



HEALTHCARE SAFETY
INVESTIGATION BRANCH

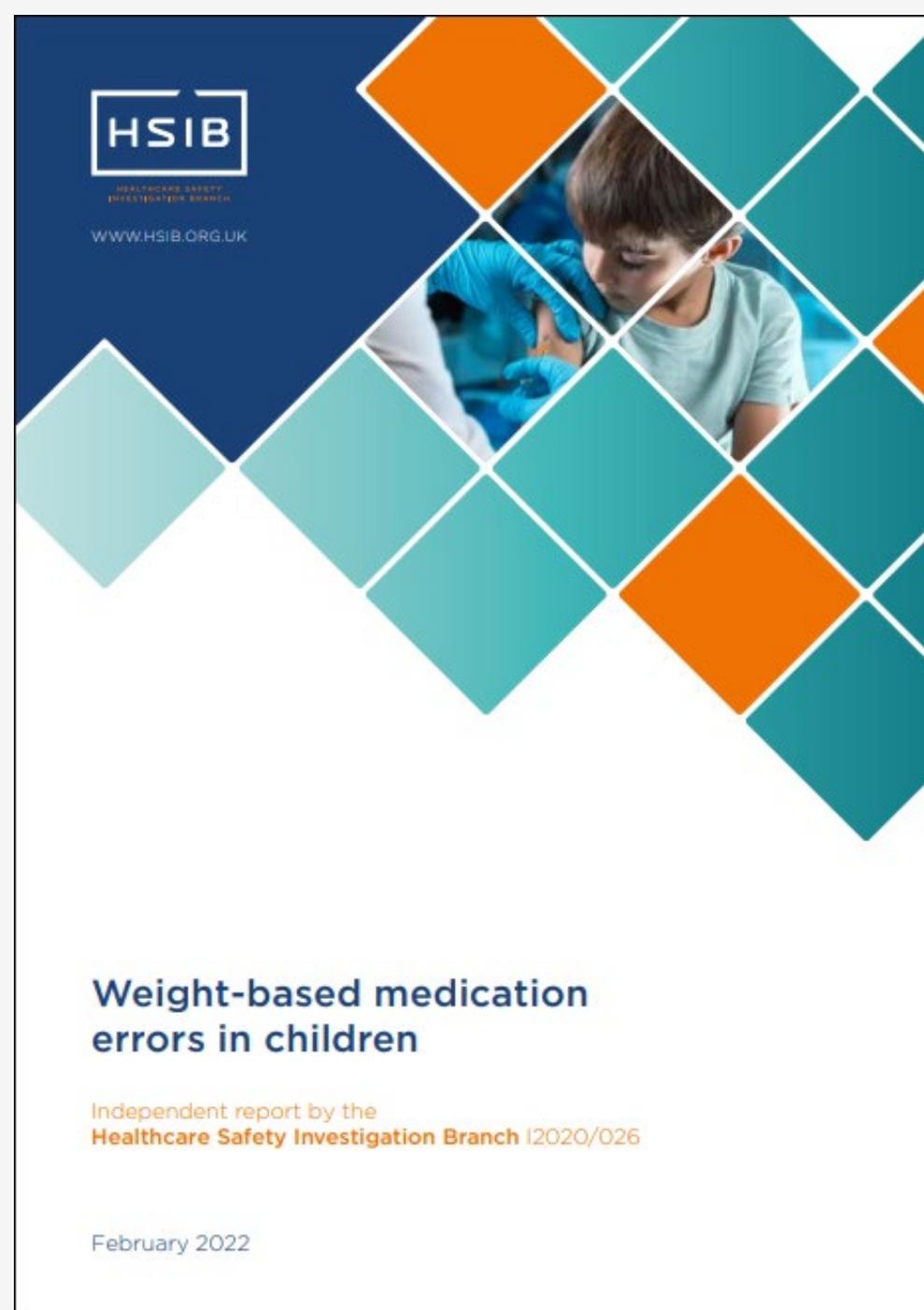
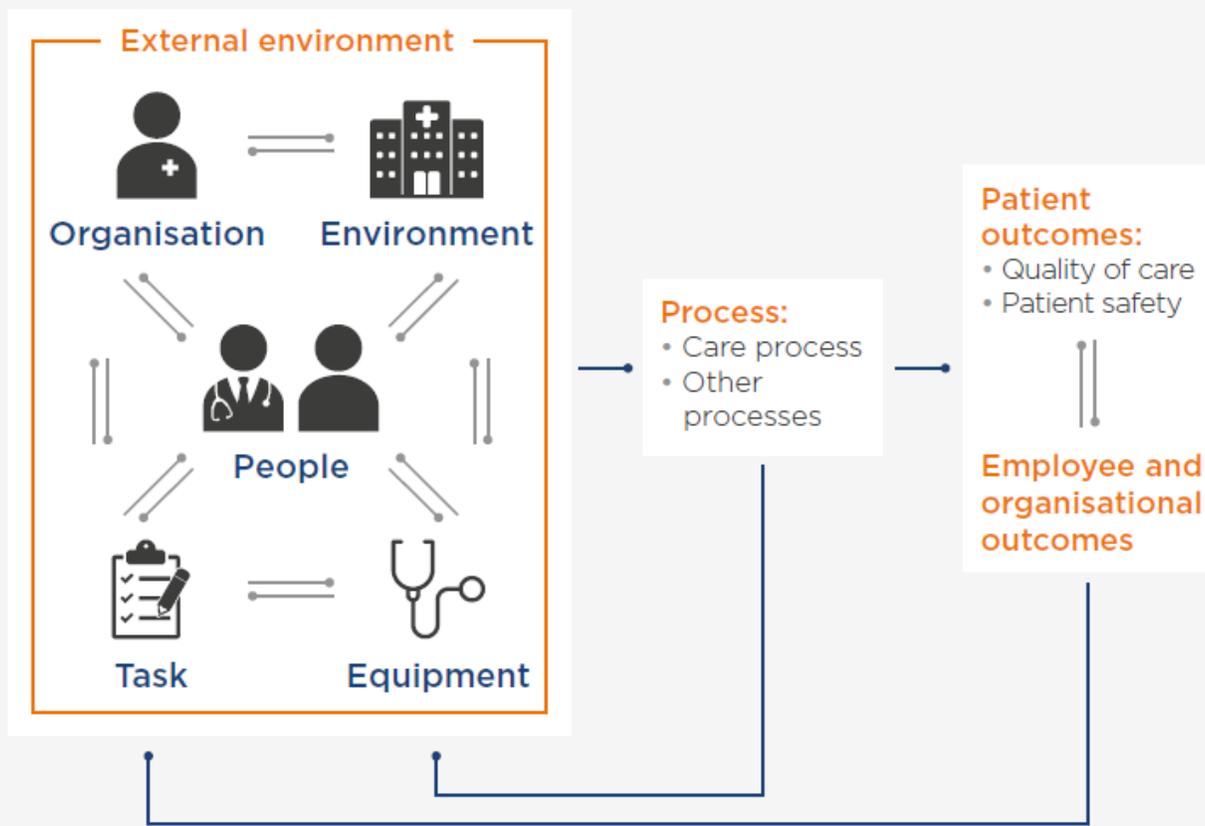
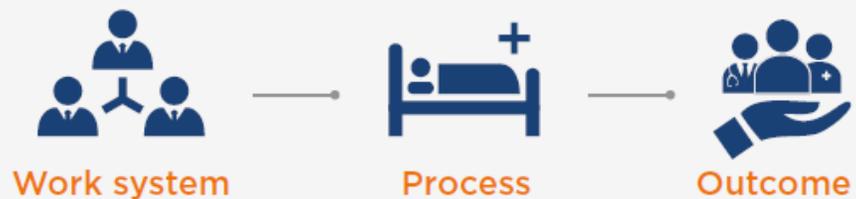
Applying CAST to healthcare investigations: does it add more?

