



Feasibility of Home Health Care Patients' Self-Administration of the PROMIS Global Health Survey

September 27, 2017

JS Riggs, EA Madigan,
Z Gonzaga, J Gillis,
R Starr, M Roczen,
E Nuccio

Funding & Disclaimers



- *Funding was received from the Centers for Medicare & Medicaid Services through Contract HHSM -500-2013-130011 , Task Order HHSM-500T0002. The views and opinions expressed are solely those of the authors and do not reflect the official positions of the institutions or organizations with which they are affiliated or the views of the project sponsors.*

OASIS Field Test team



Sara Galantowicz, MPH
Jennifer Riggs, PhD RN
Sara Bausch, MS
Johan Garcia-Padilla, MPH
Jacqueline Gillis, MS
Nicole Keane, MSN RN
Donna Hurd, MSN RN
Brenda Karkos, MSN/MBA, RN,
CHPN
Roopa Akkineni, MS
Olivia Jung, MPH
(Anisha Illa)



David Hittle, PhD
Eugene Nuccio, PhD
Raven Starr, MS, RN, AG-CNS,
CWCN
Marisa Roczen, PhD
(Angela Richard, PhD, RN)



Linda Krulish, PT MSH,
COS-C
(Marian Essey RN BSN,
COS-C)



Elizabeth A Madigan, PhD RN, FAAN
Consultant



Robin Williams, RN
Zabrina Gonzaga, MSN RN
Shirley Neal, MS

Background: Home health quality



- Outcome and Assessment Information Set (**OASIS**) (1999)
- **Calculation of quality measures**
 - Outcome (2000); Process (2010); Claims-based utilization (2012)
- **Public reporting**
 - Home Health Compare (2003); Star Ratings System (2015)
- **Conditions of Participation for Home Health (§ 484.55)**
- Consumer Assessment of Healthcare Providers and Services (**CAHPS**) in Home Health (HH) (2009)
- **GAP:** No patient reported outcomes

Trial of Patient Reported Outcomes



- **OASIS Field Test 2016-2017**
 - Reliability & validity of OASIS items
- **Selection of PROMIS**
 - Well-established, valid & reliable
 - Relevant to home health; easy to complete
 - Resources for scoring, interpretation
 - The NIH and CMS jointly recommend the PROMIS Tool for potential incorporation into CMS QRPs.

PROMIS® Global Health Survey v1.1



Please respond to each item by marking one box per row.

	Excellent	Very Good	Good	Fair	Poor
In general, would you say your health is:					
In general, would you say your quality of life is:					
In general, how would you rate your physical health?					
In general, how would you rate your mental health, including your mood and your ability to think?					
In general, how would you rate your satisfaction with your social activities and relationships?					
In general, please rate how well you carry out your usual social activities and roles. (This includes activities at home, at work and in your community, and responsibilities as a parent, child, spouse, employee, friend, etc.)					

	Completely	Mostly	Moderately	A little	Not at all
To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair?					

In the past 7 days,

	Never	Rarely	Sometimes	Often	Always						
How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?											
	None	Mild	Moderate	Severe	Very Severe						
How would you rate your fatigue on average?											
How would you rate your pain on average?	0	1	2	3	4	5	6	7	8	9	10
	No pain										Worst Imaginable pain

PROMIS data collection



- **Face-2-Face Training¹**

- Focus on defining PRO & relevance
- Stressed importance of self-administration
- Addressed how to respond in special situations

- **Data Collection**

- Intent: PROMIS offered in two modes (computer; paper)
- Patients completed surveys during Field Test data collection home visits

1. HealthMeasures.net. PROMIS: Obtain and Administer Measures:

<http://www.healthmeasures.net/explore-measurement-systems/promis/obtain-administer-measures>

Surveys completed



Patient Characteristics

Number of Patients	150			
Number of Surveys completed	SOC-ROC	DC	SOC-ROC + DC	Total
	75	18	56	206
Age (n=121)	<65	65-74	75-84	85+
	23.1%	20.7%	24%	32.2%
Race/ethnicity* (n=113)	White	Black	Hispanic	Other
*Patients may self-identify any or all categories	79.8%	14.7%	3.7%	1.8%
Gender (n=136)	Male		Female	
	39.4%		60.6%	

Length of Stay by State



State	Total # Episodes	Total # Episodes Field Test	Weighted Avg. Length of Stay
CO	2339	32	58.06
MA	30821	34	51.29
NC	4150	47	56.38
OH	7058	37	69.67

