

OVERVIEW

IROMS MEASURE DESCRIPTIONS

This paper describes the use Keet Outcomes to provision, score, and report the patient reported outcomes measurement system as developed by Intermountain Healthcare in support of the Merit Based Incentive Payment System.

BACKGROUND

The Intermountain ROMS® outcomes system was developed and tested by clinical leaders and data scientists at Intermountain Healthcare; including Stephen Hunter, DPT and Gerard Brennan, PhD, PT; over the better part of two decades.

More recently, ROMS has been approved to meet the Quality Measurement component of the Merit Based Incentive Payment System (MIPS). Physical therapists, occupational therapists, and speech language pathologists are eligible to participate in MIPS for the first time in 2019.

Keet Health has adopted ROMS as part of a strategy to support MIPS for our clients, called Keet Outcomes. Keet Outcomes automates ROMS measurement provisioning, scoring and submission to CMS for MIPS.

WHY KEET OUTCOMES?

Using the Keet Outcomes to automatically provision, score, and submit the patient reported outcomes data as developed by ROMS has several advantages:

- ❑ **Efficiency:** Using the automated Keet patient engagement system to provision the appropriate patient reported outcomes surveys and schedule repeat surveys eliminates the need to manually provision the surveys in the office and track survey completion.
- ❑ **Clinical Utility:** The patient reported outcomes surveys utilized in ROMS have proven to be a reliable indicator of functional progress.
- ❑ **Healthcare Adoption:** The ROMS surveys are evidence based, non-proprietary, and utilized across a wide variety of health care providers. This allows PTs and OTs to have their outcomes data compared across the entire spectrum of providers for MIPS.
- ❑ **No EMR Dependence:** Since the ROMS survey data is provisioned and scored with the mobile patient engagement system developed by Keet Health, it can be deployed regardless of EMR used by your organization.
- ❑ **Higher Valued MIPS Scoring:** Outcomes measurements have higher weighting for MIPS scoring purposes than process-based measures.

ROMS MEASURES

There are ten ROMS measures used in Keet Outcomes. The set is comprised of five widely-used patient reported outcomes surveys paired with a numerical pain rating scale (NPRS) for each measure. Each measurement calculates a Failure to Progress (FTP) based on a proportion of patients failing to achieve a Minimal Clinically Important Difference (MCID) in the score. The MCID has been established for each measure based on clinical research.

In addition, the measurements are risk adjusted by the baseline outcomes score, baseline NPRS score, age, sex, payer type and symptom duration based on the time from surgery or injury to the baseline visit.

There are conditions for which patients may be excluded from the sample. Exclusion reasons include:

- Patients that do not complete 2 or more surveys
- Patients that are unable to read and write English or have a mental impairment that makes them unable to understand the survey
- Patients that, in the therapist's clinical judgment, have an extremely complex condition or are otherwise unlikely to make progress.

OUTCOME SURVEYS

The MCID for each survey is shown below. A failure to progress (FTP) rate is calculated for each measure that does not improve by the MCID:

SURVEY GROUP	IDENTIFIER	DESCRIPTION	SCORING	HIGHER SCORE INDICATES	MCID
Knee Injuries and Surgery	IROMS 11	Knee Outcome Survey (KOS)	0-100%	Better function	10 points
	IROMS 12	Numeric Pain Rating Scale (NPRS) for the Knee	0-10	Worse pain	2 points
Other Lower Extremity Injuries and Surgeries	IROMS 13	Lower Extremity Functional Scale	0-80	Better function	9 points
	IROMS 14	NPRS for the Lower Extremity	0-10	Worse pain	2 points
Neck Pain	IROMS 15	Neck Disability Index (NDI)	0-100%	Worse function	10 points
	IROMS 16	NPRS for Neck Pain	0-10	Worse pain	2 points
Low Back Pain	IROMS 17	Modified Low Back Pain Disability Questionnaire (MDQ)	0-100%	Worse function	6 points
	IROMS 18	NPRS for Low Back Pain	0-10	Worse pain	2 points
Upper Extremity	IROMS 19	Quick Disability or Arm, Shoulder and Hand Score (QDASH)	0-100%	Worse function	8 points
	IROMS 20	NPRS for Upper Extremity Injuries	0-10	Worse pain	2 points

CMS will establish benchmarks by comparing the FTP rate across all providers submitting data for the above outcomes measures.

