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Research Question

How do clinicians make sense of neurobehavioral functioning in patients in disordered states of consciousness (DoC) during clinical encounters?

Unique Challenges in DoC

- Patients do not verbally communicate needs
- Non-linear or **fluctuating patient recovery** trajectory makes it hard to predict and creates **ambiguity** about patient prognosis
- **Limited indicators** of meaningful neuro-behavioral change [1]
- Clinicians **struggle to communicate** neuro-behavioral change to each other and family [2]

What is clinical reasoning?

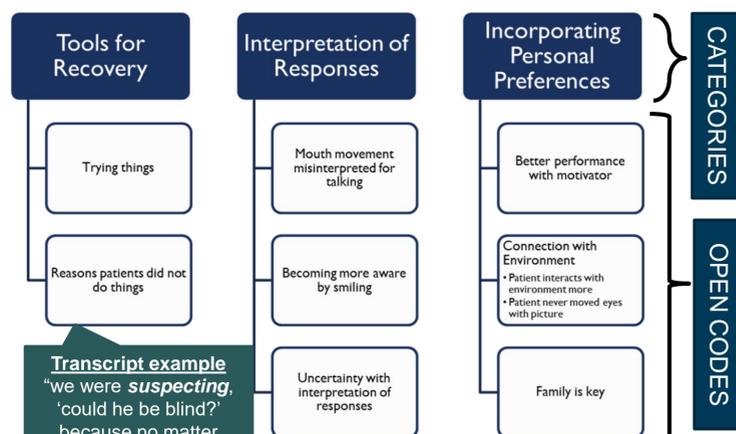
- ❖ a **way of perceiving & making sense of** information in practical settings. It combines past experience and theoretical knowledge
- ❖ "a largely **tacit thought process** ... that allows therapists to pay attention to relevant cues and unconsciously shift therapeutic interventions in response to them" [3]

Study Design & Conceptual Framework

- ❖ Qualitative, exploratory design using narrative interviewing methodology [4, 5]
- ❖ Systems perspective [2, 6] and Narrative Theory [7]

