Pilot Study to Compare Modified Patient-Reported and Standard G8 Frailty Questionnaires in Older Adults



Maksym Goryachok¹, Corbin Eule, MD², Elizabeth Kessler, MD²

•¹University of Colorado School of Medicine





AIM

 To compare the clinically validated Geriatric-8 (G8) screening tool with a hybrid patient/provider reported Modified Online Portal-based G4+4 (mEpic G4+4)

BACKGROUND

- •Frailty is an important marker for cancer treatment and follow-up care but does not always directly correlate with age
- •Most cancer clinical trials are biased towards younger, less frail patients, thus incorporating Frailty metrics in elderly cancer patients can help prevent over treatment or undertreatment (1, 2)
- •The current standard for Frailty tracking is the clinically validated Geriatric-8 tool, which is fully provider reported, and thus is not always broadly incorporated (3, 4, 5)
- •A hybrid patient-provider reported tool, the Modified Epic G4+4 (mEpic G4+4) was developed to increase ease of use and incorporation into patient care

METHODS

Standard G8

	Items	Possible answers (score)
A	Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?	0 : severe decrease in food intake
		1 : moderate decrease in food intake
		2 : no decrease in food intake
В	Weight loss during the last 3 months	0 : weight loss > 3 kg
		1 : does not know
		2: weight loss between 1 and 3 kgs
		3 : no weight loss
С	Mobility	0 : bed or chair bound
		1 : able to get out of bed/chair but does
		not go out
		2 : goes out
E	Neuropsychological problems	0 : severe dementia or depression
		1 : mild dementia or depression
		2 : no psychological problems
F	Body Mass Index (BMI (weight in kg) / (height in m²)	0 : BMI < 19
		1 : BMI = 19 to BMI < 21
		2 : BMI = 21 to BMI < 23
		3 : BMI = 23 and > 23
Н	Takes more than 3 medications per day	0 : yes
		1 : no
P	In comparison with other people of the same age, how does the patient consider his/her health status?	0 : not as good
		0.5 : does not know
		1 : as good 2 : better
	Age	0 : >85
	Age	1:80-85
		2: <80
	1	2. 100

Figure 1. Standard G8 Contents and Possible Answers, Provider Reported.

RESULTS

Frailty Score Among Patients with Cancer, N =

87

70.1%

no frailty

29.9%

mEpic 4+4

mEpic (G4+4)

Items	Possible Answers (Scores)
Patient Repor	ted Questions
Has the amount of food you eat declined over the past 3 months due to loss of appetite, digestive problems (for example: pain, nausea, vomiting, diarrhea), chewing or swallowing difficulties?	(0) The amount of food I <u>am able to</u> eat has reduced severely in the past 3 months (1) The amount of food I <u>am able to</u> eat has reduced moderately in the
	past 3 months (2) Not at all, the amount of food I eat is the same
Have you lost weight in the past 3 months?	 (0) Yes, I have lost more than 6 pounds in the past 3 months (1)I am not sure (2) A little bit, I have lost less than 6 pounds in the past 3 months (3) No, I have not lost any weight in the past 3 months
Regarding your mobility, which of the following apply?	(0) I am bed or chair bound (I cannot walk or move around on my own) (1) I am able to get out of bed or chair but do not go out (2) I go out
How would you rate your health compared to others your age?	 (0) My health is not as good as other people my age (0.5) I am not sure how my health compares with others (1) My health is as good as other people my age (2) My health is better than other people my age
Who completed this questionnaire? (unscored)	Self alone Self with Assistance(who) Other Person
Provider Repo	rted Questions
Neuropsychological problems	(0) Severe dementia or Depression (1) Mild dementia or Depression (2) No psychological Problems
Body Mass Index (BMI)	(0) BMI < 19 (1) BMI = 19 to < 21 (2) BMI = 21 to <23 (3) BMI = 23 and <23
Takes more than 3 medications per day	(0) yes (1) no
Patient age	(0) > 85 (1) 80-85 (2) < 80

Figure 2. Modified Epic G4+4, Patient and Provider Reported Questions Labelled.

