EuHPN 2019 Annual Workshop
"Getting it Right First Time, for Patients"

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Charactering hospitals, sustainable business models, taking decisions

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Signposts

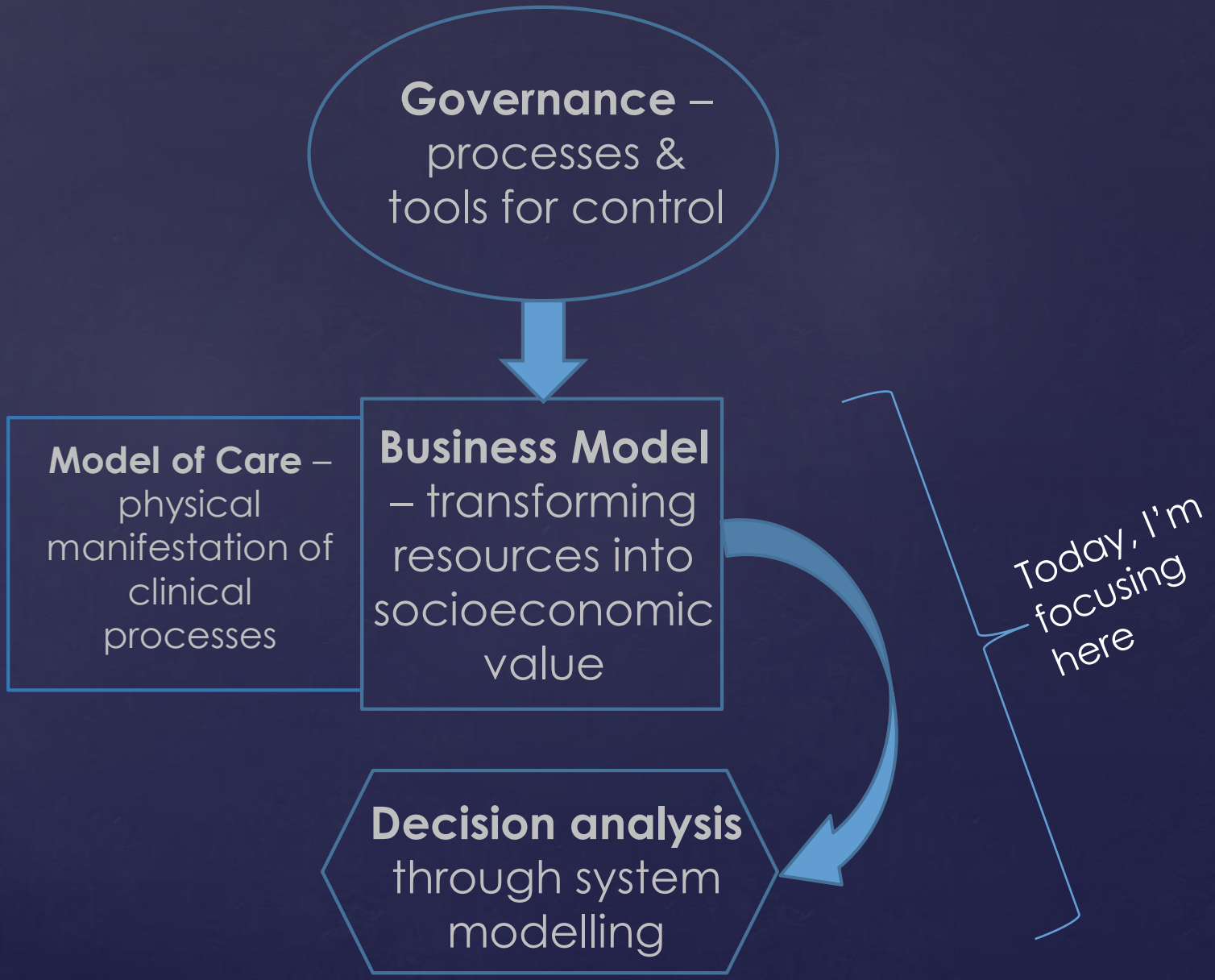
1. **Introduction**
2. Business models for hospitals
3. Decision analysis
4. Conclusion & Questions

The European Observatory, *inter alia*, has been here before

2002 2009 2009 2011

Forthcoming, 2019:
The changing role of the hospital in health systems in the 21st century

