Assessment and Management of Older Patients with Metastatic Breast Cancer (MBC) Among Community Oncologists in the US

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METHODS

Figure 1: Study Design

Phase 1 Objectives:

Evaluate gaps that exist in community oncology practices in the care of older metastatic breast cancer (MBC) patients.

Needs assessment:

Questionnaires, completed by physicians and other members of the care team, evaluating the approach to the treatment and management of the older MBC patient at each participating community site.

Phase 2 Objectives:

Enhance the care of older MBC patients by increasing awareness of geriatric assessment (GA) tools through the implementation of an educational program.

- **Educational didactic session:**
- GA tools and their implementation in clinic.
- Case-based discussion of older MBC patient management.

Educational pilot project:

- MBC patients ≥65 years old completed a patient-focused GA self-assessment.
- The provider will meet with the patient and recommend a treatment plan (Blinded to the patient's GA results).
- The formal report, which includes intervention recommendations based on scores, will be shared with the provider.

Figure 2: Sample Formal Report

BMI	Weight Status
Below 18.5	Underweight
18.5 - 24.9	Normal or Healthy Weight
25.0 - 29.9	Overweight
30.0 and Above	Obese

Patient's BMI requires an immediate intervention. BMI scores in this category are associated with a decline in health function and increased risk for treatment toxicity. Please speak with this patient about their nutritional habits, and refer them for a nutrition consult by a Registered Dietician (RD) or Nutritionist. Specific dietary recommendations, supplements, or a referral to social work may also be beneficial

Charlson Comorbidity Index				
Low	0 points			
Medium	1 to 2 points			
High	3 to 4 points			
Very High ≥5 points				

Patient Scored: 2

Patient's CCI warrants a suggested intervention. Patients that score in this range are at intermediate risk for mortality. Please speak with this patient about their comorbidities, to ensure that they are being treated and monitored effectively.

≥26 Normal				
≤25 Cognitive Impairment				

Assessment	<u>Score</u>	Action
ECOG PS	1	No Intervention Required
Evidence of Weight Loss (in the past 6 months)	12%	Immediate Intervention Required
BMI	17.2	Immediate Intervention Required
Charlson Comorbidity Index	2	Intervention Suggested
Montreal Cognitive Assessment (MoCA)	23	Immediate Intervention Required
Timed Up and Go	10.08	No Intervention Required
Number of Falls (in the past 6 months)	1	Immediate Intervention Required
Activities of Daily Living Subscale (ADL)	2	Immediate Intervention Required
Instrumental Activities of Daily Living Subscale (IADL)	4	Immediate Intervention Required

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• Evaluation of the providers' perspective of these results: "Did this change your management?"

Patient's MoCA score requires an immediate intervention. Patient's ability to provide informed consent should be assessed, and a health care proxy should be identified. Referral to Social Work should be made. Patient may benefit from further cognitive testing or a referral to neuropsychological or geriatric services. Patient's medications should also be assessed.

Geriatric Depression Scale	7	Intervention Suggested
MOS Social Support Scale	2	Immediate Intervention Required

