM

Number of participants: 18

- 1. Financial sustainability- 15.4%
- 2. Potential for policy impact 14.5%
- 3. Feasibility/practicality 14.3%
- 4. Impact on reduction of disease burden 14.2%
- 5. Innovation 14.1%
- 6. Equity 14.1%
- 7. Capacity-building potential 13.4%

Top 10 scored and ranked research priorities	
1. Environmental health and sanitation	9.09
2. Maternal and child health	8.66
3. Ensuring food security	8.64
4. Innovative approaches in health promotion and education	8.18
5. Adolescent sexuality and reproductive health	8.17
6. Disaster risk reduction management and climate change adaptation	8.13
7. Emerging and re-emerging diseases	8.10
8. Halal in health and living	8.08
9. Health service delivery and quality assurance	7.95
10. Health workforce psychological well-being and development	7.68

Regional Workshops

Region 1

DOH Drug Treatment and Rehabilitation Center Dagupan Don Mariano Marcos Memorial State University Ilocos Norte Medical Society Ilocos Sur Community College Local Government Unit Lyceum-Northwestern University Mariano Marcos Memorial Hospital & Medical Center

Mariano Marcos State University

National Nutrition Council Region 1

NEDA 1

Northern Christian College Northwestern University Philippine Hospital Association Region 1 Region 1 Ethics Monitoring Board

Region 1 Health Research and Development Consortium

The Black Nazarene Hospital Inc.
University Of Northern Philippines
Urdaneta City University
Virgen Milagrosa University Foundation

Region 2

Aldersgate College
Cagayan State University
Cagayan Valley Health Research and Development Consortium
Cagayan Valley Medical Center
DOH - Cagayan Valley Center for Health Development
DOST Regional Office II
Medical Colleges of Northern Philippines
NEDA RO2
Philippine Statistics Authority - RSSOII
Region 2 Trauma and Medical Center
Saint Mary's University
Southern Isabela Medical Center
St. Paul University Philippines
University of La Salette, Inc

Region 3

Angeles University Foundation
Bulacan State University
Centro Escolar University
City Health Office - City of San Jose Del Monte City
DOH - Central Luzon Center for Health Developmen
DOST Region 3
Dr. Paulino J. Garcia Memorial Research and Medical Center
Jose B Lingad Memorial General Hospital
Nueva Ecija University of Science and Technology
Philippine Rice Research Institute
Provincial DOH Office Bulacan
Republic Central Colleges
University Research Co. LLC

Regional Workshops

CAR

Baguio General Hospital and Medical Center
Benguet State University
Cordillera Career Development College
DOH-CHD-CAR
DOST Cordillera Region
Father Saturnino Urios University - Butuan
Luke Foundation
Saint Louis University
Saint Louis University - Sacred Heart Medical Center
University of Baguio
University of the Cordilleras
University of the Philippines Baguio

Region 4A

Cavite State University
De La Salle Medical and Health Sciences Institute
De La Salle University
DOH CHD IV CALABARZON
DOST HRDC IV-A
Emilio Aguinaldo College Cavite
Lyceum of the Philippines University Batangas
Manuel Enverga University
Mary Mediatrix Medical Center
Batangas Medical Center
University of Perpetual Help Dr. Jose G. Tamayo Medical University
University of the Philippines

Region 4B

CHED Mimaropa
DOH Center for Health Development MIMAROPA
DOST-MIMAROPA
Holy Trinity University
Marinduque State College
Occidental Mindoro State College
Provincial Health Office - Odiongan
Provincial Health Office - Romblon
Romblon Provincial Hospital
Romblon State University
Western Philippines University

Region 5

Ago Medical and Educational Center - Bicol Christian College of Medicine Ateneo de Naga University Bicol Medical Center Bicol Regional Hospital and Medical Center Bicol University Central Bicol State University of Agriculture CHED V DOH Region V

Regional Workshops

DOST Region V
DSWD
Eastern Bicol Medical Center
Food and Drug Administration
Mabini Colleges
Partido State University
Philippine Association of Agriculturists
Philippine Nurses Association
Philippine Red Cross Albay-Legazpi City Chapter
University of Nueva Caceres
University of Saint Anthony

