Human Resources for Health leadership and management: a prototype curricula package

Prototype curriculum for a master’s course
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<th>Description</th>
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<tr>
<td>CPD</td>
<td>continuing professional development</td>
</tr>
<tr>
<td>CU</td>
<td>curricular unit</td>
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<tr>
<td>GSHRH 2030</td>
<td>WHO Global strategy on human resources for health: Workforce 2030</td>
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<tr>
<td>HIS</td>
<td>health information system</td>
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<tr>
<td>HLM</td>
<td>health labour market</td>
</tr>
<tr>
<td>HRH</td>
<td>human resources for health</td>
</tr>
<tr>
<td>HRIS</td>
<td>human resources information systems</td>
</tr>
<tr>
<td>HWF</td>
<td>health workforce</td>
</tr>
<tr>
<td>ICT</td>
<td>information and communication technologies</td>
</tr>
<tr>
<td>ISCED</td>
<td>UNESCO International Standard Classification of Education</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NHWA</td>
<td>National Health Workforce Accounts</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>UHC</td>
<td>universal health coverage</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</table>
Introduction

The master's course aims to strengthen human resources for health (HRH) leadership and management competencies in diverse health systems and health care settings.

Rationale

To address the challenges to achieve universal health coverage (UHC) by 2030, countries need to develop effective policies to optimize the supply and demand of health workers, as well as to strengthen their recruitment, deployment, retention and performance. This requires capacity-building for decision-makers, managers and experts in the field of HRH, leadership, governance, policy and management.

To support this process, the master's course focuses on developing leadership competencies around policy levers that may influence the dynamics of the health labour market (HLM), including the driving forces that affect HRH supply and demand, both within countries, regionally, locally and globally.

Course description

The master's course prototype curriculum is offered as a one year full-time programme (or equivalent), with the possibility of being either an academic or a professional degree, according to national legislation and rules of the institution offering the degree. The master's course is organized over six modules.

The same content may be offered as advanced studies, corresponding to completion of the master's course work without the dissertation/technical report. Individual modules of the master's course can also be implemented as modules within other health worker training programmes.

Taking into account the differences in national legislation for master's programmes, the master's course can be organized with different structures, e.g. in semesters or trimesters. The overall master's course represents about 1300–1500 hours of work and an additional 150–180 hours for dissertation or technical report writing.

Target audience

The master's course targets a mix of audiences, namely:

- Senior technical, policy-making and managerial staff in national and provincial/state/regional ministries of health or other areas, involved in strategic decision-making, policy development, planning and implementation, either for general HRH development or for specialized areas such as information systems, training, workforce planning and projections, financing.
- Middle-level managers and technical staff at provincial and local levels responsible, for example, for health workforce (HWF) deployment, performance, data management and analysis, policy implementation, and/or capacity development.
- Leaders of professional associations, regulatory councils, technical staff of international agencies and nongovernmental organizations, and journalists involved in HRH policy matters.
- Other interested public health professionals who aspire to acquire additional competencies in HRH policy, leadership and management.
According to the local needs, the course can be organized for a diverse audience with the above-mentioned different professional backgrounds or for more specific target groups. Heterogeneity in the background of participants can facilitate peer learning and network building. However, for more specific target groups, the programme may require minor tailoring in order to meet the participants' preparedness and needs.

Scope and objectives
The overriding objectives of the master's course are to provide participants with a thorough understanding of:

- the main areas and components of the HRH environment, including the dimensions of HRH policy and management and its role in complex health systems;
- effective leadership and governance of HRH;
- HLM dynamics and development of skills in HLM analysis;
- development and use of HRH data and human resources information systems (HRIS) and research systems to ensure a process of decision-making and implementation better supported in evidence;
- leadership in key aspects of the education and training of HRH; and
- research skills required to support leadership decisions.

To address these different dimensions of HRH leadership and management, the course is structured over six modules, which provide a framework in which participants can build their understanding of ideas and concepts, and incrementally build the skills and competencies to perform priority tasks and take decisions related to HRH leadership and management. Each module has specific and complementary learning objectives related to its thematic focus. This approach ensures scientific and pedagogical coherence with continuity and complementarity within and between modules (Table 1).

Table 1 Modules of the master's course

<table>
<thead>
<tr>
<th>Module 1</th>
<th>Module 2</th>
<th>Module 3</th>
<th>Module 4</th>
<th>Module 5</th>
<th>Module 6</th>
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<tr>
<td>Health systems and HRH environment - introductory concepts</td>
<td>HRH leadership, governance and management</td>
<td>Health Labour market analysis</td>
<td>From HRH data to decision-making</td>
<td>HRH education</td>
<td>Research methodologies and technical report writing</td>
</tr>
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</table>
The first module provides an introduction to health systems and the HRH environment. It revolves around the overall comprehension and contextualization of HRH in health systems, and discusses a wide range of related concepts. Module 2 provides leadership and governance competencies at the beginning of the master’s course, along with an understanding of different structures and concepts of HRH management, policy and planning. Modules 3 and 4 look in-depth at the definition and identification of HRH data, and develop skills in performing an HLM analysis. These modules are closely interrelated, feeding into each other by focusing on the implications of HLM dynamics to policy options and the use of HRH data in policy-making. Module 5 deals with HRH education and professional development and, finally, Module 6 focuses on developing competencies related to research, with concomitant support to dissertation and technical report writing.

Table 2 describes the mix of cross-cutting and module-specific learning outcomes of the master’s course. The cross-cutting learning objectives apply to all six modules.

Table 2 Learning objectives and competencies of the master’s course

<table>
<thead>
<tr>
<th>Cross-cutting learning objectives</th>
<th>Cross-cutting competencies</th>
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<tr>
<td>• Critically interpret evidence and data to identify HRH challenges</td>
<td>• Leading and managing health systems change in complex adaptive systems</td>
</tr>
<tr>
<td>• Coordinate stakeholder analysis, policy dialogue, negotiation and consensus building</td>
<td>• Acting ethically, accountably and holding others to account at all times</td>
</tr>
<tr>
<td>• Propose HRH policy, strategy, management and implementation approaches that integrate the political, economic and social dimensions of HRH (e.g. gender, culture, equity)</td>
<td>• Engaging in reflective practice and lifelong learning</td>
</tr>
<tr>
<td>• Plan, coordinate and conduct an HLM analysis</td>
<td>• Translating knowledge, skills and attitudes into practice</td>
</tr>
<tr>
<td>• Lead the implementation of national health workforce accounts (NHWA) or equivalent HRH information systems</td>
<td>• Using evidence-informed practice</td>
</tr>
<tr>
<td>• Coordinate educational planning, curriculum development and reform</td>
<td>• Promoting collaborative practice</td>
</tr>
<tr>
<td>• Develop and implement good governance arrangements that support gender-transformative and participatory leadership in HRH</td>
<td></td>
</tr>
<tr>
<td>• Inform and set the vision and strategies to effectively steward the HRH agenda towards health systems functioning and health sector reform</td>
<td></td>
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</table>

Module 1: Health systems and HRH environment – introductory concepts

• Identify the HRH concepts of the Sustainable Development Goals (SDGs), UHC and WHO strategic initiatives.
• Describe and use key HRH concepts, terminology, frameworks, functions, systems, and policies.
• Identify the characteristics of the HLM, regulations and policy, different legal systems, HLM dynamics, HRH production and performance, strategic management, education and training.
• Use the human resource management approach.
• Identify and describe the different components and functions of health systems and the role of HRH development in health systems functioning and health sector reform.
• Assess and evaluate HRH policy options to improve the efficiency of health systems.
• Practise systems thinking in identifying strategies and policies for HRH planning, development and management.
• Facilitate policy dialogue and shared HRH decision-making with relevant stakeholders.
• Articulate the importance of HRH preparedness and resilience for emergency/disaster risk response.
• Identify the policy options to build HRH capacity for emergency preparedness and response needs.
Module 2: HRH leadership, governance and management

- Describe the concepts of leadership, governance and management, and their use to develop HRH policy and to facilitate change management.
- Perform an HRH stakeholder analysis.
- Evaluate and plan for the design and implementation of good governance and leadership in HRH.
- Identify institutional requirements to support good governance and leadership in HRH.
- Critique, design, adapt and use key HRH management, planning and policy tools.
- Demonstrate an understanding of and ability to guide HRH planning and management policies and interventions (e.g. Performance Management System (PMS), incentives and retention schemes).
- Identify the need and appropriate strategies for change in governance and management.
- Set the policy direction for HRH planning and management policies and interventions.

Module 3: Health Labour Market analysis

- Identify and describe the concepts and different components of the HLM.
- Discuss the role and importance of the HLM for HRH policy development process and planning.
- Discuss the dynamics between the health and the education systems, and their impact on the HLM.
- Identify and discuss policy options related to HRH/HLM projections and forecasting.
- Identify the drivers of HRH mobility and the impact of HRH mobility on health care systems.
- Identify information needs for HLM analyses: how to diagnose problems, identify priorities, and guide interventions.
- Lead HLM analysis planning, data collection and analysis including return on investment, and propose policy options.
- Analyse the HLM at national and subnational levels, including relevant macro context considerations (broader labour market, economic conditions) to inform HRH policy decisions and implementation.
- Analyse the fiscal and financing capacity of the HLM in the public sector with respect to the absorption capacity and interactions with the private sector.
- Identify and discuss policy options and strategies to reduce/eliminate HRH inequalities and imbalances, improve performance, motivation and productivity across public and private sectors.
- Adapt good practice in HLM analysis and its utilization for policies addressing HRH imbalances.

Module 4: From HRH data to decision-making

- Describe the process to establish a multi-stakeholder, multisectoral governance structure on HRIS.
- Identify relevant stakeholders beyond the Ministry of Health (MoH) for data sources, collection and use.
- Evaluate the implications of process requirements, regulation and legislation for appropriate data governance structure in implementing HRIS.
- Use the tools and management processes required to lead implementation of NHWA for HRH policy and management.
- Identify the range of HRH indicators and data sources.
- Identify modalities to collect, exchange and store HRH data.
- Identify methods to improve HRH data quality.
- Guide the application of information, communication and technologies (ICT) for HRIS.
- Critically analyse and interpret HRH data to ensure adequate evidence for effective decision-making and communication.
- Communicate findings to diverse audiences using various communication and media platforms.
- Present and use HRH data in political communication, persuasion, and policy dialogues.
Module 5: HRH education

- Describe key elements of health worker education necessary to align education programmes with health systems and population needs.
- Articulate the importance and characteristics of lifelong learning and continuing professional development (CPD) for health systems.
- Conceptualize interventions in health worker education to address HRH needs.
- Use the tools to facilitate intersectoral collaboration and good governance between health and education sectors.
- Envision future scenarios and HRH trends.
- Identify the need for, design and coordinate implementation of relevant education policies, including financing of HRH education, collaboration with/regulation of private sector education institutions.
- Coordinate the design and implementation of an educational programme.
- Coordinate the curriculum (re)design process.

