

Poster 4367: The MD Anderson Symptom Inventory (MDASI) survey discloses persistent moderate to high-level symptoms in cancer survivors

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Background

Patient reported outcomes (PROs) are valuable tools to include the voice of the patient into clinical care. We implemented the MD Anderson Symptom Inventory (MDASI) survey into patient visits in our Survivorship Clinics to help manage late and long-term effects of cancer and its therapy. Patients are transitioned to Survivorship if they have completed treatment with curative intent, are in remission, and past the period of highest relapse risk, as determined by disease experts [average ~ 3 years post treatment].

Methods

The MDASI is a validated cancer specific symptom survey tool. The tool consists of 13 core symptoms and 6 interference items (see Figure 1). Disease-specific modules include between 3 and 6 additional items (e.g., racing heartbeat for Thyroid, difficulty swallowing for Head and Neck). It was integrated into the electronic health record (EHR) for seven different clinics, and sent via the patient portal to patients 7 days prior to their clinic visit. Patients received education documents (Figure 2) in addition to reminder messages in the patient portal. High alerts (symptom ≥ 7) were set for four key symptoms (pain, distress, sadness, and shortness of breath). This triggered an automated message to the provider. From November 2019 to October 2022, 4322 patients completed PRO surveys.

MDASI Symptom Items	MDASI Interference Items
Pain	
Fatigue	
Nausea	
Disturbed sleep	
Distress/feeling upset	Walking
Shortness of breath	Activity
Difficulty remembering	Working (including housework)
Lack of appetite	Relations with other people
Drowsiness	Enjoyment of life
Dry mouth	Mood
Sadness	
Vomiting	
Numbness/tingling	

Figure 1. List of MDASI Symptoms and Interference Items for Core MDASI.