Quantitative Results: Global Physical/Mental Health Scores



- GPH¹ significantly worse than the US reference population subgroup aged 65 and older²
 - *GPH Scores: M = 38.5, SD = 4.9, N = 106*
 - *Reference Population: M = 50.5, SD = 9.6, N = 1396; p < .001*
- GMH¹ significantly worse than the US population aged 65 and older²
 - *GMH Scores: M = 45.7, SD = 6.9, N = 108*
 - *Reference Population: M = 53.3, SD = 8.6, N = 1394; p < .001*

1. Hays et al. *Qual Life Res* (2009): 18:873-880.

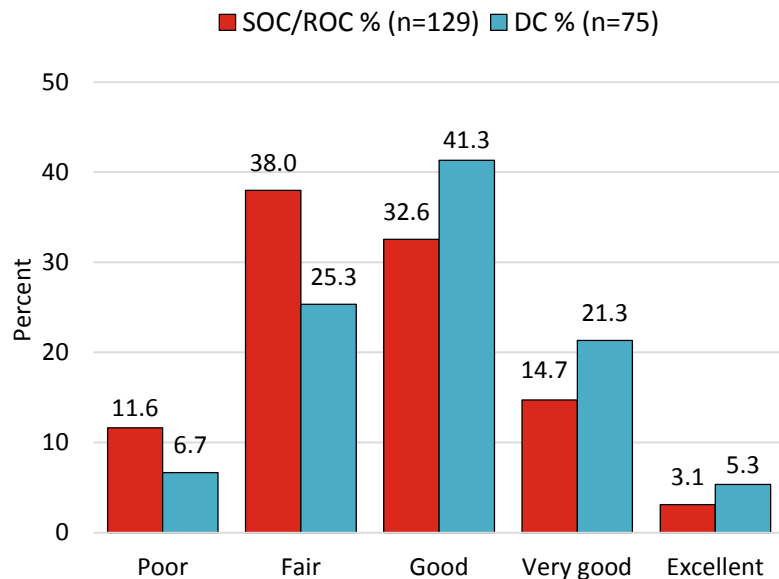
2. Compare PROMIS scores to relevant reference population: <http://www.healthmeasures.net/score-and-interpret/interpret-scores/promis>

Quantitative Results: Overall & Physical Health



Patients' ratings of overall & physical health are similar. Patients as a group reported improvement between SOC/ROC and DC.

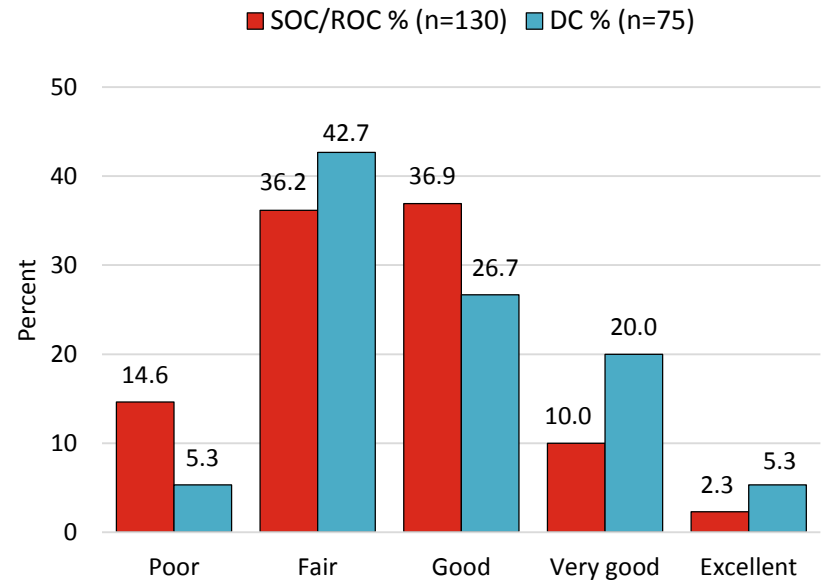
Overall health



Global01:

In general, would you say your health is:

Physical health



Global03:

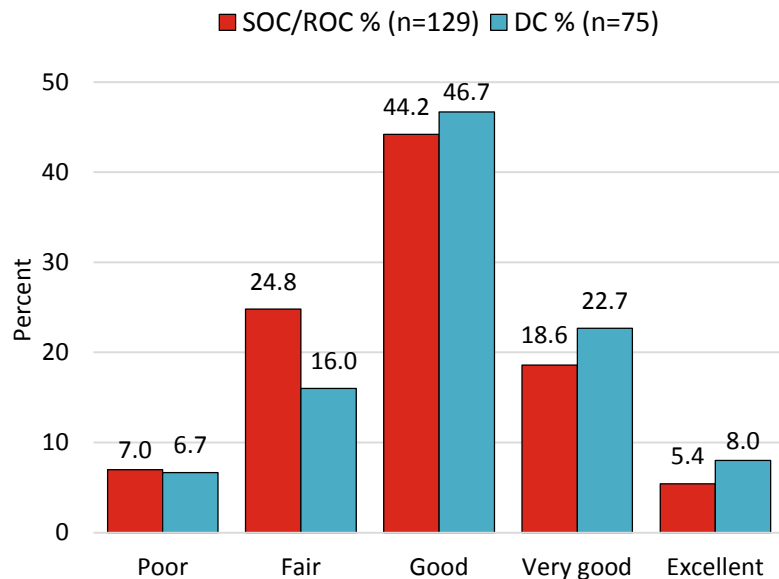
In general, how would you rate your physical health?

Quantitative Results: Quality of Life; Mental Health



Patients' ratings of quality of life and mental health are similar.

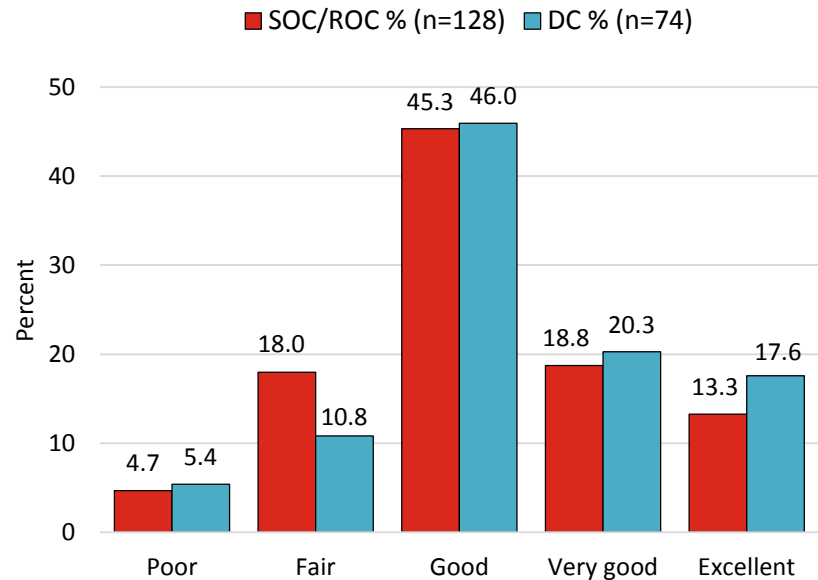
Quality of Life



Global02:

In general, would you say your quality of life is:

Mental Health



Global04:

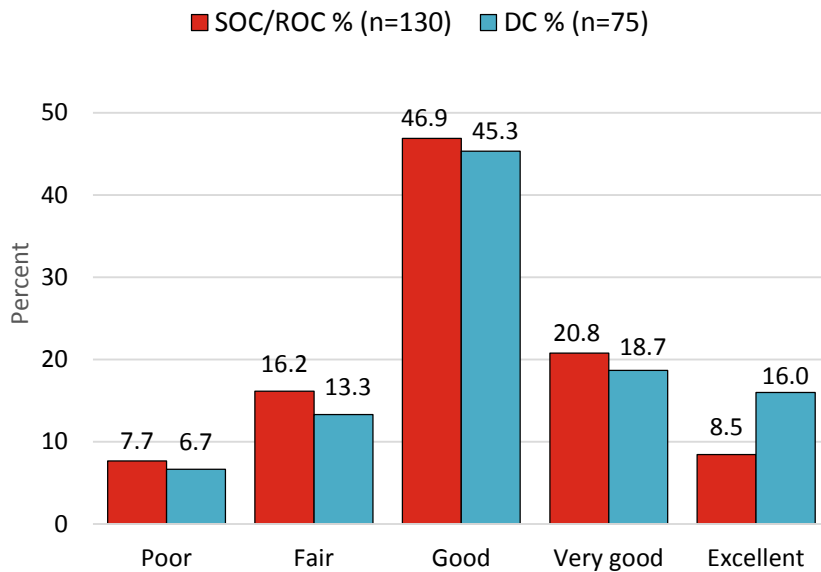
In general, how would you rate your mental health?

