



Mission report

Strengthening Capacity for Evidence-Informed Health Decisions: Topic nomination, HTA communication, and proposal development workshop in Ghana

2- 6 October 2023

Accra, Ghana



Prepared by Health Intervention and Technology Assessment Programme (HITAP),
Ministry of Public Health, Thailand

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List of acronyms

ADP	Access and Delivery Partnership
CKD	Chronic Kidney Disease
CSO	Civil Society Organization
DALY	Disability Adjusted Life Years
DSA	Deterministic Sensitivity Analysis
ESRD	End Stage Renal Disease
FDA	Food and Drug Administration
FTE	Full-Time Equivalent
HD	Hemodialysis
HITAP	Health Intervention and Technology Assessment Program
HTA	Health Technology Assessment
KNUST	Kwame Nkrumah University of Science and Technology
MoF	Ministry of Finance
MoH	Ministry of Health
NCD	Non-Communicable Disease
NHIA	National Hospital Insurance Fund
PD	Peritoneal dialysis
PSA	Probability Sensitivity Analysis
QALY	Quality Adjusted Life Years
SC	Steering Committee
TWG	Technical Working Group
UCBP	Universal Coverage Benefit Package
UHC	Universal Health Coverage
UNDP	United Nations Development Programme

Acknowledgment

This report summarizes the Health Intervention and Technology Assessment Program (HITAP) study visit to Ghana for a topic selection, HTA communication, and proposal development workshop on October 2-6, 2023. The report has been prepared by Ms. Aye Nandar Myint, Ms. Kanchanok Sirison, Ms. Siobhan Botwright, Ms. Kanokporn Srivarom, Ms. Benjarin Santatiwongchai from HITAP, and Dr. Gunjeet Kuar from the National University of Singapore (NUS). This team also prepared the presentations and exercise materials for the workshop. The Access and Delivery Partnership (ADP) supported the study visit with logistics support from the United Nations Development Programme (UNDP) in Ghana.

We would like to express our gratitude to Dr. Yot Teerawattananon, HITAP, for his support and expert suggestions in preparation for this workshop. Most importantly, we would like to thank the HTA secretariat team, Dr. Joycelyn Azeez, Dr. Brain Asare, Ms. Emmanuella Abassah-Konadu, and the team from the Ministry of Health, Ghana, for their tremendous contribution to the designing and preparation of this workshop. It would not have been possible without the support from the local team.

The findings, interpretations, and conclusions expressed in this report do not necessarily reflect the views of the funding or participating agencies.

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Executive summary

Ghana's Ministry of Health (MoH) has been seeking to incorporate Health Technology Assessment (HTA) into its decision-making process to achieve Universal Health Coverage. To support this effort, the MoH has collaborated with the Health Intervention and Technology Assessment Program (HITAP) and the Access and Delivery Partnership (ADP) to develop a five-year strategy and design appropriate governance structures for HTA in Ghana. The collaboration was set up in two phases, and the first phase of cooperation happened in December 2022 when the delegates from Ghana's HTA team visited Thailand to learn from HITAP's experience and understand the HTA system in Thailand.

This report aims to document the second phase of collaboration between HITAP and MoH Ghana with support from ADP, where HITAP hosted a topic selection workshop, communication training, and HTA proposal development workshop for relevant HTA stakeholders in Ghana from 2nd to 6th October 2023. This report summarizes the workshop, including presentations, activities, discussions, and plans for the next steps, which will be helpful for the HTA development in Ghana. Supporting documents, including the program, list of participants, and photos, are provided in the Annexures.

Introduction

The Ministry of Health in Ghana (MoH) has actively pursued the incorporation of Health Technology Assessment (HTA) as a cornerstone in decision-making processes, aligning with the ambition to achieve Universal Health Coverage (UHC). Emphasizing a five-year strategy for HTA, the MoH has been pivotal in designing governance structures and incorporating HTA guidelines within the country's healthcare framework.

Collaboratively, the Health Intervention and Technology Assessment Program (HITAP), operating within the Ministry of Public Health (MoPH) in Thailand, has been instrumental in supporting Ghana's MoH in institutionalizing HTA. A partnership facilitated by the Access and Delivery Partnership (ADP) has led to Ghana's expressed interest in enhancing HTA capacity, particularly in learning from Thailand's experiences. This collaboration culminated in a topic selection workshop in Ghana, where Ghanaian HTA professionals gained firsthand exposure to the topic selection process, aligning with the developed HTA process guideline and reference case.

This workshop marks the second phase of a two-part collaboration. The initial phase was initiated with the Ghanaian team's visit to Thailand in December 2022. HITAP's objective in this second phase was to conduct a topic selection workshop, HTA communication training, and proposal development workshop for pertinent stakeholders in Ghana. The workshop centered on presentations, plenary discussions, and group exercises aimed to augment awareness and build HTA capacity in Ghana. Key focus areas included comprehending topic selection criteria, HTA communication strategies, and the development of a proposal centered on End-stage Renal Dialysis (ESRD) presented by the HITAP team.

The initiative received support from the Access and Delivery Partnership (ADP). This report encapsulates a comprehensive summary of the workshop, encompassing presentations, activities, and discussions and delineating forthcoming steps.

Further details and supplementary materials are enclosed in the annexures, providing the agenda (Annex 1), participant list of organization (Annex 2), communication strategy workshop (Annex 3), and workshop feedback (Annex 4).

Summary of the workshop

HTA Topic selection and prioritization

The workshop began with opening remarks by Mr. Saviour Kwame Yevutsey, the Deputy Director of Pharmaceutical Services at the Ministry of Health Ghana, where he highlighted the importance of practical pathway to universal health coverage considering the unique challenges and opportunities in Ghana's healthcare landscape.

Mr. Saviour also acknowledged the valuable lessons learned from countries like Thailand, which will be instrumental in shaping Ghana's path toward this essential universal health coverage goal.



Figure 1 Opening remarks given by Mr. Saviour Kwame Yevutsey, Deputy Director of Pharmaceutical Services, Ministry of Health, Ghana.

Additionally, he emphasized the need to set a well-defined topic selection process, scientific justification for topic prioritization, significance of topic selection such as direct linkage between topic selection and resource allocation, and design of healthcare benefit package.

In the second opening speech delivered by Dr. Hafez Adam Taher, Director of External Health Cooperation at the Technical Coordinating Department of Ghana's Ministry of Health, a call for enhanced collaboration was emphasized as a central theme. The intention behind fostering

collaboration is to harness the collective expertise and insights of all involved, thereby ensuring a comprehensive and practical approach to the mission's objectives.



Dr. Hafez also stressed the need for implementable activities, underlining the significance of HTA in ensuring the proper functioning of the workshop and its alignment with practical, real-world outcomes to support the Ghana team in achieving the success of the HTA process in Ghana.

Figure 2 Opening speech given by Dr. Hafez Adam Taher, Director of External Health Cooperation, Technical Coordinating Department, Ministry of Health, Ghana.

Dr. Edward Ampratwum, Head of Inclusive Growth and Accountable Governance, speaking on behalf of the United Nations Development Programme (UNDP), emphasized the paramount importance of efficient resource allocation as a cornerstone for achieving universal health coverage.

He stressed the need for HTA to guide the prioritization of healthcare resources, ensuring inclusivity across diverse population needs. Dr. Edward called for HTA institutionalization within the national health system, emphasizing the importance of sustainability alongside funding considerations. He expressed the support of the UNDP in collaboration with ADP and HITAP in Ghana's capacity building and knowledge exchange, highlighting the value of learning from global experiences.

This workshop was indeed one of the examples that shows the continued and strong collaboration between partners in supporting the development of HTA in Ghana.



Figure 3 Afternoon remarks given by Dr. Edward Ampratwum, Head of Inclusive Growth and Accountable Governance, speaking on behalf of the United Nations Development Programme (UNDP)

Health Technology Assessment to Policy in Thailand

Following the opening remarks, Ms. Kanchanok Sirison from HITAP started the presentation by introducing the health technology assessment (HTA) and Universal health coverage (UHC) in Thailand, stating how HTA has been critical in supporting the UHC process in Thailand.

After that, Ms. Aye Nandar Myint shared the work of HITAP and the organization's collaborative efforts with other countries/organizations. She also highlighted the collaboration between HITAP and MOH Ghana in supporting the HTA institutionalization in Ghana.

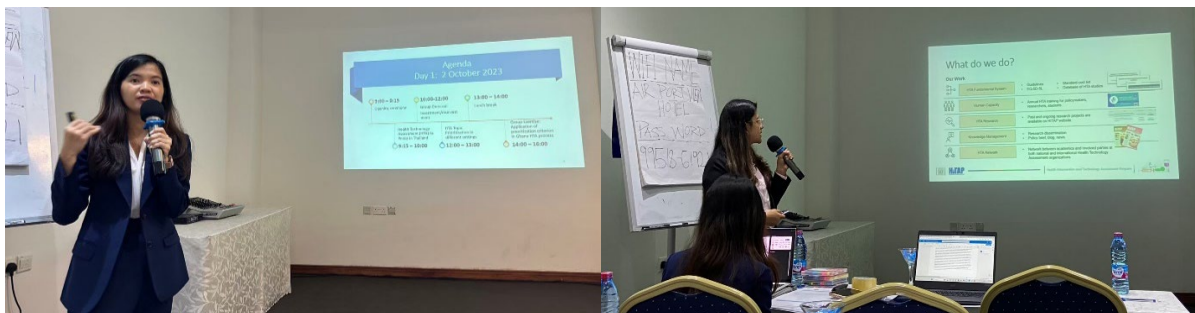


Figure 4 (Left) Ms. Kanchanok Sirison introduced the workshop program and shared the HTA and UHC experience in Thailand. (Right) Ms. Nandar Aye Myint presenting the international unit of HITAP

Activities and discussions: Investments and Disinvestments

After the introductory presentation, participants were divided into four groups for the group exercise of investment and disinvestment of health technology, where each group discussed which health technology should be invested or disinvested, the main barriers, criteria for prioritization of nominated technologies, decision-makers that should be involved and stakeholders who should be informed regarding the decisions.

