

## HTAi 2021 Virtual Annual Meeting: Workshop Abstracts

Saturday, June 19, 2021 - Full Day Session from 08:00 to 15:00 (UTC)

WS02

**Title:**

HTA 102: How HB-HTA impacted by the pandemic: role, steps of an evaluation-rapid assessment and implementation of its recommendation

**Authors & Affiliations:**

**Dr. Marco Marchetti<sup>1</sup>, Prof Americo Cicchetti<sup>2</sup>, Dr. Laura Sampietro-Colom<sup>3</sup>, Dr. Rossella Di Bidino<sup>4</sup>, Dr. Kristian Kidholm<sup>5</sup>, Prof. Matteo Ruggeri<sup>1</sup>**

*<sup>1</sup>Istituto Superiore di Sanita', Rome, Italy, <sup>2</sup>ALTEMS - Alta Scuola di Economia e Management dei Sistemi Sanitari-Università Cattolica del Sacro Cuore, Rome, Italy, <sup>3</sup>Hospital Clinic Barcelona, Barcelona, Spain, <sup>4</sup>Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy, <sup>5</sup>Center for Innovative Medical Technologies, Odense University Hospital, Odense, Denmark*

**Abstract:**

This workshop will deepen understanding the role of Hospital Based HTA on the decision making; participants will learn the steps for developing an assessment in hospital-based context and tools to perform a rapid assessment; it will be presented the implementation process of its recommendations. For each section there is an analysis of the impact of the pandemic.

The coronavirus pandemic has changed the global scenario regarding healthcare and the use of tools such as HB-HTA. Operational processes have become much faster and there has been a greater need for information on technologies for diagnosing and treating COVID. Which of these had a rationale, some potential evidence, which impact on the organization and which costs. All questions to which the Hospital Based HTA was asked to give answers that required its reorganization both of a methodological and operational type. The workshop aims to illustrate these changes resulting from real experiences lived in different parts of the globe.

1. Main role of HB-HTA – functions
2. Has HB-HTA role changed as a consequence of the pandemic?
3. Steps for a HB-HTA, relying on AdHopHTA
4. Rapid Assessment? Criteria
  - 4.a. Assessment of clinical outcomes, evidence level and safety
  - 4.b. Assessment with real world HTA
  - 4.c. Assessment of patient perception
  - 4.d. Assessment of economic consequences
  - 4.e. Assessment of organizational consequences
  - 4.f. Assessment of other potential aspects: Strategical, legal, ethical etc.
  - 4.g. How to ensure the quality of HB HTA?
5. Implementation process of the HB-HTA recommendations into the hospital decision making. Impact of pandemic
6. Discussion and closing
  - To give the participants:
    - an understanding of how HB HTA can be organized, produced and implemented at hospitals as the basis for decisions on investment in new health technologies
    - skills to produce high quality HB HTAs on their hospitals on the basis of the evidence from the AdHopHTA project.
  - To show potentials of HB-HTA to push for value-based innovations in hospitals
  - To discuss examples of HB HTAs including assessments of innovative, digital health technologies produced within hospitals.
  - To share the challenges and strategies to implement and carry out HB-HTA in the pandemic context

**Saturday, June 19, 2021 - Full Day Session from 08:00 to 15:00 (UTC)**

WS03

**Title:**

Advanced Workshop In Information Retrieval: The NICE Information Services Team, Innovative Automation Tools, and Unlimited Possibilities!

**Authors & Affiliations:**

**Dr. Siw Waffenschmidt<sup>1</sup>, Ingrid Harboe<sup>2</sup>, Caroline Miller<sup>3</sup>**

*<sup>1</sup>Institute for Quality and Efficiency in Health Care (IQWiG), Cologne, Germany, <sup>2</sup>Norwegian Institute of Public Health (NIPH), Oslo, Norway, <sup>3</sup>National Institute for Health and Care Excellence, Manchester, UK*

**Abstract:**

The HTAi Information Retrieval Group workshop will focus on how the NICE information services team works; their collaboration in the UK and internationally. We will also explore automation technologies and tools to improve searching and study identification. This workshop allows participants the opportunity to learn new advances in information retrieval and share innovative experiences and practices with other expert searchers.

The HTAi Information Retrieval Group (IRG) holds its advanced skills workshop each year at the HTAi Annual Meeting. This year we will focus on how the NICE information services team works and their collaboration with information specialists in the UK and internationally. We will also explore automation technologies and tools to improve searching and study identification. This annual workshop allows participants the opportunity to learn new advances in information retrieval and share their innovative experiences and practices with other expert searchers.

Part 1: Presentation of the NICE information services team. How the team works focusing on information support for the production of NICE guidance including HTA, methodological challenges, projects and collaboration with external stakeholders.

Part 2: This session will introduce new and already established automation tools for searching, information retrieval and screening. It will provide best practice on how to implement the tools. The session will also facilitate a discussion on the role of information specialists within HTA and implications of utilising the technologies within evidence synthesis workflows. In addition, tools provided due to the COVID-19 crisis will be discussed.

The workshop will include interactive activities, e.g. hands-on exercise, group and plenary discussions. Previous workshops in information retrieval have generated vibrant discussion and lots of engagement among the participants. This annual workshop allows participants the opportunity to learn new advances in information retrieval and share their innovative experiences and practices with other expert searchers.

