Technical Expert Panel Summary/Expert Input Report: Development and Maintenance of Post-Acute Care Cross-Setting Standardized Patient Assessment Data

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1. Introduction and Overview

1.1 Introduction

The RAND Corporation, on behalf of the Centers for Medicare & Medicaid Services (CMS), convened a Technical Expert Panel (TEP) to seek expert input on the development of Post-Acute Care (PAC) cross-setting standardized patient assessment data with a focus on Home Health Agencies (HHAs), Inpatient Rehabilitation Facilities (IRFs), Long-Term Care Hospitals (LTCHs), and Skilled Nursing Facilities (SNFs). An in-person, two day meeting of the TEP was held on April 7th and April 8th, 2016 in Baltimore, Maryland. A critical component to RAND's work on the development and maintenance of post-acute care cross-setting standardized patient assessment data is stakeholder involvement. The development and selection of data elements are guided by a consensus-based process involving expert input from PAC healthcare professionals across the country.

This report provides a summary of the TEP proceedings, detailing key issues of standardized patient assessment data development and the TEP's discussion around those issues. In this section, we provide background information on the larger project, describe the process used to identify TEP members and the process of the TEP meeting, and an outline the organization of the remainder of this report.

1.2 Background

The Improving Medicare Post-Acute Care Transformation Act of 2014 (the IMPACT Act of 2014) requires CMS to develop, implement, and maintain standardized patient assessment data elements for PAC settings to facilitate care coordination, interoperability, and improve Medicare beneficiary outcomes.[1] The types of providers covered by the IMPACT Act of 2014 include Home Health Agencies (HHAs), Inpatient Rehabilitation Facilities (IRFs), Long-Term Care Hospitals (LTCHs), and Skilled Nursing Facilities (SNFs).

Existing PAC assessment instruments by setting include: Outcome and Assessment Information Set (OASIS) for HHAs; Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) for IRFs; LTCH CARE Data Set (LCDS) for LTCHs; and the Minimum Data Set (MDS) for SNFs. With few exceptions, the data elements used in these assessments are not currently standardized or interoperable. While each assessment instrument collected for data items of similar concepts, individual items, questions and response options are varied by

[1] https://www.govtrack.us/congress/bills/113/hr4994

assessment instrument. As a result, comparisons across the assessment instruments are minimize. Implementation of a core set of standardized assessment items across PAC settings for the currently used assessment instruments has important implications for Medicare beneficiaries, families, providers, and policymakers alike.

CMS has contracted with the RAND Corporation (contract no. HHSM-500-2013-13014I) to develop standardized assessment data elements for PAC settings that meet the requirements of the IMPACT Act of 2014. Standardized assessment items will contribute to assessment data comparability across PAC providers, data exchange and interoperability, care coordination, payment analysis, and longitudinal outcome analysis. Clinical assessment domains that guide data item standardization include: cognition and mental status; medication reconciliation; care preferences; pain (medical condition); and impairments in hearing, vision, and continence. As part of its data element development and efforts, CMS requires that contractors convene groups of stakeholders and experts who contribute direction and thoughtful input on the development of this work. As a part of this process, RAND convened a set of advisors to assist in identifying a group of data elements that could be standardized across all four PAC assessment instruments. In addition to convening the TEP, RAND conducted literature reviews, focus groups, and case studies to inform its work. These activities are reported on elsewhere.

The objective of this TEP was to review and comment on the current state of standardized patient assessment data in PAC settings across the clinical assessment domains as mandated by the Act, to consider and discuss possible future states of standardized assessment data in those domains, and to identify optimal directions for pilot testing to move towards the ideal state of standardized assessment items in each of these stated domains.

1.3 Organization of the Report

This TEP summary report first describes the process of convening and conducting the TEP (Section 2), then summarizes the feedback obtained from TEP members during discussions and from their ratings that were completed as part of the TEP. Sections 3 through 9 address the topics of Cognitive Status, Depressed Mood, Pain, Vision and Hearing Impairment, Medication Reconciliation, Care Preferences, and Continence Impairment, respectively. Each section offers the background and rationale for the importance of assessing the domain in PAC, reports on the TEP's discussion, summaries of the ratings given by the TEP on potential assessment data elements, and any feedback on the domain received from federal subject matter experts.

2. About The Technical Expert Panel (TEP) Meeting

2.1 TEP Nomination Process

On February 8th, 2016, a call soliciting for technical experts was posted on the CMS Measure Management Public Comment webpage in order to find individuals who would be able to add input on the development and testing of standardized patient assessment data elements for use in PAC. The TEP solicitation included a call for participants with a diverse range of perspectives and areas of expertise within the four post-acute care settings as outlined in the IMPACT Act of 2014: HHAs, IRFs, LTCHs, and SNFs.

Individuals who were nominated or self-nominated were instructed to complete the nomination form, which asked for the individual's current title/professional role, credentials, organizational affiliation and/or employer, role (recent PAC patient, family member of PAC patient, advocate, other consumer, provider or staff, administrator, regulator, purchaser, researcher, and/or organizational employee), and the PAC settings in which they have experience (HHA, IRF, LTCH, or SNF). Additionally, they were asked to include a short biographical statement and, for applicants other than consumers and family caregivers, a curriculum vitae.

The nomination period closed on February 19th, 2016. RAND received 117 nominations. Nominees came from 94 different organizations from across 34 states. Nominees represented a variety of disciplines, experience, and reported expertise across the spectrum of PAC. After careful consideration, RAND selected 16 individuals from the complete nomination list.

2.2 TEP Selection Process

After the close of the nomination period, RAND finalized the TEP composition by selecting 17 nominees who offered a diverse range of clinical, research, consumer, and administrative expertise in the subject areas to be discussed at the TEP (cognitive status, medication reconciliation, care preferences, pain, hearing and vision, and continence), including expertise in one or more PAC settings (HHA, IRF, LTCH, SNF). Nominees were invited to participate in the TEP based on their content expertise, experience in PAC, and disciplinary perspective. The TEP was constructed purposefully to balance representation of individual disciplines, experience, and PAC settings. The membership also reflected geographic and organizational diversity as well as the variety of organization types that may have an interest in the topic. Two of the selected nominees were not available to attend the TEP. In addition, a consumer representative, an advocate for people with disabilities, who himself also has experience with post-acute care as a result of his own disability, participated in the TEP. The process resulted in a 16-member panel (Table 1). Appendix A provides the list of TEP members, with brief biographies of each member.

Table 1. TEP Roster

	Name, Credentials, Professional Role	Organizational Affiliation, City, State	PAC setting(s)	Role/Area of Expertise
1	**Susan Battaglia, RN-BC, RAC-C** Director of Case Mix Management	**Tara Cares**; NGNA; AANAC Orchard Park, NY	SNF	Patient assessment, workforce, QI
2	**Cheryl Burzynski, MSN** President and Chief Nursing Officer	McLaren Bay Special Care, Bay City, MI	LTCH	Administrator: workforce
3	**Daniel Butts, MOT, OTR/L, MBA** Senior Director Rehabilitation Operations	UPMC Rehabilitation Network Pittsburgh, PA	IRF, LTCH, SNF	Administrator: workforce
4	**Judy Elmore, BS** Vice President, Ancillary Operations	Covenant Healthcare Aliso Viejo, CA	HH, SNF	Administrator: Workforce, QI, Health Information Technology
5	**Janet Herbold, PT, MPH, CHC** Senior Administrator and Corporate Compliance Officer	Burke Rehabilitation Hospital White Plains, NY	IRF	Provider/Administrator patient assessment, care transitions
6	**Kathleen Lawrence, MSN, RN, CWOCN** Wound Ostomy Continence Program Manager	Rutland Area Visiting Nurse and Hospice Rutland, VT	HH, IRF, LTCH, SNF	Provider: care preferences, pain, workforce
7	**Natalie Leland, PhD, OTR/L, BCG, FAOTA** Assistant Professor	University of Southern California; Los Angeles, CA	IRF, SNF	Care preferences, QI, HIT
8	**Marc Rothman, MD** Senior VP & Chief Medical Officer	Kindred Healthcare; Louisville, KY	HH, IRF, LTCH, SNF	Provider: QI, workforce, care transitions
9	**Monica Sampson, PhD, CCC-SLP** Associate Director	Health Care Services in SLP, Rockville, MD	SNF	Provider: hearing and vision assessment, assessment of cognitive function

10	**Chloe Slocum, MD** Physical Medicine and Rehabilitation Physician	Spaulding Rehabilitation Hospital, Sandwich, MA	HH, IRF	Provider: pain assessment, performance measurement, medication reconciliation
11	**Peter W. Thomas, JD** Principal	Powers Pyles Sutter & Verville PC; Washington, DC	HH, IRF, LTCH, SNF	Consumer
12	**Barbara Thomsen, CDM, CFPP, RAC-CT** MDS/Case Mix Audit Specialist and Quality Assurance	Hawkeye Care Centers, Norwalk, IA	HH, IRF, LTCH, SNF	Provider: patient assessment, performance measurement
13	**Heidi Wald, MD** Associate Professor	University of Colorado School of Medicine, Aurora, CO	SNF	QI, urinary and bowel
14	**Michael Wasserman, MD, CMP** Director, Nursing Home QIN-QIO	Health Services Advisory Group Glendale, CA	HH, LTCH, SNF	Provider: QI, care transitions
15	**Kathleen Witcoskie, RN** Vice President	Visiting Nurse Association of American Health Systems Shamokin, PA	HH, LTCH, SNF	Research/ academic: QI, healthcare disparities
16	**Kimber Zappia, BSW, MBA** Executive Director	Carolinas Healthcare System Charlotte, NC	HH, IRF, LTCH, SNF	Administrator/provider: workforce, care transitions

2.3 In-Person TEP Meeting

TEP members were asked to review meeting materials (TEP Notebook) sent one week in advance of the in-person meeting. We applied a framework of "current, interim, and ideal" states of assessment data for PAC to the background materials, and organized our presentations and discussion along these lines as well. We defined the ***current state*** of assessment as existing data elements currently in use in the four PAC assessments (OASIS, IRF-PAI, LCDS, MDS), specifically, the OASIS C2 (effective 1/2017), IRF PAI (effective 10/2016), LCDS (effective 4/2016), and MDS 3.0 (effective 10/2016). Data elements considered in the ***interim state*** of assessment are those that have been tested in the four PAC settings and could be moved forward into implementation on a more rapid timeline.

A primary source of information about potential data elements for the interim state is the Post-Acute Care Payment Reform Demonstration (PAC PRD). The PAC PRD was mandated by the Deficit Reduction Act of 2005 to examine the relative costliness and outcomes of similar types of Medicare beneficiaries discharged to different PAC settings (i.e., HHAs, IRFs, LTCHs, and SNFs). To meet these aims, this demonstration collected standardized assessment data by means of the Continuity Assessment Record and Evaluation Item Set, otherwise known as the CARE Item Set or the CARE Tool, across PAC and other settings to measure patient severity and case-mix across settings in over 200 providers in 11 geographically diverse markets. In addition to extensive information on PAC costs, outcomes, and service substitution among PAC providers, the PAC PRD reported the reliability and predictive validity of many data elements pertaining to the domains and categories listed in the IMPACT Act of 2014, thereby providing important information on potential data elements, included in the TEP Notebook.

The domain-specific materials in the TEP Notebook were grouped into chapters, which included:

- summary of main points of the domain chapter
- list of all relevant current, interim, and ideal data elements for the domain
- background and rationale for including the domain in a PAC standardized assessment
- organizing framework for the domain
- description of data elements that have been identified in the current and potential interim states of standardized assessment of the domain
- summary of options for the ideal state data elements

The two-day, in-person meeting took place in Baltimore, Maryland, on April 7th and April 8th, 2016 (see Appendix B for meeting agenda). Discussion among the 16 TEP members was facilitated by Loretta Randolph (MITRE Corporation), with support from various members of the RAND team and representatives from CMS. The following key topics were covered for each domain's potential data elements:

1. *Potential for improving quality*, including the likelihood of improving care transitions by facilitating meaningful data exchange, promoting person-centered care and informing care planning, and improving care practices and patient/resident safety. This dimension also considered the items' potential to be used for quality comparisons, such as in value-based payment models, and to support clinical decision making and care coordination.
2. *Validity and reliability*, including the extent to which the data element captures the construct being assessed and the proven or likely inter-rater reliability (potential for consensus in ratings from two or more assessors).
3. *Feasibility for use in PAC*, including clinical appropriateness, relevance to work flow, and potential to be standardized and made interoperable across the four PAC settings.

4. *Utility for describing case mix*, including ability to measure differences in patients' or residents' severity levels related to resource needs and the potential for use in payment models.

Throughout the meeting, there was active discussion related to current, interim, and ideal data elements within each domain. The meeting was audio recorded and transcribed for the purpose of summarizing TEP proceedings in this report.

2.4 Rating Worksheet

During the in-person meeting, RAND distributed rating worksheets to the TEP members, each corresponding to one of the seven assessment domains of: Cognitive Status, Depressed Mood, Pain, Hearing and Vision, Medication Reconciliation, Care Preferences, and Bladder and Bowel Continence. As an example, Appendix C contains the rating sheet for Depressed Mood. RAND developed the rating sheets to obtain individual TEP participants' anonymous preferences and concerns regarding potential data elements. The rating sheets instructed TEP participants to evaluate the potential data elements on a scale from 5 (excellent) to 1 (poor) on each of the following dimensions, which correspond to the key topics discussed:

- Potential for improving quality
- Validity and reliability
- Feasibility for use in PAC
- Utility for describing case mix

TEP participants were asked to complete the rating sheets individually and to clearly indicate intentional nonresponse by striking out the data element or dimension. Rating sheets were pre-populated with data elements that the literature review and discussion with advisors identified as possibly valid for inclusion as standardized data elements (i.e. the Interim and the Ideal Short List data elements listed for each domain in Appendix E). In addition, the rating sheets provided space for TEP participants to add comments as well as to write-in additional data elements and rate them along the four key topics. Rating sheets were collected at the conclusion of the in-person TEP meeting. All TEP members returned their rating sheets, but not all TEP members provided ratings for each topic or data element. Each domain section of this report includes descriptive summaries of the ratings for data elements within that particular domain.