Module 6: Research methodologies and technical report writing

- Demonstrate an insight into the rationale, scope and importance of research or technical enquiry (in the context of a lifelong reflective practice) for policy development, forecasting, planning, management, monitoring and evaluation of HRH.
- Develop research or technical questions.
- Select an adequate strategy to review the relevant literature.
- Identify the correct methodological options to answer the research or technical questions.
- Plan and conduct relevant research or technical projects to answer leadership and management research questions.
- Interpret research data for action by HRH managers.
- Write, present and communicate research/technical findings to diverse audiences using a variety of media.

Approach to teaching and learning

Teaching methods and learning activities adopted for the master’s course support engagement with the content and application of acquired skills in practice, and the learning objectives for each module. However, educational methods and learning activities may vary among implementing institutions, among teachers and among the participant peers. Some general concepts and methods on teaching and learning are addressed in the Overview and the Glossary.

Undertaking a master’s course requires great emphasis on self-directed study. Participants need to study independently, conduct extensive background reading and share and discuss ideas with other participating peers and teachers in lectures, seminars and tutorials. Independent learning should be coupled with opportunities to study in groups and to participate in learning activities – in-class, online or during field visits, synchronously or asynchronously – and encourage peer mentoring, peer-assisted study and learning support from tutors.

Besides the learning objectives described in Table 2, participants will “learn how to learn”, and develop skills in critical thinking, reflectivity, searching the literature, technical and academic writing, preparing and conducting group work, mentoring, networking, ICT, public communication with diverse audiences, conflict resolution and other relevant social skills.
The master’s course emphasizes the complementarity between academic competency and methodological capacity to recognize and address the complexity in the health sector and to encourage lifelong learning. This will enable participants to continuously evolve and adapt abilities to be effective as a leader/manager in the field of HRH policy and management.

Description of modules and curricular units
The six sequential modules of the master’s course are outlined in Table 2. Each module is divided into curricular units (CU), and each CU includes programmatic content that addresses specific learning objectives for the module (Table 2). As the main teaching methods and learning activities may vary according to the type of CU (more theoretical, practical, case-centred), these, along with the formative assessment, are defined at CU level. Summative assessment is recommended at module level; however different institutional practices may require different solutions and approaches.

The recommended timeframes of the modules and CUs are described in weeks and working hours. Again, these are estimates since the time structure for a master’s course is generally set in national legislation and the duration of the academic year and number of hours per week may vary. However, curriculum design in most cases requires the determination of contact hours: the recommended number of contact hours is 40% of total working hours allocated to a CU. Major differences may occur in implementation according to institutional preferences, target groups and capacity for online and e-learning activities.
### Table 3 Proposed modules and curricular units of the master's course

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<th>Module 2</th>
<th>Module 3</th>
<th>Module 4</th>
<th>Module 5</th>
<th>Module 6</th>
</tr>
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<tbody>
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<td>Health systems and HRH environment – introductory concepts</td>
<td>HRH leadership, governance and management</td>
<td>Health Labour Market analysis</td>
<td>From HRH data to decision-making</td>
<td>HRH education</td>
<td>Research methodologies and technical report writing</td>
</tr>
<tr>
<td><strong>CU1</strong> Setting the scene: global frameworks and priorities for health, health systems and HRH</td>
<td>Concepts and principles of leadership, management and governance</td>
<td>HLM analysis: basic concepts and framework</td>
<td>HRH data governance</td>
<td>Characteristics, legal and institutional frameworks and challenges of HRH education</td>
<td>Research/technical questions and objectives (activities in Module 6)</td>
</tr>
<tr>
<td><strong>CU2</strong> Introduction to HRH</td>
<td>Structuring and leading HRH units</td>
<td>HLM policy issues and options</td>
<td>HRH data: collection, sources and indicators</td>
<td>Education policy interventions and innovation for the future HWF</td>
<td>Methodological approach and technical tools</td>
</tr>
<tr>
<td><strong>CU3</strong> Health system strengthening through HRH</td>
<td>Strategic HRH policy and planning</td>
<td>HLM analysis: practice and approaches (how to)</td>
<td>HRH data reporting, dissemination and utilization for evidence-informed decision-making</td>
<td>Design and implementation of educational programmes</td>
<td>Development of skills for dissertation or technical report writing and communication</td>
</tr>
<tr>
<td><strong>CU4</strong> Resilience and capacity to respond to emergencies; disaster risk management</td>
<td>Supporting HRH development in diverse environments</td>
<td>HLM analysis: learning from examples/good practices</td>
<td></td>
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<td></td>
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<tr>
<td><strong>CU6</strong> Research methodologies and dissertation writing</td>
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</table>
Each module is described using the following standard format:

- Rationale
- Timeframe
- Outline
- Module structure: summary of CUs with their specific learning objectives and programmatic content
- Details of curricular units.

Each of the four curricular units of the module are then described in more detail:

- Title
- Timeframe in weeks and in hours: as the organization of the teaching can be implemented differently, this is not applicable to every setting, but serves as an indication for the overall CU duration. Working hours cover both synchronous and asynchronous activities. One week is considered to contain 40 hours.
- Recommended number of contact hours.
- Learning objectives: module-specific learning objectives related to the CU.
- Programmatic content with recommended reading: programmatic content topics group all related elements along with key reading materials that may be compulsory or optional literature for students. The reading lists are not all-inclusive: additional reading can be added during implementation of the degree according to local context, and in any case will need to be periodically updated to reflect future development of the state-of-the-art evidence.
- Educational methods and learning activities: this section contains a non-exclusive list of synchronous and asynchronous methods and activities to achieve the learning objectives of the curricular unit. Learning objectives can be achieved in different ways in line with institutional practice or educators' experiences.
- Formative assessment for CU: recommended for achieving learning objectives. Formative assessment will preferably be carried out through learning activities.
- Additional bibliographic resources: other pieces of relevant literature are listed here, which can support the educators' preparation of the CU. These are not necessarily part of the reading list for students.

The master’s course is completed either with a dissertation or a technical/professional report.

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1 Synchronous learning activities are those in which a group of students engage in learning at the same time regardless if there is teacher contact or the activities take place in-class or online. Asynchronous learning activities describe forms of education, instruction, and learning that do not occur in the same place or at the same time.
Module 1: Health systems and HRH environment – introductory concepts

Rationale
Acquiring a deep understanding of the field of HRH is crucial for individuals providing leadership in health systems at any level. HRH are one of the fundamental resources of health systems. The structure and operation of health systems also affects the opportunities for HRH development and planning. Fostering a critical analysis of the functioning of health systems is an essential component of HRH policy and management, and a prerequisite to ensure that users of health services are served by a highly skilled and efficient HWF. Moreover, preparing the HWF for effective risk management in emergency and disaster situations, and improving the resilience of HRH are also vital parts of HRH policy and management. Module 1 presents the main areas and components of the health system and HRH environment. It introduces the concepts and frameworks for UHC, health systems and the strategic goals for HRH leadership and management, which are discussed in-depth in subsequent modules.

Timeframe
Module 1 is structured around four CUs offered over seven weeks (Table 4).

Table 4 Timeframe of Module 1 in working hours

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Curricular unit title</th>
<th>Recommended working hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1</td>
<td>Setting the scene: global frameworks and priorities for health, health systems and HRH</td>
<td>40</td>
</tr>
<tr>
<td>CU 2</td>
<td>Introduction to HRH</td>
<td>120</td>
</tr>
<tr>
<td>CU 3</td>
<td>Health systems strengthening through HRH development</td>
<td>80</td>
</tr>
<tr>
<td>CU 4</td>
<td>Resilience and capacity of HRH to respond to emergencies; disaster risk management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Module 1 total</td>
<td>280</td>
</tr>
</tbody>
</table>

Outline
Module 1 is an introduction to the master’s course. It sets the scene with the concept of UHC and the role of health systems and HRH to achieve it. A general overview of the themes of all the modules is provided, including leadership, governance, policy and management in HRH development, information and data on HRH, HLM analyses, and HRH education (Tables 1 and 3). Main concepts and essential terminology of the field of HRH will be described. Module 1 also provides an introduction to systems thinking reflected in the complexity of health systems, the relationship between the health and other sectors, and the use of policy dialogue to identify and analyse HRH challenges and solutions. These must be understood and addressed within the SDG framework. Further elaboration and transposition into practice will be part of the other modules.
## Structure: learning objectives and programmatic content by curricular unit

The specific learning objectives and programmatic content by CU of Module 1 are detailed in Table 5.

### Table 5 Learning objectives and programmatic content by curricular unit of Module 1

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1: Setting the scene: global frameworks and priorities for health, health systems and HRH</td>
<td>Identify the HRH concepts of the SDG, UHC and WHO strategic initiatives. Identify and describe the different components and functions of health systems and the role of HRH in health systems.</td>
<td>Introduction to the master's course. SDGs, UHC, world health reports and WHO priorities. WHO Health System Framework: building blocks of health systems. WHO strategic documents on HRH: HRH Action Framework; Global strategy on human resources for health: Workforce 2030. United Nations High-level Commission on Health Employment and Economic Growth.</td>
</tr>
</tbody>
</table>
### CU 3: Health systems strengthening through HRH development

- Identify and describe the different components of health systems and the role of HRH development in health systems functioning and health sector reform.
- Assess and evaluate HRH policy options to improve the efficiency of health systems.
- Practise systems thinking in identifying strategies and policies for HRH planning, development and management.
- Facilitate policy dialogue and shared HRH decision-making with relevant stakeholders.

- Systems thinking for health systems strengthening. Building resilient HRH for resilient health systems.
- Comparative analyses of health systems; health systems reform. The main types of health systems and implications for different models of HRH (e.g. predominantly public vs private employment/financing). The role of the public and private sectors.
- Contextual considerations and HRH requirements. HRH as a health system function. Contribution of HRH to health goals, equity, health care efficiency, effectiveness and quality, and patient safety.
- HRH responsiveness and resilience of HRH: ability to prepare for, manage and learn from shocks, shock cycles. Strategies for enhancing resilience (governance, financing, resources, service delivery), coping with change. Mental health and well-being of HRH.
- HRH challenges and solutions. HRH policies in use. Addressing shortages and maldistribution.
- Strategic HRH planning. Strengths and weaknesses of HRH policies in different health systems.

### CU 4: Resilience and capacity of HRH to respond to emergencies; disaster risk management

- Articulate the importance of HRH preparedness and resilience for emergency/disaster risk response.
- Identify the policy options to build HRH capacity for emergency preparedness and response needs.

