

# APPENDIX

## Detailed Medical Group and Clinic Level Tables

### ORTHOPEDIC SURGERY MEASURES

2018 MINNESOTA HEALTH CARE  
QUALITY REPORT

RELEASED FEBRUARY 2019

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# TABLE OF CONTENTS

## **2 Measures by Medical Group: Spine Surgery**

- 2** Lumbar Fusion: Patients Assessed Functional Status Before AND After Surgery Using Oswestry Disability Index (ODI)
- 3** Lumbar Fusion: Patients Assessed Quality Of Life Before AND After Surgery Using Promis Global Health 10 Tool
- 4** Lumbar Fusion: Patients Receiving Visual Analog Scale (VAS) Tool to Assess Back Pain Before AND After Surgery
- 5** Lumbar Fusion: Patients Receiving Visual Analog Scale (VAS) Tool to Assess Leg Pain Before AND After Surgery
- 6** Lumbar Fusion: Average Change in Patient Reported Functional Status at One Year After Surgery
- 7** Lumbar Fusion: Average Change in Patient Reported Quality of Life (Physical Health Status) at One Year After Surgery
- 8** Lumbar Fusion: Average Change in Patient Reported Quality of Life (Mental Health Status) at One Year After Surgery
- 9** Lumbar Fusion: Average Change in Patient Reported Back Pain at One Year After Surgery
- 10** Lumbar Fusion: Average Change in Patient Reported Leg Pain at One Year After Surgery

## **11 Measures by Medical Group: Total Knee Replacement**

- 11** Total Knee Replacement: Patients Assessed Functional Status Before AND After Surgery Using Oxford Knee Scale (OKS) Tool
- 12** Total Knee Replacement: Patients Assessed Quality of Life Before AND After Surgery Using Promis Global Health 10 Tool
- 13** Total Knee Replacement: Average Change in Patient Reported Functional Status at One Year After Surgery
- 14** Total Knee Replacement: Average Change in Patient Reported Quality of Life (Physical Health Status) at One Year After Surgery
- 15** Total Knee Replacement: Average Change in Patient Reported Quality of Life (Mental Health Status) at One Year After Surgery

# MEASURES BY MEDICAL GROUP: SPINE SURGERY

## Lumbar Fusion: Patients Assessed Functional Status Before AND After Surgery Using Oswestry Disability Index (ODI)

MEDICAL GROUP	Performance	Patients	Rate	95% Lower Limit	95% Upper Limit
Essentia Health	●	242	44.21%	38.10%	50.51%
Fairview Health Services	▼	162	16.67%	11.71%	23.16%
HealthPartners Clinics	▲	173	50.29%	42.91%	57.65%
KIM Neurosurgery PLLC	▲	51	60.78%	47.09%	72.97%
Mayo Clinic	▼	426	20.89%	17.30%	25.00%
Park Nicollet Health Services	▲	106	53.77%	44.32%	62.97%
Sanford Health - Fargo Region	▼	276	13.04%	9.57%	17.53%
The Orthopaedic & Fracture Clinic	●	63	46.03%	34.31%	58.21%
Twin Cities Spine Center	▲	956	62.45%	59.33%	65.46%
University of Minnesota Physicians	▼	57	28.07%	18.08%	40.83%

# Lumbar Fusion: Patients Assessed Quality Of Life Before AND After Surgery Using Promis Global Health 10 Tool

MEDICAL GROUP	Performance	Patients	Rate	95% Lower Limit	95% Upper Limit
Essentia Health	▲	242	41.32%	35.30%	47.61%
Fairview Health Services	▼	162	0.00%	0.00%	2.32%
HealthPartners Clinics	●	173	26.01%	20.05%	33.02%
KIM Neurosurgery PLLC	▲	51	58.82%	45.17%	71.25%
Mayo Clinic	●	426	31.69%	27.45%	36.26%
Park Nicollet Health Services	▲	106	36.79%	28.22%	46.28%
Sanford Health - Fargo Region	▼	276	7.61%	5.03%	11.35%
The Orthopaedic & Fracture Clinic	▲	63	47.62%	35.78%	59.73%
Twin Cities Spine Center	▲	956	32.53%	29.64%	35.57%
University of Minnesota Physicians	●	57	26.32%	16.65%	38.98%

