The Outcome and Assessment Information Set (OASIS) Field Test: Methods, Design and Participants

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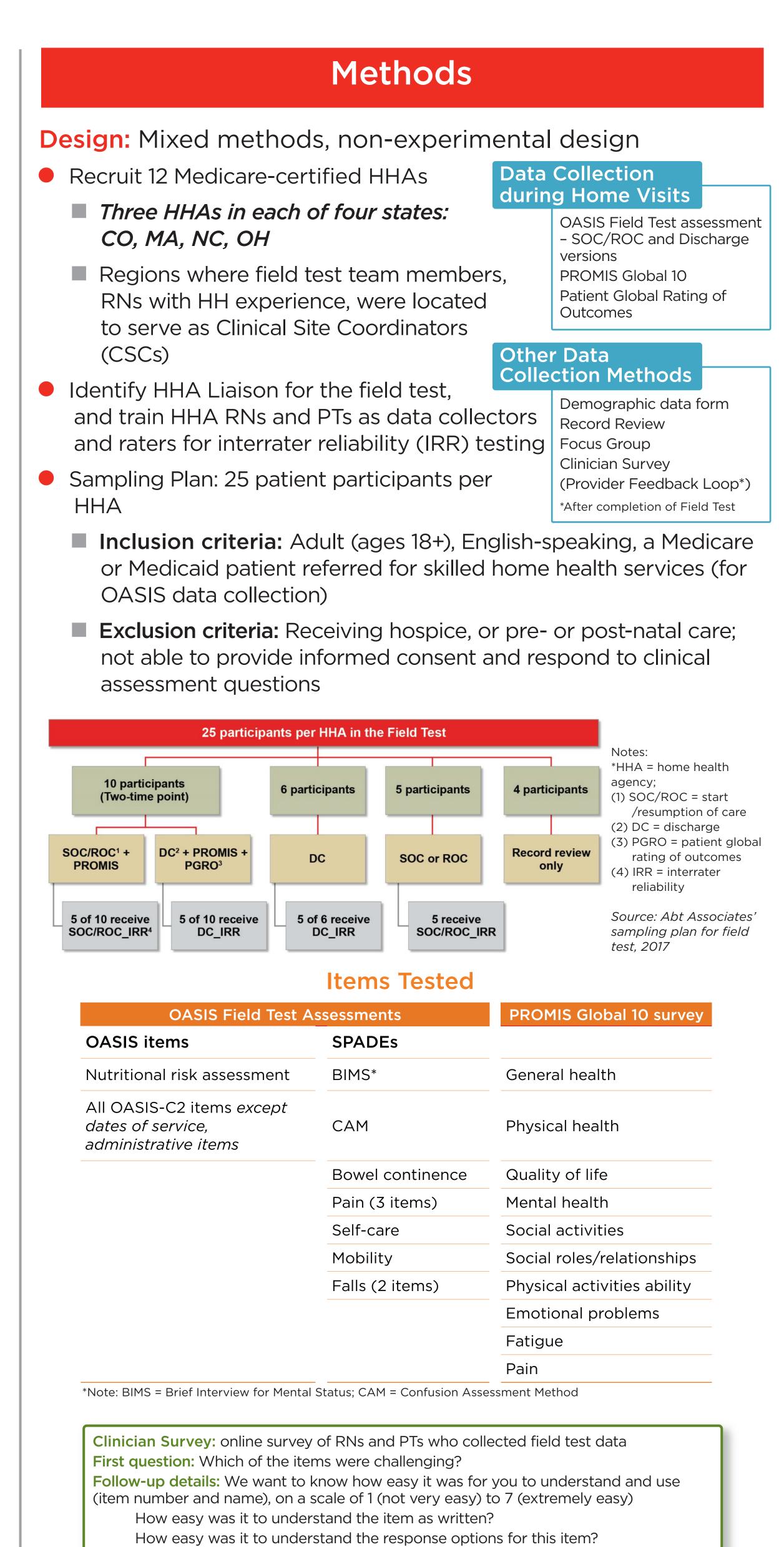
Background

- The Centers for Medicare & Medicaid Services (CMS) is committed to ensuring high quality care for beneficiaries
- Section 1895(b)(3)(B)(v)(II) of the Social Security Act requires home health agencies (HHA) to submit data for quality measurement
- The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 mandates reporting of standardized patient assessment data elements (SPADEs) in several domains across post-acute care (PAC) settings, including home health (HH)
- *Validity and utility of quality measures rest on the underlying source data*
- Development and testing of data items is a critical task in the CMS Quality Reporting Programs (QRPs)