- Introduction to leadership, governance and management principles in the health system.
- HRH policy and management issues in the context of system response and challenges of emergency/disaster situations. Coping with catastrophic events, e.g. COVID-19.
- Mechanisms to develop capacity to respond to health-related crises, and engage collective measures in the rapidly changing environment.
- Initiatives to strengthen emergency preparedness and response.
- Approaches to leading and managing HRH policy as part of complex adaptive systems.
Activities and content related to the dissertation and/or technical report are recommended to be included in all course modules. As such, contents related to the selection of the research problem will be addressed at the end of Module 1. Learning objectives, programmatic content, educational methods and suggested activities for the dissertation/technical report are detailed in Module 6, CU 1.

A summative assessment of participants will also be conducted at the end of Module 1. Based on the studied concepts and frameworks, participants will prepare a written descriptive analysis (e.g. appreciative enquiry) of the main features and challenges of HRH policy and management in a specific country, region or territory, including an overview of the HWF, activity types, legislation, education, and particular health policy challenges.

Details of curricular units

The CUs of Module 1 are further detailed in Tables 6 to 9, using a standard description format.

Table 6 Module 1, Curricular Unit 1

<table>
<thead>
<tr>
<th>CU 1</th>
<th>Setting the scene: global frameworks and priorities for health, health systems and human resources for health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeframe</td>
<td>1 week (40 hours)</td>
</tr>
<tr>
<td>Recommended contact hours</td>
<td>1 week (40 hours)</td>
</tr>
<tr>
<td>Learning objectives</td>
<td></td>
</tr>
<tr>
<td>• Identify the HRH concepts of the SDGs, UHC and WHO strategic initiatives.</td>
<td></td>
</tr>
<tr>
<td>• Identify and describe the different components and functions of health systems and the role of HRH in health systems.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
The WHO health system framework: building blocks of health systems

|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HRH Action Framework, GSHRH 2030 | Related video: [https://www.youtube.com/watch?v=iCau2jZ7yNc](https://www.youtube.com/watch?v=iCau2jZ7yNc)  

Educational methods and learning activities

- Identification of personal learning goals (fears and expectations).  
- Interactive lectures, overview of most important concepts and frameworks from an HRH perspective, SDGs, UHC, role of the HLM and HRH development.  
- Problem-solving exercises, gap analyses, practical skills training in identifying HRH policy options.  
- Group discussions on core documents with collection of highlights and main messages of concepts and frameworks.  
- Group presentations.

Summary of highlights and main messages of the core documents through group presentations.

Additional bibliographic resources

Table 7 Module 1, Curricular Unit 2

**CU 2**
Introduction to human resources for health

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>3 weeks (120 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Describe and use key HRH concepts, terminology, frameworks, functions, systems, and policies.
- Identify the characteristics of the HLM, regulations and policy, different legal systems, HLM dynamics, HRH production and performance, strategic management, education and training.
- Use the Human Resource Management approach.

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
Introducing the HLM framework and dynamics. Interaction between supply and demand. Compensation of health workers. Main actors of the labour market. Labour relations


HRH education (lifelong learning and CPD), design and implementation. The impact of HRH education and training on HRH composition, including gender aspects, skill-mix and role optimization


Legal systems and regulations. Employment status


Introduction to health information systems and HRIS, data in HRH development. The needs, demand and utilization of health information systems. HRH data requirements


### Educational methods and learning activities

- Theoretical input about main aspects of human resource management and HRH development, interactive lectures, discussion of reading materials.
- Case analyses, planning exercise, group discussions.
- Mapping exercise of legislation, institutions, educational and information systems, HLM trends.
- Brainstorming exercise for HRH solutions and patterns.

### Formative assessment for Curricular Unit 2

Written summaries or participant’s presentations on the practical realization of different subsystems (labour market, education, information systems, etc.) of HRH. Collection of regulations addressing HRH or mapping institutions with a role in HRH development and planning can also be part of this.

### Additional bibliographic resources


Table 8 Module 1, Curricular Unit 3

**CU 3**  
Health systems strengthening through HRH development

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended contact hours</strong></td>
<td>32 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Identify and describe the different components of health systems and the role of HRH in health systems.
- Assess and evaluate HRH policy to improving the efficiency of health systems.
- Practise systems thinking in identifying strategies and policies for HRH planning, development and management.

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems thinking for health systems strengthening. Building resilient HRH for</td>
<td>Alliance for Health Policy and Systems Research, World Health Organization. Systems</td>
</tr>
<tr>
<td></td>
<td><a href="https://apps.who.int/iris/bitstream/handle/10665/44204/9789241563895_eng.pdf?sequence=1">https://apps.who.int/iris/bitstream/handle/10665/44204/9789241563895_eng.pdf?sequence=1</a></td>
</tr>
<tr>
<td>health systems and implications of different models on HRH (e.g. predominantly public</td>
<td>Health Organization; 2000.</td>
</tr>
<tr>
<td>vs private employment/financing, etc.). The role of the public and private sectors</td>
<td><a href="https://apps.who.int/iris/handle/10665/42281">https://apps.who.int/iris/handle/10665/42281</a></td>
</tr>
<tr>
<td>Contextual considerations and HRH requirements. HRH as a health system function.</td>
<td>Dal Poz MR, Gupta N, Quai E, Soucat ALB, editors. Handbook on monitoring and evaluation</td>
</tr>
<tr>
<td>Contribution of HRH to health goals, equity, health care efficiency, effectiveness</td>
<td>of human resources for health – with special applications for low- and middle-income</td>
</tr>
<tr>
<td>and quality, and patient safety</td>
<td>countries. World Health Organization, The World Bank, United States Agency for</td>
</tr>
<tr>
<td></td>
<td>International Development; 2009.</td>
</tr>
<tr>
<td></td>
<td><a href="https://apps.who.int/iris/bitstream/handle/10665/44097/9789241547703_eng.pdf?sequence=1">https://apps.who.int/iris/bitstream/handle/10665/44097/9789241547703_eng.pdf?sequence=1</a></td>
</tr>
<tr>
<td></td>
<td>Lopes MA, Almeida AS, Almada-Lobo B. Handling healthcare workforce planning with care:</td>
</tr>
<tr>
<td>HRH responsiveness and resilience of HRH: ability to prepare for, manage and learn</td>
<td>Harnois G, Gabriel P, World Health Organization &amp; International Labour Organisation.</td>
</tr>
<tr>
<td>financing, resources, service delivery), coping with changes. Mental health and</td>
<td>Organization; 2000.</td>
</tr>
<tr>
<td>well-being of HRH</td>
<td><a href="https://apps.who.int/iris/handle/10665/42346">https://apps.who.int/iris/handle/10665/42346</a></td>
</tr>
<tr>
<td></td>
<td>Kovacs E, Tandari-Kovacs M, Kozak A. Challenges in Health Workforce Planning: Caring</td>
</tr>
<tr>
<td></td>
<td>for a Healthy Health Workforce. In: Okpaku S, editor. Innovations in Global Mental</td>
</tr>
<tr>
<td></td>
<td><a href="https://doi.org/10.1007/978-3-319-70134-9_78-1">https://doi.org/10.1007/978-3-319-70134-9_78-1</a></td>
</tr>
<tr>
<td></td>
<td>Workplace mental health: developing an integrated intervention approach. BMC Psychiatry</td>
</tr>
<tr>
<td></td>
<td>2014;14:131.</td>
</tr>
<tr>
<td></td>
<td><a href="https://doi.org/10.1186/1471-244X-14-131">https://doi.org/10.1186/1471-244X-14-131</a></td>
</tr>
</tbody>
</table>
Human Resources for Health leadership and management: a prototype curricula package


Governance in health. HRH leadership and management. Relationship of health and other sectors. Influence of politics on HRH policymaking. Policy dialogue as a tool for stakeholder engagement


HRH challenges and solutions. HRH policies in use. Addressing shortages and maldistribution


Strategic HRH planning. Strengths and weaknesses of HRH policies in different health systems


Educational methods and learning activities

- Group discussions on building blocks and functions of health systems with specific focus on HRH.
- Mapping exercises and gap analyses to identify the main HRH challenges at national, regional or local level and critically evaluate them.
- Case analyses and discussions for describing situations and interventions in different countries, which allows participants to discover both similarities and differences.
- Interactive exercises (e.g. drawings, using metaphors).

Formative assessment for Curricular Unit 3 (optional)

Written 4–6 page summary of the health system in a country/region and the role and main challenges of HRH in this system.
### Additional bibliographic resources


### Table 9 Module 1, Curricular Unit 4

**CU 4**

**Resilience and capacity to respond to emergencies; disaster risk management**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>1 week (40 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>16 hours</td>
</tr>
</tbody>
</table>

#### Learning objectives

- Articulate the importance of HRH preparedness and resilience for emergency/disaster risk response.
- Identify the policy options to build HRH capacity for emergency preparedness and response needs.

#### Programmatic content

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
Mechanisms to develop capacity to respond to health-related crises, and engage collective measures in the rapidly changing environment

https://www.covid19healthsystem.org/mainpage.aspx

Initiatives to strengthen emergency preparedness and response

https://apps.who.int/iris/handle/10665/333072

Approaches to leading and managing HRH policy as part of complex adaptive systems

https://apps.who.int/iris/bitstream/handle/10665/259460/9789241513357-eng.pdf?sequence=1

Educational methods and learning activities

- Theoretical input of main concepts.
- Interactive lectures, group discussions.
- Brainstorming exercises.
- Case discussions of HRH development issues and challenges.
- Group discussions on capacity-building, crisis management.
- Simulation games, interactive exercises.

Formative assessment for Curricular Unit 4

Class participation in discussions, short written assignment. Case analysis on HRH development in crisis management with identification of good practices and shortcomings in the case.

Additional bibliographic resources

Module 2: HRH leadership, governance and management

Rationale
Leadership and management competencies are critical for effective HRH policy and governance. Module 2 focuses specifically on the development of these competencies in the degree participants, emphasizing good leadership and management practices within complex health systems, and the development of governance structures and processes (including HR management structures and HRH planning processes) that are responsive to local and wider contexts, that take account of complexity, and that nurture and support the HWF.

Timeframe
Module 2 is structured around four CUs offered over seven weeks (Table 10).

Table 10 Timeframe of Module 2 in working hours

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Curricular unit title</th>
<th>Recommended working hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1</td>
<td>Concepts and principles of leadership, management and governance</td>
<td>40</td>
</tr>
<tr>
<td>CU 2</td>
<td>Structuring and leading HRH units</td>
<td>40</td>
</tr>
<tr>
<td>CU 3</td>
<td>Strategic HRH policy and planning</td>
<td>120</td>
</tr>
<tr>
<td>CU 4</td>
<td>Supporting HRH development in diverse environments</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td><strong>Module 2 total</strong></td>
<td><strong>280</strong></td>
</tr>
</tbody>
</table>

Outline
Module 2 revolves around introducing the concepts and developing competencies of leadership, governance and management with the ability to develop policies for effective HRH management. The aim of the module is to provide an understanding of the different structures and concepts of HRH management, leadership and good governance that underpin the design and decision-making processes of effective HRH systems. Moreover, Module 2 is inherently connected to the concepts and dynamics of the HLM as well as HRH education and analysis which are presented in later modules. Considering the rationale for the module, the outline adopted is reflected in Fig. 1.
Fig. 1 HRH Action Framework

### Structure: learning objectives and programmatic content by curricular unit

The specific learning objectives and programmatic content by CU of Module 2 are detailed in Table 11.