Reminder: The simple version of the structure of the book



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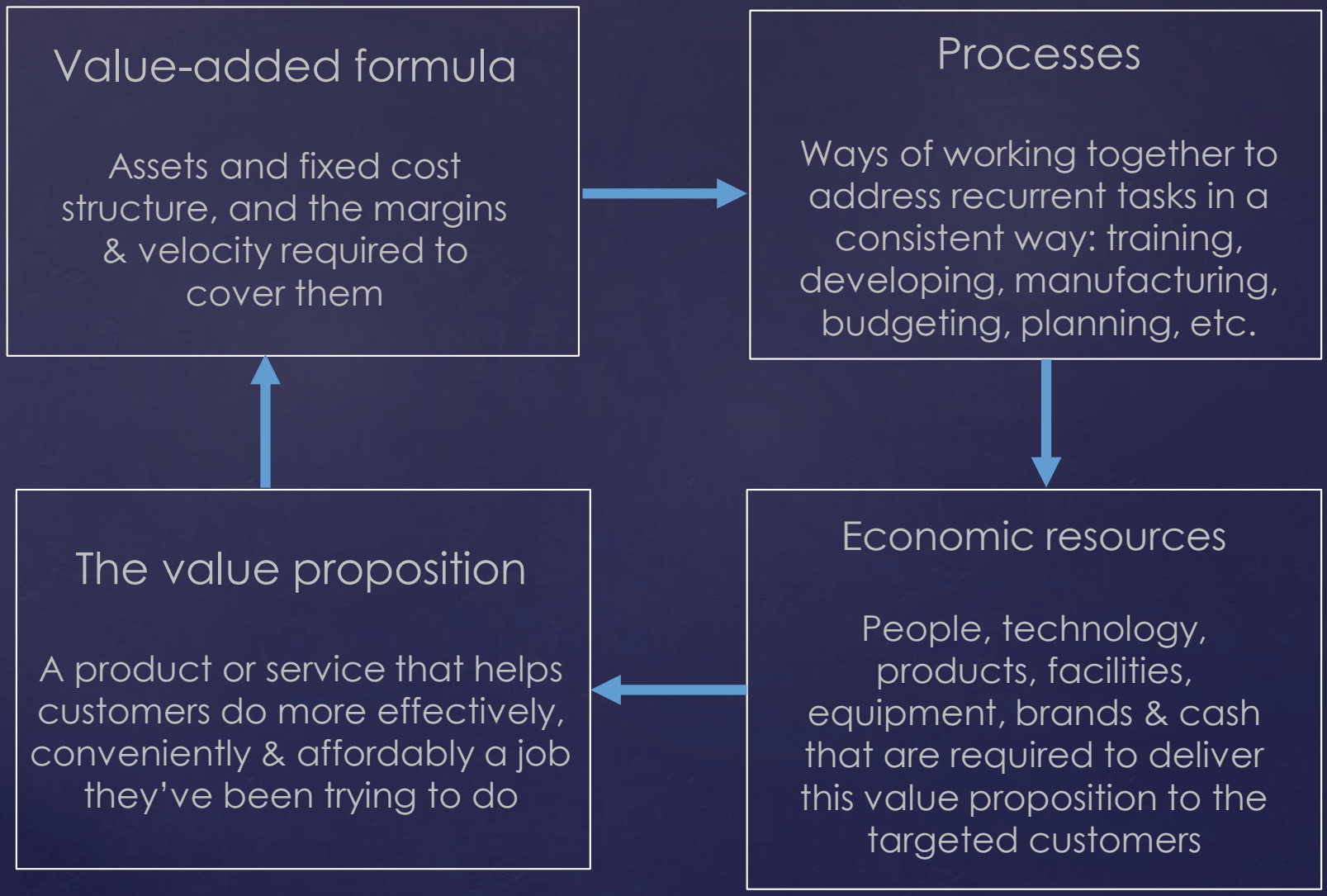
Problems in health service delivery:

- Vast amounts of resource consumed
- Uncertain output, let alone outcome
- Pervasive, unexplained variation in performance

We don't seem to be able to make a secure connection between what we put in to the various parts of the system, & what we get out of them

The idea of the "Business Model" is an attempt to improve thinking about that link, in health systems & in hospitals themselves…
It applies irrespective of whether a system is public or private in orientation

