UHC2030 STEERING COMMITTEE
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UPDATE ON UHC2030 KNOWLEDGE HUB

For Information ☐   **For Review & Advice** ☒   **For Approval** ☐
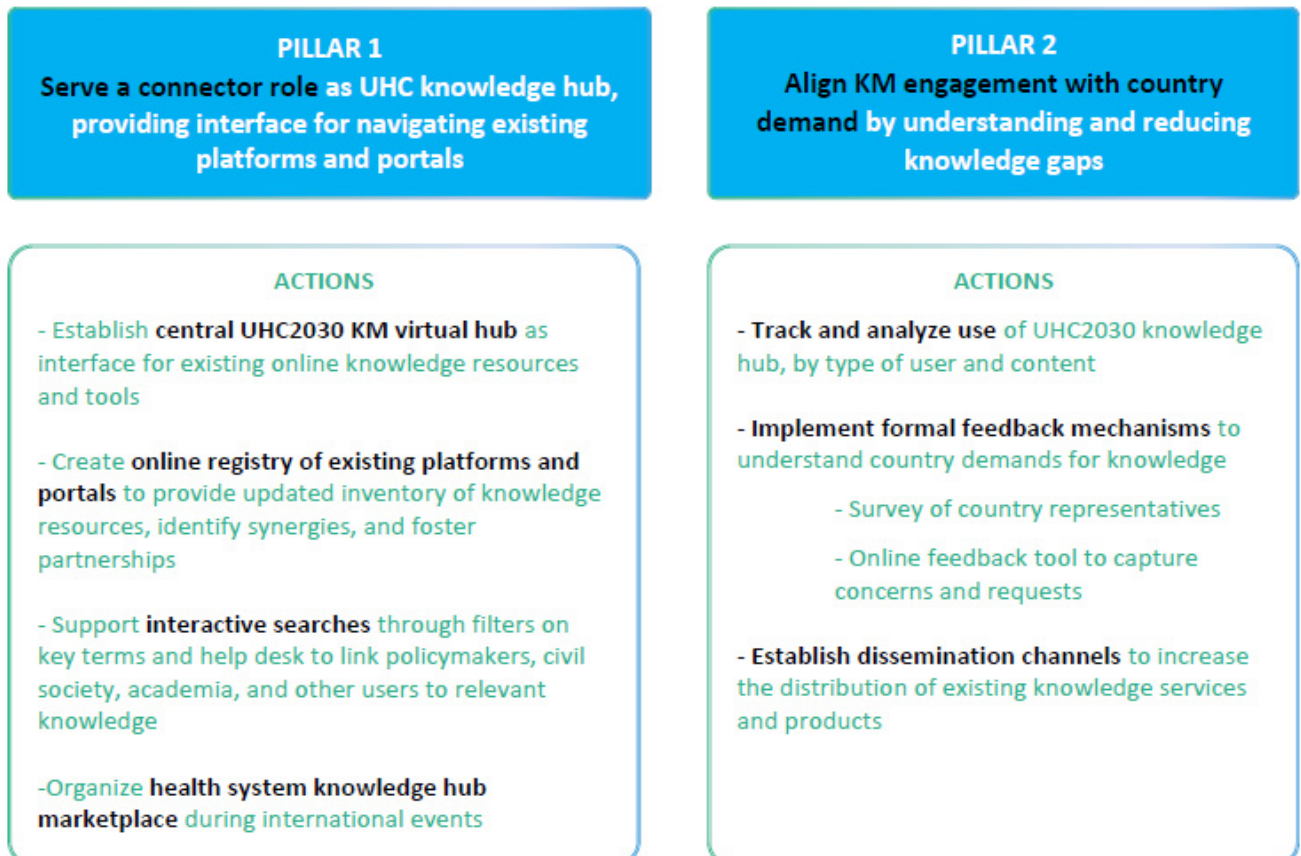
UHC2030 KNOWLEDGE HUB

This document presents an overview of the UHC2030 Knowledge Hub, which contributes to position UHC2030 as a knowledge broker across the health system strengthening (HSS) and universal health coverage (UHC) agenda. Developing the knowledge hub is part of the UHC2030 Knowledge Management Strategy which the Steering Committee approved in December 2017.

The Steering Committee is invited to review progress in developing the knowledge hub, which provides a good example of collaboration across UHC2030 related initiatives, and acknowledge cost implication associated with the initial investment and future maintenance costs of the hub hosted by UHC2030.

1) Background

UHC2030 is the global movement to build stronger health systems for UHC and global health security by 2030. It provides a multi-stakeholder platform to encourage the exchange of knowledge and learning between and across partners and related initiatives to strengthen collaboration and coordination across sectors. A key lever for this collaboration is knowledge management (KM). To this end, the KMWG completed a landscape analysis of existing KM initiatives and country demand and developed the KM Strategy for UHC2030 which was submitted for Steering Committee approval and presented at the UHC Forum 2017.

UHC2030 Knowledge Management Strategy

PILLAR 1	PILLAR 2
Serve a connector role as UHC knowledge hub, providing interface for navigating existing platforms and portals	Align KM engagement with country demand by understanding and reducing knowledge gaps

| ACTIONS	ACTIONS

- Establish **central UHC2030 KM virtual hub** as interface for existing online knowledge resources and tools
 	
- Create **online registry of existing platforms and portals** to provide updated inventory of knowledge resources, identify synergies, and foster partnerships
 	
- Support **interactive searches** through filters on key terms and help desk to link policymakers, civil society, academia, and other users to relevant knowledge
 	
-Organize **health system knowledge hub marketplace** during international events
	- **Track and analyze use** of UHC2030 knowledge hub, by type of user and content
	
	- **Implement formal feedback mechanisms** to understand country demands for knowledge
	
	    - Survey of country representatives
	
	    - Online feedback tool to capture concerns and requests
	
	- **Establish dissemination channels** to increase the distribution of existing knowledge services and products

2) UHC2030 Knowledge Hub

The UHC2030 KM Strategy focuses on two pillars so that UHC2030 can effectively serve a connector role as the UHC knowledge hub and align the supply of knowledge products and services more closely with country demand. The priority actions designated under each pillar have important implications for how knowledge resources could best be indexed into a manageable yet comprehensive set of categories to cover the full range of content, types of knowledge resources, and potential users. As a first step in implementing the UHC2030 strategy, a taxonomy is being developed (see Annex 1) which will provide the logical framework for organising a KM virtual hub that supports interactive searches through standard coding and filters on key terms.