Table 11 Learning objectives and programmatic content by curricular unit of Module 2

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to</th>
<th>Programmatic content</th>
</tr>
</thead>
</table>
| **CU 1:** Concepts and principles of leadership, management and governance       | Describe the concepts of leadership, governance and management, and their use to develop HRH policy and to facilitate change management. Perform an HRH stakeholder analysis. | Introduction to leadership, governance and management principles in the health system:  
  • scope  
  • current debates  
  • what is leadership?  
  • what makes effective leaders?  
  • what is good governance?  
  • what is management?  
  • how to manage HRH and development issues and challenges?  
  • different leadership frameworks.  
Capacity-building for leadership and management.  
Leading and managing in complex adaptive systems.  
Understanding policy cycles and relevant roles of leaders, policy-makers and managers.  
Gendered leadership.  
Stakeholder analysis and engagement, including specific considerations on incorporating vulnerable and minority perspectives. |
| **CU 2:** Structuring and leading HRH units                                     | Evaluate and plan for the design and implementation of good governance and leadership in HRH, including gender considerations. Identify institutional requirements to support good governance and leadership in HRH. | HRH unit’s function, capacity, role and structure within the MoH.  
Skills and competencies required in an HRH unit; composition of an HRH unit.  
Governance and management systems structures, processes and needs, including gender considerations.  
Intersectoral collaboration, and collaboration with private sector and other stakeholders: MoH directorates, other relevant line ministries, domestic government, and international partners. |
| **CU 3:** Strategic HRH management, planning and policy                          | Critique, design, adapt and use key HRH management, planning and policy tools.                                         | Health policy analysis for HRH leadership and management.  
Different approaches to, and methods of forecasting and planning (WISN, stock and flow analysis, etc.).  
Linking HRH monitoring and evaluation to planning and forecasting. |
<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 4: Supporting HRH development in diverse environments</td>
<td>Identify the need, and appropriate strategies for change in governance and management processes. Set the policy direction for HRH planning and management policies and interventions.</td>
<td>Managing interests, power and conflicts. Organizational theory and practice. Facilitate change management processes. Principles and practices of people management (e.g. supervision systems, performance management systems, employment relations, compensation negotiations, employee engagement, remuneration). HRH reforms: licensing, regulation, accreditation, HRH management in the context of decentralization reforms, incentives systems, staffing, work allocation, substitution, and role optimization.</td>
</tr>
</tbody>
</table>

Activities and content related to the dissertation and/or technical report are recommended to be included in all course modules. As such, contents related to the selection of the research problem will be discussed at the end of Module 2. Learning objectives, programmatic content, educational methods and suggested activities for the dissertation/technical report are detailed in Module 6, CU 1.

A summative participant assessment will also be conducted at the end of Module 2. Based on the studied concepts and frameworks, participants will be asked to identify and assess HRH governance, leadership and management issues (systems, policies, mechanisms, or practices of managing, supporting, or promoting HRH performance and productivity) in their context (organization/facility, district or country), and propose policy options to facilitate improvement processes.
Details of curricular units
The CUs of Module 2 are further detailed in Tables 12 to 15, using a standard description format.

Table 12 Module 2, Curricular Unit 1

CU 1
Concepts and principles of leadership, management and governance

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>1 week (40 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>16 hours</td>
</tr>
</tbody>
</table>

Learning objectives
- Describe the concepts of leadership, governance and management, and their use to develop HRH policy and to facilitate change management.
- Perform an HRH stakeholder analysis.

Programmatic content
Introduction to leadership, governance and management principles in the health system:
- scope
- current debates
- what is leadership?
- what makes effective leaders?
- what is good governance?
- what is management?
- how to manage HRH and development issues and challenges?
- different leadership frameworks

Recommended reading
https://www.demos.co.uk/files/systemfailure2.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6986219/


https://www.worldcat.org/title/managing/oclc/465077894


https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1017&context=leadershipfacpub
### Programmatic content

<table>
<thead>
<tr>
<th>Capacity building for leadership and management</th>
<th>Leading and managing in complex adaptive systems</th>
<th>Understanding policy cycles and relevant roles of leaders, policy-makers and managers</th>
</tr>
</thead>
</table>

### Recommended reading


### Educational methods and learning activities

- Brainstorming exercises (management/governance/leadership).
- Interactive lecture and theoretical input.
- Group work, presentation and discussion – read a scenario and identify application of concepts, or reflect on the application of the concepts in/on your setting.
- Plenary discussion.
- Participation in online discussion forums.

### Formative assessment for Curricular Unit 1

Written assignment on analysis of and reflection on selected readings, concepts and frameworks.
Additional bibliographic resources


https://apps.who.int/iris/bitstream/handle/10665/70010

http://dx.doi.org/10.1186/s12960-016-0175-y

http://dx.doi.org/10.15171/ijhpm.2015.152

http://apps.who.int/iris/bitstream/handle/10665/259460/9789241513357-eng.pdf?sequence=1

https://apps.who.int/iris/bitstream/handle/10665/43432/9241563176_eng.pdf?sequence=1&isAllowed=y

Table 13 Module 2, Curricular Unit 2

<table>
<thead>
<tr>
<th>CU 2</th>
<th>Structuring and leading HRH units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeframe</strong></td>
<td>1 week (40 hours)</td>
</tr>
<tr>
<td><strong>Recommended contact hours</strong></td>
<td>16 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Evaluate and plan for the design and implementation of good governance and leadership in HRH, including gender considerations.
- Identify institutional requirements to support good governance and leadership in HRH.
<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>

**Educational methods and learning activities**

- Brainstorming exercises (management/governance/leadership).
- Interactive lectures.
- Theoretical input.
- Group work, presentation and discussion – read a scenario and identify application of concepts, or reflect on the application of the concepts in/on your setting.
- Plenary discussion.
- Analysing video clips/role plays.
- Case analyses and discussions.
- Interactive exercises, applying framework/tool.
- Reflect/analyse/compare (readings, case studies, frameworks).
- Participation in online discussion forums.
- Compile a resource (PowerPoint presentation, policy brief, guide).
Formative assessment for Curricular Unit 2 (optional)

Group work and class presentations on appropriate case studies (e.g. Blaauw et al, but may also be on more locally relevant cases).

Additional bibliographic resources

https://gh.bmj.com/content/4/Suppl_9/e001115

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4275647/


https://www.tandfonline.com/doi/abs/10.1080/09581596.2014.887831

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6986219/


https://apps.who.int/iris/handle/10665/70010


http://dx.doi.org/10.1186/s12960-016-0175-y

http://dx.doi.org/10.15171/ijhpm.2015.152

http://apps.who.int/iris/bitstream/handle/10665/259460/9789241513357-eng.pdf?sequence=1

http://www.human-resources-health.com/content/9/1/12


https://research.monash.edu/en/publications/building-a-climate-for-innovation-through-transformational-leader

https://apps.who.int/iris/bitstream/handle/10665/259460/9789241513357-eng.pdf?sequence=1
**CU 3**  
**Strategic HRH management, planning and policy**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>3 weeks (120 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Critique, design, adapt and use key HRH planning and management tools.
- Plan for the design and implementation of good governance and leadership in HRH management, planning and policy.

**Programmatic content**

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
  https://gh.bmj.com/content/4/Suppl_9/e001115
  https://apps.who.int/iris/bitstream/handle/10665/259460/9789241513357-eng.pdf?sequence=1 |
  http://ruby.fgcu.edu/courses/twimberley/EVR2861/theorypolprocess.pdf                |
  https://apps.who.int/iris/bitstream/handle/10665/44097/9789241547703_eng.pdf?sequence=1 |
|                                                                                    | Joarder T, Tune SNBK, Nuruzzaman M, Alam S, de Oliveira Cruz V, Zapata T.  


Educational methods and learning activities

- Brainstorming exercises (management/governance/leadership).
- Interactive lectures and theoretical input.
- Group work, presentation and discussion – read a scenario and identify application of concepts, or reflect on the application of the concepts in/on your setting.
- Plenary discussions.
- Analysing video clips.
- Interactive exercises, applying a framework/tool.
- Case studies of human resource planning; reflect/analyse/compare (readings, case studies, frameworks).
- Participation in online discussion forums.
- Compile a resource (PowerPoint presentation, policy brief, guide).

Formative assessment for Curricular Unit 3

Group work and presentation or individual work (depending on context): develop human resource planning processes and identify evidence sources for selected planning issues.

Additional bibliographic resources


Rainer Strack on Strategic Workforce Planning from Davos [video]. https://www.youtube.com/watch?v=Q9rfymrfl6c

Rainer Strack: The surprising workforce crisis of 2030 — and how to start solving it now [video]. https://www.youtube.com/watch?v=uxTGxERUUY


What are the steps in a Workforce Planning process? [video]. https://www.youtube.com/watch?v=EvGhsGOtOol

### Table 15 Module 2, Curricular Unit 4

**CU 4**

**Supporting HRH development in diverse environments**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

#### Learning objectives

- Identify the need, and appropriate strategies for change in governance and management.
- Set the policy direction for HRH planning and management policies and interventions.

#### Programmatic content


#### Recommended reading


**Strengthening health workforce regulation in the Western Pacific Region. Manila: WHO Regional Office for the Western Pacific; 2016.** [https://apps.who.int/iris/bitstream/handle/10665/246422/9789290617709_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/246422/9789290617709_eng.pdf?sequence=1&isAllowed=y)
### Educational methods and learning activities

- Interactive lectures.
- Theoretical input.
- Group work, presentations and discussions – read a scenario and identify context-relevant solutions through application of concepts, or reflect on the application of the concepts in/on your setting.
- Plenary discussions.
- Role play.
- Analysing video clips.
- Case studies.
- Interactive exercises, applying a framework/tool.
- Participation in online discussion forums.

### Formative assessment for Curricular Unit 4 (optional)

- Reflect/analyse/compare (relevant readings, case studies, tools, frameworks).
- Reflect on own/selected case management practices and how to improve these.
- Reflect/analyse own/selected case organization’s management practices/systems and how to improve these.
- Map the range of relationships in own/selected case workplace environment.
- Compile a resource (PowerPoint presentation, policy brief, guide).

