

A person is walking away from the camera on a paved path that runs alongside a body of water, enclosed by a metal railing. The sky is filled with a large number of birds in flight. To the right of the path, there are trees and streetlights with glowing yellow lamps. The overall scene is somewhat desaturated, with a cool color palette.

Stirred but not Shaken

Canadian Paramedicine's Response to COVID-19

Ron Bowles

Justice Institute of British Columbia

Karl Hines

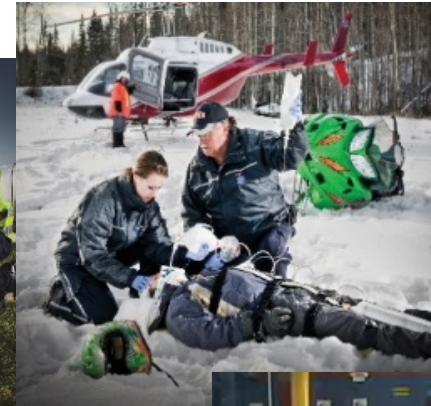
I'd like to start by acknowledging that the land from which I am speaking today is traditional and unceded Qayqayt and Musqueam territory.

Where We are Heading:

- Setting the stage: Paramedicine as a complex system
- CPRC
- Descriptive findings
- Emerging models
- Where to next?

The Paramedics Connecting Through Applied Research (Paramedics CARE) online conference aims to mobilize knowledge on the latest research in Canadian paramedicine and foster intersectoral and transdisciplinary collaboration between academic researchers, educators, provincial and municipal governments, private small and medium enterprises (SMEs) that support paramedic practice, and the public through patient advocacy groups.