3. Cognition and Mental Status: Cognitive Status

3.1 Background and Rationale

Conducting cognitive assessments in PAC settings is essential in order to screen for cognitive impairment, rate severity of disorder, and develop a plan for care transitions. However, because cognitive status is a multidimensional construct, it may be challenging to obtain sufficient information to define the specific areas of cognitive impairment. Thus, the challenge of this domain is to establish a relatively brief, standardized assessment of cognitive status that captures issues of memory, executive function, impaired communication, and cognitive skills for daily decision-making.

To explore potential interim and ideal state data elements and to identify approaches for assessing cognitive status, the RAND research team collaborated with clinical advisors to develop an organizing framework (see Appendix D) for guiding the literature review. The advisors provided feedback about the components of cognitive status that needed standardized assessment approaches across all types of patients/residents and about gaps in current cognitive assessments in PAC assessment instruments. RAND conducted a literature review to identify data elements for assessing cognitive status that could supplement or address gaps in the current assessment instruments to move into an ideal state. RAND then worked with advisors to develop a list of questions and recommendations about specific data elements to present to the TEP.

A full list of the data elements can be found in Appendix E of this document.

3.2 Summary of TEP Discussion for Cognitive Status

Data elements related to cognition were discussed in two sessions during the TEP meeting. The second session was added at the request of the TEP, after the initial time allotted ran out before participants felt they had exhausted discussion.

Discussion opened with discussion on the use of the Brief Interview of Mental Status (BIMS) for the PAC assessment instruments. The TEP was supportive of the use of the BIMS. One TEP member emphasized that current measurement of and reporting on cognitive status is extremely limited, and crude in comparison with how other medical conditions are measured and described in the medical record. This member supported the use of the three-word recall in the BIMS because it is sensitive for detecting cognitive impairment and can still identify the need for treatment of a cognitive impairment in PAC patients or residents. Another TEP member noted that three-word recall is generally acceptable to all types of patients/residents because it is valid and imposes low burden on patients/residents and staff.

The TEP discussed the importance of considering the timing of cognitive assessments, that is a single point in time measurement and whether that is or is not sufficient to differentiate

delirium and dementia, or to capture changes in cognition in patients with brain injury. Another related concern expressed by TEP members was that patients or residents might be "labeled" based on cognitive performance on a single test or day without looking for other causes for poor performance. One TEP member felt that the medical record notation of "alert and oriented" was more useful than a cognitive test or score.

Although tracking change over time on cognitive assessments was acknowledged as important, for example, identifying changes in cognition and to support discharge planning, one TEP member noted that patients or residents might not want to be asked questions repeatedly. This TEP member suggested that one way to overcome patient/resident irritation at multiple assessment timepoints was to explain the purpose of re-assessment to the patients/residents. However, another TEP member countered that, for a provider, it is not helpful to know that a patient/resident failed a three-word recall nine times in the last week. Finally, two TEP members raised the possibility of an opt-out or "stable: no need to retest" option for patients/residents who are completely intact, citing PAC patients/residents who are post-surgical but otherwise healthy.

The TEP discussed how the items presented during the TEP meeting may assess only some dimensions of cognition and are not intended to provide diagnostic capabilities. TEP members described the BIMS and other cognitive assessments as screening tools that would require follow-up by providers to fully characterize the nature of a patient's or resident's cognitive impairment. One way to support accurate characterization of a patient's or resident's cognitive status, according to one TEP respondent, was to look across multiple assessment tools and not rely on only the BIMS score.

Particular components of cognition that were named as important by at least one or two TEP members, were verbal comprehension, language ability, attention, and organizing and attending to daily life. A few TEP members suggested that performance assessments of cognition, such as the Performance Assessment of Self-Care Skills – Medication Management task (PASS), might give the best and most salient picture of what the patient/resident is capable of, thereby indicating level of care needed better than an assessment that yields a single cognitive score. Cognitive assessment that was linked to function was seen as having potential for explaining and/or justifying patient/resident therapies, resource use, and other expenses, as well as helping with planning future care needs. However, it was noted that compensatory strategies and obstacles to functioning could change between settings. One TEP member noted their experience of a frequent intersection of mental health and cognitive issues in patients that often required additional resources; several TEP members agreed about the importance of assessing patient behaviors that might arise because of cognitive impairment, because of the implications for management and resource needs. The TEP also discussed the importance of judgment/safety items, which were deemed important for planning for the next setting of care. In particular, these items can inform on the patient's or resident's ability to be safe in their home.

A few TEP members discussed the idea that there are changing needs for cognitive assessment over the trajectory of PAC. That is, aspects of the patient's or resident's clinical

status that are useful to know at admission may be different than what is needed closer to discharge, as the patient/resident is preparing for transfer to the next care setting. For example, assessing the safety judgement of a patient or resident who is planning on a transfer to living independently with home health services would be crucial as the patient/resident prepares to transfer, but relatively less important at the beginning of the PAC stay, when the individual's status may not indicate his or her abilities at the end of the stay. Although there was general agreement of this concept, there was no consensus on which components would be more relevant at different time points. For example, one TEP member noted that attention and retention were more important to assess at admission, as they would help inform therapy and care planning. A few TEP members discussed how knowing a patient's or resident's executive function and safety/judgment capacities were relatively more important to know closer to discharge. However, two TEP members suggested that an assessment such as the PASS was not as useful to care planning on the day of discharge. These TEP members felt that assessment of an individual's ability to manage or administer their own medication could be done early in the stay and throughout the stay in order to guide therapy and track progress. Another TEP member suggested that assessing aspects of cognition (like executive function) too early in a PAC stay can be problematic or misleading, as the patient/resident has not yet acclimated and become stabilized in that care setting.

The TEP commented on several other data elements that assess cognition. A few of the alternatives, such as the Montreal Cognitive Assessment (MoCA) and PASS, were considered likely too long to be feasible for inclusion as standardized assessment items. That is, TEP members thought these assessments would take longer than the 5 to 10 minutes they had agreed was acceptable for a standardized assessment of cognition. The TEP preferred, instead, a "screening" approach that might identify patients/residents for longer assessment. Support for the use of gateway or screening items was a theme heard throughout the TEP, across their discussions of the different domains. Additionally, the PASS was described as too complicated by one TEP member. However, TEP members indicated that specific data elements from the MoCA such as those that assess language and attention might be useful. Another TEP member suggested that the AHSA cognitive problem solving data elements were the most amenable to the home health setting. The CAM was also discussed, and a concern raised by one TEP member about the feasibility of the psychomotor retardation data element tested in the PAC PRD was allayed by a recent modification of the assessment, and evidence that staff training could improve the reliability of data elements. Two other TEP members also commented on the challenge of providing necessary training and education for staff doing complex assessments.

3.3 TEP Ratings of Potential Data Elements for Cognitive Status

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Cognitive Status (see Appendix E). The TEP completed the rating sheets and

we summarized the results. All data elements rated received overall scores over 3 on the 5-point scale (1=poor, 5=excellent). TEP members rated the BIMS highest overall, perceiving it to be "very good" across all rating dimensions. The MoCA also received high ratings. The TEP assessed the MoCA as "very good" in terms of its potential for improving quality, validity and reliability, and utility for describing case mix, though its feasibility for use in PAC, while still "good", was rated slightly lower. The TEP also rated the CAM highly – between "good" and "very good" – on its potential for improving quality, validity and reliability, and feasibility for use in PAC, and slightly lower on its utility for describing case mix.

3.5 Summary of TEP Recommendations for Cognitive Status

In response to presentations and questions about the interim state of PAC data elements identified for assessing aspects of cognitive status (i.e., BIMS, understanding verbal content, ability to express ideas and wants, observational assessment of cognition, and short Confusion Assessment Method) and the potential ideal state data elements (i.e., MoCA and the PASS), TEP members generally agreed that the interim state data elements provide brief and useful "snapshots" of cognitive status (e.g., BIMS) and generally supported the items usefulness for standardized assessment application. The TEP also discussed how although it could be useful to selected standardized data elements that were designed to provide in-depth and comprehensive cognitive assessments, the potential benefits would not outweigh the burden for patients or residents and providers of the relatively long data elements that would be required. This feedback speaks directly to the feasibility of use of the PASS and the MoCA. TEP members suggested that the PASS would be administratively challenging and that the full MoCA would likely be too lengthy given the other required assessments—though TEP members expressed enthusiasm for the language and attention subsections of the MoCA, in particular the Serial 7s task, trail making task, and complex sentence repetition, which are common assessments of executive function in the cognition literature.

4. Cognition and Mental Status: Depressed Mood

4.1 Background and Rationale

Depression, the most common mental health problem in older adults, is particularly common in PAC settings. Yet, depression is under-evaluated and thus may be under-recognized in these settings. Undetected depression can lead to degraded physical and mental health and functioning, increased medical care utilization and costs, reduced quality of life, and premature death. It can also exacerbate other chronic medical conditions, compromise treatment participation and compliance, slow recovery from injuries and surgeries, and lead to rehospitalization.

RAND worked with clinical advisors to develop an organizing framework (see Appendix D) to guide a literature review and to identify the psychometric properties, feasibility, acceptability, and utility of the 9-item Patient Health Questionnaire (PHQ-9) and the 2-item Patient Health Questionnaire (PHQ-2) in PAC settings. The PHQ-9 and PHQ-2, which are based on the DSM criteria for depression, are increasingly used in the field to assess depressive symptoms, track severity over time, and monitor response to therapy. RAND also solicited feedback from PAC clinicians and consumers, asking about other issues related to assessing depression in PAC. We worked with our advisors to develop a list of questions and data elements to present to the TEP.

A full list of the data elements can be found in Appendix E of this document.

4.2 Summary of TEP Discussion for Depressed Mood

The TEP was asked to comment on the strengths and weaknesses of the PHQ-2, the PHQ-9, and any other data elements or issues related to depression screening in PAC. The TEP affirmed the importance of screening for depression in PAC, noting in particular that patients/residents who are depressed may not be able or willing to do what is necessary to fully participate in their care.

The TEP discussed the general challenges of depression screening in PAC, and noted facility staff members' frequent discomfort with conducting depression screening assessments. Different TEP members identified different data elements as challenging, including data elements from the PHQ-2 and PHQ-9. Although the PHQ contains "difficult questions," TEP members discussed how training is effective at overcoming staff discomfort, and one TEP member noted the necessity of asking about suicidality because of the substantial safety risk that this represents.

In addition, the TEP emphasized the importance of facilities having and communicating a clear plan to staff about what to do when a patient or resident screens positive for possible mood disorder. Having a clear "next step" for staff, and teaching and empowering staff to go back and do follow-up, was discussed as an additional strategy for allaying staff concerns about conducting depression screening.

Several members of the TEP described the strengths of the PHQ-2 and endorsed it for cross-setting assessment of PAC patients or residents. The PHQ-2 was described as not being burdensome for collection, and suitable to use as a screening instrument. That is, facilities could implement policies so that patients/residents that screen positive to the PHQ-2 would progress to other assessment and formal evaluation for depression. Some TEP members recommended that if the PHQ-2 suggests possible mood disorder, a PHQ-9 then be completed. When asked about self-administration of the PHQ data elements, one TEP member noted that self-administration of the PHQ—if feasible—would be preferable to administration via interview or observation both because it likely improves the validity of the data and protects patient/resident privacy.

As with other data elements for standardized cross-setting assessment, the TEP noted that the data elements in the PHQ-2 did not represent the extent of assessment required to meet standards of care for patients/residents, but were sufficient and clinically useful for a basic level of assessment across PAC settings and assessment instruments.

There were a few questions and some discussion of "situational depression" and demoralization versus depression, and whether or not a standardized assessment would distinguish between these states. The RAND presenters conveyed that the consensus of the clinical advisors and the literature is that patients/residents that meet the DSM V criteria for depression should have their symptoms addressed regardless of the etiology of the depression. The focus of the assessment is to identify patients/residents with signs and symptoms of depression, although follow-up clinical evaluation would likely explore the source of depression.

Regarding treatments for depression available in PAC settings, some TEP members voiced concern about the lack of mental health resources, including trained behavioral health and social work staff in their settings. A few members noted lack of access to talk therapy and the potential, within this resource environment, for a reliance on pharmacotherapy to treat depression.

Finally, TEP members echoed discussion in other sections about the importance of avoiding labels and treatments based on screening items. One TEP member raised the concern that a "label" or diagnosis of depression might affect a patient's or resident's ability to be transferred from a more intensive care setting to a less intensive one (e.g. from LTCH to SNF). This concern was based on the belief that some SNFs "cherry pick" patients/residents, avoiding those with indications of behavioral health problems.

4.3 TEP Ratings of Potential Data Elements for Depressed Mood

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Depressed Mood (see Appendix E). The TEP completed the rating sheets and we summarized the results. The TEP ranked the PHQ-2 the highest, perceiving it to be "very good" across all dimensions. The PHQ-2 received particularly high ratings for its feasibility for use in PAC. The potential item list also included a proposal to investigate whether adding an additional item or two from the PHQ-9 to the PHQ-2 would improve the diagnostic accuracy of

the tool. This hypothetical item, the “PHQ-X”, that is, an item with more questions and responses than the PHQ-2 but fewer than the PHQ-9 – was rated as “very good,” and was perceived to have the highest validity and reliability, although it ranked slightly lower overall than the PHQ-2. The remaining items were generally rated as “good,” though their feasibility for use in PAC consistently received lower ratings.