The following diagram provides an overview of UHC2030 Knowledge Hub and associated functions for allowing our partners to access knowledge resources seamlessly:

- **UHC2030 Knowledge Hub:** It will consist of a knowledge management system with interactive search features and on-demand knowledge support to access to pooled resources indexed by the taxonomy.

- **UHC2030 Country Database:** It will build on the Country Planning Cycle Database initiated by IHP+ and currently hosted by WHO (http://nationalplanningcycles.org/), which could pool UHC2030 country member information free of charge.

- **UHC2030 eLearning Modules:** Open Learning Campus powered by the World Bank Group (https://olc.worldbank.org/), which could accommodate UHC2030 branded eLearning materials free of charge.

- **UHC2030 Market Place**: Common exhibition booth, face-to-face networking & interactive sessions for UHC2030 Related Initiatives during selected international meetings.

- **UHC2030 Interactive Portal:** We are currently conducting a detailed inventory and analysis of UHC2030 related initiatives, platforms, and portals to identify a relevant and low-cost platform for this function that would connect UHC2030 partners and related initiatives.
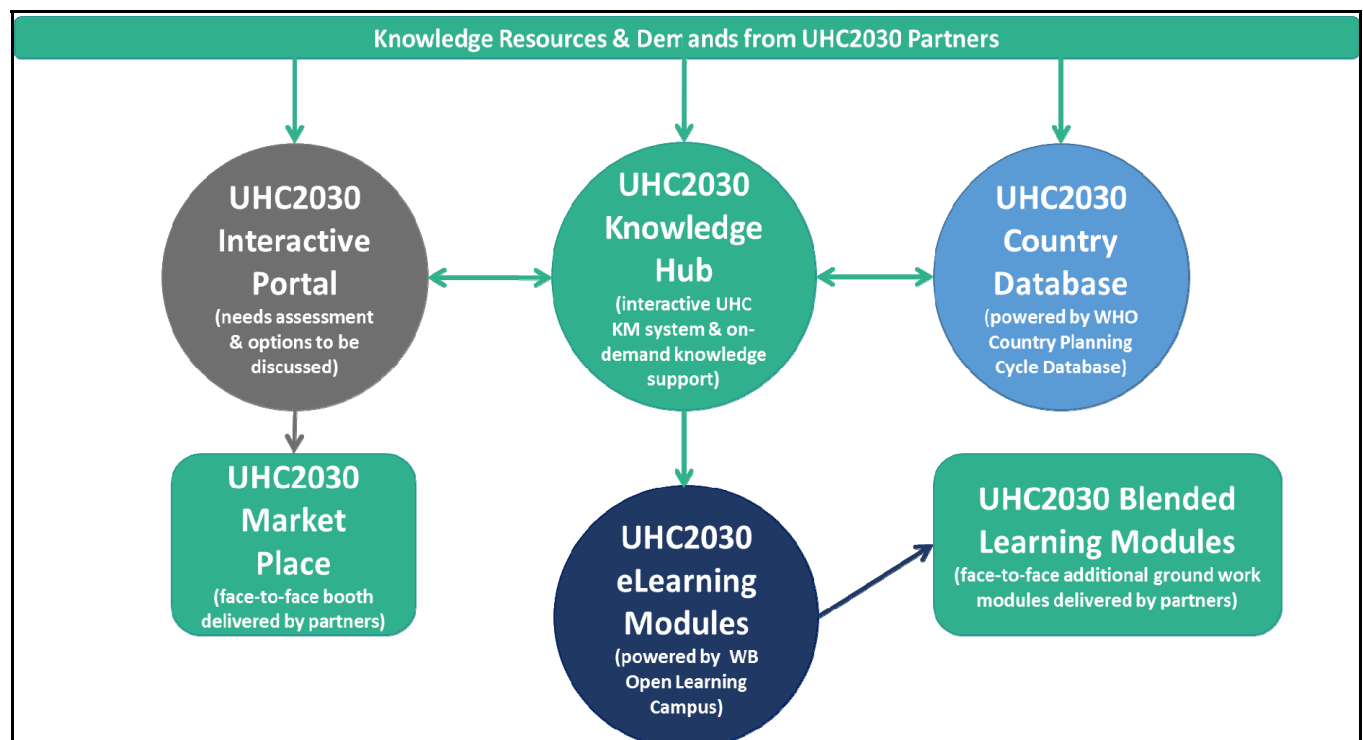
3) Timeline

UHC2030 Knowledge Hub
- Q2 2018: Classify and categorise knowledge in a standardised manner – standard taxonomy created, and 'indexing' knowledge commenced
- Q3 2018: Populate knowledge hub with descriptions and links to knowledge products & services
- Q4 2018- Q1 2019: Interactive knowledge management hub with interactive search features

UHC2030 Marketplace
- October 2018: Organize a marketplace during the Fifth Global Symposium on Health Systems Research
- December 2018: Organize a marketplace during the UHC2030/UHC-P meeting (TBC)

UHC2030 Country Database
- Q3 2018: Update UHC2030 country member information on Country Planning Cycle Database
- 2019: Additional database functions for TWGs' products on Country Planning Cycle Database (TBC)

UHC2030 Interactive Portal
- Q3-4 2018: Detailed inventory and analysis of UHC2030 related initiatives, platforms, and portals
- End 2018: UHC2030 Interactive Portal operationalised (TBC)

UHC2030 eLearning Modules
- Q4 2018: UHC2030 branded eLearning modules powered by WBG Open Learning Campus (e.g. advocacy & accountability for UHC)
- 2019: Blended learning program (i.e. a mix of eLearning & face-to-face group work/follow up) derived by UHC2030 partners (TBC)

4) Initial investment and maintenance costs for the knowledge hub

Total initial investment cost (2018): 925,000 USD
- Develop business requirements/specifications for the online 'connector' function: 125,000 USD (IT company contract)
- Classify and categorize knowledge in a standardized manner - 'indexing' knowledge: 500,000 USD (1 full time consultant (50 days) & 1 consultation meeting)
- Populate knowledge hub with descriptions and links to knowledge products & services: 200,000 USD (2 part-time consultants, mid-level)
- Virtual hub with interactive search features: 100,000 USD (1 part-time consultant)

Annual operation costs (2019-): 400,000 USD
- 2 part-time research assistant: 200,000 USD
- IT system development support: 200,000 USD

Note: The costs of initial investment & maintenance for the interactive portal, eLearning modules, the country database are expected to be covered through in-kind support from partner organizations.