Defining, Describing, & Understanding Paramedic Practice in Canada



Canadian Paramedic Information System



The Tonka Dilemma



Your Stories

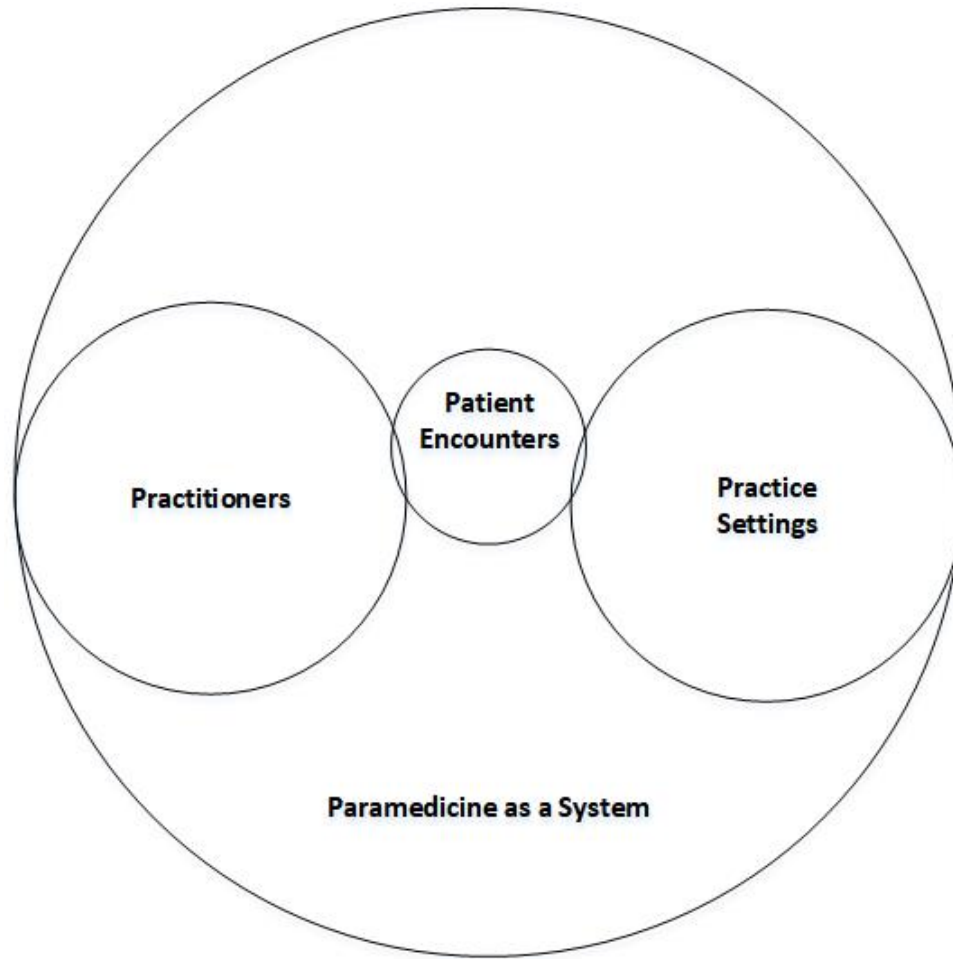
Data Needs

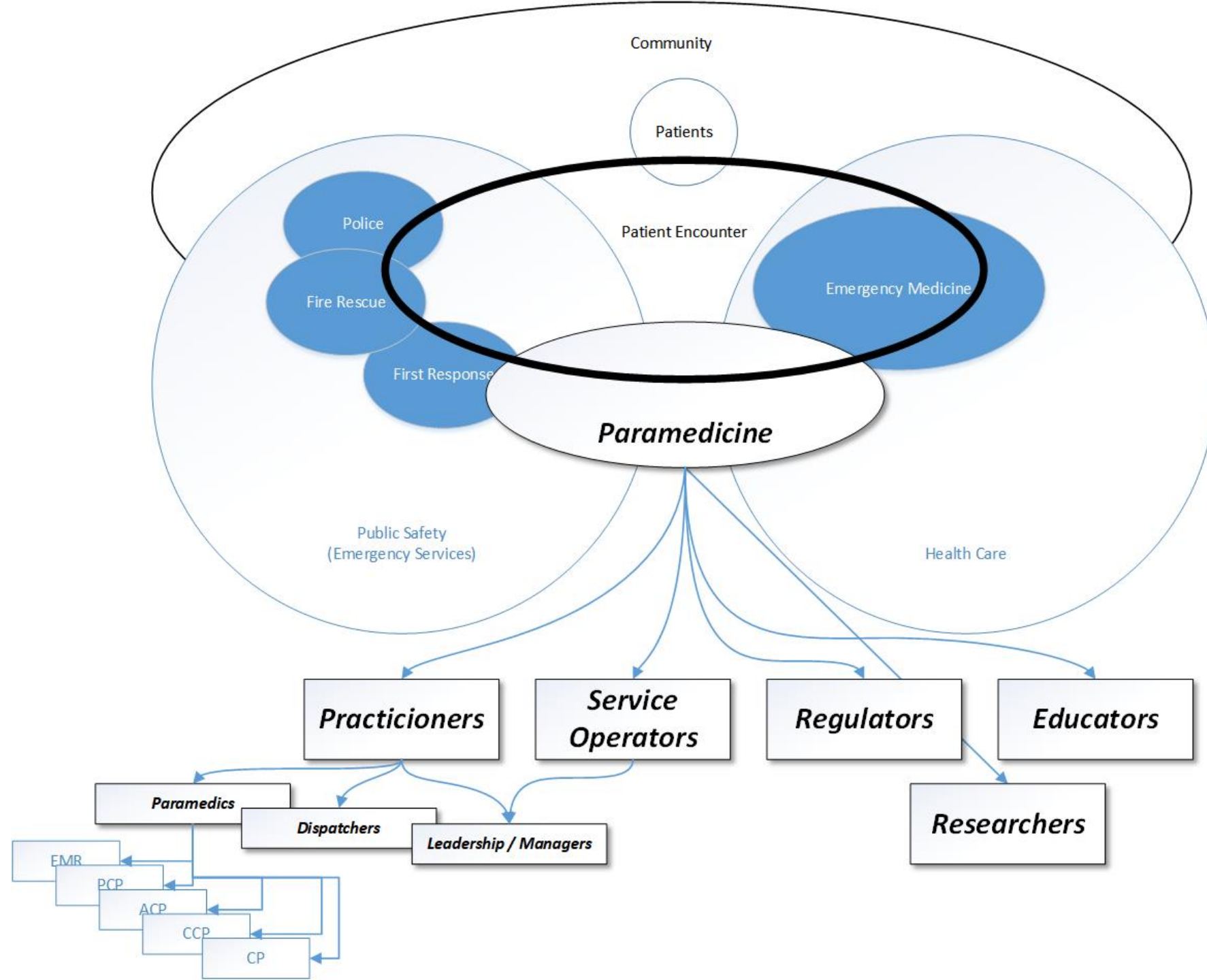
