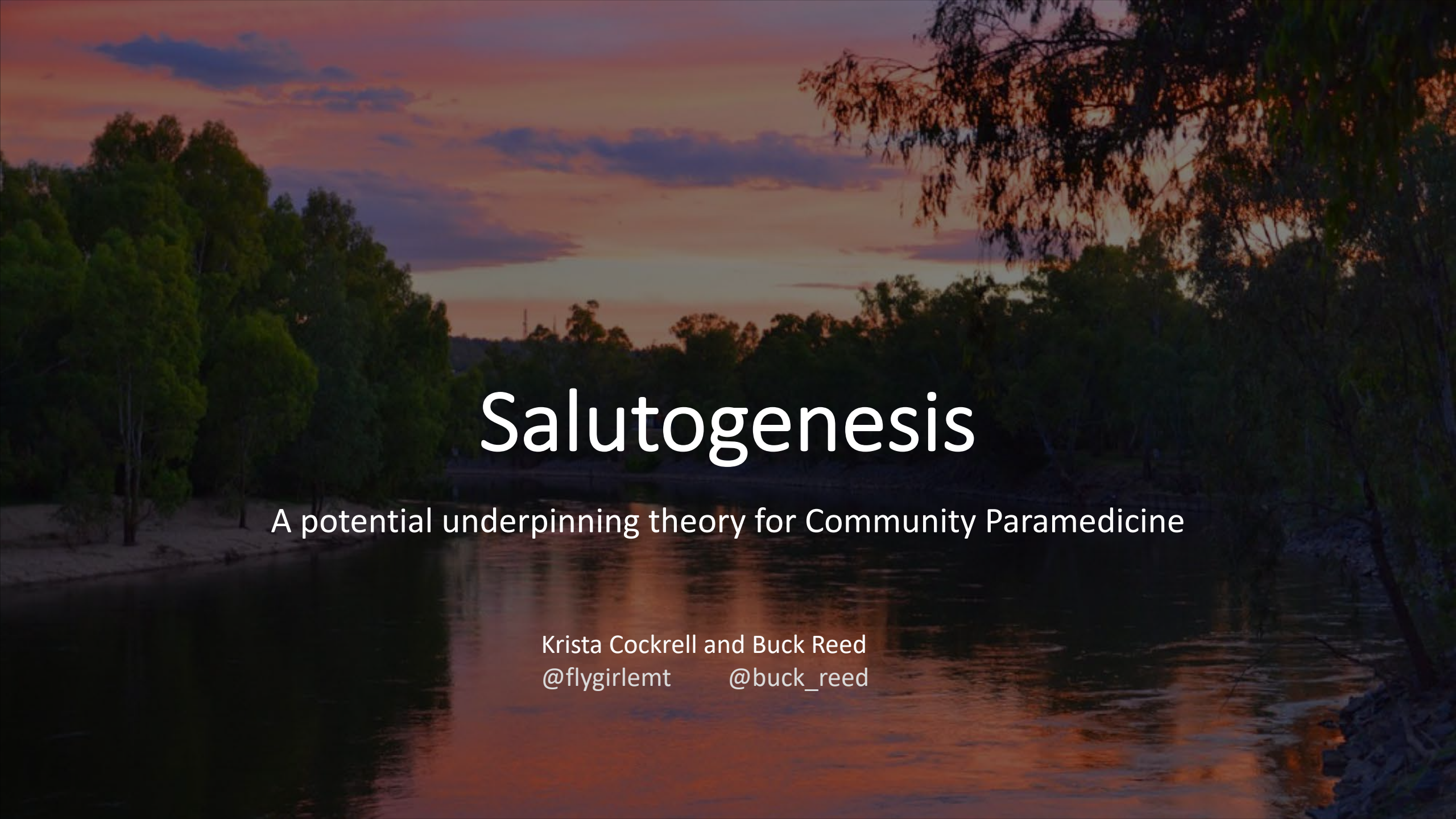


Salutogenesis

A potential underpinning theory for Community Paramedicine

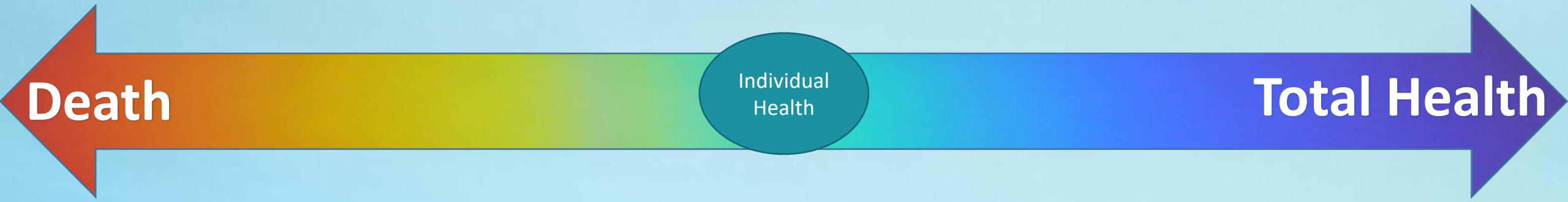
Krista Cockrell and Buck Reed
@flygirlemt @buck_reed

What is Salutogenesis?

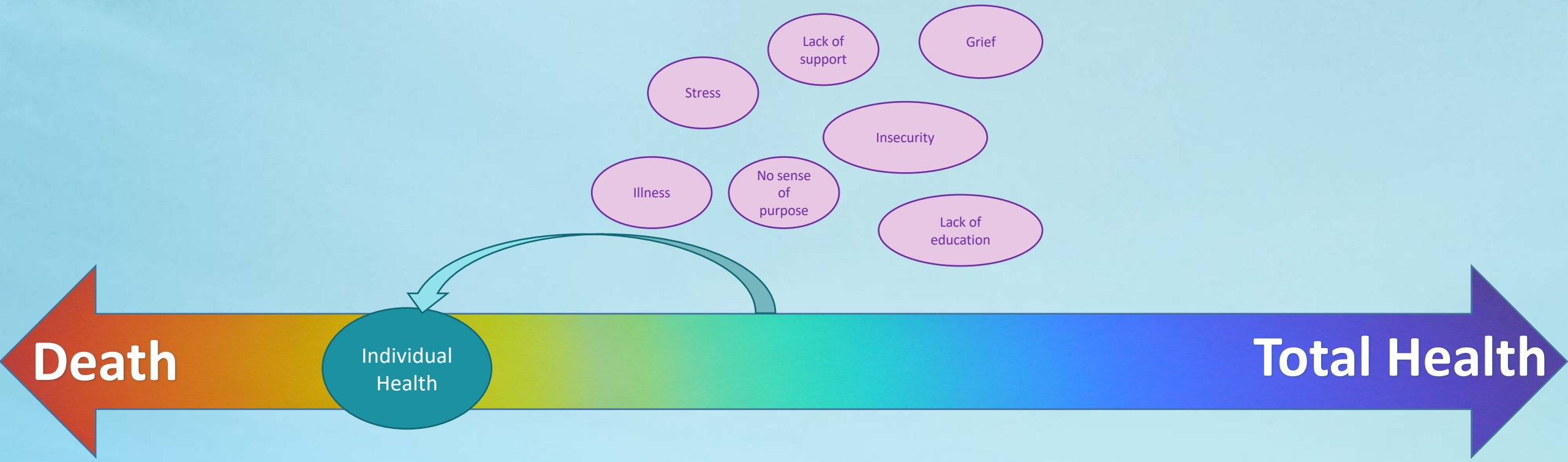
Salutogenesis…

- asks the question, “What causes health?”
- questions how can some people remain well despite their circumstances?
- does not view health as either healthy or sick.
- recognises individuals’ experiences impact health outcomes.