Quantitative Results: Social activities and roles



Slightly more patients reported satisfaction with social activities/relationships than reported ability to carry out social activities/roles.

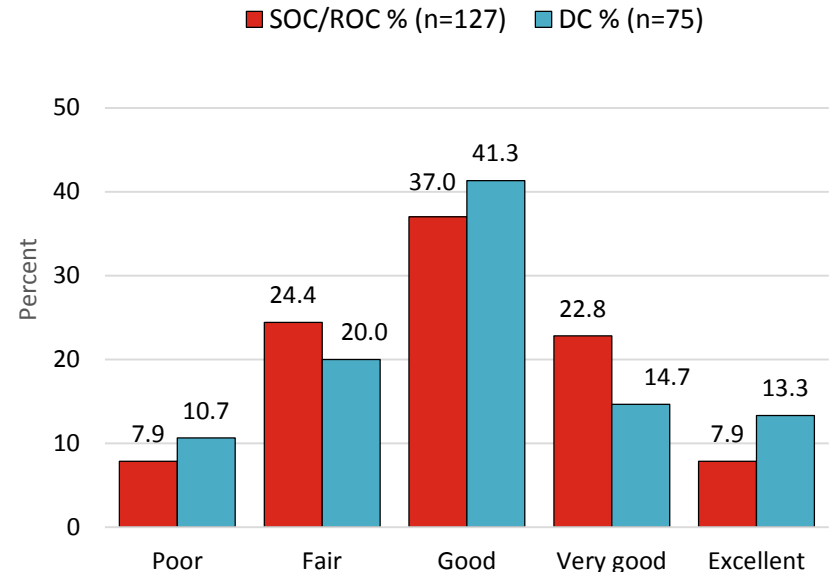
Social activities



Global05:

In general, how would you rate your satisfaction with your social activities and relationships?

Social roles



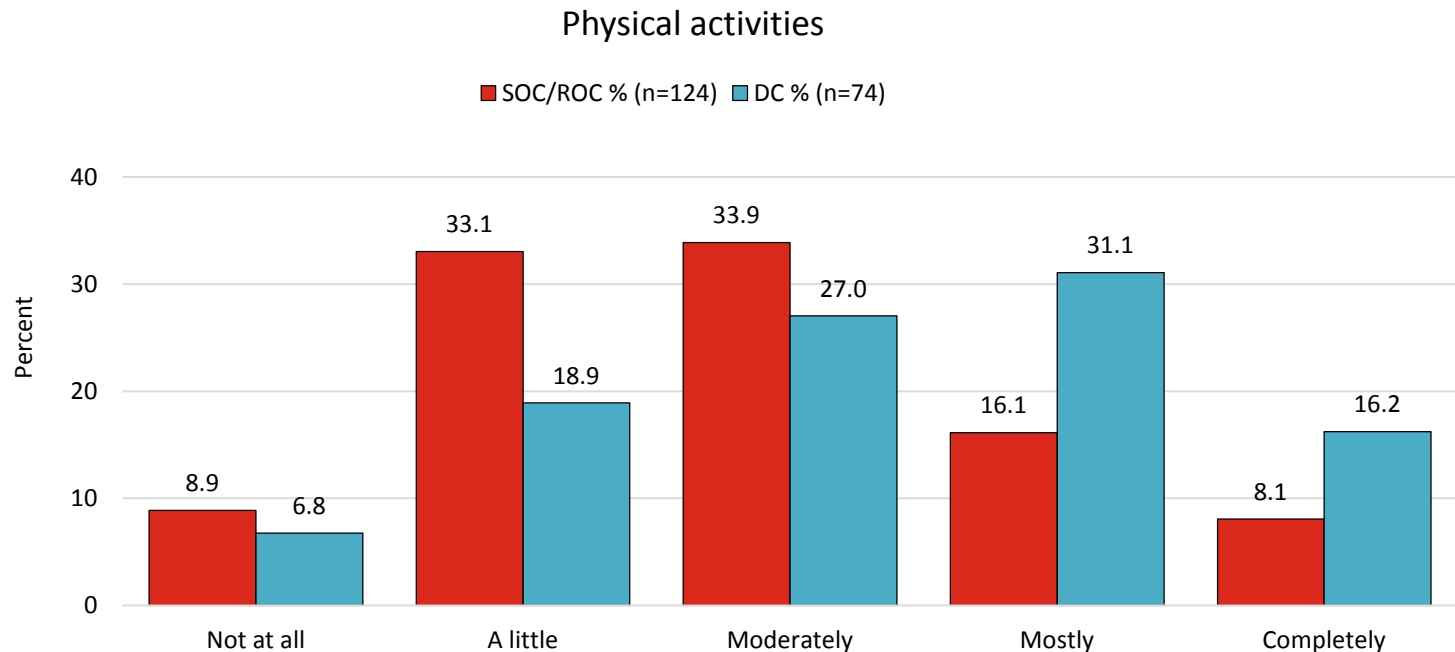
Global09:

In general, please rate how well you carry out your social activities and roles.