Characteristics
Functions
Elements

Information
System

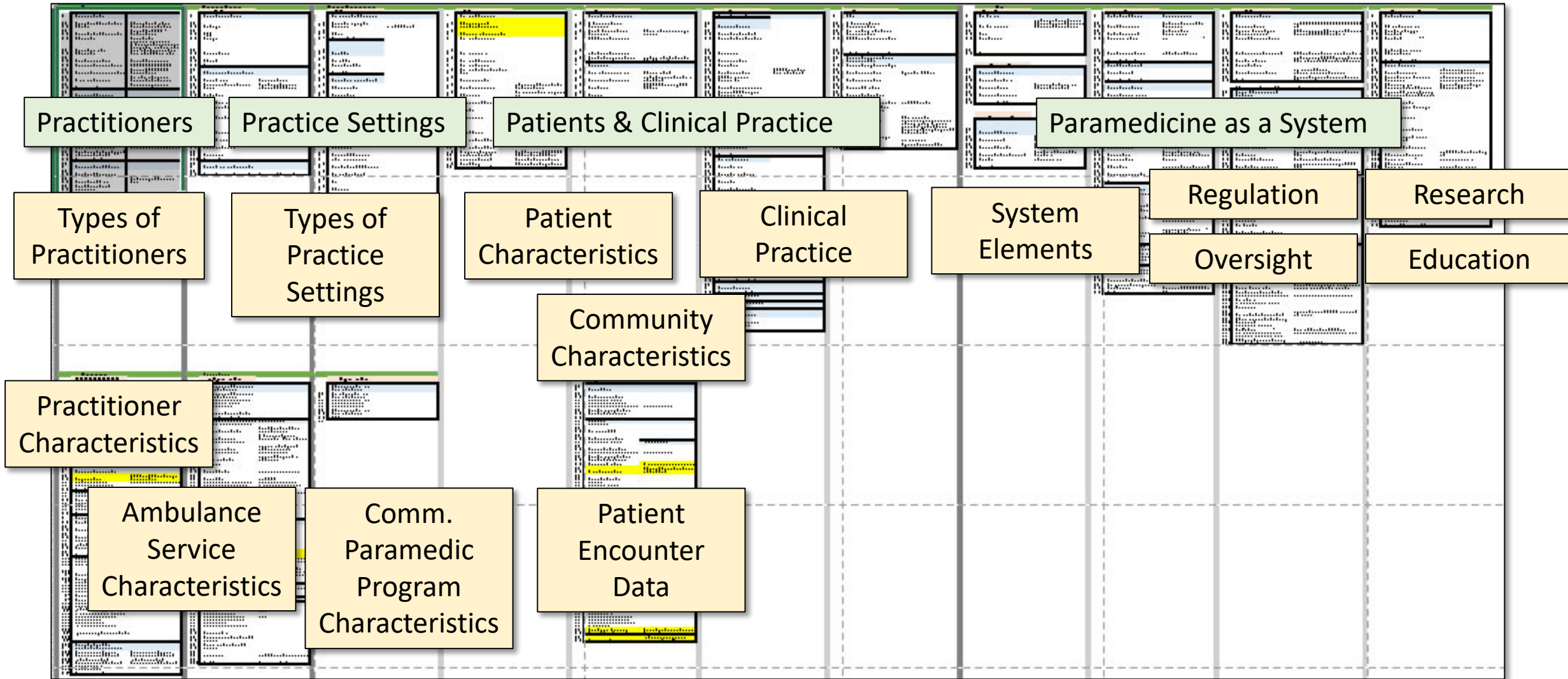
Describing
Paramedicine

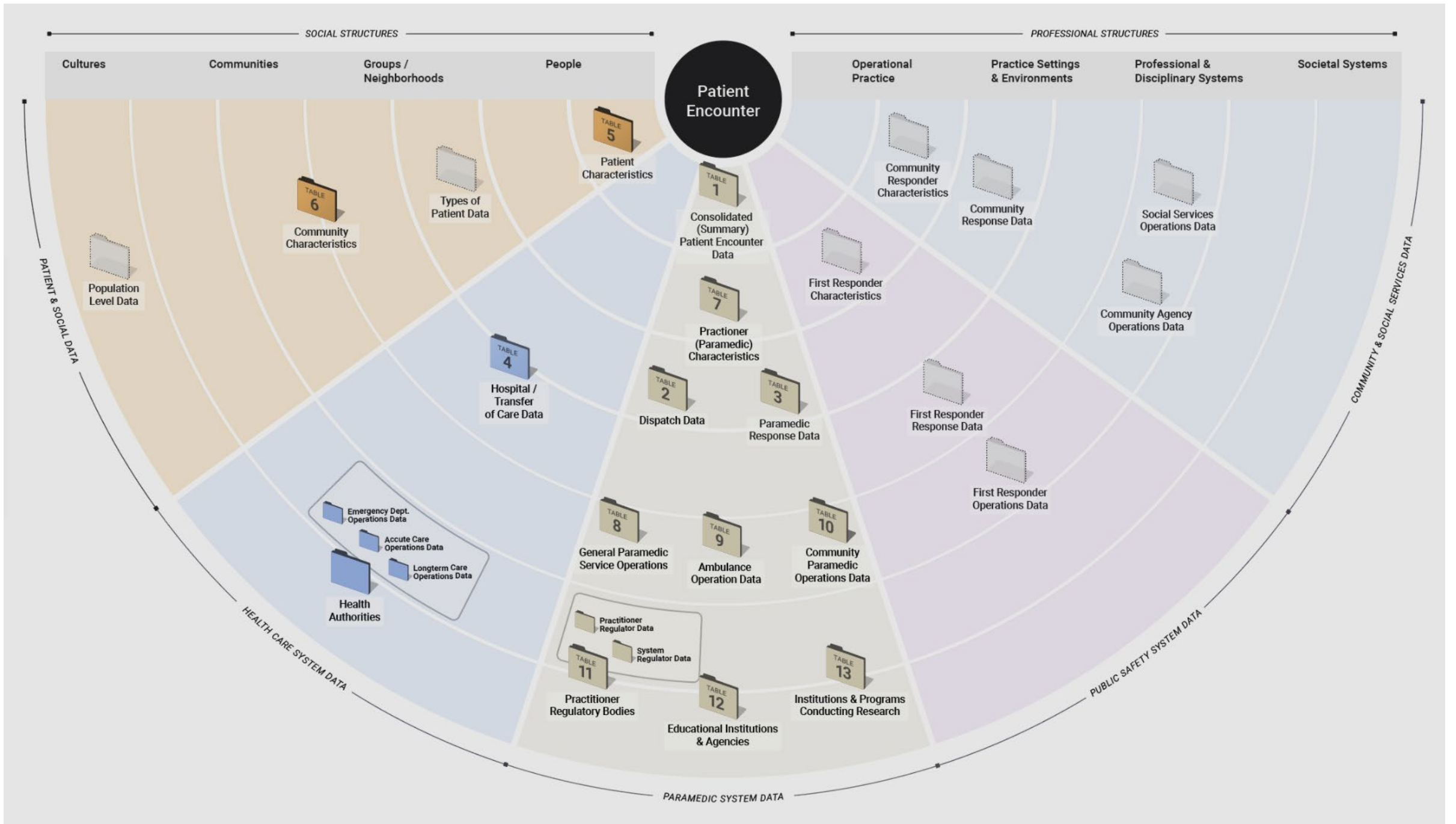
What do you REALLY want to know about....