SCORE CONVERSION BY OUTCOME MEASURE

DASH				NDI				ODI			
RAW	%	RAW	%	RAW	%	RAW	%	RAW	%	RAW	%
11	0	34	52	0	0	26	52	0	0	26	52
12	2	35	55	1	2	27	54	1	2	27	54
13	5	36	57	2	4	28	56	2	4	28	56
14	7	37	59	3	6	29	58	3	6	29	58
15	9	38	61	4	8	30	60	4	8	30	60
16	11	39	64	5	10	31	62	5	10	31	62
17	14	40	66	6	12	32	64	6	12	32	64
18	16	41	68	7	14	33	66	7	14	33	66
19	18	42	70	8	16	34	68	8	16	34	68
20	20	43	73	9	18	35	70	9	18	35	70
21	23	44	75	10	20	36	72	10	20	36	72
22	25	45	77	11	22	37	74	11	22	37	74
23	27	46	80	12	24	38	76	12	24	38	76
24	30	47	82	13	26	39	78	13	26	39	78
25	32	48	84	14	28	40	80	14	28	40	80
26	34	49	86	15	30	41	82	15	30	41	82
27	36	50	89	16	32	42	84	16	32	42	84
28	39	51	91	17	34	43	86	17	34	43	86
29	41	52	93	18	36	44	88	18	36	44	88
30	43	53	95	19	38	45	90	19	38	45	90
31	45	54	98	20	40	46	92	20	40	46	92
32	48	55	100	21	42	47	94	21	42	47	94
33	50			22	44	48	96	22	44	48	96
				23	46	49	98	23	46	49	98
				24	48	50	100	24	48	50	100
				25	50			25	50		

SCORE CONVERSION BY OUTCOME MEASURE

KOS				LEFS*			
RAW	%	RAW	%	RAW	%	RAW	%
0	0	36	51	0	-	41	-
1	1	37	53	1	-	42	-
2	3	38	54	2	-	43	-
3	4	39	56	3	-	44	-
4	6	40	57	4	-	45	-
5	7	41	59	5	-	46	-
6	9	42	60	6	-	47	-
7	10	43	61	7	-	48	-
8	11	44	63	8	-	49	-
9	13	45	64	9	-	50	-
10	14	46	66	10	-	51	-
11	16	47	67	11	-	52	-
12	17	48	69	12	-	53	-
13	19	49	70	13	-	54	-
14	20	50	71	14	-	55	-
15	21	51	73	15	-	56	-
16	23	52	74	16	-	57	-
17	24	53	76	17	-	58	-
18	26	54	77	18	-	59	-
19	27	55	79	19	-	60	-
20	29	56	80	20	-	61	-
21	30	57	81	21	-	62	-
22	31	58	83	22	-	63	-
23	33	59	84	23	-	64	-
24	34	60	86	24	-	65	-
25	36	61	87	25	-	66	-
26	37	62	89	26	-	67	-
27	39	63	90	27	-	68	-
28	40	64	91	28	-	69	-
29	41	65	93	29	-	70	-
30	43	66	94	30	-	71	-
31	44	67	96	31	-	72	-
32	46	68	97	32	-	73	-
33	47	69	99	33	-	74	-
34	49	70	100	34	-	75	-
35	50			35	-	76	-
				36	-	77	-
				37	-	78	-
				38	-	79	-
				39	-	80	-
				40	-		

*LEFS is only calculated with a raw score