

Cost-effectiveness analysis of diagnostic and screening strategies: when and how to compare a googolplex of strategies?

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Cost-effectiveness analysis of diagnostic and screening strategies: when and how to compare a googolplex of strategies?

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| 12.30 – 12.35 | Introduction
Martin Henriksson, Linköping University, Sweden |
| 12.35 – 12.50 | A case study in cascade screening for familial hypercholesterolaemia
Rita Faria, University of York, UK |
| 12.50 – 13.05 | An illustration in atrial fibrillation screening
Mattias Aronsson, AstraZeneca, Sweden |
| 13.05 – 13.20 | Meta modelling to evaluate (all) screening strategies
Erik Koffijberg, University of Twente, Netherlands |
| 13.20 – 13.30 | Discussion |

WHY IS THIS IMPORTANT?

- Increasingly complex 'test and treat' management strategies
 - Precision medicine/diagnostics
 - Many potential management combinations
- All potential strategies should be evaluated and compared in an evaluation
- Increasingly complex models and computer expensive simulations
- Increasingly hard for decision makers to make sense of results and prioritize management strategies
- Hence, issues to wrestle with for analysts performing and decision-makers considering cost-effectiveness analyses of diagnostics and screening!

WHAT ARE WE WRESTLING WITH?

- Conceptualization
 - The issue of complex strategies
 - How to approach and make sense of multiple test- and treat strategies?
- Selection of strategies
 - How do we narrow down candidate strategies?
 - How to present results in a meaningful way?
- Computing
 - Likely to be an issue at some point!
 - Model of models

WORKSHOP AIM

Present approaches to the cost-effectiveness analysis of many diagnostic strategies and discuss how best to handle their complexity.

Issues we would like to discuss with you:

- How to present the results of 100s of strategies?
- Can we determine beforehand or during evaluation which (further) strategies might be interesting to evaluate (and ignore the rest)?
- How can metamodeling support evaluation of many strategies?

OUR SPEAKERS



Rita
Faria

Senior Research Fellow, Centre for Health Economics, University of York, UK

- MSc in Health Economics, University of York
 - Expertise in cost-effectiveness analysis & decision modelling
 - NICE Technology Appraisal Committee member
 - Health economics expert for Portuguese HTA agency
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Mattias
Aronsson

Senior Nordic Health Economist, AstraZeneca, Södertälje, Sweden

- PhD in Health Economics, University of Linköping
 - Expertise in modelling of screening, optimizing the benefits of screening and support design of new screening studies
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Erik
Koffijberg

Associate Professor/Chair, section HTSR, University of Twente, Netherlands

- PhD in Decision-analytical modelling with focus on neurology
 - Expertise in model-based assessment of the impact of new imaging tests, biomarkers, prediction models, AI, supporting personalized care strategies including optimizing the benefits of screening / diagnostic strategies
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