It's not all fun and games:
Building multiplayer worlds to explore, learn and expand

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Who is Benjamin Green?

- Registered Nurse
- Coder & Business Analyst
- Supporter of PPI events
- Supported and led a range of games related projects

Before we go on - A key principle

Games don't have to be fun!

What is a Megagame

- Large scale
- Semi-formalised
- Complex system simulations
- Asymmetric player roles/interactions

What is a Megagame

- ## Large scale
  20+ players
- ## Semi-formalised
  Rules can be modified
- ## Complex system simulations
  Any system where the outcome of a given input can't be directly computed or known
- ## Asymmetric player roles/interactions
  Players ability to influence the gamestate is different by role

Megagames in context

- Originally military and political instruments for testing strategy in predicted imperfect information scenarios

    Such as the actions of Iraq in Gulf War 1 or the 'Operation Sealion' enactment

- Still used these areas as well as in industry to test corporate strategy
- They are run regularly by hobbyists, often to simulate pop culture or fantasy situations

What did we do?

Team Structure

BOARD
Chief Executive
Chief Medical Officer
Chief Nursing Officer
Chief Information Officer

Directorate titles
Data Auditing
Staffing
Planning
Patient flow
Medical
Surgical
Anaesthetics
Admissions
Waiting list

Directorate (4-6)
Titles (responsibilities) allocated by **board**
Implement hospital improvement interventions

Medical
Prioritising patients
from A&E to:
Wards, ICU, Surgery

Nursing
Staffing patient routes

Surgical
Prioritising patients
to conduct surgery and
manage a waiting list

Wards & ICU
Staff Management
Skill Matching
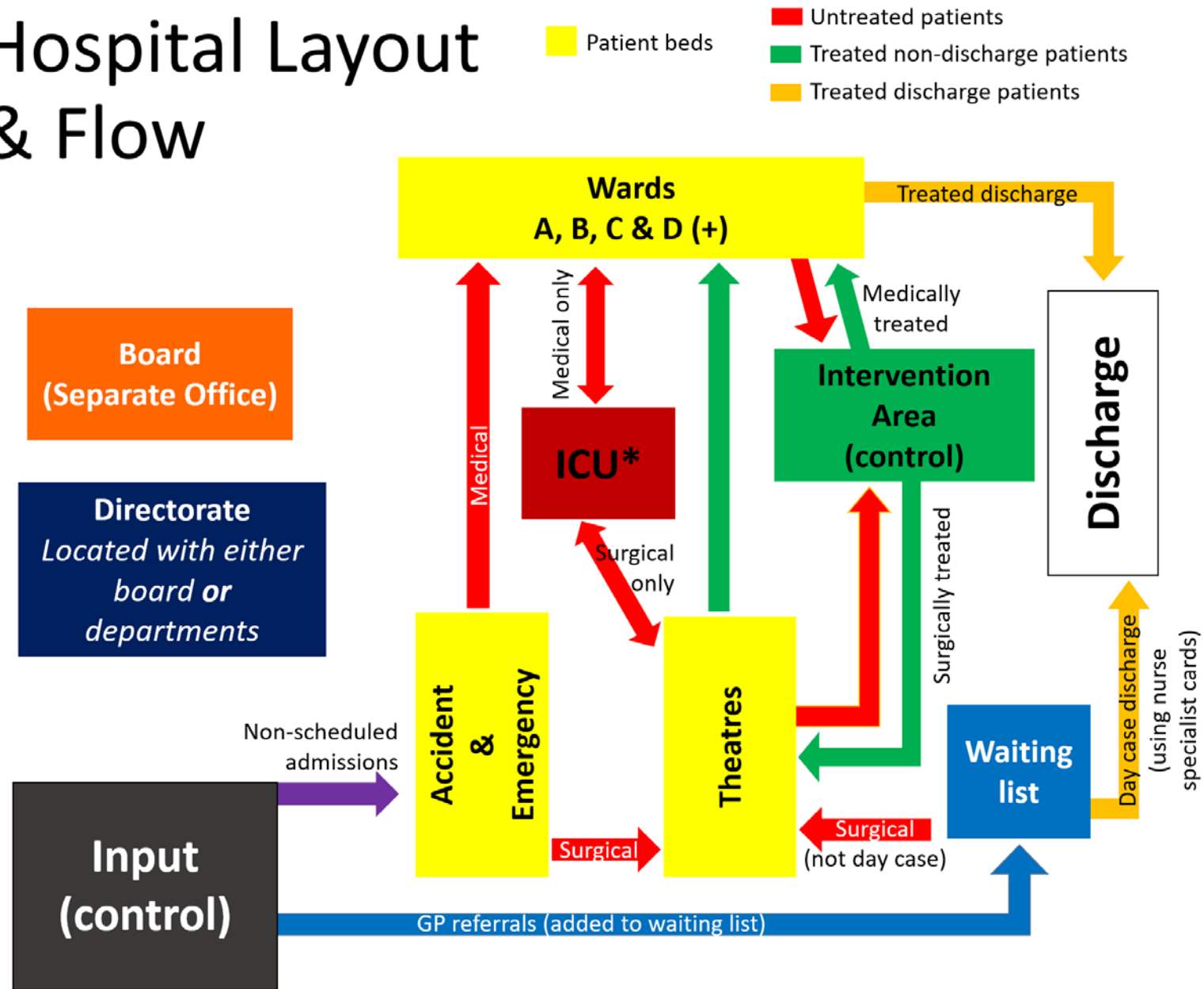Bed Management

Accident & Emergency
Staff Management
Skill Matching

Scheduled Appointments
Staff and Patient Management
Skill Matching

The design process

- *Situation observation*
- *Abstract representation*
- *Hypothetical Testing*
- *Micro runs of each system and role*
- Run a game
- Review and revise

The magic (how to make a game run well)

- Controllers
- Casting
- Great quality components
- Live editing rules based on player innovation
- Throttling of challenge
- Consistency/inconsistency
- A key event
- A time based finish

Was it valuable?

- I saw behaviours in the game that I'd witnessed in reality
- Players felt that the experience was formatively beneficial
- Players all came away with an abstract understanding of the situation presented

Points to consider

- There is a risk in using these games as performance management tools
- Not everyone experiences every aspect of the game
- Some people won't enjoy parts of the experience and player conflict can happen!
- Inconsistency of control decisions can cause significant experiential dissonance

Video (if there is time – 5min)

- https://vimeo.com/295407891

- Or if there is not time:
  https://www.herc.ac.uk/2018/10/15/nhs-themed-megagame/

Thanks and Questions