A Knowledge Management Taxonomy for UHC2030

Proposing a classification system to facilitate the storage and retrieval of knowledge products and services related to universal health coverage and health systems strengthening
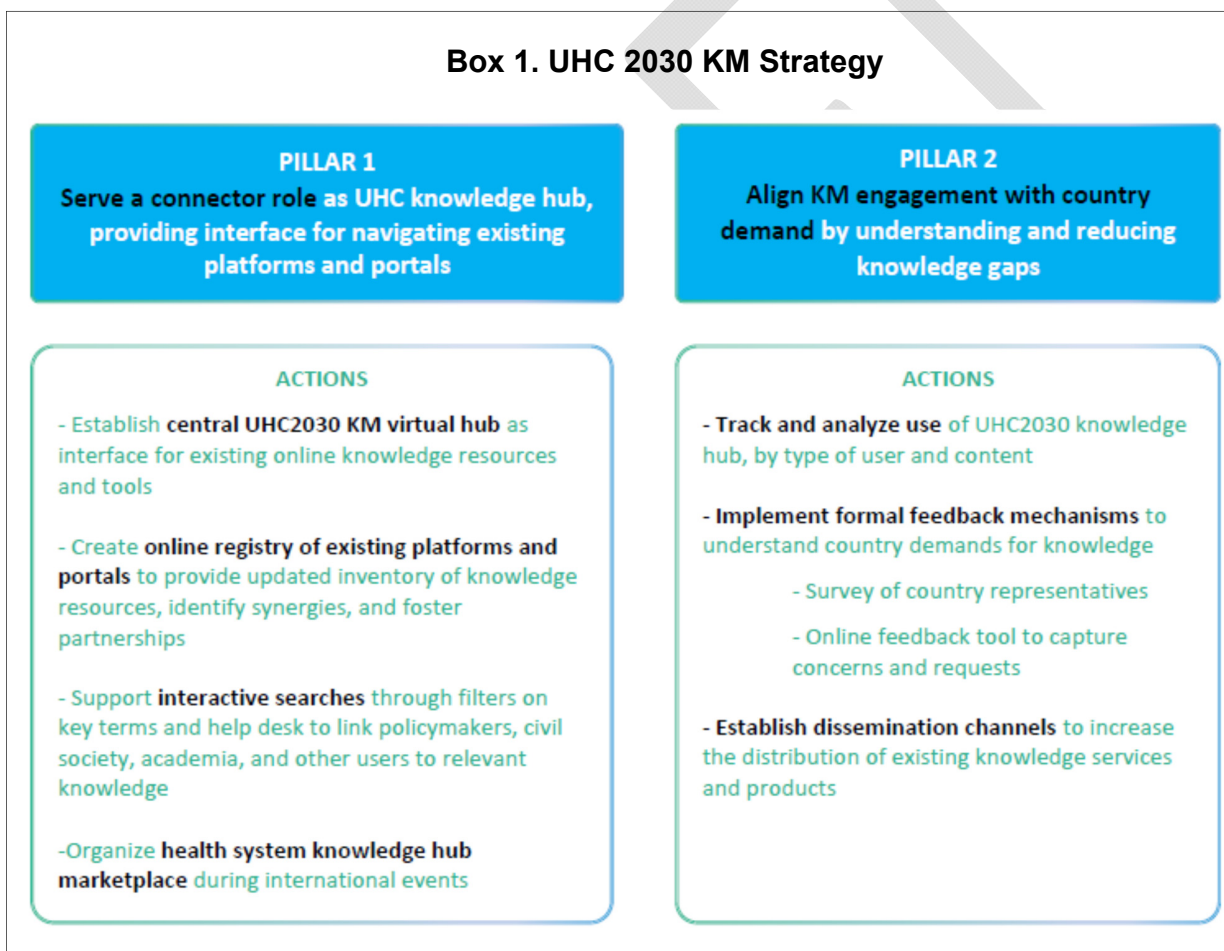
Contents

Introduction

UHC2030 is the global movement to build stronger health systems for universal health coverage and global health security by 2030. It provides a multi-stakeholder platform to encourage the exchange of knowledge and learning between and across partners and related initiatives to strengthen collaboration and coordination across sectors. A key level for this collaboration is knowledge management (KM). The Knowledge Management Working Group (KMWG) is helping to position UHC2030 to broker knowledge across the HSS and UHC agenda. To this end, the KMWG completed a landscape analysis of existing KM initiatives and country demand and presented the KM Strategy for UHC2030 at the UHC Forum 2017.

A critical early step for effective knowledge management will be to establish a common language for classifying, organizing, storing, and retrieving knowledge products and services. This guidance note proposes a UHC knowledge taxonomy for these purposes by identifying guiding principles and indexing common terms and their relationships. Recommendations are based on findings from the landscape analysis and a review of relevant literature related to organizing knowledge, navigating content areas pertaining to UHC and health system strengthening (HSS), and previous efforts to develop taxonomies at the organizational, thematic, and/or sector levels.

Implications of the Knowledge Management Strategy for UHC2030

The immediate practical need for a UHC KM taxonomy is to support the implementation of the new KM strategy. As part of the strategic planning process, the KMWG identified priority actions that should be undertaken as part of the 2018-2019 KM workplan and current challenges that will need to be addressed for effective implementation.