RESULTS

Table 1: Provider Demographics

Table 2: Pre-Intervention Providers Assessment Methods for Older MBC Patients

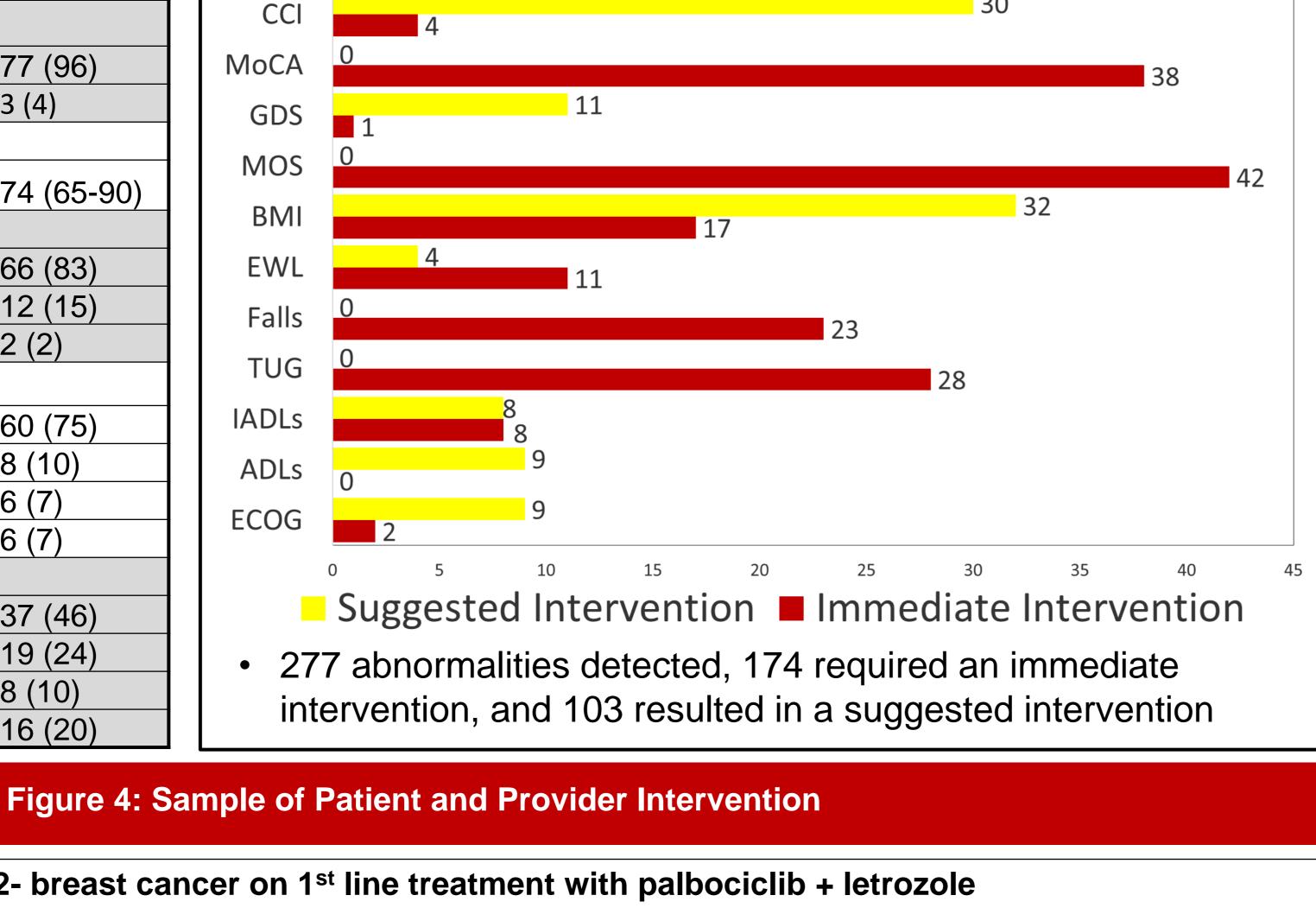
Characteristic	N=43	Characteristic (cont'd)	N (%)
Gender	N (%)	Years in Practice	
Female	23 (53)	<5	16 (37)
Male	20 (47)	5 - 10	12 (28)
Age		11 - 15	9 (21)
30 – 40	16 (37)	> 15	
41 – 50	12 (28)	Prior experience in Geriatri	CS
>50	9 (21)	Yes	2 (5)
Race		GA is beneficial	
Caucasian	25 (58)	Agree	33 (77)
Asian	14 (33)	Use GA regularly	18 (42)
Role		% of MBC pts ≥ 70	
Physician	37 (86)	≤ 40 %	31 (72)
Physician extender	6 (14)	> 40%	12 (28)

	Routinely assess prior to treatment			Provider Current Approach		
	N (%)			N (%)		
	Agree	Neutral	Disagree	Validated Scale	Patient Interview	None
Fitness for treatment	ECOG F	PS assessed in	n all patients	29 (68)	14 (32)	0 (0)
Cognition	33 (77)	33 (77) 7 (16) 3 (7)			26 (60)	7 (16)
Depression	29 (68)	7 (16)	7 (16)	6 (14)	28 (65)	9 (21)
Socioeconomic status	28 (65)	6 (14)	9 (21)	7 (16)	25 (58)	11 (26)
Fall risk	33 (76)	5 (12)	5 (12)			
Nutritional status	37 (86) 2 (5) 4 (9)		19 (44)	17 (40)	7 (16)	
Comorbidities	42 (98)	0 (0)	1 (2)	0 (0)	40 (93)	3 (7)
Toxicity Risk				4 (9)	0 (0)	39 (91)

Results from the Needs Assessment identified the patient interview as the preferred method of assessing patients prior to treatment. Validated scales are used less frequently.

