



NHTA
GLOBAL MARKET ACCESS

Early modelling of ileostomy management systems: showcasing value in Rshiny

2nd July 2024 – R for HTA workshop

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Objective and stakeholders

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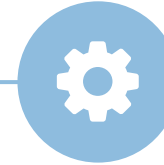
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Ileostomy modelling

Early model structure

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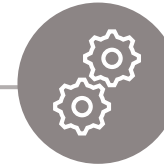
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Objective and stakeholders

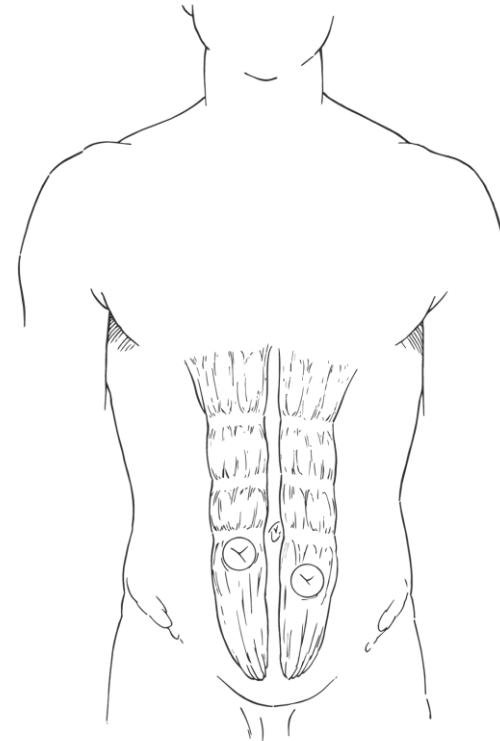
Medtech company with an innovative **ileostomy** management system



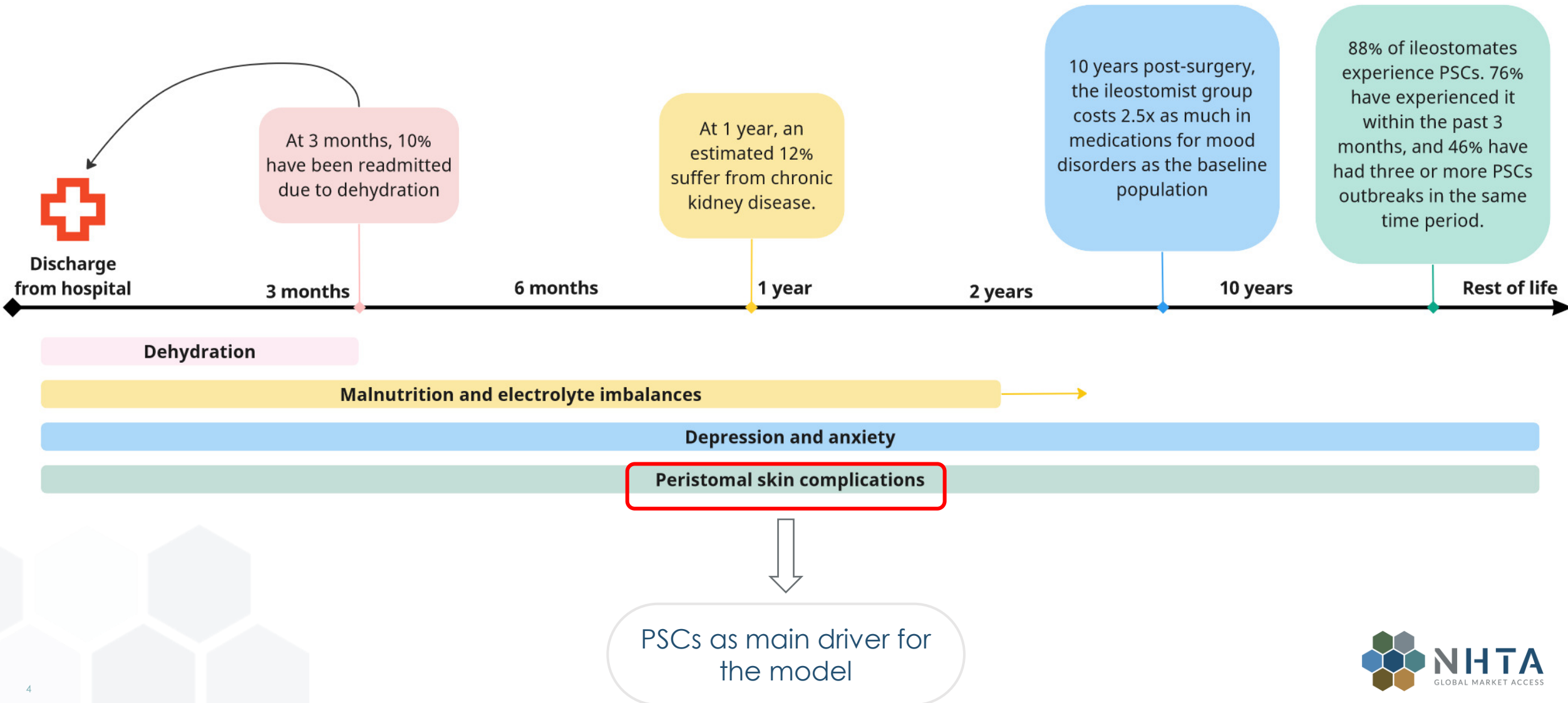
Looking for a way to showcase **value** to stakeholders