The Map





Social Structures

Professional Structures



Cultures

Communities

Groups/
Neighbourhoods

Family, Bystanders

Operational
Practice

Practice Settings
& Environments

Professional
& Disciplinary
Systems

Societal
Systems

Micro

Events

Individuals
& Teams /
Groups

Meso

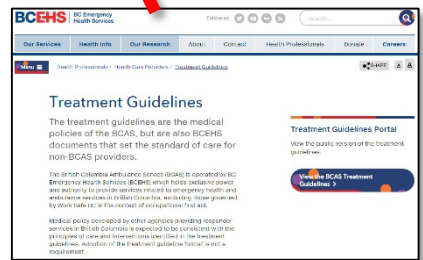
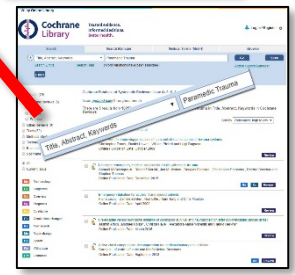
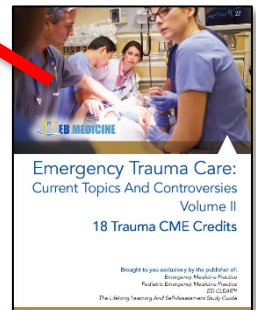
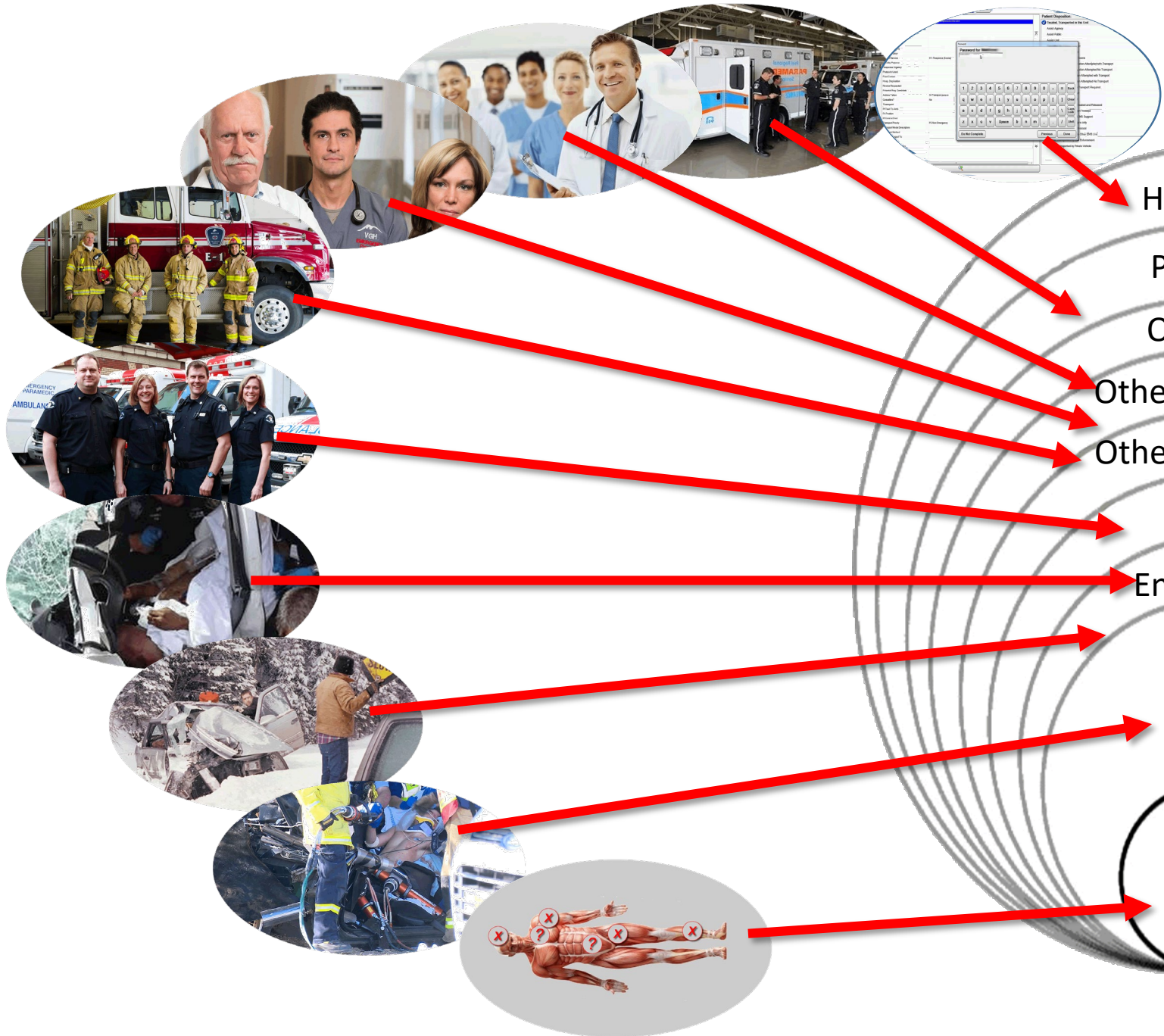
Organizations

