STRATEGIC HEALTHCARE PROGRAMS

Demystifying Home Health Risk Adjustments (OASIS-D Update)





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Objectives

- How and why risk adjustments are used in quality reporting
- Changes to the risk adjustment model with OASIS-D
- Top and bottom covariates in the OASIS-D risk model
- Impact analysis and insights on the OASIS-D risk model
- How should you use this information?



How and why risk adjustments are used in quality reporting



CMS Reported Scores

 Risk-adjusted outcomes are utilized by CMS in many different areas, including Home Health Compare, Quality of Patient Care star ratings, CASPER reports, Value-Based Purchasing calculations, and more.

										Ē	SH	Superir	r Outcomes Hon	ne Health							Rep	port Date: 12/19/201
					Page 1 of 4						Jalua Daa	ed Purchas		Your Cur	rent Period	2015 CN	S State (LA)			Points		Your Point
		isted Oi	itcome Report							Ĭ		Measures	ilig (VDP)	SHP	Score - 11/2016)	Threshold (Median)	Benchmark (90th% Avg)	Your 2015 CMS Baseline	Achieve- ment	Improve- ment	Current Care Points	Based % Rank (LA)
Agency Name: SUPERIOR OUTCOMES H Agency ID: CA12345678 Location: SANTA BARBARA, CA	HH		Requested Currer Requested Prior F	Period:	01/2017 - 12/2017 01/2016 - 12/2016 01/2017 - 12/2017					Improv	vement in Pai	in (Risk Adj)	0		81.00%	• 66.90%	88.90%	• 51.60%	6.27	7.38	7.38	n=76 56%
	Branch: All		Actual Current Pe Actual Prior Perio # Cases: Curr 52	d:	01/2017 - 12/2017 01/2016 - 12/2016 Prior 4129					Improv	vement in Be	d Transferring	-		66.56%	• 58,10%	75.67%	• 52.50%	4.83	5.57	5.57	n=76 47%
Date Report Printed: 03/01/2018			Number of Cases									erunitu /Diele Ad			62.32%	67.24%	78.85%	• 51.62%	0.00	3.43	3.43	n=75 649
End Result Outcomes:	Elig. Cases	Signif.	Current Adjusted F		Real-Time Star Ratings P	review - Qual	ity of Patie	nt Care			OM	/PM: 07/16-06/17	Hosp: 07/16-06/17		67.22%	• 65.40%	79.01%	• 60.00%	1.70	3.30	3.30	n=76 29%
mprovement in Grooming	4142	0.28		Т	SUPERIOR Outcomes Home Health							Rep	ort Date: 4/15/2018		68.90%	• 62.70%	84.35%	 53.10% 	3.08	4.56	4.56	n=76 275
abilization in Grooming	2836510 4846	0 **				Process	Measures			Outcome M	leasures				56.92%	58.10%	75.25%		0.00	0.26	0.26	n=76 23
	3875 3796898	0.82			Initial Desile Detine	Timely Initiation	Drug Education		t in Improvement in									• 55.40%				
nprovement in Upper Body Dressing	4168 3003 3101609	0.81		1	Initial Decile Rating High/Low Better (+/-)	of Care	All Meds	Ambulation +	n Bed Trf	Bathing +	Pain +	Dyspnea +	Hospitalizations		85.82%	• 60.80%	• 82.91%	• 63.20%	10.00	10.00	10.00	n=76 999
mprovement in Lower Body Dressing	4353	0.73		2		0.0-81.6	0.0-90.0	0.0-52.1	0.0-45.0	0.0-51.9	0.0-49.6	0.0-42.7	20.6-100.0		99.31%	• 97.20%	99.98%	• 92.50%	7.32	8.60	8.60	n=76 639
nprovement in Bathing	3336461 4962	0 **		3	1.0	81.7-87.7	90.1-94.7	52.2-59.7	45.1-54.2	52.0-61.7	49.7-60.0	42.8-55.9	18.7-20.5		65.64%	71.30%	89.38%	• 59.20%	0.00	1.63	1.63	n=76 10%
	3742 3833416	0.02 ++ 0.01 **		4	1.5	87.8-91.0	94.8-96.6	59.8-64.6	54.3-59.9	61.8-67.0	60.1-65.8	56.0-63.4	17.6-18.6		70.13%	• 70.00%	86.58%	• 61.50%	0.57	2.94	2.94	n=76 29%