METHODS

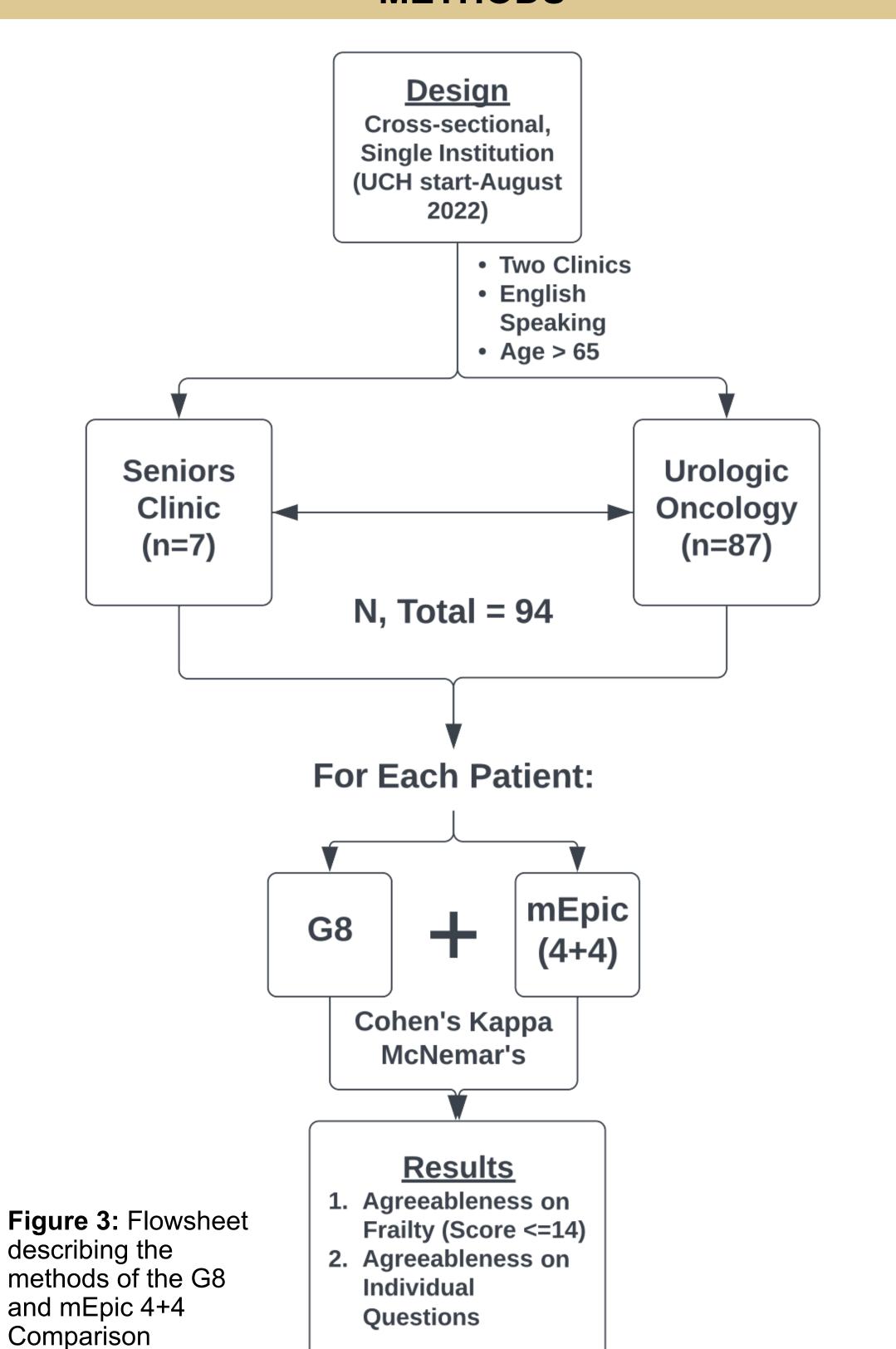


Figure 4: Total responders with a score indicating frailty (<= 14) among patients with cancer across the standard G8 and mEpic 4+4. McNemar's Test, P = 0.5637. Cohen's Kappa = 0.67; 95% CI (0.51, 0.85); Standard error = 0.0855

