

Participatory Healthcare Modelling: Using modelling to build capacity and implement change

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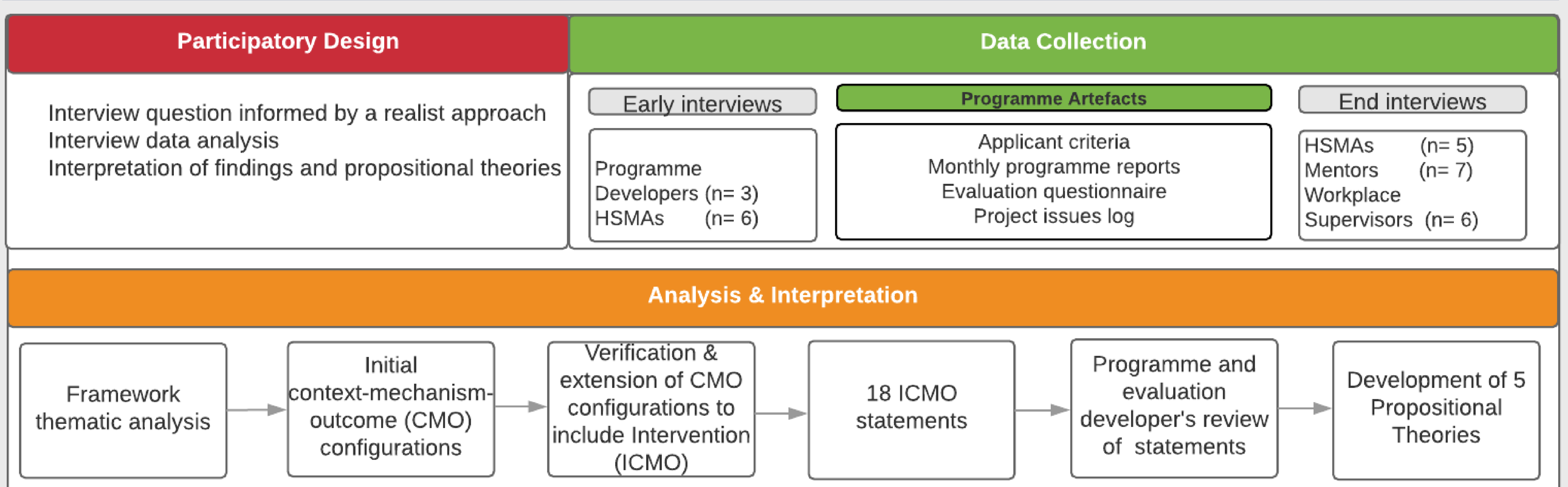
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Background

We used realist-informed evaluation to explore where, how, and why a 12 month pilot programme, Healthcare services Modelling Associates (HSMA) programme (Manzi 2018), which aimed to build capacity for NHS healthcare modelling capability in South West England, was considered to be successful. We (a) developed propositional theories intended for further testing, (b) contributed to the evidence on the practice of capacity building, and (c) developed our understanding of what counts as “success” in this type of context.

*Manzi S, Chalk D, Day J, et al A novel modelling and simulation capacity development initiative for the National Health Service BMJ Simulation and Technology Enhanced Learning 2018;4:97-98.

Approach



Propositional Theories

1. Structure

The framework or structure of a modelling capacity building programme should provide the tools and **resources** required to develop modelling skills and **sustain** modelling capacity beyond the duration of the programme.

