The Sense of Coherence Health And Resilience Assessment (SCHARA) as part of a study of identified frequent users of the Canadian emergency services system: How well does the tool align to paramedic prescribed interventions to improve health resilience?
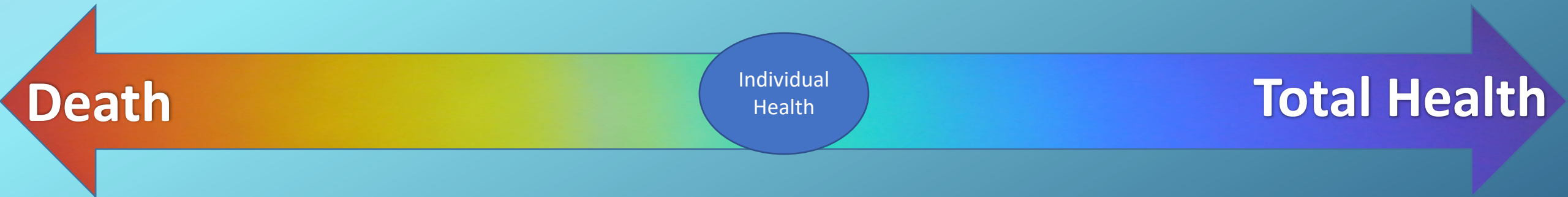
Krista Cockrell

Western Sydney University

@flygirlemt

Salutogenic Theory

- Asks the question, "What causes health?"

- Questions how can some people remain well despite their circumstances?

- Recognises individuals' experiences impact health outcomes.

- Does not view health as either healthy or sick.