### HRH reforms: licensing, regulation, accreditation, HRH management in the context of decentralization reforms, incentives systems, staffing, work allocation, substitution, and role optimization

  https://apps.who.int/iris/bitstream/handle/10665/43432/9241563176_eng.pdf?sequence=1&isAllowed=y


  https://doi.org/10.1371/journal.pone.0196471

  http://doi.org/10.7861/clinmedicine.14-3-229

- Pierantoni CR, Garcia AC. Human resources for health and decentralization policy in the Brazilian health system. Hum Resour Health. 2011;9(12). 
  https://doi.org/10.1186/1478-4491-9-12

  https://www.who.int/publications/i/item/9789241500197
### Additional bibliographic resources

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Journal</th>
<th>Year</th>
<th>DOI</th>
<th>URL</th>
</tr>
</thead>
</table>


Module 3: Health Labour Market analysis

Rationale
The module is organized around the different components of HLM flows and dynamics including the driving forces of supply and demand, both within countries and globally. The HLM analytical lens is essential to effectively link HRH to the health financing discourse. This is because an estimation of demand hinges upon quantifying and projecting into the future the fiscal space (public) and economic space (private) for health sector employment, and identifying corrective actions required to address market failures.

The overall aim is to overcome an exclusive or over-restrictive focus on HRH numerical shortages, which carries a risk of policy misalignment. Improved performance, productivity and quality are equally important in devising and implementing comprehensive HRH strategies; the same policy response may address multiple challenges, e.g. improving performance and productivity to address a perceived shortage.

Timeframe
Module 3 is structured around four CU offered over seven weeks (Table 16).

Table 16 Timeframe of Module 3 in working hours

<table>
<thead>
<tr>
<th>Curricular unit No.</th>
<th>Curricular unit title</th>
<th>Recommended working hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1</td>
<td>HLM analysis: basic concepts and framework</td>
<td>80</td>
</tr>
<tr>
<td>CU 2</td>
<td>HLM policy issues and options</td>
<td>80</td>
</tr>
<tr>
<td>CU 3</td>
<td>HLM analysis: practice and approaches (how to)</td>
<td>80</td>
</tr>
<tr>
<td>CU 4</td>
<td>HLM analysis: learning from examples/ good practices</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td><strong>Module 3 total</strong></td>
<td><strong>280</strong></td>
</tr>
</tbody>
</table>

Outline
The module includes theoretical lessons and practical training in four CUs (Fig. 4). Initially the participants will be exposed to and discuss the HLM analysis flow and dynamics concepts and framework, including the information needed to diagnose HRH problems. Next, they will discuss the issues, priorities and options for HLM policies and interventions. In the third CU, participants will have the opportunity to work with data and information, exploring and analysing the flows and dynamics of the HLM in more detail. Lastly, they will review good practices using published and grey literature with examples of national and subnational analyses.

This module on the HLM aims to put into practice the acquired knowledge from Module 2 on leadership and governance, and to bring participants closer to evidence-informed policy. Since the concepts of HLM and HRH data and information systems are interrelated aspects of HRH management and policy, Modules 3 and 4 are highly interconnected.
Fig. 2 Logical framework for Module 3

**THEORETICAL**

**Concept and policies**

**CU 1**

HLM analysis: basic concepts and framework

**CU 2**

HLM policy issues and options

**CU 3**

HLM analysis practice and approaches (how to)

**CU 4**

HLM analysis: learning from examples/good practices

- Discuss the HLM framework, including the information needed to diagnose health workforce problems.
- Discuss the issues, priorities and options for HLM policies and interventions to achieve universal health coverage.

- Manage data and information to explore and analyse the HLM flows and dynamics.
- Review and learn good practices using examples of national and subnational analyses.

**Structure: learning objectives and programmatic content by curricular unit**

The specific learning objectives and programmatic content by CU of Module 3 are detailed in Table 17.

Table 17 Learning objectives and programmatic content by curricular unit of Module 3

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1: HLM analysis: basic concepts and framework</td>
<td>Identify and describe the concepts and the different components of the HLM. Discuss the role and importance of the HLM for HRH policy development process and planning. Discuss the dynamics between the health and the education systems, and their impact on the HLM.</td>
<td>HLM framework: concepts and relevant dimensions, analysis design and implementation. Key concepts of HRH economics, determinants and drivers of HRH demand and supply. HLM indicators and data sources. Information needed to identify problems and priorities and guide HLM analysis. Forces, drivers and bottlenecks that impact on the need, demand and supply for HRH. Dynamics between the health and the education systems, and their impact on the HLM. Composition (occupation, gender and demographics) and distribution of HRH according to different dimensions and criteria (production, in- and outflows, private and public, distribution by geography and employment type, level of care, etc.).</td>
</tr>
<tr>
<td>Curricular unit</td>
<td>Learning objectives – participants will be able to:</td>
<td>Programmatic content</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>CU 2: HLM policy issues and options</td>
<td>Identify and discuss policy options related to HRH/HLM projections and forecasting. Identify the drivers of HRH mobility and the impact of HRH mobility on health care systems.</td>
<td>Policy issues: context, current situation and policy levers on the HLM to attain UHC. Differences between HRH policy issues and policy options. Linking the HLM with HRH development plans. Relationship between HLM analysis and NHWA. Policy options: HRH interventions to address market failures, inequalities and imbalances, including relating to the following issues and dimensions: • gender • ageing • feminization of HRH • education (e.g. training capacity, scope, role of private sector, attrition, access to education/training) • remuneration • skill-mix • behavioural and cultural issues • employment (dual and multiple employment) • interaction between public and private employers • shortages–surplus • geographical distribution • mobility and migration • recruitment • retention • community health workers integration in the HLM. Relevant policies on HRH remuneration, job design, motivation, performance, and productivity.</td>
</tr>
<tr>
<td>CU 3: HLM analysis: practice and approaches</td>
<td>Identify information needs for HLM analyses: how to diagnose problems, identify priorities, and guide interventions. Lead HLM analysis planning, data collection and analysis, including return on investment, and propose policy options. Analyse the HLM at national and subnational levels, including relevant macro context considerations (broader labour market, economic conditions) to inform HRH policy decisions and implementation. Analyse the fiscal and financing capacity of the HLM in the public sector with respect to the absorption capacity and interactions with the private sector.</td>
<td>Data and sources of information for HLM analyses. HLM analysis data requirements, methods and tools. Population health needs, health systems, and HRH need and demand. HRH supply, demand and stock, flow analysis and identification of market failures. HWF planning and forecasting. Process to conduct HLM analyses (defining key policy questions, timeline for the HLM analysis, representation on and management of a working group, validation workshops). Financing for HRH, financing for health systems and return on investment in HRH. Financing drivers of labour market demand.</td>
</tr>
</tbody>
</table>
Activities and content related to the dissertation and/or technical report are recommended to be included in all course modules. As such, contents related to the selection of the research problem will be addressed at the end of Module 3. Learning objectives, programmatic content, educational methods and suggested activities for the dissertation/technical report are detailed in Module 6, Curricular Unit 1.

A summative assessment of participants will also be conducted at the end of Module 3. Based on the studied concepts and frameworks, participants will conduct an analysis of the HLM based on sample/mock data provided, identifying policy issues, market failures, and articulating relevant policy options.

Details of curricular units
The CUs of Module 3 are further detailed in Tables 18 to 21 using a standard description format.

Table 18 Module 3, Curricular Unit 1

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 4: HLM analysis: learning from examples/good practices</td>
<td>Identify and discuss policy options and strategies to reduce/eliminate HRH inequalities and imbalances, improve performance, motivation and productivity across public and private sectors. Adapt good practice in HLM analysis and its utilization for policies addressing HRH imbalances.</td>
<td>HLM analysis: practical experiences on local/national strategies, approaches and contexts. Evidence-informed policies and strategic approaches to strengthen the response of the workforce to changed health service needs based on HLM analyses. Lessons learnt from HLM analysis experiences in countries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
<tr>
<td>Learning objectives</td>
<td></td>
</tr>
<tr>
<td>• Identify and describe the concepts and the different components of the HLM.</td>
<td></td>
</tr>
<tr>
<td>• Discuss the role and importance of the HLM for HRH policy development process and planning.</td>
<td></td>
</tr>
<tr>
<td>• Discuss the dynamics between the health and the education systems, and their impact on the HLM.</td>
<td></td>
</tr>
<tr>
<td>Programmatic content</td>
<td>Recommended reading</td>
</tr>
</tbody>
</table>

https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-017-0264-6

https://openknowledge.worldbank.org/bitstream/handle/10986/13824/82557.pdf;sequence=5


https://www.who.int/publications/i/item/9789240035546

https://apps.who.int/iris/bitstream/handle/10665/259360/9789241513111-eng.pdf?sequence=1

https://doi.org/10.1186/1478-4491-9-24
### Forces, drivers and bottlenecks that impact on the need, demand and supply for HRH


### Dynamics between the health and the education systems, and their impact on the HLM


### Composition (occupation, gender and demographics) and distribution of HRH according to different dimensions and criteria (production, in- and outflows, private and public, distribution by geography and employment type, level of care, etc.)


### Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Small group work – virtual forum (requires availability of technology).
- Simulation games.
- Participation in online discussion forums.

### Formative assessment for Curricular Unit 1 (optional)

- Based on assessment of presentations.
- Oriented study – written assignment addressing specific questions and topics.
- Participation in class activities.
- Participation in virtual forums (guideline provided).

### Additional bibliographic resources

n/a
**Table 19 Module 3, Curricular Unit 2**

<table>
<thead>
<tr>
<th><strong>CU 2</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HLM policy issues and options</strong></td>
</tr>
<tr>
<td><strong>Timeframe</strong></td>
</tr>
<tr>
<td><strong>Recommended contact hours</strong></td>
</tr>
</tbody>
</table>

**Learning objectives**

- Identify and discuss policy options related to HRH/HLM projections and forecasting.
- Identify the drivers of HRH mobility and the impact of HRH mobility on health care systems.

**Recommended reading**

| --- | --- |
### Relevant policies on HRH

<table>
<thead>
<tr>
<th>Remuneration, job design, motivation, performance, and productivity</th>
</tr>
</thead>
</table>

### Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Small group work – virtual forum (requires availability of technology).
- Research exercises (hands-on data).

### Formative assessment for Curricular Unit 2

- Participatory in-class activities.
- Participation in virtual forums (guideline provided).
- Group seminars (writing assignment and presentation).

### Additional bibliographic resources

### Table 20 Module 3, Curricular Unit 3

#### CU 3
HLM analysis: practice and approaches (how to)

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

#### Learning objectives

- Identify information needs for HLM analyses: how to diagnose problems, identify priorities, and guide interventions.
- Lead HLM analysis planning, data collection and analysis, including return on investment and propose policy options.
- Analyse the HLM at national and subnational levels, including relevant macro context considerations (broader labour market, economic conditions) to inform HRH policy decisions and implementation.
- Analyse the fiscal and financing capacity of the HLM in the public sector with respect to the absorption capacity and interactions with the private sector.