A **model** that can be easily populated with data once new evidence becomes available

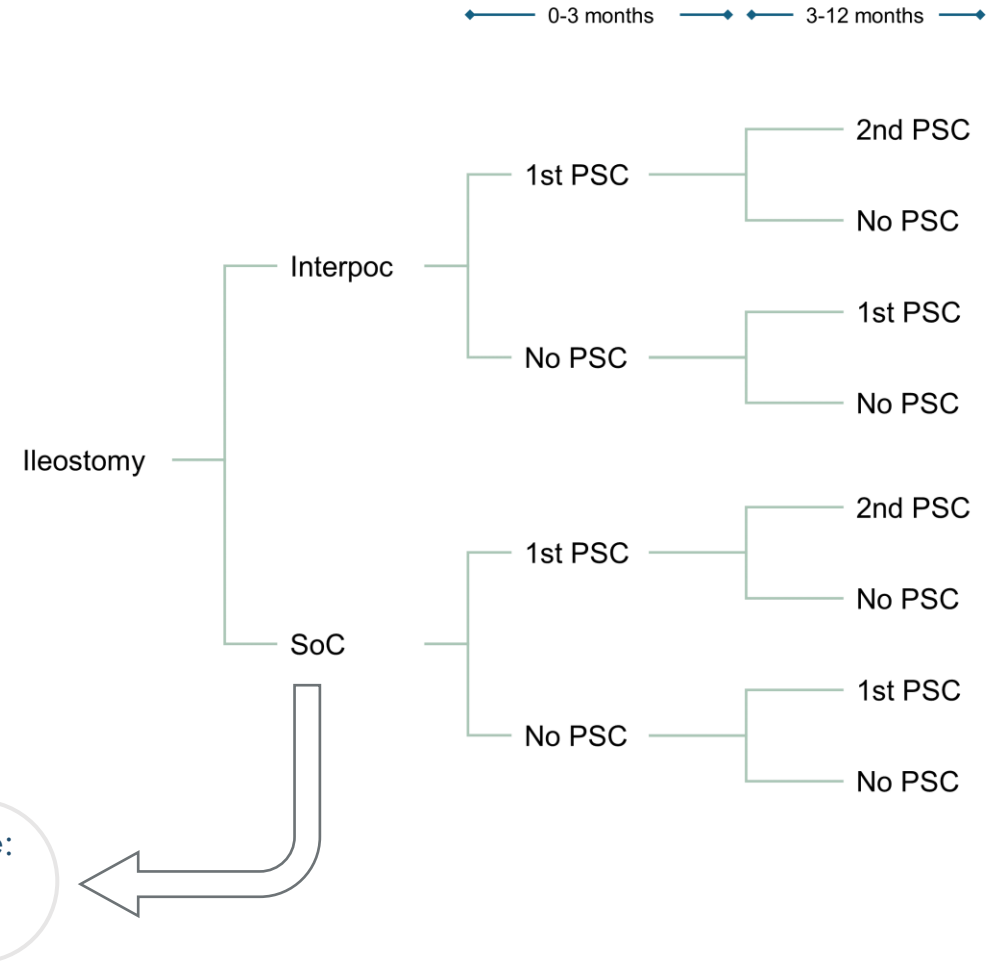


Ileostomy modelling



Early model structure

Decision tree based on occurrence of **PSC**



Early model structure (PICO)

Patients

Ileostomy patients 3 weeks after surgery



Intervention

Interpoc – novel ileostomy management system



Comparator

SoC:
1-piece or 2-piece systems



Outcomes

QALYs
Costs
ICER



Functionalities of the Shiny app

The user can select:

- Type of PSC: mild or severe (each with different decrements and cost)
- Type of comparator: 1-piece or 2-piece
 - All comparator's inputs can be adjusted independently

The user can save multiple scenarios and load them back into the model as needed:

- To test different usage patterns
- To update results once trial data becomes available

Results focus on cost effectiveness of **Interpoc** given the user's inputs

Insights on single inputs to reach specific ICER values

Model walkthrough

Challenges

- Modelling Medtech devices with scarce data and with no standard approach available
Structuring it in a way it that can be easily adapted/changed once new data is generated/collected
- Creating an interface that a non-expert user can navigate and understand:
Trade-off between “code behind the scene” and “flexibility”
E.g. Transforming annual probabilities into a 3-months probability > client was not familiar with procedure, happens “behind” the shiny app interface
- Communicating HE information and outcomes to the general public

Contact

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