Saturday, June 19, 2021 - Half Day Session from 08:00 to 11:00 (UTC)

WS06

**Title:**

Values In Doing Assessments Of Healthcare Technologies

**Authors & Affiliations:**

**Mr. Bart Bloemen<sup>1</sup>, Mr. Gert Jan Van der Wilt<sup>1</sup>, Mrs. Carla Fernandez Barceló<sup>2</sup>**

<sup>1</sup>Radboudumc Nijmegen, Nijmegen, Netherlands, <sup>2</sup>Fundació Clinic per la Recerca Biomedica, Barcelona, Spain

**Abstract:**

HTA is widely seen as a specific type of policy-research. However, in its course of development it has failed to take account of crucially important insights from policy sciences. The VALIDATE (VALues In Doing Assessments of healthcare TEchnologies) project aims to redress this and offers an e-learning course, an accompanying handbook, and appropriate opportunities for internships at European HTA Agencies. The goal of this workshop is to introduce participants to methods from the VALIDATE e-learning course that help to address challenges in estimating the value of new and disruptive technologies. The goal is to be able to conduct a comprehensive assessment that provides relevant information to policy decision makers that try to achieve universal health coverage.

- Introduction: Important lessons from policy sciences for HTA – Van der Wilt (30 min)

- Experiences of a VALIDATE participant (Fernandez Barceló)

- Break (15 min)

- Practical exercise – VALIDATE team (90 min)

How do I find out what type of policy problem I'm dealing with?

How do I decide what type of policy analysis is appropriate?

How can I foster learning among stakeholders?

- Lessons learned and wrap-up (30 min) – Van der Wilt

HTA as learning

Re-thinking the role of facts and values in HTA

Participants will be able to explain how HTA may be conceived as a specific type of policy research, and why that matters. Specifically, they understand

That policy problems come into different types

That the type of policy problem critically determines what type of policy-analytic approach is appropriate

How the method of reconstructing stakeholders' interpretive frames can be used to determine the type of a policy problem

The role of facts and values in HTA

Saturday, June 19, 2021 - Half Day Session from 12:00 to 15:00 (UTC)

WS07

**Title:**

Horizon scanning of new and emerging health technologies (medicines, devices, diagnostics and digital) for HTA stakeholders

**Authors & Affiliations:**

**Mrs Sonia Garcia Gonzalez-Moral<sup>1</sup>, Dr. Anne Oyewole<sup>1</sup>, Dr. Sarah Khalid Khan<sup>1</sup>, Prof. Dawn Craig<sup>1</sup>**  
*<sup>1</sup>NIHR Innovation Observatory - Newcastle University, Newcastle Upon Tyne, United Kingdom*

**Abstract:**

In this workshop, horizon scanning experts from the UK NIHR Innovation Observatory will share their experience and insights gained from the set up and delivery of the national horizon scanning service for medicines in England. The team will reflect on the intrinsic challenges and opportunities faced whilst designing a national horizon scanning system for devices, diagnostics and digital technologies.

Horizon scanning (HS) can provide early insights about innovative health technologies with the potential for significant impact on patients, services and costs, and is therefore a crucial initial step in the HTA process for healthcare systems. HS methodologies vary across organizations and need to adapt to the needs of their stakeholders. The NIHR Innovation Observatory utilises a combination of HS methodologies to scan for medicines, devices, diagnostics and digital technologies and have developed a digital solution, integrating big data analytics, text-mining, active monitoring and industry engagement in one searchable platform.

This workshop will cover developing HS processes, from discovery and monitoring, to elimination and early notification to HTA bodies. It will include the following interactive components:

- Criteria for defining HS purpose, scope and time frames
- Sources for identifying innovative technologies (medicines, devices, diagnostics and digital): evaluation and challenges
- Dissemination of information: tools and frequency

This workshop will benefit participants involved in using HS for local/national planning and wider healthcare commissioning. The workshop will employ a scenario-based learning approach throughout, and interactive polling.

Participants will be able to set the basis for a robust, transparent and efficient HS system fit for their stakeholder's needs, select relevant available sources and identify appropriate dissemination method.

Saturday, June 19, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS08

**Title:**

A hands-on workshop on the theory and practice of assessing the impact of health technology assessment

**Authors & Affiliations:**

**Dr. Sophie Werkö<sup>1</sup>, Dr. Lotte Groth Jensen<sup>2</sup>, Mairin Ryan<sup>4</sup>, Dawn Craig<sup>3</sup>, Dr. Heather Logan<sup>5</sup>, Tara Schuller<sup>1</sup>**  
<sup>1</sup>International Network of Agencies for Health Technology Assessment, Edmonton, Canada, <sup>2</sup>DEFACTUM – Social & Health Services and Labour Market, Aarhus, Denmark, <sup>3</sup>National Institute for Health Research, Southampton, United Kingdom, <sup>4</sup>Health Information and Quality Authority, Dublin, Ireland, <sup>5</sup>Canadian Agency for Drugs and Technologies in Health, Ottawa, Canada

**Abstract:**

Many HTA agencies evaluate the impact (or influence) of their HTA reports. Participants in this educational workshop will learn about current approaches to conceptualizing and measuring HTA impact. Facilitated by staff at HTA agencies that are members of INAHTA, this session will engage participants in a hands-on activity to apply the INAHTA Impact Framework to case studies.