As summarized in Box 1, the UHC2030 KM Strategy focuses on two pillars so that UHC2030 could effectively serve a connector role as the UHC knowledge hub and align the supply of knowledge products and services more closely with country demand. The priority actions designated under each pillar have important implications for how knowledge resources could best be indexed into a manageable yet comprehensive set of categories to cover the full range of content, types of knowledge resources, and potential users. The taxonomy will provide the logical framework for organizing a KM virtual hub that supports interactive searches through standard coding and filters on key terms.

Box 1. UHC 2030 KM Strategy

PILLAR 1	PILLAR 2
Serve a connector role as UHC knowledge hub, providing interface for navigating existing platforms and portals	Align KM engagement with country demand by understanding and reducing knowledge gaps

ACTIONS

- Establish **central UHC2030 KM virtual hub** as interface for existing online knowledge resources and tools

- Create **online registry of existing platforms and portals** to provide updated inventory of knowledge resources, identify synergies, and foster partnerships

- Support **interactive searches** through filters on key terms and help desk to link policymakers, civil society, academia, and other users to relevant knowledge

- Organize **health system knowledge hub marketplace** during international events

ACTIONS

- **Track and analyze use** of UHC2030 knowledge hub, by type of user and content

- **Implement formal feedback mechanisms** to understand country demands for knowledge

  - Survey of country representatives

  - Online feedback tool to capture concerns and requests

- **Establish dissemination channels** to increase the distribution of existing knowledge services and products

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The KM Strategy was informed by a survey of networks and relevant knowledge initiatives and semi-structured interviews with practitioners to explore country demand. Findings from these sources suggest the need for three entry points from which a user might start the search for knowledge products or services:

1. *Technical area*—Knowledge initiatives and networks related to UHC and HSS focus on a multitude of interrelated and overlapping content areas and subtopics.

2. *Type of knowledge resource*—A broad range of knowledge products and services are available across technical areas, offered in various formats for different learning modalities and dissemination channels.

3. *Geographic area*—Users often have a specific need or interest linked to a specific country or regional context.

Other variables that are likely to serve as useful filters to identify relevant knowledge resources <u>after the user has started the search process</u> include the developer(s)/provider(s) of the product or service and the date(s) offered.

The KM Strategy for UHC2030 and the accompanying landscape analysis framed the need for and potential benefits of effective knowledge management but also identified existing challenges that could hinder the development and implementation of a new taxonomy. Three challenges stand out with clear implications for how knowledge resources related to UHC and HSS could most effectively be organized, stored, and retrieved.

- ***The lack of common definitions.*** Interviews with knowledge providers, a preliminary review of network websites, and a survey of networks and related knowledge initiatives elucidated broad variations in terminology for thematic and technical content areas related to UHC. This lack of standardization was also present for the classification of KM products, services, and practices, as highlighted in the landscape analysis. A review of multi-stakeholder partnerships in the post-2015 development era identified the need for a "common ontology" related to knowledge management, comprising "a set of core concepts and definitions that make sure that all members of the partnership know what they are talking about, and are talking about the same things" (AtKisson 2015, p. 20). Similarly, a system-wide review for the United Nations System identified notably different definitions for KM across 28 UN organizations (Dumitriu 2016).

- ***Emerging credibility.*** UHC2030 is a relatively new multi-stakeholder platform working to establish its identity as a knowledge broker; however, there are already various other partnerships focused on coordination and collaboration for HSS and UHC. There is not yet adequate trust among policymakers and practitioners that UHC2030 will accurately represent what each network is doing or use effective channels to share information with those who need it. The taxonomy will need to accurately reflect the language of both supply and demand, and accurately mapping the supply of knowledge will not necessarily be sufficient to ensure that it is "taken up ('mobilized' or 'implemented' in practice) (Kislov et al 2017, p. 110).

- ***Inadequate investment in KM infrastructure and practices.*** Managing knowledge is a well-documented challenge within organizations. For example, a study of UN agencies found that shortcomings stemmed from the lack of support and sponsorship at the senior level, insufficient staff awareness and organizational culture, inadequate ICT interoperability, and a lack of financial resources (Dumitriu 2016). Across organizations, the challenges are even greater. In *Mapping Global Health Architecture to Inform the Future*, Hoffman, Cole, and Pearcey (2015) found that "few global health actors are involved in the sharing of intellectual property and in harmonized norms, standards, and guidelines" (p. 22).

Together, these challenges underscore the need for clear principles to underpin the KM taxonomy. These principles, described below, will help to ensure that UHC2030 is well-positioned to fill the knowledge broker role.
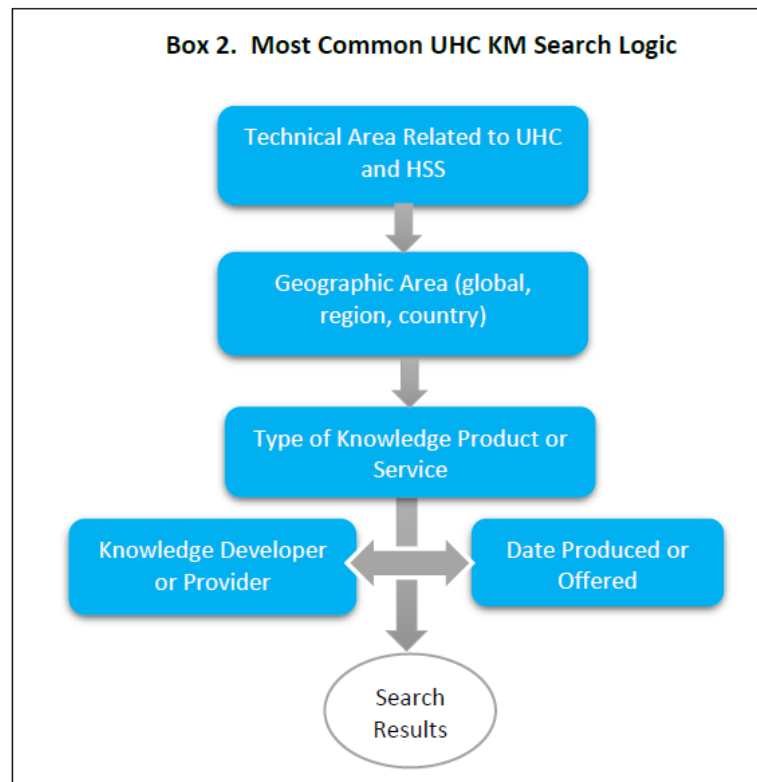