Quantitative Results: Physical Activities



Most patients reported being able to carry out everyday physical activities moderately (34%) or a little (31%) at SOC/ROC. At DC, more patients were mostly (31%) or completely (16%) able to do so.



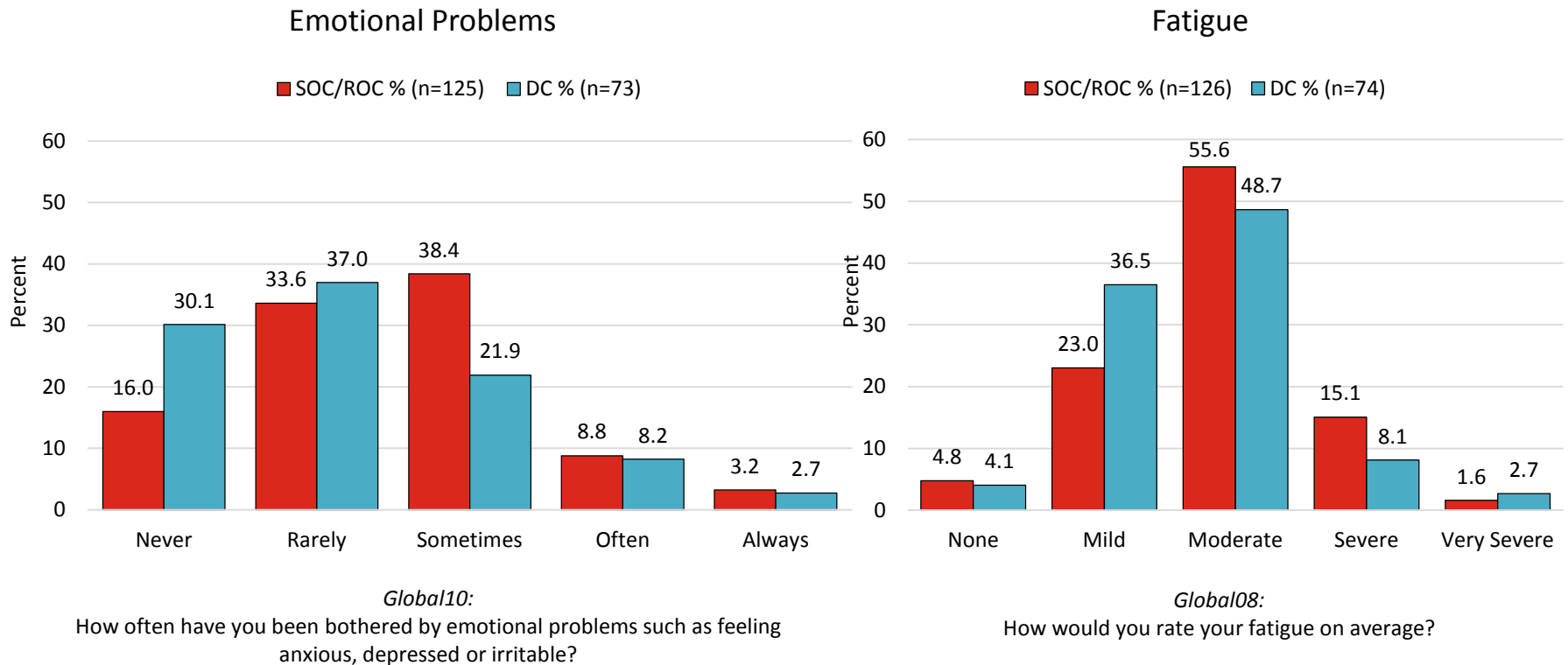
Global06:

To what extent are you able to carry out your everyday physical activities?