tabilization in Bathing		0.68		5	2.0	91.1-93.2	96.7-97.8	64.7-67.9	60.0-64.1	67.1-70.5	65.9-70.0	63.5-68.5	16.6-17.5	(HHC 10/16)	15.10%	14.00%	8.87%	15.10%	0.00	0.00	0.00	n=79 549
nprovement in Toilet Transferring	3820125 3293	0 "		6	2.5	93.3-94.8 94.9-96.1	97.9-98.5 98.6-99.1	68.0-70.6 70.7-73.0										16.10%	0.00	0.00	0.00	n=75 519
abilization in Toilet Transferring	2151 2285785 4937	0.67		8	3.5	96.2-97.1	99.2-99.5	73.1-75.5					Show Gra	phs				• 90.00%	3.76	5.14	5.14	n=68 76
•	3899 3830756	0.82		9	4.0	97.2-98.0	99.6-99.8	75.6-78.7						_				• 87.00%	5.05	6.33	6.33	n=68 83
mprovement in Toileting Hygiene	3895	0.31		10		98.1-99.0	99.9-99.9	78.8-83.8											10.00	10.00	10.00	n=68 993
Stabilization in Toileting Hygiene	2539183 4785	0 **		11	5.0	99.1-100.0	100.0-100.0	83.9-100.				PERIOR		CALIFORNIA		NATIONAL	AVERAGE	• 90.00%			1 1	
	3768322	0.7		12	Your HHA Score	98.8	99.4	77.0				COMES HO	DME	AVERAGE				• 90.00%	8.21	7.83	8.21	n=68 87%
mprovement in Bed Transferring	4642 3286 3375147	0++	48.1%	13	Your Initial Decile Rating	4.5	3.5	4.0			HEAI	LTH						• 89.00%	8.40	7.36	8.40	n=68 939
Stabilization in Bed Transferring	5175	0.06 +		14	Your Number of Cases (N)	162	162	106			_								Raw To	otal Points (RTP)	85.75	AMFWS
mprovement in	3993659 4869	0 "		15	National (All HHA) Median	94.9	98.6	70.7	How often pati	ents got better	85.0%	6		70.1%		72.4%		Total Applicabl	e Measure Points	(RTP/AM) x 10	50.44	% Rank (LA)
Ambulation/Locomotion	3599 3710188	0 **	, and the second se	16	Your Statistical Test Probability Value (p-value)	0.010	0.336	0.078	at walking or m							12.110		plicable Measure	e Final Weighted S	Score (AMFWS):	45.40	59%
Improvement in Eating		0.33			Your Statistical Test Results													_				i
	1980970	0 "		17	(Is the p-value ≤ 0.050?)	Yes	No	No	How often nativ	ents got better	87.3%	6		66.8%		69.7%		New Measure	Final Weighted S	Score (NMFWS):	10.00	TPS
The probability is 10% or less that this difference, and 90% or more that the difference.	ence is real.			18	Your HHA Adjusted Rating	4.5	3.0↓	3.5↓	at getting in an		01.078	,		00.070		00.170						% Rank (LA)
The probability is 5% or less that this differ to chance, and 95% or more that the difference	erence is real.																	_	Total Performan	ce Score (TPS)	55.40	59%
The probability is 10% or less that this diffe chance, and 90% or more that the difference		to		19 20		-			How often patie	ents not better	82.8%	6		74.0%		75.3%			rotarrenoman	oe ocore (11 o).	00.40	
 The probability is 5% or less that this difference, and 95% or more that the difference. 		- P				rtounded			at bathing	into got better	02.070	,		14.070		10.076						
This outcome has been risk adjusted. How predictive model for this outcome is less ro	wever, the		10% 20% 30% 40% 50% 60 ercent (Number) of Cases with		% 90% 100%																	
the other predictive models.		1	his report has not beer	n approv	ed to meet privacy				Managing r	pain and treatin	ng symptoms											
ote: When a measure value is calculated usi Depisodes of care, the statistical significance	ing less than the level will		equirements and can on realth agency and state								8 c)p.cc											
ot be displayed on the report.		Ľ	,						Preventing	harm												
									Preventing	unplanned hos	spital care											
SHP																						

