

# Using Facilitated Simulation Modelling to evaluate Health and Social Care Services in Leicestershire

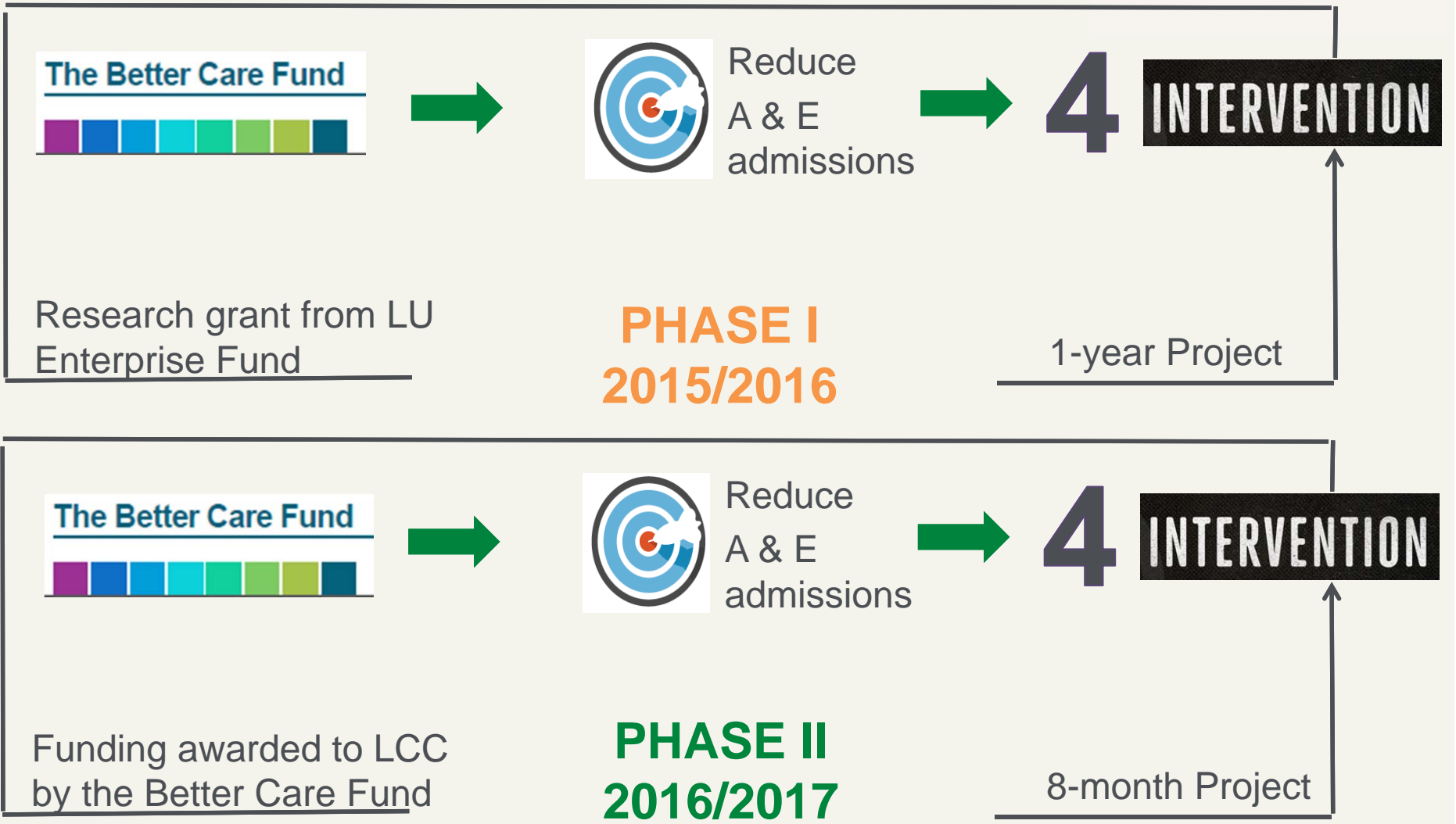
Dr. Antuela A Tako,  
Dr. Anastasia Gogi,  
Prof. Stewart Robinson  
Loughborough University

Prof. Zoe Radnor

Leicester University

12-14 September 2017, OR59 Conference, Loughborough University

# Context and Background



## The 4 Services Evaluated in Phase 2

- **Lightbulb Programme (LB)**
- **Intensive Community Support (ICS)**
- **Help to Live at Home (HTLAH) Service**
- **Glenfield's Clinical Decision Unit (CDU)**