#### Programmatic content

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
### HWF Planning and Forecasting

**Process to conduct HLM analyses (defining key policy questions, timeline for the HLM analysis, representation on and management of a working group, validation workshops)**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kroezen M, Van Hoegaerden M, Batenburg R. The Joint Action on Health Workforce Planning and Forecasting: Results of a European programme to improve health workforce policies. Health Policy. 2018;122(2):87–93</td>
<td></td>
</tr>
</tbody>
</table>

### Financing for HRH, Financing for Health Systems and Return of Investment on HRH

<table>
<thead>
<tr>
<th>Reference</th>
<th>Description</th>
</tr>
</thead>
</table>
Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Small group work – virtual forum (requires availability of technology).
- Research exercised (hands-on data).
- Skills training.
- Problem-based learning – problem-solving exercises.
- Case study simulation: conduct a mock HLM analysis using fictional data and contextual information to identify policy issues, market failures and relevant policy options to address them.

Formative assessment for Curricular Unit 3

- Participation in class activities.
- Participation in virtual forums.

Additional bibliographic resources


Table 21 Module 3, Curricular Unit 4

CU 4
HLM analysis: learning from examples/good practices

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>1 week (40 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>16 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Identify and discuss policy options and strategies to reduce/eliminate HRH inequalities and imbalances, improve performance, motivation and productivity across public and private sectors.
- Adapt good practice in HLM analysis and its utilization for policies addressing HRH imbalances.

**Recommended reading**

|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
Evidence-informed policies and strategic approaches to strengthen the response of the workforce to change health service needs based on HLM analyses


https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-6-89


Lessons learnt from HLM analysis experiences in countries


https://openknowledge.worldbank.org/bitstream/handle/10986/13824/82557.pdf;sequence=5


Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Small group work – virtual forum (requires availability of technology).
- Research exercises (hands-on data).
- Role playing (components of policy dialogue and/or MoH).
- Oriented studies.
- Simulation exercises: analysis of data sets in a country case study context.

Formative assessment for Curricular Unit 4 (optional)

- Participation in class activities (mainly simulation).
- Participation in virtual forums (guideline provided).
- Group seminars (writing assignment and presentation).
Additional bibliographic resources


Module 4: From HRH data to decision-making

Rationale
Evidence-informed decision-making and communication are at the centre of strengthening capacity for HLM analysis, HRH leadership and management. Hence, this module focuses specifically on capabilities to:

- develop multi-stakeholder and multisectoral governance structures and processes (including for human resource and knowledge management) that consider the necessary data to ensure adequate evidence for effective decision-making and communication;
- support capacity-building in HRH leadership and management, with a particular focus on HRH data collection and use in HRH development and planning;
- establish and nurture evidence-informed leadership and management practices within complex health systems;
- lead HRIS developments as part of broader health system strengthening;
- lead ICT deployment; and
- implement NHWA by leading data collection, compilation, analysis, coordination, quality assessment and use.

Fig. 3 Framework highlighting the link between HRH education, the HLM, and policy

Timeframe

Module 4 is structured around three CUs offered over seven weeks (Table 22).

Table 22 Timeframe of Module 4 in working hours

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Curricular unit title</th>
<th>Recommended working hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1</td>
<td>HRH data governance</td>
<td>80</td>
</tr>
<tr>
<td>CU 2</td>
<td>HRH data: collection, sources, and indicators</td>
<td>120</td>
</tr>
<tr>
<td>CU 3</td>
<td>HRH data reporting, dissemination and utilization for evidence-informed decision-making</td>
<td>80</td>
</tr>
<tr>
<td>Module 4 total</td>
<td></td>
<td>280</td>
</tr>
</tbody>
</table>

Outline

Data and evidence-informed decision-making are core components of HRH development and planning. Concepts, issues and aspects mentioned in Module 1, 2, and 3, particularly on HRH leadership and governance, as well as HLM analysis are all interconnected with the concepts and use of data and information systems in HRH development. Module 4 reviews HRH information systems, covering data governance, collection, quality assessment, analysis and use. Learners move from data scoping in order to answer key policy questions, to knowledge production, while intensifying the dialogue of HLM analysis from Module 3. Some of the tools of Module 6 will further deepen knowledge for research data collection, collation and analysis.

Fig. 4 From HRH data to decision-making
### Structure: learning objectives and programmatic content by curricular unit

The specific learning objectives and programmatic content of the CUs of Module 4 are detailed in Table 23.

#### Table 23 Learning objectives and programmatic content by CU of Module 4

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CU 1: HRH data governance</strong></td>
<td>Describe the process to establish a multi-stakeholder, multisectoral governance structure on HRIS.</td>
<td>Information and evidence as building blocks of health systems.</td>
</tr>
<tr>
<td></td>
<td>Identify relevant stakeholders beyond the MoH for data sources, collection and use.</td>
<td>HRIS and their alignment and integration with health information systems. NHWA.</td>
</tr>
<tr>
<td></td>
<td>Evaluate the implications of process requirements, regulation and legislation for appropriate data governance structure in implementing HRIS.</td>
<td>Governance structure for HRIS. Ensuring governmental buy-in.</td>
</tr>
<tr>
<td></td>
<td>Use the tools and management processes required to lead implementation of NHWA for HRH policy and management.</td>
<td>Stakeholder mapping and engagement in the context of HRH data collection and use.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data ownership, responsibilities and accountability.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scoping of data sources.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Systems interoperability.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy, regulatory and legal requirements for effective HRH data governance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business plans and dissemination plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Funding for sustainable HRH data governance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Process review. Revision of and implementing changes in HRIS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overview of key databases, indicators, data categories and methods of data collection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NHWA: a major tool to drive implementation of national systems and processes for HRH data collection, analysis and use.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data standards and norms for HRH. National and international classification of occupations and qualifications relevant for HRIS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Main types of HRH indicators. Indicators of NHWA.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sources of data for HRIS: population-based sources, registries, health facility assessments and administrative records, and eHealth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data collection strategies and techniques. Data exchange.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legal and ethical aspects of data collection and storage. Data protection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICT for HRH development.</td>
</tr>
<tr>
<td><strong>CU 2: HRH data: collection, sources, and indicators</strong></td>
<td>Identify the range of HRH indicators and data sources.</td>
<td></td>
</tr>
</tbody>
</table>
Activities and content related to the dissertation and/or technical report are recommended to be included in all course modules. As such, contents related to the HRH data requirements of research questions will be addressed at the end of Module 4. Learning objectives, programmatic content, educational methods and suggested activities for the dissertation/technical report are detailed in Module 6, Curricular Unit 1.

A summative assessment will also be conducted at the end of Module 4. Based on the studied concepts and frameworks, participants will write a critical review with the core elements of (i) HRIS, (ii) quantitative analysis, and (iii) triangulation of data using summary statistics from multiple sources of national HRIS.

Details of curricular units

The CUs of Module 4 are further detailed in Tables 24 to 26 using a standard description format.

Table 24 Module 4, Curricular Unit 1

<table>
<thead>
<tr>
<th>CU 1</th>
<th>HRH data governance</th>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning objectives</td>
<td></td>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

- Describe the process to establish a multi-stakeholder, multisectoral governance structure on HRIS.
- Identify relevant stakeholders beyond the MoH for data scoping, collection and use.
- Evaluate the implications of process requirements, regulation and legislation for appropriate data governance structure in implementing HRIS.
- Use the tools and management processes required to lead implementation of NHWA for HRH policy and management.
### Programmatic content

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Data ownership, responsibilities and accountability</td>
<td>The Joint Action on European Health Workforce Planning and Forecasting. Toolkit on Health Workforce Planning [website]. Budapest: Semmelweis University; 2016.&lt;br&gt;&lt;br&gt;<a href="https://hwftoolkit.semmelweis.hu">https://hwftoolkit.semmelweis.hu</a></td>
</tr>
<tr>
<td>Funding for sustainable HRH data governance</td>
<td>Strengthening national health research systems: implementation of the Action Plan to Strengthen the Use of Evidence, Information and Research for Policy-making in the WHO European Region. Chapters 1.5. Copenhagen; WHO Regional Office for Europe; 2017.&lt;br&gt;&lt;br&gt;<a href="https://www.euro.who.int/__data/assets/pdf_file/0004/388912/nhrs-ukr-eng.pdf">https://www.euro.who.int/__data/assets/pdf_file/0004/388912/nhrs-ukr-eng.pdf</a></td>
</tr>
</tbody>
</table>

Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Group work and participants' presentation of recommended readings.
- Group work and discussion of case studies.
- Self-study.

Formative assessment for Curricular Unit 4 (optional)

Assessment of presentations.

Additional bibliographic resources


Table 25 Module 4, Curricular Unit 2

<table>
<thead>
<tr>
<th>CU 2</th>
<th>HRH data: collection, sources, and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeframe</strong></td>
<td>3 weeks (120 hours)</td>
</tr>
<tr>
<td><strong>Recommended contact hours</strong></td>
<td>48 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Identify the range of HRH indicators and data sources.
- Identify modalities to collect, exchange and store HRH data.
- Identify methods to improve HRH data quality.
- Guide the application of ICT for HRIS.

**Recommended reading**


https://www.elsevier.com/books/global-health-informatics/marin/978-0-12-804591-6


https://apps.who.int/iris/bitstream/handle/10665/330091/9789241549226-eng.pdf?sequence=1&isAllowed=y


https://apps.who.int/iris/bitstream/handle/10665/275473/9789241514446-eng.pdf?ua=1


https://doi.org/10.1093/ptj/pzy154
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources for health information system: minimum data set for health workforce registry.</td>
<td><a href="https://apps.who.int/iris/bitstream/handle/10665/330091/9789241549226-eng.pdf?sequence=1&amp;isAllowed=y">https://apps.who.int/iris/bitstream/handle/10665/330091/9789241549226-eng.pdf?sequence=1&amp;isAllowed=y</a></td>
</tr>
</tbody>
</table>

### Main types of HRH indicators


### Sources of data for HRIS: population-based sources, registries, health facility assessments and administrative records, and eHealth

| Human resources for health information system: minimum data set for health workforce registry. | https://apps.who.int/iris/bitstream/handle/10665/330091/9789241549226-eng.pdf?sequence=1&isAllowed=y |

### Data collection strategies and techniques

| Data exchange | Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. | https://apps.who.int/iris/handle/10665/258734 |

### Improving data quality: triangulation of data


### Legal and ethical aspects of data collection and storage


### ICT for HRH development

### Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Group work, e.g. to identify strengths and weaknesses of HRH governance on data exchange (as delineated in NHWA implementation guide) from a real country experience (1–2 pages), with the aim of identifying potential improvements.
- Group work and discussion of case studies.
- Self-study.

### Formative assessment for Curricular Unit 2

Assessment of presentations.