HTA agencies need to produce and disseminate reports in ways that align well with decision making processes and to facilitate the uptake of HTA evidence by the health system. HTA impact assessment can provide insights into what factors help or hinder the influence of HTA reports. Through impact assessment, agencies can understand how to tailor their reports to the context in their country or region with a view to optimizing the influence of HTA reports on policy and administrative decisions. Impact assessment also aims to understand the influence of HTA evidence on downstream health system implementation choices and patient outcomes.

A faculty of senior HTA practitioners and impact experts from INAHTA will present the key issues and hot topics in the theory and practice of HTA impact. Participants will be divided into groups to analyze two HTA case studies using the INAHTA impact framework. The workshop will include presentations from four HTA agencies about their experiences in impact assessment and what they have learned. The workshop will conclude with a discussion session where participants can share their own experiences and views on HTA impact assessment. To conclude, a synthesis of learnings will be summarized.

The workshop will be "hands on" and offer value to those interested to learn about HTA programs and the decision makers they inform. Workshop participants will learn about different approaches to assessing HTA influence, and the facilitators and barriers to conducting HTA impact assessments. Participants will leave the session with a deepened understanding of the conceptual and practical aspects of measuring HTA impact, and gain a greater sense of confidence in creating or adapting an impact assessment process to their local health care setting.

Saturday, June 19, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS09

**Title:**

Environmental sustainability in HTA: methods and outputs workshop.

**Authors & Affiliations:**

**Dr Paul Dimmock<sup>1</sup>**, Ms Liz Islam<sup>1</sup>, Dr Yingying Wang<sup>1</sup>

<sup>1</sup>NICE, Manchester, United Kingdom

**Abstract:**

This will explore methods to incorporate environmental sustainability into HTA. It will use different approaches to capture the evolving global importance of sustainability for medical devices. Methods used will include weight of evidence, MCDA and CUA and will produce a proposed framework of environmental data sources, evidence requirements, environmental HTA outputs and gap analysis of use to payers and users. Industry is increasingly focussing on the environmental impact of products, due to growing global concern. HTA for clinical and cost effectiveness is advanced but lacks the methods and outcome measures to facilitate rationale decisions on innovative technologies in terms of environmental impact. This workshop will explore the available methods for diverse environmental impacts relating to medical devices, focussing on carbon economies, reduction in single use plastic and life cycle analysis. Using 3 methods of analysis, the session hopes to identify challenges in environmental impact models, data sources and outcome measures, in the form of a proposed directional framework.

The workshop will split into 3 groups after a brief introductory session. Each group will be provided with specific published resources related to their method and sustainability area. The groups will have structured proformas describing the emerging methods and outputs linked to current HTA methods for medical devices and will utilise internet search to inform this.

**Timings:**

- The introductory session will be 30 minutes,
- Methods and topic work will be 1 hour
- Result reporting, gap analysis and theme collation will be 1 hour
- Wrap up session to present the proposed framework will be 30 minutes

The outcome will be a thematic, directional framework of environmental data sources, evidence requirements, environmental HTA outputs and gap analysis of use to payers and users. A key objective will be guidance on which outputs could be usefully incorporated with HTA decisions to inform sustainable development of new technologies. A further objective will be to understand useful formats for assessing environmental outputs and accessibility for stakeholders to aid decision-making on adoption of innovative technologies. The session will help to build capacity in HTA methods for environmental sustainability and raise the profile of incorporating such outputs in adoption decisions.

Saturday, June 19, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS10

**Title:**

Introduction to Ethics in Health Technology Assessment

**Authors & Affiliations:**

**Mr. Duncan Steele<sup>1</sup>, Mr. Bart Bloemen<sup>2</sup>, Mr. Ken Bond<sup>3</sup>, Dr. Pietro Refolo<sup>5</sup>, Dr. Dario Sacchini<sup>4</sup>**

<sup>1</sup>Alberta Health Services, Calgary, Canada, <sup>2</sup>Radboud University Medical Centre, Nijmegen, The Netherlands, <sup>3</sup>Institute of Health Economics (IHE), Edmonton, Canada, <sup>4</sup>Università Cattolica del Sacro Cuore, Rome, Italy, <sup>5</sup>Department of Healthcare Surveillance and Bioethics, Università Cattolica del Sacro Cuore, Rome, Italy

**Abstract:**

The relevance of incorporating ethical analysis into HTA is increasingly acknowledged not only because many health technologies raise ethical, legal and social issues but also because HTA is an ‘evaluative process’ aimed at informing decision-making. This workshop offers a lively introduction to the role of ethics in HTA for people familiar with HTA, but not familiar with ethics in HTA.

The relevance of incorporating ethical analysis into an HTA is increasingly acknowledged not only because many health technologies raise ethical, legal and social issues but also because HTA is an “evaluative process” aimed at promoting more informed decision-making. In addition, rapid advances in progressive digitalization, disruptive innovations, and the questioning of established evidence requirements may challenge the established values of both individuals and the health systems upon which they rely. Accordingly, there is a need for experts involved in HTA to learn and to apply methods that can be used to explore potential ethical implications of health care technologies.