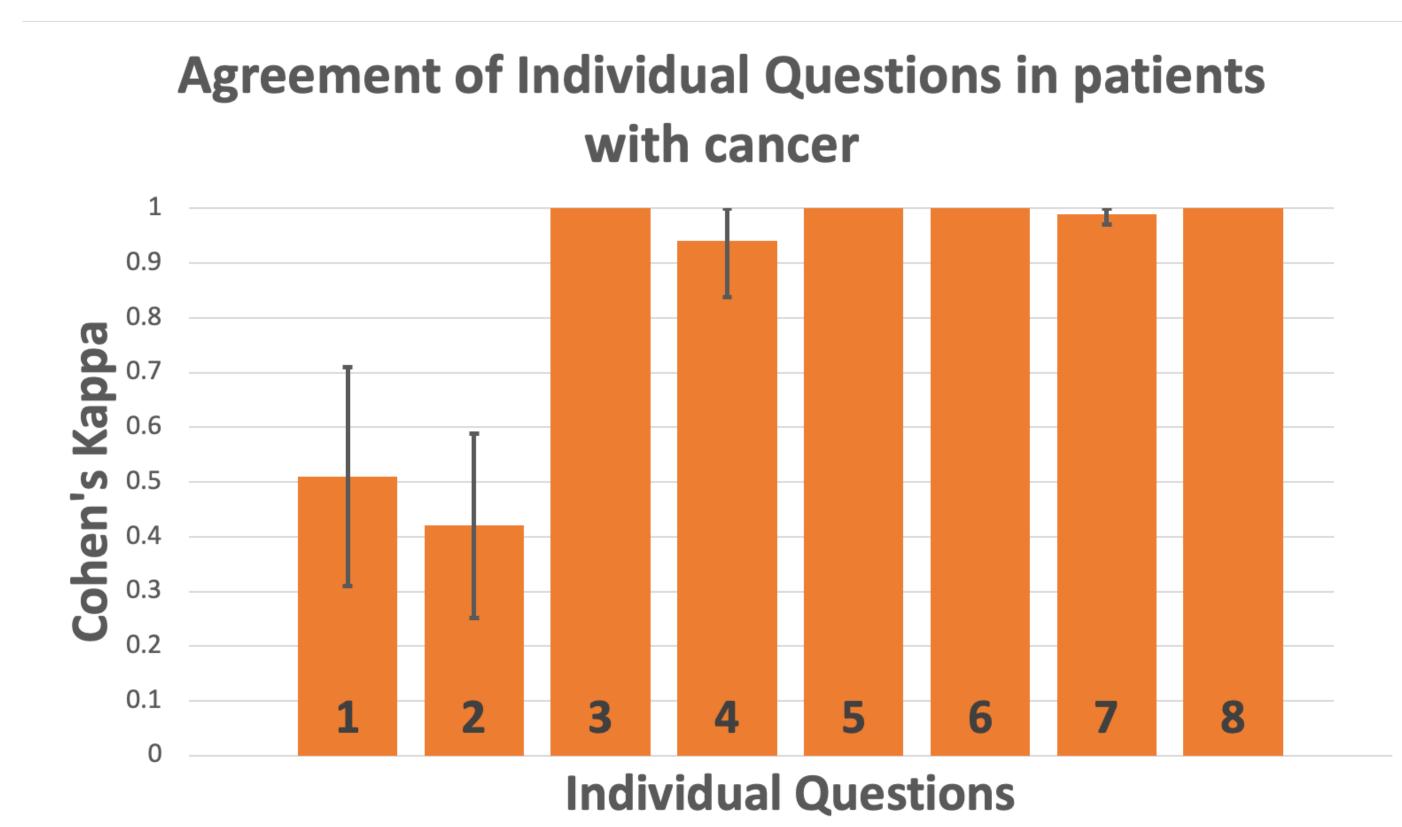
Figure 5: Agreement of

Individual Questions in

across the standard G8

Patients with cancer

and mEpic 4+4



Cohen's Kappa Measure of Agreement

≤ 0: no agreement

0.01-0.20: none to slight agreement
0.21-0.40: fair agreement
0.41-0.60: moderate agreement
0.61-0.80: substantial agreement
0.81-1.00: almost perfect agreement

Question 1: Food
Intake

Question 2: Weight
loss in the last 3
months

Question 3: Mobility

Question 4:
Neuropsychological
problems

Question 5: Body
Mass Index

Question 6: Quantity

of medications

Question 7: Health status

Question 8: Age

SUMMARY

- Substantial agreement between the G8 and mEpic 4+4 in labelling a patient as frail or not frail among patients with cancer
- Near perfect agreement among questions 3 to 8
- Reduced agreement between the G8 and mEpic4+4 in weight loss and oral intake questions among patients with cancer
- Small cohort population for patients without cancer prevented evaluation of concordance between the G8 and mEpic4+4

FUTURE DIRECTIONS

- Modify and revalidate questions that had decreased concordance
- Clinically validate the mEpic G4+4 as an independent tool for predicting cancer outcomes in the elderly
- Evaluate provider uptake and utilization of G8 compared to mEpic G4+4
- Potential to evaluate the impact on efficacy and quality of life among cancer patients when frailty is tracked via mEpic G4+4

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