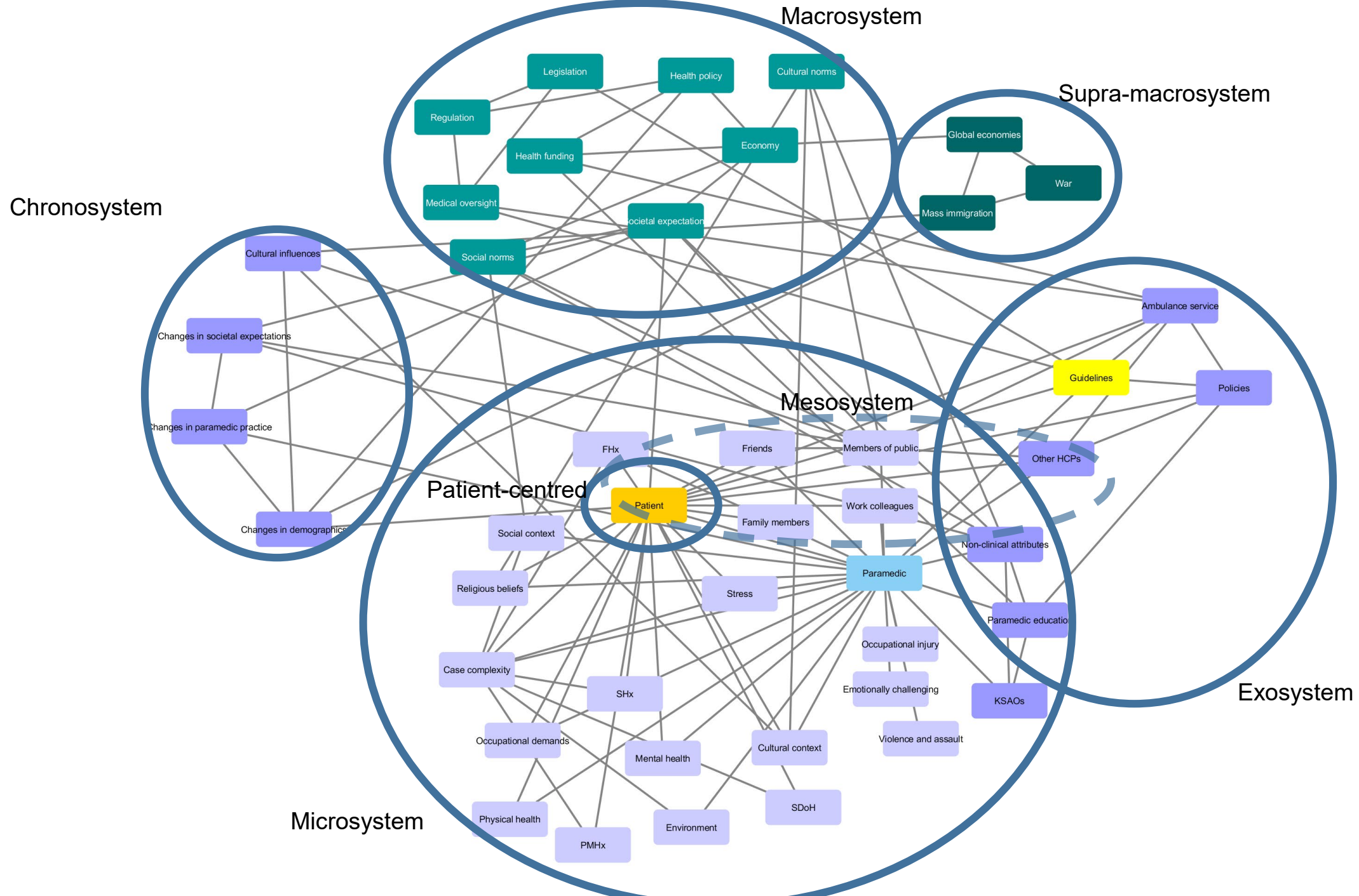
Professions
Broader Fields

Macro

Social /
Cultural
Systems

Decision-making as a Complex Process





Lenses on Paramedicine

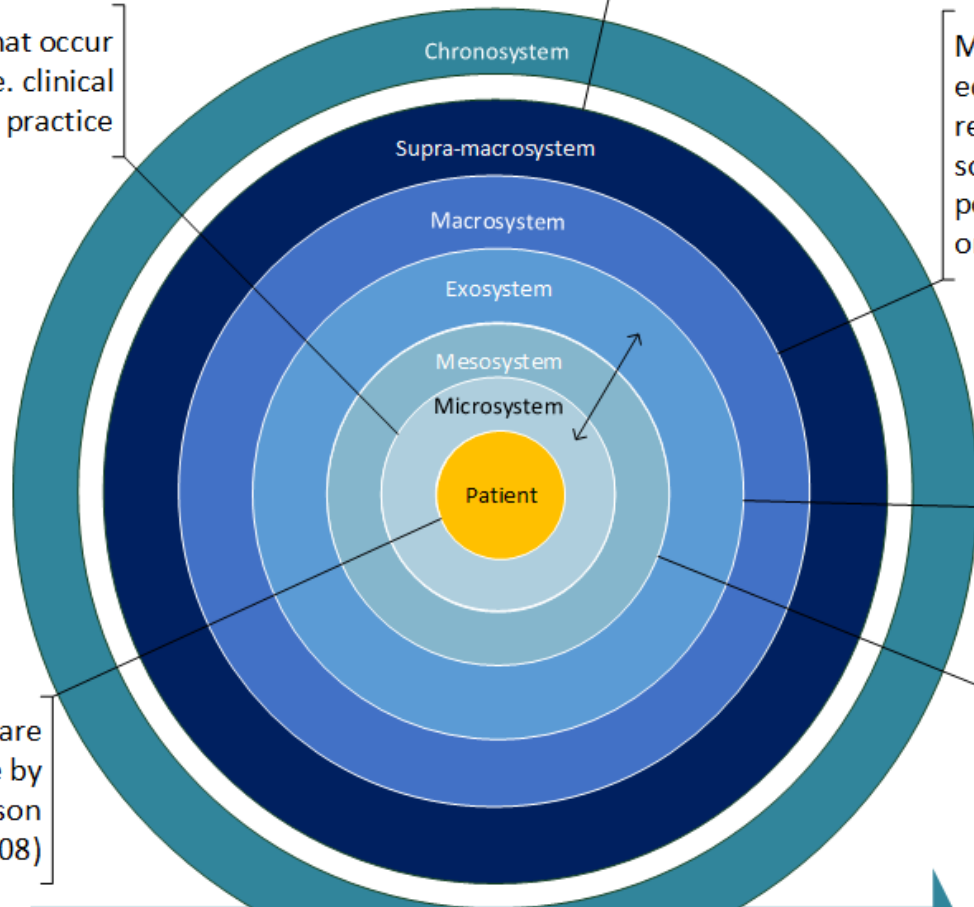
Applied Professional	Interdisciplinary Studies	Arts	Sciences	Health Disciplines	Education	Research	Health Studies
<ul style="list-style-type: none"> • Leadership • Municipal Management • Health Management • Occupational Health & Safety 	<ul style="list-style-type: none"> • Interdisciplinary Studies 	<ul style="list-style-type: none"> • Sociology • Psychology • Women's Studies • Philosophy • Communications • Contemporary Studies 	<ul style="list-style-type: none"> • Political Science • Sciences • Chemistry • Biological Science • Biomedical Toxicology • Neuroscience • Physiology • Kinesiology • Geography 	<ul style="list-style-type: none"> • Health Sciences • Medicine • Nursing • Paramedicine • Paramedicine Critical Care 	<ul style="list-style-type: none"> • Education • Curriculum • Educational Policy Studies • Adult Education • Continuing Education • Learning & Technology • Health Science Education • Medical Education 	<ul style="list-style-type: none"> • Health Research • Applied Modeling/Quant Methods • Clinical Epidemiology 	<ul style="list-style-type: none"> • Health Quality/QA • Health, Aging & Society • Population & Public Health • Public Health • Health Policy • Community Health



Supra-macrosystem: government relations, sociopolitical forces, global economies, and internationally endorsed values and priorities

Microsystem: direct interactions that occur between individuals and elements i.e. clinical practice

Macrosystem: cultural beliefs, the economy, rituals and traditions, religious beliefs and practices, and sociopolitical movements. healthcare policy, legislation, and cultural views on healthcare



Exosystem: Healthcare service delivery; policies and procedures

Patient-centred: Clinical microsystems are embedded in larger systems, and are by their definition "patient-centred" (Nelson 2008)

Mesosystem: system created through interactions between actors in the microsystem, and the dynamics of these interactions with higher levels

Batt, A.M., Williams, B., Brydges, M., Leyenaar, M., Tavares, W. New ways of seeing: the role of systems thinking when developing competency frameworks in health professions education. *Advances in Health Sciences Education.*