The course has been specifically developed for international participants and is based on more recent international achievements in the field. It will emphasize adapting approaches in ethics for all types of health technologies and across international settings. Participants who attend this course will strengthen their understanding and facilitate their participation in ethical assessment in HTA, as well their ability to participate in broader discussions. Most importantly it provides a number of approaches for ‘how to’ incorporate ethics into an HTA.

Objective: To learn and apply methods that can be used to explore potential ethical implications of health technology assessment.

After the preconference workshop participants will be able to:

- explain and acknowledge the role of ethical issues in HTA;
- recognize potential ethical issues in HTA and formulate appropriate research questions,
- learn about and practice applying basic methods for analysing ethical issues;
- know how to find and critically approach literature used when identifying ethical implications of health care technologies;
- describe different ways of synthesizing and communicating the results of an ethics analysis.

Saturday, June 19, 2021 - Half Day Session from 21:00 to 00:00 (+1 day) (UTC)

WS11

**Title:**

HTA 101 - Introduction to Health Technology Assessment

**<sup>1</sup>Authors & Affiliations:**

**Dr. Clifford Goodman<sup>1</sup>**

<sup>1</sup>*HThe Lewin Group, Virginia, United States*

**Abstract:**

This popular workshop is updated and offered at all HTAi annual meetings. It provides an understanding of important HTA concepts, methods, current issues, and trends to help attendees to engage fully in the annual meeting. Good for those who are new to HTA and those who want a “refresher” course. Course leader: Clifford Goodman, PhD, a past president of HTAi.

This popular workshop course has been updated and offered at all HTAi annual meetings for many hundreds of attendees. HTA 101 provides an understanding of essential HTA concepts, methods, and current international HTA issues and trends that will enable attendees to be more prepared to engage in the scientific program and other aspects of the annual meeting.

1. HTA origin, definitions, purposes, and roles
2. Health technology: types, applications, lifecycle
3. Factors affecting technology overuse, underuse
4. Properties and impacts assessed in HTA
5. HTA methods
  - Primary methods
  - Secondary/synthetic methods
  - Economic analyses
6. Evidence appraisal
7. Priority setting, moving target problem, rapid reviews

HTA 101 will provide: 1) a fundamental understanding of HTA for those who are new to the field, 2) overview of emerging concepts and trends in HTA, 3) refresher/update content for those with some HTA experience, and 3) greater ability to engage in and gain from the scientific program and other aspects of the annual meeting.



Sunday, June 20, 2021 - Full Day Session from 08:00 to 15:00 (UTC)

WS04

**Title:**

A Comprehensive Evaluation Of High-Tech Medical Equipment—Methods And Practices

**Authors & Affiliations:**

**Professor Yingyao Chen<sup>1</sup>, Dr. Xiaoling Huang<sup>1</sup>, Msc. Chen Zhang<sup>1</sup>, Dr. Yan Wei<sup>1</sup>, Msc. Yi Yang<sup>1</sup>, Mr. Zhilei Fan<sup>1</sup>**

<sup>1</sup>Key Lab Of HTA (National Health Commission), Fudan University, Shanghai, China

**Abstract:**

High-tech medical equipment is widely used for diagnosis, treatment and rehabilitation of disease or injury but receives less attention in the HTAi community. HTA's new definition promotes an equitable, efficient, and high-quality health system and raises challenges to the assessment and management of medical equipment. This workshop will present corresponding framework and methodologies and their implementation in the real world.

Although high-tech medical equipment like MRI and CT has been widely used globally, it is seldomly evaluated and presents many challenges for health technology assessment (HTA) and management. To address these challenges, the comprehensive evaluation framework and methodologies, including evaluations in terms of equity, economics, and efficiency, are critical to further optimize the management of high-tech medical equipment.

Taking MRI as an example, this workshop includes three sessions. First, the instructor will demonstrate a comprehensive evaluation framework for high-tech medical equipment and its special characteristics that are different from other health technologies. Second, the instructor will introduce in details methodologies for evaluations in terms of equity based on population and geography, economics, efficiency, and health services. Lastly, attendees will join a group for each of the methods to gain a better understanding.

Attendees are expected to understand the systematic evaluation of high-tech medical equipment and key methods to measure the outcome, e.g., equity evaluation(Gini index), spacial geography-based allocation evaluation by ArcGIS software, economic evaluation (cost-benefit analysis), utilization efficiency evaluation(data envelopment analysis, DEA) and health services utilization evaluation(panel data analysis). Attendees should have basic knowledge of hospital-based HTA. Through this workshop, they are expected to have basic understanding of methods that meet the requirements of medical equipment assessment.