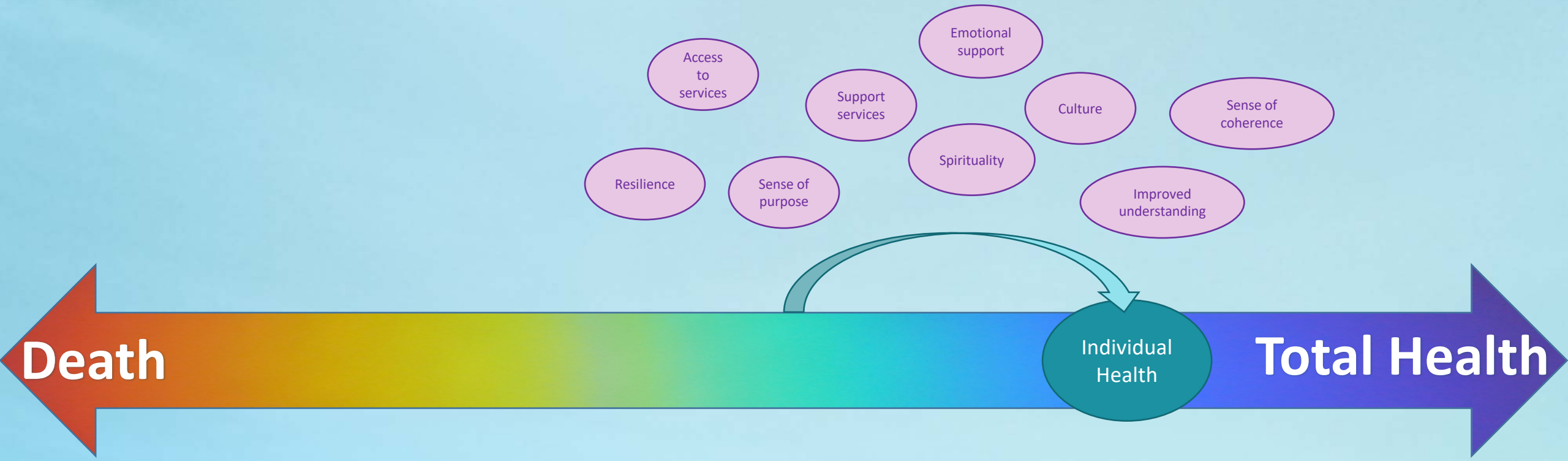
The Health Continuum



- Health is not dichotomous
- Each individual has a unique position along the continuum
- Our position along the health continuum changes constantly



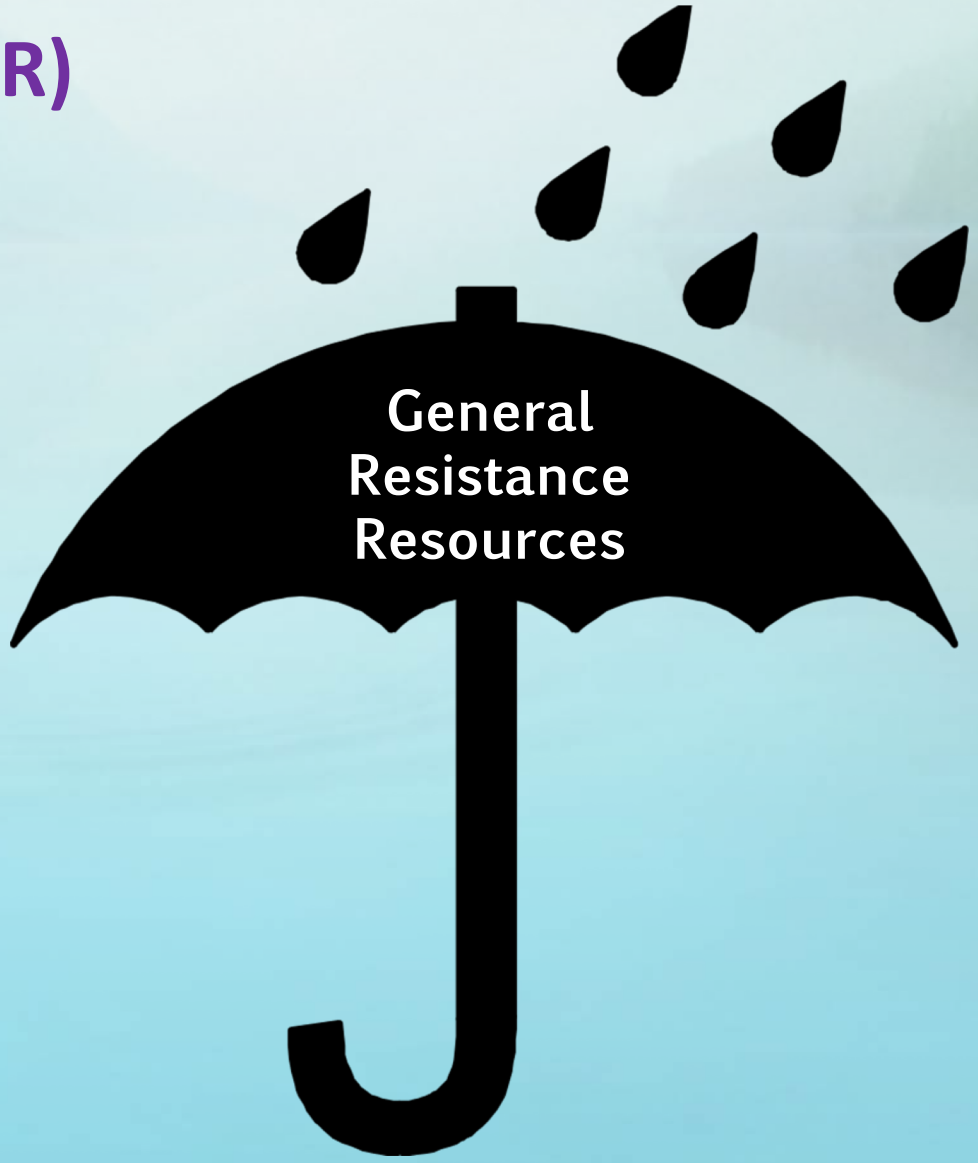
The Health Continuum



Salutogenesis

General Resistance Resources (GRR)

- Protective factors
- Can be applied at various levels
  - Individual,
  - Family,
  - Community



Resources, both internal and external which aid in the ability to cope with stressors.

General Resistance Deficits (GRD)

- Also, can be applied at various levels
  - Individual,
  - Family,
  - Community

How does this apply to Community Paramedicine?