What **is** a business model?
It is how an organization creates value



SW from **Christensen** CM, 2011, The Innovator's Dilemma

What a business model is **not**

It is not, as such:

- A product, such as “hospital care”
- The processes of care (surgery, diagnostics etc)
- The ownership structure
- The payment system
- The strategy
- …

…though it is related to all these things

Business models in health (Christensen)

1. Solution shops
   - "Institutions built to diagnose and solve unstructured problems": (handi)craft approaches
   - Most hospitals (including tertiary) **&** almost all primary care are like this
2. Value-Added Processes
   - "Transform, in repeatable and closely-controlled disciplined ways, standardized resource inputs to deliver high-quality and efficient services at low cost"
   - Focused factories, often in elective (is this business model the only true domain of "lean"?)
3. Facilitated Networks
   - Organisations in which users/consumers are also producers – patients as producers of their own care?

Much more needs to be done to define current & emerging business models for healthcare & hospitals…

Disruption & hybrid business models?

It's a knee-jerk to associate 'business models' with a supposed absolute inevitability of 'disruption', as though it always applies & to every industry:

- But the current business models in health are very robust, & the disconnect between patients & the payment for services means a limited incentive to disrupt anyway

There is also a presumption that "hybrid" business models in health, blending 'solution shops' with 'value-added processes', are unstable:

- But this depends on the "separability" of processes, & that's rarely true in healthcare

Ownership?

Obvious variants:

- Public or state (national, regional, local/urban…)
- Not-For-Profit (trust or charity)
- Public-Private Partnership (real estate lease, or service-intensive variants)
- For-Profit

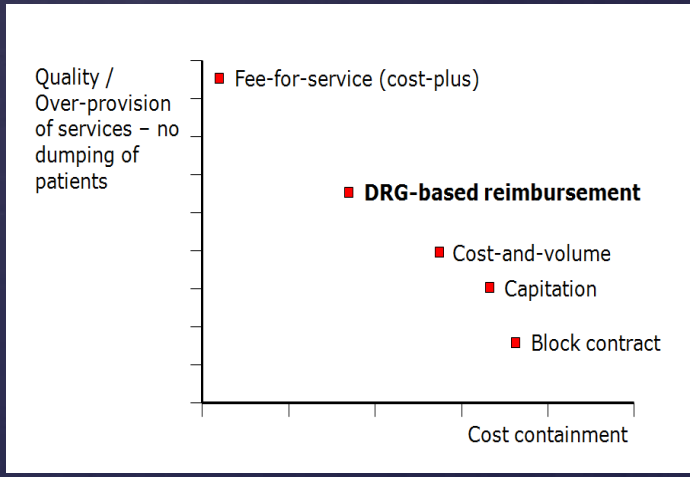
There is a distinction between *formal* & *effective* control (the state is always present)
Can create pseudo-markets, through purchaser-provider splits, if a real one doesn't exist
Maybe "public hospitals are as efficient as private, but less responsive to wants or needs"

Ownership looks important & even is, *politically*.
But it really isn't important *functionally* – as long as governance is right & it matches the desired business model

Payment systems?

Payment mechanisms are the intermediation function between payers & recipients of care. Complexities:

- Retrospective vs prospective PS
- Line-item budgets, per-diems, global budgets, capitation, DRGs, fee-for-service, pay-for-performance…
- Trade-offs between:
  - Enhancing quality/containing costs
  - Risk selection/efficiency
  - Producer surplus/inducing supply
  - Governance control/flexibility
  - …



The "best" system is probably neither fully prospective nor fully retrospective, & with top-ups for achievement of quality

The payment mechanism will embed all sorts of compromises. It should be linked to the business model desired for the hospital

Geography?

Context matters…

- Health systems in ex-Communist countries were bureaucratised, over-specialised & hospital-centric – the implied path-dependency has made reform difficult (OK in Estonia, less so in Georgia…)
- Developing world hospitals have bifurcated between public hospitals dealing badly with the bulk of the population & world-class institutions for the privileged

Healthcare/hospital reform is in fact difficult, everywhere:

- All large organisations are dysfunctional (Weber/Simon)
- Conflicts between clinicians & professional management add more dysfunctionality (Mintzberg)
- Politics adds yet more dysfunctionality

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Decisions, decisions…

- The analysis framework we've suggested – governance + models of care + business models – is all very well. But what should practitioners ***do***? And who should they be?
- Decisions in complex settings should not be merely intuitive – they must be supported by modelling. There are many decision support models in the health sector – accounting, comparable system/hospital analysis (e.g. DEA), service redesign simulation (e.g. DES), investment appraisal (DCF)…
- From our perspective, there are flaws with all - they usually:
  - Are short-term
  - Do not encompass both physical (clinical, patient pathways) & economic (value/cost) issues
  - Fail to provide any causal explanation
  - Are oriented to the facility, rather than the system

What is hospital capacity?