Discussion points on the **Investment and Disinvestment** of health technologies

From the exercise on the investment of the health technology group, the following discussion themes were brought up during the group exercise. Each group consisted of participants from various backgrounds to ensure equal participation and contribution.

Investment groups

1. Ideas for investment technologies

The ideas for technologies considered under-investment included the treatment of prostate cancer, kidney disease (dialysis), HPV vaccines for cervical cancer, telemedicine infrastructure, long-acting injectables for schizophrenia patients, pre-exposure prophylaxis for HIV, and screening services for diabetes, hypertension, and hyperlipidemia in high-risk groups aged 40 and above. These technologies are currently available in health services in Ghana, whether through private or government hospitals, but are not currently covered by the government.

2. Identified barriers to investment technologies

Several barriers could affect investment decisions, including limited resources, a lack of technical expertise among healthcare providers and policymakers, political interference, knowledge gaps, and challenges in the healthcare financing structures in Ghana.

3. Criteria used in investment

To prioritize the nominated technologies, criteria were established, including the burden of disease in terms of incidence and prevalence, cost-effectiveness of the technology, budget impact, stakeholder interest, equity, economic factor, efficiency, and clinical effectiveness.

4. Identified stakeholders for the decision-making process

In terms of decision-makers, a diverse group of stakeholders was identified as essential participants in the decision-making process. This included policymakers, payers, politicians, patients, providers, and development partners. Additionally, various stakeholders, such as civil society, media, patient groups, pharmaceutical industries, advocacy groups, and academia, should be informed and engaged in the decision-making process to ensure transparency and accountability in health technology investments.



Figure 5 Participants and facilitators discussing the health technologies to be invested as part of group exercise

Disinvestment groups

1. Ideas for disinvestment technologies

On the other hand, the group exercise on the disinvestment of health technology came up with different health technologies such as anemia, worm infestations, dental caries, drone delivery and systems for medicine and logistics, National Condom and Water-based Lubricant Programme Strategy, Iron Polymaltose, Pyronaridine Artesunate (an anti-malarial drug), and chemicals used for indoor residual spraying for vector control.

2. Identified barriers to disinvestment technologies

Similar to the investment group, several barriers were identified for disinvesting the existing health technologies, such as lack of evidence basis for these decisions, the involvement of stakeholders, political barriers, a lack of political will for disinvestment, conflicts of interest and business interests, a lack of skilled personnel, and concerns regarding equity in healthcare access.

3. Criteria used in disinvestment

When it comes to criteria for prioritization of disinvestment, cost-effectiveness, impact on population, budget impact, financial sustainability, feasibility, safety, and sustainability came up within the group discussion.

4. Identified stakeholders for the decision-making process

Decision-makers in the disinvestment process involved a wide array of stakeholders, depending on the specific health technology under consideration. These stakeholders included the Ministry of Health and Cabinet, Parliamentary Select Committee on Health, National Health Insurance Authority (NHIA) board, National medicines selection committees, patient groups, health professionals, and representatives from the private sector (manufacturers and importers). Civil society organizations, religious bodies, donor partners, and the general public were also recognized as important stakeholders, in addition to the decision-makers who should be informed of the decision.



Figure 6 Participants and facilitators discussing the health technologies to be disinvested as part of the group exercise

In conclusion, the workshop provided valuable insights into the strategic considerations of investing in and divesting from health technologies. It highlighted the importance of a collaborative and inclusive decision-making process involving diverse stakeholders. The identified criteria for prioritization in investment and disinvestment offer a robust framework for future healthcare decisions.

Moving forward, the challenge lies in translating these discussions into actionable policies that enhance health technology management's efficiency, equity, and effectiveness. The commitment to transparency and stakeholder engagement ensures a holistic approach, ultimately improving healthcare delivery and outcomes.

HTA topic selection in different settings

Following that, Miss Kanchanok from HITAP shared the countries' experiences for topic prioritization in the HTA process in different settings, such as Thailand, Indonesia, and the Philippines. Miss Kanchanok referred to the core principles of the HTA process for Thailand UHC, the steps involved in topic prioritization, decision-making criteria, and the importance of stakeholder engagement. Additionally, the HTA process framework in Indonesia and the Philippines was shared, where she stressed the different processes in different countries' contexts and the requirements of adaptation based on local context.

Interactive activities: dance along!

After the lunch break, the workshop facilitator, Ms. Kanokporn from HITAP, led the groups on interactive physical activity, which helped promote healthy meetings and reduce sedentary behaviors during the workshop.



"For health and wellbeing, WHO recommends at least 150 to 300 minutes of moderate aerobic activity per week for all adults and an average of 60 minutes of moderate aerobic physical activity per day for children and adolescents."

WHO guidelines on physical activity and sedentary behavior



Figure 7 Workshop participants and facilitators engaging in dancing activities after lunch break.

Current HTA process in Ghana

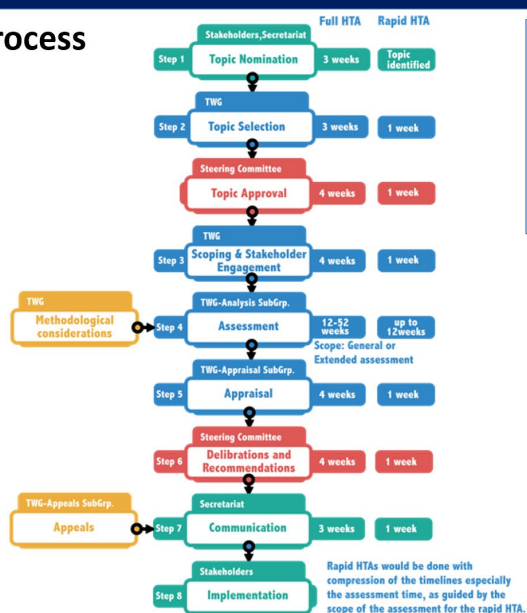
Before the participants worked out in group exercises for the afternoon session of the day, Dr. Brian Adu Asare, Pharmacy Directorate, from MOH Ghana, presented the first edition of Ghana HTA process guidelines (see [Figure 8](#)), which were launched in 2022. Dr. Asare highlighted the topic selection and approval process, along with its importance and stakeholders involved in these processes, and specified the timeline of the activities as well as the importance of topic selection for efficient resource allocation.

He emphasized the role of internal capacity building in developing and implementing the HTA process in Ghana and mentioned that everyone has a responsibility to push forward the HTA process. The overall process of Ghana HTA outlined in the process guideline has been said ([Figure 9](#)).



Figure 8 The first edition of Process Guidelines for Health Technology Assessment (HTA) in Ghana. This document is available on the GEAR website: <http://gear4health.com/uploads/files/file-35-649e42d879d22.pdf>.

Ghana HTA process



- Borrowing from
- (1) the successes of a >30 year country-led process
- (2) the evidence informed deliberative process

Figure 9 Ghana HTA process (retrieved from Dr. Brian Asare's presentation)

Activities and discussions: Application of topic selection criteria in Ghana HTA process

Next, the participants were divided into four groups for topic prioritization of nine predefined given topics (selected by MOH Ghana), where the teams brainstormed based on five topic selection criteria in Ghana. The predefined topics are outlined in the table below.

No.	Area	Details
1	Prostate cancer	Screening, Treatment
2	Renal dialysis	peritoneal, renal
3	Sickle Cell	Screening
4	Sickle Cell	Hydroxyurea
5	Malaria vaccine	R21/RTS vaccine
6	Malaria AP/AL	AP-AL, AP-AA, AP_DHAP
7	New antibiotics	Ceftazidime + Avibactam
8	New antibiotics	Ceftaroline fosamil
9	New antibiotics	Piperacillin + Sulbactam

The topic selection criterion used in the group exercise is outlined in the current HTA process guidelines, including the total potential users of the health technology, clinical benefit, cost-effectiveness, economic burden of the disease, household burden, and equity in health considerations.

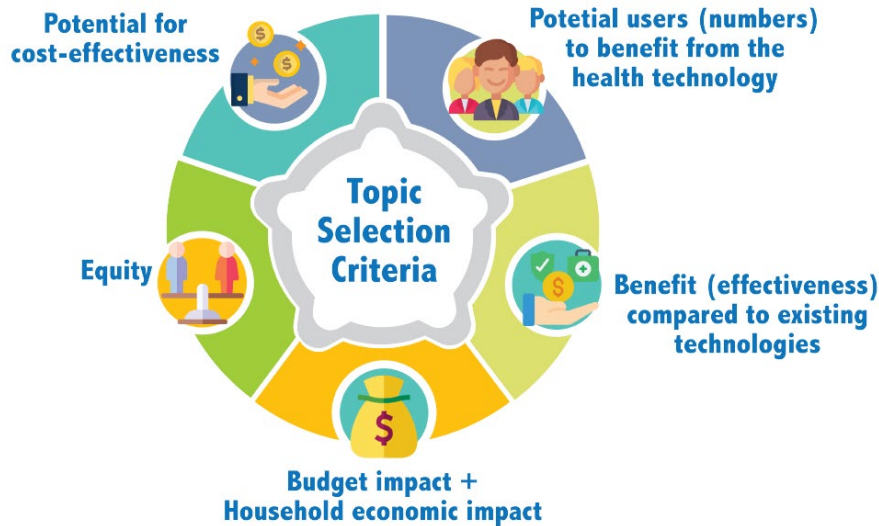


Figure 10 Criteria for topic selection retrieved from the Ghana 1st edition HTA Process Guideline.