Quantitative Results: Emotional Problems and Fatigue



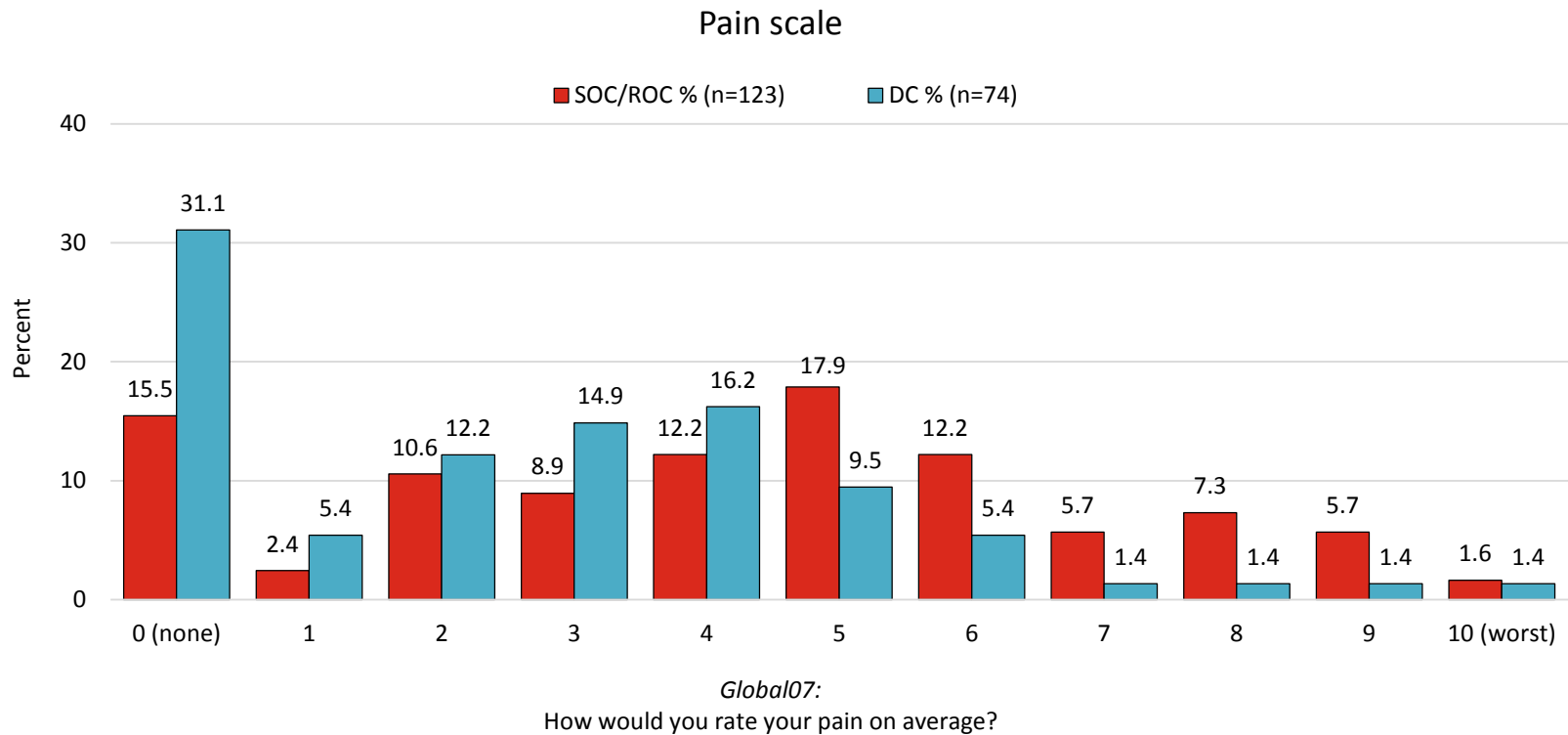
Most patients reported having emotional problems ‘never’ or ‘rarely’. About 1 in 2 patients indicated a moderate fatigue level at SOC/ROC and DC.



Quantitative Results: Pain



Pain intensity was relatively normally distributed, except for 15% and 31% reporting 'no pain' for SOC/ROC and DC, respectively.