# Lumbar Fusion: Patients Receiving Visual Analog Scale (VAS) Tool to Assess Back Pain Before AND After Surgery

MEDICAL GROUP	Performance	Patients	Rate	95% Lower Limit	95% Upper Limit
Essentia Health	▲	242	40.91%	34.90%	47.20%
Fairview Health Services	▼	162	0.00%	0.00%	2.32%
HealthPartners Clinics	▲	173	42.77%	35.64%	50.23%
KIM Neurosurgery PLLC	▲	51	62.75%	49.03%	74.68%
Mayo Clinic	▼	426	11.50%	8.81%	14.88%
Park Nicollet Health Services	▲	106	50.94%	41.56%	60.26%
Sanford Health - Fargo Region	▼	276	0.00%	0.00%	1.37%
The Orthopaedic & Fracture Clinic	▲	63	47.62%	35.78%	59.73%
Twin Cities Spine Center	▲	956	57.95%	54.79%	61.04%
University of Minnesota Physicians	▼	57	0.00%	0.00%	6.31%

# Lumbar Fusion: Patients Receiving Visual Analog Scale (VAS) Tool to Assess Leg Pain Before AND After Surgery

MEDICAL GROUP	Performance	Patients	Rate	95% Lower Limit	95% Upper Limit
Essentia Health	▲	242	40.91%	34.90%	47.20%
Fairview Health Services	▼	162	0.00%	0.00%	2.32%
HealthPartners Clinics	▲	173	42.77%	35.64%	50.23%
KIM Neurosurgery PLLC	▲	51	62.75%	49.03%	74.68%
Mayo Clinic	▼	426	11.50%	8.81%	14.88%
Park Nicollet Health Services	▲	106	52.83%	43.40%	62.07%
Sanford Health - Fargo Region	▼	276	0.00%	0.00%	1.37%
The Orthopaedic & Fracture Clinic	▲	63	47.62%	35.78%	59.73%
Twin Cities Spine Center	▲	956	56.59%	53.43%	59.70%
University of Minnesota Physicians	▼	57	0.00%	0.00%	6.31%

# Lumbar Fusion: Average Change in Patient Reported Functional Status at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Actual	Expected	Actual / Expected Ratio
Essentia Health	●	107	24.8	22.1	1.1
HealthPartners Clinics	●	87	22.6	21.2	1.1
KIM Neurosurgery PLLC	●	31	25.7	19.8	1.3
Mayo Clinic	▼	89	14.5	18.5	0.8
Park Nicollet Health Services	●	57	20.9	19.1	1.1
Sanford Health - Fargo Region	▲	36	24.1	18.4	1.3
Twin Cities Spine Center	●	597	19.2	20.1	1.0

# Lumbar Fusion: Average Change in Patient Reported Quality of Life (Physical Health Status) at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Actual	Expected	Actual / Expected Ratio
Essentia Health	●	100	8.64	7.70	1.12
HealthPartners Clinics	●	45	8.22	6.73	1.22
KIM Neurosurgery PLLC	▲	30	11.73	7.24	1.62
Mayo Clinic	●	135	5.39	6.52	0.83
Park Nicollet Health Services	●	39	6.91	6.97	0.99
The Orthopaedic & Fracture Clinic	●	30	6.30	6.94	0.91
Twin Cities Spine Center	●	311	6.37	6.93	0.92



# Lumbar Fusion: Average Change in Patient Reported Quality of Life (Mental Health Status) at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Actual	Expected	Actual / Expected Ratio
Essentia Health	●	100	4.74	4.07	1.17
HealthPartners Clinics	●	45	4.70	2.92	1.61
KIM Neurosurgery PLLC	▲	30	6.11	2.98	2.05
Mayo Clinic	●	135	1.47	2.58	0.57
Park Nicollet Health Services	●	39	3.35	2.88	1.16
The Orthopaedic & Fracture Clinic	●	30	2.57	2.75	0.94
Twin Cities Spine Center	●	311	2.46	2.83	0.87