OASIS Field Test Objectives

- Assess reliability, validity and feasibility of selected existing and potential new OASIS items, including SPADEs for pain, comprehension, cognition, delirium, continence, self-care, mobility and falls
- Explore feasibility of the Patient Reported Outcomes Measurement Information System® (PROMIS®) v1.1 10-item Global Health Survey among home health care recipients
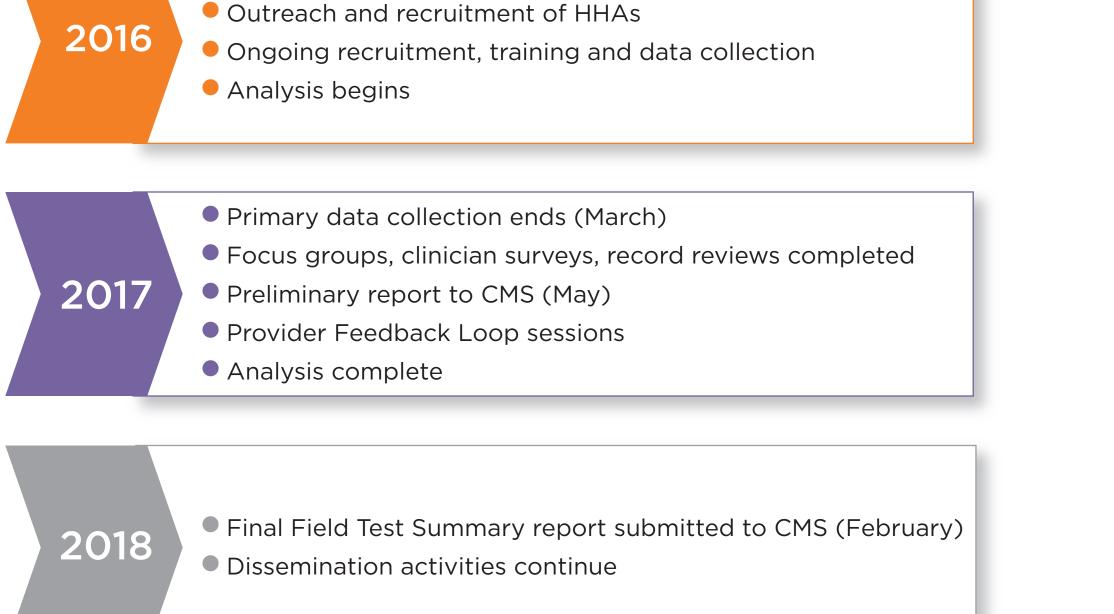
Methods

Design: Mixed methods, non-experimental design

- Recruit 12 Medicare-certified HHAs
  - *Three HHAs in each of four states: CO, MA, NC, OH*
  - Regions where field test team members, RNs with HH experience, were located to serve as Clinical Site Coordinators (CSCs)
- Identify HHA Liaison for the field test, and train HHA RNs and PTs as data collectors and raters for interrater reliability (IRR) testing
- Sampling Plan: 25 patient participants per HHA
  - **Inclusion criteria:** Adult (ages 18+), English-speaking, a Medicare or Medicaid patient referred for skilled home health services (for OASIS data collection)
  - **Exclusion criteria:** Receiving hospice, or pre- or post-natal care; not able to provide informed consent and respond to clinical assessment questions

Data Collection during Home Visits
- OASIS Field Test assessment – SOC/ROC and Discharge versions
- PROMIS Global 10
- Patient Global Rating of Outcomes

Other Data Collection Methods
- Demographic data form
- Record Review
- Focus Group
- Clinician Survey (Provider Feedback Loop*)
*After completion of Field Test

25 participants per HHA in the Field Test

- 10 participants (Two-time point)
  - SOC/ROC* + PROMIS → 5 of 10 receive SOC/ROC_IRR*
  - DC* + PROMIS + PGRO* → 5 of 10 receive DC_IRR
- 6 participants
- 5 participants
  - DC → 5 of 6 receive DC_IRR
- 4 participants
  - SOC or ROC → 5 receive SOC/ROC_IRR
  - Record review only