Sunday, June 20, 2021 - Full Day Session from 08:00 to 15:00 (UTC)

WS05

**Title:**

Medical Devices Interest Group Workshop - Case Studies in Health Technology Assessment and Value Based Health Care

**Authors & Affiliations:**

Mr. Jamie Erskine<sup>1,7</sup>, **Mr Richard Charter<sup>2,7</sup>**, **Dr Rabia Kahveci<sup>3,7</sup>**, **Mr Scott Tackett<sup>4,7</sup>**, **Dr Sally Lewis<sup>5,7</sup>**, **Mr Andrea Rappagliosi<sup>6,7</sup>**

<sup>1</sup>King's College London, London, United Kingdom, <sup>2</sup>Alira Health, Basel, Switzerland, <sup>3</sup>Management Sciences for Health, Kiev, Ukraine, <sup>4</sup>Intuitive, , USA, <sup>5</sup>NHS Wales, Newport, UK, <sup>6</sup>Edward's Lifesciences, Nyon, Switzerland, <sup>7</sup>Medical Devices Interest Group, ,

**Abstract:**

There is a rapidly growing body of scientific literature regarding both HTA and Value-Based Healthcare (VBHC) as applied to MedTech. Through a series of case-studies, this workshop will investigate how these advances can be realized in practice. The session will cover surgical robotics, diabetes technology and cardiac implants to explore how HTA and VBHC can aid implementation of innovative technology.

Through a series of case-studies, this workshop will move beyond the methodological differences in the evaluation of MedTech and Pharmaceuticals. Using real-life experiences, the speakers will distinguish the roles of HTA and Value-Based Healthcare (VBHC) in the evaluation and implementation of medical technologies and discuss value based access programs (managed entry agreements) for medical technologies.

Welcome and Introductory session: Presented by Richard Charter and Rabia Kahveci.

Case-study 1: Robotically-assisted Surgery, presented by Scott Tackett.

Break

Case-study 2: Diabetes Management Technology, presented by Richard Charter and Sally Lewis.

Lunch

Case-study 3: Cardiac Implants, presented by Andrea Rappagliosi.

Group Discussion

There will be an availability for questions and discussion after each case-study, followed by a full discussion session following the final case-study.

This Workshop aims to provide the participants with a comprehensive understanding of how HTA and VBHC methods can be used in practice. It will further the goals and mission of the Medical Devices Interest Group, including advancing the dialogue on Medical Device HTA methods and evidence based policy-making to develop the way we evaluate a rapidly evolving technology sector.

Sunday, June 20, 2021 - Half Day Session from 08:00 to 11:00 (UTC)

WS12

**Title:**

An Introduction To Early Health Technology Assessment

**Authors & Affiliations:**

**Dr. Janneke Grutters<sup>1</sup>, Dr. Geert Frederix<sup>2</sup>, Prof.dr. Kari Kvaerner<sup>3</sup>, Dr. Linn Stome<sup>3</sup>, Dr. Marcia Tummers<sup>1</sup>**

<sup>1</sup>Radboud university medical centre, Nijmegen, Netherlands, <sup>2</sup>University Medical Centre Utrecht, Utrecht, Netherlands,

<sup>3</sup>Oslo University hospital, Oslo, Norway

**Abstract:**

Health systems around the globe face challenges to provide equal access to innovative technologies, while managing budgets. Early HTA addresses this challenge by informing and steering the development, research and implementation of non-drug technologies from multiple perspectives. In this workshop we provide a practical and interactive introduction to state-of-the-art methods that can be used before clinical evidence is available.

Health systems around the globe face challenges to provide equal access to innovative and effective health technologies, while managing health budgets. To address this challenge, we need to reconsider why, when and how we assess innovative technologies. Early health technology assessment (HTA) explores the potential value of technologies under development, including methods to quantify and manage uncertainty. It differs from traditional HTA in that it aims at informing and steering the development and research of innovations, instead of evaluating them. This workshop will help to build capacity in the field of early HTA.

In this workshop participants will learn the principles of early HTA and apply them in a case study. As an introduction we will play an interactive, fun game in teams. Second, we present and discuss the background and theory of evaluation of innovation, (Grutters, 30 minutes). Third, we explain and use participatory approaches for early HTA (Tummers, 40 minutes). Fourth, we explain and use early health economic modeling (Frederix, 40 minutes). We will finalise the workshop by introducing a practical framework for early decision support in HTA (Kvæerner/Støme, 40 minutes). Throughout the workshop there will be time for interactive discussions.

At the end of the workshop, participants will know what early HTA is, and why and how it can be used in innovative healthcare technologies. They will also learn how it can steer the development and research of these technologies. Participants will gain a basic understanding of the methodologies that can be used for early HTA.

Sunday, June 20, 2021 - Half Day Session from 08:00 to 11:00 (UTC)

WS13

**Title:**

Simplifying horizon scanning with the use of digital solutions

**Authors & Affiliations:**

**Ms Maria Pokora<sup>1</sup>, Mrs Savitri Pandey<sup>1</sup>, Dr Jawad Sadek<sup>1</sup>, Mr James Woltmann<sup>1</sup>**

<sup>1</sup>The National Institute For Health Research Innovation Observatory, Newcastle upon Tyne, United Kingdom

**Abstract:**

The National Institute for Health Research Innovation Observatory (NIHRIO) has been working on identifying and implementing effective and efficient ways of conducting the horizon scanning searches with the use of digital technologies. The workshop is a practical demonstration of the methods used to develop one of our digital solutions and an interactive guide for users.