Group discussion: Topic selection criteria

Among the nine health interventions, renal dialysis, prostate cancer treatment, and malaria vaccine are the first top 3 topics prioritized and gained the most consensus among the groups to be invested in the Ghana context.

Owing to the current public attention in Ghana, renal dialysis has particularly gained public interest because of the media coverage, which may influence the groups' decision for the urgent needs in evidence to support the policy decision-making process. Prostate cancer treatment was discussed to be prioritized due to the issues of gender inequity in cancer treatment available in Ghana. Currently, there are several cancer treatments under the National Health Insurance Scheme (NHIS), namely for cervical cancer and breast cancer. However, there are limited drugs for cancer treatment in men that are under the benefit package. Therefore, the groups decided to prioritize prostate cancer treatment in the Ghana context.

Given that malaria is a life-threatening disease primarily found in tropical countries like Ghana, a vaccine for malaria was thought to be relevant and important to be prioritized by the government. Since Ghana is the first country to approve the Malaria vaccine, R21/Matrix-M vaccine, for use by Ghana's Food and Drugs Administration (FDA) in children aged 5-36 months, the groups discussed that the vaccine could be implemented to prevent death in children and should be prioritized by the government.

After the group presentation, the groups also discussed any reflections and experiences from the exercise; the participants mentioned the challenges regarding the topic prioritization process such as the requirement of a scoring system, data unavailability, additional information such as social and cultural context as well as lack of evidence and participatory process and need of gender representativeness. Potential solutions to overcome the identified challenges were also noted and shared by the HITAP team in addressing similar issues found in the Thailand context. This includes defining the scoring system, investment in research, involvement of other evidence-informed deliberative processes, and gender equality in the representation of decision-making for the topic selection process.

Roles of stakeholders and tools for the topic selection process

On the following day, the ice-breaking questions were asked to explore participants' opinions regarding stakeholders' involvement in topic nominations and selection process, as well as participants' awareness of their roles and responsibilities. Education, training, increased communication and dissemination by the HTA secretariat, and clear assignment were mentioned as key activities to increase awareness of roles and responsibilities in the topic selection and nomination process.

Following that, Ms. Aye Nandar recapped the first-day workshop, including the key discussion points and exercise outcomes, as well as the importance of the topic appraisal process. Based on the participants' interest, Thailand's example of scaling topic prioritization across a set of criteria was shared.

The factors to consider for the HTA process were presented, ranging from governance structure and budget to conflict of interest and making consensus decisions. During this presentation, an NHIA representative from Ghana discussed the political interference in the HTA process and how to navigate it, as this political support is critically important in Ghana's context.

In response to this, HITAP shared the principles used successfully to rewrite the health system reform movement in Thailand. The "*Triangle that Moves the Mountain*" is a conceptualized strategy initiated as a social movement tool for solving difficult social problems by simultaneously strengthening capacity in three interrelated sectors: (1) creation of relevant knowledge through research; (2) social movement or social learning; and (3) political involvement, representing each angle of the triangle (Figure 11).

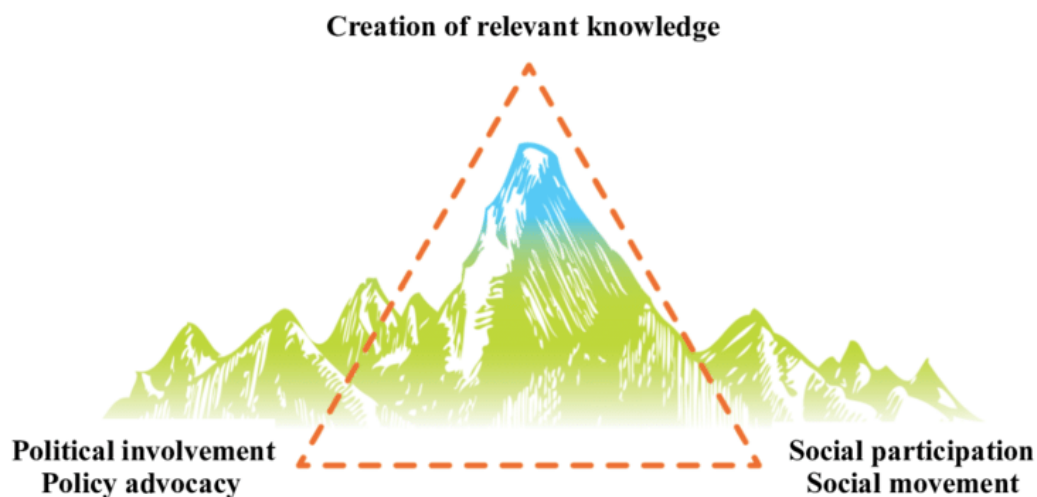


Figure 11 The illustration by Ungsuchaval et al¹. Representing the 'Triangle that moves the Mountains.'

Additionally, the history of PD first policy in Thailand, as well as the study of two groups of monoclonal antibodies (FDA approved and off-label) used in neuromyelitis optica spectrum

¹ Ungsuchaval T. NGOization of Civil Society as Unintended Consequence?. Premises on the Thai Health Promotion Foundation and its pressures toward NGOs in Thailand. 2016 Jun 28.

disorder was shared by Ms. Benjarin Santatiwongchai highlighting how HTA was applied as a decision support tool in political environment.

Panel discussion: What comes next following the topic selection process?

The session was followed by a panel discussion on 'what comes next after the topic selection.' Dr. Daniel Opoku from Kwame Nkrumah University of Science and Technology (KNUST) discussed stakeholder engagement. He stressed the importance of it throughout the whole HTA process and to co-design, co-create, co-implement and co-evaluate the research at different levels of stakeholders (national, regional, districts, and community). He also shared his expert opinion on the mainstreaming process, for instance, patients' groups being part of the HTA process, which enhances transparent and evidence-based outcomes. The research should be informed as a package that the people see HTA has an impact on NHIA, which in turn can create the demand for HTA work and feed into the agenda of policymakers, donors, and academics for sustainability.

Ms. Belynda Amankwa from UNDP shared about the budget allocation and the role of donors in which she expressed the effort of donors on developing the right strategies and policies, being catalytic, and supporting the institutionalization of the HTA process in the country. She also added that mainstreaming of the HTA process in Ghana should be led by the government/country itself, and hence, it becomes the foundation for the need for HTA work for future sustainability.

Ms. Benjarin Santatiwongchai, on the other hand, shares the insight on communication that there should be a good strategy for raising awareness of HTA, tailoring the information based on the target audience, and translating research into evidence and its value on policy decision-making. HTA communication is one of the trust-building pathways in HTA work. Moreover, she also pointed out the role of internal communication and building relationships with the internal stakeholders for a better understanding of the context and making deliberative decisions in concluding the plenary session.



Figure 12 Panel discussion on the role of HTA communication, stakeholder engagement, and resource allocation and budgeting for the next steps

Activities and discussions: Development of implementation strategy

In the afternoon session, interactive group discussions were performed in terms of key factors in the HTA process implementation strategy in Ghana. Under this topic, six key areas were considered: technical human resources, infrastructure, link to policy, stakeholders, legal framework and funding. Each group discussed the strengths, weaknesses, and areas for improvement for each category. Key discussion points are summarized below.

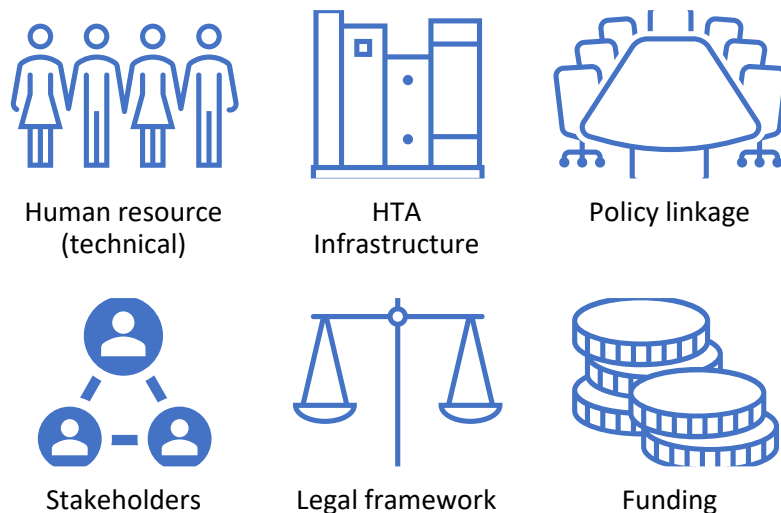


Figure 13 Key factors in HTA process implementation strategy

Human resources

Firstly, the human resource aspect of HTA implementation is crucial. Ghana boasts strengths such as having its work peer-reviewed by international experts, a well-established HTA secretariat, access to highly qualified and experienced experts, and a network of academics. However, challenges include capacity-building needs, gaps in expertise in certain areas, delays in output due to full-time equivalent (FTE) constraints, and issues related to motivation and interest.

To address these challenges, strategies involve establishing structured networks within the HTA community, reassigning or redeploying staff, instituting periodic monitoring and evaluation mechanisms, re-engaging the Technical Working Group (TWG), and integrating HTA into the curriculum of training institutions.

HTA infrastructure

In terms of infrastructure, Ghana has developed guidelines and possesses an NHIA cost database for reimbursement claims. Still, it faces weaknesses such as a lack of defined thresholds, insufficient cost-saving data from HTA, and a lack of a centralized data registry. The group discussed that improvement can be achieved by collecting more data for equity assessment.

Linkage to policy

Linking HTA to policy decisions is another critical aspect. Ghana has a strong ability to link evidence to policy, including policy briefs, standard treatment guidelines, and collaboration with service providers. However, there is a need for more data, improved documentation, enhanced stakeholder engagement, effective communication, and the strengthening of governance structures. Achieving these goals involves capacity building, simplifying information for users, creating awareness, and enhancing governance structures.