4.5 Summary of TEP Discussion and Recommendations for Depressed Mood

The PHQ-2 and PHQ-9 was present to the TEP for review along with three other psychometrically sound depression screeners, the Geriatric Depression Scale, the Center for Epidemiologic Studies Depression Scale, and the 8-item PROMIS depression measure. RAND explained the idea for improving the sensitivity of the depression screen by adding items to the PHQ-2 and shared concerns about the fidelity with which the PHQ items are currently administered in PAC settings. The TEP was satisfied with the reliability, validity, and utility of the PHQ-2 as a depression screener, but did not reach consensus on the need to enhance it with additional items from the PHQ-9. The TEP also felt that the concerns about fidelity of administration would likely apply to any depression screener. They emphasized the need to educate clinicians on the importance of screening and how to properly conduct an interview on depressive symptoms. The TEP stressed the need to have a clear system in place for what to do in the case of a positive or negative screen for depression. They also suggested that an ideal scenario might be to have clinicians transition from the PHQ-2 to the PHQ-9 in cases in which a patient screens positive on the PHQ-2. Such a strategy would minimize assessment burden overall and provide the opportunity to gather more information and depressive symptoms and severity in the case of a positive screen on the PHQ-2.

5. Medical Conditions: Pain

5.1 Background and Rationale

Standardized assessment of pain in PAC settings is essential for promoting patient-centered care, assisting in care transitions, enhancing healing and participation in rehabilitation activities, decreasing social isolation, and improving mental health. The current state of pain assessment is encouraging for standardization in that existing data elements have been shown to be feasible and reliable to administer across PAC settings, yet these data elements are not currently collected in all PAC assessment instruments. In addition, a number of challenges associated with pain assessment, especially among individuals with severe cognitive impairment or inability to communicate, warrant further consideration. These challenges will be critical in determining the optimal approach for moving closer to an ideal state of cross setting pain assessment in PAC patients.

RAND used a variety of methods to identify and evaluate potential interim and ideal state data elements and approaches for assessing pain. We collaborated with our clinical advisors to develop an organizing framework (See Appendix D) for guiding a literature review. The advisors provided feedback about the components of pain assessment that required standardization and described challenges and gaps in current assessments. RAND conducted a formal literature review and web-based search to identify 'best in class' assessment instruments for pain that could supplement or address gaps in the currently collected data elements. RAND used the advisors' feedback about the components of current PAC pain assessment data elements as well as the existing evidence to guide final recommendations for data elements that were presented to the TEP for comment and discussion.

A full list of the data elements can be found in Appendix E of this document.

5.2 Summary of TEP Discussion for Pain

The TEP discussed the core challenges of pain assessment. Specifically, the TEP emphasized that pain is a subjective patient experience that is best measured by self-report, but patients or residents vary in the amount of pain that they are willing to tolerate before reporting it or considering it intolerable. However, the TEP broadly endorsed the sentiment that understanding a patient's or resident's pain is critical for maintaining standards of care and essential to providing patient-centered care.

For the interview assessment of pain, the TEP was asked to comment on what information about pain would be clinically useful to the treating provider as well as to other providers across the PAC spectrum. Several participants agreed that having information on timing and causes of pain would be useful for the clinical plan. That is, if pain is most intense during or after therapy,

with activity versus resting, or during medical procedures. TEP members also discussed the importance of understanding how pain interferes with a patient's or resident's ability to function, including the ability to participate in therapies.

A few TEP members stated that information on the pain treatment regimen would be helpful, as well as knowing if the pain level and extent of pain relief are acceptable to the patient or resident. Several TEP members distilled key points of the conversation to three questions about pain, which they thought should to be addressed in an ideal standardized assessment: Is pain interfering? Is pain acceptable? Is pain new or changed? Regarding specific pain data elements, one participant expressed a favorable impression of the Brief Pain Inventory (BPI). However, other members of the TEP highlighted the burden of completing the BPI instrument for a patient or resident with multiple sources or loci of pain. The TEP generally affirmed the feasibility and utility of the PAC PRD pain interview data elements. When asked, a few TEP members voiced agreement that adding a graded response scale for the pain interference items would be feasible and clinically useful for pain assessment.

TEP members also considered the need for an observational pain assessment, citing the importance and clinical utility of observational measures for those patients or residents who cannot self-report if or how much pain they are experiencing. The TEP reflected on alternative descriptions of pain behavior (e.g., American Geriatrics Society [AGS] descriptions versus those used in the PAC PRD). Two TEP members voiced a preference for certain AGS descriptions (with nods of agreement from other members) because they contained a wider range of pain behaviors, which may more accurately capture the range of patient/resident behaviors. Specifically, members noted that including additional indicators of pain for facial expression (e.g., tightly closed eyes, rapid blinking) and body movements and postures (e.g., rigid or tense posture, fidgeting, restricted movement, gait or mobility changes) to more closely align with published guidelines would be useful. The first four questions on the Mahoney Pain Scale (i.e., Facial Expression; Breathing; Vocalization; Body Language) were also raised as a possibility for observational assessment by one TEP member and seconded by another. When asked whether or not a graded measure of pain (like the DOLOPLUS-2) would be feasible in PAC settings, one TEP member raised concerns that such measures would be time intensive to complete at every visit. Another member raised the issue of the assessor or caregiver changing from day to day, making it difficult to grade behavioral changes relative to a patient's or resident's typical behavior.

5.3 TEP Ratings of Potential Data Elements for Pain

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Pain (see Appendix E). The TEP completed the rating sheets and we summarized the results. The PAC PRD observational assessment for pain received the highest ratings. The TEP assessed its potential for improving quality, validity and reliability, and

feasibility for use in PAC as “very good.” Its utility for describing case mix was rated slightly lower as “good.” The PAC PRD pain interview assessment also received ratings of “good” to “very good” across the dimensions, with lower ratings for its utility for describing case mix as seen similarly with the observational assessment. The ratings for the PAC PRD interview assessment increased with the addition of items that address the frequency of pain, relief from pain due to treatment and medications, pain management, and pain interference with quality of life. The suggestion to include a question on how much pain has interfered with relationships with other people was rated lower than other modifications, as was the item that addressed the impact of pain on the ability to use the telephone, watch TV, and read. Of the potential pain assessments on the rating sheets provided to TEP members, the TEP rated all the pain items as “good” or “very good,” with the items generally receiving the highest ratings for their feasibility in PAC and received the lowest ratings for their utility for describing case mix.

5.5 Summary of TEP Discussion and Recommendations for Pain

The TEP generally affirmed the feasibility and clinical utility of the PAC PRD pain interview data element. They were in general agreement that the standardized assessment could be improved by the addition of items that addressed the following: pain frequency, patient/resident perceptions of adequacy of pain relief/pain treatment regimen, and pain interference with ability to participate in therapies vs. other activities. There was also general agreement that adding a graded response scale (vs. yes/no) for several items would be feasible and clinically useful for pain assessment.

TEP members also acknowledged the need for a standardized observational measure of pain, particularly for patients or residents who are unable to communicate. In addition to endorsing the inclusion of an indicator for whether the observation was at rest vs. during activity, the TEP reflected on alternative descriptions of pain behavior (e.g., American Geriatrics Society [AGS] descriptions versus those used in the PAC PRD), and noted that including additional indicators of pain for facial expression (e.g., tightly closed eyes, rapid blinking) and body movements and postures (e.g., rigid or tense posture, fidgeting, restricted movement, gait or mobility changes) would be useful.

6. Impairments: Hearing and Vision

6.1 Background and Rationale

Hearing and vision impairments are common conditions that, if unaddressed, affect patients' or residents' activities of daily living, communication, rehabilitation outcomes, and overall quality of life. Sensory limitations can lead to confusion in new settings, increase isolation, contribute to mood disorders, and impede accurate assessment of other medical conditions. The challenge in assessing hearing and vision is to strike a feasible and reliable balance between performance-based testing, observation, and self-report in order to achieve a valid screening assessment. In addition, current data elements do not address the significance of the impairment to the patient/resident, caregiver, or care team.

The RAND research team worked with clinical advisors to develop an organizing framework (see Appendix D) for guiding the literature review. The advisors provided feedback about the dimensions of hearing and vision impairments that needed standardized assessment across PAC settings and noted potential gaps in current assessments. The goal of the literature review was to identify evaluations of the psychometric properties, feasibility, acceptability, or utility of current hearing and vision impairment assessment screeners as well as to identify data elements that might address gaps in current assessments. RAND worked with advisors to identify the data elements to be presented to the TEP for comment and discussion.

A full list of the data elements can be found in Appendix E of this document.

6.2 Summary of TEP Discussion for Hearing and Vision

The TEP generally endorsed the PAC PRD hearing and vision items, but recommended that basic questions about the availability and use of glasses and hearing aids be added in order to better document the context and possible pathways to resolve a patient's vision and hearing impairments (e.g., are they are needed, are they current, were they used as part of the hearing or vision assessment, and does the patient use them as indicated). The TEP generally did not like the inclusion of hearing the television as part of a response option, noting that the television volume can be raised or lowered and is therefore a poor standard against which to assess hearing ability. TEP members discussed whether they preferred the response set of PAC PRD data elements over similar data elements in current assessments. The PAC PRD merged mild and moderate level categories, whereas some current data elements distinguish between them. There was some disagreement among TEP members regarding which was preferable, with some preferring the PAC PRD items' use of fewer levels of the response set (i.e. none, mild or moderate, and severe), while other TEP members felt that the mild and moderate level categories tested in the PAC PRD needed to be divided.

In the general discussion of hearing and vision impairments, TEP members connected hearing and vision impairment to the potential impact these impairments might have on patients' or residents' ability to communicate and function, including engaging in their care, especially in therapy. TEP members also raised and discussed the relationship between hearing and vision impairments and patient/resident safety, such as risk for falls or the ability to reside in the community. One TEP member voiced a concern about a data element such as "Does this impairment put the patient at risk of falls?" or "Is this impairment a risk to patient safety?" Although members of the TEP seemed to agree that this type of data might be clinically useful, especially as a screening tool, one TEP member was concerned that a facility could be averse to documenting a patient as "unsafe" in their records. Another TEP member noted the challenge for facilities of identifying issues, such as a need for glasses or hearing aids, that may not be able to be accommodated within the PAC setting (e.g. seeing an audiologist or optometrist), and that would not be paid for by Medicare.

Similar to other domains, some TEP members suggested that data elements around hearing and vision be structured as "drill down" items, where certain levels of impairment would trigger additional questions. Specifically, they advised asking those patients or residents who were determined to have severe hearing or vision impairments when they last had a physician or hearing or vision specialist test their hearing or vision, respectively. One TEP member suggested that those who are ultimately determined to have severe impairments that put them at risk for falls might ideally also have fall risk assessments conducted in the home upon returning. They felt that this type of information would be important for ensuring safe transitions and could be used to improve care coordination, if reported to the patient's or resident's primary care physician following discharge.

6.3 TEP Ratings of Potential Data Elements for Hearing and Vision

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Hearing and Vision (see Appendix E). The TEP completed the rating sheets and we summarized the results. The hearing and vision data elements from the PAC PRD received the highest overall rating from TEP members. The vision item was perceived to have very good validity and reliability and feasibility for use in PAC, and good potential for improving quality and utility for describing case mix. The hearing item was also rated as "good" overall, and, similar to the PAC PRD vision item, it received higher ratings for its validity and reliability and feasibility for use in PAC compared to its potential for improving quality and utility for describing case mix. The Hearing Handicap Inventory for the Elderly-Screening Version (HHIE-S) was the only other item to receive an overall rating of "good." The remaining items were not assessed favorably by the TEP.

6.5 Summary of TEP Discussion and Recommendations for Hearing and Vision

The TEP recommended the use of the PAC PRD hearing and vision items with the removal of television in the item on hearing. In addition to this modification, the TEP strongly advised the addition of basic questions about the availability and use of glasses and hearing aids in the assessment (e.g., are they needed, are they current, were they used as part of the hearing or vision assessment, and does the patient use them as indicated). Some TEP members suggested that, like in other domains, data elements around hearing and vision be structured as "drill down" items, where certain levels of impairment would trigger additional questions. Specifically, they advised asking those patients/residents who were determined to have severe hearing or vision impairments when they last had a physician test their hearing or vision, respectively.

7. Medication Reconciliation

7.1 Background and Rationale

Medication Reconciliation (MR) assessment is not mandated for item standardization in the IMPACT Act of 2014. However, MR promotes patient or resident safety by reducing errors and resulting adverse drug events, and is essential for improving patient care at points of transition. In the Ideal State, standardized MR data elements could assess the process of comparing lists and reconciling medication discrepancies, focus on high-risk medications, appropriateness of medications, and communication of the reconciled list to the patient/resident and pharmacy at care transitions.

To explore potential interim and idea state data elements and approaches for assessing MR, RAND worked with advisors to develop an organizing framework (see Appendix D) to guide a literature review. RAND searched a variety of academic, government, clinical, and grey literature databases to identify potential MR data elements and studies on the properties of MR data elements.

The best-in-class data elements had little or no psychometric data published in the literature, or were not eligible for consideration because they were copyrighted. Thus, RAND worked with advisors to develop new data elements that aim to (1) focus on the five-step process outlined by the organizing framework and the Joint Commission, (2) ensure a more active MR process; (3) incorporate patient input in a patient-centered way, and (4) integrate the new data elements with the current state OASIS-C2 drug regimen review data elements while also defining potential clinically significant medication issues tied to high-risk drug classes.