Horizon Scanning methods often involve complex, manual and time-consuming data searches across sources of various structure and format. This process can result in inefficiencies, duplications and lots of data cleaning.

The National Institute for Health Research Innovation Observatory (NIHRIO) has been working on implementing effective and efficient ways of conducting the horizon scanning searches with the use of digital technologies, including web crawling and Natural Language Processing (NLP). ScanMedicine is one of the solutions currently in development at NIHRIO. It incorporates big data and artificial intelligence tools to enable flexible, open access to intelligence about new and emerging health technologies.

The workshop is a practical demonstration of the methods used to implement ScanMedicine, as well as an interactive guide to the most effective and useful ways the tool can be utilised to support an informed decision making.

The session will entail:

- 1) Examples of information sources used, and how we collect and process the data
- 2) An overview of the ScanMedicine architecture underpinning the platform
- 3) ScanMedicine demo with examples of searches

The participants will gain understanding of the purpose and potential uses of ScanMedicine. Further to this, the users will be given the opportunity to participate in an interactive discussion around the development plans of the platform, and the pros and cons of using it to inform decision making.

Sunday, June 20, 2021 - Half Day Session from 12:00 to 15:00 (UTC)

WS14

**Title:**

Conceptualizing patient-involvement in countries with expanding healthcare coverage: Identifying opportunities in Low- and Middle-Income Countries (LMICs)

**<sup>2</sup>Authors & Affiliations:**

Dr. rer. nat., MBA Anke-Peggy Holtorf<sup>1</sup>, Ms Debjani Mueller<sup>2</sup>, Dr. Sharmila Sousa<sup>3</sup>, Ms Lauren Pretorius<sup>4</sup>, Mr Dipen Ankleshwaria<sup>5</sup>, Prof. Dr. Denny John<sup>10,11</sup>, Mr Kalman Wijaya<sup>6,7</sup>, Mr Sylester Adeyemi<sup>8</sup>, Mr John Vianney Amanyanya<sup>9</sup>  
<sup>1</sup>Health Outcomes Strategies GmbH, Basel, Switzerland, <sup>2</sup>CMeRC, Johannesburg, South Africa, <sup>3</sup>Independent Research Consultant, Sao Paulo, Brazil, <sup>4</sup>Campaigning for Cancer, Pretoria, South Africa, <sup>5</sup>Novartis, Dubai, UAE, <sup>6</sup>Oxford University, Oxford, UK, <sup>7</sup>Merck Sharp Dome (MSD), Zürich, Switzerland, <sup>8</sup>Data-Lead Africa, Abuja, Nigeria, <sup>9</sup>Uganda Alliance of Patient Organizations, Kampala, Uganda, <sup>10</sup>Amrita Institute of Medical Sciences & Research Centre, Kochi, India, <sup>11</sup>PharmaQuant, Kolkata, India

**Abstract:**

In this workshop we aim to conceptualize patient and public involvement (PPI) and to outline approaches on how to drive PPI in Low- and Middle-Income countries (LMIC) and to put patients at the heart of healthcare. After exploring examples of emerging Patient and Public Involvement (PPI), the participants will interactively elaborate the determinants for PPI and specific requirements in LMICs.

Patient and Public Involvement (PPI) in HTA can help prioritise health technologies that meet the need of patients and improve patient health outcomes. Therefore, processes and methodologies are developed to involve patients in a fair and methodologically consistent manner. Institutions in LMICs face special challenges but also may contribute with sustainable 'glocal' (global-local) patient engagement solutions that support equitable access to patient-relevant health technologies.

We will explore current experiences in LMICs with PPI including the gaps, limitations, and new opportunities. The participants will then co-creatively design concrete programs to address selected challenges for PPI in LMICs. Through this workshop, the mixed group of participants (patient advocates, HTA experts, academics, and industry stakeholders with experience in LMICs) will get a better understanding and design actions to advance PPI in LMICs.

In this workshop, we will share the collaboration for driving patient involvement suitable for the LMIC context on a global level. We will explore current experiences in LMICs with PPI including the gaps, limitations and new opportunities. The outcomes of the workshop will feed into a joint project which is being initiated by the Patient and Citizen Involvement Interest Group and the Developing Countries Interest Group to explore practicable approaches for PPI in LMICs.

Sunday, June 20, 2021 - Half Day Session from 12:00 to 15:00 (UTC)

WS15

**Title:**

The Use Of Evidence-Informed Deliberative Processes For Health Technology Assessment In Low and Middle Income Countries (LMIC)

**Authors & Affiliations:**

**Dr. Wija Oortwijn<sup>1</sup>, Dr. Leon Bijlmakers<sup>1</sup>, Maarten Jansen<sup>1</sup>, Dr Maryam Huda<sup>2</sup>, Dr Lyazzat Kosherbayeva<sup>3</sup>, Prof. dr. Rob Baltussen<sup>1</sup>**

<sup>1</sup>Radboud university medical centre, Nijmegen, Netherlands, <sup>2</sup>The Aga Khan University, Karachi, Pakistan, <sup>3</sup>Kazakh National Medical University, Almaty, Kazakhstan

**Abstract:**

On their path towards universal health coverage, governments need to make choices in the design of HTA processes which may be challenging in countries that have limited experience with HTA. This workshop provides guidance on how to make these choices, informed by the theory of evidence-informed deliberative processes, international best practices and practical examples from several middle-income countries.