Stakeholder engagement

The stakeholder mapping exercise was introduced as part of the group activity to facilitate the discussion. High-power and high-interest stakeholders include the Ministry of Health (MOH), the National Medicine Committee, big pharmaceutical companies, the National Health Insurance Authority (NHIA), and development partners. Areas of improvement for stakeholder

engagement were seen in high-power, low-interest stakeholders like the Presidency and the public, as well as high-interest, low-power stakeholders such as civil society organizations (CSOs) and academia. On the other hand, the Food and Drug Administration (FDA) and private health insurance companies (PHIS) were listed as low-power and low-interest stakeholders. To improve stakeholder engagement, public sensitization, collaboration, and advocacy efforts are commented on in the discussion.

Legal Framework

Regarding the legal framework, Ghana has made progress with an assessment of the legal framework related to HTA in Ghana, HTA process guidelines and policies and governance structures (TWG, SC, HTA Secretariat). However, more needs to be done, including legislation for the conduct of HTA, implementation of recommendations within specified timelines, and ensuring that the law is binding but flexible. Participants brought up advocacy, stakeholder engagement, comprehensive HTA policies, and collaboration with monitoring and evaluation bodies as part of improvement areas to achieve these goals.

HTA funding

Discussing about funding, Ghana has been successful in winning grants and using resources efficiently, but there's room for improvement through stronger partnerships with other agencies, transparent funding arrangements, mainstreaming HTA into MOH work plans, and attracting funding for topics of public interest. The discussion focused on the roles of international partners and their funding for the HTA activities. Many participants realized the importance of internal support from MOH, Ghana, as external funders may shift their focus to other areas, which will affect the development of HTA in Ghana. The plan for sustainable funding for HTA activities was discussed. This can be achieved through stakeholder engagement, effective communication, and the development of legal frameworks to facilitate transparent private sector funding.

In conclusion, the development of an HTA process implementation strategy in Ghana requires a multifaceted approach that addresses human resources, infrastructure, policy linkages, stakeholder engagement, legal frameworks, and funding. Mitigation strategies are vital to overcoming weaknesses and challenges, ultimately leading to a more effective and sustainable HTA system in the country.



Figure 14 Group photo to wrap up Day 2 activities

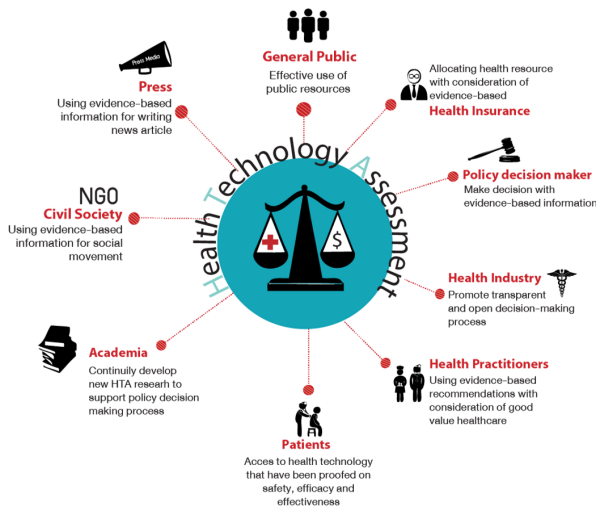
HTA communications

Introduction to HTA communications

Day 3 of the workshop began with the introduction to HTA communications which underscores the critical role effective communication plays in the field of health technology assessment. The core principle here is that engagement leads to impact (Figure 15), highlighting the need to capture and maintain the audience's attention. Ms. Benjarin emphasizes the essential factors to be considered, including the source of information, clear objectives, understanding the target audience, crafting compelling messages, selecting appropriate formats and channels, and specifying the type of communication objective, whether it is creating awareness, disseminating information, or calling for action.

Introduction to HTA Communication	How to communicate?	How to produce a policy brief?
-----------------------------------	---------------------	--------------------------------

Why do we need communication in HTA?



Engagement leads to impact

Figure 15 Usefulness of HTA communication (retrieved from Ms. Benjarin's presentation)

Furthermore, the AIDA model (Attention, Interest, Desire, Action) was introduced as a guiding framework for effective communication within the HTA context. This model can also be used to track performance with different goals and key performance indicators (KPIs) at different stages of communication (Figure 16).

Examples of contents for HTA, format, and communication were briefly mentioned to match the audience with the media consumption behavior as well as the age of users.

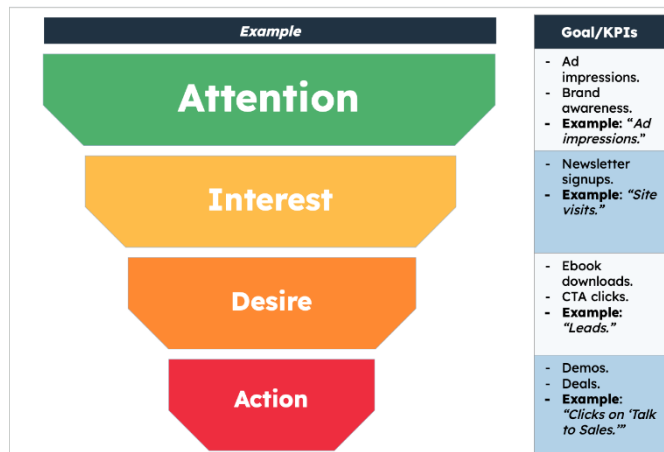


Figure 16 AIDA model for performance track

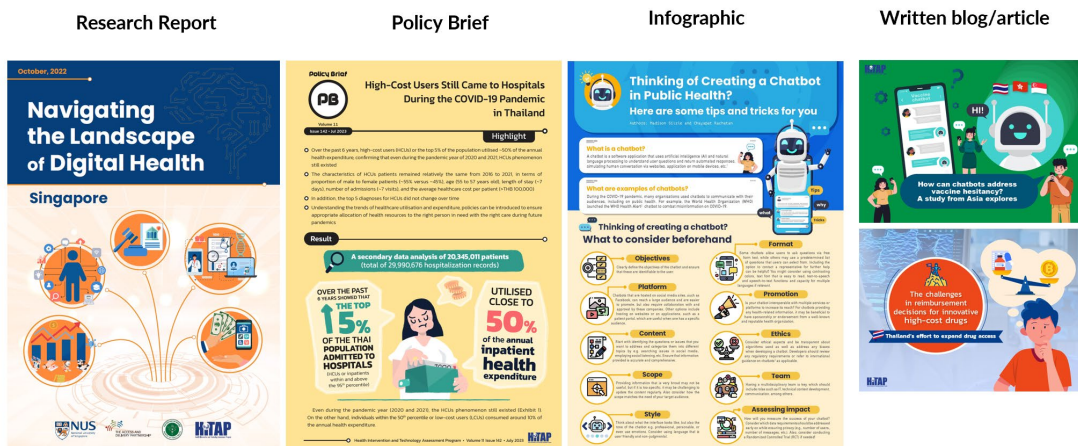
Additionally, a deep understanding of the audience, distinguishing between primary decision-makers and secondary influencers, is vital for tailoring the communication strategy effectively.

Insights on the 'window of opportunity' were also shared as a pivotal role in maximizing the impact of HTA communication where the intersecting time of problems, policies and politics finds the need for HTA evidence most acute. Then, the presentation continues with sharing HITAP's communication principles of sincere dialogue, tailor-made information and messages, and two-way stream which in combination with diverse media products (e.g., social media, face-to-face, publications, academic forum, radio spot) empower communicators to select the most suitable channels and moments to maximize the impact of HTA communications in the dynamic landscape of healthcare decision-making.

HITAP's experience with HTA communications

Next, Ms. Kanokporn Srivarom, a communication officer from HITAP, shared HITAP's experiences in Health Technology Assessment (HTA) communication, emphasizing the critical role of translating intricate research findings into accessible formats and content for non-experts. HITAP's outlets were showcased through various means (Figure 17), such as policy briefs, reports, press releases, videos, podcasts, and motion graphics, along with notable campaigns like the Covid Marathon and the launch of Thailand's UCBP website as well as Nual's step challenges. In response to inquiries by participants about HTA communication operations and funding, Ms. Benjarin highlighted HITAP's dedicated budget allocation and the other collaboration strategies with media funding agencies, influencers, and international media partners. Inspired by this exchange, the Ghana team initiated discussions on creating a new HTA materials landing page under the Ministry of Health Ghana's website, fostering collaborative knowledge-sharing and advancement in HTA communication strategies.

Non-verbal



Verbal: Podcast series



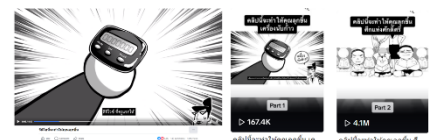
Verbal: Video, Motion Graphic/Animation

Collaboration works with expert and influencer in Thailand



Assistant Professor Phinit Limsukhon, MD.
Area of expertise: Neurology.
Dispelling myths, breaking down the misconception and misunderstanding about treatments which could potentially affect out-of-pocket payment of patients in Thailand.

3M+ views 192K+ views



Nual's Step Challenge

Introducing 'Sedentary Behaviour' to the public.

Research project on 'The Physical Activity at Work (PAW): a cluster randomized trial of a multicomponent short-break intervention to reduce sitting time and increase physical activity among office workers in Thailand'

4M+ views 141K+ views

Figure 17 Examples of HITAP verbal and non-verbal communication materials

The session was delivered by a Q&A session where the participants were asked about their opinions on the principles of HTA communication in Ghana. Factors such as the need for unified form/reporting templates, guidelines for accuracy and balance of HTA research translation, and simplicity were brought into the answer. Another question was regarding the pain point for HTA communication in Ghana, for which the attendees mentioned limited funding, capacity in HTA communication, media training/workshop, and internal and external communications that should be fixed with communication in the Ghana context.