The data elements presented to the TEP can be found in Appendix E.

7.2 Summary of TEP Discussion for Medication Reconciliation

The TEP was asked to comment on the interim item from OASIS-C2 that asks about "potential clinically significant medication issues." Two TEP members described the need to develop a common meaning and understanding of this term, as it currently varies by provider and/or discipline.

When asked generally about the MR process, the TEP discussed the general challenges related to MR in PAC, such as not always getting a complete picture or good information of patients' or residents' medications, patients' or residents' tendency to hold on to old medications rather than dispose of them, and health literacy with regard to understanding and taking medications correctly. Several differences in MR between settings emerged in the discussion, such as the extent to which patients or residents self-administer medications, access to multiple sources of medications, and length of the episode of care. One TEP member also noted the

difference in a provider's understanding of the patients' or residents' medication regimen and medication literacy at the beginning versus the end of the episode of care, which influences how efficient the MR process is at admission versus transfer.

One TEP member discussed the tension between making a MR assessment very long and thorough, or just making it short and simple, such as ascertaining that MR has been done and relying on professional standards, rather than attempting to micromanage MR through a standardized assessment.

Another TEP member favored the suggested increase from three items in the OASIS-C2 to 14 items using the new data elements identified by the MR advisory group if it would be effective at increasing the clarity of the medication situation for a patient/resident for the receiving PAC setting and provider. This member emphasized the connection between adverse medication events, readmissions, and other poor outcomes, suggesting that a more robust measure on medications and MR is important in these patient populations.

A few TEP members had very favorable reviews of collecting the indication for each medication as a potential data element. Two TEP members described how asking about the indication for each medication would make the assessor "think about it" and one expressed that it was the "single most important thing in the new [list of] elements". However, they agreed that it may not always be the correct indication, and that positive response bias of respondents wanting to "populate with a yes" will need to be addressed.

Several TEP members voiced support for a data element to identify whether there was a stop date, either for certain types of medication only (e.g. antibiotics) or for all medications. Other potential content included whether there was documentation of lab monitoring. Another TEP member suggested the possibility of documentation to identify and possibly limit the quantities of medications available to patients or residents.

The support for creating common definitions of "potential clinically significant medication issue" and focusing attention on high risk drugs were voiced by multiple TEP members throughout the discussion of the new data elements. TEP members recommended that a common definition or list of high-risk drugs be used across settings, both to improve provider communication and to help patients understand which drugs are more potentially harmful than others. The TEP agreed with the five high-risk drugs proposed in the new data elements. One member noted that while people argue about the Beers' list medications, it was suggested as the best starting point. The majority of TEP members voiced the importance of and potential for focusing cross-setting assessment on high-risk drugs, including responding to medication issues involving high-risk drugs within 24 hours.

With regard to the 24-hour timeframe for MR, or provider or pharmacist review, two TEP members suggested that this timeframe might be particularly challenging in the home health setting because, for example, it is difficult to know who the responsible provider is. However, two other TEP members challenged the conventional wisdom that 24 hours is too small a

window for a provider to review high-risk drugs, suggesting that creating such an expectation is reasonable and important, given the risk for patients on high-risk drugs.

With regard to the data element on disposing medication if the patient or resident was in a home health setting, the TEP members were concerned that even if the patient was given instructions, that patients/residents would not actually dispose of medications that didn't make it to the reconciled list. Two TEP members suggested that the more appropriate question to assess is whether the patient or resident received education or instructions, and understood what medications they should not be taking.

The members made several suggestions about how to support PAC patients/residents in the appropriate use of medication by asking the patient or resident questions about behaviors, such as medication adherence, in a non-judgmental way that would be useful to the provider in the next PAC setting, and asking the assessor what the barriers were to not doing MR.

Finally, the closing conversation on MR addressed the issue of patient/resident and caregiver health literacy, and the relationship between cognitive assessments and health literacy/medication-taking ability. A few TEP members noted that knowledge about medication-taking ability at the beginning of the PAC stay could guide therapy goals and level of engagement of the patient and family caregiver. They highlighted how many members of the care team and healthcare system impact a patients' or residents' medication and medication skills throughout their stay, and that changes are needed throughout that system to improve medication reconciliation. In addition, assessment of medication-taking ability at end of stay would speak to the patients' or residents' ability to safely go home or transition to another facility.

7.3 TEP Ratings of Potential Data Elements for Medication Reconciliation

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Medication Reconciliation (see Appendix E). The TEP completed the rating sheets and we summarized the results. TEP members rated most of the MR data elements in the rating sheets as "good" to "very good" overall. The data element asking if there are indications noted for each medication received the highest score. The TEP perceived its validity and reliability, and its potential to improve quality to be "very good," whereas the TEP rated the item's feasibility for use in PAC and feasibility for describing case mix as "good." The items addressing potential medication discrepancies, adverse drug events, and clinically significant medication issues were also assessed favorably. The TEP rated them "good" to "very good" across dimensions, though their utility for describing case mix was often rated lower. All but one MR item received favorable ratings, and the items were generally assessed to have potential for improving quality, in particular, with that dimension typically rated in the range of "good" to "very good." Only the data elements that included response options to document the timeframe for resolving "potential clinically significant medication issues" received an overall rating of less than "good."

7.5 Summary of TEP Discussion and Recommendations for Medication Reconciliation

Overall, the TEP supported a focus on high-risk drugs, because of higher potential for harm to patients and residents, and recommended developing and promoting a common meaning of "potential clinically significant medication issues," because the meaning of this term can vary by provider type. They felt that a data element to capture indication of medications was critical to include but also noted challenges to its success, including desire to populate with "yes" responses. They also suggested adding a data element that asks about whether a "stop date" is attached to a medication. Finally, they recommended that understanding patient barriers to and education around medication stoppage would be more useful than data elements asking only about medication disposal.

8. Care Preferences

8.1 Background and Rationale

Care preference assessment is not mandated for item standardization in the IMPACT Act of 2014. However, it is essential to assess and understand patient care preferences and goals in order to develop a patient-centered care plan, identify potential challenges to successful therapy, and set appropriate expectations for the patient/resident, family, and care team regarding desired interventions and outcomes. Currently, assessment of patient or resident preferences in PAC is limited. Preferences for involvement in treatment and treatment decision-making, preferences for site and type of care, and overall goals for healthcare intervention are currently not addressed within the commonly used assessment instruments. Preferences for daily activity and for family caregiver participation as well as overall goals for care (through a single data element evaluating preferences for returning to the community) are only assessed in the SNF setting by means of the MDS 3.0.

RAND collaborated with expert advisors to develop an organizing framework (see Appendix D) for assessing care preferences in PAC and to guide a literature review to identify existing data elements that might be used in standardized assessment. RAND also solicited input from stakeholders on the current and desired state of care preferences assessment in PAC. After reviewing this information, RAND identified data elements to recommend for discussion by the TEP based on: 1) salience to PAC patients and families; 2) utility for informing care plans; 3) feasibility in PAC, including complexity/clarity from the patient's perspective, time to administer, and amount of training needed; 4) anticipated ease of implementation (e.g.; if already in use in a PAC setting); and 5) likelihood of supporting interoperable data exchange.

A full list of the data elements can be found in Appendix E of this document.

8.2 Summary of TEP Discussion for Care Preferences

The TEP affirmed the importance of assessing patient or resident-identified goals, described how these goals can identified and used in therapy, and were supportive of the idea that patients' or residents' goals need to be communicated and understood across the care team and between PAC settings. However, one TEP member noted a challenge of cross-setting assessment is that patients' or residents' goals in each setting reflect the wide range of health statuses across the PAC spectrum, where very different goals might be expected in the HH setting, for example, than in the LTCH setting.

Two TEP members emphasized the importance of distinguishing between goals identified by patients or residents, and those identified by the care team or by caregivers. They indicated that patient or resident-identified goals were of utmost importance for assessment, and that care team

and caregiver goals were also important for helping to inform the care plan, particularly if differences between these goals helped to identify important constraints to goal achievement and points of reconciliation. One of these members went on to describe the importance and feasibility of engaging patients and residents with cognitive or communication impairments in expressing care preferences through visual aids, and forced choice questioning (i.e. closed-ended questions, such as "Would you like the red shirt or the blue shirt today?").

A few TEP members discussed their belief that preferences for daily life and routine may have limited salience across all four PAC care settings and are potentially problematic, in that the ability of facilities to accommodate such preferences varies (e.g. ability to accommodate tub baths versus showers). These TEP members voiced concerns about eliciting preferences that could not be accommodated, either because of facility constraints or because of patient or resident limitations. As an alternative, a few TEP members suggested that more generic or "conceptually broad" items could be used that assess the degree of control or involvement desired by the patient/resident and family.

TEP members identified a gap in the data elements discussed in the TEP, pointing out that a data element that ascertains the preferred next setting of care desired by the patient or resident, which is part of goals of care, is important preference to assess. Two TEP members commented that patients or residents often trust providers to guide their treatment setting choice and may not be able or want to answer this question.

TEP members were asked to comment on the feasibility and clinical utility of having patients or residents rank their preferences. Two TEP members commented that they felt the ranking of preferences was considered feasible and useful as it could show change over time. However, another two TEP members countered that facilities and providers should really be striving to meet all of patients/residents preferences, and that ranking did not make sense from a consumer perspective.

Data elements that attempted to capture patient or resident preferences through trade-off exercises, where patients/residents are asked what short-term actions they would consider to achieve long-term gains, were rejected because they were viewed as too abstract/hypothetical, too context-dependent, potentially confusing for patients/residents, and having limited clinical utility for care planning purposes. The TEP's consensus was that patients or residents would need more context and want more specifics before they could answer items like this. One TEP member commented that these types of items produce results that are too abstract to be clinically useful, while another TEP member noted that the idea of preventing future problems did not seem relevant to frail elderly patients or residents and those who already receive care in PAC settings.

Finally, three TEP members offered specific recommendations for next steps. One TEP member recommended developing and piloting a tool that would help people think about and document what is important to them, although this member conceded that a successful item that captures this may not be easy to create. Another TEP member noted the potential for new,

interactive technologies to facilitate the completion of decision-making items in ways that pencil and paper measures might not. A third TEP member reflected an opinion that while PAC goals need to be sufficiently understood by the care team to guide the care plan and therapies, they also may be so nuanced as to not be feasible as a standardized item. Another TEP member noted that it might be relevant to standardize advance directive (e.g., living will and healthcare proxy) documentation, as well as whether or not a goals of care conversation was conducted.

8.3 TEP Ratings of Potential Data Elements for Care Preferences

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Care Preferences (see Appendix E). The TEP completed the rating sheets and we summarized the results. The TEP assessed the Patient Preferences for Information and Decision-Making data element as "very good" across domains, except for its utility for describing case mix, which was rated as "fair." The care preference items tested in PAC PRD also received a favorable rating, with ratings of "good" across all domains except for its utility for describing case mix, which was rated as "fair." The remaining data elements were not perceived as favorably and were rated as "fair" overall.

8.5 Summary of TEP Discussion and Recommendations for Care Preferences

TEP members engaged in a rich discussion of the construct of care preferences, and commented on various data elements that capture care preferences. This discussion raised several relevant points helpful to the candidate data element selection process. First, the TEP noted that both patient/resident and care team-identified goals are important to assess in PAC settings to help inform the care plan. Second, the discussion highlighted how assessment of preferences for daily life and routine might have variable or limited salience across the four PAC settings, and could be potentially problematic in some contexts. Third, TEP members noted that assessment of broad goals of care, or even of underlying values such as for autonomy or control could be an important way to capture patient/resident preferences. Finally, the TEP felt that having patients or residents rank their preferences is both feasible to do and useful in helping to inform the care plan, but complex methods such as "trade-off" questions and discrete choice experiments would be too burdensome and abstract to implement in PAC settings. One TEP member echoed some of the discussion among our advisors that, despite considerable limitations, advance directive information could be useful and might be relevant to standardize.

9. Impairments: Bladder and Bowel Continence

9.1 Background and Rationale

Impaired bowel and bladder continence are common conditions that, if unaddressed, can affect patients' activities of daily living, rehabilitation outcomes, skin integrity, and overall quality of life. Incontinence is also associated with sleep difficulties, inactivity, social isolation, and depression, among other negative outcomes. Changes in continence can signal important changes in health status, making transfer of information at care transitions particularly important.

The data elements tested in the PAC PRD that assess continence frequency have been shown to be feasible and reliable in PAC settings. However, the challenges associated with the collection of data by means of these data elements, especially the making uniform instructions and rating scales across PAC the assessment instruments, warrants further consideration. In addition, neither the data elements currently collected in the PAC assessment instruments nor the data element tested in the PAC PRD address the significance of the impairment to the patient, caregiver, or care team.

RAND used mixed methods to identify and evaluate potential interim and ideal state data elements to be considered in developing a standardized assessment of continence in PAC settings. RAND sought stakeholder feedback in each PAC setting to obtain insights regarding setting-specific challenges associated with standardized assessment of impairments. The research team worked with clinical advisors to develop an organizing framework (see Appendix D), which was then used to guide the literature review and influence selection of data elements. The primary purpose of the literature review was to identify peer-reviewed journal articles pertaining to assessment of continence and chronicling the psychometric properties, feasibility, acceptability, or utility of a number of current continence assessment screeners.

A full list of the data elements identified in the literature review can be found in Appendix E of this document.

9.2 Summary of TEP Discussion for Bladder and Bowel Continence

The TEP largely agreed that incontinence is prevalent and an important issue among PAC patients, but probably underreported due to patients' discomfort disclosing incontinence. Several TEP members noted that assessing incontinence is key to structuring therapies, planning care transitions and/or return to community, assessing need for caregiver education, and estimating resource use.