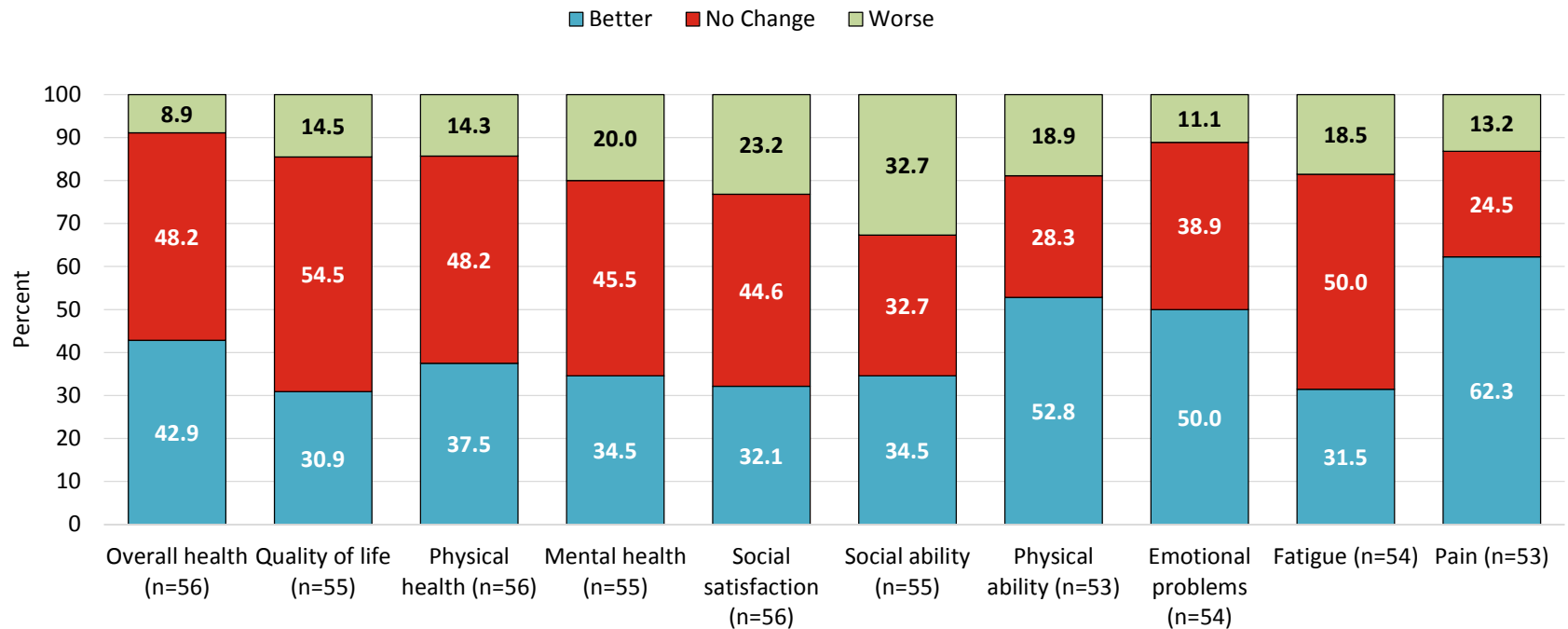


Quantitative Results: Self-Reported Improvement for Matched Surveys



Higher percentages of patients reported improved pain, physical activity, emotional problems at DC when compared to their scores at SOC/ROC.

Self-Reported Improvement for Patients with Matched Surveys by Global Health Item



Quantitative Results: Global Physical/Mental Health Scores



- **Global Physical Health (GPH) Score Items¹**
 - *Global03*: How would you rate your physical health?
 - *Global06*: To what extent are you able to carry out your everyday activities?
 - *Global07*: How would you rate your pain on average?
 - *Global08*: How would you rate your fatigue on average?