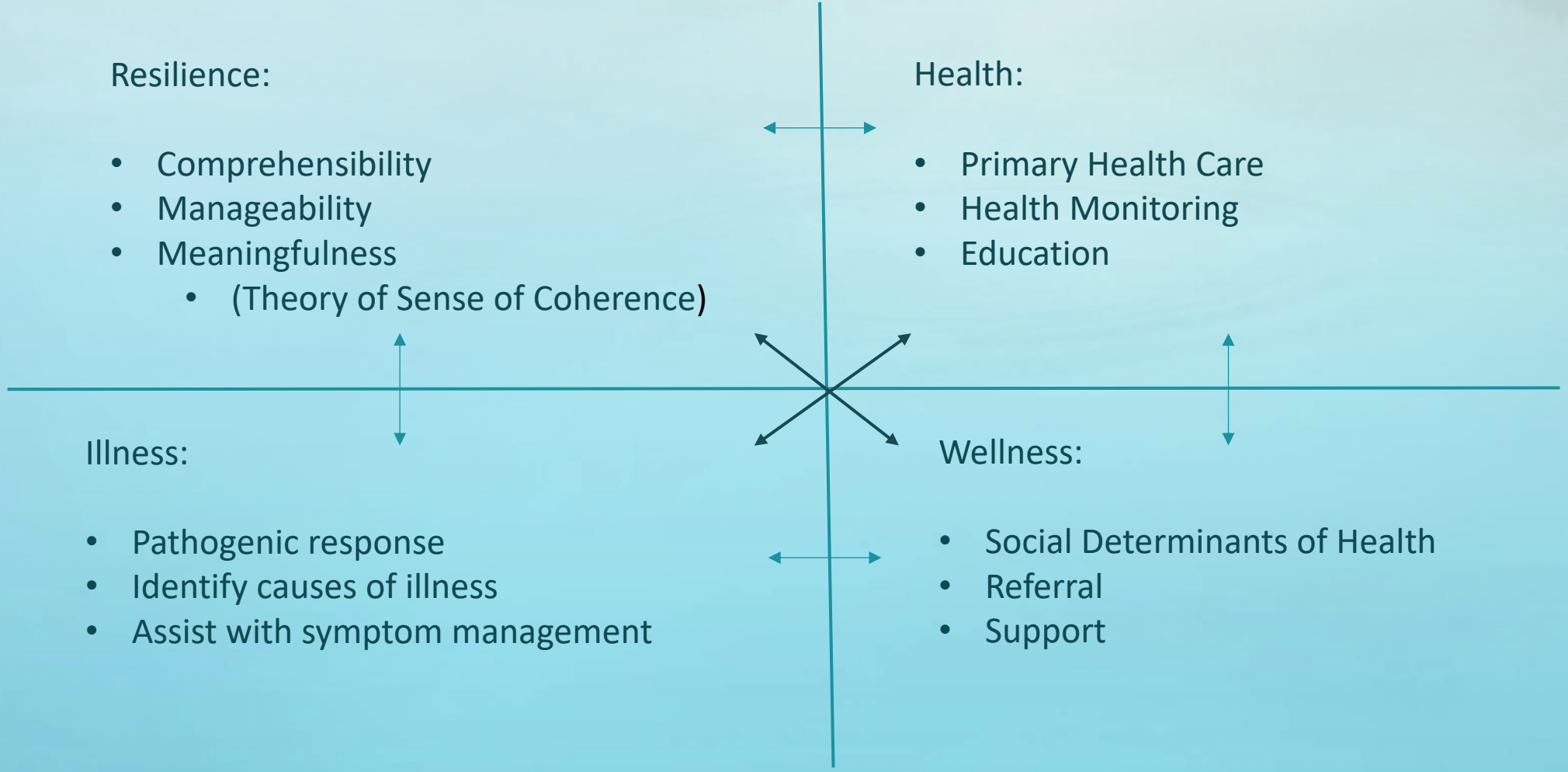
Commonalities among Community Paramedicine Services

Resilience:

- Comprehensibility
- Manageability
- Meaningfulness
  - (Theory of Sense of Coherence)

Health:

- Primary Health Care
- Health Monitoring
- Education



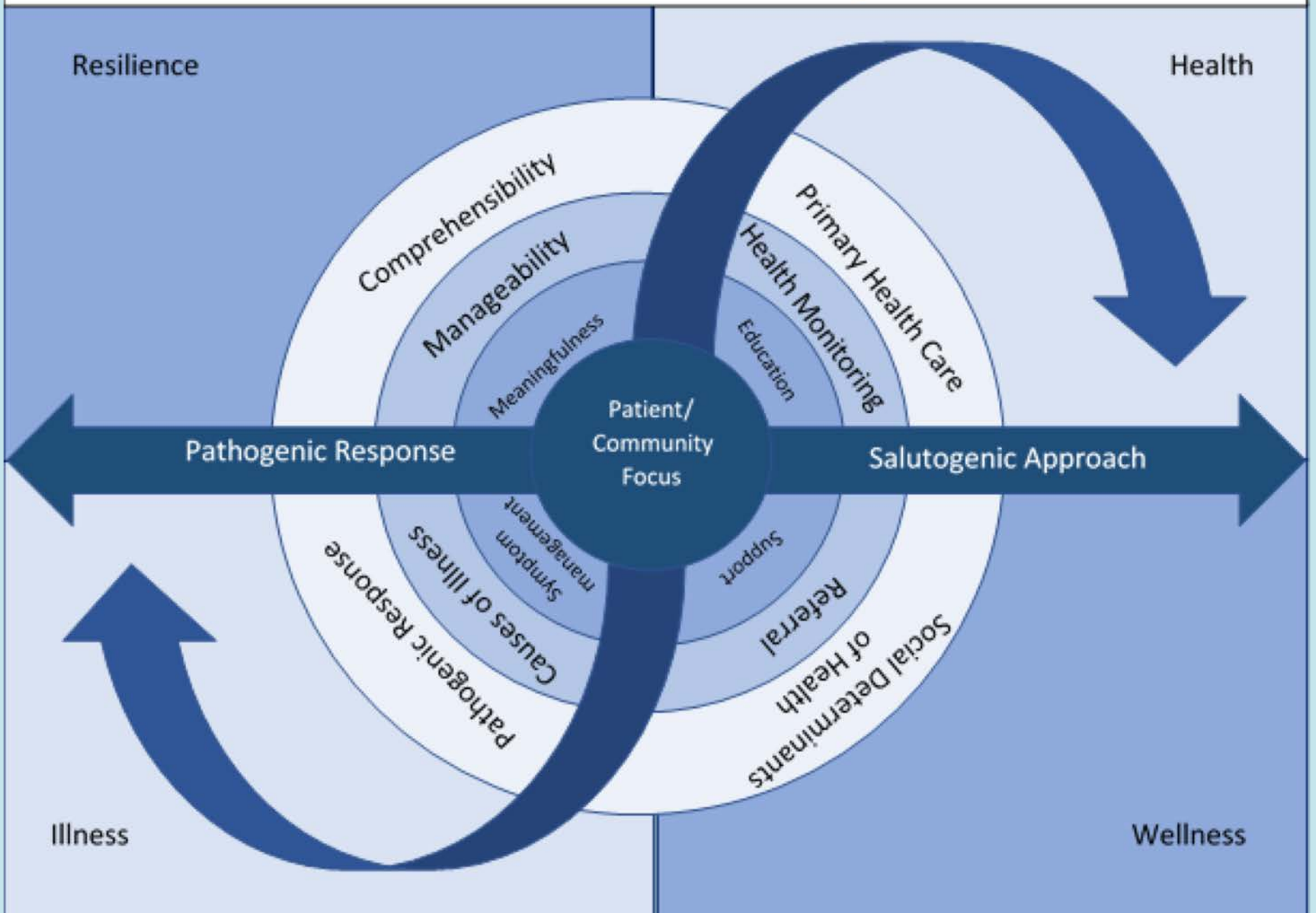
Illness:

- Pathogenic response
- Identify causes of illness
- Assist with symptom management

Wellness:

- Social Determinants of Health
- Referral
- Support

Theoretical Model of Community Paramedicine



Case Study

Provided by: CP@Clinic CommunityParamedicine Program
Program Lead: Dr Gina Agarwal, MBBS PHD MRCGP CCFP
Paramedic Service Providing Case: Natalie Kedzierski, ACP, BSc.,
York Region Paramedic Service