Two TEP members noted that the bladder and bowel continence frequency data elements in the IRF-PAI, that will go into effect in October 2016, are helpful, and an improvement over the FIM™ for inpatient rehabilitation facilities.

TEP members discussed that the stress incontinence response option in the PAC PRD continence frequency item was inappropriate for inclusion in a cross-setting assessment. Agreeing that, although an understanding the etiology of incontinence is clinically important, soliciting a diagnosis is inappropriate for an assessment item since this information may not be available to the assessor.

Other characteristics of incontinence that TEP members were interested in were frequency and timing of incontinent events, but not volume. This type of collateral information about the incontinent events could shed light on causes, potentially modifiable factors, and/or gaps around skills that could be addressed during the patient's stay in PAC.

There was some disagreement among TEP members on how extensive the standardization of data elements assessing continence should be. Because of the difference in the care plan options for different PAC settings, each setting would likely do its own assessment of continence and care plan, so some TEP members suggested that a comprehensive standardized assessment would be redundant with setting-specific assessments.

Gaps in the data elements identified by other TEP members included length of the incontinence or appliance use, experience with bladder management programs, and patient skills in self-management of their devices and ostomies.

With regard to other data elements, one TEP member liked the Cleveland Clinic Incontinence Score items about lifestyle restriction, which she felt was a good way to start assessing impact of incontinence on daily life. Another TEP member suggested the Urogenital Inventory as a way to incorporate some key information, but this lacks information on functional ability to get to the toilet and reporting of undetected urine leakage, both of which are also important.

In other general discussion and comments, one TEP member discussed understanding the significance and importance to the patient of experiencing incontinent events, and the need to communicate with the patient about the tradeoffs involved in doing further testing in order to understand the cause of the incontinence. For longer stay patients, for example, investigating incontinence may not be important to their goals of care. Another TEP member raised the relationship between continence and falls, and suggested that a continence assessment could serve as a screening tool to do further fall risk assessment, if needed.

Finally, a few members of the TEP commented on the cost of incontinence for facilities in terms of supplies and staff burden. One TEP member also suggested that incontinence also has indirect implications for payment, describing that the potential for a setting to incur penalties for infection or readmission related to catheter placement in a prior setting.

9.3 TEP Ratings of Potential Data Elements for Bladder and Bowel Continence

The research team distributed rating sheets that included all Interim and the Ideal Short List data elements for Bladder and Bowel Continence (see Appendix E). The TEP completed the

rating sheets and we summarized the results. The TEP rated the bowel incontinence items tested in PAC PRD the highest. This set of items received ratings ranging from “good” to “very good” across all domains, with its lowest rating on the dimension of utility for describing case mix. The bladder continence items tested in PAC PRD and the Score for Fecal Continence were also rated favorably. The TEP rated these data elements as “good” for all domains except for their utility for describing case mix, which the TEP rated as “fair.” Overall, TEP rated all data elements on continence from “fair” to “very good.”

9.5 Summary of TEP Discussion and Recommendations for Bladder and Bowel Continence

The TEP members were largely supportive of advancing the continence items tested in the PAC PRD, but noted that the stress incontinence response option in the PAC PRD continence frequency item was inappropriate for inclusion in a cross-setting assessment. TEP members were also interested in characteristics of incontinence such as frequency and timing of incontinent events, duration of the incontinence or appliance use, patient experience with bladder management programs, and patient skills in self-management of their devices and ostomies. This type of collateral information on incontinent events could shed light on causes, potentially modifiable factors, and/or gaps around skills that could be addressed during the patient’s stay in PAC.

10. Conclusion and Summary of Findings from the TEP

The TEP panel engaged expert stakeholders in an effort to guide our work and obtain consensus on the development and maintenance of cross-setting standardized patient assessment for PAC facilities, in support of the IMPACT Act of 2014. The TEP helped narrow the list of data elements under consideration through their discussion on the extent to which potential data elements would be feasible, clinically useful, and broadly applicable to patients across the four PAC settings. The key findings from TEP are listed below.

Cognitive Status

- The BIMS is acceptable to patients, poses fairly low administration burden, and is sensitive to detect most forms of cognitive impairment.
- Additional assessments of language and attention may assess aspects of executive function not captured by the current elements
- Timing of cognitive assessments is important to identify delirium and change in cognitive status over the PAC stay, but repeated assessment must be balanced against patient and provider burden.
- A patient's ability to function may be only loosely related to their performance on cognitive assessments, so functional tests of cognition have both value and limitations.
- Some components of cognition, such as the ability to process language, are foundational to testing higher order cognition, such as recall and medication management.

Depressed Mood

- Depression screening is not without challenges, but appropriate training of staff and clear action plans for what to do when a patient screens positive were thought to be effective strategies.
- The TEP perceived the etiology of depression in PAC to be heterogeneous, and wanted to see more mental health treatment resources in PAC settings. They also cautioned about understanding the implications of labeling a patient as depressed.
- The PHQ-2 and PHQ-9 were both assessed as being valid, reliable, acceptable, and mostly feasible to administer as part of a standardized assessment across PAC settings.
- In particular, the idea of using the PHQ-2 as a screening item that would be followed up with additional questions (e.g. remaining items from the PHQ-9) if the PHQ-2 screen was positive was endorsed as a possibility worthy of further study.

Pain

- Assessing pain is challenging, but essential to maintain a standard of care and provide patient-centered care.

- Clinically useful information about pain includes timing and causes of pain, pain interference, and pain treatment regimens and effectiveness.
- The TEP supported the feasibility and usefulness of the PAC PRD pain assessment items, but favored several extensions and/or modifications to the item set and response categories, such as using graded response scales, asking specifically about therapy or medical treatments as a cause of pain or as activity that pain interferes with, and aligning the observational pain assessment response set with widely-used descriptions of pain expression.

Hearing and Vision

- The TEP felt that the PAC PRD hearing and vision items were reasonable, but recommended adding questions about patients' use of glasses and hearing aids. They also recommended removing hearing the television as part of the hearing ability question, and endorsed use of a response set of three versus four levels.
- In that hearing and vision impairments can increase the risk of falls and/or prevent a patient's ability to be transferred to a less intensive level of care, the TEP suggested that standardized assessment of hearing and vision could be useful to facilities for follow-up assessment of patient safety and risk factors.

Medication Reconciliation

- The TEP largely agreed with moving forward to test the item set for medication reconciliation, indicating support for focusing on high-risk drugs, and retaining the indication data element. The TEP also suggested including data elements to assess stop dates and patient education about taking medications.
- The TEP suggested promoting common definitions of key terms related to medication reconciliation, such as "potentially clinically significant medication issues" and "high-risk medications."
- A patient's ability to understand and administer their own medications was also noted as an important dimension of medication assessment in PAC.

Care Preferences

- The TEP agreed that understanding patients' preferences was important to patient-centered care, but discussed challenges with soliciting and attempting to accommodate patient preferences, given the heterogeneity of PAC patients and PAC facilities.
- The TEP supported the use of items that asked patients to rank preferences, and also of data elements that assessed patient preferences more broadly (e.g. patient preferences for how much information to receive, how to involve family and clinicians in decision-making).

Bladder and Bowel Continence

- The TEP was supportive of the PAC PRD continence data elements, but recommended the removal of the stress incontinence response option.
- The TEP also recommended exploring the development of data elements on frequency and timing of incontinent events, duration of the incontinence, patients' self-management skills around their bladder and bowel function and/or appliances, and the impact of incontinent events on the patient's sense of well-being.

Appendix A TEP Members: Biographical Information

Susan Battaglia, RN-BC, RAC-CT is the Director of Case Mix Management for Tara Cares, a consulting firm that provides supportive services to 35 facilities in seven states. Ms. Battaglia has worked in Long Term Care for over 35 years, beginning her career as a licensed practical nurse and later became a nurse manager. She is a 15 year active member of AANAC and has intimate knowledge of the MDS.

Cheryl Burzynski, MSN is the President and Chief Nursing Officer at McLaren Bay Special Care, a long-term care hospital in east-central Michigan. She brings over 30 years of nursing and hospital administration experience to the TEP. In addition, Ms. Burzynski serves as the president of the National Association of Long Term Hospitals.

Daniel Butts, MOT, OTR/L, MBA is an Occupational Therapist and Senior Director of Rehabilitation Operations with the University of Pittsburgh Medical Center (UPMC) Rehabilitation Network. He provides leadership and direction on clinical programing, coordination of therapy services, and interdepartmental activities to all network inpatient rehabilitation units, skilled nursing facility, and transitional rehabilitation units, with major contributions including successful development and implementation of new clinical programs.

Judy Elmore, BS is a Registered Pharmacist with a Clinical Pharmacy Degree and Vice President of Ancillary Operations at Covenant Care. She brings over 40 years of experience in health care management and operations across the continuum of care. Ms. Elmore brings a unique perspective to the TEP because of her strong interest and engagement in the practical aspects of HIT support for patient assessment. She was nominated by the National Association for the Support of Long Term Care (NASL).

Janet Herbold, PT, MPH, CHC is the Senior Administrator and Corporate Compliance Officer for Burke Rehabilitation Hospital. She has served in various clinical and administrative capacities across the continuum of care for nearly 30 years, including research on the identification of predictors for determining disposition and functional outcomes and development of an outcomes assessment tool based on the FIM for physical and occupational therapy delivered to patents in skilled nursing facilities. Additionally, she is affiliated with and was nominated by the American Medical Rehabilitation Providers Association (AMRPA).

Kathleen Lawrence, MSN, RN, CWOCN is the Wound Ostomy Continence Program Manager at Rutland Area Visiting Nurse and Hospice, a non-profit agency in rural Vermont. She has an extensive background in clinical care with a specialty focus on wound, ostomy, and continence care, including comprehensive patient assessment, medication reconciliation, and evaluation of cognition, pain status, and functional abilities. Mr. Lawrence served as past president and was nominate by the Wound Ostomy and Continence Nurses Society.

Natalie Leland, PhD, OTR/L, BCG, FAOTA is an Assistant Professor at the University of Southern California with a joint appointment in the T.H. Chan Division of Occupational Science

and Occupational Therapy and the Davis School of Gerontology. She is also an Adjunct Assistant Professor of Health Services Policy & Practice at Brown University's School of Public Health. Dr. Leland has over ten years of clinical experience working in post-acute care as an occupational therapist. She has significant experience in conducting rehabilitation health services research with a focus on enhancing the quality of post-acute care services for older adults.

Marc Rothman, MD is the Senior Vice President and Chief Medical Officer at Kindred Healthcare, Inc. where he oversees the company's quality and physician strategies nationwide across all four PAC settings. Prior to joining Kindred, Dr. Rothman practiced geriatric, post-acute, and palliative medicine and conducted research on patient decision-making, frailty, and post-acute care outcomes.

Monica Sampson, PhD, CCC-SLP is the Associate Director of Health Care Services in Speech-Language Pathology at the American Speech-Language-Hearing Association (ASHA). She has over 11 years of clinical experience working in post-acute rehabilitation settings, teaching future Speech-Language Pathologists, and conducting research examining the relationship between cognition and communication and practical constraints associated with implementation of measurement systems in health care settings.

Chloe Slocum, MD is a Spinal Cord Injury Medicine Fellow and Physician at Spaulding Rehabilitation Hospital Boston, within Partners HealthCare Network. Dr. Slocum cares for patients with paralysis and spinal cord injuries with a special interest in urologic disorders and functional outcomes and health promotion for individuals with spinal cord injuries.

Barbara Thomsen, CDM, CFPP, RAC-CT is the MDS and Case Mix Audit Specialist at Hawkeye Care Centers in rural Iowa. Ms. Thomsen has worked across the state of Iowa with over 600 PAC facilities and agencies as the state's MDS/OASIS Automation Coordinator and Educator. Additionally, she has authored a number of articles on the MDS 3.0 and the importance of providing standardized, holistic, assessments.

Peter W. Thomas, JD is a Principal with the Washington, DC based law firm of Powers, Pyles, Sutter & Verville. He has been a legislative and regulatory advocate for over twenty years on behalf of health care and post-acute care providers as well as consumers with injuries, illnesses, disabilities and chronic conditions. Mr. Thomas participates in multiple coalitions focused on health and disability advocacy, rehabilitation research policy and funding, and access to rehabilitation services and devices. Mr. Thomas provide a consumer perspective on the panel.

Heidi Wald, MD, MSPH is an Associate Professor of Medicine in the Division of Health Care Policy Research at the University of Colorado School of Medicine where she serves as Vice Chair for Quality in the Department of Medicine. In addition, Dr. Wald serves as Physician Advisor to the Colorado Hospital Association. Dr. Wald has a longstanding interest in patient safety and quality of care for the geriatric patient with a focus on the hospital, skilled nursing facility, and nursing home settings.

Michael Wasserman, MD, CMD is the Director of Nursing Homes for the Quality Improvement Organization in California, Health Services Advisory Group. Dr. Wasserman has served as a clinical geriatrician and Medical Director across the continuum of care for nearly 30 years. In

addition to his experience and expertise in quality improvement and implementation science, Dr. Wasserman brings the perspective of caregiver to his father-in-law to the TEP.

Kathleen Witcoskie, RN is the Vice President at Visiting Nurse Associations of America Health System. Ms. Witcoskie brings extensive knowledge in standardized patient assessment and regulations to the TEP. As an OASIS Specialist, she has completed reviews on over 500 assessments and trained over 200 clinicians. She was nominated by the Visiting Nurse Association of America.

Kimber Walters Zappia, BSW, MBA is the Executive Director of Transitions at Carolinas Healthcare System. Trained in social work and human resources, Ms. Zappia has spent her career managing and improving healthcare practices across the continuum of post-acute care.

