Applying CAST to healthcare investigations: does it add more?

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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
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?
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?


https://www.hsib.org.uk/