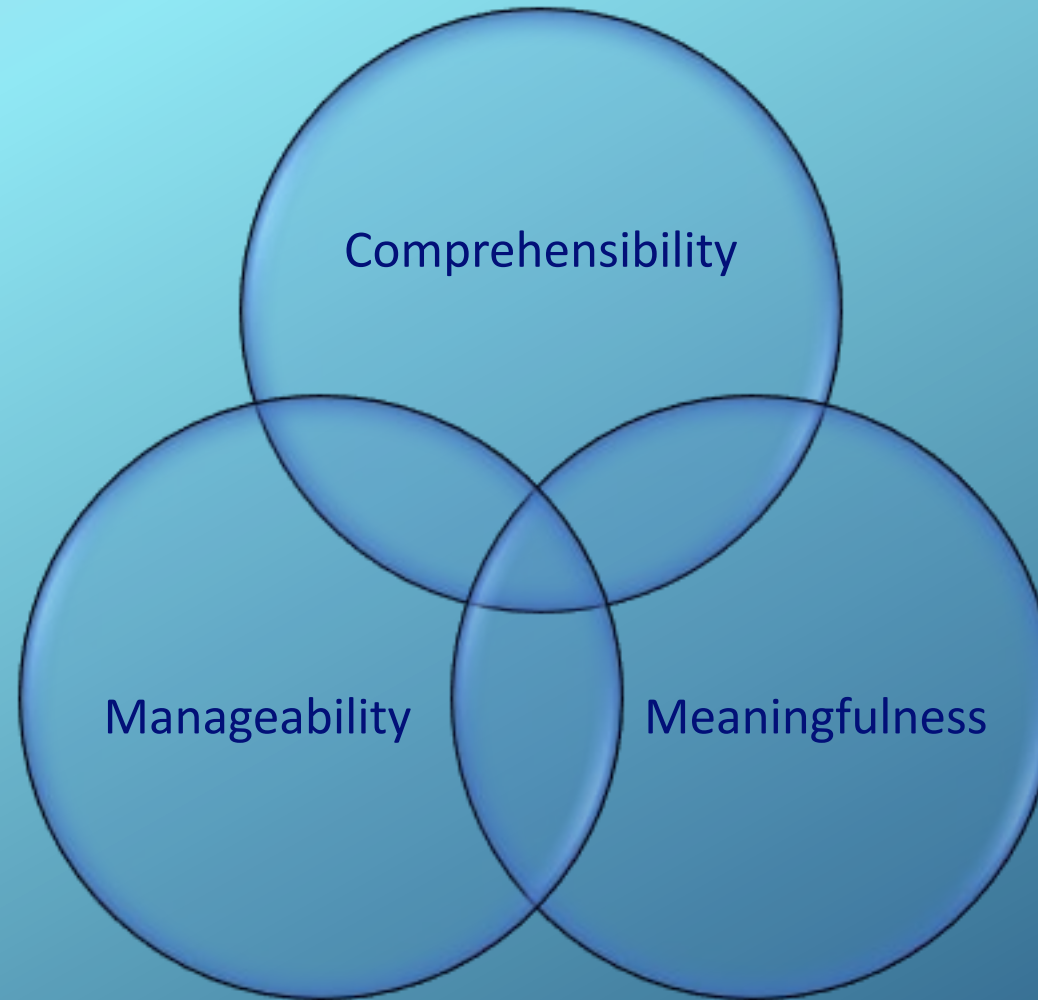Why can two people with the same diagnosis in similar living conditions have substantially different health outcomes?
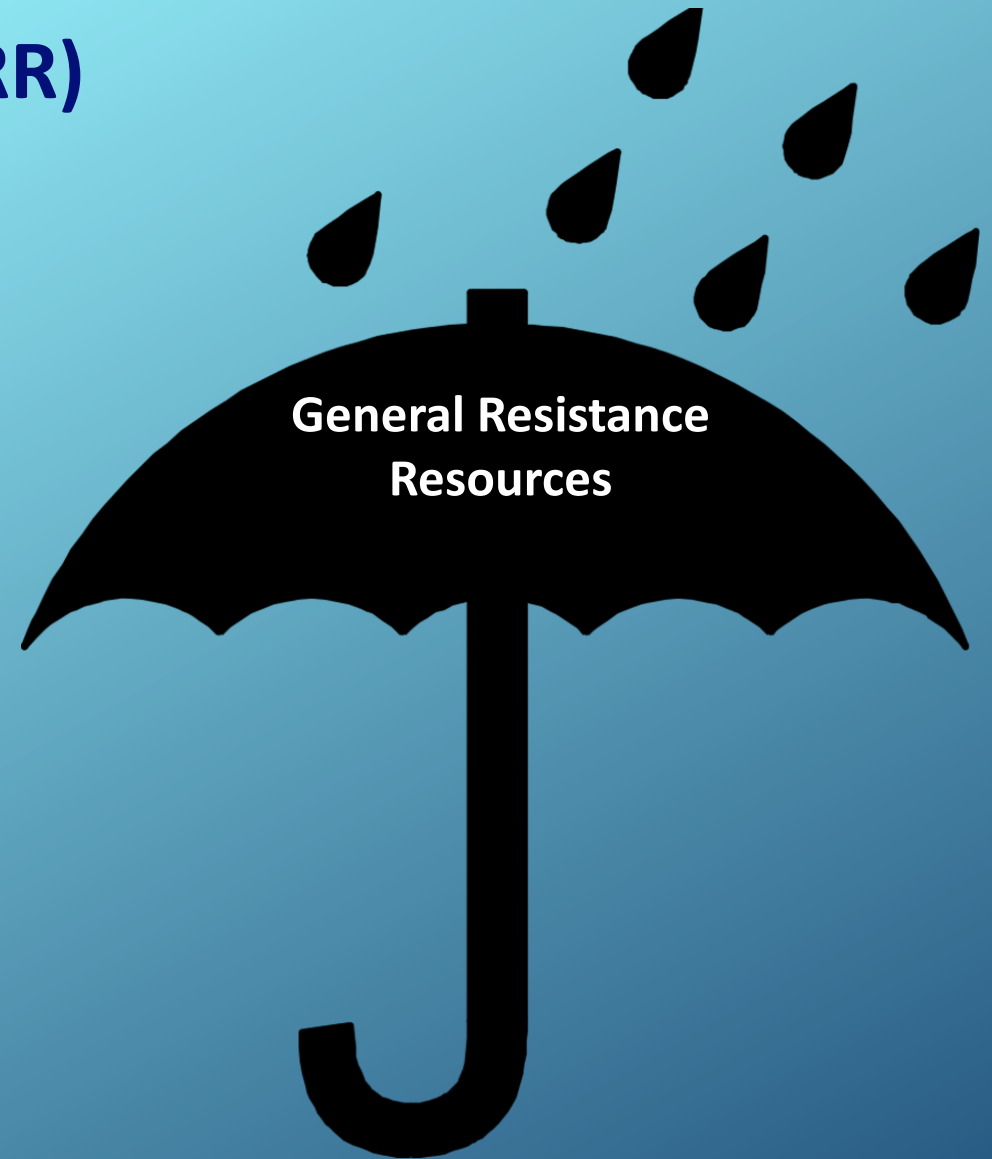
Sense of Coherence

General Resistance Resources (GRR)

- **Protective factors**

- **Can be applied at various levels**

  - **Individual,**
  - **Family,**
  - **Community**

General Resistance Resources

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

How do we know which referral pathway is best for our patient?