Real-Time VBP Total Performance Score

November 2016

CMS Reported Scores (cont.)

- Not every publicly reported outcome is utilized in every calculation.
- As shown below, the Quality of Patient Care Star Rating calculation and the Value Based Purchasing calculation both omit outcomes that are reported on Home Health Compare.

Current Usage	Ambulation	Bed Transferring	Bathing	Pain	Dyspnea	Surgical Wound Status	Oral Meds	Discharged to Comm.
Home Health Compare	х	Х	х	х	Х	Х	Х	
CASPER	х	Х	х	х	х	х	х	х
Quality of Patient Care Star Ratings	х	Х	х	х	х		х	
Value Based Purchasing	Normalized Compo	omes now contribute site (TNC) measure utcomes, utilizing a	s, along with other	х	х		х	х

Risk Adjustment – Why is it done?

- The basic purpose of risk adjustment is to ensure a fair comparison of outcomes by taking into consideration patient characteristics at the start of a home care quality episode that may affect the likelihood of specific outcomes during this episode
- Used for OBQI improvement outcomes and the OASIS-based
 Discharged to Community utilization measure
- Not used for process measures
- Each outcome has a unique risk model
- Outcomes scores include Medicare, Medicare Advantage, Medicaid and Medicaid HMOs payers
- Only exception is Claims-based measures



Risk Adjustment – How is it done?

- A predicted value for a specific outcome was computed based on an analysis of the relationships between that outcome and its multiple risk factors in the **reference group** of patients
- A formula was then developed that expressed the probability of the outcome as a mathematical function of the most significant risk factors
- Using this formula for each of a specific agency's patients, the predicted value for the agency's rate on a specific outcome measure can be calculated
- The actual outcome rate achieved by the agency (its current observed value) is then compared to the national reference value



Risk Adjustment – In English Please??

An adjustment made to your outcome scores by comparing your patient characteristics to national averages.

Risk-Adjustment Step-by-Step

1. Observed outcome rate is calculated for all eligible patients

Agency(observed) = (# achieving outcome)/(# eligible for outcome)

- 2. For each of the same patients, a predicted outcome is calculated based on statistical risk model and patient condition at SOC/ROC
- Predicted outcomes are averaged across all the patients served in a 12 month period

Agency(predicted) = (Sum of predicted probability)/((# eligible for outcome)

- 4. National observed and predicted rates are calculated aggregating across all eligible patients served by any HHA
- 5. Agency rate is risk adjusted by adding to the observed rate the difference between the national predicted rate and agency predicted

Agency(risk adjusted) = Agency(observed) + (National(predicted) – Agency(predicted))



Risk Model using Logistic Regression

- Logistic regression is a statistical technique commonly used to analyze the relationship between multiple predictors (In this case, risk factors) and a yes/no outcome (In this case, improved/not-improved)
- Using this technique, a predictive model was constructed for each outcome based on an analysis of risk factors and outcomes using reference group data
- The predictive model is a mathematical formula that reflects the influence of multiple **risk factors** on a particular outcome





Risk Factors and Covariates

- OASIS risk factors are patient characteristics identified at SOC or ROC
- Each risk factor has multiple covariates, each with an associated coefficient value that that can either raise or lower the likelihood of the patient improving for the outcome in question
 - Note: We will be presenting the coefficients as probabilities so that it's easier to interpret the potential impact of each covariate.
- The higher the probability value for a risk factor (e.g. over 50%), the more likely the patient is to improve if the risk factor is present, whereas a lower value (e.g. - below 50%), indicates that the specified risk factor makes the patient less likely to improve



Risk Factors and Covariates: Example

• **Example**: Below are top and bottom risk-factor covariates (converted to probabilities) for the Ambulation outcome that have the largest **positive** and **negative** impact on how likely a particular patient is to improve in Ambulation:

Risk Factor	Covariate	Covariate Detail	Coefficient	Probability
Ambulation	AMB3	M1860 = 3 (Able to walk only with the supervision	2.2677	90.6%
		or assistance of another person at all times.)		
Age	AGE_95PLUS	Age = 95+	-0.6206	35.0%

 Translation: A rating of "3" for Ambulation at SOC/ROC would increase the probability of the patient improving, whereas a patient being aged 95 or older would lessen their likelihood of improving in Ambulation



Predicted Improvement Scores

- The values for each risk factor present for a specific patient are aggregated and contribute to a single predicted improvement score for the patient
- The higher the **predicted improvement** score, the more likely that the patient is to improve, and vice versa
- The predicted improvement scores for each individual patient are used to calculate your **agency predicted** score
- Therefore, having a large population of patients with patient predicted values that are **higher** than the national predicted score will result in your risk-adjusted score being **lower** than your observed score, and vice-versa



Takeaway Regarding Risk-Factors

- What does this tell us about risk-adjustment?
- For nearly all of the HHC outcomes, the **single biggest factor** by far that causes your final risk-adjusted score to be lowered is the severity of the rating for the outcome at SOC/ROC