McMaster University
FAMILY MEDICINE

Community Paramedicine

CP@clinic

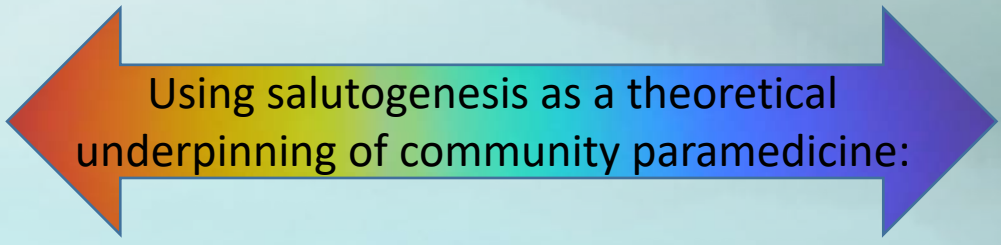
- CP@clinic is a weekly health promotion and health prevention drop-in program
- Targets low-income seniors in public housing buildings
- CPs assess modifiable risk factors for health conditions, using validated tools
- Educate participants and then and link the participants to resources in their community, loop results back to family physicians.
- Within its first full year of implementation at a seniors' building in Hamilton, the program effectively reduced paramedic service calls by 25% compared to the previous two years, and significantly lowered participants' blood pressure. (Agarwal et al, 2018)

Condition and Impairments

Client had been diagnosed with several chronic physical and mental health issues.

Issues included, but were not limited to:

- Depression
- Fibromyalgia
- Diabetes (newly diagnosed)
- Physical impairment due to stoke



- It is reasonable to assume that total health is not likely to be achieved in the case of this client.
- Despite not being able to achieve total health, the client's position along the health continuum can be moved towards the healthy end.
- Improving the client's position along the health continuum will lead to fewer acute health events and decreased stress on emergency services.

The client:

- Lives alone in a low income community housing complex.
- Is reclusive and rarely leaves apartment.
- Referred to CP@Clinic by a friend.
- Would not leave apartment to attend CP@Clinic.
- Allowed CP@Clinic paramedics to meet with them in their apartment.

How would you treat this client/patient?

Client's GRD/ GRR

GRD:

- Health literacy
- Socially Isolated
- Lack of purpose/ meaning

GRR:

- Community housing
- Improved access to healthcare through CP@Clinic
- Support from friend

Intervention

After the initial assessment and greeting; this client was given information on EatRight Ontario (a government funded phone-based service that allows Ontarians to speak with a Registered Dietician at no cost) because they were having difficulty managing their diet and eating habits since the diabetes diagnoses.

Outcomes

After about two more home visits, this client (who rarely ventured out of their apartment) then began to attend the weekly clinic. They were observed by paramedics to have had an increase in joy, the client was more mobile and reported regular exercise. They began to do social activities and routinely consulted with EatRight Ontario. The client's diet and diabetes became better controlled and the client was then observed to be better coping with their own physical health, mental health and general well-being with little support from paramedics going forward.

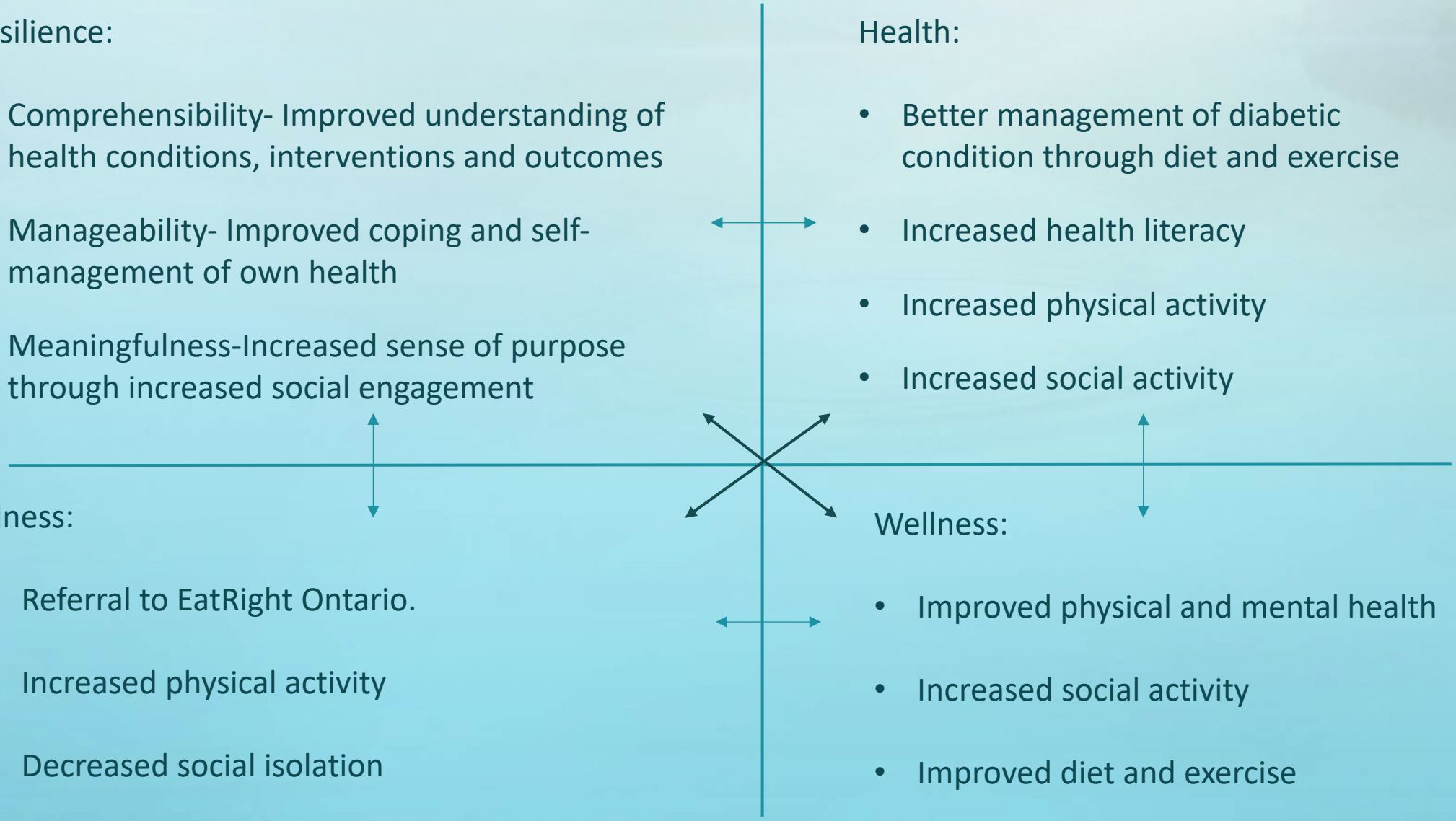
Outcomes

Resilience:

- Comprehensibility- Improved understanding of health conditions, interventions and outcomes
- Manageability- Improved coping and self-management of own health
- Meaningfulness-Increased sense of purpose through increased social engagement

Health:

- Better management of diabetic condition through diet and exercise
- Increased health literacy
- Increased physical activity
- Increased social activity



Illness:

- Referral to EatRight Ontario.
- Increased physical activity
- Decreased social isolation

Wellness:

- Improved physical and mental health
- Increased social activity
- Improved diet and exercise

Why can two people with the same diagnosis in similar living conditions have substantially different health outcomes?

Sense of Coherence

Development and evaluation of a tool to assess health and resilience in a salutogenic model

The Sense of Coherence, Health and Resilience Assessment (SCHARA) Pilot

Krista Cockrell and Buck Reed
@flygirlemt @buck_reed

What is the SCHARA?