What if they have barriers that prevent them from using the referrals?

How do I know if they have a strong sense of coherence or not?

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.

Domains

Comprehensibility

Manageability

Meaningfulness

GRR/ GRD

Resilience

Sense of Coherence

Scoring

SCHARA	
Total Score	
Low	<24
Median	25-36
High	>37
Comprehensibility	
Benchmark	11
Manageability	
Benchmark	11
Meaningfulness	
Benchmark	8

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

Action Pathways
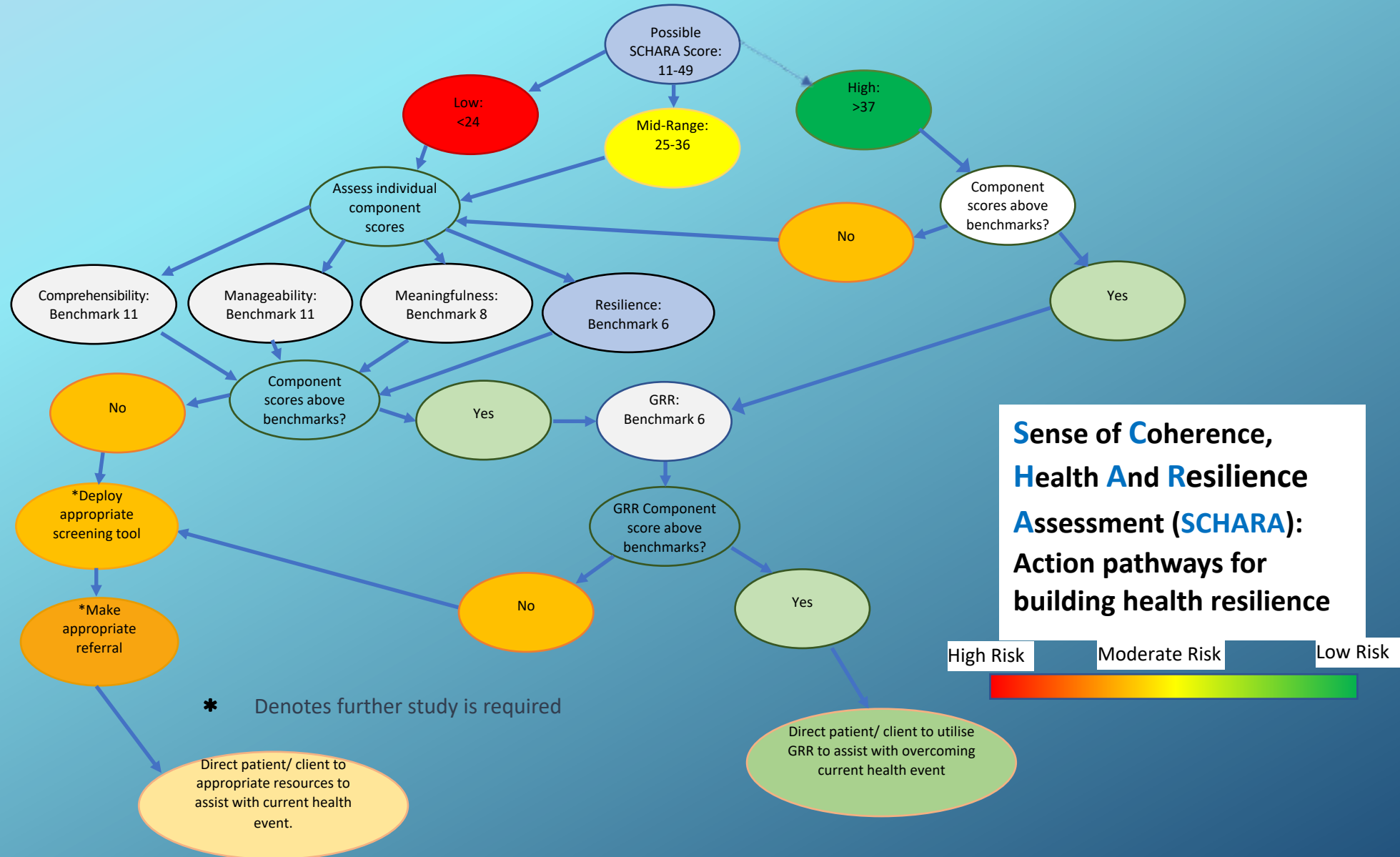
PARAMEDIC

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Calendar

CPs make scheduled home visits

911
Homes of frequent 911 callers and lift assists

Conduct in-depth risk assessments of mobility, pain, chronic disease risk, and mental health (e.g. social isolation, depression)