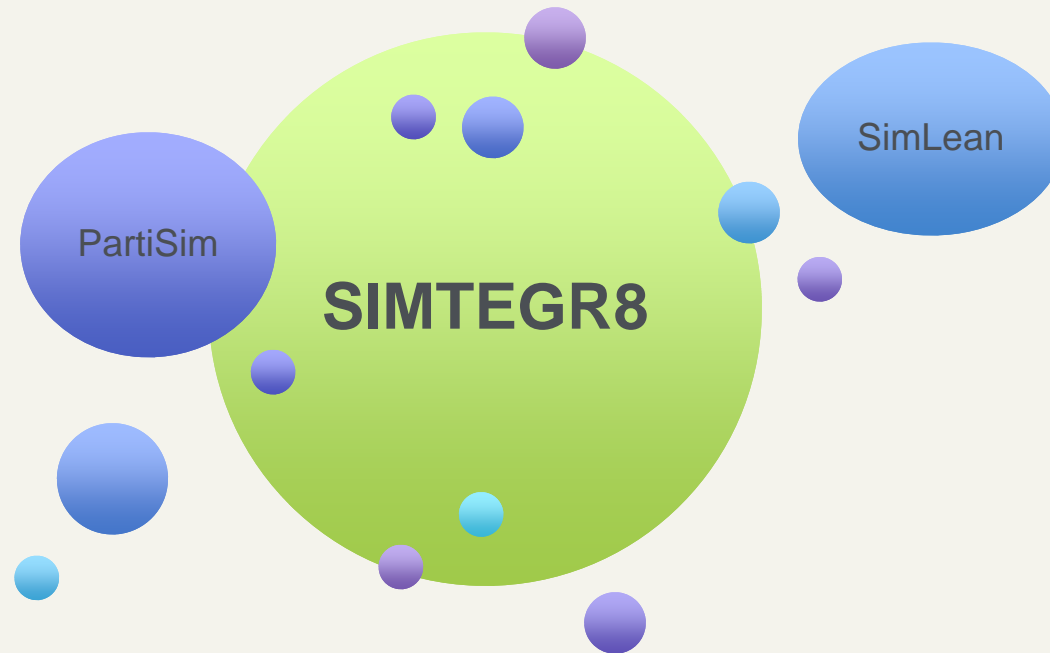
# Purpose



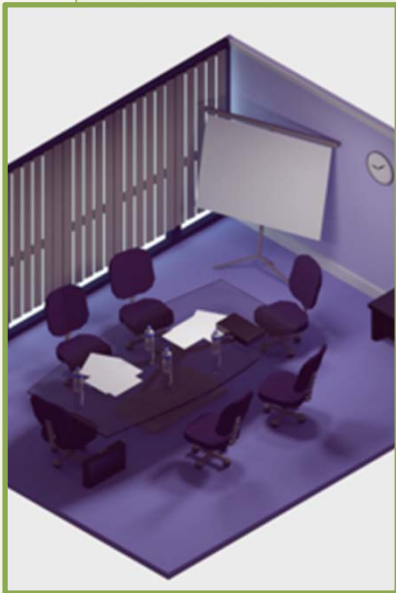
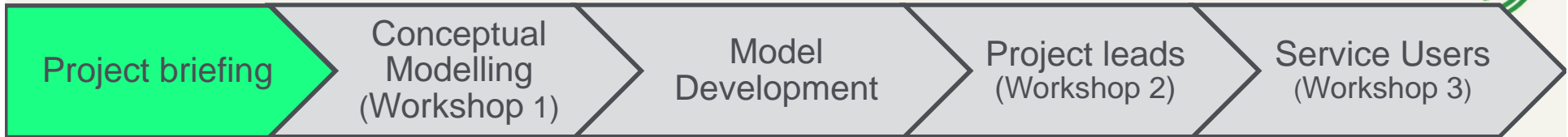
- **Support** development of integrated care services in the community to avoid emergency admissions to hospitals
- **Help Improve** the patient journey through these services
- **To identify** how performance can be improved.

# Methodology

*Core to SIMTEGR8 is the use of facilitated simulation*



- Methodology revised following phase 1
- Adapted from: PartiSim (Tako & Kotiadis 2015) & SimLean Facilitate (Robinson et al 2014)



**Meet with Project Leads for initial understanding of the service, process map, data needed, etc.**

**Key Tip**

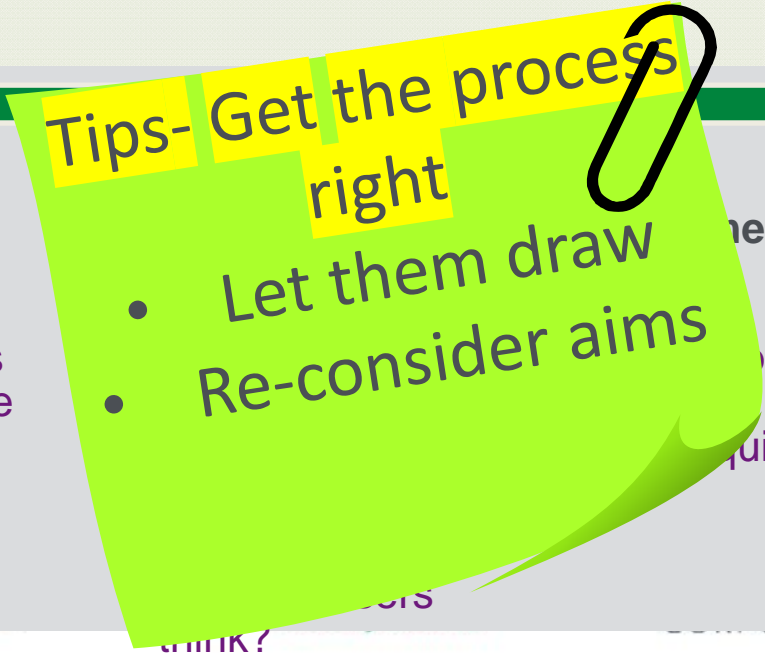
- Project Champion
- Participants



Hold a **workshop** to discuss planned pathway of each intervention and reflect on its efficiency.