CHANGING COMMUNITY NEEDS

**NATIONAL STANDARDS FOR
COMMUNITY PARAMEDICINE**

**DISRUPTING THE PARAMEDIC
WORK ENVIRONMENT WITH
GENDER BASED ANALYSIS**

**POST-TRAUMATIC
STRESS INJURY AND
PARAMEDICINE**



**PREVENTION OF
MUSCULOSKELETAL DISORDERS
(MSDS) AMONG PARAMEDICS**

THE FUTURE OF PARAMEDICINE: A CANADIAN VISION

**TECHNOLOGY AND INNOVATION
TO SUPPORT CARE-IN-PLACE IN
CANADA**

**COVID-19 AND
PARAMEDIC PRACTICE**

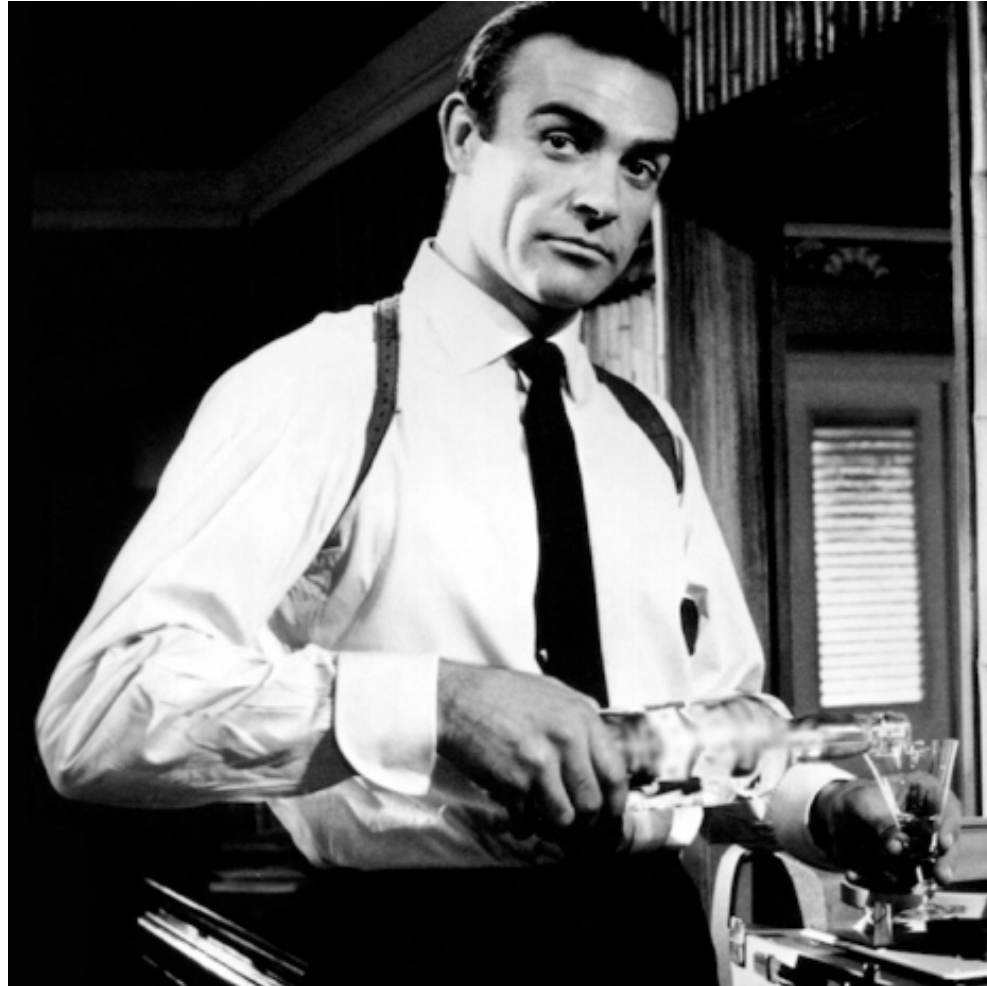
Paramedics CArE brings together leading experts to discuss paramedicine from their respective disciplines and perspectives, share current trends in research, initiate a conversation on how these initiatives will impact the lives of Canadians, and explore ways to mobilize research knowledge more effectively for an intersectoral and transdisciplinary audience.

**PREDICTIVE MODELLING IN
PARAMEDICINE**

**COMPLEXITY IN PARAMEDIC
PRACTICE AROUND THE WORLD**

Stirred, not Shaken

Canadian Paramedicine's Response to COVID-19



Research Team	
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Johanne Joseph	Urgences-santé, JIBC*