Activities and discussions: Communication strategy

After that, the participants were divided into two groups for a communication strategy exercise focusing on the pain point, objective, target audience, key message, media product type and campaign timeline specific to the Ghana context.

Some of the interesting key messages for raising awareness were brought up during the discussion such as '*HTA: for a healthy population*' and '*saving your life and saving cost*'. Moreover, it was suggested that formal channels (e.g., Facebook, LinkedIn, TikTok, YouTube, etc.) and informal channels (e.g., church, market activations, billboards) should be applied for HTA communication in Ghana. Target audiences include MOH, NHIA, MOF, and clinicians, and the key message could be sharing HTA experience from other countries to producing reports, policy briefs, and documentaries. The participants also highlighted campaign timelines based on activities and key performance indicators at the end of the discussion. See Appendix 3 for the group work on the communication strategy for HTA in Ghana.



Figure 18 Group exercise on HTA communication strategy

Introduction to the Policy Brief

The afternoon session continued with fruitful discussions on developing policy briefs and getting hands-on experience after a short introduction about 'writing a policy brief' by Ms. Benjarin. Insights on the importance of policy briefs and key considerations were shared along with examples and tips/tricks such as visualization and following the up-to-date trend.

Activities: Policy brief creation

For the exercise, the participants were given two published papers from Ghana (related to Hypertension and Burkitt lymphoma) to develop policy briefs. The HTA communication workshop ends with a presentation by each group regarding their own policy brief.

In conclusion, the teams presented their work on the policy brief and commented on the other team for the completeness and relevance of the content to the selected audience. Overall, the participants learned the key components of a policy brief as well as tips and techniques to produce an informative message that is compelling and attractive for policy audiences.

Economic Evaluation proposal workshop for Renal dialysis

Activities: Introduction to kidney disease

The final two days of the workshop were dedicated to drafting the economic evaluation proposal for renal dialysis in Ghana. The workshop kick-started with an activity related to '*introduction to chronic kidney disease (CKD)*' where groups of participants discussed the different stages of CKD progressions with potential interventions as well as the advantages and disadvantages of kidney transplantation, hemodialysis and peritoneal dialysis.

The current state of kidney disease in Ghana

Afterward, Dr. Abdul-Jalil Inusah, a Nephrologist, gave a presentation on the overview of the burden of kidney disease, the management of kidney failure, the current state of dialysis, and the challenges of dialysis services in Ghana. The burden of kidney disease in Ghana presents a significant challenge, particularly due to its impact on the young and productive segment of the population. This not only affects individuals but also places a considerable strain on the healthcare system and the country's productivity. One of the primary challenges faced in combating kidney disease is the prohibitive cost associated with Kidney Replacement Therapy (KRT). Most affected individuals cannot afford the expenses linked with this essential treatment. Hence, there's an urgent need for sustainable funding options to make KRT more accessible to those in need.

Another critical issue contributing to the burden of kidney disease is the inadequate workforce specialized in nephrology and the inequitable distribution of dialysis services. Dialysis centers are not uniformly distributed across the country, resulting in disparities in access to critical care. Additionally, there is a pressing need to increase the number of skilled healthcare professionals trained in nephrology to cater to the growing demand for dialysis services. Furthermore, there exists a low level of awareness and knowledge about kidney disease among both the general populace and primary healthcare providers. This lack of awareness often leads to delayed diagnoses and inadequate management of the condition at its early stages. He emphasized that efforts should be made directly toward educating the public and healthcare providers about the risk factors, symptoms, and preventive measures related to kidney disease.

In summary, Dr Inusah proposed solutions by addressing the burden of kidney disease, which necessitates a multifaceted approach. While focusing on treatment and dialysis services is crucial, more emphasis should also be placed on prevention strategies. Preventive measures, including lifestyle modifications, early screening programs, and public health campaigns, are essential in reducing the incidence of kidney disease and its associated complications. This presentation serves as a fundamental problem statement of the chronic kidney disease situation in Ghana.

Activities and discussions: defining the decision problem

Following the presentation, Ms. Siobhan Botwright led the step-by-step group activity on 'defining the decision problem' starting with the set of objectives. Participants highlighted the importance of improving the quality of life, reducing catastrophic expenditures of the population, providing patient access to services, and reducing budget impact for the National Health Insurance Agency (NHIA). Then, these objectives were mapped with current problems related to chronic kidney disease in Ghana and potential interventions were identified, including peritoneal dialysis (PD), hemodialysis (HD), kidney transplantation, screening for

CKD among high-risk groups, slowing prevention of CKD, public education campaigns, and training GPs/specialists for early CKD detection.



Figure 19 Group exercise on defining decision problem

The afternoon session resumed with consolidating the discussion points from the morning activity and laying out the proposal based on the Ghana Reference Case and the CHEERS 2022 checklist². The interventions were identified as screening for chronic kidney disease, hemodialysis, and peritoneal dialysis on the basis that these interventions were likely to be a high cost but could also bring significant health benefits, and decisions on these interventions fall within the mandate of the NHIA (payer). The main outcomes of interest were cost-effectiveness (in terms of the QALYs/DALYs) and long-term budget impact for financial sustainability. Measures to consider equity and financial protection were also discussed.

Model types and structures

Another important presentation on model types and structures was introduced by Dr. Gunjeet Kaur, National University of Singapore (NUS), where she explained the choice of models such as decision trees and Markov models. Examples of economic evaluation models of chronic renal disease were also introduced, which allowed participants to assess different model types and structures.

Activities: Creating Markov Model structure (schematic) for renal dialysis in Ghana

Then, four groups developed model structures for screening and renal dialysis in consideration of relevance to a policy question, appropriateness in the context of Ghana, and additional scenarios based on discussions.



Both the Markov model and decision tree with Markov structure were chosen for evaluating the end-stage kidney disease screening and treatment. Each group presented their version of Markov models while appreciating the challenges of study scoping and the roles of stakeholder consultations in validating the model structure.

Figure 20 Group exercise on creating Markov Model structure for renal dialysis

² Husereau, D., Drummond, M., Augustovski, F. *et al.* Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) statement: updated reporting guidance for health economic evaluations. *BMC Med* 20, 23 (2022).

Day 4 concluded with sharing examples of model structures for ESRD intervention in different countries such as Thailand, Indonesia, Philippines, and China.

Activities and discussions: Markov model in Excel

The final day of the workshop started with a training exercise on Markov modeling in Excel to look at the cost-effectiveness of a drug to prevent chronic disease following an acute infection. The purpose of this exercise was to show how a Markov model structure translates into a model in Excel and for participants to practice writing equations.



Figure 21 Group exercise on Markov model in Excel

Activities and discussions: Data collection for Ghana CKD study

Following this, group activities were carried out to populate a dialysis model for Ghana, mainly focusing on effectiveness and transition probabilities from moving from one health state to another, resource use/costs, and utilities/quality of life.

Costs related to complications of hemodialysis and peritoneal dialysis, as well as palliative costs, were also mentioned to be added to the model. Various data sources were identified for the model, such as the hospital registry, Ghana HTA reference case, World Bank, Ministry of Finance, bank of Ghana, OECD health, systematic review, primary data collections, and expert opinion.

Activities and discussions: Value of information analysis

After the identification of data sources for modeling, participants were asked to conduct a qualitative value of information (VOI) analysis to identify when it is appropriate to invest extra time and money in collecting better quality data (e.g., primary data collection or a systematic review). This was based on the scoring of magnitude (level of expected uncertainty from lack of evidence or disagreement between data sources), relevance (the degree to which the parameter was expected to influence which intervention is most cost-effective), and reducibility (the extent to which the uncertainty can be reduced by conducting a study or collecting better data).

Attendees presented the total scores for each parameter and discussed the prioritization, as higher scores should be prioritized for more effort-intensive data collection. Overall, hospital records and published data sources were attached to high scores, and expert opinion appeared to be at a lower score. One of the groups proposed a modification to the methodology to show the relative benefit of one data source over another.

Uncertainty analysis

Ms. Siobhan gave a brief overview of uncertainty analysis in economic evaluation, which helped me understand how well the model represents reality. Some of the methods, such as Deterministic Sensitivity Analysis (DSA) and Probabilistic Sensitivity Analysis (PSA), were introduced before moving to the last activity of the workshop.

Activities and discussions: Scenario analysis

This group activity was to consider uncertainty factors that may influence policy outcomes and whether to account for these factors for modeling as model parameters during scenario analysis or not to include them explicitly in the model.

For uncertainty about implementation, the team mentioned factors such as HD dropout rates (model parameter/scenario), rate of referral to a nephrologist (model parameter/scenario), transition between HD and PD (model parameter), and political hesitation (no inclusion as a parameter, add in discussion). When it comes to uncertainty about the future, dialysate supply and price (model parameter), service utilization (scenario), NCD screening policies, sustainable funding sources, and political will (no inclusion as a parameter, add in discussion) were discussed.

Wrap-up

After wrapping up key activities that were conducted under the economic evaluation proposal workshop over the two days, Dr. Brian from MOH stressed the importance of timely analysis of the study for evidence generation, resource requirement (human/financial), and stakeholder engagement for timely intervention. He noted that the HTA team in Ghana had already planned and committed to finalizing the study protocol and conducting the study. He also shared briefly about the Markov model implemented in Malawi for malaria disease. Then Ms. Kanchanok from HITAP summarized all the workshop activities before ending the session.

Mr. Saviour Kwame Yevutsey, the Deputy Director of Pharmaceutical Services at the Ministry of Health Ghana, delivered the closing remark highlighting the strengthening of Ghana's HTA capacity through the collaboration between donors, the technical advisors, namely Health Intervention and Technology Assessment Program (HITAP) and the Ministry of Health (MoH) in Ghana. The dedication and commitment exhibited by the Ghanaian HTA team in actively participating in the topic selection workshop, communication training, and proposal development sessions were evident throughout the five-day workshop. This collaborative platform has not only increased awareness but has also equipped stakeholders with advanced HTA communication strategies and laid the groundwork for a research proposal focusing on ESRD in Ghana's context.