- A tool developed to examine individual Sense of Coherence (SOC), GRR and resilience to help guide health planning and appropriate referral pathways.
- By assessing SOC and resilience, paramedics may determine patients' capacity to cope with and manage health events as an adjunct to clinical treatment.
- A work in progress!

Tool Development

- Systematic review of relevant psychometric properties scales assessing SOC, quality of life (QoL) and resilience.
- Series of studies collecting qualitative and quantitative data were utilised to modify the tool to best suit the needs of all stakeholders.
- Pilot validation administered to three demographically diverse groups and compared to a similar tool to measure SOC.

Domains

Comprehensibility

Manageability

Meaningfulness

GRR/ GRD

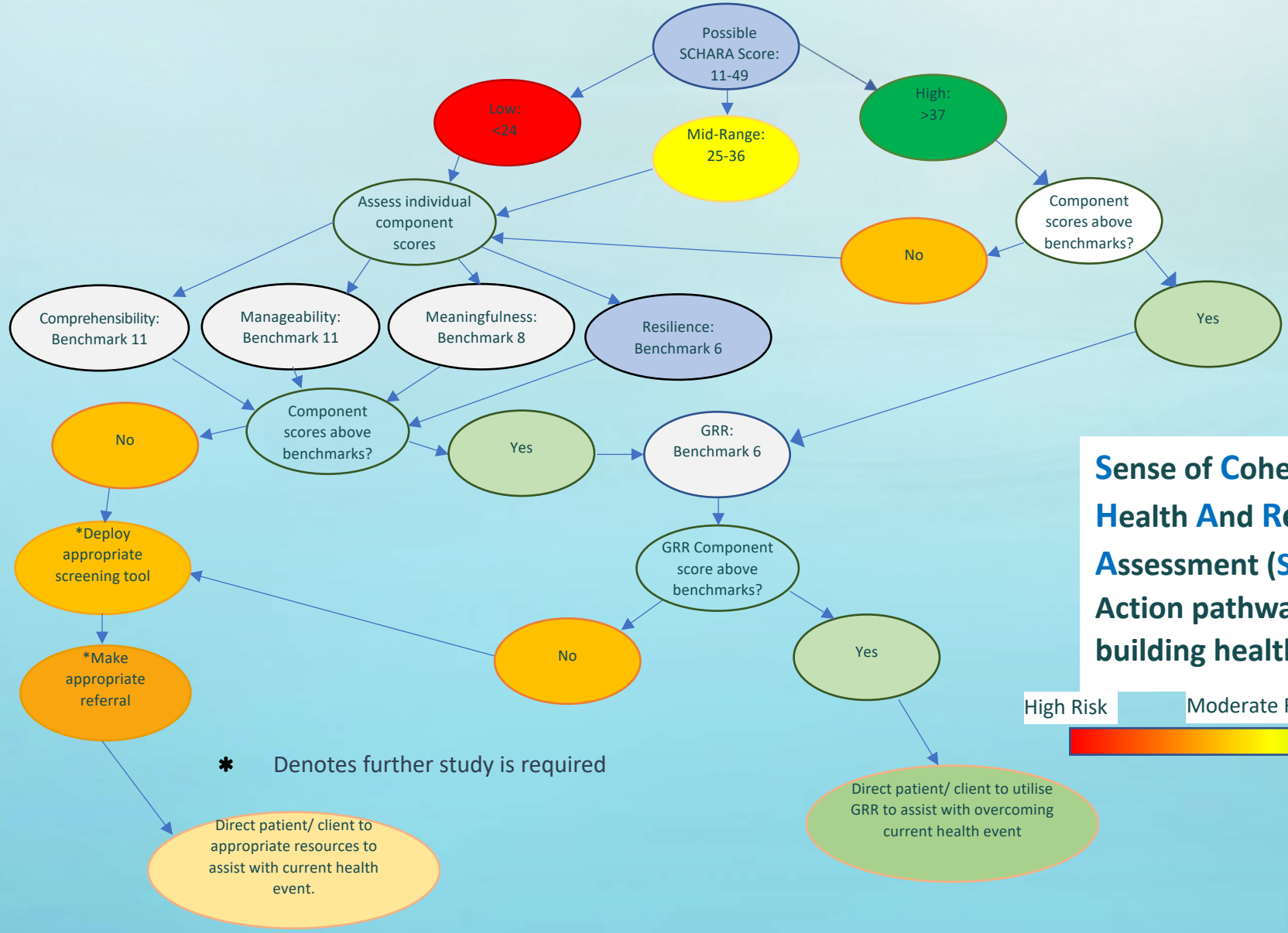
Resilience

Sense of Coherence

Scoring

SCHARA			SOC-13		
Component	Maximum	Minimum	Component	Maximum	Minimum
Comprehensibility	18	4	Comprehensibility	35	5
Manageability	18	4	Manageability	28	4
Meaningfulness	13	3	Meaningfulness	28	4
Total	49	11	Total	91	13
Sub-components					
GRR	9	3	GRR	-	-
Resilience	10	2	Resilience	-	-

Action Pathways



* Denotes further study is required

Sense of Coherence, Health And Resilience Assessment (SCHARA): Action pathways for building health resilience

High Risk — Moderate Risk — Low Risk

Development

Phase 1 → Phase 2 → Phase 3

Phase 1

- CP@Clinic
- 20 participants
- SCHARA followed by SOC-13
- Participant responses
- Assessor feedback
- Duration

Phase 2

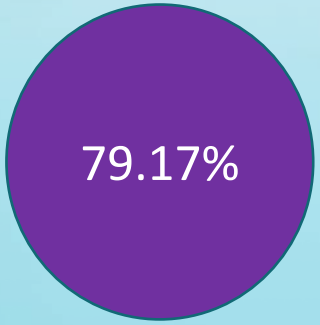
- Online Convenience Sample
- 10 participants
- SCHARA followed by questionnaire
- Participant responses
- Participant feedback
- Duration

Phase 3

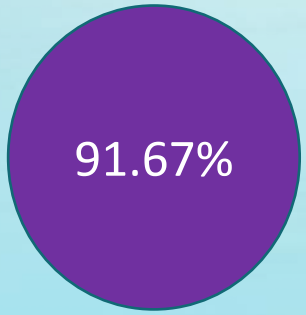
- Demographically diverse cohorts of 10-20 participants each
- SCHARA followed by SOC-13
- Comparison between scales
- Comparison between cohorts