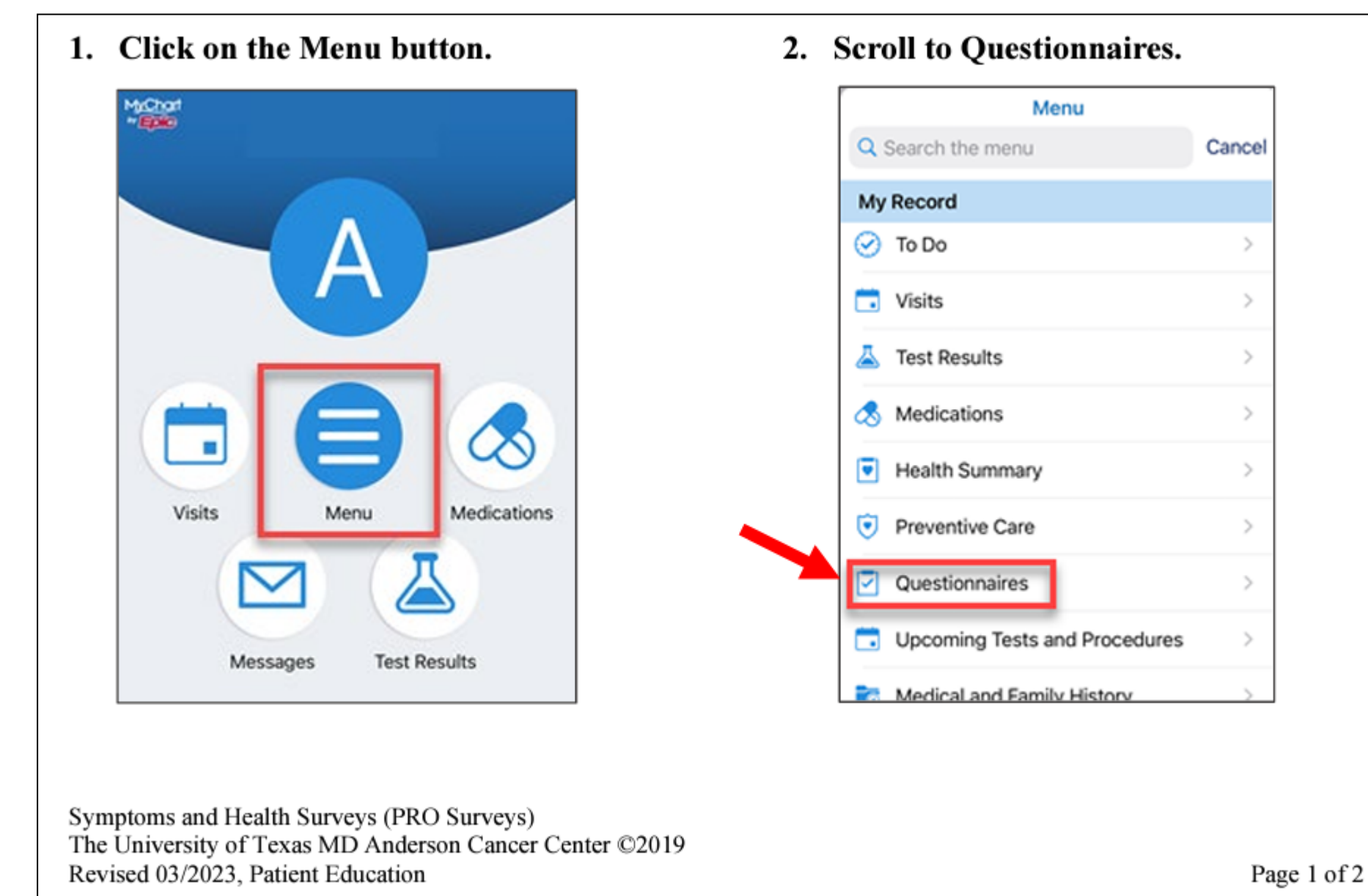


Figure 2. Excerpt from Patient Education document directing patient on how to complete the questionnaire in their online health record portal.

Table 1. Moderate and High Values for Four Symptoms from the Survivorship MDASIs

Clinic	Total PROs	Distress		Pain		Sad		SOB	
		Mod %	High %	Mod %	High %	Mod %	High %	Mod %	High %
Breast	915	7.65%	1.97%	8.96%	2.95%	6.56%	1.09%	5.79%	1.64%
H&N	618	5.99%	2.27%	6.63%	4.21%	4.53%	2.10%	4.69%	3.07%
Lymph	112	16.96%	1.79%	9.82%	6.25%	8.93%	0.89%	10.71%	1.79%
Prostate	496	3.43%	0.60%	1.81%	1.81%	2.02%	0.40%	2.62%	0.60%
SCT	229	8.73%	1.31%	7.86%	5.68%	5.68%	1.31%	7.86%	1.31%
Thoracic	103	2.91%	1.94%	9.71%	1.94%	3.88%	2.91%	12.62%	3.88%
Thyroid	1849	12.93%	5.08%	6.00%	2.49%	8.82%	2.97%	6.54%	2.11%
Grand Total	4322	9.37%	3.15%	6.52%	3.01%	6.66%	2.01%	5.99%	1.97%

Results

Table 1 summarizes the frequency of moderate (4-6) and high (7-10) level responses. Categories with more than 5% of respondents endorsing a moderate symptom value are highlighted yellow, and those more than 10% are highlighted red. There is significant variation of severity for the four key symptoms amongst patients with different disease types. Lymphoma and thyroid patients have higher level symptoms, while prostate patients report relatively low levels. Overall, for this cohort of responders, the totals of moderate and high level symptoms are: distress = 12.5%; pain = 9.5%; sadness = 8.7%; and shortness of breath = 8%.

Conclusions

A subset of cancer survivors still experience moderate to high level symptoms, as measured by the MDASI survey, even years after treatment. There are notable differences across patient populations. Further study can identify unique at-risk patient groups who may require additional intervention.

References

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