Outcome	Risk Factor	Covariate Detail	Coefficient	Probability
Ambulation	Ambulation	M1860 = 3 (Able to walk only with the supervision or assistance of another person at all times)	2.2677	90.6%
Bathing	Bathing	M1830 = 6 (Unable to participate effectively in bathing and is bathed totally by another person)	3.0383	95.4%
Bed Transferring	Transferring	M1850 = 3, 4, or 5 (Unable to transfer self and is unable to bear weight or pivot when transferred by another person OR Bedfast)	3.0747	95.6%
Pain	Pain	M1242 = 4 (All of the time)	1.6770	84.3%
Dyspnea	Dyspnea	M1400 = 3 or 4 (With minimal exertion or with agitation OR At rest during day or night)	1.5293	82.2%
Oral Meds	Oral Medication Management	M2020 = 3 (Unable to take medication unless administered by another person)	1.2751	78.2%
Surgical Wounds	Therapy	M2200 > 13 (More than 13 therapy visits planned)	0.5192	62.7%

Changes to the risk adjustment model with OASIS-D



CY 2019 OASIS-D

- Effective January 2019, 70 data elements from 24 OASIS items are no longer collected at SOC/ROC
- CMS was required to recalibrate the risk adjustment model to include only OASIS items that will be present on OASIS-D

Removed M-Items Included:

- Frequency of ADL/IADL Assistance: At least daily
- Conditions Prior to Treatment: Intractable pain
- Prior Functioning: Needed assistance with transfer
- Use of Telephone: Able to make and answer calls
- Patient Overall Status: Serious progressive conditions



CMS Activities to Update Models

- Reviewed model risk adjustment factor (covariate) definitions to identify those not supported by OASIS-D
- Refined additional risk adjustment factors as needed, based on statistical, clinical and other input
- Recalibrated risk adjustment model parameters using revised risk factors
- Conducted clinical and technical reviews to retain risk adjustment factors that were statistically and clinically meaningful
- Tested new risk adjustment model performance against current models



Risk Factors: Old Model vs. New Model

 In general, there are more risk factors used for each outcome under the new model, with the exception of the Surgical Wound Status outcome, which has 18 less risk factors under the new model

Outcome	Old Model	New Model	Change (+/-)	
Ambulation	102	122	1 20	
Bathing	114	122	▲ 8	
Bed Transferring	99	116	17	
Pain	69	116	1 47	
Dyspnea	83	106	1 23	
Oral Meds	119	121	1 2	
Surgical Wounds	78	60	- 18	

Top and bottom risk factor covariates in the OASIS-D risk model



Top/Bottom Risk Factors: Ambulation

- The SOC/ROC rating for Ambulation and Surgical Wound Status are still the top risk factors for Ambulation
- New risk factors in the top-10 are: Pain and Anxiety

		10 Covariates ent MORE likely to improve		Bottom 10 Covariates (making the patient LESS likely to improve)										
	Improvement in Ambulation/Locomotion													
Risk Factor #	Risk Factor	Covariate Name	Probability	Risk Factor #	Risk Factor	Covariate Name	Probability							
29	Ambulation	AMB3	90.6%	1	Age	AGE_95PLUS	35.0%							
29	Ambulation	AMB456	81.9%	14	Urinary Status	URINCONT_CATH	36.6%							
12	Surgical Wound	SRG_WND_OBS_NOHEAL	62.7%	25	Bathing	BATH6	37.3%							
29	Ambulation	AMB2	60.3%	4	SOC/ROC and Admission Source	SOC_COMM	38.5%							
12	Surgical Wound	SRG_WND_OBS_EPI	57.1%	1	Age	AGE_90_94	39.0%							
12	Surgical Wound	SRG WND OBS GRAN	56.8%	10	Pressure Ulcers	PU_STG2PLUS_UNSTG	39.3%							
26	Toilet Transferring	TLTTRN2	56.8%	4	SOC/ROC and Admission Source	ROC	39.7%							
9	Pain	PAIN4	56.7%	28	Transferring	TRNFR1	41.0%							
26	Toilet Transferring	TLTTRN1	56.6%	11	Stasis Ulcer	STAS_ULCR_OBS_2PLUS	41.4%							
18	Anxiety	ANX3	56.2%	28	Transferring	TRNFR345	41.7%							

Ambulation SOC/ROC Rating Trends

 The % of episodes rated a "2" for Ambulation at SOC/ROC has decreased consistently over time, while the % of episodes rated a "3" has increased



Top/Bottom Risk Factors: Bathing

- The SOC/ROC rating for Bathing still comprises the top 5 risk factors for the Bathing outcome
- New risk factors in the top-10 are: Surgical Would Status, Toilet Transferring and Pain

Top 10 Covariates
(making the patient MORE likely to improve

Bottom 10 Covariates (making the patient LESS likely to improve)

