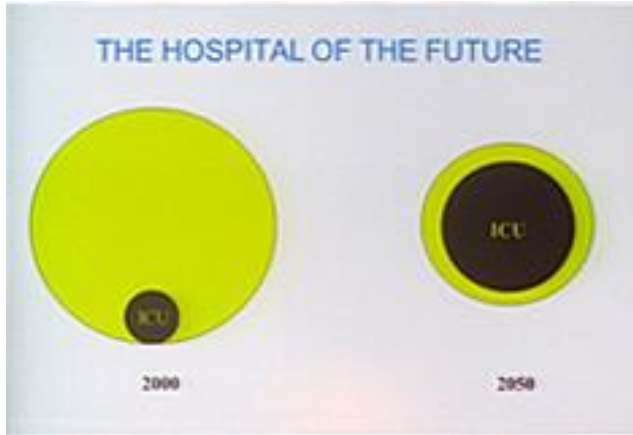


Innovative health and care services diagnosis and integrated care

Reduce cognitive load and build adaptive capacity in the critical care ecosystem

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SIGNIFICANCE of the problem



Status:

- Intensive Care represents 15-25% hospital cost
- Complex setting

Trends:

- In-hospital and out-hospital Intensive Care Services
- Electronic tools
- Patient Safety
- Patient & staff experience (PICS)
- Patient & family engagement

Challenges:

- Overwhelming amount of data/information
- Diagnosis and decision making
- Do more with less resources

Result:

- Stress
- Burnout of intensivists (up to 50%)
- Post ICU Syndrom (up to 50%)

Cognitive load (leading to stress and burnout) experienced by clinicians in critical care environments persists, and may even be worsening, despite best efforts to understand and address it with clinical decision-support systems and other interventions.

The OPPORTUNITY



Improve diagnosis on intensive care

COMPLICATED

Vital sign categories

Organ monitoring

Patient as generalized object

Structure conversations, e.g. at handoff

Compliance to checklists

Reduce communication errors (and measure them)

Procedure adherence and link to patient outcomes

Evidence of success

Reduce cognitive load



Integrate Intensive Care (design Critical Care Services)

COMPLEX

Understand the whole (sensemaking)

Each patient is unique

Identify what is unique about a patient situation

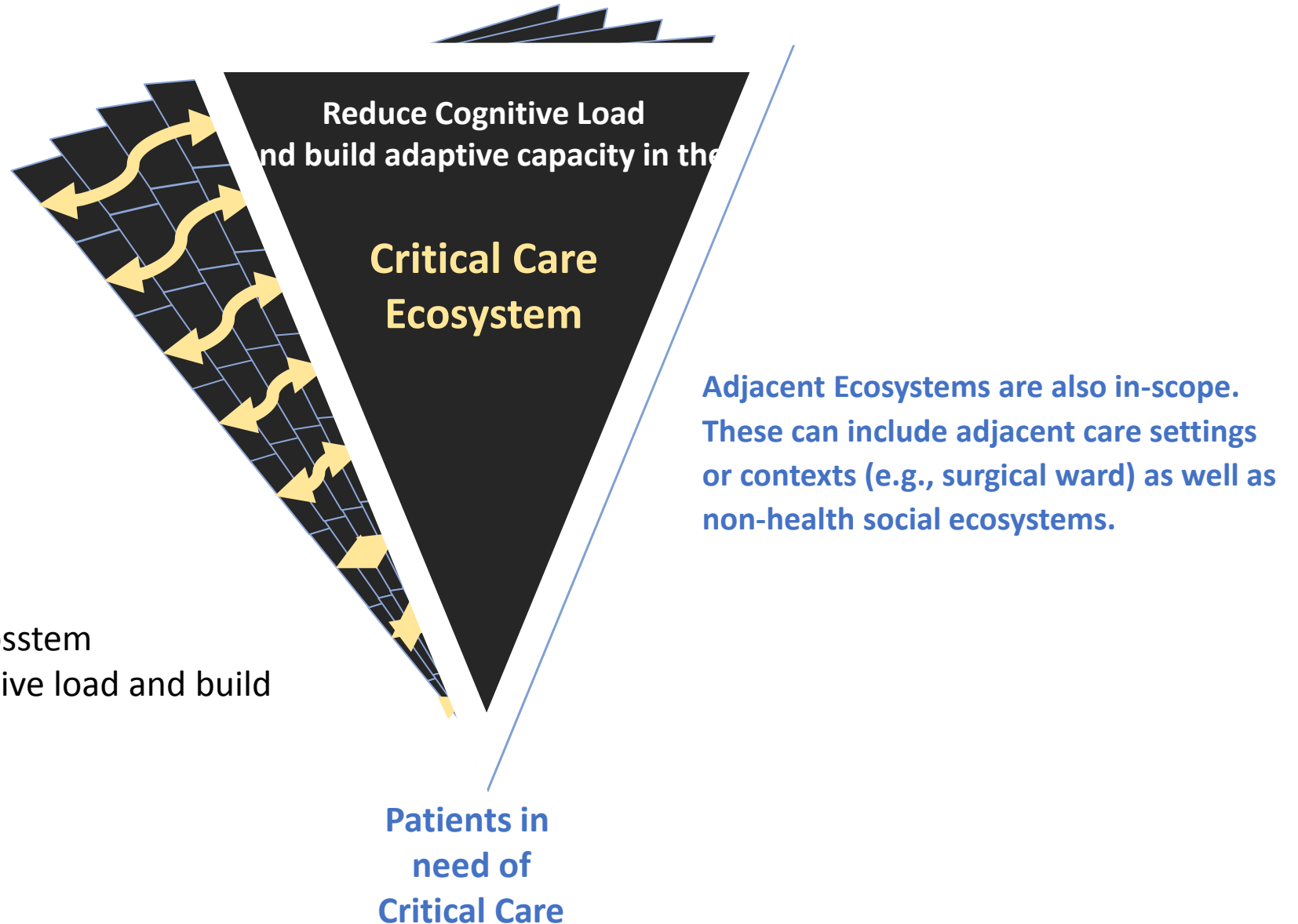
Temporal plot-making and communication

High reliable organization

Engage patient & family

Build adaptive capacity

The PROPOSAL



1. Better understand the critical care ecosystem
2. Design interventions that reduce cognitive load and build adaptive capacity
3. Implement them and proof impact