Provide tailored health education and referrals to community services based on the individual's risk factor profile

Provide two follow-up visits to monitor the management plan and make any necessary adjustments

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Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
age	57	31	94	72.40	2.080	15.702
Comprehensibility_SOC	58	2	10	7.24	.287	2.187
Comprehensibility_GRR	58	1	3	2.72	.064	.488
Comprehensibility_Res	58	1	5	3.45	.184	1.404
Managebility_SOC	58	2	10	6.95	.272	2.073
Managebility_GRR	58	1	3	2.69	.079	.598
Managebility_Res	58	1	5	3.52	.200	1.525
Meaningfulness_SOC	58	2	10	7.21	.247	1.880
Meaningfulness_GRR	58	1	3	2.47	.086	.655
ComprehensibilityTotal	58	6	18	13.41	.425	3.239
ManageabilityTotal	58	5	18	13.07	.451	3.433
MeaningfulnessTotal	58	5	13	9.67	.286	2.180
ComprehensibilityTotal (minusRes)	58	4	13	9.97	.311	2.369
ManageabilityTotal (minusRes)	58	3	13	9.64	.311	2.367
MeaningfulnessTotal (minusRes)	58	5	13	9.67	.286	2.180
GRR	58	4	9	7.88	.169	1.285
Res	58	1	10	6.88	.342	2.603
Valid N (listwise)	57					

SCHARA	
Total Score	
Low	<24
Median	25-36
High	>37
Comprehensibility	
Benchmark	11
Manageability	
Benchmark	11
Meaningfulness	
Benchmark	8

Components

ID	Comprehensibility Total	ManageabilityTotal	MeaningfulnessTotal	GRR	Res		SCHARA
76	12	9	11	8	1	2	32
45	13	14	8	9	5	1	35
77	12	7	9	8	2	2	28
88	10	8	11	8	3	3	29
162	15	10	10	8	5	2	35
170	11	8	10	4	6	4	29
213	8	10	7	7	2	4	25
217	11	10	10	8	3	3	31
277	6	7	5	6	2	5	18
309	7	6	5	8	3	4	18
10	13	11	9	6	4	3	33
37	15	11	12	9	6	2	38

Components

ID	Comprehensibility Total	Manageability Total	Meaningfulness Total	GRR	Res	# of domains scored at or below the benchmark	SCHARA
7	18	15	12	9	8	0	45
132	14	13	13	9	8	0	40
222	13	15	11	9	8	0	39
251	18	15	13	9	9	0	46
282	12	15	10	8	7	0	37
299	16	16	10	8	9	0	42
307	17	17	12	9	9	0	46

Age: 58

Education: High School or Less

Are you currently: Never Married

BMI: 24

Lifestyle Behaviours

Eats vegetables and fruits 2-3 times a week

Former Smoker

Non-drinker / Barely drinks

Does not regularly engage in physical activity

Number of Medications: 8

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Referral to Cognitive-behavioural therapy and counselling

Breakdown of Individual Scores

ID	Comprehensibility Total	Manageability Total	MeaningfulnessTotal	GRR	Res	# of domains scored at or below the benchmark	SCHARA
214	13	5	11	6	7	2	29

ID	Comprehensibility_SOC	Comprehensibility_GRR	Comprehensibility_Res	Comprehensibility TotalminusRes	Comprehensibility Total			
214	6	2	5	8	13	6/10 SOC	5/5 Res	2/3 GRR

ID	Managebility_SOC	Managebility_GRR	Managebility_Res	ManageabilityTotalminusRes	ManageabilityTotal			
214	2	1	2	3	5	2/10 SOC	2/5 Res	1/3 GRR

ID	Meaningfulness_SOC	Meaningfulness_GRR	MeaningfulnessTotalminusRes	MeaningfulnessTotal			
214	8	3	11	11	8/10 SOC	3/3 GRR	
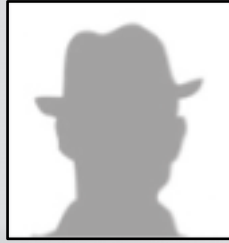
Age: 93