Guiding Principles for a Taxonomy

How knowledge is organized is a critical factor for effective knowledge management. A recent brief on how KM could transform the UN Development System emphasized that "KM refers to the management of knowledge flows—into, through, and out of an organization" (Slovinsky 2017, p. 1). A study on the KM taxonomy of the Asian Development Bank (ADB) described the importance of having a taxonomy go beyond the simple organization of documents and knowledge resources to provide measurable benefits such as "Making explicit knowledge that is embedded in documents available at the point of need," "facilitating coordination and knowledge sharing," and "creating a common vocabulary" (Pellini and Jones 2011, p. 3).

However, the act of designing a taxonomy or indexing system alone will not ensure effective KM. A literature review of KM taxonomy development combined with the findings of the UHC2030 landscape analysis highlighted the following seven guiding principles for greater effectiveness.

1. ***Structure the taxonomy according to its intended functions.*** The purposes for designing a classification system determine which hierarchy and components provide an intuitive structure for enabling the efficient retrieval and sharing of knowledge, information, and data across all types of users. A reflection by the task manager of the ADB study emphasized that "the availability of (or need for) content coupled with the information-seeking behaviors of users should influence the design and upkeep of taxonomies" (Serrat 2010, p.2). In the case of the UHC2030 knowledge hub, a user would likely start searching in a specific content area (e.g., health care financing, service delivery, etc.), narrow the results down for geographic relevance, and then look for an appropriate knowledge resource that focuses in this desired content area with the right regional or country context. This common UHC2030 KM search sequence is in Box 2. However, the structure will also need to be flexible to accommodate users who wish to circumvent the usual logic. For example, someone could seek a model learning product or wish to review all the resources for a specific country without using other filters.

2. ***Build on existing classification systems.*** A taxonomy is more likely to be widely used if it has an intuitive structure with terms that are already familiar or readily understood by potential users. For UHC2030, the KM strategy encompasses two separate hierarchies of terms that will need indexing. First, there is the broad set of overlapping categories reflecting technical areas related to UHC and HSS. Second, there is the range of knowledge resources from peer-reviewed research articles and flagship reports to e-learning modules and annual conferences. In each case, the naming conventions and categorization should be aligned with existing widespread practices where possible (discussed more in the next sections on technical areas and on knowledge products and services).

3. ***Start simple and refine the taxonomy through an incremental approach.*** The ADB experience found that overly complex classification schemes and burdensome tagging requirements led to a high level of non-compliance and variations across departments in the implementation of taxonomies across the organization. The study therefore strongly recommended that "taxonomy development proceed in an incremental manner" with the idea that a "more comprehensive, unified taxonomy may be possible further down the line" (Pellini and Jones 2011, p. 21). Where possible, more complicated lists should be branched into a tree structure to distinguish broad categories from more specific ones.

Box 2. Most Common UHC KM Search Logic

Technical Area Related to UHC and HSS

Geographic Area (global, region, country)

Type of Knowledge Product or Service

Knowledge Developer or Provider

Date Produced or Offered

Search Results

4. ***View the system as a living structure that will continually need adapting.*** Closely related to the previous principle, planning knowledge audits is important for informing system improvements. A framework for good practice in developing corporate taxonomies called for a "knowledge audit" given that "organizations need to adapt to a changing environment… which force them to modify their knowledge flows" (Sharma et al 2008, p. 5). Ideally, such an audit identifies what knowledge is needed, what knowledge already exists, where the gaps are, who is using the knowledge, and how the knowledge is being used. This principle highlights the need to closely link ongoing taxonomy development with audit-related actions already planned under the second pillar of the UHC2030 KM strategy. These actions include tracking and analyzing the use of the knowledge hub by type of user and content and the implementation of formal feedback mechanisms to understand the country demand for knowledge.

5. ***Define roles, responsibilities, and requirements.*** Any taxonomy will need to be actively managed throughout its implementation, so assigning responsibilities is an essential step in good taxonomy design. Serrat (2010) advises particular focus on the role of a governance board in overseeing the overall strategy and appropriate types of content; the function of a taxonomy team to ensure proper functioning, content placement and quality; and the responsibilities of content owners in preparing content and applying keyword tags and metadata. Similarly, an initial set of requirements should be defined to operationalize the taxonomy. In the case of ADB, new compulsory tagging requirements were designed given uneven performance in the tagging and adding of metadata to knowledge products uploaded into the internal systems (Pellini and Jones 2011).

6. ***Think through infrastructure investments.*** The development of a taxonomy for UHC2030 at this time is based on the assumption that there will be an interactive virtual knowledge hub through which practitioners can find relevant knowledge resources and networks can explore potential synergies with other providers. IT infrastructure development and requirements to support these functions could have implications for the scope or structure of the taxonomy in its pilot phase. In addition, even with adequate IT infrastructure in place, a caution from the ADB study was that

"rolling out any new taxonomy will require embedded staff with dedicated time for the task and taxonomies require a certain level of ongoing quality control" (Pellini and Jones 2011, p. 21).