Notes:
*HHA = home health agency;
(1) SOC/ROC = start /resumption of care
(2) DC = discharge
(3) PGRO = patient global rating of outcomes
(4) IRR = interrater reliability

Source: Abt Associates' sampling plan for field test, 2017

Items Tested

OASIS Field Test Assessments		PROMIS Global 10 survey
OASIS items	**SPADEs**	
Nutritional risk assessment	BIMS*	General health
All OASIS-C2 items *except dates of service, administrative items*	CAM	Physical health
	Bowel continence	Quality of life
	Pain (3 items)	Mental health
	Self-care	Social activities
	Mobility	Social roles/relationships
	Falls (2 items)	Physical activities ability
		Emotional problems
		Fatigue
		Pain

*Note: BIMS = Brief Interview for Mental Status; CAM = Confusion Assessment Method

Timeline

2016
- Protocol submitted for IRB review – approved July
- Outreach and recruitment of HHAs
- Ongoing recruitment, training and data collection
- Analysis begins

2017
- Primary data collection ends (March)
- Focus groups, clinician surveys, record reviews completed
- Preliminary report to CMS (May)
- Provider Feedback Loop sessions
- Analysis complete

2018
- Final Field Test Summary report submitted to CMS (February)
- Dissemination activities continue

HHA Characteristics

State	HHA* Size	Ownership	Service Area
CO*	Medium	National not-for-profit chain	Urban-suburban
CO	Small	Independent for-profit	Suburban-rural
CO	Large	Independent for-profit	Urban-suburban-rural
MA*	Large	Not-for-profit, hospital affiliated	Urban-suburban
MA	Small	Local independent	Urban-suburban
MA	Medium	National not-for-profit chain	Suburban-rural
NC*	Medium	Regional not-for-profit chain	Suburban-rural
NC	Medium	National not-for-profit chain	Suburban-rural
NC	Small	Public health department	Rural
OH*	Small	Local not-for-profit independent	Rural
OH	Small	Hospital affiliated not-for-profit	Rural
OH	Large	Independent not-for-profit	Urban-suburban-rural

*HHA = home health agency
CO = Colorado; MA = Massachusetts; NC = North Carolina; OH = Ohio
Source: Abt Associates' summary of field test HHA characteristics, 2017.

Summary of Data Collected

Patient Participants (n=213)
- Two-time point (SOC/ROC + DC): 67 (31.5%)
- SOC/ROC only: 87 (40.8%)
- DC only: 59 (27.7%)

Assessments Completed (n=470)
- SOC/ROC: 154
- SOC/ROC IRR: 106
- DC: 126
- DC IRR: 84

PROMIS Surveys Completed (n=150)
- SOC + DC: 56
- Single time point only: 94

Other Data Collected
- Record Reviews: 103
- PGRO Surveys: 77
- Focus Groups: 12 (In-person, 90 minutes)
- Clinician Surveys: 25 (n=70; 31% response rate)

Results Overview

Demographic Characteristics of Field Test Participants and the 2017 HH Patient Population

	Field Test Participants (n=213)	2017 HH* Pop (n=6,158,295 episodes)
	%	%
Age groups	**(n=202)**	
0-64	24.3	17.5
65-74	20.8	26.9
75-84	22.8	29.9
85+	32.2	25.7
Gender	**(n=202)**	
Male	38.0	39.4
Female	62.0	60.6
Race/ethnicity (mark all that apply*)	**(n=175)**	
Black or African American	13.6	13.4
Hispanic or Latino	2.3	7.3
White	83.1	76.6
Current payment sources for home care (mark all that apply*)	**(n=203)**	
Medicare (traditional fee for service)	66.2	66.2
Medicare (HMO*/Managed care/Advantage plan)	14.9	27.7
Medicaid (traditional fee for service)	11.4	4.1
Medicaid (HMO/managed care)	2.0	4.7
Private insurance	3.5	2.1
Private HMO/managed care	3.0	0.7

*HH = home health; HMO = health maintenance organization; Mark all that apply items: Totals may sum to more than total sample size and more than 100%.
Source: Abt Associates' analyses of field test and CMS 2016 OASIS data set demographic data.