HTA is aimed to inform decision-making. On their path towards universal health coverage, governments need to make choices in the design of HTA frameworks and processes. These choices impact on the legitimacy of their decision-making processes.

This workshop provides participants with guidance on how to best make these choices in their own context, based on the principles of evidence-informed deliberative processes (EDPs). EDPs consist of 6 steps and are based on rational decision-making through evaluation based on relevant criteria (via multi-criteria decision analyses - MCDA) as well as fair decision-making (as reflected in the accountability for reasonableness approach – A4R).

Facilitators: Dr. Leon Bijlmakers & Prof. dr. Rob Baltussen, the Netherlands

Introducing EDPS: Why and how? 15 minutes

Dr Wija Oortwijn, The Netherlands

The use of EDPs and practical application in Pakistan 25 minutes + 30 minutes group discussions + 15 min reporting back / discussion

Dr Maryam Huda, Pakistan

Maarten Jansen, The Netherlands

BREAK 15 minutes

The use of EDPs and practical application in Kazakhstan - 25 minutes + 30 minutes group discussions + 15 min reporting back / discussion

Dr Lyazzat Kosherbayeva, Kazakhstan

Maarten Jansen, The Netherlands

Part IV: Wrap up and closure - 10 min

The workshop aims to provide an opportunity for participants to learn about EDPs and how they can be used in optimizing HTA processes, especially in LMIC.

It aims to increase the understanding of participants on the available choices in these processes, and on the basis of the i) theoretical framework of EDPs, ii) best practices of HTA agencies around the world, and ii) real-world examples from MIC.

During the workshop we will provide guidance on these different steps in the HTA process, based on literature and best practices of HTA organisations around the world, and implementation in LMIC.

Sunday, June 20, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS16

**Title:**

Co-creating Value Assessment Frameworks for Comprehensive Genomic Profiling (CGP) and Next Generation Sequencing (NGS) Technologies

**Authors & Affiliations:**

**Dr Emily Reese<sup>4,5</sup>, Prof Federico Augustovski<sup>1,5</sup>, Markus Ott<sup>2,3,5</sup>**

<sup>1</sup>Institute for Clinical Effectiveness and Health Policy (IECS), Buenos Aires, Argentina, <sup>2</sup>Medtech Europe, , <sup>3</sup>Roche Diagnostics, Zurich, Switzerland, <sup>4</sup>EMD Serono Inc, Boston, United States, <sup>5</sup>International Society for Pharmacoeconomics and Outcomes Research (ISPOR), ,

**Abstract:**

This half-day workshop will describe:

- (1)The challenges in assessing the value of innovative genomic technologies such as CGP/NGS;
- (2)A collaborative approach used to develop a value framework in Latin America, and how it is being adapted to co-create a framework in Europe;
- (3)Practical steps of how to implement the framework in other regions to broaden access to these innovative technologies.

Assessing the long-term value of CGP/NGS is complex. New approaches to evaluate clinical, healthcare system and societal benefits are needed that are tailored to the technology and region. Co-creation with key regional stakeholders is essential for local adoption, allowing more equitable access.

A half-day workshop comprising:

- (1) Emily Reese: an overview of the challenges assessing the value of NGS/CGP (30 mins)
- (2) Federico Augustovski: developing the LATAM value assessment framework in Latin America (30 mins);
- (3) Markus Ott: how LATAM is being adapted for Europe using co-creation methods with key stakeholders (30 mins)
- (4) Interactive session: Adaptation and implementation in other regions (30 mins).

App-based software will enable interactive polling and questions. Regional breakout groups will discuss the local challenges of implementing NGS/CGP and identify prospective stakeholders and organizations.

To describe: (1) the challenges in assessing the value of CGP/NGS; (2) a collaborative approach used to develop a framework in Latin America, and adaptation to co-create a European framework; (3) Practical steps for implementation in other regions to broaden access. Participants expected to benefit are those interested in HTA methodology for devices/diagnostics, including industry representatives, HTA policymakers and health economists.

Sunday, June 20, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS17

**Title:**

Generating and Using Real World Evidence for Health Technology Assessment

**Authors & Affiliations:**

**Dr Massoud Toussi<sup>1</sup>, Mrs Elena Petelos<sup>2</sup>, Mrs Dimitra Lingri<sup>3</sup>**

*<sup>1</sup>Iqvia, Courbevoie La Defense, France, <sup>2</sup>University of Crete, Crete, Greece, <sup>3</sup>EOPYY, Athens, Greece*

**Abstract:**

Following the success of our previous workshop, the Real-World Evidence and Artificial Intelligence (RWE-AI) interest group proposes this updated workshop. Its aim is to present the activities of the interest group, and provide an understanding of how real-world evidence and artificial intelligence are generated, as well as how they are used in health technology assessment. The workshop is interactive.

Real world evidence is becoming increasingly important in the process of health technology assessment. More specifically, a vast majority of managed entry agreements early access discussions rely on the generation of evidence from real world data. Professionals who are involved in these activities need to understand the methods of generating evidence and their quality appraisal.