7. ***Promote use through strategic communications.*** Even after standard indexing practices are under implementation, ongoing communication efforts will be needed to educate users on how to use the platform most efficiently and to build the credibility of UHC2030 as a go-to resource for navigating knowledge resources. The ADB study outlined the need for a communications strategy, in which "the aim is to keep all stakeholders informed as to the purpose of the taxonomies, the approach adopted, progress, and what is expected from the audience" (Pellini and Jones 2011, p. 19). For UHC2030, this advice underscores the importance of continued collaboration between the knowledge management and communication workstreams.
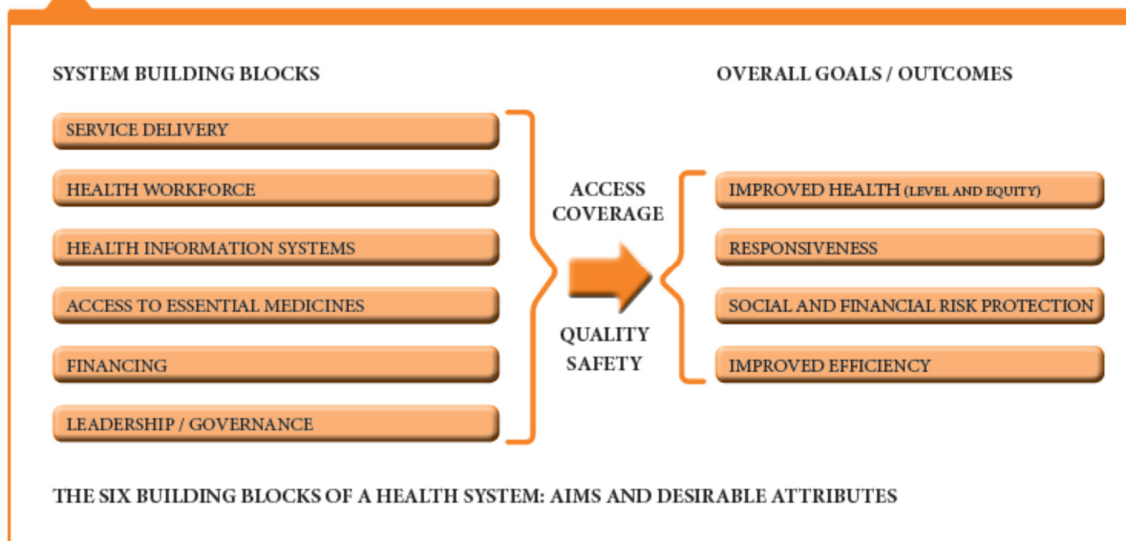
Overall, these principles signal the need to start first with classifying knowledge in the two domains where a common language is most needed (technical areas related to HSS and UHC and types of knowledge products and services). The following sections propose standard terms and structures to categorize and navigate these concepts.

Technical Areas

A starting point for indexing the technical content areas related to UHC and HSS is the World Health Organization (WHO) Health Systems Framework. A health system consists of all the organizations, institutions, resources and people whose primary purpose is to improve health. As shown in Box 3, the WHO framework describes health systems in terms of six core components or "building blocks": (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing, and (vi) leadership/governance. Depending on factors related to access, coverage, quality, and safety, strengthening these building blocks can lead to improved outcomes.

For the UHC2030 context, it is also important to consider the distinction between activities that *support* the health system versus those that *strengthen* it. A review of the interpretations of health system strengthening warned against focusing too much on the inputs reflected by the building blocks and emphasized that "permanent performance improvement requires delving deeper into the system to change policies, structures, and behaviors that can improve the way inputs are used—to improve equity, access, quality, and efficiency" (Chee, G. et al. 2013, p. 88). The joint vision developed by UHC2030 navigates this distinction carefully by focusing on dimensions of health system performance and framing three broad entry points for policy action: service delivery, health financing, and governance (UHC2030 2017).

Box 3. WHO Health Systems Framework

SYSTEM BUILDING BLOCKS

- SERVICE DELIVERY
- HEALTH WORKFORCE
- HEALTH INFORMATION SYSTEMS
- ACCESS TO ESSENTIAL MEDICINES
- FINANCING
- LEADERSHIP / GOVERNANCE

ACCESS
COVERAGE

QUALITY
SAFETY

OVERALL GOALS / OUTCOMES

- IMPROVED HEALTH (LEVEL AND EQUITY)
- RESPONSIVENESS
- SOCIAL AND FINANCIAL RISK PROTECTION
- IMPROVED EFFICIENCY

THE SIX BUILDING BLOCKS OF A HEALTH SYSTEM: AIMS AND DESIRABLE ATTRIBUTES

Source: WHO 2010.

The classification of concepts into categories for the WHO framework and further elaboration for the UHC2030 joint vision help to inform a potential approach for organizing and coding knowledge resources. However, lessons learned from the UHC2030 KM landscape analysis suggest that a more flexible and nuanced approach for keyword tagging is warranted. The survey of 27 network providers and knowledge initiatives, interviews with 7 country practitioners, and comments from KMWG members revealed the following dynamics:[1]

- Knowledge providers have established their own terms and labels for knowledge content, which collectively reflect an interdependent and overlapping web of topics. In many cases, survey respondents opted not to select an option from the closed-ended list and instead wrote in a different but related category.

- The digital age allows for more flexibility and less dependence on a specific hierarchy. Whereas a book in a traditional library must be placed on one shelf, knowledge resources in a virtual knowledge hub can be tagged with multiple keywords for retrieval. Nonetheless, it will be important to be systematic and cohesive in categorization for effective operationalization of the taxonomy.

- The use of hierarchies for categorization are likely to facilitate the search process. For example, the three areas identified for policy action in the joint vision (service delivery, health financing, and governance) can be assigned as prefixes or filters for linking to broad sets of subtopics.

- Country practitioners expressed concern that it has been difficult to find needed content in critical areas such as population coverage and data analytics. While these topics are included in the WHO framework and/or joint vision, a more nuanced categorization might help to link supply and demand more effectively and reveal knowledge gaps. Therefore, these topics explicitly identified as high priority should be established as separate categories to start.