Risk	Risk Factor	Covariate Name	Probability	Risk	Risk Factor	Covariate Name	Probability						
Factor #				Factor #									
25	Bathing	BATH6	95.4%	29	Ambulation	AMB456	21.0%						
25	Bathing	BATH5	94.3%	1	Age	AGE_95PLUS	34.4%						
25	Bathing	BATH4	91.8%	30	Feeding or Eating	EAT345	36.1%						
25	Bathing	BATH3	86.9%	29	Ambulation	AMB2	37.4%						
25	Bathing	BATH2	76.8%	14	Urinary Status	URINCONT_CATH	38.2%						
12	Surgical Wound	SRG_WND_OBS_NOHEAL	62.1%	1	Age	AGE_90_94	39.0%						
34	Therapy	THER_HIGH_GT13	58.6%	17	Confusion	CONF4	39.2%						
26	Toilet Transferring	TLTTRN2	57.9%	4	SOC/ROC and Admission Source	SOC_COMM	39.8%						
9	Pain	PAIN4	57.7%	29	Ambulation	AMB3	39.9%						
12	Surgical Wound	SRG_WND_OBS_GRAN	57.6%	11	Stasis Ulcer	STAS_ULCR_OBS_2PLUS	40.0%						

Improvement in Bathing

Top/Bottom Risk Factors: Bed Transferring

- The SOC/ROC rating still comprises the top risk factors for the Bed Transferring outcome, followed by Surgical Wound Status and Therapy Need
- New risk factors in the top-10 are: any DX within the range Z00 to Z99, Anxiety, and Disruptive Behavior Frequency

<u>Top</u> 10 Covariates (making the patient MORE likely to improve)

Bottom 10 Covariates (making the patient LESS likely to improve)

Risk	Risk Factor	Covariate Name	Probability	Risk	Risk Factor	Covariate Name	Probability
Factor #				Factor #			
28	Transferring	TRNFR345	95.6%	29	Ambulation	AMB456	13.5%
28	Transferring	TRNFR2	91.9%	29	Ambulation	AMB2	27.7%
12	Surgical Wound	SRG_WND_OBS_NOHEAL	61.5%	29	Ambulation	AMB3	31.9%
34	Therapy	THER_HIGH_GT13	58.3%	1	Age	AGE_95PLUS	36.4%
34	Therapy	THER_MED_5_13	57.9%	29	Ambulation	AMB1	36.6%
12	Surgical Wound	SRG_WND_OBS_EPI	56.0%	14	Urinary Status	URINCONT_CATH	36.8%
12	Surgical Wound	SRG_WND_OBS_GRAN	56.0%	25	Bathing	BATH6	38.5%
35	Home Care Condition Codes	HC_DX_HLTH_FACTORS	55.8%	4	SOC/ROC and Admission Source	SOC_COMM	38.8%
18	Anxiety	ANX3	55.7%	30	Feeding or Eating	EAT345	39.4%
21	Disruptive Behavior Frequency	BEHPFR5	54.8%	10	Pressure Ulcers	PU_STG2PLUS_UNSTG	40.0%

Improvement in Bed Transferring

Top/Bottom Risk Factors: Pain

- The SOC/ROC rating still comprises the top risk factors for the Pain outcome
- The seven risk factors below the 3 pain risk factors are all new to the top-10

<u>Top</u> 10 Covariates (making the patient MORE likely to improve)

Bottom 10 Covariates (making the patient LESS likely to improve)

Risk	Risk Factor	Covariate Name	Probability	Risk	Risk Factor	Covariate Name	Probability
Factor #				Factor #			
9	Pain	PAIN4	84.3%	29	Ambulation	AMB456	37.1%
9	Pain	PAIN3	68.2%	29	Ambulation	AMB2	42.6%
9	Pain	PAIN2	67.7%	19	Depression Screening	PHQ2_SCOR_3PLUS	42.8%
12	Surgical Wound	SRG_WND_OBS_NOHEAL	56.4%	11	Stasis Ulcer	STAS_ULCR_OBS_2PLUS	43.6%
21	Disruptive Behavior Frequency	BEHPFR3	55.9%	4	SOC/ROC and Admission Source	ROC	43.8%
26	Toilet Transferring	TLTTRN2	55.5%	25	Bathing	BATH6	44.3%
21	Disruptive Behavior Frequency	BEHPFR12	55.3%	1	Age	AGE_55_59	44.6%
26	Toilet Transferring	TLTTRN34	54.9%	29	Ambulation	AMB3	44.7%
31	Oral Medication Management	ORMED2	54.4%	10	Pressure Ulcers	PU_STG2PLUS_UNSTG	45.2%
1	Age	AGE_85_89	54.3%	3	Payment source	PAY_MCAID_ONLY	45.3%

