

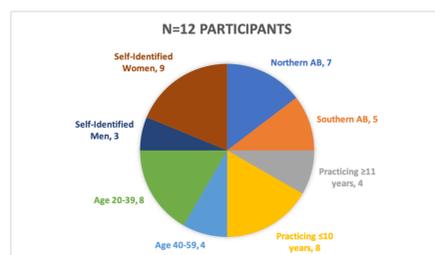
Context

Pharmacists often interact with patients who are prescribed chronic opioid therapy (i.e. longer than 3 months) or opioid agonist therapy (OAT). Their frequent interactions with these patients, combined with their expertise, gives them an important perspective in this area of clinical management. Recently the Collaborative Mentorship Network for Chronic Pain and Addiction (CMN) highlighted differences in understanding around prescribing between primary care physicians and pharmacists. We believe that pharmacists and family physicians are likely approaching prescribing and managing chronic opioid therapy and OAT with different mental models and wanted to understand these differences and how they may be impacting coordinated care. This research project sought to elicit the mental models of physicians and pharmacists regarding the management patients using chronic opioid therapy and/or OAT.

Design & Participants

We used the CTA knowledge audit method to interview (n=6) family physicians and (n=6) pharmacists and elicit mental models. By describing the mental models of participants, we hope to understand the differences between these two groups and provide recommendations to the CMN based on our findings.

Two CTA focus groups will take place with interview participants to validate the findings. This provides an opportunity for discussion, awareness, and understanding on how practitioners are approaching this clinical work in their own roles.



Preliminary Findings

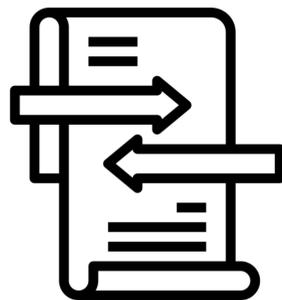
As expected, we discovered differences in mental models between family physicians and pharmacists; however, we have also found differences within the two groups. This included variation in the richness of the mental models.

Mental models among pharmacists may differ due to contextual setting, such as where they work, e.g. chronic pain clinic, community pharmacy where they work closely with opioid dependency clinics, or independent vs "big chain" pharmacy.

Mental models among family physicians may differ based on their past experiences with patients and pharmacists, as well as when they trained and guidelines learned at that time, or confidence and knowledge in current guidelines and resources.

Elements of Differing Mental Models:

- Patient-Centred
- Team-Based
- Relationship-Based
- Physician Directed
- Harm Reduction
- Transactional
- Contextual
- Systems Oriented
- Avoidance
- High responsibility



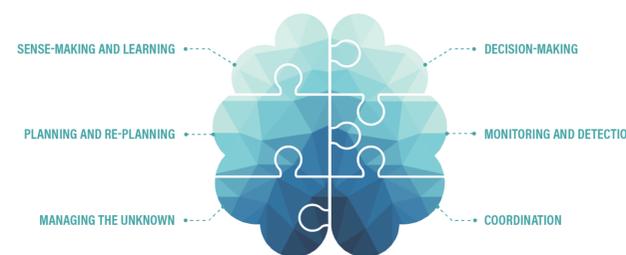
What is CTA?

Cognitive Task Analysis (CTA) is a set of tools used to reveal the cognitive skills and strategies needed to effectively tackle challenging situations and accomplish tasks in real-world settings (macro-cognition). It is used to elicit mental models and understand functioning in high stakes settings (e.g. aviation, firefighting, ICUs).

Macro-cognition

CTA uncovers and represents what individuals know and how they think when making decisions or performing tasks, known as 'macro-cognition'. Macro-cognitive functions are the crucial processes that individuals carry out each day (coordination, planning and re-planning, decision making, monitoring and detection, sense making and learning, and managing the unknown).

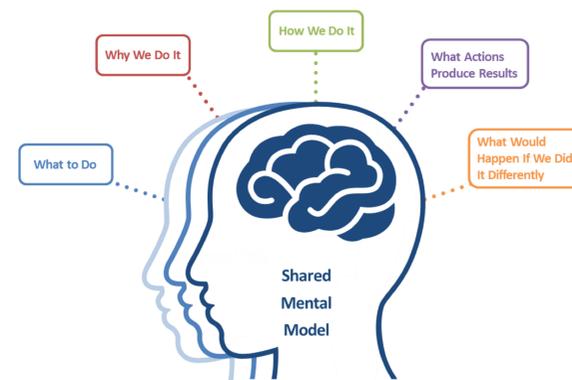
MACROCOGNITION PROCESSES AND FUNCTIONS



Mental Models

CTA is a well established method to eliciting mental models through understanding how individuals and teams perform macro-cognition. Mental models describe the lens through which individuals make sense of what's happening around them. They are more than our beliefs and values. They determine what we pay attention to, the options and possibilities we consider, and how we solve problems, make decisions, and act.

When those who commonly interact and engage on the same work do not share the same mental model, effectiveness can be markedly impaired and often the individuals working together do not clearly understand why.



Present Conclusion (So What?)

While we have yet to complete our research, at this point it is evident that pharmacists and family physicians do not share the same mental model of chronic opioid therapy or OAT; and there are differences in mental models among pharmacists and family physicians themselves.

So What?

Absence of a shared mental model results in:

- Misunderstandings of roles and responsibilities
- Misunderstanding on scope of work
- Challenges in communication and coordination
- Too much guessing on what others are thinking and doing

The management of patients on chronic opioid therapy or OAT is effortful, lacks structure (i.e. there are so many different guidelines that can and are being used), and requires timely information— the right information as soon as it is needed.

Emerging recommendations

There needs to be clearer messaging on:

- What guidelines to use
- What resources are available and where to access them
- How to access just in time information
- Guidance and mentorship in managing this patient population
- Roles of pharmacists and the benefits of working collaboratively

References

- Crandall B, Klein G, Hoffman R. Working Minds: a Practitioner's Guide to Cognitive Task Analysis. Cambridge, Massachusetts: The MIT Press; 2006.
- Barber T, Toon L, Tandon P, Green LA. Eliciting and Understanding Primary Care and Specialist Mental Models of Cirrhosis Care: A Cognitive Task Analysis Study. Canadian Journal of Gastroenterology and Hepatology. 2021;2021
- Institute for Patient and Family Centred Care: <https://www.ipfcc.org/>
- The Collaborative Mentorship Network for Chronic Pain and Addiction: <https://cmnalberta.com/>

We would like to acknowledge that this work took place on Treaty 6 and 7 territory, the traditional lands of diverse Indigenous peoples and the Métis people.