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[1] See *The Knowledge Management Landscape for UHC2030: A Background Study to Inform the Development of a Knowledge Management Strategy* at https://www.uhc2030.org/what-we-do/knowledge-exchange-and-learning/

Response options for the KM landscape survey of networks were developed based on a review of existing terminology, including the WHO framework. Given the input from respondents and additional consideration of example knowledge services and products, the classification system proposed for technical areas includes 10 main categories related to HSS and UHC as follows:

1. **Development Cooperation**
2. **Community Health and Civil Society Engagement**
3. **Equity and Ethics**
4. **Governance and Leadership**
5. **Health Financing**
6. **Health Security**
7. **Information and Communications Technology**
8. **Measurement for Improvement**
9. **Population Coverage**
10. **Service Delivery**

Each of these categories is further divided into subtopics that would also be tagged in the system to facilitate the efficient storage and retrieval of knowledge. The current list of categories, alternate terms and subtopics is in Annex 1.

The proposed classification system reflects some trade-offs given that the list includes some overlapping and interdependent categories. However, good practices for developing corporate taxonomies include that "classification should be able to evolve into perfection" and that starting with "more and simpler classifications rather than fewer and sophisticated classifications" might be more likely to yield desired results and build user confidence in the system (Sharma et al 2008).

Knowledge Products and Services

Knowledge management is fundamentally referring to the flow of knowledge, so another important classification system needed for UHC2030 relates to categorizing the types of knowledge resources. This process is typically challenging for organizations given the common overlap and confusion of labeling among knowledge products, types of knowledge shared, delivery and dissemination channels and tools, and learning modalities. In addition, knowledge-sharing practices are rapidly changing with advances in technology. A review of how multi-stakeholder partnerships in the post-2015 development share knowledge and expertise found that "best practice in knowledge sharing is leaving behind the world of static publications and websites as the core knowledge-management and -sharing strategy, and moving to more differentiated mixes of contemporary tools and approaches (such as social media and communities of practice) that are better able to meet the specific needs of knowledge users" (AtKisson 2015, p. 18).

The survey conducted for the UHC2030 KM landscape analysis asked providers to indicate the types of knowledge products and the types of knowledge sharing channels and tools that they used. Both questions provided closed-ended response options but an open-ended "other" category was available for additions and comments. Based on the input from these networks and related knowledge initiatives, a simple consolidated classification of knowledge products and services is proposed to start, with two priorities noted for the first phase of the taxonomy rollout:

- The knowledge hub should differentiate between those resources that have been peer-reviewed, refereed, and indexed publications versus those that have not.

- The system will focus mainly on managing explicit knowledge (searchable information) rather than seeking to map tacit knowledge (linking users to relevant experts and/or upcoming events and programs that might address their needs). However, relevant peer learning platforms will be included to the extent possible to help bridge this gap.

The nine main categories of knowledge products and services include the following in alphabetical order:

1. Courses and Learning Modules
2. Data
3. Governance and Strategic Planning Documents
4. News and Commentary
5. Non-Peer Reviewed/Refereed Technical and Research Publications
6. Peer Learning Platforms
7. Peer Reviewed/Refereed Technical and Research Publications
8. Reports from Events and Programs
9. Tools, Guidelines, and Frameworks

Each of these main categories contains subtopics for more refined searches. The complete list of categories and subtopics is listed in Annex 2.

Next Steps

This note has proposed a system for classifying knowledge related to UHC and HSS in terms of its focus in one or more technical areas and the type of knowledge product or service in which it is embedded. This structure for labeling or "tagging" content is intended not only to enable an efficient flow of knowledge from those who have it to those who need it but also to identify synergies for the co-production of knowledge.

In keeping with the guiding principles set forth earlier, the categories proposed for a UHC taxonomy would best be rolled out incrementally, with review and refinement as needed. Important early steps in this process include:

▪ Continuing to review the main categories and add subtopics for the classification system, drawing on the input from the UHC KMWG members, other partners, and related studies or scoping exercises currently underway. Parallel activities to advance this process could include consultations with taxonomists at the Gates Foundation and the European Observatory.

▪ Establishing a pilot database to test tagging and metadata capture on a sample of knowledge products and services.

▪ Working collaboratively with the developers of the UHC2030 virtual knowledge hub to inform system specifications and understand the implications and potential constraints related to infrastructure investments.

▪ Defining roles and responsibilities for developing, populating, managing, maintaining, and using any system relying on the taxonomy to enable the flow, adaptation, and co-creation of knowledge. This would likely include some consideration of how the input of users can be used to refine the structure and terms as needed.

Above all, it is important to recognize that any approach to classification will need to be continually reevaluated in terms of its effectiveness for closing knowledge gaps and building user confidence. A useful reminder from the ADB experience of reviewing knowledge taxonomies was that "taxonomies are not artifacts for safekeeping: they adapt and change in coevolution with the efforts of users to make a sense of ambiguity, emergence, and uncertainty in their environment" (Serrat 2010).

References

Note: The list below reflects publications cited from the literature review and does not include many documents and publications developed and shared by UHC stakeholder organizations on their websites that were useful for the preliminary development of a UHC KM taxonomy.

AtKisson, A. 2015. *Multi-Stakeholder Partnerships in the Post-2015 Development Era: Sharing Knowledge and Expertise to Support the Achievement of the Sustainable Development Goals*. Background paper in connection with the Expert Group meeting being convened by the Division for Sustainable Development, United Nations Department of Economic and Social Affairs. New York. June 16.

Chee, G., Pielemeier, N., Lion, A., and Connor, C. 2013. Whey differentiating between health system support and health system strengthening is needed. *The International Journal of Health Planning and Management.* 28: 85-94

Dumitriu, P. 2016. *Knowledge Management in the United Nations System*. United Nations Joint Inspection Unit. Geneva.

Glovinsky, S. 2017. How Knowledge Management Could Transform the UN Development System. Future United Nations Development System Briefing. February.

Hoffman, S.J., Cole, C.B., and Pearcey, M. 2015. *Mapping Global Health Architecture to Inform the Future*. Centre on Global Health Security. London. January.

Kislov, R., Wilson, P., and Boaden, R. 2017. The 'dark side' of knowledge brokering. *Journal of Health Services Research & Policy*. Vol. 22(2) 107-112.

Manyazewal, T. 2017. Using the World Health Organization health system building blocks through survey of healthcare professionals to determine the performance of public healthcare facilities. *Archives of Public Health* 75:50. August.