# Lumbar Fusion: Average Change in Patient Reported Back Pain at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Average Change	95% Lower Limit	95% Upper Limit
Essentia Health	●	99	3.83	3.17	4.49
HealthPartners Clinics	●	74	2.76	2.15	3.38
KIM Neurosurgery PLLC	●	32	3.83	2.47	5.18
Mayo Clinic	●	49	2.45	1.57	3.33
Park Nicollet Health Services	●	54	3.07	2.20	3.95
The Orthopaedic & Fracture Clinic	●	30	3.57	2.45	4.68
Twin Cities Spine Center	●	554	3.35	3.10	3.61

# Lumbar Fusion: Average Change in Patient Reported Leg Pain at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Average Change	95% Lower Limit	95% Upper Limit
Essentia Health	●	99	3.89	3.10	4.69
HealthPartners Clinics	●	74	3.23	2.61	3.85
KIM Neurosurgery PLLC	●	32	3.73	2.43	5.04
Mayo Clinic	●	49	2.54	1.81	3.27
Park Nicollet Health Services	●	56	3.13	2.18	4.07
The Orthopaedic & Fracture Clinic	●	30	4.37	2.92	5.81
Twin Cities Spine Center	●	541	3.12	2.83	3.40

# MEASURES BY MEDICAL GROUP: TOTAL KNEE REPLACEMENT

## Total Knee Replacement: Patients Assessed Functional Status Before AND After Surgery Using Oxford Knee Scale (OKS) Tool

MEDICAL GROUP	Performance	Patients	Rate	95% Lower Limit	95% Upper Limit
Affiliated Community Medical Centers	▲	38	68.42%	52.54%	80.92%
Allina Health	▼	905	23.98%	21.31%	26.87%
Altru Health System	●	139	34.53%	27.14%	42.76%
Avera Medical Group	▲	110	46.36%	37.33%	55.65%
Bigfork Valley Hospital, Clinics & Communities	▼	39	2.56%	0.45%	13.18%
Community Memorial Hospital	▼	82	0.00%	0.00%	4.48%
Cuyuna Regional Medical Center	▼	183	0.00%	0.00%	2.06%
Essentia Health	▼	114	12.56%	10.56%	14.87%
Fairview Health Services	▲	253	45.45%	39.43%	51.61%
Grand Itasca Clinic	▲	59	71.19%	58.62%	81.16%
HealthPartners Clinics	▲	586	60.92%	56.91%	64.79%
Heartland Orthopedic Specialists	▲	395	41.77%	37.01%	46.69%
Hennepin County Medical Center (HCMC) Clinics	▼	101	1.98%	0.54%	6.93%
Hutchinson Health	●	133	31.58%	24.29%	39.90%
Lake Region Healthcare	●	144	33.33%	26.16%	41.38%
Little Falls Orthopedics	▲	216	66.67%	60.14%	72.61%
Mayo Clinic	▼	1,597	21.23%	19.29%	23.30%
Mayo Clinic Health System	▲	681	43.47%	39.79%	47.22%
Minneapolis Orthopaedics	▼	40	0.00%	0.00%	8.76%
Northern Orthopedics, Ltd.	▲	415	56.14%	51.34%	60.84%
Northfield Hospital + Clinics	●	147	27.89%	21.28%	35.63%
Olmsted Medical Center	▲	189	70.90%	64.06%	76.91%
Park Nicollet Health Services	▲	1,249	38.19%	35.54%	40.92%
RiverView Health	▼	38	0.00%	0.00%	9.18%
Riverwood Healthcare Center	▼	87	11.49%	6.36%	19.88%
Sanford Health - Fargo Region	▼	1,319	10.01%	8.50%	11.75%
St. Luke's Clinics	▼	183	1.09%	0.30%	3.90%
Summit Orthopedics	▼	1,438	8.62%	7.28%	10.19%
The Orthopaedic & Fracture Clinic	▲	489	49.49%	45.08%	53.91%
University of Minnesota Physicians	▼	252	8.33%	5.51%	12.40%
Winona Health Services	▼	32	3.13%	0.55%	15.74%