It's weird: nobody has **any** cogent idea how to measure the capacity of a hospital!

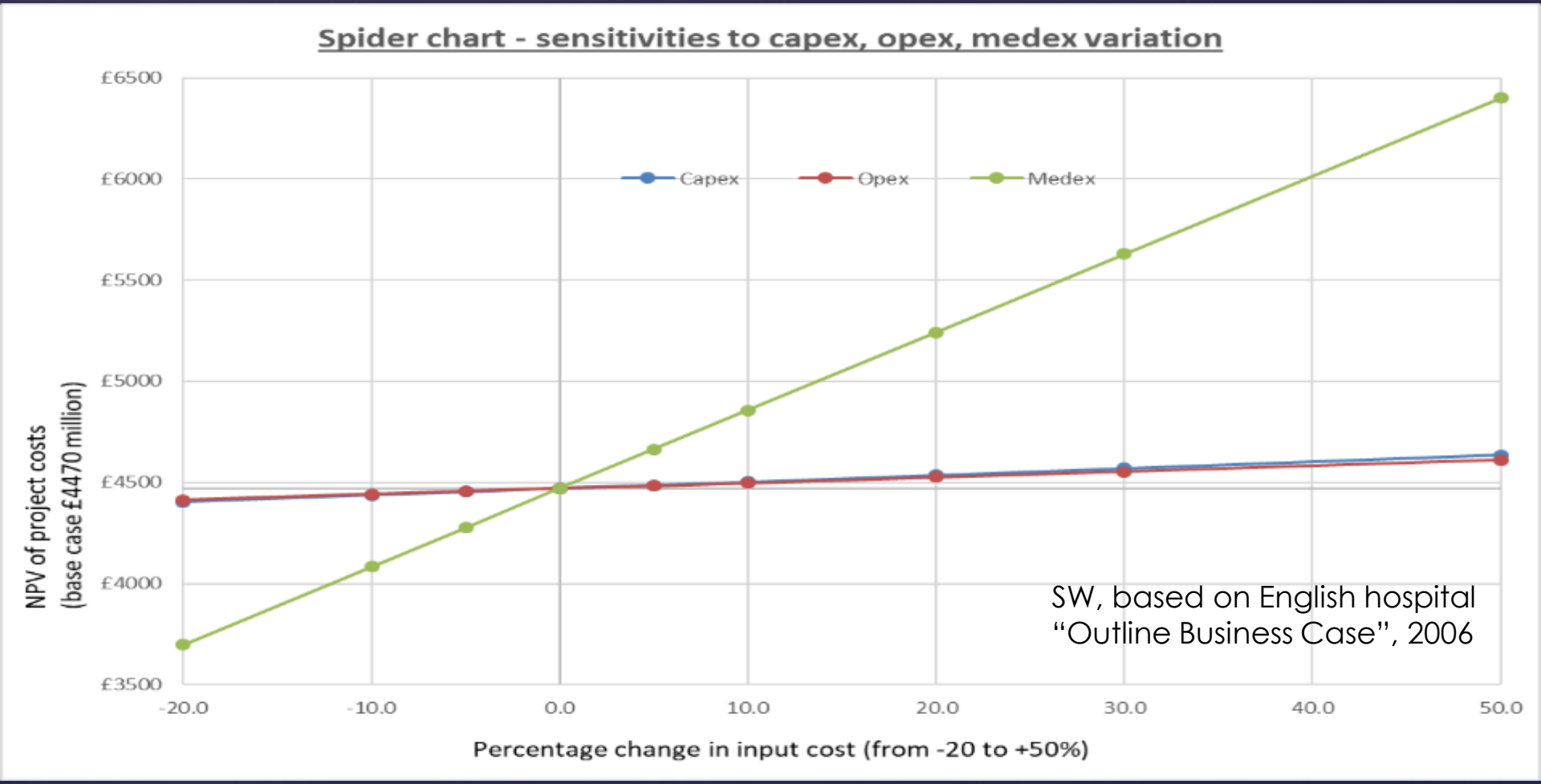
Note the "Hill-Burton Formula" for the supposedly-required number of beds in a hospital:

$$\text{Bed numbers} = \frac{\text{Population} * \text{Hospital admissions frequency} * \text{ALoS}}{\text{Occupancy rate} * 365}$$