Pellini, A. and Jones, H. 2011. A Study of ADB's Knowledge Taxonomy: Final Report. Asian Development Bank, Knowledge Management Center. March.

Pellini, A. and Jones, H. 2011. Knowledge Taxonomies: A literature review. Overseas Development Institute. London. May.

Serrat, O. 2010. *Taxonomies for Development*. Asian Development Bank. Washington, DC.

Sharma, R.S., Foo, S. and Morales-Arroyo, M. 2008. Developing corporate taxonomies for knowledge auditability: A framework for good practices. *Knowledge Organisation*, 35(1), 30-46.

World Health Organization. 2010. *Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and their Measurement Strategies*. Geneva.

UHC2030. 2017. *Health Systems for Universal Health Coverage—A Joint Vision for Healthy Lives.* World Health Organization and the International Bank for Reconstruction and Development. Geneva.

United Nations Development Programme. 2014. *UNDP Knowledge Management Strategy Framework 2014-2017*. New York.

Annex 1. Proposed Categories for Technical/Thematic Areas Related to UHC and HSS

Note: The list of subtopics is not exhaustive. Additional refinements to the categories and hierarchies are expected through the review and piloting processes.

1. **Development Cooperation**Development Cooperation
   a. Aid effectiveness
   b. Development assistance for health
   c. Global partnerships
   d. Harmonization
   e. International cooperation

2. **Community Health and Civil Society Engagement**
   a. Citizen-led accountability
   b. Citizens' platforms
   c. Inclusive policy development
   d. Social partnerships
   e. Whole-of-society governance

3. **Equity and Ethics**
   a. Access
   b. Human-rights based approach
   c. Non-discrimination
   d. Pro-poor programs

4. **Governance and Leadership**
   a. Accountability
      i. Oversight institutions
      ii. Public financial management
   b. Policy and planning
      i. E-health strategy
      ii. National health planning
   c. Research and development
      i. Health economic analysis and research
      ii. Health policy and systems research
   d. Transparency
      i. Freedom of information
      ii. Access to data

5. **Health Financing**
   a. Allocation / Priority setting
      i. Benefit design
      ii. Benefit packages
      iii. Health technology assessment
      iv. Systematic priority setting
   b. Pooling / Risk sharing
      i. Insurance
      ii. Pooling arrangements
   c. Purchasing
      i. Strategic purchasing
      ii. Provider payment mechanisms
   d. Revenue generation
      i. Premium calculation
      ii. Resource Mobilization/ Domestic resource mobilization
      iii.

6. **Health Security**
   a. Crisis management/ crisis response
   b. Health emergencies
   c. Health systems in fragile and conflict-affected states
   d. Pandemic preparedness
   e. Resilience

7. **Information and Communications Technology**
   a. Management information systems
      i. Health information management
      ii. Data protection
      iii. Data sharing and data confidentiality
      iv. Standards for data use
   b. ehealth
      i. Mhealth
      ii. Digital health

8. **Measurement for Improvement**
   a. Data analytics
   b. Monitoring and evaluation
      i. Indicators
      ii. National monitoring and evaluation systems

9. **Population Coverage**
   a. Demand promotion
   b. Reaching target populations
   c. Covering the informal sector

10. **Service Delivery**
    a. Human resources for health
       i. Health workforce
       ii. HR Deployment
       iii. Labor market dynamics
       iv. Health worker migration
    b. Health system performance
       i. Delivery system reform
       ii. Efficiency
       iii. Supply chain
    c. Integrated care
       i. Integrated people-centered health services
       ii. Patient empowerment
    d. Medicines in health systems
       i. Quality-assured medicines
       ii. Essential health commodities
    e. Multisectoral determinants of health
       i. Coordination across ministries
       ii. Synergies across sectors
       iii. Water and sanitation
       iv. Aging
       v. Education
       vi. Social services
       vii. Environment
    f. Primary healthcare

g. Public-private partnerships
    i. Health franchising
    ii. Contracting health services
    iii. Social marketing of health commodities
h. Quality
    i. Patient safety
    ii. Prevention and treatment protocols and practices
i. Secondary care
j. Tertiary care

Annex 2. Proposed Categories for Types of Knowledge Products and Services

1. **Courses and Learning Modules**
   a. Archived Webinars/online events
   b. Curricula
   c. Presentations

2. **Data**
   a. Data portals
   b. Databases/datasets

3. **Governance and Strategic Planning Documents**
   a. Annual reports
   b. By-laws
   c. Charters
   d. Strategic plans

4. **News and Commentary**
   a. Announcements
   b. Blogs
   c. Essay contests
   d. Newsletters/regular bulletins
   e. Progress reports
   f. Radio announcements
   g. Social media posts
   h. Speeches
   i. Videos/multimedia presentations

5. **Non-Peer Reviewed/Refereed Technical and Research Publications**
   a. Briefing notes
   b. Case studies
   c. Discussion papers
   d. Evaluation reports
   e. Flagship reports
   f. Lessons learned
   g. Policy briefs
   h. Promising practices
   i. Research summaries
   j. Working papers

6. **Peer Learning Platforms**
   a. Closed member portals
   b. Communities of practice
   c. Digital platforms for collaboration
   d. Listservs
   e. Technical collaboratives
   f. Thematic/technical working groups

7. **Peer Reviewed/Refereed Technical and Research Publications**
   a. Case studies
   b. Country assessments
   c. Discussion papers
   d. Evaluation reports
   e. Implementation research reports

  f. Policy briefs
  g. Research articles
  h. Reviews—Systematic reviews, rapid reviews

8. Reports from Events and Programs
  a. Collaborative learning summaries
  b. Conference proceedings
  c. Meeting documentation
  d. Policy dialogue transcripts
  e. Program documents
  f. Workshop reports

9. Tools, Guidelines, and Frameworks
  a. Assessment tools
  b. Diagnostics
  c. Evaluation frameworks
  d. Guidelines for in country dialogues
  e. How-to guides
  f. Manuals
  g. Programming guidance