4. Optimise Outputs

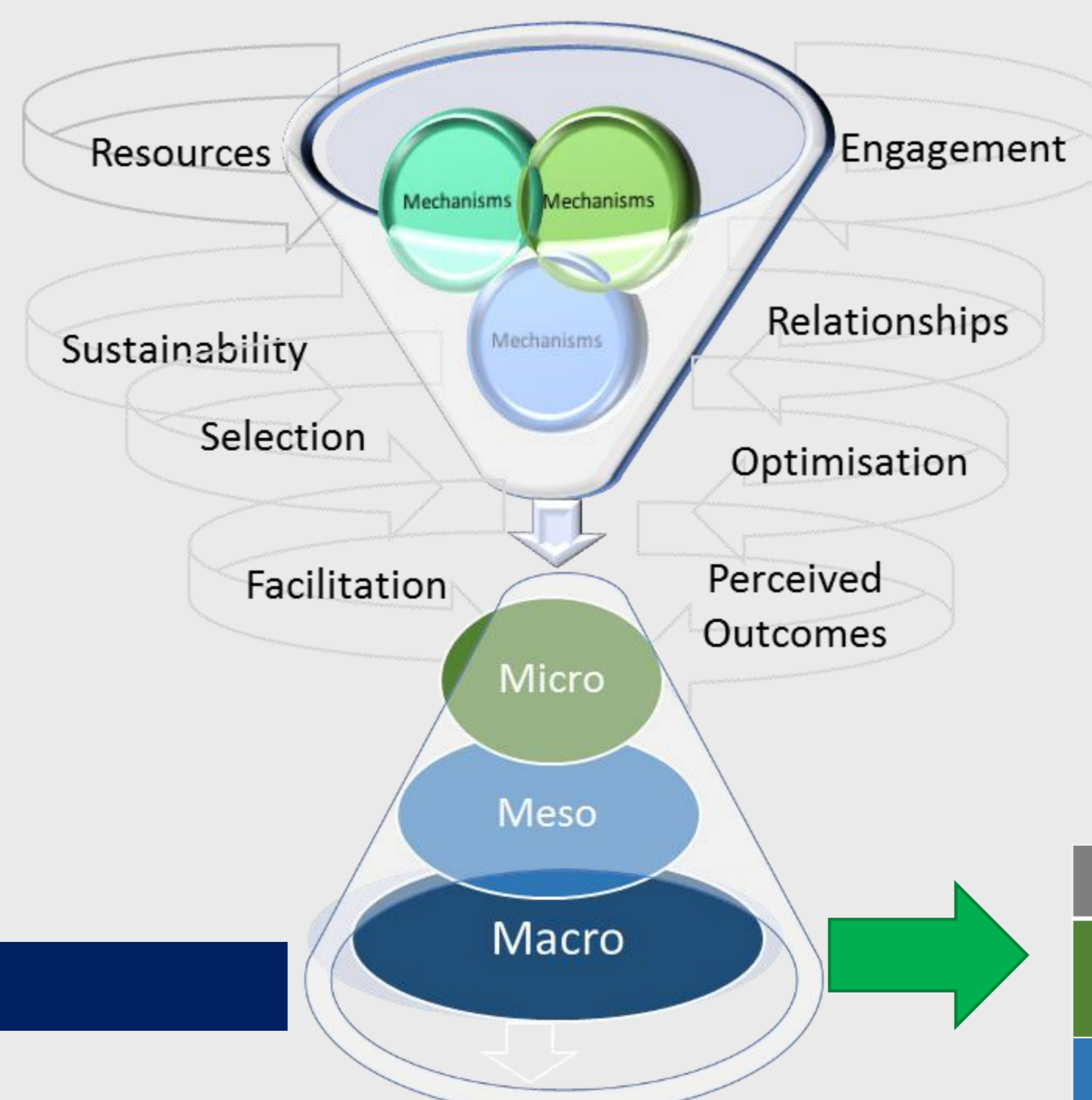
Optimisation of the modelling output through alignment with organisational decision making focus and timing to maximise senior management engagement and the impact of the modelling process.

Implications

1. Modifications to subsequent HSMA programmes to optimise sustainability and implementation
2. Success of capacity building programmes need to consider visibility of outcomes and learning at all levels of the organisation
3. Further testing of the propositional theories to enable generalisation

2. Relationships

Building up **relationships** is required across NHS organisations and NHS organisations and Academic modelling units.



3. Interactions

The participant **selection** and **facilitation** process needs to effectively enable interactions and **engagement** between roles e.g. modelling associates, mentors, workplace supervisors, senior managers, and stakeholders.

5. Implementation potential

Prospective consideration needs to be given to the implications and implementation of modelling **outcomes** at all levels of the system being.

Successful Outcomes

Micro	Individual promotion, visibility within organisation, job enrichment, novice modeller
Meso	Stakeholder engagement, collaborative problem solving, system visualisation to support decision making, test solutions and facilitate organisational improvement.
Macro	Collaborative relationships between Academia and NHS, shared learning, evidence based and transparent decision making, modelling within analysts job descriptions.