Introduction to Economic Evaluation for Global Health **Economic Evaluation Resources**

Week 1 lecture

TUFTs CEA Registry

Hi everyone. In this session we'll be talking about resources for conducting health economic evaluations.

So, the <u>TUFTs Cost Effectiveness Analysis or CEA Registry</u> is a comprehensive database of over 9000 cost effectiveness analyses, on a wide variety of diseases and treatments, published from 1976 to 2019. The registry conducts regular searches of the published literature and extracts articles to summarize, and each article that's included in the registry undergoes a formalized review process and has to meet criteria for inclusion. So, for example, all included articles must include QALYs as their measure of health effect. And two readers with training in cost effectiveness analysis, independently review each article and record information about the article using a standardized set of forums. And data on over 40 variables are collected for each article.

So, for example, if we searched the registry with the keyword of *Tuberculosis*, we would get 74 articles. And here, you can go through and click on any of these articles to get more information about the data that's summarized.

So, if we were to click on the second article, which is in Brazil, we would see information about the funder and the time horizon and the discount rate and what kind of sensitivity analyses they used. And also, each article is given us quality score from one to seven.

TUFTs also puts out a <u>Global Health CEA Registry</u>. And this is a comprehensive database of articles using DALY averted as the metric to measure effectiveness. And this is funded by the Gates Foundation. And they also review the literature and include all peer reviewed articles, since the 1990s.

And this is an example of searching the database with a keyword of HIV AIDS. And you can see that there are over 6000 total interventions that meet this criteria. So, if you wanted to refine your search further, you could add in a specific country or region, or publication year, and you can search by a number of diseases or treatments.

WHO CHOICE

WHO CHOICE is also a great resource and CHOICE stands for *Choosing Health Interventions that are Cost Effective*. And it's an initiative by the WHO that's intended to provide policymakers with evidence for deciding which interventions to implement, to maximize health for the available resources that each country has. And WHO CHOICE puts out guidelines for conducting cost effectiveness analyses, which is a really useful document to read through. And these

guidelines are often followed by authors who are publishing CEAs that are set in low- and middle-income countries.

WHO CHOICE also provides Excel spreadsheets with cost estimates of the cost of a hospitalization per day by country. And here I'm showing the example of Afghanistan, but you can click through and choose any country and the numbers will update. And here you can see that they have the cost per bed day and the cost per inpatient and outpatient visits by health facility.

International Health Economics Association (iHEA)

There are also a number of health economic associations. This is the website for the International Health Economics Association (or iHEA). And they hold a conference every two years, where researchers come to learn about the latest research in their field. And they also provide mentorship to junior investigators and have trainings that are both online or in-person during their conference on different subjects, including budget impact analysis or health technology assessment. And like most associations, they have scholarships and training grants available for researchers from low- and middle-income countries, to attend their conferences and trainings. And many of the talks available from all of these conferences are available online for free.

International Society for Pharmaecoeconomics and Outcomes Research (ISPOR)

The International Society for Pharmacoeconomics and Outcomes Research (or ISPOR), is another international health economics association that holds annual conferences and publishes guidelines for conducting different types of economic evaluations. They also put out tools and resources and hold trainings. And these include online webinars and short courses on different topics in health economic evaluation. And they also have membership fee waivers and travel grants for researchers from low- and middle-income countries.

Society for Medical Decision Making (SMDM)

And finally, there's the Society for Medical Decision Making. They also have an annual conference and have trainings and short courses, and they provide mentoring and career development activities. And they also publish a peer reviewed journal. So, I encourage you to take a look at these websites and learn more about the resources that are available to support you in conducting an economic evaluation. Thank you.