Block 0.3

Interactive Session I

Interactive Session I

VIMC + Workshop Activity

Agenda:

- VIMC - Who, Why, When, Where, Why
- VIMC M&R modelling teams
- VIMC strategic modelling
- Workshop activity

Vaccine Impact Modelling Consortium (VIMC)

Who, What, When, Where, Why

- VIMC is an **international community of modellers** providing high-quality estimates of the public health impact of vaccination, to inform and improve decision making.
- The Consortium was established at the end of 2016 for a period of five years, and **is coordinated by secretariat based at Imperial College London**.
- As its core objective, the Consortium aims t**o deliver more sustainable, efficient, and transparent approach to generating disease burden and vaccine impact estimates** of twelve vaccine-preventable diseases.
- **Funded by Gavi, the Vaccine Alliance and the Bill & Melinda Gates Foundation**, to support the evaluation of the two organisations' existing vaccination programmes, and inform potential future investments and vaccine scale-up opportunities.

VACCINE IMPACT
MODELLING CONSORTIUM

VIMC

Measles and Rubella Modelling Teams

Measles:

- Mark Jit, London School of Hygiene and Tropical Medicine
- Matt Ferrari, Pennsylvania State University

Rubella:

- Emilia Vynnycky, UK Health Service Agency
- Amy Winter, University of Georgia

Bill and Melinda Gates Foundation:

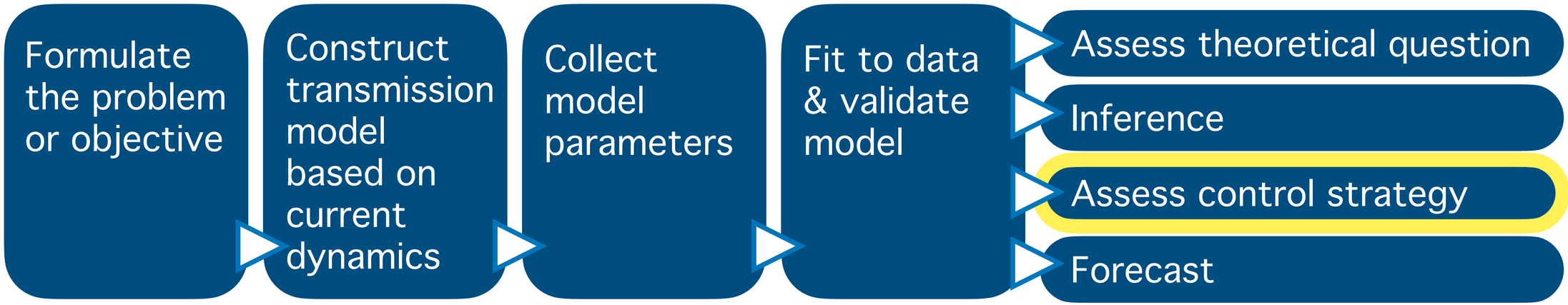
- Niket Thakkar

VIMC

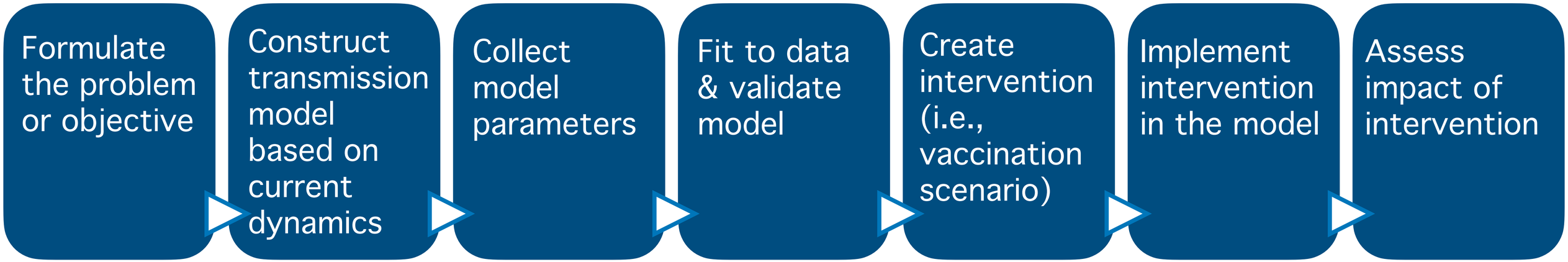
Measles and Rubella Modelling Teams

- We conduct **strategic modelling** based on defined vaccination scenarios for >100 countries
- We compare direct model outputs (i.e., infections) as well as its sequel (i.e., deaths, congenital rubella syndrome cases, DALYs) across vaccination scenarios in order to answer questions for Gavi such as:
    - What is the impact of a vaccination strategy X compared to vaccination strategy Y on the number of infections and number of death?

Developing a Strategic Model



Strategic Modelling - The Analytic Process



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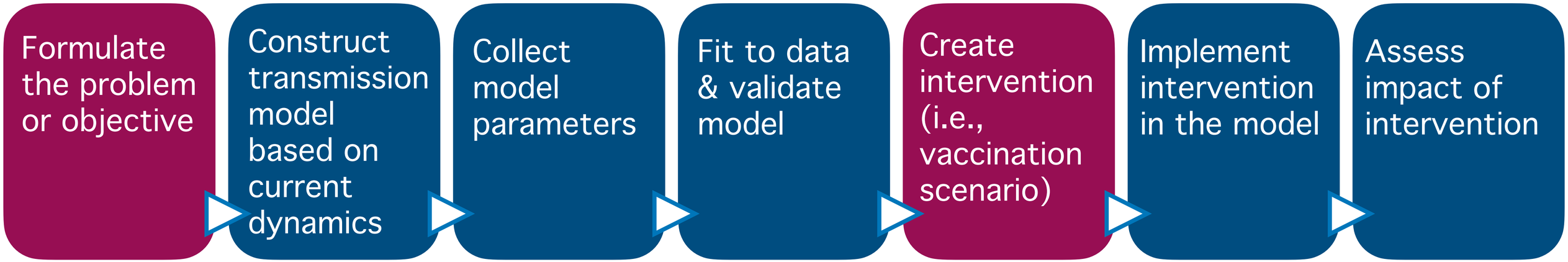

Stakeholders & Modellers

Modellers

Workshop Activity

Strategic Modelling

Assume measles and rubella is mostly controlled, but we believe outbreak risk is there. We continue to conduct and work to improve vaccination programmes, and have just conducted a preventative MR vaccination SIA. We want to know:

1. How many measles cases have been averted as a result of the past preventative MR vaccination SIA?

2. What is the impact of differential rollout timing of the next preventative MR vaccination SIA (e.g., 1, 2, or 3 year rollout)?

Consider: What data is needed, where does the uncertainty lie in this problem, what model is needed, how can question #1 help us investigate question #2?