Figure 22 Group photo at the end of the workshop

Workshop feedback from participants

The workshop feedback was conducted through survey sparrow at the end of each day. The survey comprises ten questions, both multiple-answer questions and open-ended questions.

Overall, there were 18 participants who answered the survey. Nearly 90% of participants strongly agreed that the content of the workshop was well-prepared, while 78% thought that this workshop enhanced their knowledge about the topic. Almost 84% of participants mentioned that they would apply the knowledge gained from this workshop in their future activities, and all participants (100%) would recommend this workshop to their peers.

Interestingly, the majority of participants preferred the mode of workshop activities as case studies (71%), practical exercise (65%), and group discussion (65%), while almost a third of participants preferred activities in lecture and Q&A sessions. The full details of the workshop survey report for each day can be found in Appendix 4.

HITAP team reflections

An After-Action Review (AAR) was conducted within the HITAP organizing team to reflect on what went well and what could have been done differently.

In general, the organizing team had a positive reflection on the outcomes of the visit. They were able to assist the Ghanaian team on the application of Ghana HTA guidelines and reference cases in topic selection and prioritization, developing policy briefs with Ghana studies and economic evaluation proposals for renal dialysis in Ghana, for which the Ghana team was planning to proceed forward as an immediate next step. Delegations from diverse backgrounds attended the workshops, which enhanced discussions, and they expressed satisfaction with the visit and its outcomes.

The organizing team also acknowledged the importance of carefully planning and executing study visits depending on the local context. Moreover, in-person interaction was also highlighted as crucial for enhancing engagement, contributing to the workshop's success. Ultimately, the workshop assisted the real-world application of the HTA process in Ghana and established the groundwork for future collaboration between HITAP and MoH Ghana.

Looking forward

Through a comprehensive workshop, professionals gained insights into topic selection, HTA communication strategies, and proposal development, aligning with Ghana's HTA guidelines. The collaborative effort, supported by the Access and Delivery Partnership, aimed to boost awareness and build capacity, propelling Ghana towards evidence-based healthcare decision-making. The success of this workshop sets the stage for implementing HTA practices, fostering continued capacity building, nurturing collaborations, and monitoring progress toward greater efficacy and informed decision-making.

To further build internal capabilities and sustain this collaborative momentum, ongoing collaboration is anticipated to guide the HTA Ghana team on the ESRD proposal and the economic evaluation study through activities such as staff exchange and knowledge exchange activities. These initiatives are pivotal in fortifying Ghana's HTA expertise and maintaining the vibrancy of international collaborations in evidence-based healthcare decision-making.

Annexures

Annex 1: Agenda and workshop activities

Agenda for HITAP visit to Ghana for topic selection, HTA communication, and proposal development workshop

Background

The Health Intervention and Technology Assessment Program (HITAP), a semi-autonomous research unit in the Ministry of Public Health, Thailand, has been working with the Ministry of Health (MoH), Ghana, to support the development of HTA institutionalization and HTA capacity building in Ghana. Through the collaboration with the Access and Delivery Partnership (ADP), MoH Ghana has subsequently expressed interest in building HTA capacity and learning from Thailand's experience on the HTA institutionalization process, particularly in the topic selection process through a topic selection workshop in Ghana, where professionals from the Ghanaian HTA team can have first-hand experience in topic selection process following the recent developed HTA process guideline and a reference case.

This study visit is the second phase of a proposed two-phase collaboration wherein the Ghana team visited Thailand in the first phase between the 5th and 9th of December 2022. HITAP will host a topic selection workshop and communication training for relevant HTA stakeholders in Ghana. This agenda focuses on the second phase, which includes a topic selection workshop, communication training, and proposal development workshop. The sessions will be in the form of webinars, presentations, discussions, and group-work exercises.

Objectives:

- To raise awareness and build the capacity of the HTA in Ghana. Specifically:
 - The topic selection process and criteria for selecting topics,
 - The HTA communication strategy,
 - The proposal development of the End-stage renal dialysis (ESRD) case study model from the HITAP team.
- To apply the knowledge of such a platform to Ghana's setting following the launch of Ghana HTA Process guideline and reference case,
- To discuss the next steps on future collaborations.

Expected outcomes:

- Increased awareness of HTA and HTA capacity in Ghana,
- Advanced HTA communication strategies to support the HTA implementation process,
- Developed a research proposal focusing on ESRD in Ghana's setting,
- Strengthened collaboration for HTA institutionalization between Ghana and Thailand.

Date: 30 September - 7 October 2023

Location: Accra, Ghana

Participants: HTA secretariat Ghana, Ministry of Health (MoH), Ghana, and HITAP staff.

Funding on the local arrangement: the Access and Delivery Partnership (ADP).

Schedule

Date	Activity
Sat 30 Sep	<ul style="list-style-type: none"> • Leave Bangkok, Thailand • Arrive in Accra, Ghana
Sun 1 Oct (afternoon)	<p>Title: Preparatory session with Ghana HTA Secretariat core team</p> <ul style="list-style-type: none"> • Preparatory meetings with the core team, location checking, going over materials, etc.
Topic selection workshop	
Mon 2 Oct	<p>Title: Topic selection workshop for HTA in Ghana Day 1 (full day)</p> <p>Topics:</p> <ul style="list-style-type: none"> • Section 1: Importance of topic selection in HTA • Section 2: Topic Selection process in different settings • Section 3: Application of criteria for selecting topics
Tue 3 Oct	<p>Title: Topic selection workshop for HTA in Ghana Day 2 (full day)</p> <p>Topics:</p> <ul style="list-style-type: none"> • Section 4: What is important after topic selection? • Section 5: Implementation strategy
Communication training	
Wed 4 Oct	<p>Title: HTA communication training (full day)</p> <ul style="list-style-type: none"> • Morning – Introduction to HTA communication, approach, and exercise • In the afternoon, How do you produce a policy brief? (Lecture and group work)
HTA study workshop	
Thurs 5 Oct	<p>Title: Day 1 - Renal dialysis economic evaluation proposal workshop (HITAP and HTA secretariat team) (full-day)</p> <p>Topics:</p> <ul style="list-style-type: none"> • Chronic kidney disease in Ghana • Policy question scope • Defining the decision problem (GROUP WORK) • Model structure
Fri 6 Oct	<p>Title: Day 2 - Renal dialysis economic evaluation proposal workshop (HITAP and HTA secretariat team) (full-day)</p> <p>Topics:</p> <ul style="list-style-type: none"> • Overview of Excel model • Adapting and parameterizing the model (GROUP WORK) • Uncertainty (ACTIVITY) • EE proposal
Sat 7 Oct	<ul style="list-style-type: none"> • Leave Accra, Ghana • Arrive in Bangkok, Thailand

Full details of each agenda item are available below.

Activity 1: Topic Selection workshop for HTA in Ghana

Date: 2-3 Oct 2023

Venue: Airport view hotel

Objectives:

- To raise awareness on topic selection on HTA
- To develop a protocol for topic selection for HTA in Ghana

Sections:

- Section 1: Importance of topic selection in HTA
- Section 2: Topic Selection process in different settings
- Section 3: Application of criteria for selecting topics
- Section 4: What is important after topic selection?
- Section 5: Implementation strategy

Participants:

- High-level officers - Steering committee and HTA secretariats
- Representatives of stakeholders working on health in Ghana
- Experience with HTA: Varied technical working groups, etc.
- Expected number: 40 confirmed.

Scope of Activities:

- The workshop is aimed to raise awareness of HTA in Ghana and increase the understanding of the topic selection process.
- The success of the workshop will rely on the active participation of attendees in lectures, panel sessions, and group work.
- Groups will be formed through random assignments during the first group session, and participants will continue to work with the same group for the rest of the workshop.
- Participants will be requested to complete a short survey on HTA in Ghana during the workshop. Results will be presented on the final day.
- Reading materials will be shared with participants during the workshop.
- Participants will be asked to provide feedback on sessions through evaluation forms.

Outputs:

- Presentations and briefs from group work
- Workshop Report on Topic Selection
- A draft protocol on topic selection/implementation strategy for Ghana (elaborate from Process guide)

Schedule:

DAY 1				
Topic Selection for HTA - Day 1 of 2				
Time	Session	Description	Type	Person (s)

				Responsible
9:00 – 9:15	Opening ceremony			MOH Ghana
9:15 – 10:00	Importance of topic selection in HTA	<ul style="list-style-type: none"> Health Technology Assessment- Sharing experiences: “HTA to Policy in Thailand” Why do we need to do HTA for topic selection? 	Presentation	HITAP
10:00 – 12:00	Group exercise on Investment/ Disinvestment	<ul style="list-style-type: none"> Groups discuss criteria to be used for selecting topics and stakeholders involved. Instructions will be provided in the exercise handout Groups present on discussion and rationale 	Group Work	HITAP
12:00 – 13:00		<ul style="list-style-type: none"> Presentations on approach to HTA topic prioritization in different settings: Thailand Overview of the topic selection process in Ghana 	Presentation	HITAP and Ghana team (Dr. Brian Asare)
Lunch Break				
14:00 – 16:00	Group exercise on applying protocols for topic selection	<p>Priority Setting in Ghana HTA: Application of topic selection criteria.</p> <ul style="list-style-type: none"> Participants will be divided into two groups: Both groups will rank topics following the guidance of topic selection criteria in the Ghana HTA process guideline. Both groups will apply topic selection criteria to assess a topic with reference to Ghana. Topics will be taken from Ghana's priorities list. Each group is to present the results of their discussion (15 minutes each) on: <ul style="list-style-type: none"> Priority list & rationale. Topic selection criteria used. Application of topic selection process in Ghana. Challenges found during the decision-making process. 	Group Work	All