Appendix B TEP Meeting Agenda

Thursday, April 7, 2016

8:30am	Arrivals
9:00am	Welcome and Overview of Agenda Debra Saliba
	Review of TEP Charter, Ground Rules, Introductions, and Instructions on Ratings Loretta Randolph, MITRE
9:30am	Overview of IMPACT Act of 2014 and Discussion of Current, Future, and Ideal States Stella Mandl, CMS
10:15am	Description of Project Stages and Activities Overview of Approach to Identifying Candidate Date Elements Maria Orlando Edelen
10:30am	Break
10:50am	*Stakeholder Feedback to Date*
	Summary of Findings from Stakeholder Focus Groups Sangeeta Ahluwalia
11:05am	*Cognition* (Cognitive Status)
	Brief summary of results from information gathering activities Brian Stucky
	Moderated TEP discussion Loretta Randolph, MITRE
12:30pm	Lunch Break
1:15pm	*Mental Status (Mood)*
	Brief summary of results from information gathering activities Steven Martino

	Moderated TEP discussion Loretta Randolph, MITRE
1:55pm	*Medical Conditions: Pain*
	Brief summary of results from information gathering activities Maria Orlando Edelen
	Moderated TEP discussion Loretta Randolph, MITRE
3:00pm	Break
3:20pm	*Impairments: Vision and Hearing*
	Brief summary of results from information gathering activities Amy DeSantis
	Moderated TEP discussion Loretta Randolph, MITRE
4:15pm	Wrap-Up
4:30pm	Adjourn for the day

Friday, April 8, 2016

8:00am	Recap from Day 1
8:30am	*Medication Reconciliation*
	Brief summary of results from information gathering activities Regina Shih
	Moderated TEP discussion Loretta Randolph, MITRE
9:50am	Break
10:10am	*Care Preferences*
	Brief summary of results from information gathering activities Sangeeta Ahluwalia
	Moderated TEP discussion Loretta Randolph, MITRE
11:30am	Lunch Break
12:15pm	*Impairments: Continence*
	Brief summary of results from information gathering activities Tepring Piquado
	Moderated TEP discussion Loretta Randolph, MITRE
1:30pm	Additional feedback, including gaps, and priorities for Ideal state Loretta Randolph, MITRE
2:30pm	Wrap up: Summary of discussion and next steps Loretta Randolph, MITRE
3:00pm	Adjourn

Appendix C TEP Rating Sheet Example

Data Elements for assessing Depressed Mood

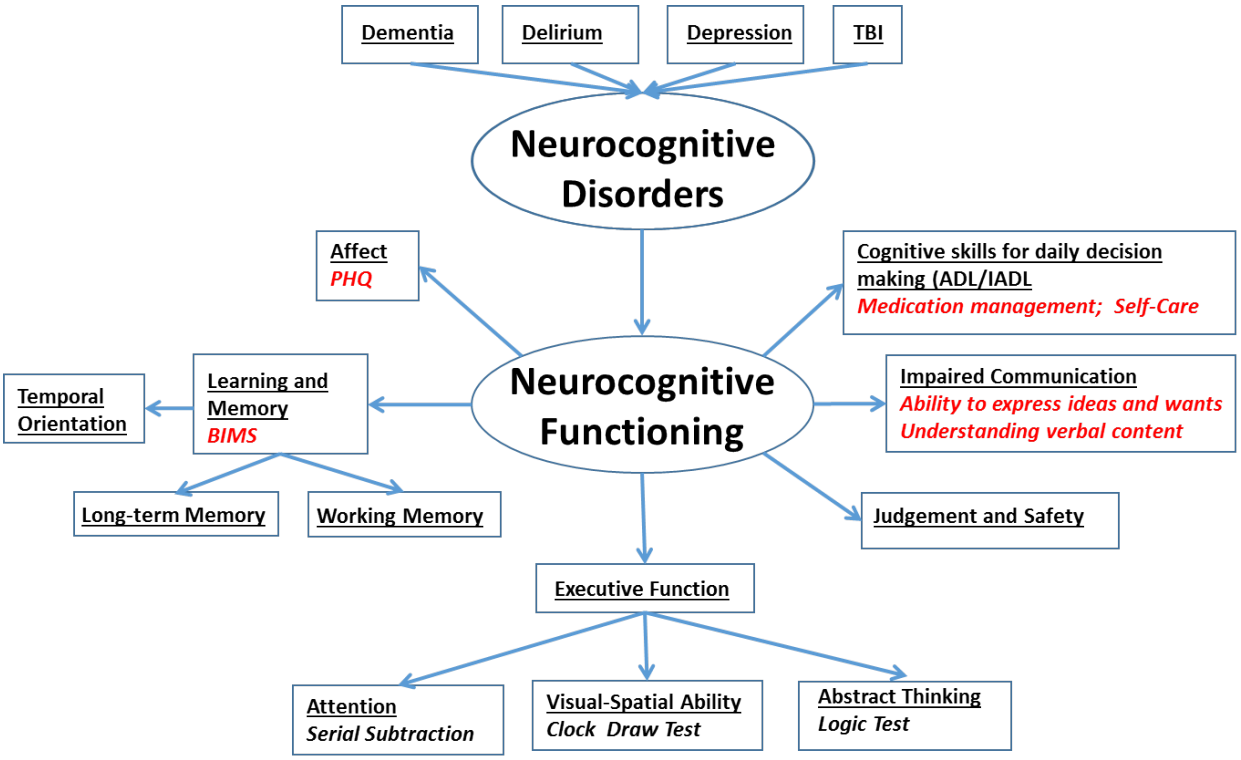
Data Element (or cluster)	Potential for Improving Quality	Validity and Reliability	Feasibility for Use in PAC	Utility for Describing Case Mix
	Excellent Very Good Good Fair Poor	Excellent Very Good Good Fair Poor	Excellent Very Good Good Fair Poor	Excellent Very Good Good Fair Poor
1. Two-item Patient Health Questionnaire (PHQ-2) as tested in the PAC-PRD (Page 66)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
2. PHQ-? – a subset of items from the PHQ-9 (Page 64) that balances brevity with diagnostic accuracy	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
3. Center for Epidemiologic Studies Depression Scale (CES-D; Page 70)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
4. 15-item Geriatric Depression Scale (GDS-15; Page 71)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
5. PROMIS Short Form Depression Scale (Page 72)	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

Additional Comments:

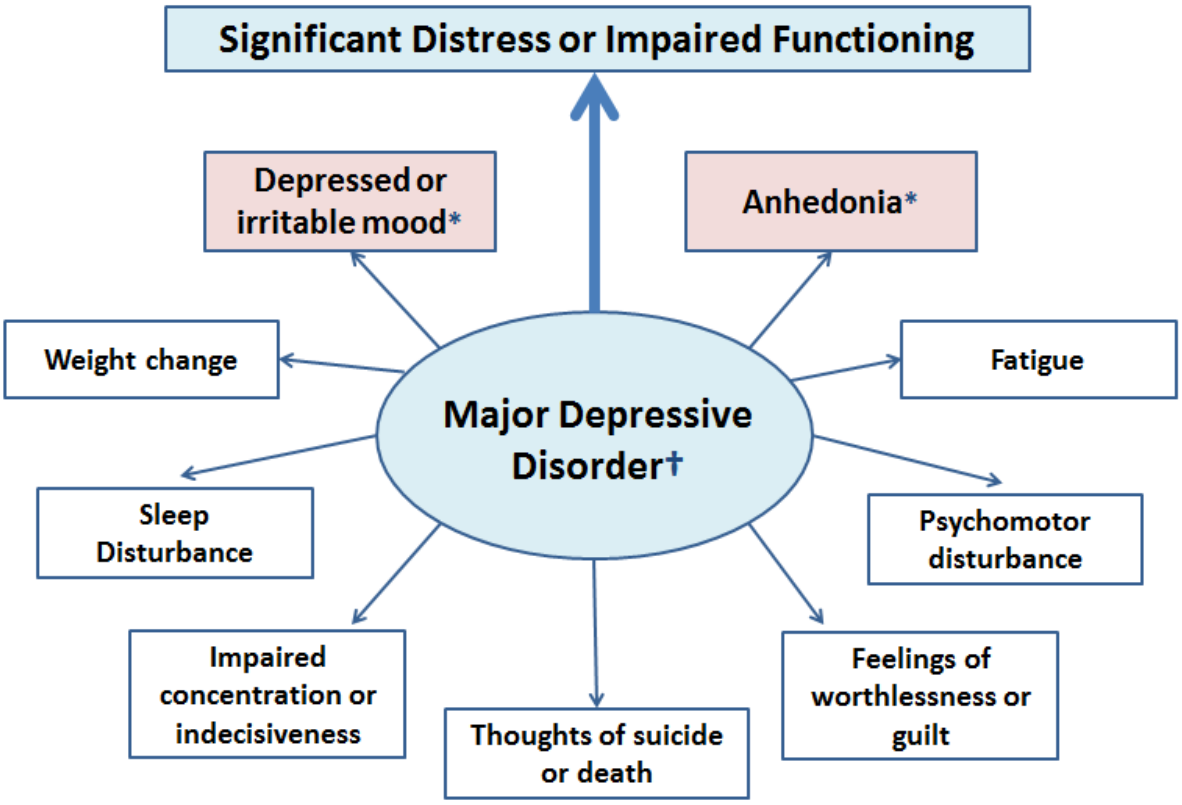
Note: Page numbers in table refer to the page in a reference notebook distributed to TEP members.