Improvement in Pain Interfering with Activity

Top/Bottom Risk Factors: Dyspnea

- The SOC/ROC rating still comprises the top risk factors for the Dyspnea outcome
- New risk factors in the top-10 are: any DX within the range Z00 to Z99, Disruptive Behavior Frequency, and ROH = None

	Top 10 Co (making the patient Mo		Bottom 10 Covariates (making the patient LESS likely to improve)										
	Improvement in Dyspnea												
Risk Factor #	Risk Factor	Covariate Name	Probability		Risk Factor #	Risk Factor	Covariate Name	Probability					
13	Dyspnea	DYSP34	82.2%		35	Home Care Condition Codes	HC_DX_RESPIRATORY	40.9%					
13	Dyspnea	DYSP2	72.4%		4	SOC/ROC and Admission Source	ROC	41.1%					
12	Surgical Wound	SRG_WND_OBS_NOHEAL	60.1%		4	SOC/ROC and Admission Source	SOC_COMM	41.4%					
34	Therapy	THER_MED_5_13	58.6%		29	Ambulation	AMB456	41.7%					
34	Therapy	THER_HIGH_GT13	57.2%		35	Home Care Condition Codes	HC_DX_NEOPLASM	43.6%					
35	Home Care Condition Codes	HC_DX_HLTH_FACTORS	56.4%		14	Urinary Status	URINCONT_CATH	43.9%					
12	Surgical Wound	SRG_WND_OBS_EPI	55.4%		1	Age	AGE_95PLUS	43.9%					
21	Disruptive Behavior Frequency	BEHPFR3	54.7%		11	Stasis Ulcer	STAS_ULCR_OBS_2PLUS	44.6%					
21	Disruptive Behavior Frequency	BEHPFR5	54.6%		19	Depression Screening	PHQ2_SCOR_3PLUS	45.4%					
7	Risk of Hospitalization	RISK_NONE	54.5%		14	Urinary Status	URINCONT_INCONT	45.5%					

Top/Bottom Risk Factors: Oral Meds

- The SOC/ROC rating still comprises the top risk factors for the Oral Meds outcome
- New risk factors in the top-10 are: Pain and Living Arrangement (Lives Alone)

Top 10 Covariates	
(making the patient MORE likely to improve	e)

Bottom 10 Covariates (making the patient LESS likely to improve)

Risk Factor #	Risk Factor	Covariate Name	Probability	Risk Factor #	Risk Factor	Covariate Name	Probability
31	Oral Medication Management	ORMED3	78.2%	8	Living Arrangement	LIV CONGREGATE	26.8%
31	Oral Medication Management	ORMED2	75.5%	1	Age	AGE_95PLUS	29.4%
12	Surgical Wound	SRG_WND_OBS_NOHEAL	63.0%	17	Confusion	CONF4	31.1%
9	Pain	PAIN4	62.9%	30	Feeding or Eating	EAT345	33.6%
18	Anxiety	ANX3	58.3%	1	Age	AGE_90_94	33.8%
9	Pain	PAIN3	58.1%	16	Cognitive function	COGN34	34.7%
8	Living Arrangement	LIV_ALONE	57.5%	1	Age	AGE 85 89	37.5%
12	Surgical Wound	SRG_WND_OBS_EPI	57.3%	25	Bathing	BATH6	38.2%
13	Dyspnea	DYSP34	56.9%	17	Confusion	CONF23	38.3%
12	Surgical Wound	SRG_WND_OBS_GRAN	56.6%	29	Ambulation	AMB456	38.6%

Improvement in Management of Oral Medications

Top/Bottom Risk Factors: Surgical Wounds

- Therapy Need still comprises two of the top 3 risk factors for the Surgical Wound Status outcome, but the therapy buckets have been condensed and simplified
- The eight other risk factors are all new to the top-10

	<u>Top</u> 10 Covariates (making the patient MORE likely to improve) Improvement in Status				Bottom 10 Covariates (making the patient LESS likely to improve)				
Risk Factor #	Risk Factor	Covariate Name	Probability	Risk Factor #	Risk Factor	Covariate Name	Probability		
34	Therapy	THER_HIGH_GT13	62.7%	4	SOC/ROC and Admission Source	SOC_COMM	41.2%		
1	Age	AGE_95PLUS	58.5%	12	Surgical Wound	SRG_WND_OBS_GRAN	42.2%		
34	Therapy	THER_MED_5_13	57.8%	29	Ambulation	AMB456	43.7%		
1	Age	AGE_90_94	56.3%	35	Home Care Condition Codes	HC_DX_GEN_URINARY	44.0%		
1	Age	AGE_85_89	56.2%	3	Payment source	PAY_OTHER_COMBO	45.0%		
35	Home Care Condition Codes	HC_DX_HLTH_FACTORS	56.1%	35	Home Care Condition Codes	HC_DX_NEOPLASM	45.1%		
8	Living Arrangement	LIV_CONGREGATE	55.6%	6	IV Therapies	IVTHER_ANY	45.3%		
22	Grooming	GROOM2	55.0%	15	Bowel Incontinence	BWL_FR345	45.6%		
27	Toilet Hygiene	TLTHYG3	54.8%	15	Bowel Incontinence	BWL_OSTOMY	45.6%		
27	Toilet Hygiene	TLTHYG2	54.6%	35	Home Care Condition Codes	HC_DX_SKIN	45.7%		