		<ul style="list-style-type: none"> Resources or additional information needed to aid the decision-making. 		
DAY 2				
Topic Selection for HTA - Day 2 of 2				
9:00 – 9:15	Recap from yesterday's discussion	<ul style="list-style-type: none"> Key takeaways of topic and selection criteria in Ghana 	Discussion	All
9:15 – 10:00	Roles of Stakeholders and Tools for Topic Selection Process	<ul style="list-style-type: none"> Role of the stakeholders Tools for the topic selection process Q&A 	Discussion	HITAP
10:00 - 11:00	What is important after topic selection?	<p>Panelists will discuss the following (15 mins each):</p> <ul style="list-style-type: none"> Role of communication Community engagement Funding Q&A 	Panel	HITAP and Ghana
11:00 - 13:00	Group Exercise: Development of implementation strategy	<ul style="list-style-type: none"> The session aims to develop a proposal, tools, or strategy for topic selection in Ghana following the process guidelines. Participants will be divided into two groups (work in world café style): <ul style="list-style-type: none"> Group I will work on identifying the strategy plan and activities to address issues in human resources, infrastructure, and link to policy. Group II will work on identifying the strategy plan and activities to address issues stakeholders, legal framework, and funding for selected topics. 	Group work	All
Lunch Break				
14:00 – 15:00	Group Exercise: Development of implementation strategy	Group Presentation on the implementation strategy	Group work	All
15:00 - 16:00	Next step	Discussion on the implementation strategy of the topic selection process in Ghana	Discussion	HITAP and Ghana

		<ul style="list-style-type: none"> • Presentation: Implementation Strategy of the Topic Selection Process in Ghana • Define the timeline and next activities • Plan for the output of the workshop • Wrap-up and closing remarks 		
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Activity 2: HTA communication training

Date: 4 Oct 2023

Venue: Airport view hotel

Objectives: To raise awareness and develop capacity in Ghana's HTA communication strategy framework.

Expected outcomes: Advanced HTA communication strategies to support the HTA implementation process,

Participants: Communication capacity building (sub-groups of TWG) and secretariats, MOH public relations officers, public health programs, and association (i.e., saving consortium).

Capacity: Maximum 20 people

- 1) Sub-group of TWG approx. 2
- 2) Secretariats: 10
- 3) MOH PRO approx. 2
- 4) Saving consortium comm group approx. 4 (TBC)

HTA communication training				
Time	Session	Description	Type	Person (s) Responsible
9:00 – 9:45 (45 minutes)	Introduction to HTA communication	Topics: <ul style="list-style-type: none"> • What is HTA communication? • Why do we need communication? • HITAP's experience with HTA communication • HITAP products • Who should be our target audience? (e.g., stakeholder identification and mapping) • Who should be our target audience? (e.g., stakeholder identification and mapping) • Selecting the right content for the target audience: What is the content for HTA? (e.g., problem framing, root cause analysis, and data visualization) • How do you determine the platform/communication channels? 	Lecture	HITAP and Ghana team
10:00–13:00	How to communicate?	Topics: <ul style="list-style-type: none"> • Discussion: Ghana's communication pain point, media usage behavior. Identify the target audience. Objective for HTA 	Discussion and exercise	HITAP

		<p>communication. The key message for the communication campaign.</p> <p>Exercise:</p> <ul style="list-style-type: none"> • Ghana’s HTA communication strategy. Plan communication for each target group. • Presentation by each group and feedback. 		
Lunch break				
NHIA visit				

Activity 3: HTA study – proposal development workshop

Date: 5-6 Oct 2023

Venue: Airport View Hotel

Objectives:

- Capacity building for the HTA secretariat and TWG members
 - To provide training on the process for economic evaluation proposal development, including decision problem definition, model choice and structure, and analysis methods.
 - To provide practical experience applying the Ghanaian reference case to develop a model structure and methods for economic evaluation.
- Proposal development for economic evaluation of renal dialysis
 - To jointly define the decision problem for renal dialysis inclusion under the national health insurance scheme between the modeling team, clinical experts, and the payer.
 - To draft a study proposal to conduct an economic evaluation (cost-utility analysis and budget impact analysis) of introducing renal dialysis into the NHIS benefit package in Ghana.

Expected outcomes:

1. Template economic evaluation proposal that may be used for future studies.
2. Draft proposal for economic evaluation of renal dialysis interventions (bullet point form).
3. Plan the next steps for study completion and future collaboration with HITAP.

Participants:

- HTA secretariat: 10
- HTA Technical Working Group: 15 (TBC)
- National Health Insurance Scheme: 1
- National medicine selection committee: 1
- Others: up to 5

Agenda:

Day 1 of Renal Dialysis economic evaluation proposal workshop (Thursday, 5th October)			
Time	Session	Lead	Description
9:00-9:15	Welcome	HTA secretariat	<ul style="list-style-type: none"> - Round of introductions - Meeting objectives - Overview of agenda
9:15-10:00	Introduction to kidney disease (ACTIVITY)	HITAP + All	<ul style="list-style-type: none"> - Consent form + initial research question - Activity 1: stages of CKD and interventions (15 mins) - Activity 2: ESKD interventions (15 mins)
10:00-10:15	Kidney disease in Ghana	National Medicine Selection Committee	<ul style="list-style-type: none"> - Burden of disease - Treatment guidelines - Provision and access to care
10:15-10:30	Policy question scope	NHIS	Clarify required outputs from the decision, scope, and relationship to other decisions.
BREAK			
11:00-12:30	Defining the decision problem (ACTIVITY)	HITAP + All	<ol style="list-style-type: none"> 1. Understand the problem & define objectives (30 mins) 2. Identify potential interventions (30 mins) 3. Sketch a consequences table (30 mins)
LUNCH			
13:30-14:30	Defining the decision problem (PLENARY)	HITAP + All	<ol style="list-style-type: none"> 4. Refine the problem framing (compare groups) (30 mins) 5. Complete Population, Intervention, Comparator, Outcomes, Perspective + other relevant sections (30 mins)
BREAK			
15:00-15:30	Model choice	NUS	Recap of model types and structure
15:30-17:00	Model structure (GROUP WORK)	NUS + All	<ol style="list-style-type: none"> 1. Draft a model structure in groups (45 mins) 2. Peer review of model structures (15 mins) 3. Complete rationale and description of the model, time horizon, and discount rate (30 mins)

Day 2 of Renal dialysis economic evaluation proposal workshop (Friday 6th October)			
Time	Session	Lead	Description
9:00-10:00	Overview of Markov model (GROUP WORK)	NUS + All	Provide a demo of an Excel model for CKD and/or a simple exercise of a model in Excel.
10:00-10:30	Data collection plan (GROUP WORK)	NUS/HITAP + All	Identify appropriate data sources (including international vs local data)
BREAK			
11:00-12:00	Data collection prioritization (GROUP WORK)	HITAP + All	<ul style="list-style-type: none"> - Conduct qualitative VOI to prioritize data collection - Complete EE proposal: outcomes & measurement and valuation of resources
12:00-12:30	Uncertainty (GROUP WORK)	HITAP + All	<ul style="list-style-type: none"> - Reference case + scenario analysis - Complete EE proposal: characterizing uncertainty, characterizing heterogeneity, analytics + assumptions
LUNCH			
13:30-14:30	Finalise EE proposal	HITAP/NUS + All	Complete EE proposal, including stakeholder engagement plan, timelines, roles + responsibilities of the research team
14:30-15:30	Malaria model	HTA secretariat	The present proposal for malaria vaccine economic evaluation for feedback from the HITAP/NUS team
15:30-16:30	Next steps	All	Discuss the next steps and future collaboration between HITAP and the HTA Secretariat.
MEETING CLOSE			

Useful materials:

- Video: “Power of HTA.” Link: <https://www.youtube.com/watch?v=QnmnyZ14A4w>
- “Price of Life”: <http://thepriceoflife.net/>
- How to write a research proposal: GEAR - Tools (gear4health.com)

Renal replacement therapy reading materials:

Kerala:

- The Hindu. In Kerala, a free peritoneal dialysis scheme was initiated in 11 districts. Feb 2022: <https://www.thehindu.com/news/national/kerala/in-kerala-free-peritoneal-dialysis-scheme-initiated-in-11-districts/article38366032.ece>

Cross-country lessons on dialysis policy:

- How do we meet the demand for good-quality renal dialysis as part of universal health coverage in resource-limited settings? : https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4797124/pdf/12961_2016_Article_90.pdf
- To include or not include: renal dialysis policy in the era of universal health coverage: <https://www.bmj.com/content/368/bmj.m82>
- Dispelling the myths of providing dialysis in low- and middle-income countries: <https://www.nature.com/articles/s41581-020-00346-7?proof=t>

Thailand:

- Economic Evaluation of Palliative Management versus Peritoneal Dialysis and Hemodialysis for End-Stage Renal Disease: Evidence for Coverage Decisions in Thailand: [https://www.valueinhealthjournal.com/article/S1098-3015\(10\)60455-X/pdf](https://www.valueinhealthjournal.com/article/S1098-3015(10)60455-X/pdf)
- Universal coverage of renal dialysis in Thailand: promise, progress, and prospects: <https://www.bmj.com/content/346/bmj.f462>
- Video on “Using Evidence in Healthcare Decision-Making for Equitable and Sustainable Outcomes”: <https://www.youtube.com/watch?v=me2Ouew46U8&t=79s>

Indonesia:

- Economic evaluation of policy options for dialysis in end-stage renal disease patients under the universal health coverage in Indonesia: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0177436>

The Philippines:

- Filtering for the best policy: An economic evaluation of policy options for kidney replacement coverage in the Philippines: <https://onlinelibrary.wiley.com/doi/full/10.1111/nep.13830>

Annex 2: List of participants' organization

No.	Organizations
1	Ministry of Health (MoH), Ghana
2	National Health Insurance Authority (NHIA)
3	University of Cape Coast
4	Cape Coast Teaching Hospital (CCTH)
5	United Nations Development Programme (UNDP)
6	Food and Drugs Administration (FDA)
7	Kwame Nkrumah University of Science and Technology (KNUST)
8	University of Ghana (UoG)
9	University of Health Allied Sciences (UHAS)
10	BSGH-Lab Ghana Office
11	Ghana Health Service (GHS)
12	IQVIA
13	Cape Coast Teaching Hospital (CCTH)
14	Korle-Bu Teaching Hospital
15	Christian Health Association of Ghana
16	The International Maritime Hospital (IMaH)
17	Christian Health Association of Ghana (CHAG)
18	Tetteh Quarshie Memorial Hospital (TQMH)
19	C. K. Tadam University of Technology and Applied Sciences (CKT-UTAS)
20	Health Intervention and Technology Assessment Programme (HITAP)

Annex 3: Group work on communication strategy for HTA in Ghana

[Group work] COMMUNICATION STRATEGY FOR HTA

PAIN POINT: Importance and Impact of HTA

Objectives:

- To increase awareness and understanding of HTA in managing healthcare expenditure
- To communicate the benefits and achievements of HTA in safeguarding healthcare's social and financial aspects.