Education: High School or Less

Are you currently: Widowed

BMI: 32.7

Lifestyle Behaviours

Eats vegetables and fruits 2-3 times a week

Former Smoker
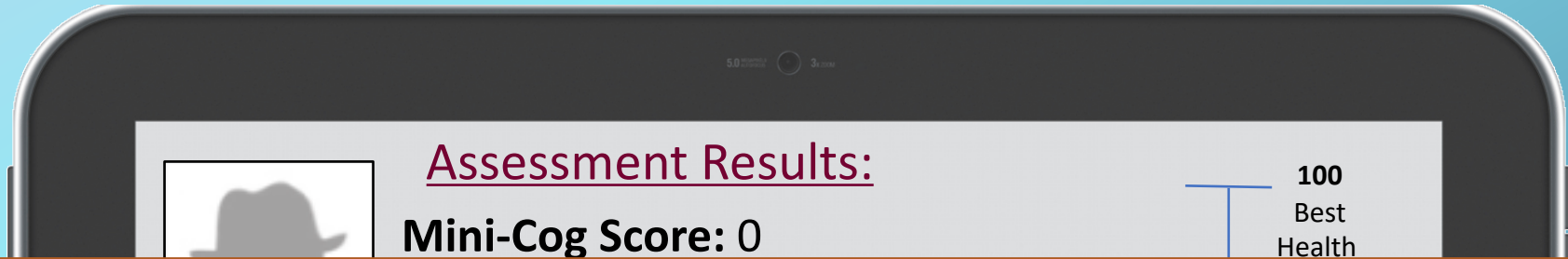
Drinks 11-14 drinks per week
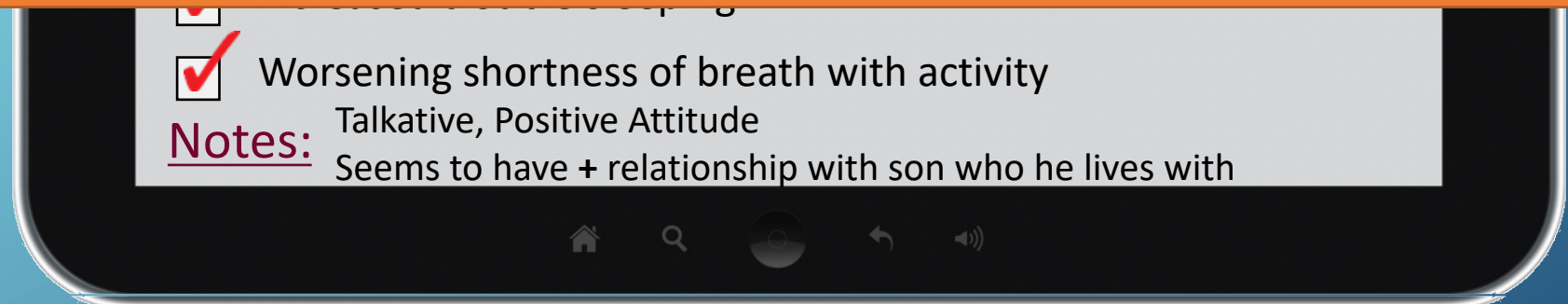
Number of Medications: 7

☑ Has had a stroke   ☑ Signs of dementia

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Breakdown of Individual Scores

ID	Comprehensibility Total	Manageability Total	MeaningfulnessTotal	GRR	Res	# of domains scored at or below the benchmark	SCHARA		
173	16	17	5	7	9	1	38		

ID	Comprehensibility_SOC	Comprehensibility_GRR	Comprehensibility_Res	Comprehensibility TotalminusRes	Comprehensibility Total				
173	9	3	4	12	16			9/10 SOC	4/5 Res

ID	Managebility_SOC	Managebility_GRR	Managebility_Res	ManageabilityTotalminusRes	ManageabilityTotal				
173	10	2	5	12	17			10/10 SOC	5/5 Res

ID	Meaningfulness_SOC	Meaningfulness_GRR	MeaningfulnessTotalminusRes	MeaningfulnessTotal					
173	3	2	5	5				3/10 SOC	2/3 GRR

What's next?

- **Test and validate the benchmarks**

- **Align scores with relevant interventions**

- **Further develop tool with multidisciplinary input**

- **Develop tool into electronic application for real-time decision-making**