Impact analysis and insights on the OASIS-D risk model



Patient Predicted Analysis

- To demonstrate the effect of the new risk model, the comparison below looks the average patient predicted rates for SOC/ROC assessments from 2018 vs. SOC/ROC assessments from 1/2019 to 9/2019
- As noted in the last column, the average patient predicted rates have gone up for all 7 outcomes

Outcome	1/2018 - 12/2018	1/2019 - 9/2019	Change (+/-)
Ambulation	72.7%	78.0%	r 5.3%
Bathing	72.1%	78.0%	r 5.9%
Bed Transferring	74.4%	80.5%	r 6.1%
Pain	69.5%	77.1%	① 7.6%
Dyspnea	70.4%	77.0%	6.6%
Oral Meds	90.2%	90.7%	0.5%
Surgical Wounds	66.0%	70.6%	4.6%



National Predicted Scores under OASIS-D

Remember the calculation:

Agency(risk adjusted) = Agency(observed) +(National(predicted) – Agency(predicted))

- SHP calculates the <u>Agency's</u> observed and predicted scores based on the covariate logic provided by CMS
- Due to the fact that the <u>National Predicted</u> rates for each outcome are not published by CMS, they must be calculated each quarter by SHP (for 12 months ending)
- SHP calculates a National Predicted rate from the SHP national database, and incorporates the most-recent publicly reported Home Health Compare data from CMS in order to help adjust for any differences between the SHP and CMS national benchmarks



National Predicted Scores under OASIS-D

- Our hope is that CMS will be posting risk-adjusted scores based on the new OASIS-D risk model in early 2020, which would include outcome data from April 2018 – March 2019
- Once available, SHP will use the OASIS-D portion of the data to calibrate 12-month SHP-only National Predicted rates for each publication period that includes outcomes in 2019
- Due to this gap in data, and in order to avoid multiple changes to your risk-adjusted scores, we chose to wait until 2020 to make changes to the national predicted component of the risk-adjustment calculation
- Keep in mind that trends including both OASIS-C2 and OASIS-D data may show a decline in risk adjusted scores starting in early 2019 that will be adjusted once a National Predicted rate that includes OASIS-D can be calculated.



National Predicted Scores under OASIS-D

- Tracking your <u>observed</u> scores trends will be important
- Comparing your <u>percentile rank</u> for both observed and risk adjusted scores will reflect performance against your peers
- Reminder: Risk adjustment is calculated the same way for all providers

Clinical Executive Advantage Standard: 05/01/2018 - 04/30/2018, Offset: 02/01/2018 - 01/31/2018									
STRATEOIC HEALTHCARE PROGRAMS Superior Healthcare								F	eport Date: 5/12/201
	1								
A Outcome: Ambulation		Impro	oved		Declined			Your % Ranking	
☆ Outcome: Ambulation	Eligible	#	%	Risk Adjusted	Eligible	#	%	Observed	Risk Adjusted
Enterprise	7,975	6,368	79.8%	68.9%	8,534	82	1.0%	88%	77%
SHP National Database			67.6%				2.4%		
Superior Home Care of Ventura	1,304	1,103	84.6%	70.0%	1,390	12	0.9%	95%	81%
Enterprise (CA)	1304	1103	84.6%	70.0%	1390	12	0.9%	95%	81%
SHP Database (CA)			71.3%				1.8%		
Superior Home Care of Scottsdale	43	31	72.1%	62.2%	49	2	4.1%	70%	43%
Superior Home Care of Phoenix	3,034	2,312	76.2%	64.4%	3,237	34	1.1%	81%	54%
Superior Home Care of Flagstaff	282	250	88.7%	75.7%	283	1	0.4%	98%	94%
Superior Home Care of Gilbert	829	650	78.4%	72.3%	884	6	0.7%	85%	89%
Superior Home Care of Mesa	1,968	1,600	81.3%	72.3%	2,110	23	1.1%	90%	89%
Enterprise (AZ)	6156	4843	78.7%	68.5%	6563	66	1.0%	86%	76%
SHP Database (AZ)			71.8%				1.9%		



Social Determinants of Health Framework





Social Determinants of Health Framework

- Additional Social Risk Factors are being proposed as new questions on OASIS-E
- A1250 Transportation

Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living?

