

SCALING UP CIRRHOSIS CARE



LIVER CIRRHOSIS IS A LEADING CAUSE OF MORBIDITY AND PREMATURE MORTALITY. PROBLEMS IN COORDINATION AND TRANSITIONS OF CARE CONTRIBUTE TO HIGH RATES OF HOSPITAL READMISSIONS AND INADEQUATE QUALITY OF CARE.

OBJECTIVE

To compare the mental models of cirrhosis care held by speciality and primary care physicians and nurse practitioners, to help identify factors that hinder smooth transitions and coordination between primary and specialty care; informing the development of a province-wide cirrhosis care pathway.

METHOD

Cross-sectional formal elicitation of mental models using Cognitive Task Analysis (CTA). Setting: Primary and specialty (digestive, cirrhosis, hepatitis) care in Alberta. Selection: Purposeful and chain-referral sampling for family physicians (n=8) who saw small numbers (typical for unspecialized practice) of cirrhosis patients, and specialists (n=9) with high content knowledge and many cirrhosis patients. Nurse practitioners (n=2) included when the sampling chain led to them.

KEY FINDINGS

- **Family physicians** do not maintain rich mental models of cirrhosis care but take a “knowledge on demand” approach. They care for cirrhosis patients relatively infrequently and rebuild their mental model when required. They rely heavily on relationships with specialists for sensemaking. They have reactive, patient-need-focused, rather than proactive system-of-care models.
- **Specialists’** mental models are rich but vary widely a) between patient-centred and task-centred and b) in the degree to which they incorporate responsibility for addressing gaps in the system and in transitions.
- **Nurse practitioners** hold patient-centered mental models similar to specialists but take responsibility for addressing gaps in system.

MENTAL MODELS

Mental Models describe the lens through which individuals make sense of what’s happening around them. More than our beliefs and values and dynamic in nature. Our mental models are so implicitly held that we’re not aware of them and how they constrain our thinking.

SHARED MENTAL MODELS

Everyone shares the same lens. When mental models are not shared, working together effectively can be impaired without an understanding of why.

COGNITIVE TASK ANALYSIS

Set of qualitative tools used to elicit mental models; valuable to represent how people think when working in cognitively complex environments.

SO WHAT?

Improving the coordination of cirrhosis care will require:

- Processes to optimize informational, relational and management continuity.
- Pathways and support infrastructure to provide resources for knowledge on demand that are easily found and applied, to facilitate the development of individual primary care physician-specialist relationships, to clearly define responsibilities of providers (who takes care of whom, when, how and where), and to support adaptation to local context (rural vs. urban, underserved or other special populations) will be integral components.

Purposeful redundancy will need to be built in as a part of reliable system design, to ensure loops are closed, and to minimize cognitive burden and task disruption.

RECOMMENDATIONS:

1. Plan for the “expected unexpected.”

- Create clear steps to help providers navigate and anticipate the trajectory of care and issues that may occur for patients living with cirrhosis. E.g. less structured appointments, forming structured partnerships among multidisciplinary teams to improve access and communication among health care providers, and patients.

2. Consider patient context and journey, i.e. who they are, what is their situation, what stage they are at, and who needs to provide care when and how.

Possible options:

- Co-located clinics, with interdisciplinary team, demonstrate how care can be planned, monitored, and coordinated for both attached and unattached patients.
- Consider supports for health care providers and patients in rural areas to keep patients in homes or geographical area.

3. Create clarity of provider roles that:

- Spans the trajectory of care required.
- Includes the “middle ground” when patients are pre-compensated, between compensated and decompensated, and pre-end of life.
- Examines details of coordination, communication, monitoring and detection.

4. Work with and consider the mental models we know exist among health providers.

- Develop easily accessible care pathways and links to trusted resources that work with the knowledge on demand approach used by family physicians.

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