Audience: General Public: Segmented into the formal and informal sectors.

Key message:

- Limited resources for health expenditure (We don't have money to pay for everything. We need to pay for the most important things that offer the most benefit first while we raise more money.
- We need tools to help us prioritize (know what is most important for the population. HTA is the most effective and transparent way to meet this need. HTA is an inclusive and participatory process that gives us the best value for the money we spend. It uses evidence to measure the safety, effectiveness, and economic value of everything we spend.
- Spending wisely for a healthy population.

Media products:

Formal

- Social Media (LinkedIn, WhatsApp, Facebook, X, Instagram, Youtube)
- Website (Dedicated page on MOH website for HTA, Gallery, HTA inquiries, and Google search optimization. Ristoka to obtain formal approval)
- Traditional Media (Radio and Television)
- Print (Newspapers, Flyers)

Informal

- Churches and Mosque
- Television
- Market activations, information van
- Billboards
- WhatsApp
- Social media handles should share links from the website.

Annex 4: Workshop feedback

HITAP THAILAND | Ghana topic selection/communication/HTA proposal workshop- Feedback Survey

Default Report

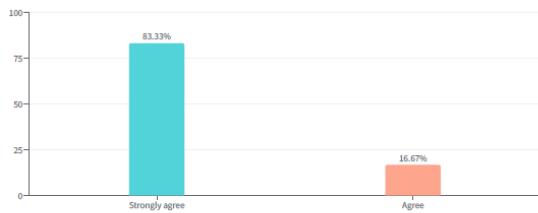
Explore the data behind your survey responses. Gain a better perspective of your survey data and uncover insights for further planning.

📄 Visited
👤 Started
🕒 Avg. Time to Complete
✅ Completed
📊 Completion Rate

25
18
2m
18
100.00%

QUESTION 03 | MULTIPLE CHOICE
 I will apply the knowledge gained from this workshop in my future activities

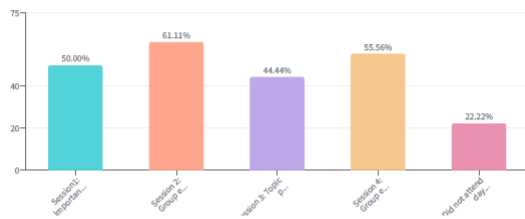
Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Strongly agree	15	83.33 %
Agree	3	16.67 %

QUESTION 04 | MULTIPLE CHOICE
 Which sessions on day 1 did you find most useful?

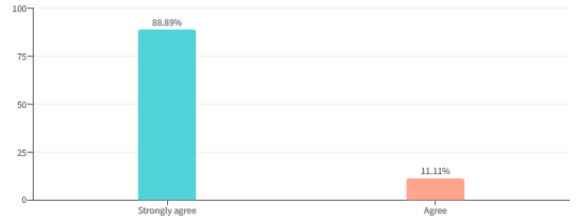
Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Session 1: Importance of topic selection in HTA	9	50.00 %
Session 2: Group exercise - Investment/disinvestment	11	61.11 %
Session 3: Topic prioritization in other settings - sharing experience from Thailand and others.	8	44.44 %
Session 4: Group exercise - Application of topic selection criteria	10	55.56 %
Did not attend day 1	4	22.22 %

QUESTION 01 | MULTIPLE CHOICE
 The content of the workshop was well prepared

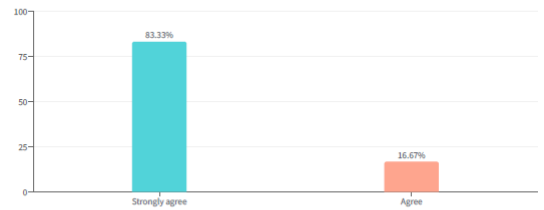
Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Strongly agree	16	88.89 %
Agree	2	11.11 %

QUESTION 02 | MULTIPLE CHOICE
 I will apply the knowledge gained from this workshop in my future activities

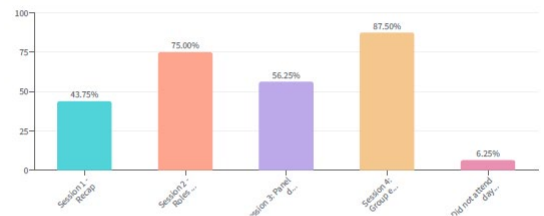
Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Strongly agree	15	83.33 %
Agree	3	16.67 %

QUESTION 05 | MULTIPLE CHOICE
 Which sessions on day 2 did you find most useful?

Answered: 16 Skipped: 2

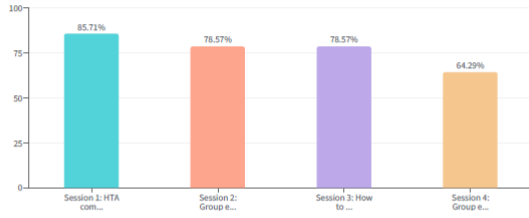


ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Session 1 - Recap	7	43.75 %
Session 2 - Roles of stakeholders and tools for selection process	12	75.00 %
Session 3: Panel discussion - What is important after topic selection?	9	56.25 %
Session 4: Group exercise - development of implementation strategy	14	87.50 %
Did not attend day 2	1	6.25 %

QUESTION 06 | MULTIPLE CHOICE

Which sessions on day 3 did you find most useful?

Answered: 14 Skipped: 4

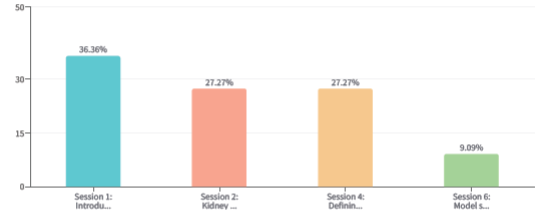


ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Session 1: HTA communication	12	85.71 %
Session 2: Group exercise - Ghana's HTA communication strategy	11	78.57 %
Session 3: How to develop a policy brief?	11	78.57 %
Session 4: Group exercise - policy brief creation	9	64.29 %

QUESTION 07 | MULTIPLE CHOICE

Which sessions on day 4 did you find most useful yesterday?

Answered: 11 Skipped: 0

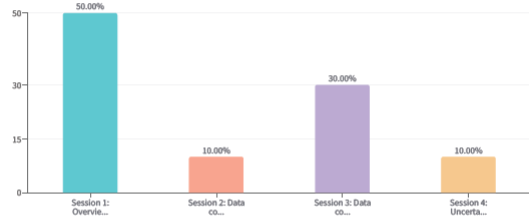


ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Session 1: Introduction to kidney disease (ACTIVITY)	4	36.36 %
Session 2: Kidney disease in Ghana - shared by Nephrologist	3	27.27 %
Session 4: Defining the decision problem (ACTIVITY)	3	27.27 %
Session 6: Model structure (ACTIVITY)	1	9.09 %

QUESTION 08 | MULTIPLE CHOICE

Which sessions on day 5 did you find most useful?

Answered: 10 Skipped: 0

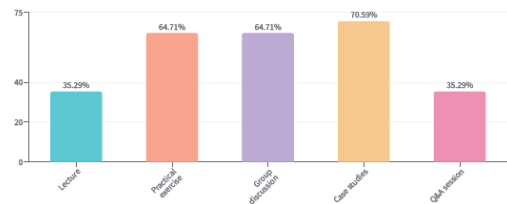


ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Session 1: Overview of Markov model (GROUP WORK)	5	50.00 %
Session 2: Data collection plan (GROUP WORK)	1	10.00 %
Session 3: Data collection prioritisation (GROUP WORK)	3	30.00 %
Session 4: Uncertainty (GROUP WORK)	1	10.00 %

QUESTION 09 | MULTIPLE CHOICE

What mode of activities you have liked to see more of in the workshop?

Answered: 17 Skipped: 1

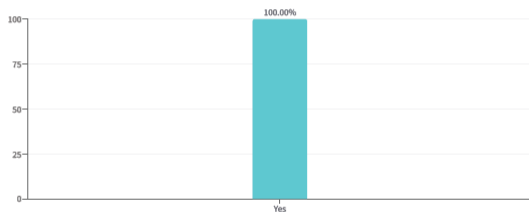


ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Lecture	6	35.29 %
Practical exercise	11	64.71 %
Group discussion	11	64.71 %
Case studies	12	70.59 %
Q&A session	6	35.29 %

QUESTION 10 | YES OR NO

Would you recommend this workshop to your colleagues?

Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	RESPONSE PERCENTAGE
Yes	18	100.00 %