Methods & Analysis

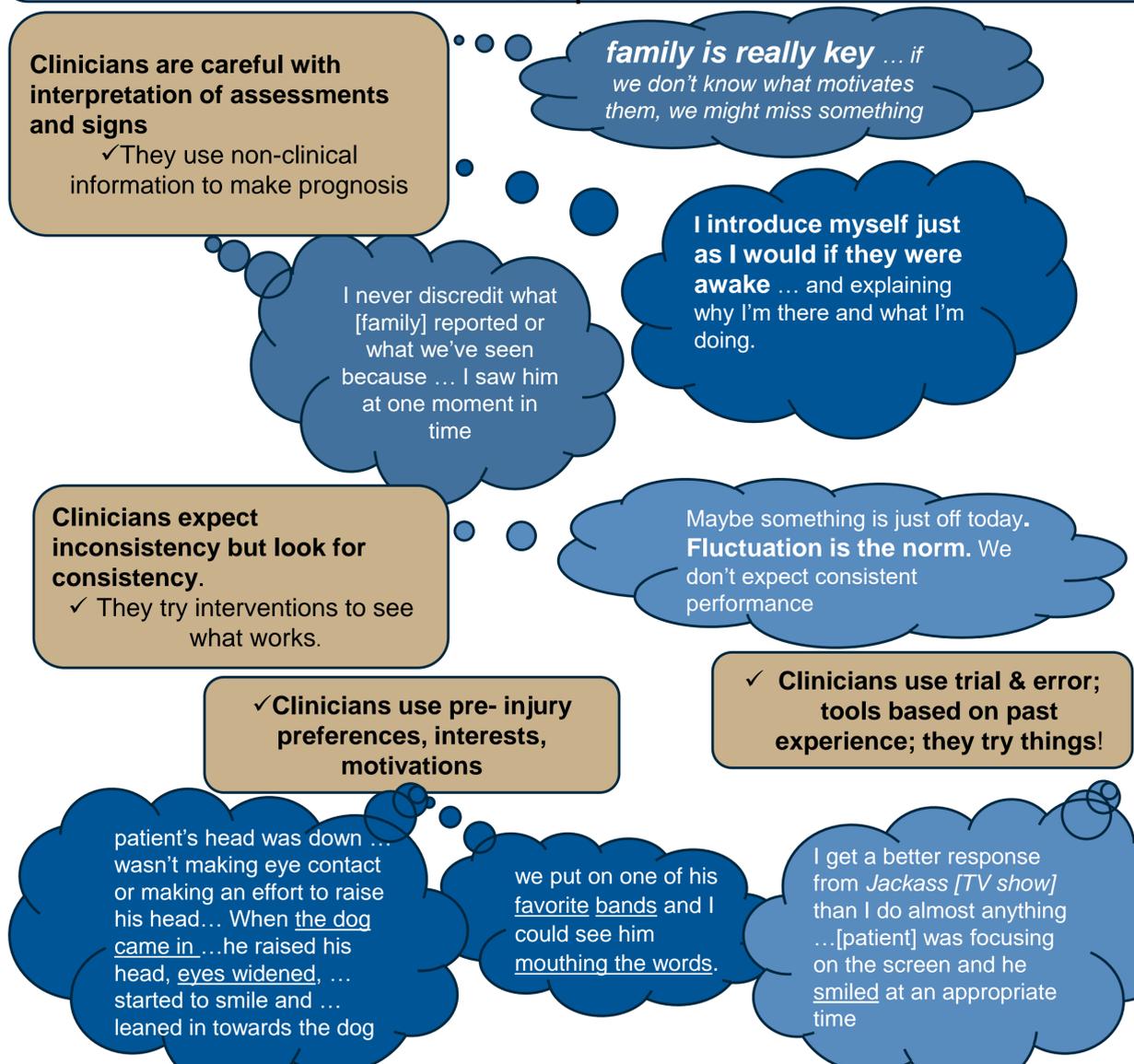
- 21 rehabilitation clinicians working in post-acute rehabilitation settings with experience treating adults with DoC due to severe TBI.
- Participants include: Occupational, Physical, Speech, & Recreational Therapists, Nursing, Psychology, Physicians, & Case Managers.
- Thematic analysis is iterative, i.e. ongoing coding develops & adjusts themes using NVivo 11 Plus. Thematic & constant comparative analytic tools used to organize and analyze data [5, 8, & 9]
- Disagreements discussed among team to seek consensus & explore variety of interpretations



Generates a Theme
Clinicians Make Sense of Ambiguity

Clinicians Make Sense of Ambiguity: The Art & Science of Clinical Reasoning

- **Ambiguity encompasses the everyday experiences of rehabilitation clinicians.**
- **They make clinical decisions based on patient responses, interactions with team and family, past experience, and personal ethics & values.**
- **They incorporate patient preferences, use everyday tools and clinical expertise to treat DoC patients.**



Why is clinical reasoning important?

Clinical Reasoning takes places within a **system** of interpersonal & organizational factors



Clinicians makes judgments about the best treatment plans & assessment tools patients need **everyday**.

- Understanding how clinicians make judgments in their practice settings helps to:
- ✓ ensure they **design successful treatment** plans, including being **person-centered** [4]
 - ✓ **train clinicians** to respond to ambiguous clinical settings such as working in the DoC field

Take Home Messages

- **Fluctuation** of behavior is common for these patients
- Clinical assessments and their interpretations **do not provide clarity** on prognosis or diagnosis (~40% misdiagnosed) [10]
- Clinicians remain **uncertain** about **how to judge** neurobehavioral change
- Communicating prognostic ambiguity to families & team members is **emotionally taxing**

What do I do now?

- ✓ Clinicians make decisions based on judgments, not exactitude! → **Use your clinical judgment tools & seek continuous critical assessment** of the information you have.
- ✓ Clinical reasoning depends on marshalling ethics, virtues, experience and insights → **Reflect** on these; **Seek** mentoring; **Challenge** your beliefs; **Listen** to family [11]

Future Directions

- **Train** clinicians on how to respond to ambiguity in clinical practice
- Currently interviewing **caregivers** to understand their reasoning tools when interacting with persons in DoC

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