NCR

CHED NCR

Adamson University
Arellano University
Centro Escolar University

De La Salle University Emilio Aguinaldo College Far Eastern University - Manila Far Easyern University - Nicanor Reyes Medical Foundation Makati Medical Center Manila Central University Metro Manila Health Research and Development Consortium Metropolitan Medical Center College of Arts, Science & Technology National Institutes of Health, University of the Philippines **NEDA** Nutrition Center of the Philippines Nutrition Center of the Philippines Our Lady of Fatima University Our Lady of Lourdes Hospital Pamantasan ng Lungsod ng Maynila Philippine Christian University Quezon Ctiy Epidemiology and Surveillance Unit Research Institute for Tropical Medicine St. Luke's Medical Center St. Paul University Manila The Tambalista Inc University of Santo Tomas University of the Philippines Manila

Region 6

Zuellig Family Foundation

Capiz Provincial Health Office
Central Philippine University
Commission on Higher Education
Corazon Locsin Montelibano Memorial Regional Hospital
DOH Western Visayas Center for Health Development
DOST Region VI
GalenX
Hospital Management Office - Province of Iloilo
Iloilo City Health Office

Regional Workshops

Iloilo Doctors' College
Iloilo Mission Hospital
National Commission on Indigenous Peoples R6/7/8
NEDA 6
Office Of Civil Defense Region 6
Philippine Information Agency Region 6
University of San Agustin
University of the Philippine Visayas
UP Visayas - PGC Visayas
West Visayas State University
West Visayas State University Medical Center
Western Visayas Medical Center

Region 7

Cebu Doctors' University

Cebu Institute of Medicine Cebu Institute of Technology - University Cebu Normal University Cebu South Medical Center Cebu United Rainbow LGBTIQ+ Sector, Inc. Commission on Higher Education DOH - Central Visayas Center for Health Development DOST 7 Gov. Celestino Gallares Memorial Medical Center Holy Name University Lapu-lapu City Health Office Mandaue City Health Office NEDA Region 7 Philippine Society of Public Health Physicians Cebu Silliman University Southwestern University - PHINMA St. Anthony Mother and Child Hospital University of Bohol University of San Carlos University of San Jose-Recoletos University of Southern Philippines Foundation Velez Research Vicente Sotto Memorial Medical Center

Region 8

Northwest Samar State University

Association of Municipal Health Officers of the Philippines - Samar Chapter City Health Office - Calbayog City
DOH - Eastern Visayas Center for Health Development
DOST 8
Eastern Visayas Medical Center
Eastern Visayas State University
Leyte Normal University
LGU Daram
Mother of Mercy Hospital
Municipal Health Office
National Nutrition Council

Regional Workshops

Philippine Institute of Traditional and Alternative Health Care Remedios T. Romualdez Medical Foundation Rural Health Unit - Alangalang St. Scholastica's College Tacloban, Inc. University of the Philippines School of Health Sciences University of the Philippines Tacloban College Visayas State University

Region 9

Brent Hospital and Colleges Incorporated
Ciudad Medical Zamboanga
DOST IX
Mindanao Central Sanitarium and General Hospital
NEDA IX
Universidad de Zamboanga
Western Mindanao State University
Zamboanga City Medical Center
Zamboanga Peninsula Polytechnic State University
Zamboanga State College of Marine Sciences and Technology

Region 10

Bukidnon State University

Central Mindanao University City Health Office - Cagayan de Oro Commission on Higher Education DOST - Northern Mindanao Consortium for Health Research and Development lligan Medical Center College J.R. Borja General Hospital La Salle University Liceo de Cagayan University Mindanao State University - Iligan Institute of Technology Misamis University **NEDAX** Northern Mindanao Medical Center Office of Civil Defense 10 Philippine Nurses Association PHINMA - Cagayan de Oro College Syntactics, Inc. Xavier University

Region 11

Ateneo de Davao University
City Health Office of Mati
Davao del Norte State College
Davao del Sur State College
Davao Medical School Foundation Inc.
Davao Oriental State University
Davao Regional Medical Center
DOH RO XI
DOST-RHRDC XI
Food and Drug Administration

Regional Workshops

Mapua Malayan Colleges Mindanao **NEDAXI** Philippine Institute of Traditional and Alternative Healthcare Rural Health Unit - Braulio E. Dujali San Pedro College University of Mindanao University of Southeastern Philippines - School of Medicine University of the Immaculate Conception

Region 12

Brokenshire College SOCSKSARGEN,Inc Commission on Higher Education Region XII Cotabato Regional and Medical Center Cotabato State University DOH - Center for Health Development SOCCSKSARGEN DOST XII Integrated Provincial Health Office of South Cotabato