(Nowadays, the 3 numerator terms & occupancy are granular - in terms of a few disease or departmental categories)

A hospital bed is 2 things: one part of the hospital capital stock, & a short-term buffer for when the rest of the system is clogged. Either way, it is **not** a useful measure of the real capacity of the hospital to do work, **within its health system**

What matters in hospital development?



Did you know? Whether the capital cost of a facility is high or low is essentially *unimportant* to its long-term economic viability. *But: the capital decision is still absolutely key in determining all future activities*

A (wild?) suggestion

- Our framework complements **investment appraisal** issues well: 'business cases for business models'
- Importantly, the sector capital stock (human & physical) is unconstrained when looked at over long periods - but there are very big policy & system management questions
- We propose **optimisation** models, with the 'objective function' being minimisation of **through-life system-wide** costs:
  - Are used in many other process industries
  - Encompass physical & economic flows
  - Balance initial (capital) vs recurrent (operational) costs
  - Make explicit the trade-offs both within a facility (departments), & between the facility & the wider system
- Such models involve computing the system model with-&-without a given facility

This would implicitly answer the question of the "capacity" of a hospital: it is the ability to do work for the system

An example: how viable are small hospitals?

What "small" means is a question of taste! In many countries, it might mean 50 beds. But in England a facility at 300 beds is now extremely marginal:

- Specialist elective, or generalist?
- Geography – trading off clinical/economic viability against patient access
- Economies of scale & economies of scope…
- It's less a question of "the hospital" as a whole, than departments or specialties within it

In any event, the logic of our book is that there is no such things as the economic or clinical viability of a single facility, whether it is small or large… It's the system, stupid!
The only way to decide if a unit is viable is modelling the **whole** system in which it sits

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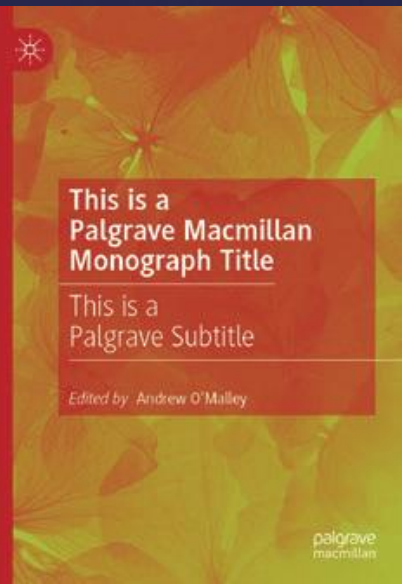
The contributors to the book…

Chap No.	Chapter title	Authors
1	Introduction	AD, SW, Paolo Belli, Tata Chanduridze, Patrick Jeurissen, Richard Saltman
2	Models of care	AD, SW
3	Governance	AD, RS
4	Business model	SW, AD
5	Ownership	PJ, Hans Maarse
6	Payment mech	PB, PJ
7	Geographies	TC, RS
8	Reform problem	RS, TC
9	Decisions	SW, AD
10	Conclusions	AD, SW, PB, TC, PJ, RS

November 2019



Conclusions (business models, decision analysis)

- We hope that we are asking the right questions - most debate on hospitals does not
- Hospitals are really nothing more (or less) than the (human & physical) capital-intensive bits of the wider healthcare system
- The Business Model for any hospital is a crucial statement, even for a public facility: what value is the place trying to add?
- There should be 'business cases for business models'
- The useful discussions about hospitals should be at the level of the system/network not facility/unit
- We should aim at optimisation **models** of the whole system, not of a single facility

(Some) questions

1. Why is there such enormous performance variation between health systems, & between individual hospitals?
2. How should we trade off spending & effort between public health, primary care & hospitals?
3. What business models (if any!) do your institutions follow? Is the BM a valid concept in your minds?
4. Who should be the decision-makers in health systems (& what should be the public/private balance)?
5. How big should hospitals be? And what does "big" mean anyway?