### Additional bibliographic resources

https://doi.org/10.7189/jogh.06.020408

Human resources for health (online journal).
https://human-resources-health.biomedcentral.com/

Knowledge Success [website].
https://www.k4health.org/sites/default/files/concept_nat_observat_eng.pdf

https://doi.org/10.1093/eurpub/ckz185.411

Sheridan PT, Watzlaf V, Fox LA. Health Information Management Leaders and the Practice of Leadership through the Lens of Bowen Theory. Perspect Health Inf Manag. 2016;13(Spring):1d.

Workforce: glossary [webpage]. Australian Institute of Health and Welfare.
### Table 26 Module 4, Curricular Unit 3

| CU 3 HRH data reporting, dissemination and utilization for evidence-informed decision-making |
|---|---|
| **Timeframe** | 2 weeks (80 hours) |
| **Recommended contact hours** | 32 hours |

#### Learning objectives
- Critically analyse and interpret HRH data to ensure adequate evidence for effective decision-making and communication.
- Communicate findings to diverse audiences using various communication and media platforms.
- Present and use HRH data in political communication, persuasion, policy dialogues.

#### Programmatic content vs. Recommended reading

Cairney P, Oliver K. Evidence-based policymaking is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy? Health Res Policy Syst. 2017;15:35. http://doi.org/10.1186/s12961-017-0192-x

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|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
Human Resources for Health leadership and management: a prototype curricula package

Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Group work and participants' presentation of recommended readings.
- Group work and discussion of case studies.
- Self-study.

Formative assessment for Curricular Unit 3 (optional)

Assessment of presentations.

Additional bibliographic resources

https://www.who.int/publications/m/item/hrh_universal_truth


https://doi.org/10.1186/1478-4491-1-3


Sheridan PT, Watzlaf V, Fox LA. Health Information Management Leaders and the Practice of Leadership through the Lens of Bowen Theory. Perspect Health Inf Manag. 2016;13(Spring):1d.


Module 5: HRH education

Rationale
HRH education policies are crucial to ensure an adequate supply of HRH with the requisite competencies to improve health outcomes. The incorporation of ICT in HRH education provides opportunities and enables the development of innovative, learner-centred approaches informed by current educational knowledge. Moreover, distance or distributed learning can also serve as a powerful tool to reach learners in remote areas.

Leadership in HRH education requires understanding of key aspects of working in complex institutional contexts, based on interprofessional and intersectoral action. In work-based educational environments, learning takes place on-site in organizational settings, and promotes teamwork. Health services and systems require lifelong learning to maintain competence and adapt to changing demands, as well as governance and legal frameworks based on political and technical agreements. To provide health systems with an adequate HWF in diverse occupational groups requires alignment between the health and education sectors.

Module 5 seeks to develop leadership for relevant educational policies and programmes by providing insight into education and training of HRH in different countries, workplace settings, involving multiple stakeholders, intersectoral collaboration, and different pedagogical strategies.

Timeframe
The module is structured around three CUs offered over six weeks. The timeframe of the module in working hours is reflected in Table 27.

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Curricular unit title</th>
<th>Recommended working hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1</td>
<td>Characteristics, legal and institutional frameworks and challenges of HRH education</td>
<td>80</td>
</tr>
<tr>
<td>CU 2</td>
<td>Education policy interventions and innovation for the future HWF</td>
<td>80</td>
</tr>
<tr>
<td>CU 3</td>
<td>Design and implementation of educational programmes</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Module 5 total</td>
<td>240</td>
</tr>
</tbody>
</table>

Outline
Module 5 introduces the main concepts and key elements of HRH pre-service and in-service education as core components of HRH development. The Module will focus on the challenges, specific policy interventions related to HRH education, and possibilities of educational reforms. Since HRH education drives the supply of health workers, Module 5 stands as an important pillar of HRH and health system development.
Structure: learning objectives and programmatic content by curricular unit

The specific learning objectives and programmatic contents of the CUs of Module 5 are detailed in Table 28.

Table 28 Learning objectives and programmatic content by CUs of Module 5

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
</table>
| CU 1: Characteristics, legal and institutional frameworks and challenges of HRH education | Describe key elements of HRH education necessary to align education programmes with health systems and population needs.  
Articulate the importance and characteristics of lifelong learning and CPD for health systems. | Education within the HLM: characteristics and challenges of HRH education in different health systems; resource requirements for different modes of delivery; and education pathways, attrition and drop-out rates.  
Data indicators for health worker education.  
Measurement challenges and the ISCED classification.  
Social accountability of health education institutions.  
HRH education from a global perspective.  
Regulation of HRH education and quality assurance (accreditation, licensing, certification/recertification, mutual recognition).  
Quality/access trade-offs.  
Regulation of private sector, regulatory capture.  
Principles of lifelong learning, CPD, and maintaining competence.  
Economics of HRH education: course selection by students, financing of education, role of private sector subsidization policies. |
| CU 2: Education policy interventions and innovation for the future HWF            | Conceptualize interventions in health worker education to address HRH needs.  
Use the tools to facilitate intersectoral collaboration and good governance between the health and education sectors (pre-service, in-service and specialization education).  
Envision future scenarios and HWF trends.  
Identify the need for, design and coordinate implementation of relevant education policies, financing of HRH education, collaboration with/ regulation of private sector education institutions. | Management and implementation of education policies for HRH, policies on production, training quotas, addressing maldistribution.  
Student selection and admission policies: embedding gender, ethnic and socioeconomic equity; links with rural and remote HWF recruitment.  
Intersectoral action and governance.  
Policy dialogue.  
Interprofessional education.  
Skills-mix of the HWF.  
Technologies and innovation in HRH education, digitalization of education. |

Activities and content related to the dissertation and/or technical report are recommended to be included in all the master’s course modules. As such, content related to the selection of aims and objectives will be discussed at the end of Module 5. Learning objectives, programmatic content, educational methods and suggested activities for the dissertation/technical report are detailed in Module 6, Curricular Unit 1.

A summative participant assessment will be also be conducted at the end of Module 5. Based on the studied concepts and frameworks, participants will be asked to prepare a written assignment; and plan a short (1–2 day) training for health workers on a sample subject matter (describing the following conditions: target group, objectives, environment, content outline, main teaching modalities and materials, learning activities, participant assessment and evaluation).
Details of curricular units

The CUs of Module 5 are further detailed in Tables 29 to 31 using a standard description format.

Table 29 Module 5, Curricular Unit 1

<table>
<thead>
<tr>
<th>CU 1</th>
<th>Characteristics, legal and institutional frameworks and challenges of HRH education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeframe</td>
<td>2 weeks (80 hours)</td>
</tr>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

**Learning objectives**

- Describe key elements of HRH education necessary to align education programmes with health systems and population needs.
- Articulate the importance and characteristics of lifelong learning and CPD for health systems.

**Programmatic content**

|-------------------------------------------------|------------------------------------------------------------------------------------------|

**Recommended reading**


Educational methods and learning activities

- Lectures followed by debate, interactive lectures.
- Small group work – virtual forum (requires availability of technology).
- Problem-based learning – problem-solving exercises.
- Seminars (participant led, guidelines provided).

Formative assessment for Curricular Unit 1

- Written assignment describing characteristics, legal and institutional frameworks and challenges of HRH education in participants’ context (guideline provided).
- Participation in virtual forums (guideline provided).

Additional bibliographic resources


https://apps.who.int/iris/bitstream/handle/10665/330834/PMC6986219.pdf?sequence=1&isAllowed=y

http://journals.lww.com/00005141-201703730-00002


https://ezcollab.who.int/?8c5bxtd7


http://www.tandfonline.com/doi/abs/10.1080/13538320120045076

## Table 30 Module 5, Curricular Unit 2

### CU 2
**Education policy interventions and innovation for the future HWF**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended contact hours</strong></td>
<td>32 hours</td>
</tr>
</tbody>
</table>

### Learning objectives
- Conceptualize interventions in health worker education to address HRH needs.
- Use the tools to facilitate intersectoral collaboration and good governance between the health and education sectors (pre-service, in-service and specialization education).
- Envision future scenarios and HWF trends.
- Identify the need for, design and coordinate implementation of relevant education policies, including financing of HRH education, collaboration with/rectification of private sector education institutions.

### Programmatic content

<table>
<thead>
<tr>
<th>Management and implementation of education policies for HRH, policies on production, training quotas, addressing maldistribution</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student selection and admission policies: embedding gender, ethnic and socioeconomic equity; links with rural and remote HWF recruitment</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Intersectoral action and governance Policy dialogue</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Interprofessional education</th>
</tr>
</thead>
</table>
Prototype curriculum for a master’s course

Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Small group work – virtual forum (requires availability of technology).
- Problem-based learning – problem-solving exercises.
- Role playing/simulation games (components of policy dialogue).
- Skills training: educational virtual environment.

Formative assessment for Curricular Unit 2

- Planning and simulation of student admission policies/replenishment strategies.
- Written report.

Additional bibliographic resources

https://doi.org/10.1023/A:1004181331049


https://apps.who.int/iris/bitstream/handle/10665/251458/9789241511360-eng.pdf?jsessionid=97488C61D8AEB4DDD2109EE829449F16?sequence=1

https://apps.who.int/iris/bitstream/handle/10665/311941/9789241550505-eng.pdf?ua=1
### Table 31 Module 5, Curricular Unit 3

**CU 3  
Design and implementation of educational programmes**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

#### Learning objectives
- Coordinate the design and implementation of an educational programme.
- Coordinate the curriculum (re)design process.

<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
### Educational environments and materials; institutional and programme structure

https://linkinghub.elsevier.com/retrieve/pii/S0020748906000605

http://doi.org/10.1007/s10459-020-10003-0


### Educational activities and experiences; sequencing content

https://www.capacityplus.org/in-service-training-improvement-framework-launched.html

**Bengtsson M, Carlson E. Knowledge and skills needed to improve as preceptor: development of a continuous professional development course – a qualitative study part I. BMC Nurs. 2015 Dec 16;14(1):51.**

**Biggs J. Constructive alignment in university teaching. HERDSA Review of Higher Education. 2014;1:5–22.**

### Pedagogical approaches; interprofessional education; supervision

https://www.who.int/publications/i/item/transforming-and-scaling-up-health-professionals%E2%80%99-education-and-training


https://apps.who.int/iris/bitstream/handle/10665/311941/9789241550505-eng.pdf?ua=1

### Educational methods and learning activities

- Lectures followed by debate, interactive lectures.
- Small group work – virtual forum (requires availability of technology).
- Problem-based learning tutorial groups.
- Role playing.
- Simulation.
- Skills training: educational virtual environment.

### Formative assessment for Curricular Unit 3

- Group presentations.
Additional bibliographic resources


Module 6: Research methodologies and technical report writing

Rationale
This is a module dealing with the dissertation or technical report, where methodological tools are essential to support the research work, and the final product. These tools are also useful for evidence gathering to support decision-making, as addressed in other modules.