Mindanao State University - General Santos City Notre Dame of Dadiangas University

Notre Dame of Marbel University Notre Dame University

Unviersity of the Philippines Mindanao

Provincial Health Office - South Cotabato Provincial Health Office - Sultan Kudarat

Sultan Kudarat State University University of Southern Mindanao

DOST-RHRDC XI

Food and Drug Administration Mapua Malayan Colleges Mindanao NEDA XI

Philippine Institute of Traditional and Alternative Healthcare Rural Health Unit - Braulio E. Dujali San Pedro College University of Mindanao

University of Southeastern Philippines - School of Medicine

University of the Immaculate Conception Unviersity of the Philippines Mindanao

CARAGA

Adela Serra Ty Memorial Medical Center Butuan City Health Office Butuan Medical Center ${\bf Caraga\ Health\ Research\ and\ Development\ Consortium}$ Caraga Regional Hospital Caraga State University Chamber of Commerce CHED Caraga City Health Office - Butuan Democrito O. Plaza Memorial Hospital DOH CHD - Caraga DOST Caraga

Family Planning Organization of the Philippines SND

Regional Workshops

Father Saturnino Urios University
LGU - Butuan
LGU - Caraga
NEDA Caraga
North Eastern Mindanao State University Tandag Campus
PhilHealth Caraga
SIKAP, Inc.
St/ Paul University Surigao
Surigao del Norte State University

BARMM

Datu Alawaddin Bandon Sr Memorial Hospital
Integrated Provincial Health Office - Lanao del Sur
Integrated Provincial Health Office - Maguindanao
Mahardika Institute of Technology,Inc
Mindanao Autonomous College Foundation Inc.
Mindanao State University - Maguindanao
Mindanao State University - Marawi
Mindanao State University - Tawi-Tawi College of Technology and Oceanography
Ministry of Science and Technology - BARMM
Notre Dame of Jolo College
Pangutaran District Hospital
Sulu State College
Upi Agricultural School
Wao District Hospital

National Consultation

Biotechnology Coalition of the Philippines

Board of Investments

British Embassy

Department of Education - Bureau of Learner Support Services-School Health Division

Department of Health - Disease Prevention and Control Bureau

Department of Health - Health Promotion Bureau

Department of Labor and Employment - Bureau of Working Conditions

Department of Labor and Employment - Occupational Safety and Health Center

Department of Social Welfare and Development - National Capital Region

DOST - Health Technology Assessment Division

DOST - PCHRD

Food and Drug Administration

Food and Nutrition Research Institute

Health Futures Foundation, Inc.

League of Corporate Foundations

Mariano Marcos Memorial Hospital & Medical Center

National Economic and Development Authority

National Nutrition Council

National Research Council of the Philippines

PhilHealth

Philippine Alliance of Patient Organizations

Philippine Clinical Research Professionals

Philippine Hospital Association

Philippine Institute of Traditional and Alternative Health Care

Philippine Mental Health Association

Philippine Society of Public Health Physicians

Research Institute for Tropical Medicine

UNICEF - Philippines

Union of Local Authorities of the Philippines

United Nations Population Fund

West Visayas State University Medical Center

World Vision Development Foundation



PNHRS Research Agenda Management Committee 2023

Chair:

Dr. Ma. Lourdes K. Otayza

Vice Chair:

Dr. Eva Maria C. Cutiongco-Dela Paz Dr. Edward H.M. Wang (Alternate)

Members:

Mr. Paul Ernest N. de Leon Ms. Melissa C. Bulao (Alternate) Ms. Renee Lynn C. Gasgonia

Ms. Xcyllea Jasmine E. Abanilla (Alternate)

Ms. Mayumi G. Belandres Ms. Coleen B. Moog (Alternate) Mr. Tomasito P. Javate, Jr.