This three-hour workshop is structured in two sessions of 80 minutes of interactive training including presentations, dialogue and debate, simulation and role-play. During the first session, two presenters from HTA bodies and industry will introduce notions of real-world evidence and explain how HTA bodies use it in decision making. During the second session, two presenters from contract research organisations and governmental institutions will discuss advanced topics such as artificial intelligence, the quality of evidence, transparency, data privacy and stakeholder management.

- To get awareness about the RWE-AI interest group and its activities, attracting active members
- To acquire knowledge about how real world evidence is generated and used for health technology assessment



Sunday, June 20, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS18

**Title:**

Providing intelligence to support an accelerated innovation pathway: A UK COVID-19 Story

**Authors & Affiliations:**

**Dr Dapo Ogunbayo<sup>1</sup>, Ross Fairbairn<sup>1</sup>, Alex Inskip<sup>1</sup>, Dr Sarah Khalid Khan<sup>1</sup>, Kieran Brooks<sup>1</sup>, Professor Dawn Craig<sup>1</sup>**

<sup>1</sup>NIHR Innovation Observatory, Newcastle-upon-tyne, United Kingdom

**Abstract:**

Following the global coronavirus pandemic, the RAPID-C19 (Research to Access Pathway for Investigational Drugs for COVID-19) group was set up in the UK, to address the urgent need for safe and effective treatments. This workshop will outline an iterative process undertaken by the NIHR Innovation Observatory (NIHRIO) to support this group in identifying, tracking and prioritising relevant innovative health technologies.

The global pandemic has led to an unprecedented level of activity in research and development in one disease. The race to develop effective therapeutics has provided an impetus for relevant authorities to forge new collaborations and processes to accelerate clinical development, approval and assessment. In the UK, a multi-agency initiative, the RAPID-C19 (Research to Access Pathway for Investigational Drugs for COVID-19) emerged to address this need.

This workshop will focus on the systematic and transparent approach taken by the NIHR Innovation Observatory to support the activities of the RAPID-C19, utilising a 5-step approach:

1. Topic identification - horizon-scanning scope and processes
2. Data processing - classification and enrichment
3. Live tracking – analysis and update
4. Topic prioritisation - scoring and stratification
5. Dissemination - outputs and online dashboard

The workshop will utilise real-life scenarios, interactive polls and in-session question and answer to stimulate participant interaction.

The lessons learned from contributions to the RAPID-C19 process and the generalisability of the methods used to other areas will be reflected upon and discussed.

This project is funded by the NIHR (HSRIC-2016-10009)/Innovation Observatory]. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

Sunday, June 20, 2021 - Half Day Session from 17:00 to 20:00 (UTC)

WS19

**Title:**

Putting Patients At The Heart: Resources And Good Practice For Patient Involvement In Health Technology

**Authors & Affiliations:**

Ms. Ann Single<sup>1</sup>, Ms Valentina Strammiello<sup>2</sup>, Mr Neil Bertelsen<sup>3</sup>, **Ms Sarah Berglas<sup>4</sup>, Ms Heidi Livingstone<sup>5</sup>, Dr Elisabeth Oehrlein<sup>6</sup>, Mr Martin Coombs<sup>7</sup>, Dr Herve Nabarette<sup>8</sup>**

<sup>1</sup>Patient Voice Initiative, Ashgrove, Australia, <sup>2</sup>European Patients Forum, Brussels, Belgium, <sup>3</sup>Neil Bertelsen Consulting, Berlin, Germany, <sup>4</sup>CADTH, Ottawa, Canada, <sup>5</sup>NICE, Manchester, UK, <sup>6</sup>National Health Council, Washington, USA, <sup>7</sup>Bristol\_Myers Squibb, Middlesex, UK, <sup>8</sup>AFM-Téléthon, Paris, France

**Abstract:**

This workshop will share how resources for patient involvement developed by the HTAi Patient and Citizen Involvement Interest Group are adapted and used around the world. It includes presentations by HTA bodies, patients and patient groups, researchers and medicine developers; discussions about the strengths and limitations of current resources; and small-group work to identify approaches to meet ongoing needs.

The HTAi Patient and Citizen Involvement Interest Group (PCIG) encourages innovative Health Technology Assessment (HTA) processes with tools and resources to put patients at the heart of HTA. Its resources have been used and adapted around the world over the past decade. This year, PCIG launched the first international template to provide patients involved in HTA with information about the medicine being assessed, and a toolkit to help HTA bodies involve patients in Early Dialogues. This workshop will enable HTA bodies, patients and industry to take a deep dive into patient involvement as they explore the use of these resources.

A full day workshop with a mixture of individual and panel presentations and interviews with facilitated full room discussion and breakout group work.

Outcome: Increased awareness of patient involvement practices, resources and needs.

**Objectives:**

Increase participants' capacity for appropriate patient involvement with:

- o knowledge of how HTA can involve patients and resources available to support involvement and overcome barriers
- o lessons from the adaptation of resources in real world settings
- o awareness of the strengths and limitations of the approaches used.

Increase PCIG's capacity to support patient involvement with increased knowledge about resource use and unmet needs.