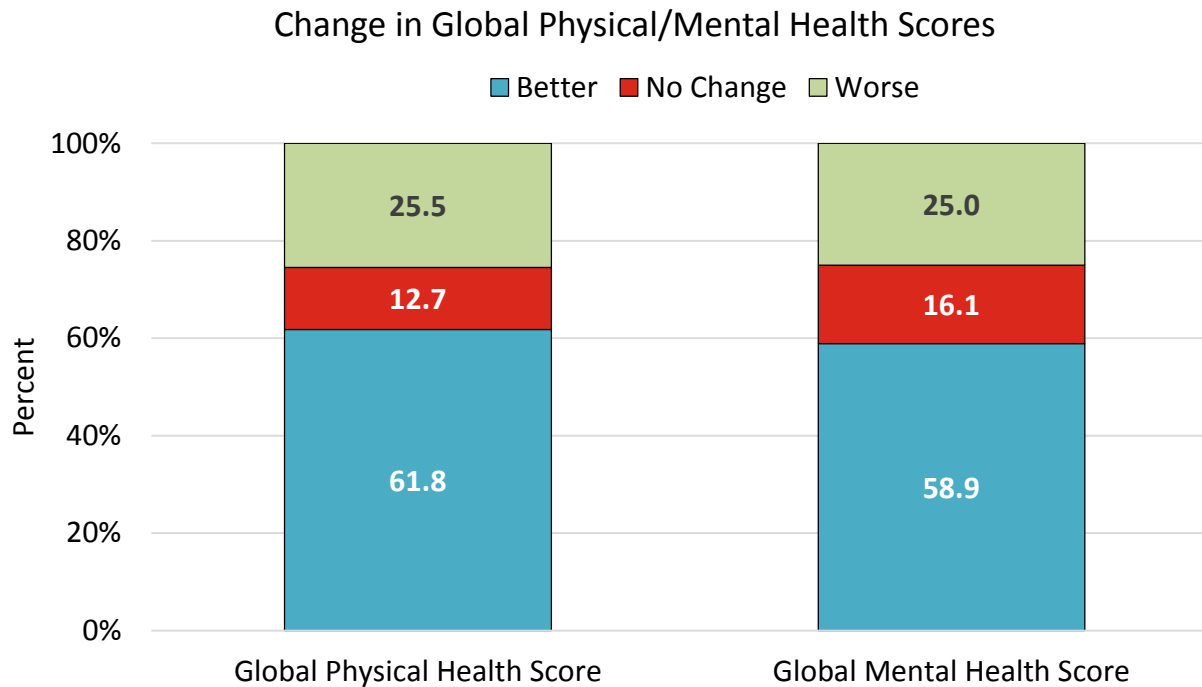
- **Global Mental Health Score (GMH) Items¹**
 - *Global02*: Would you say your quality of life is...?
 - *Global04*: How would you rate your mental health?
 - *Global05*: How would you rate your satisfaction with your social activities and relationships?
 - *Global10*: How often have you been bothered by emotional problems?

1. Item descriptions abbreviated.

Quantitative Results: Change in Global Physical/Mental Health Score



The majority of patients showed improvement in the global physical health score (62%) and global mental health score (59%).



Quantitative Results: Goodness of Fit analyses



Based on the Start/Resumption of Care PROMIS ratings, which of the following best characterizes the home health patients who participated in the field test?

- Patients' ratings are ...
 - evenly distributed across response options.
 - normally distributed across response options.
 - skewed toward lower than average response options.

Based on Goodness of Fit tests, the answer is

Quantitative Results: Goodness of Fit analyses



Based on the Start/Resumption of Care PROMIS ratings, which of the following best characterizes the home health patients who participated in the field test?

- Patients' ratings are ...
 - normally distributed across response options.

Based on Goodness of Fit tests, the answer is

Quantitative Results: Conclusions



- Patients reported improvement in global physical and mental health between SOC/ROC and DC
 - Raw change rates were lower
- Most notable improvement in pain and physical activities from SOC/ROC to DC
 - Focus of home health care
- Social ability mostly unchanged between SOC/ROC and DC
 - Expected due to short episodes of care

Qualitative



- Focus Groups
 - Site Coordinators facilitated at each of the 12 HHA
 - Participants: RNs, PTs, support staff involved in field test
- Semi-structured discussions
 - PROMIS was one topic
 - 10 groups provided substantial feedback; 2 minimal

Perceptions of feasibility



- Clinicians were about evenly divided in concluding whether their patients found survey confusing or difficult
- Clinicians noted survey does not apply to patients with cognitive impairment & did not include caregivers, who play an essential role in home health
- Clinicians acknowledged and appreciated the value of PRO

Perceptions of self-report



- Clinicians in 50% of groups characterized patient self-report as ‘subjective,’ ‘unrealistic’
 - Comparing with their clinical assessment
 - Considering what the information will be used for
- Clinicians suggested home health patients overstate their independence; health and functional status
 - Avoid having to move from home to a more restrictive, higher level of care setting

Conclusions



- **Quantitative:** Improvement between SOC/ROC & DC, most notably in pain, physical abilities
- **Qualitative:** PRO feasible among cognitively intact and Clinicians find value in patient self report
- **Limitations:** small convenience sample; English speaking; cognitively intact.
- **Next Steps**
 - National testing of PROMIS© Global10 across all PAC settings underway
 - Considerations for cognitively impaired; caregivers; integration with clinical practice; implications for quality measurement



**BOLD
THINKERS
DRIVING
REAL-WORLD
IMPACT**