Mr. Edgardo S. Aranjuez II (Alternate) Dr. Aretha Ann G. Liwag

Dr. Jasmen S. Pasia Dr. Alan B. Feranil

Secretariats:

Ms. Nheka Louise D. De Mesa Ms. Diovelle E. Ambrocio Ms. Andrea Mae L. Almonte

Mariano Marcos Memorial Hospital & Medical Center

University of the Philippines Manila University of the Philippines Manila

DOST-PCHRD DOST-PCHRD

Department of Health-Health Policy Development

and Planning Bureau

Department of Health-Health Policy Development and Planning Bureau

Commission on Higher Education Commission on Higher Education

National Economic and Development Authority National Economic and Development Authority West Visayas State University Medical Center

San Pedro College Davao Scalabrini Migration Center

DOST-PCHRD DOST-PCHRD DOST-PCHRD



DOST-PCHRD Institution Development Division

Ms. Paula Jane A. de Leon

Ms. Maria Belen A. Balbuena

Ms. Reichel Ann P. Refuerzo

Ms. Daphne Joyce Maza

Ms. Maria Angelica D. Lanuza

Ms. Laila M. Labonite

Ms. Fatima E. Panganiban

Ms. Jessica Marie R. Suerte

Ms. Alysya Marie D. Pedraza

Ms. Sydney P. Taculog

Ms. Lucila E. Roja

Ms. Eixylaine O. Arenas

RHRDCs

Region 1 Health Research and Development Consortium

Chair: Dr. Ma. Lourdes K. Otayza Secretariats: Ms. Ana Gay D. Ranga

Ms. Liezel R. Biag

Cagayan Valley Health Research and Development Consortium

Chair: Dr. Virginia G. Bilgera

Secretariat: Mr. Niko Angelo S. Tabangin

Central Luzon Health Research and Development Consortium

Dir. Julius Caesar V. Sicat Chair: Secretariats: Ms. Camille Louise S. Manalad

Ms. Daryl Hann S. Sabile

Mr. Mark Joen G. Pamintuan

Cordillera Regional Health Research and Development Consortium, Inc.

Chair. Dir. Demetrio P. Anduyan, Jr. Secretariats: Ms. Elizabeth Porsha L. Kulallad

Ms. Femarie P. Bacona

Metro Manila Health Research and Development Consortium

Dr. Carmencita D. Padilla Chair: Secretariat: Ms. Nichole Atienza

Health Research and Development Consortium Region IV-A Consortium

Chair: Dr. Melchor Victor G. Frias IV Secretariat: Ms. Reinachell D. Daclan

MIMAROPA Health Research and Development Consortium

Chair: Dr. Merian C. Mani Secretariat: Mr. John Seth Z. Arcilla

Bicol Consortium for Health Research and Development

Dir. Rommel R. Serrano Chair: Secretariat: Mr. Bernard Dexter M. Moros

Western Visayas Health Research and Development Consortium

Chair: Dr. Adriano P. Suba-an

Secretariats: Ms. Raisheine Joyce D. Arcillas

Ms. Maerell Love C. Señalista

Mr. Seth N. Barce

Central Visayas Consortium for Health Research and Development

Chair: Dr. Enrico B. Gruet Secretariats: Ms. Ellen Grace Gerolaga

Ms. Aireen Monica B. Guzman

Eastern Visayas Health Research and Development Consortium

Chair: Dr. Exuperia B. Sabalberino Secretariats: Mr. Raymond G. Campo

> Ms. Leslie Joy L. Calvo Mr. Jeremy V. Jusay Mr. Jake Arvin M. Margallo

Zamboanga Consortium for Health Research and Development

Chair: Dr. Chona Q. Sarmiento Secretariats: Ms. Marielle R. Atilano

Ms. Ismael I. Ghazali

Northern Mindanao Consortium for Health Research and Development

Engr. Romela N. Ratilla Chair: Secretariats: Mr. Linreb G. Mondero Ms. Jessa Q. Aromin

Regional Health Research and Development Consortium XI

Dr. Warlito C. Vicente Chair: Secretariat: Ms. Richell Mae B. Ruyeras

Ms. Mabel Diana M. Capiles

Health Research and Development Consortium XII

Chair: Engr. Sammy P. Malawan Secretariat: Ms. Sheena Paypa

BARMM Health Research and Development Consortium

Chair: Engr. Aida M. Silongan Secretariat: Ms. Marinell C. Mabazza

CARAGA Health Research and Development Consortium

Chair: Dr. Cesar C. Cassion

Secretariats: Ms. Camille Cassandra O. Pastoriza

Ms. Angelica Labiano



Chiqui M. de Veyra Edlyn Toribio Ferlie Ann Rose N. Famaloan Gillian Lauren L. Garcia Joseph V. Oraño Kate D. Dunlao-Cortez Kim Sales Kristine C. Alvina Lionel Daley A. Peters Lynnell Alexie D. Ong Alberto M. Ong, Jr.