Final product
The final product is either a dissertation or a technical report. Module 6 has a dedicated CU for its preparation.

Timeframe
Module 6 is offered over six weeks. It includes an introduction to research methodology and methodological preparation for dissertation/technical report writing. Dissertation writing will have additional 150–180 dedicated working hours, which are not reflected in this module.

Some of the topics and time allocated to Module 6 will have been addressed right from the start of Module 1 of the master’s course. This means around 8 hours face-to face (or e-learning) sessions connected to other modules. Hence, students will come to the final four weeks of the module with clarity regarding the theme of the dissertation/technical report, the questions to be addressed and the objectives to be reached.

The final 4 weeks will focus on developing methodological skills needed to write the dissertation or technical report. The depth of study of the research methods will be tailored to the methodological needs of the research questions of the participants.

The timeframe of the Module in working hours is reflected in Table 32.

Table 32 Timeframe of Module 6 in working hours

<table>
<thead>
<tr>
<th>Curricular unit No.</th>
<th>Curricular unit title</th>
<th>Recommended working hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1 (distributed at the end of Modules 1–5)</td>
<td>Research/technical questions and objectives (activities in Module 6)</td>
<td>40 (8 hours per module)</td>
</tr>
<tr>
<td>CU 2</td>
<td>Methodological approach and technical tools</td>
<td>80</td>
</tr>
<tr>
<td>CU 3</td>
<td>Development of skills for dissertation or technical report writing and communication</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Module 6 total</td>
<td>240</td>
</tr>
</tbody>
</table>
Activities related to dissertation and technical report

Activities and content related to the dissertation and/or technical report are included in all course modules:

- Modules 1 and 2 address the contents related to the selection and definition of the research question;
- Modules 3, 4 and 5 include contents related to research/technical questions, and the aims and objectives.

Outline

Module 6 aims to provide participants with an understanding of the methodology appropriate for the research/technical question asked and its intended recommendations.

HRH research should serve to understand underlying mechanisms by asking how and why, and by using theories to guide and test understanding through explorative and explanatory research. HRH research is also about guiding change whether collaboratively through emancipatory approaches or through more intervention research that aims to test the adequacy, plausibility and probability of influence. HRH research may be a tool for gathering essential evidence for decision-making. Finally, HRH research is also about informing stakeholders of the consequences of certain decisions. It is therefore predictive through scenario-building, which can involve participatory stakeholder engagement and computer modelling (Fig. 5).

For those writing a dissertation, the module will provide expertise on a range of quantitative, qualitative or mixed methods oriented towards the production of a scientific report for peer review and publication. For those writing a technical report, the module intends to provide the methodological bases to observe and analyse concrete aspects of organizational structures, leadership and HRH governance that support planning and management. Some of the methodological tools addressed will include evaluative and participatory research, case studies, policy analysis, labour market analysis, risk analysis, political mapping, stakeholder mapping and analysis, design of logical frameworks, decision trees, etc.
Fig. 5 Multidisciplinary research inference

- **Exploratory**: Initial research to understand and build hypotheses, concepts, theories.
- **Explanatory**: In-depth research using and testing theory to explain causal mechanisms.
- **Descriptive**: To describe within context to enable comparability with other contexts and experiences.
- **Emancipatory**: To jointly understand a problem, act on it, and learn from working collaboratively while addressing power.
- **Influence**: To assess the impact of one variable on another (adequacy, plausibility and probability analysis).
- **Predictive**: To inform about the consequences of preferences and decisions.
- **What, where, when?**
- **How and why?**
- **What if? What next?**
- **How to empower with change?**
- **What works to effect change?**

**HPSR**: Health policy and systems research.
Structure: learning objectives and programmatic content per curricular unit

The specific learning objectives and programmatic contents of the CUs of Module 6 are detailed in Table 33.

Table 33 Learning objectives and programmatic content by CU of Module 6

<table>
<thead>
<tr>
<th>Curricular unit</th>
<th>Learning objectives – participants will be able to:</th>
<th>Programmatic content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU 1: Research/technical questions and objectives</td>
<td>Demonstrate an insight into the rationale, scope and importance of research or technical enquiry (in the context of a lifelong reflective practice) for policy development, forecasting, planning, management, monitoring and evaluation of HRH. Develop research or technical questions.</td>
<td>Selecting and defining a research problem and objectives. Selecting research questions (qualitative or mixed methods). Selecting technical questions (research design and procedures).</td>
</tr>
<tr>
<td>CU 2: Methodological approach and technical tools</td>
<td>Select the adequate strategy to review the relevant literature. Identify the correct methodological options to answer the research or technical questions. Plan and conduct relevant technical or research projects to answer leadership and management research questions.</td>
<td>Principles of research methodology. Overview of research approaches and study design. Methodological approaches and techniques to answer the research question. Research ethics. Range of approaches and tools that can be addressed: quantitative research methods; qualitative research methods; mixed-methods research; implementation research; economic research methods; participatory research; evaluative research; data collection techniques; data analysis techniques; writing research proposals; academic writing; literature reviews; case studies; policy research/analysis; labour market analysis; risk analysis; political mapping; stakeholder mapping and analysis; force field analysis; design of logical frameworks, decision trees, etc. Development of the proposal for the enquiry.</td>
</tr>
<tr>
<td>CU 3: Development of skills for dissertation or technical report writing and communication</td>
<td>Interpret research data for action by HRH managers. Write, present and communicate research/technical findings to diverse audiences, using a variety of media.</td>
<td>Dissertation writing. Technical report writing. Developing a communication strategy: writing for strategic communication and online campaigns.</td>
</tr>
</tbody>
</table>

The summative participant assessment conducted at the end of Module 6 consists of a research plan, including a research protocol and dissemination plan.
Details of curricular units

The CUs of Module 6 are further detailed in Tables 34 to 36 using the standard description format.

Table 34 Module 6, Curricular Unit 1

<table>
<thead>
<tr>
<th>CU 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research/technical questions and objectives</td>
<td></td>
</tr>
<tr>
<td>Timeframe</td>
<td>2 weeks (80 hours)</td>
</tr>
<tr>
<td></td>
<td>Of these, 1 week is allocated as parallel work with other modules as dissertation preparation</td>
</tr>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

Learning objectives

- Demonstrate an insight into the rationale, scope and importance of research or technical enquiry (in the context of lifelong reflective practice) for policy development, forecasting, planning, management, monitoring and evaluation of HRH.
- Develop research or technical questions.

Programmatic content

<table>
<thead>
<tr>
<th>Selecting and defining a research problem and objectives</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>


Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Group work and participants’ presentation of recommended readings:
  - Review of the literature/Identifying an HRH topic/Identifying and justifying a research problem;
  - Producing aims and objectives;
  - Qualitative research: a qualitative central question from an ethnography;
  - Central questions from a case study;
  - Quantitative research questions;
  - Research questions in a mixed methods study.
- Self-study.
Human Resources for Health leadership and management: a prototype curricula package

Formative assessment for Curricular Unit 1

- Assessment of presentations.

Additional bibliographic resources


Table 35 Module 6, Curricular Unit 2

CU 2

Methodological approach and technical tools

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

Learning objectives

- Select the adequate strategy to review the relevant literature.
- Identify the correct methodological options to answer the research or technical questions.
- Plan and conduct relevant research or technical projects to answer leadership and management research questions.

Programmatic content

<table>
<thead>
<tr>
<th>Principles of research methodology</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>
Educational methods and learning activities

- Lectures followed by debate, interactive presentations.
- Group work: Critiquing selected research technical papers (adequacy of methodological options).
- Group work: Critiquing selected technical papers (adequacy of methodological options).
- Group work: Preparing a research/technical project (planning and implementation).
- Self-study.

Formative assessment for Curricular Unit 2

- Assessment of presentations.

Additional bibliographic resources


Table 36 Module 6, Curricular Unit 3

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>2 weeks (80 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended contact hours</td>
<td>32 hours</td>
</tr>
</tbody>
</table>

Learning objectives

- Interpret research data for action by HRH managers.
- Write, present and communicate research/technical findings to diverse audiences using a variety of media.
<table>
<thead>
<tr>
<th>Programmatic content</th>
<th>Recommended reading</th>
</tr>
</thead>
</table>

### Educational methods and learning activities

- Individual work: Preparing the dissertation.
- Individual work: Preparing the technical report.
- Group work: Writing a journal paper (HRH).
- Group work: Preparing a presentation to a lay audience.
- Group work: Preparing a dissemination plan via social media.
- Group work: Writing a policy paper (HRH).

### Formative assessment for Curricular Unit 3

- Assessment of presentations/writing.

### Additional bibliographic resources


### Detailing final dissertation/technical report (Final product)

Students will have selected and developed their dissertation/technical report topic and proposal throughout the degree programme, with training in research methodologies in Module 6. The final element of the master's course is the independent research and writing of the dissertation/technical report. Students can submit chapters or research findings for discussion with the tutor; the final assessment is based on the defence of the dissertation/technical report in the form of a viva.
Dissertation
Most higher education institutions have established dissertation guidance mechanisms and format standards that a dissertation must meet before it receives final approval. These standards are both technical and structural, to ensure that all relevant research information is presented in a rigorous and orderly manner. The participants must follow these standards, adapting them to the requirement of submitting the dissertation (according to the model adopted by the proposed prototype) within 5 to 6 weeks after completing the curricular work of the master’s course.

Technical report
In certain circumstances, the dissertation can be replaced by a technical report, usually following an elective placement. The report serves the purpose of training the participant in the processes of evaluation and/or analysis and writing under the direction of members of the accredited institution. Technical reports may be considered as grey literature. The Grey Literature International Steering Committee (GLISC) provides guidelines for the production of technical reports. Many organizations collect their technical reports into a formal series. Reports are then assigned an identifier (report number, volume number) and share a common cover page layout. The entire series might be uniquely identified by an ISSN. These standards are both technical and structural, to ensure that all relevant information is presented in a rigorous and orderly manner. The participants must follow these standards, adapting them to the requirements of the elective placement. Once again, the report (according to the model adopted by the proposed prototype) should be submitted within 5 to 6 weeks after completing the curricular work of the master’s course.

Table 37 Dissertation/technical report

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>5–6 weeks (150–180 hours)</th>
</tr>
</thead>
</table>

**Learning objectives and contribution to programme outcomes**

- Collect and critically interpret evidence and data to identify HRH challenges.
- Propose HRH policy, strategy, management and/or implementation approaches that integrate the political, economic and social dimensions of HRH (e.g. gender, culture, equity), drawing on the policy options and approaches developed throughout the degree.
- Inform and set the vision and strategies to effectively steward the HRH agenda towards health systems functioning and health sector reform.
- Write, present and communicate research/technical findings to diverse audiences using a variety of media.

**Summative assessment:** Writing of a dissertation/technical report and its defence at a viva.