Urgences-santé
Québec



McGill



UNIVERSITY OF
TORONTO

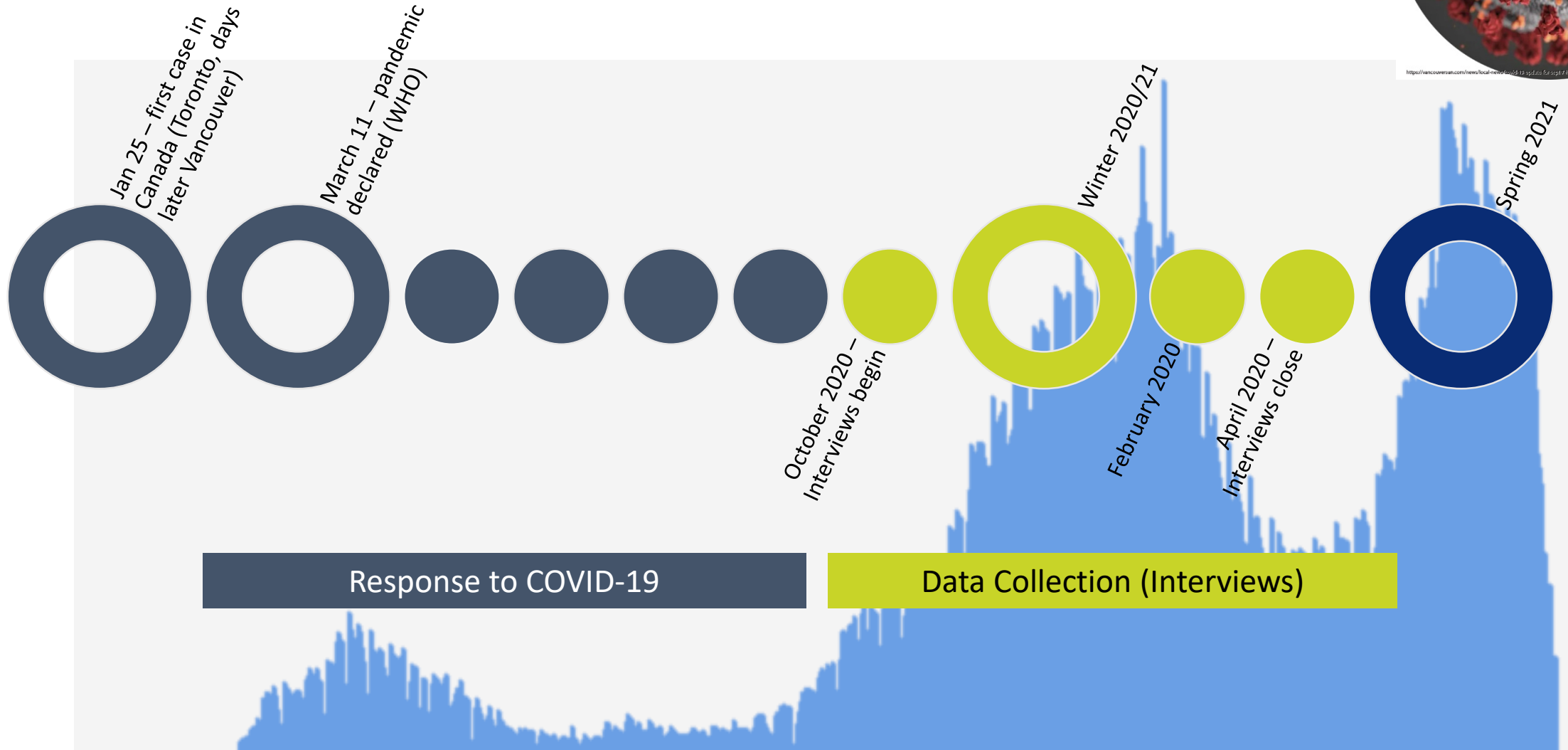
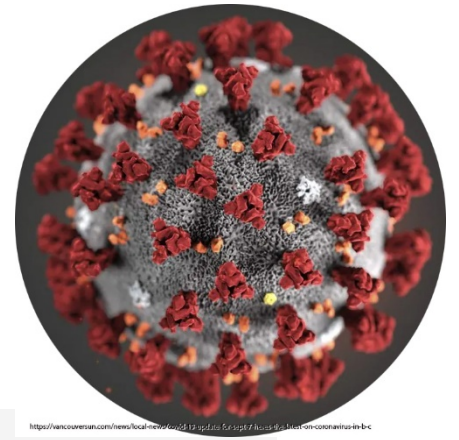


BC Emergency
Health Services

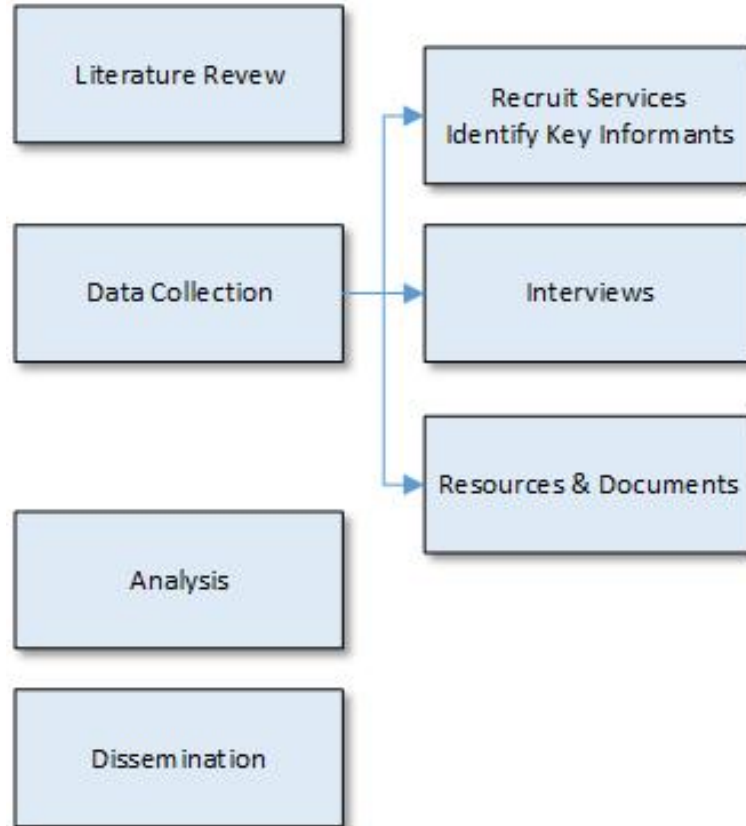


This project is funded through the National Sciences and Engineering Council's College and Community Innovation Program's special Tri-Agency Applied Research Rapid Response to COVID-19

Context: Pandemic



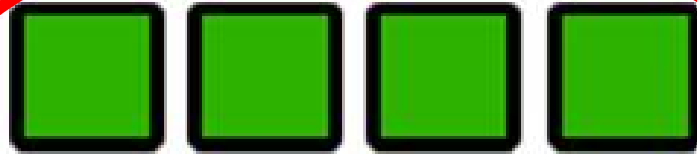
Challenges, Innovations, Barriers, Strategies



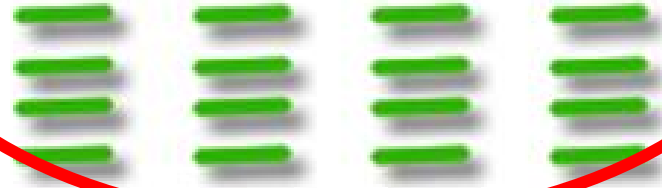
- Identify challenges and innovations in operations, practice, and decision-making related to the management of the COVID-19 pandemic
- Identify barriers to and considerations for innovation, particularly in relation to operational guidelines, operational and clinical governance, policy, procedure, education, and regulation
- Identify strategies and resources employed to mitigate barriers and address considerations