Validation

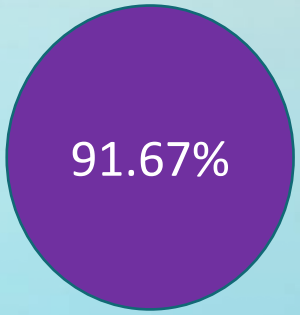
Comprehensibility



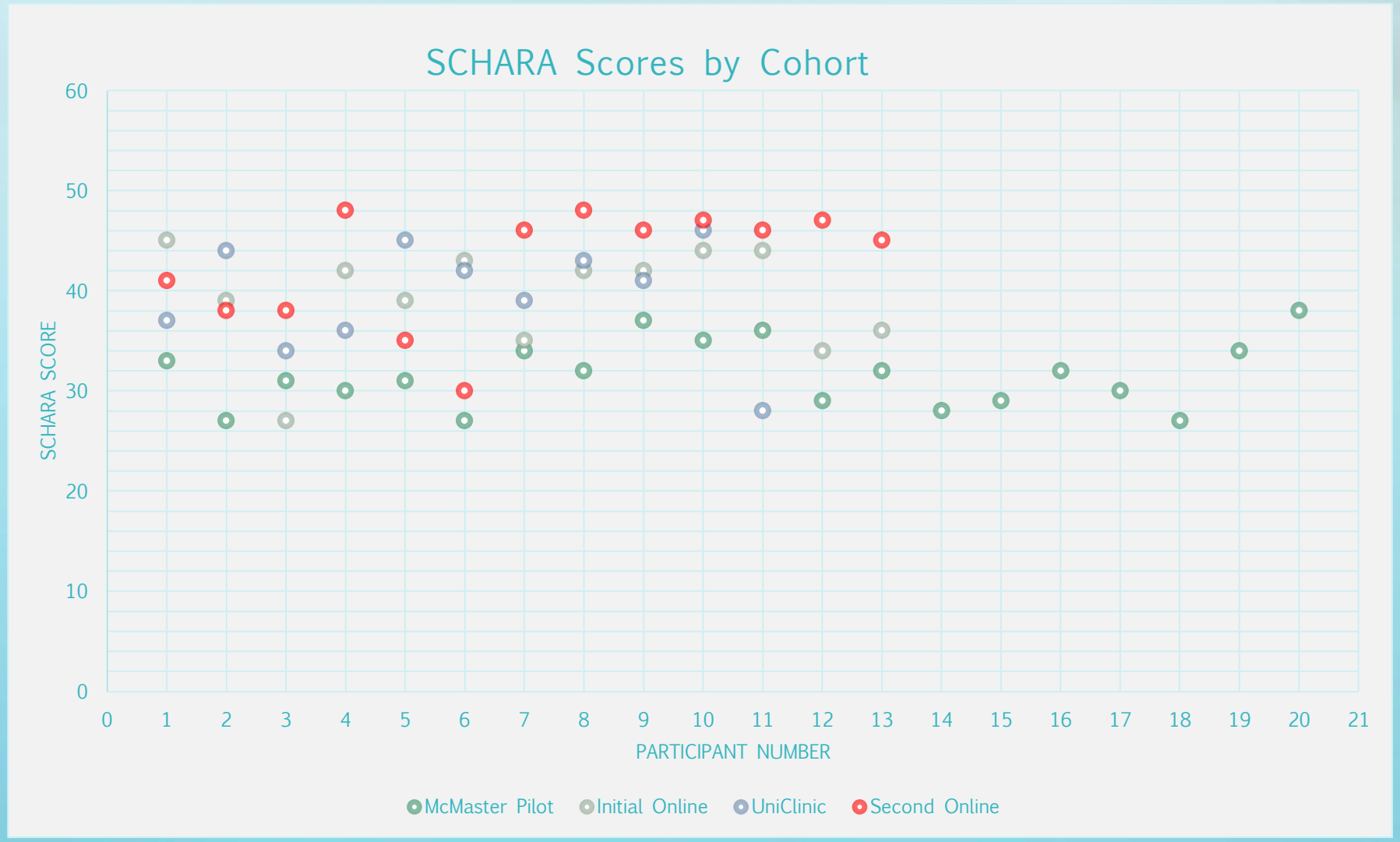
Manageability



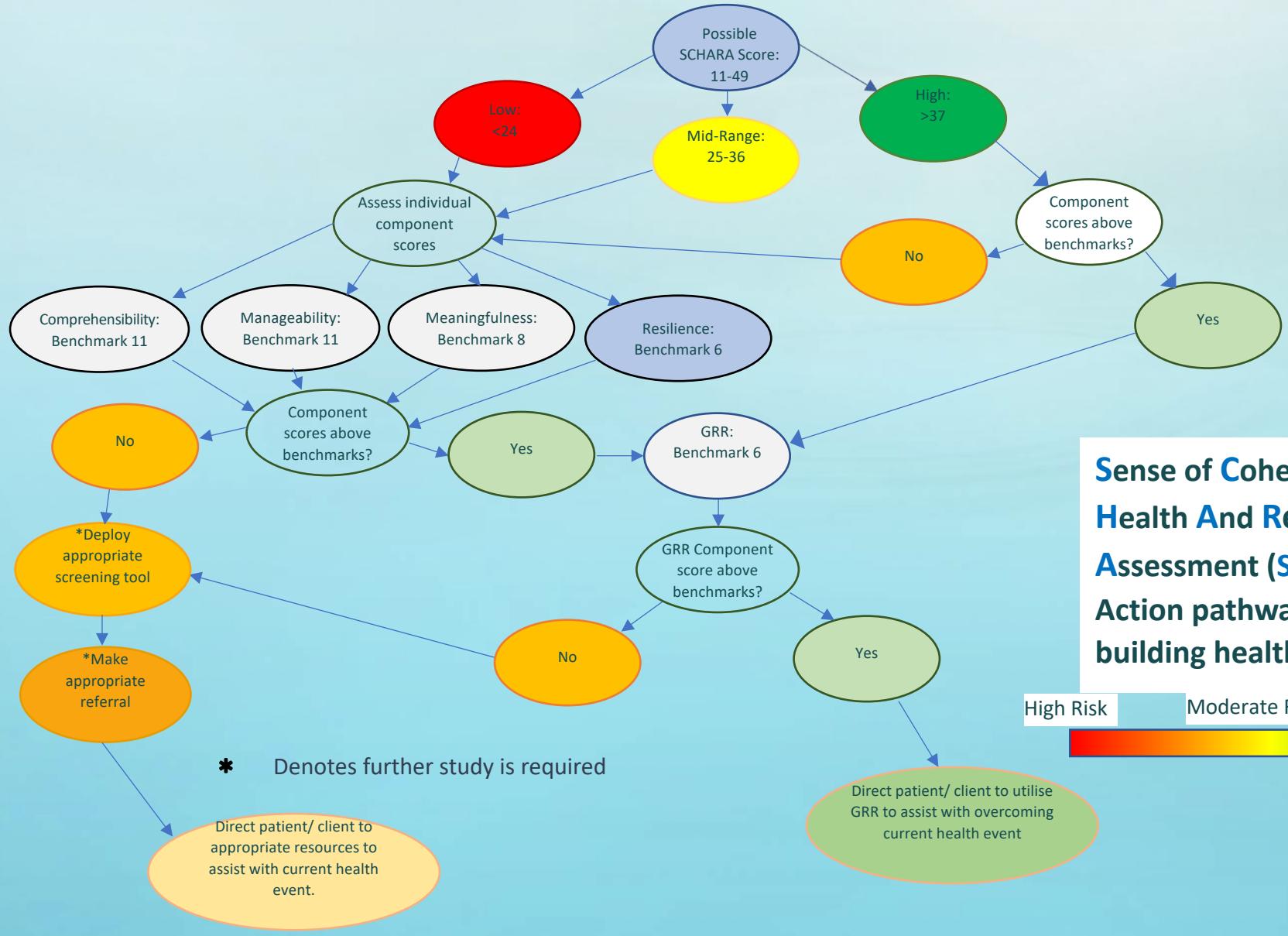
Meaningfulness



Comparison of Scores by Cohort



Case Study



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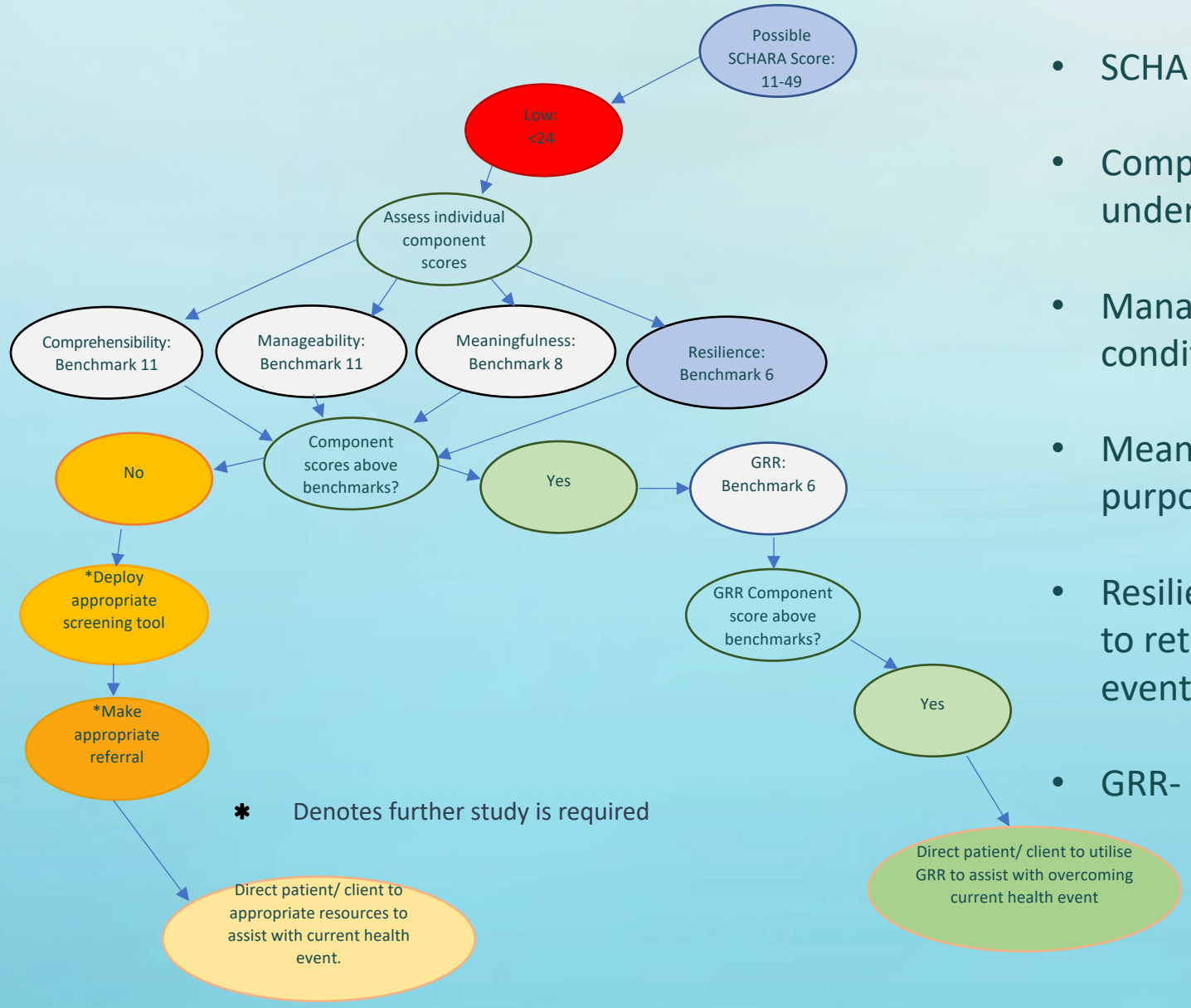
Sense of Coherence, Health And Resilience Assessment (SCHARA): Action pathways for building health resilience

High Risk — Moderate Risk — Low Risk

Case Study - Hypothetical



- SCHARA Score-24→ Assess components
- Comprehensibility Score- 9→ Low understanding of health condition
- Manageability Score- 8→ Does not view condition as manageable
- Meaningfulness Score-7→ Poor sense of purpose/ quality of life
- Resilience Score- 6 → Demonstrates the ability to return to a normal state following a health event
- GRR- Score 6 → Recognises GRR available

Conclusions

- Utilising a multifactorial approach to determining one's health status and predicating their capacity for adaptive coping, healthcare providers will better be able to assist patients/ clients in overcoming health events and build health resilience for improved future health outcomes.