**Tips- Get the process right**

- Let them draw
- Re-consider aims



**Aims of intervention**

- What aspect of the service should be evaluated?

**Draw process map**

- What are the main activities that take place in the real system?

ments  
le for  
the  
quired?

THINK?



# Workshop 1 - Outcomes



- ✓ Lively discussion & contributions from participants
- ✓ Better understanding of the service achieved
- ✓ A commonly agreed focus of the evaluation

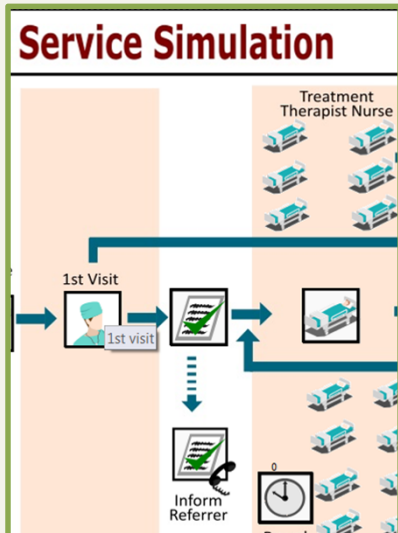




Build the model → Convert the Conceptual model into a Computer Model.

**Key Tips**

- Involve client: Data Collection & Analysis, Model Validation
- Don't be driven by data availability
- Keep it simple but focus on presentation



Hold a **workshop with Project Leads**: use the model to facilitate discussion on the intervention and how it can be improved.

**Key Tips**

- Pre-define the scenarios to test
- Go beyond the model

**Model Understanding**

- What do you think the model is doing?

**Face Validation**

- Does this represent the real system?

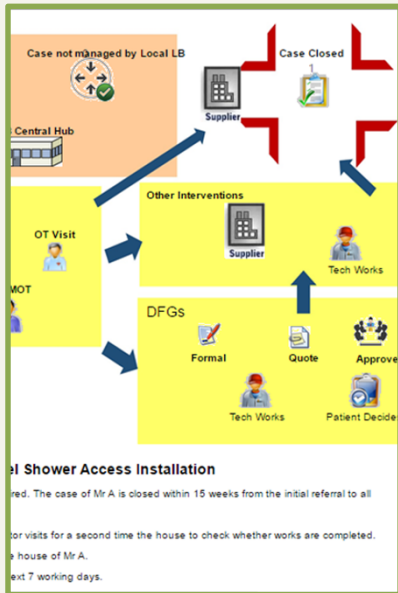
- What is the effect of the intervention? Do you think it will be effective?

## Workshop 2 - Findings



“ *It really brought the figures to life* ”

- ✓ Positive effect of the step-up ICS service on hospital services.
- ✓ Changes in practice can provide better outcomes.



Hold a workshop with Service Users (Patients and Carers) using a user mode model to facilitate discussion on how the service can be improved.

**Key Tips**

- Insert text to describe patient pathway.
- Let one patient enter per simulation run.

**Model Understanding**

- What do you think the model is doing?  
Does this represent what the service felt like for you?

**Problem**

- Describe the pathway. What do you think is the most effective pathway?
- Let one patient enter per simulation run. How many patients can you start per simulation run? How many patients can you start per simulation run? How many patients can you start per simulation run?

# Workshop 3- What did they say about the workshop?



- ✓ A good opportunity to find out more about the LightBulb service.
- ✓ Meet and discuss each other's experience with the service.
- ✓ The model helped participants to visualise the overall patient's journey

# Did we meet our aims?



- ✓ Facilitated simulation has been successful in evaluating the four integrated care services.
  
- ✓ Generate discussion about
  - Pathway & its effectiveness
  - Model
  - Reality
  - Metrics
  
- ✓ Identify issues
  - Resolve issues

# Lessons Learnt



- Engaging with service users can be challenging due to patients being elderly and frail; Use of questionnaire survey instead of workshops (plan B).
- Good communication between the SIMTEGR8 team and the project leads helps make the model useful.
- Don't under-estimate the amount of time that collecting and cleansing data takes.
- Involving the right stakeholders in the workshops is important in order to create an appropriate understanding of the service.



# Thank YOU!



Visit our website to find more about:

- ✓ Models built
- ✓ Reports for each intervention
- ✓ Tips and how to use the approach

Website: [www.simtegr8.org](http://www.simtegr8.org)

Email: [simtegr8@lboro.ac.uk](mailto:simtegr8@lboro.ac.uk)



[@simtegr8](https://twitter.com/simtegr8)