Table 3: Patient Characteristics	Figure 3: Results of Geriatric Assessment	Table 4: Abnormalities found in provider's assessment vs. GA		
Characteristic N=80 (%)	30	Provider's Patient CGA Identified by		

Gender	
Female	77 (96)
Male	3 (4)
Age	
Mean (range)	74 (65-90)
Race	
Caucasian	66 (83)
African American	12 (15)
Missing/ Refused	2 (2)
Subtype of breast ca	ancer
ER/PR+, HER2-	60 (75)
ER/PR+, HER2+	8 (10)
ER/PR-, HER2+	6 (7)
Triple negative	6 (7)
Line of therapy	
1st line	37 (46)
2nd line	19 (24)
3rd line	8 (10)
4th and beyond	16 (20)



Domain	assessment N (%)	N (%)	both N (%)
Functional Status	29 (36)	43 (54)	22 (28)
Comorbidities	28 (35)	34 (43)	17 (21)
Social Support	7 (9)	42 (53)	5 (6)
Depression	20 (25)	12 (15)	6 (8)
Nutritional Status	27 (34)	50 (63)	20 (25)
Cognitive Status	18 (23)	38 (48)	13 (16)
Table	5: Providers' pers	spective of GA r	report
Review of Geriat	ric Assessment (r	n=80 patients)	N (%)
			00 (10
Providers who we	ere surprised by res	sults of geriatric	32 (40
Providers who we assessment	ere surprised by res	sults of geriatric	32 (40
		sults of geriatric	32 (40 16 (50
assessment	tion score	sults of geriatric	
assessment Cognitive func	tion score score	sults of geriatric	16 (50
assessment Cognitive func Social support	tion score score	sults of geriatric	16 (50 8 (25)
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Domain	Assessments	Provider Assessment	CGA	Formal Report	Recommendation	Provider Review
Functional	ECOG PS	ECOG 2	2	Intervention Suggested	Consider this score with their IADL and CCI, and intervene accordingly.	
Status	Timed Up and Go		15.61 seconds	Intervention Required	Patients in this category are at high risk for falling. Measures that could be implemented to lower this patient's fall risk are physical therapy, occupational therapy, and/or the addition of a walking aid.	Abnormalities detected: Cognitive function
	Falls	Intermediate fall risk	0 (past 6 months)	No Intervention		Surprised by
	Activities of Daily		6	No Intervention		results because
	Living Instrumental Activities of Daily Living	Requires some assistance but able to perform self-care	6	Intervention Suggested	Speak with this patient about what support is available to them. If inadequate support is available, referral could be made to physical therapy, occupational therapy, and/or Social Work.	patient "functions independently and compliant " As a result, will
Nutritional Status	Evidence of Weight Loss		3 lbs, fluctuations	Intervention Suggested	Continue to monitor as weight can change with disease progression.	make a referral to
Otatao	Body Mass Index	Overweight	43.05	Intervention Required	Talk to patient about their nutritional habits, and refer them for a nutritional consult.	support services (i.e. nutritional consult, PT,
Comorbidities	Charlson Comorbidity Index	1-2 comorbidities that affect cancer care	1	Intervention Suggested	Ensure comorbidities are being treated and monitored effectively.	psychiatry) and social work
Cognitive Function	Montreal Cognitive Assessment	Mild cognitive impairment , no issues affecting daily function	24	Intervention Required	Patient's ability to provide informed Consent should be assessed. Referral to Social Work should be made. Patient's medications should also be assessed.	Provider agrees that this
Depression	Geriatric Depression Scale	Concerned about some depression, but no further management required	2	No Intervention		information is highly useful and important for the
Social Support	Montreal Social Support Scale	Lives alone but has support from family	4 (Raw score of 7)	Intervention Required	Please speak with your patient about their social support needs, and refer them to Social Work.	care of this patient.

care of older patients with metastatic breast cancer Strongly Agree 13 (16) 46 (58) Agree 15 (19) Neutral

CONCLUSIONS

- Despite acknowledgement of the value associated with pre-treatment GA, most providers in the community do not routinely conduct such an assessment. Furthermore, most providers use interview rather than validated assessment tools to identify age related treatmentaltering concerns.
- In preliminary phase II results with 80 patients, the GA identified a large number of deficient areas that had not been identified through the physician's assessment, and resulted in change to the management of these patients.

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