- Further research is needed to further develop the SCHARA into an electronic application conducive to the prehospital environment.

Should we apply a salutogenic approach to traditional paramedic response in rural and remote communities?

Exploring paramedic perceptions of incorporating primary healthcare in practice and the development of a tool to assess patient health resilience.

Krista Cockrell and Buck Reed
@flygirlemt @buck_reed

What we know

- Rural and remote communities' healthcare needs are left unmet by traditional approaches to healthcare delivery.
- Each rural and remote community is unique with varying healthcare needs.
- Paramedic services struggle to meet the needs of rural and remote communities within the traditional 'Respond and Treat' system.

We also know…

…that there are range of health benefits associated with living in rural and remote communities.

Social support (Kutek, Turnbull & Fairweather-Schmidt, 2011)

Lower levels of stress; Greater satisfaction from leisure activities (Lau & Morse, 2008)

Sense of community (Winterton & Warburton, 2011)

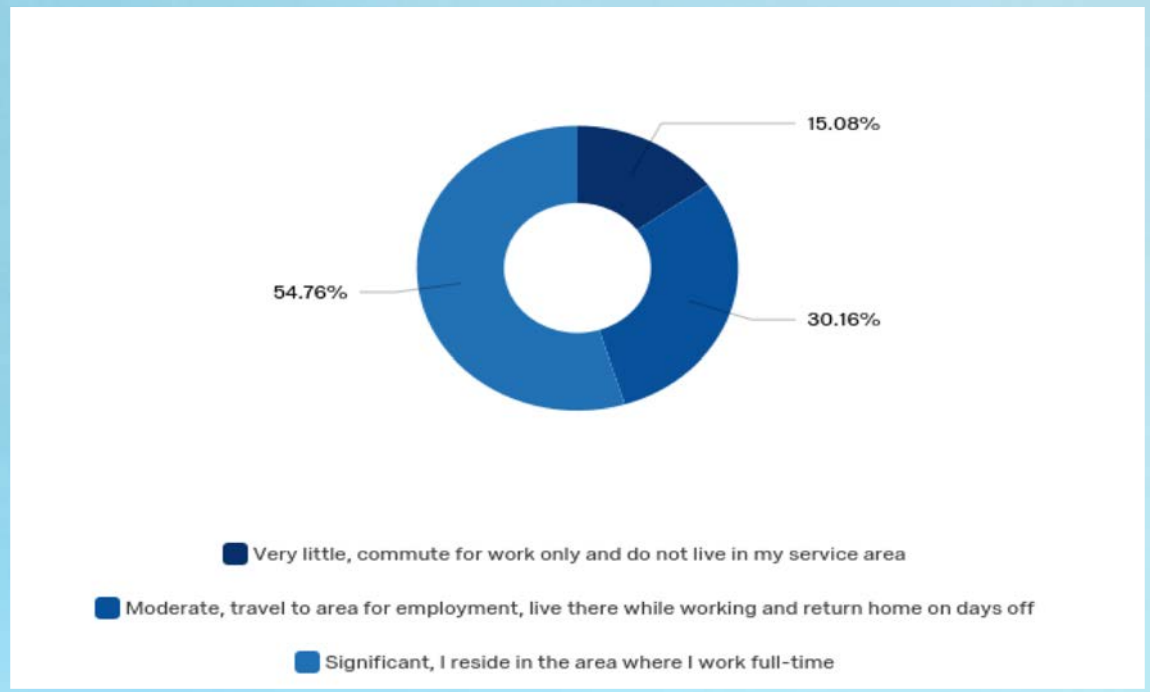
Exposure and connectedness to nature (Gregory, 2009)

This study aimed to establish paramedics' perceptions:

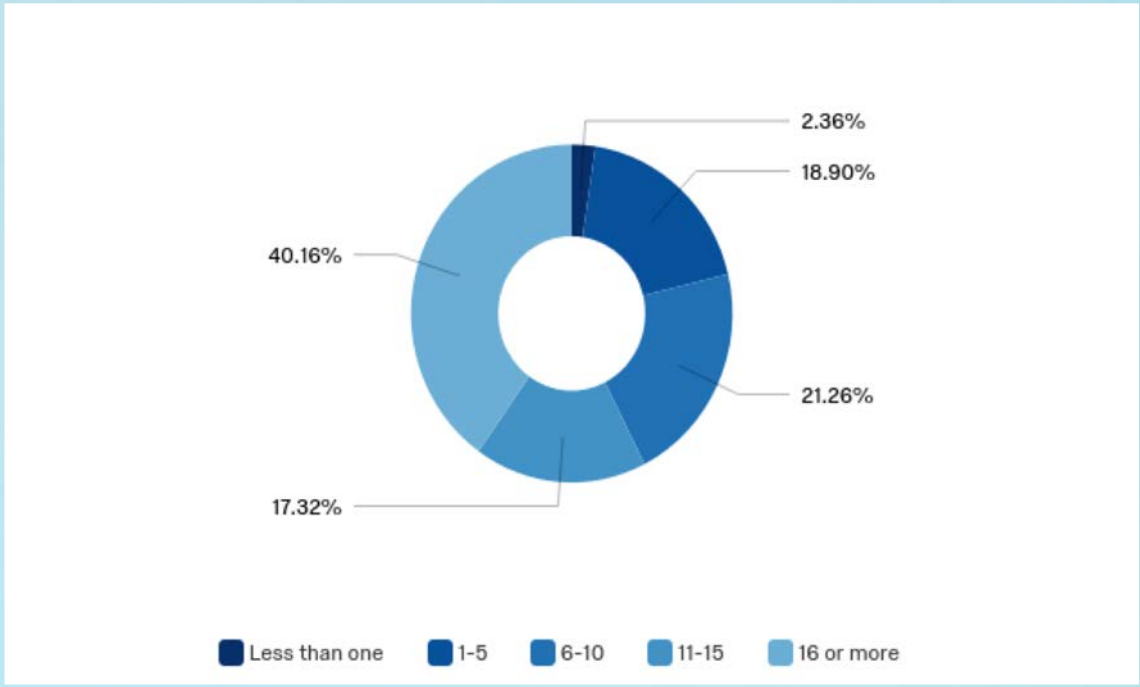
- Regarding their knowledge of community health benefits and health disparities and how this impacts healthcare delivery in the communities they serve.
- Of the importance of the social determinants of health and general resistance resources.
- Of the importance of sense of coherence and resiliency following a health event.
- Regarding their roles as frontline primary care providers and the impact this plays on healthcare delivery.
- Regarding straying from traditional pathogenic roles to engage salutogenic approaches to healthcare delivery.

Participants

Community Engagement



Years of Service



Country of Most Practice

Quantitative Results

- Results were primarily positive

- Paramedics recognise the benefits of primary healthcare to their practice.

- The majority of paramedics stated they were willing to spend additional time on-scene to ensure follow-up of referrals

84.41%

Have knowledge regarding cultural, religious and spiritual beliefs of the community

96.3%

Feel that it is important to address areas of concern and educate or suggest services that may be able to assist

83.3%

Would be willing to take additional time during or following a case to contact services to ensure follow-up of referrals

When asked about the communities they serve, participants reported:

- A strong knowledge of cultural, religious and spiritual beliefs.
- An awareness of the unique geographical and environmental challenges.
- Awareness of unique economic and socioeconomic challenges.
- Recognise the impact unique challenges have on the overall health of the communities.

Participants also reported:

69.7%

Disagree that a paramedic's role is to respond and treat illness/injury as they arise and not engage in primary healthcare

Qualitative Results

- Do you feel that paramedics should further explore areas where preventative services can be offered outside that of traditional emergency response care and why?
- How do you feel your knowledge and services can best be utilised to provide maximum benefit to the members of the communities you serve?
- What social aspects do you feel have the largest positive/ negative impact on the overall health of the communities in which you provide services?
- What ideas do you have that you believe would help to improve the overall health of the communities in which you provide service?

Themes:

Social factors impacting on health of communities

Positive

- Community/ Social Groups
- Family Support
- Culture
- Religion/ Spirituality

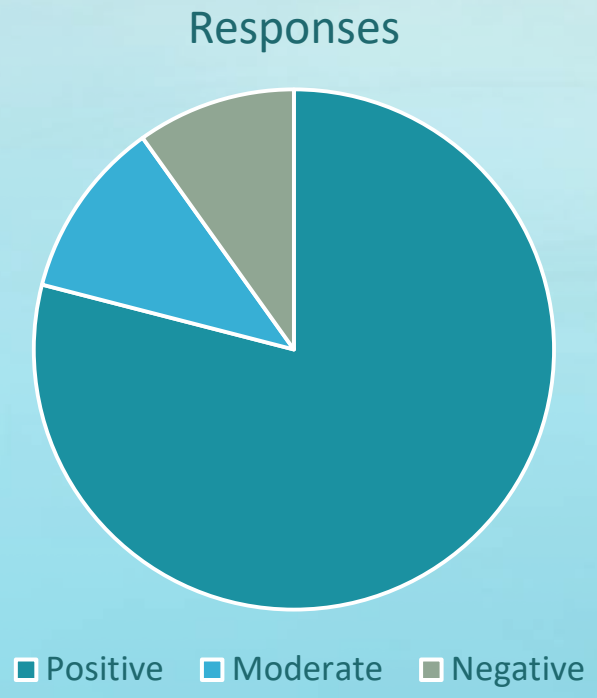
Negative

- Employment
- Education
- Culture
- Religion/ Spirituality

"Band and tribal councils (on First Nation Reservations) can either be community advocates or not depending on the Band. They hold the biggest power to get things done."

"negative cultural behaviour that people/ community will not let go of – prevents integration and prevents people/ communities being responsible for their negative health behaviour."

Do you feel that paramedics should further explore areas where preventative services can be offered outside that of traditional emergency response care and why?



Positive Results

Ability to assess patients in their ‘normal living environments’

‘Provide referrals’

“We see them in their day to day lives. Sometimes what they tell other health care practitioners is not what is the truth. We may have a better idea of what the patients really need and if given the tools could use it to empower the patients and their families.”

Negative Results

‘Increased stress on the system’

‘Not a paramedic's role.’

“No. I believe there needs to be a clear distinction between using ambulances for life threatening emergencies and utilising other services for non-life-threatening emergencies…I think if paramedics start to provide preventative services then (the system) will be abused and people will call for trivial reasons.”

Moderate Results

Expressed concerns for:

- Already taxed emergency response system
- Reduced time for emergency response
- Time constraints

How do you feel your knowledge and services can best be utilised to provide maximum benefit to the members of the communities you serve?

- Patient education
- Referrals
- Community outreach/ engagement
- Interprofessional networking
- Risk identification/ reduction.
- Focusing solely on emergency

What ideas do you have that you believe would help to improve the overall health of the communities in which you provide service?

- Improved access to care
- Preventative care education/ increase health literacy
- Referral pathways and interprofessional services
- Improved support for drug/ alcohol treatment and mental health

What's next?

- SCHARA incorporated into CP@Home study of frequent callers to paramedic services
- PhD Proposal
  - Multidisciplinary input to complete referral pathways
  - Development of SCHARA into electronic application conducive to the pre-hospital environment

Thank you for listening!

Questions?

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