• B1300 - Health Literacy

How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?

D0700 – Social Isolation

How often do you fell lonely or isolated from those around you?

How should you use this information?



OASIS Accuracy

OASIS accuracy is key to financial success

Outcomes can only improve when SOC assessment accurately reflects patient frailty and disability

Enhance OASIS education

Repeat education at specified intervals Validate knowledge received and retained Utilize OASIS Q & As

	Home Health Patient Tracking Sheet
	CMS Certification Number:
(M0014)	Branch State:
	Branch ID Number:
(M0018)	National Provider Identifier (NPI) for the attending physician who has signed the plan of care:
	UK – Unknown or Not Available
(M0020)	Patient ID Number:
M0030)	Start of Care Date:
	Resumption of Care Date: / / / NA - Not Applicable
	Patient Name:
(First)	
	Patient State of Residence:
(M0060)	Patient ZIP Code:
(M0063)	Medicare Number: NA - No Medicare
(M0064)	Social Security Number:
(M0065)	Medicaid Number:
(M0066)	Birth Date:
(M0069)	Gender
Enter Co	ode 1 Male 2 Female
(M0140)	2 - Asian
Centers f	for Medicare & Medicaid Services OASIS-C2 Item Set-Effective 1/1/17 Page 1 of 3



OASIS Scrubbing

- Have OASIS review staff and clinicians review and resolve OASIS scrubbing alerts
- Track and monitor alert utilization
- Look at Outcome alerts to proactively identify improvement opportunities and verify OASIS accuracy

Assessment: 09/25/2015 (04) F Patient: Johnson, John Patient ID: ID123456 Age: 69 (1/1/1950)	Clinician: Case Mgr: Team:	SMITH, JANE SMITH, JANE GREEN	✔ ಿ 🖹 ProviderID: 99999
Telehealth? No Control In Alert Type: Outcome 440 Ambulation Status Unchanged: Patient i	01	DOCTOR, JOHN	SHP#: 1234567
Relevant Measures	Previous Assessment: (01) SOC 08/01/2015 Clinician		t Assessment: (04) Recert 2015 Clinician:
M1860 Ambulation	3 - Able to walk only with supervision/assistance at all tim		le to walk only with vision/assistance at all times



OASIS Potential Alerts

- It is important to resolve both the SHP critical <u>and</u> potential OASIS alerts regularly for all patients
- The SHP resolution rate for potential alerts is typically less often, but these inconsistencies can impact your risk adjustments
- Certain OASIS items can affect the predicted improvement rates for your patients depending on how scored and influence the risk adjustments positively or negatively
- Managing alerts for all Medicare and Medicaid patients will help ensure the accuracy is applied consistently in the risk models



OASIS Potential Alerts

• The examples below demonstrate just a few of the SHP "Potential" OASIS alerts that could impact your risk-adjustment

18 🗹 🛆 🖸 Unaddressed 🔽						
M2102g indicates no assistance needed with advocacy or facilitation, but neuro/emotional/behavioral or telephone measure(s)						
Current Assessment						
g. Advocacy/facilitation: 0 - No assistance needed						
2 - Requires assistance/direction or low stimulus environment						
🖍 🛆 🔽 Unaddressed 🔽						
re disruptive or dangerous to self or others, but M1740 indicates behavior may be						
Current Assessment						
0 - Never						
Yes						
Yes						
138 🗹 🛆 🖸 Unaddressed 🔽						
GG0170C Mobility indicates SOC/ROC Performance - Patient Dependent, but M1810 Dressing Upper, M1820 Dressing Lower, M1830 Bathing, or M1860 Ambulation indicate independence.						
Current Assessment						
03 - Parital/moderate assistance						
1 - Able to dress upper body if clothing is placed						
2 - Someone must assist						
2 - Able to bathe self with intermittent assistance						

3 - Able to walk only with supervision/assistance at all times



M1860 Ambulation

The Takeaway

The \$1,000,000 question: How do I "fix" my risk adjustment?

Answer: You don't! Your risk-adjustment isn't "right" or "wrong", it simply uses your OASIS answers to determine how likely your patients are to improve.

Instead, focus on OASIS accuracy and do the best that you can to ensure that your assessments accurately represent the clinical condition of your patients.



Questions?



Thank You for Attending!

Chris Attaya

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Zeb Clayton

VP of Client Services zclayton@shpdata.com

Demystifying Home Health Risk Adjustments (OASIS D Update)

Winning Wednesday Webinar Series