Field Test patient participants are similar to the national HH population (2017)
- More in the 85+ years age cohort
- Fewer with managed Medicare or managed Medicaid, more with private insurance
- Fewer in fragile or serious health condition; at risk for pressure ulcers; or, with self-reported hospital or emergency department use

Overall Status at HH SOC/ROC (M1034)

	Field Test Participants	2017 HH pop [a]
	%	%
Stable	21.33	5.67
Temporary high health risk	54.00	52.74
Fragile health	22.00	35.52
Serious condition	2.67	5.94
Unknown	0.00	0.13

Notes: HH = home health, SOC = start of care, ROC = resumption of care; pop = population. [a] The 2017 HH patient population at SOC/ROC, comprising 6,158,295 episodes

Prior conditions among patients at HH SOC/ROC who had a medical or treatment change, or an inpatient stay, in the 14 days prior (M1018)

	Field Test Participants	2017 HH pop [a]
	%	%
Urinary incontinence	38.16	36.71
Intractable pain	22.37	15.60

Notes: HH = home health; SOC = start of care; ROC = resumption of care; pop = population; M1018 Prior conditions, is a "mark all that apply" OASIS item. Frequencies may be larger than the sample size, and the percent will sum to greater than 100. [a] 2017 HH population at SOC/ROC, comprising 6,158,295 total episodes.

Clinician Surveys
- Clinicians reported the items and response options were easy to understand and use, however, collecting required information was challenging, especially for weight, and function
- Used Guidance resource for new and difficult items. Examples:
  - M1028 Active Diagnoses – "what is 'active'"?
  - M2001 Drug regimen review – "what is a 'potential clinically significant medication issue'"?
  - Section GG, GG0130 Self-care and GG0170 Mobility – new to home health, new response scale, multiple activities to assess
- **Most challenging item:** M1060 Height and **weight**
  - Multiple logistical, environmental barriers to accurate measurement of weight

Focus Groups
- Clinical site coordinators facilitated in-person 1.5 hour focus groups at each HHA, for RNs and PTs who collected data
- **Main takeaways**
  - Clinicians and other HHA staff valued the opportunity to participate in testing and providing feedback on OASIS items
  - Because they are most directly impacted by changes to OASIS items, the clinician data collectors especially valued the opportunity to participate in testing and provide direct feedback
- Less narrative in clinical records
  - Narrative notes less available; less information to validate OASIS item responses

Record Reviews
- Process of care items easy to validate
- Example: Did patient receive a multifactorial fall risk assessment? Validation: MAHC-10 (Missouri Alliance for Home Care) in record
- Comprehensive clinical assessment records generally do not duplicate OASIS item information
- Example: OASIS items assess dyspnea, pain interfering with activity or movement; this is not duplicated in clinical assessment records

Provider Feedback Loop
- Participating HHA leaders invited to attend 2 webinars (following conclusion of field test) to provide feedback
- **Main takeaways:**
  - Participants valued the opportunity to participate in testing
  - Highly recommended increased home health industry involvement in design and development of procedures for future testing, to improve feasibility
  - Noted challenges such as – difficult to find bandwidth to undertake additional data collection in support of the study
- Suggested considerations related to incentivizing participation

Health Status, Symptoms and Utilization at Home Health Admission

Health Status Characteristics at SOC/ROC	Field Test Participants (%)	2017 HH pop (%) [a]
Taking 5 or more medications	91.56	91.67
History of falls	35.71	32.62
At risk for falls	92.72	94.48
Impaired Vision	22.08	28.45
Impaired hearing	34.42	36.85
Dyspnea	46.71	49.48
Urinary incontinence	55.56	52.64
At risk for pressure ulcers	31.37	50.27

Utilization at HH SOC/ROC	Field Test Participants (%)	2017 HH pop (%) [a]
Two or more hospitalizations (reported, past 6 months)	20.78	67.49
Two or more ED Visits (reported, past 6 months)	14.29	25.27

Notes: HH = home health; SOC = start of care; ROC = resumption of care; pop = population; [a] 2017 HH population at SOC/ROC, comprising 6,158,295 total episodes

Conclusions

- HH patients in this sample had health status challenges that persisted, although they generally improved between admission and discharge (Discharge data not displayed on poster)
- Despite challenges, the opportunity to contribute to development and testing of the OASIS is highly valued by HH providers and clinicians

Implications for Policy and Practice

- Findings will inform future CMS quality measure development activities
  - CMS's Meaningful Measures Framework
- Increased HH provider participation in future testing may strengthen engagement and partnership with CMS to improve quality of care