Descriptive

1. Categorize
to ?'s



2. Open
Coding



3. Relate / Develop
Themes to Research
Questions

Exploratory

4. Organize / Sequence
Elements within Themes

5. Relationships
within Themes

Explanatory

6. Relationships
across Themes



2nd: Fatigue

2nd: Sustainability

Staffing

Maintaining Core Functions

Providing Care to COVID patients

Operations

Clinical Care

Preventing Infection

Unknowns
Fear

System Overload

Managing Potential COVID Pt not requiring hospital care

Safety

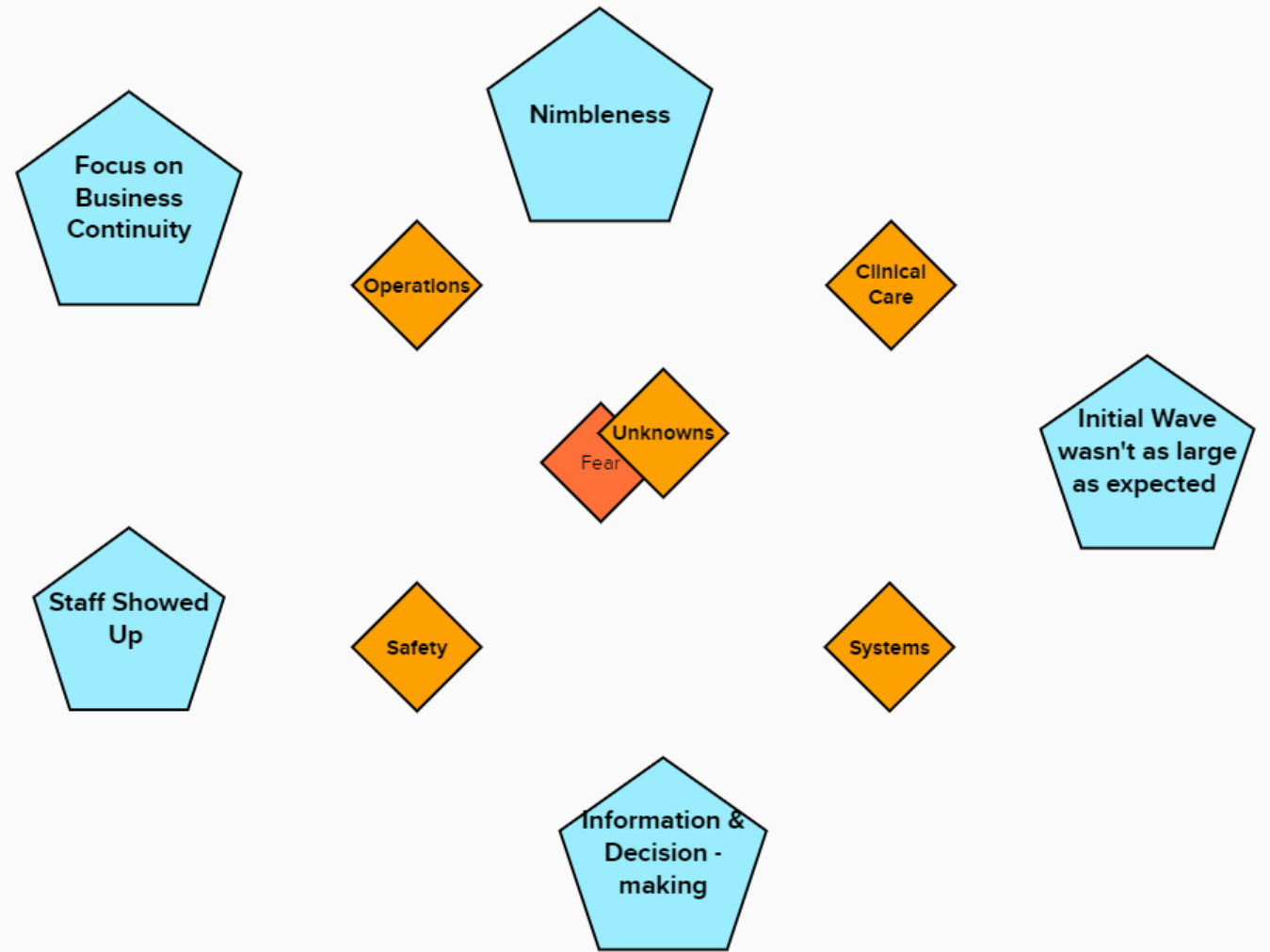
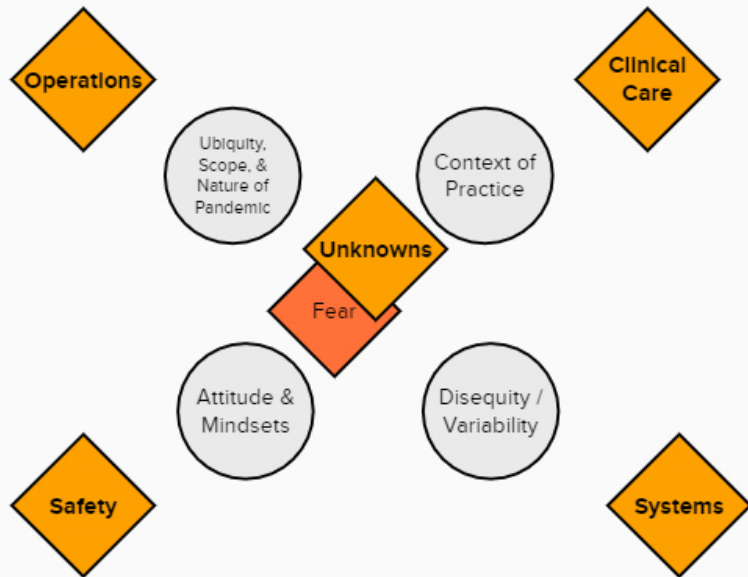
Systems

Information

Core Framework

Next Steps: Exploratory Analysis

Considerations



Success Factors

Questions?