Appendix D Organizing Frameworks for Domains

Organizing Framework for Cognitive Status

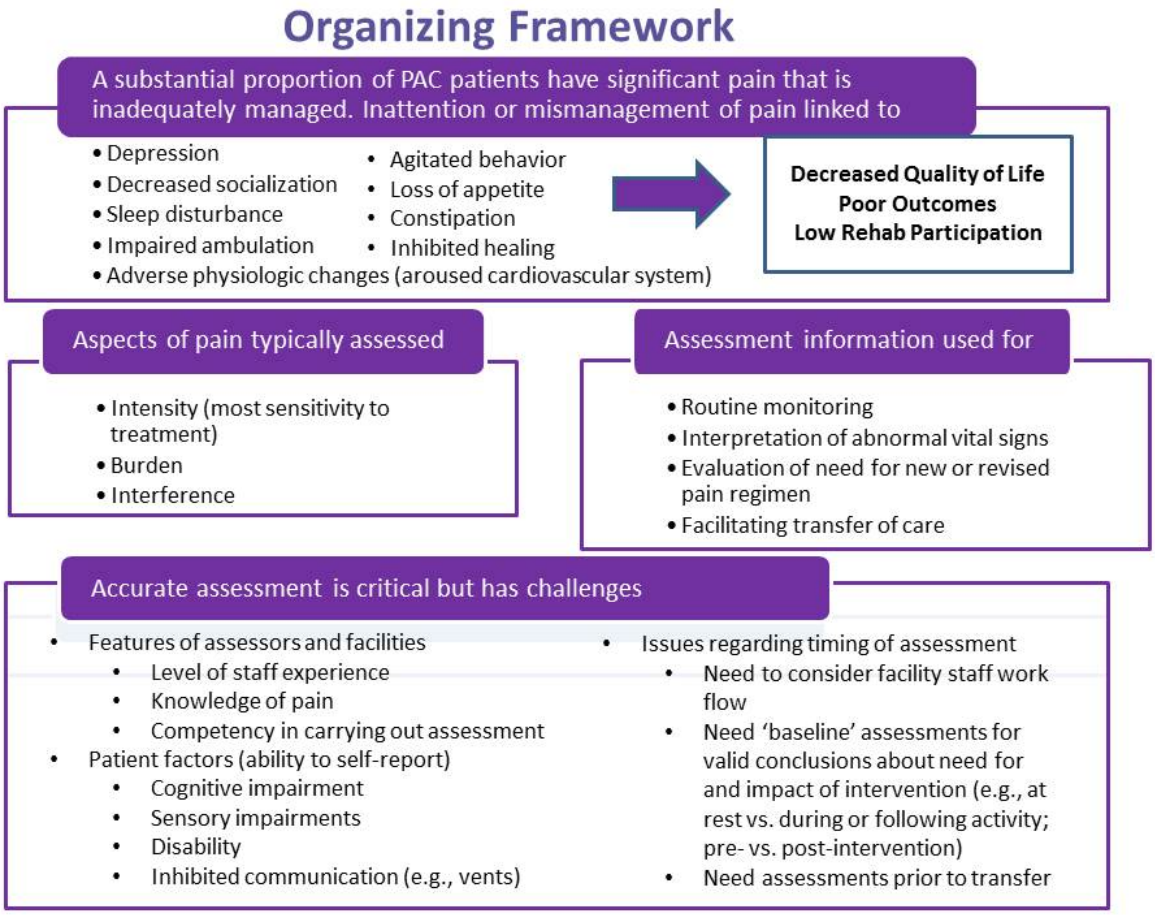


Organizing Framework for Depressed Mood

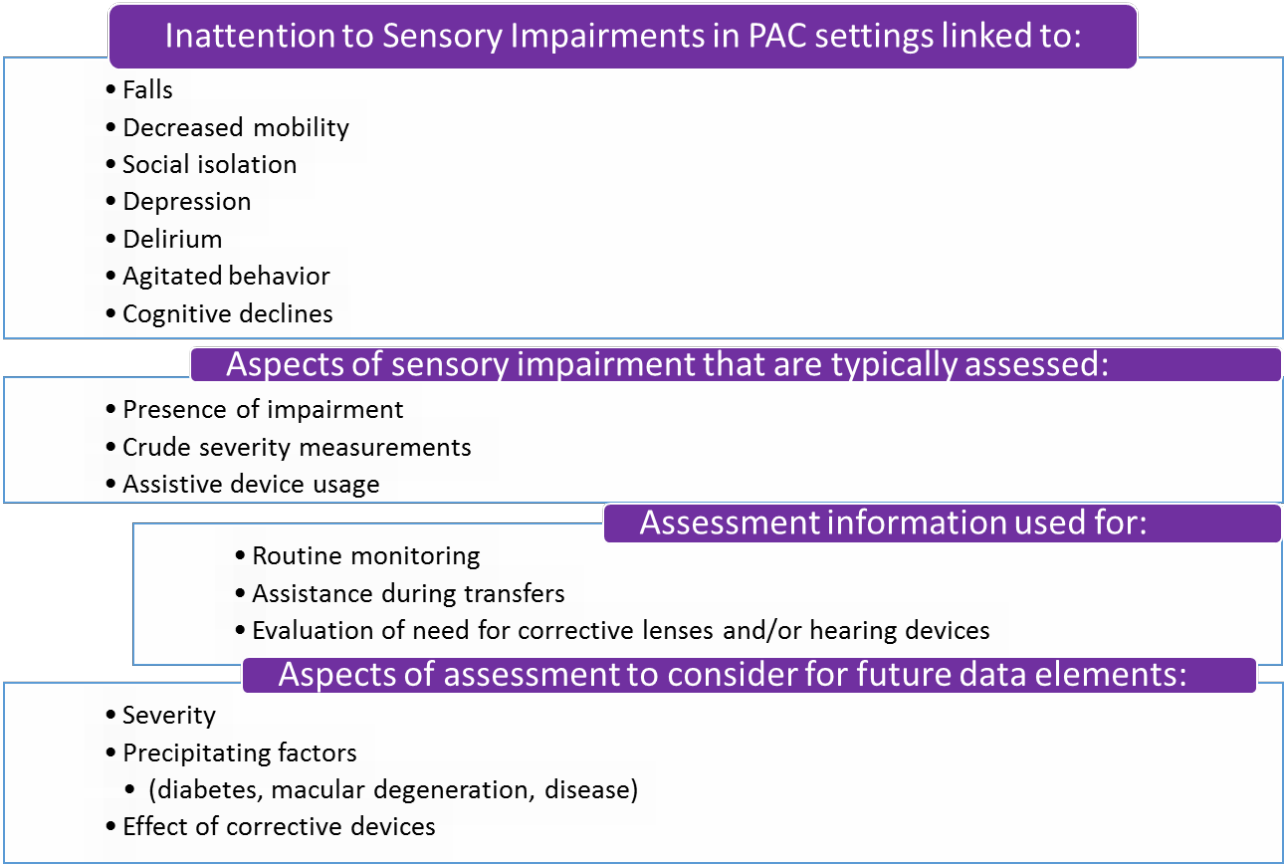


† As defined by the DSM-V * Cardinal criteria for major depressive disorder

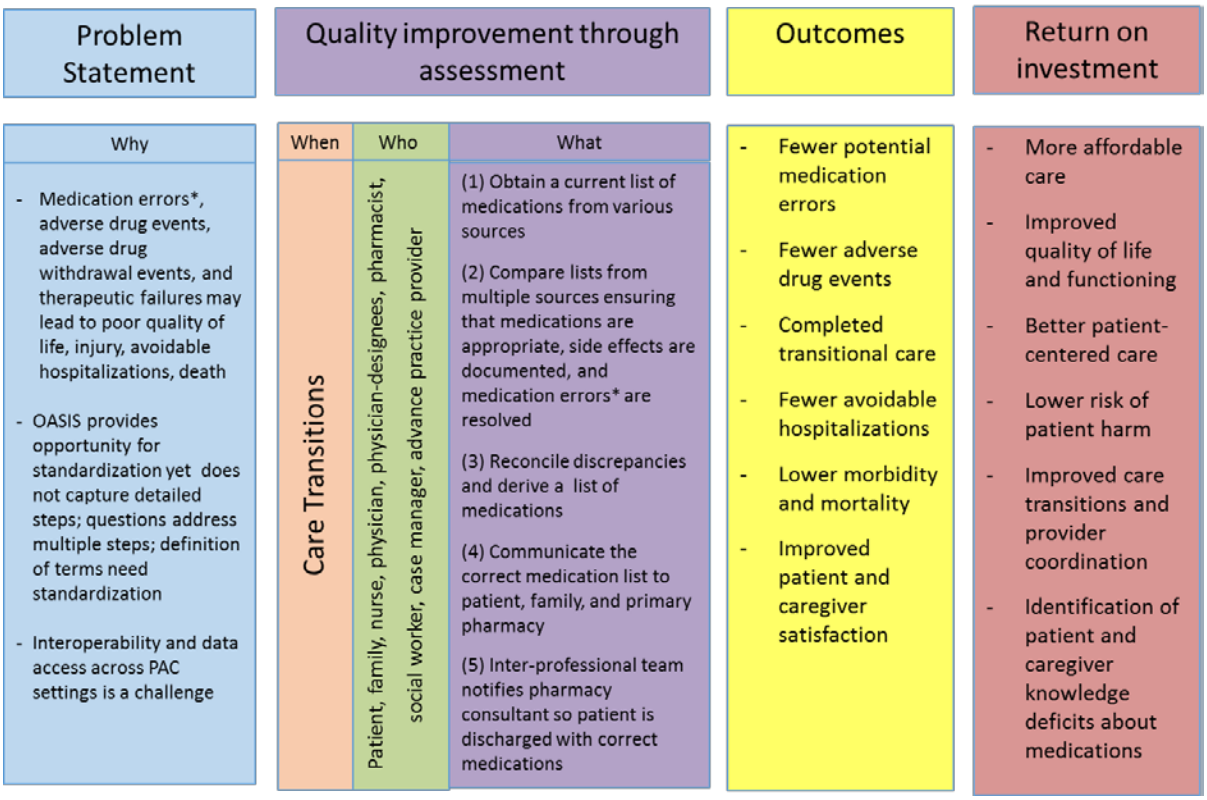
Organizing Framework for Pain



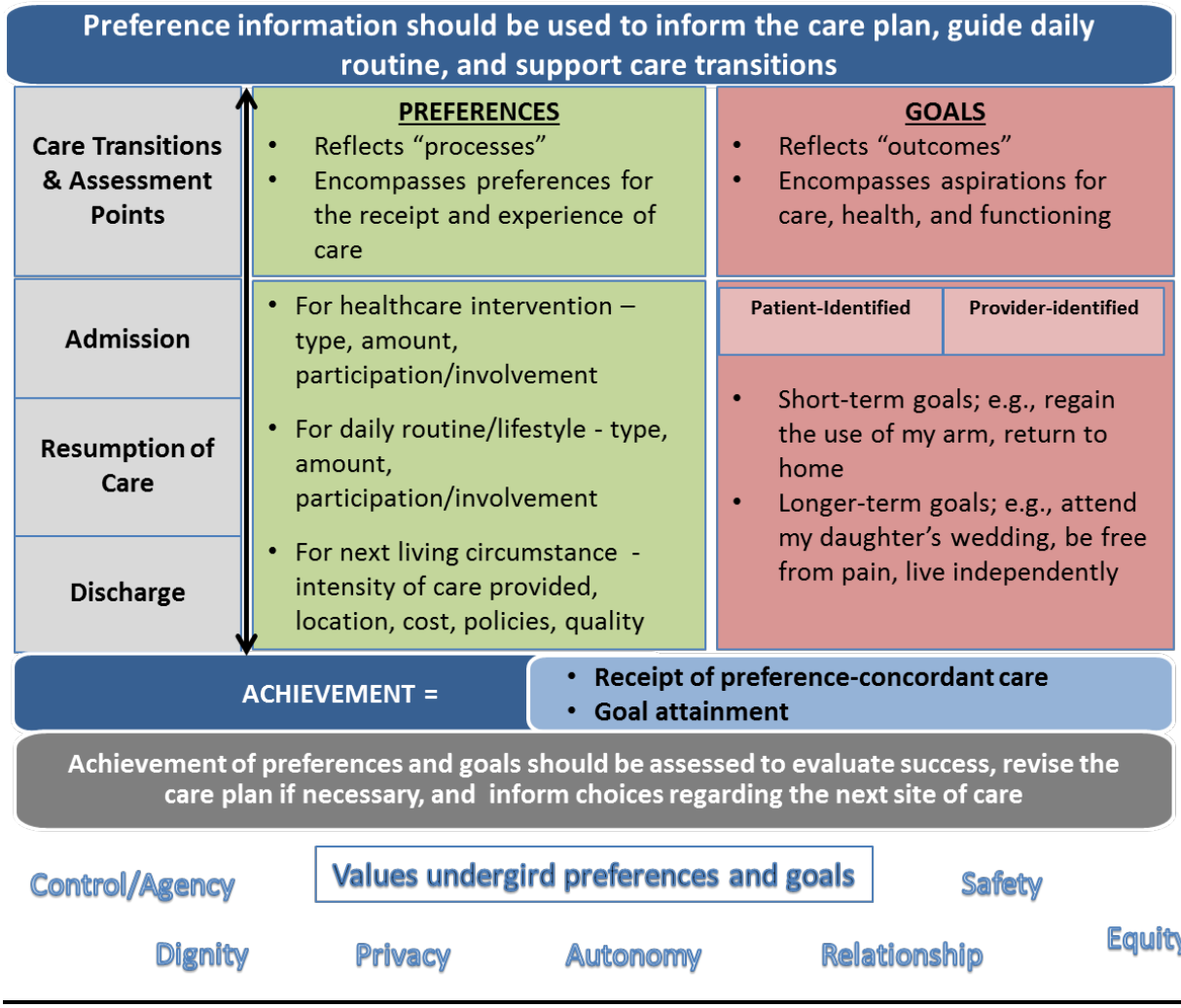
Organizing Framework for Hearing and Vision



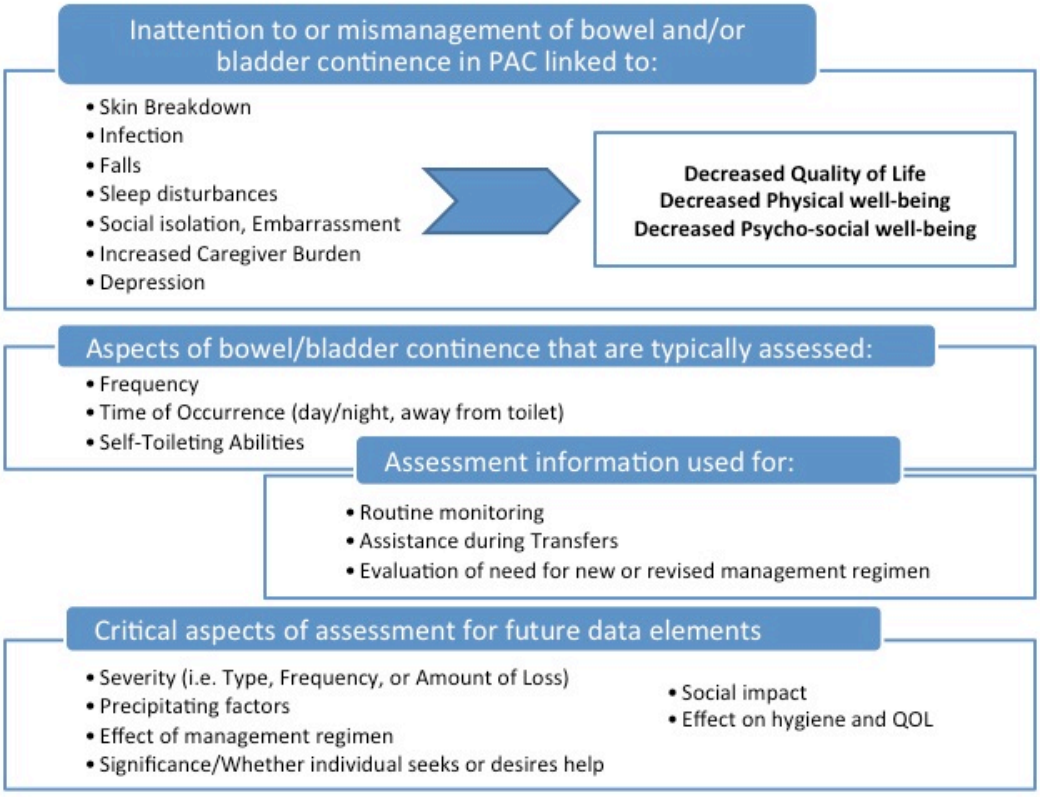
Organizing Framework for Medication Reconciliation



Organizing Framework for Care Preferences



Organizing Framework for Continence



Appendix E Data Elements Presented to TEP

Comprehensive List of Data Elements Identified for Cognitive Status

Current

- BIMS (MDS, IRF-PAI)
- Medication Management (OASIS)
- Cognitive functioning, Confusion, and Cognitive, Behavioral, and Psychiatric Symptoms (OASIS)
- CAM-SV (MDS)
- Expression of Ideas and Wants (MDS, OASIS, IRF-PAI)
- Observational assessment of Cognitive Status (MDS, IRF-PAI)
- Understanding Verbal Content (MDS, OASIS, IRF-PAI, LCDS)

Interim

- BIMS (as tested in PAC PRD)
- CAM-SV (as tested in PAC PRD)
- Expression of Ideas and Wants (as tested in PAC PRD)
- Observational assessment of Cognitive Status (as tested in PAC PRD)
- Understanding Verbal Content (as tested in PAC PRD)

Ideal Short List

- ASHA – Cognitive Status and Problem Solving
- ASHA – Memory and Attention
- ASHA – Difficulty Remembering, Organizing, or Attending in Daily Life
- Executive Function Performance Test (EFPT)
- General Practitioner Assessment of Cognition
- Mini-Cog
- Montreal Cognitive Assessment (MoCA)
- Performance Assessment of Self-care Skills (PASS)
- Six-Item Cognitive Impairment Test
- St. Louis University Mental Status Exam