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National Investigation Team

2022 MIT STAMP Workshop

Fig 2 The Systems Engineering Initiative for Patient Safety (SEIPS) adapted from Holden et al (2013)



Current safety investigation (UK)...

- Happens at different levels of the system
- Most commonly in hospitals/practices
- Remains focussed on RCAs
- Varies in its approach
- Hasn't really changed in past 20 years
- Is regularly criticised

What is the best approach for healthcare?

Does it differ depending on the level of the system undertaking the investigation?

In comes CAST...

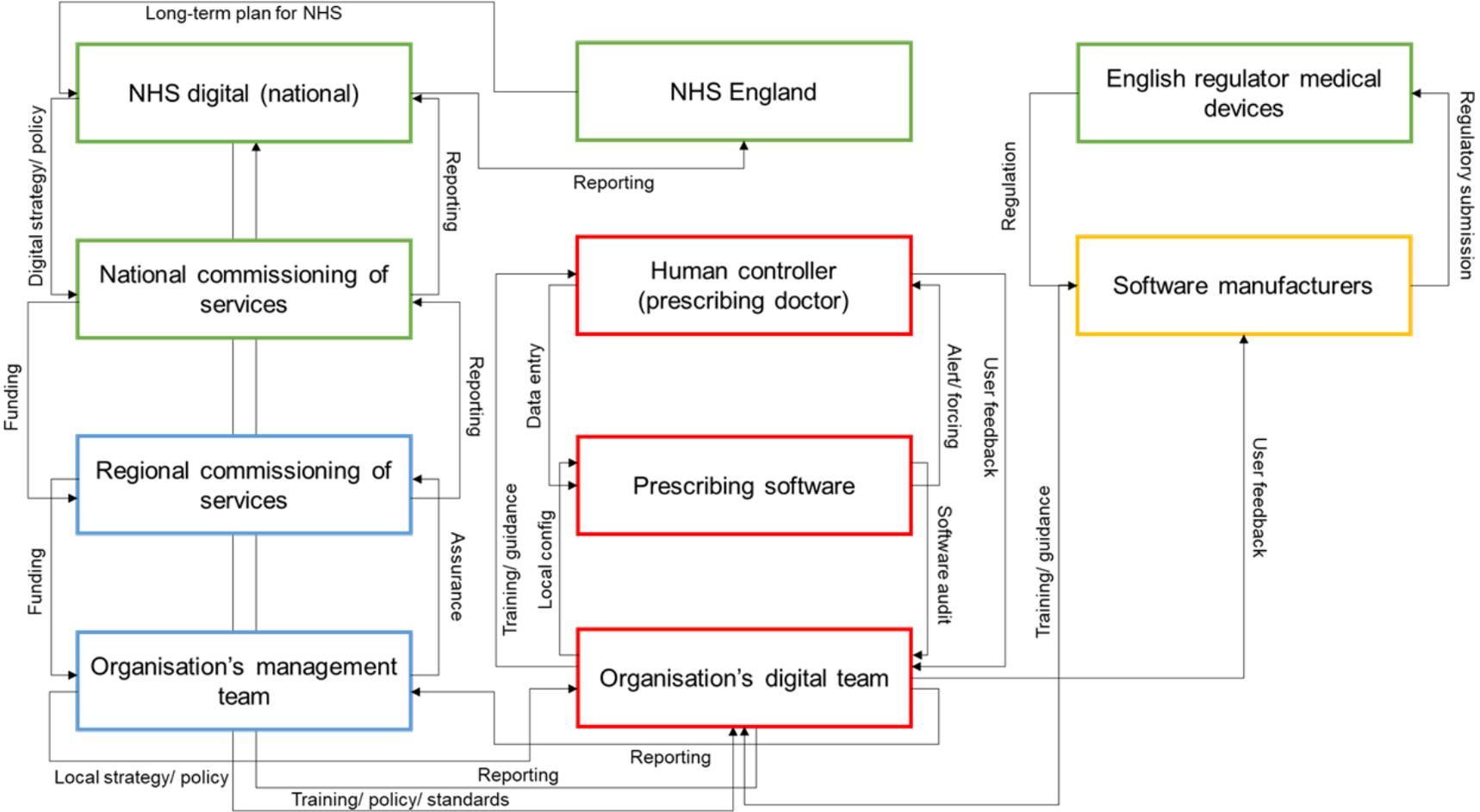
System hazards:

- Prescribing of a medicine to a child at an excessive dose.
- Dispensing of a medicine for a child at an excessive dose.
- Administration of a medicine to a child at an excessive dose.

Safety constraints (prescribing of a medicine at an incorrect dose):

- Patients must not be prescribed incorrect doses of medicines.
- Measures must exist to prevent prescribing of incorrect doses of medicine.
- Treatments must be available to treat patients who receive incorrect doses of medicine.

Control structure (prescribing hazard)



CAST vs SEIPS - reflections

- Focus
- Usability
- Terminology
- Validity
- Credibility
- **Application in healthcare?**

National investigation teams

Local investigation teams

Conclusions

- Broad view of the system and its controls
- Feedback mechanisms
- Complexity
- Time versus focus
- Identifying actions through showing controls that are needed

- **A healthcare specific guide?**

Questions?



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