Remaining Options

- Activity Measure for Post-Acute Care Applied Cognition Short Forms
- Addenbrooke’s Cognitive Examination - Revised
- Alzheimer's Disease Assessment Scale - Cog
- Animal Naming Task
- Berg Orientation Scale
- Boston Naming Test

Clock Drawing Test
Cognitive Difficulties Scale
Delay Discounting Task
Digit Span Backward
Digit Span Test
Digit Symbol Substitution Test
Fluid Object Memory Test
Function Assessment of Communication Skills
Halstead Category Test
Hooper Visual Organization Test
Kolkata Cognitive Screening Battery
Matrix Reasoning
Milan Overall Dementia Assessment
Mini-Mental State Examination
Multifactorial Metamemory Questionnaire
Neuro-QOL: Applied cognition-Executive Function (SF)
Paced Auditory Serial Addition Test
PROMIS Applied Cognition General Concerns
Repeated Battery for the Assessment of Neuropsychological Status
Rey Auditory Verbal Learning Test
Rey Complex Figure Task
SCL-90-R
Six-Item Screener
Spot the Real Word Test
Stroop Colour Word Test
Trail Making Test
Transfer Co-ordination Test
Wechsler Adult Intelligence Scale-IV
Wechsler Test for Adult Reading

Comprehensive List of Data Elements Identified for Depressed Mood

Current

PHQ-9 (MDS 3.0)

PHQ-2 (OASIS-C2)

Interim

PHQ-2 as tested in the PAC PRD

Ideal Short List

PHQ-X

Remaining Options

CES-D

GDS-15

PROMIS Depression - Short Form 8b

Comprehensive List of Data Elements Identified for Pain

Pain: Interview

Current

MDS 3.0 Pain Interview Items

Interim

PAC PRD Pain Interview Items

Ideal Short List

Brief Pain Inventory (BPI)
Functional Pain Scale (FPS)
Geriatric Pain Measure (GPM)
Short Form McGill Pain Questionnaire (SFMPQ)
PROMIS pain interference

Remaining Options

Behavioral Rating Scale (BRS)
Box Numerical Scale (Box-11, Box-21)
Chronic Pain Grade Scale (CPGS),
Color Analog Scale (CAS)
Color-Circle Pain Scale–[CCPS]
FACES Pain Scale Revised
Facial Affective Scale (FAS)
Global Pain Scale (GPS)
Gracely Box Scale (GBS)
Graphic Rating Scale (GRS)
Health Utilities Index (HUI-3)
Hundred Paisa Pain Scale (HPPS)
Iowa Pain Thermometer (IPT)
Mankoski Pain Scale (MPS)
McGill Pain Questionnaire
Medical Outcomes Study SF-36 Bodily Pain Scale (BPS)
Memorial Pain Assessment Card (MPAC)
Multidimensional Affect and Pain Survey (MAPS)
Multidimensional Pain Evaluation Scale (MPES)
Multidimensional Pain Inventory scale (MPI)
Neuropathic Pain Scale (NPS)
Numeric Pain Rating Scale (NPRS)
Numeric Rating Scale (NRS)
P4

Pain Quality Assessment Scale (PQAS)
Pain Relief Scale (PRS)
Percentage Improvement in Pain Scale (PIPS)
PROMIS - Pain Behavior
PROMIS Pain Intensity
Red Wedge Scale (RWS)
Regional Pain Scale (RPS)
Scale of Pain Intensity (SPIN)
Verbal Descriptor Scale (pain thermometer)
Verbal Numeric Scale (VNA)
Verbal Rating Scale (VRS)
Visual Analog Scale (VAS)
West Haven-Yale Multidimensional Pain Inventory

Pain: Observational

Current
MDS 3.0 Observational Pain Items
OASIS Observational Pain Items

Interim
PAC PRD Observational Pain Items

Ideal Short List
Abbey Pain scale
Certified Nursing Assistant Pain Assessment Tool (CPAT)
Checklist of Nonverbal Pain Indicators (CNPI)
DOLOPLUS 2
Mahoney Pain Scale
Pain Assessment Checklist for Seniors with Limited Ability to Communicate (PACSLAC)
PAINAD

Remaining Options
Algoplus scale
Assessment of Discomfort in Dementia (ADD) protocol
Behavior Checklist
Behavioral Indicators of Pain Scale (ESCID)
Behavioral Pain Scale (BPS)
Comfort Checklist
Critical Care Pain Observation Tool (CPOT)

Discomfort Behavior Scale
Discomfort in Dementia of the Alzheimer's Type (DS-DAT)
DOLOSHORT Observational Pain Assessment Scale
Elderly Pain Caring Assessment 2 (EPCA-2)
Face, Legs, Activity, Cry, Consolability Pain Assessment Tool (FLACC)
Facial Action Coding System (FACS)
Mobilization-Observation-Behavior-Intensity-Dementia (MOBID) Pain Scale
Mobilization-Observation-Behavior-Intensity-Dementia Pain Scale 2 (MOBID-2)
Non-Communicating Adult Pain Checklist (NCAPC)
Non-communicative Patient's Pain Assessment Instrument (NOPPAIN)
Non-verbal Pain Scale (NVPS)
Observational Pain Behavior Tool
Pain and Discomfort Scale (PADS)
Pain Assessment Checklist for Seniors with Limited Ability to Communicate-II (PACSLAC-II)
Pain Assessment for Demented Elderly (PADE)
Pain Assessment in Non-communicative Elderly (PAINE)
Pain Assessment Scale for use with Cognitively Impaired Older Adults
Pain Assessment Tool in Confused Older Adults (PATCOA)
Pain Behavior Method (PBM)
Pain Behaviors for Osteoarthritis Instrument for Cognitively Impaired Elders (PBOICIE)
Pain Level Outcome Scale (PLOS) (Spanish version)
Present Pain Intensity
Rating Pain in Dementia (RaPId)
Revised Non-Verbal Pain Scale (NVPS)
Rotterdam Elderly Pain Observation Scale (REPOS)

Comprehensive List of Data Elements Identified for Hearing and Vision

Hearing

Current

Hearing data elements in OASIS-C2, MDS 3.0

Interim

Hearing data elements tested in PAC PRD

Ideal Short List

Hearing Handicap Inventory for Elderly-Screening (HHIE-S)

Pure-Tone Auditory (PTA) Screener

Remaining Options

Hearing Assessment Test (HAT)

Nursing Home Hearing Handicap Index (NHHI)

Vision

Current

Vision data elements in OASIS, MDS 3.0

Interim

Vision data elements tested in PAC PRD

Ideal Short List

Age-Related Vision Loss Scale-12 (AVL-12)

National Eye Institute Visual Functioning Questionnaire-25 (NEI-VFQ-25)

Nursing Home Vision-Targeted Health-Related Quality-of-Life Questionnaire (NHV-QoL)

Veterans Affairs Low-Vision Visual Functioning Questionnaire-48 (LV VFQ-48)

Remaining Options

Adaptation to Age-Related Vision Loss (AVL) Scale: AVL-24, AVL-12

NEI-VFQ-51 (51 Item Version)

NEI-VFQ-39 (39 Item Version)

Comprehensive List of Data Elements Identified for Medication Reconciliation

Current

OASIS-C1

Interim

OASIS-C2

Ideal Short List

Fourteen data elements such as:

- Did the post-acute care provider obtain lists of current medications from more han one source (e.g., from the patient, caregiver, pharmacy, prescribers, or Discharge Summary)?
- Were there indications noted for each medication?
- Did the review of medications identify any potential medication discrepancies?
- Did the review of medications identify any adverse drug events?
- Could any of the medication discrepancies, or adverse drug events result in a potential clinically significant medication issue involving anti-coagulants, anti-diabetics, opioids, anti-psychotics, anti-microbials, or are listed in the Beer's criteria?
- Did the post-acute care provider resolve all potential clinically significant medication issues before the end of this episode of care?
- Did the post-acute care provider resolve all potential clinically significant medication issues by involving the patient or family caregiver (defined as asking the patient or family caregiver for reasons, e.g., patient non-compliance, financial reasons)?
- Did the post-acute care provider resolve all potential clinically significant medication issues by involving the patient or family caregiver (defined as asking the patient or family caregiver for reasons, e.g., patient non-compliance, financial reasons)?
- Did the post-acute care provider contact a physician (or physician-designee) about all identified potential clinically significant medication issues within 24 hours?
- After the physician (or physician-designee) responded, did the post-acute care provider complete the physician (or physician-designee) prescribed/recommended actions within 24 hours in response to all identified potential clinically significant medication issues?
- Did the post-acute care provider communicate the reconciled medication list to you or your family caregiver?
- If you are receiving home health care, were you and/or family caregiver given instructions on which medications to dispose of?

Did the post-acute care provider communicate the reconciled medication list to the patient's primary pharmacy?

Did the post-acute care provider communicate the reconciled medication list to the primary care provider?

Remaining Options

- Care Transitions Measure
- INTERACT
- IPRO Medication Discrepancy Tool
- Medication Appropriateness Index
- Medication Discrepancy Tool
- Medicare Part D Medication Therapy Management Program
- Medication Reconciliation Meaningful Use Toolkit
- Medication Therapy Management Documentation System
- National Transitions of Care Coalition Tools
- Pre-admission Medication List (PAML) Builder
- Project Re-engineered Discharge
- Twinlist
- Unnecessary Drug Use Measure

Comprehensive List of Data Elements Identified for Care Preferences

Current

- Functional Status Goals (Mobility)
- Functional Status Goals (Self-Care)
- Participation in Assessment and Goal Setting
- Preferences for Customary Routines and Activities

Interim

- Care preferences items tested in the PAC PRD

Ideal Short List

- Autonomy preference index (API)
- Control Preferences Scale (CPS)
- Patient Preferences for Information and Decision-making
- Preferences for Customary Routines and Activities: Subsection F0400
- Item F: How important is it to you to have your family or a close friend involved in decisions about your care?
- Item A - How important is it to you to choose what clothes to wear? Item C: How important is it to you to choose between a tub bath, shower, bed bath, or sponge bath?
- Item D: How important is it to you to choose your own bedtime?
- Preferences for Everyday Living Inventory (subsetted)
- Preferences for Privacy

Remaining Options

- Control Preferences Scale (CPS) - Modified 1
- Control Preferences Scale (CPS) - Modified 2
- Control Preferences Scale (CPS) - Modified 3
- Decision Self-Efficacy Scale
- Discrete Choice Experiment (DCE) assessing preferences for community services after stroke
- Discrete choice experiment (DCE) assessing preferences for individual service characteristics of community-based models of care
- Discrete choice experiment (DCE) assessing preferences for provider, location, frequency, and method of delivery of care
- Goal Attainment Scale
- Goal Attainment Scale-Geriatric setting
- MIBBO: Measure to Identify Meaningful Physical Activities in the Elderly
- Nursing home resident preferences related to incontinence and mobility care
- Open-ended preference for daily activities interview
- Paired preference ranking exercise for incontinence interventions
- Patient Assessment of Chronic Illness Care (PACIC) Goal Setting Subscale

Perceived Involvement in Care Scale (PICS)
Physical Activity Preference Instrument
Preference elicitation interview assessing 13 dimensions of self-care capabilities
Preference for hospital versus "Crisis Assessment and Treatment Team"
Preference item for treatment place - inpatient hospital care or hospital-at-home
Preference tool for mechanical ventilation
Preferences for Everyday Living Inventory
Preferences for nutrition interventions
Preferences for the amount and type of preoperative information provided, as well as for different aspects of decision making during treatment
Preferences regarding choice and control in daily life
Problem Solving Decision Making Scale (PSDM)
Scenario-based assessment of patient preferences for home vs. hospital care
Scenario-based assessment of preferences for decision making
Scenario-based assessment of preferences for decision making with capacity and with incapacity
Scenario-based assessment of preferences for location of care based on expected assistance needed
Self-maintenance Habits and Preferences in Elderly (SHAPE)
Single item assessing preference for living in a nursing home all the time
Single item assessing preference for location of care
Single item assessing preference for location of care if given choice - hospital alone or hospital and home. Single item assessing preferences for informal versus professional care
Single-item assessing preferences for participation in decision-making
Single Hospital Assessment of Healthcare Providers and Systems (HCAHPS) survey - item measuring whether or not patient preferences were met in hospital
TARGET - Towards Achieving Realistic Goals in Elders Tool
The RAI-PC (Resident Instrument for Palliative Care)
Time tradeoff method (TTM) to assess preferences for different modes of LTC services
Treatment Tradeoff Method (TTM)
Two questions depicting preferences for typical elements of shared decision-making and one question asking for patients' information needs and preferences
Vignette-based assessment of preferences for involvement in decision making

Comprehensive List of Data Elements Identified for Continence

Current

Bowel and bladder incontinence data elements (MDS 3.0, OASIS, IRF-PAI, LCDS)

Interim

Bowel and bladder incontinence data elements tested in PAC PRD

Ideal Short List – Bowel

Cleveland Clinic Incontinence Score (CCIS)
Fecal Incontinence Quality of Life Scale (FIQL)
Quality of Life Scoring Tool Relating to Bowel Management (QoL-BM)
Wexner Score for Fecal Incontinence

Ideal Short List – Bladder

King's-Health-Questionnaire (KHQ)
Nursing Home Disabilities Instrument (NHDI)
Overactive Bladder Questionnaire (OAB-q)/Overactive Bladder Symptom Score (OABSS)
Urinary Incontinence Severity Score
Urogenital Distress Inventory-6 (UDI-6)