# Total Knee Replacement: Patients Assessed Quality of Life Before AND After Surgery Using Promis Global Health 10 Tool

Medical Group	Performance	Patients	Rate	95% Lower Limit	95% Upper Limit
Affiliated Community Medical Centers	▲	38	60.53%	44.72%	74.40%
Allina Health	▼	905	20.22%	17.73%	22.96%
Altru Health System	▲	139	34.53%	27.14%	42.76%
Avera Medical Group	▲	110	36.36%	27.98%	45.67%
Bigfork Valley Hospital, Clinics & Communities	▼	39	2.56%	0.45%	13.18%
Community Memorial Hospital	▲	82	26.83%	18.44%	37.30%
Cuyuna Regional Medical Center	▼	183	0.55%	0.10%	3.03%
Essentia Health	▼	908	11.34%	9.44%	13.57%
Fairview Health Services	▲	253	41.50%	35.60%	47.66%
Grand Itasca Clinic	●	59	20.34%	12.04%	32.27%
HealthPartners Clinics	▲	586	61.09%	57.08%	64.96%
Heartland Orthopedic Specialists	▲	395	37.72%	33.08%	42.60%
Hennepin County Medical Center (HCMC) Clinics	▼	101	1.98%	0.54%	6.93%
Hutchinson Health	●	133	30.08%	22.93%	38.34%
Lake Region Healthcare	▲	144	34.03%	26.79%	42.09%
Little Falls Orthopedics	▼	216	0.00%	0.00%	1.75%
Mayo Clinic	●	1,597	25.99%	23.89%	28.19%
Mayo Clinic Health System	▲	681	42.00%	38.35%	45.74%
Minneapolis Orthopaedics	▼	40	0.00%	0.00%	8.76%
Northern Orthopedics, Ltd.	▲	415	52.77%	47.96%	57.53%
Northfield Hospital + Clinics	●	147	28.57%	21.89%	36.35%
Olmsted Medical Center	▲	189	64.55%	57.50%	71.02%
Park Nicollet Health Services	▲	1,249	38.51%	35.85%	41.24%
RiverView Health	▼	38	0.00%	0.00%	9.18%
Riverwood Healthcare Center	▼	87	12.64%	7.21%	21.24%
Sanford Health - Fargo Region	▼	1,319	5.16%	4.09%	6.48%
St. Luke's Clinics	▼	183	1.64%	0.56%	4.71%
Summit Orthopedics	▼	1,438	0.00%	0.00%	0.27%
The Orthopaedic & Fracture Clinic	▲	489	45.40%	41.04%	49.83%
University of Minnesota Physicians	▼	252	9.52%	6.48%	13.78%
Winona Health Services	▼	32	3.13%	0.55%	15.74%

## Total Knee Replacement: Average Change in Patient Reported Functional Status at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Actual	Expected	Actual / Expected Ratio
Allina Health	▼	217	16.12	17.38	0.93
Altru Health System	●	48	18.73	18.07	1.04
Avera Medical Group	●	51	15.96	15.70	1.02
Essentia Health	●	114	16.67	17.58	0.95
Fairview Health Services	▼	115	15.73	17.70	0.89
Grand Itasca Clinic	●	42	15.69	15.96	0.98
HealthPartners Clinics	●	357	15.20	15.52	0.98
Heartland Orthopedic Specialists	▲	165	17.56	15.45	1.14
Hutchinson Health	●	42	11.81	14.50	0.81
Lake Region Healthcare	●	48	15.40	15.28	1.01
Little Falls Orthopedics	▼	144	14.69	16.70	0.88
Mayo Clinic	●	339	16.75	16.62	1.01
Mayo Clinic Health System	●	296	17.35	17.41	1.00
Northern Orthopedics, Ltd.	●	233	17.32	16.92	1.02
Northfield Hospital + Clinics	●	41	15.37	16.34	0.94
Olmsted Medical Center	▲	134	17.59	15.87	1.11
Park Nicollet Health Services	●	477	15.52	15.61	0.99
Sanford Health - Fargo Region	●	132	17.11	16.06	1.06
Summit Orthopedics	●	124	17.23	16.61	1.04
The Orthopaedic & Fracture Clinic	●	242	18.09	17.27	1.05

## Total Knee Replacement: Average Change in Patient Reported Quality of Life (Physical Health Status) at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Actual	Expected	Actual / Expected Ratio
Allina Health	▼	183	6.96	8.06	0.86
Altru Health System	▼	48	5.94	8.39	0.71
Avera Medical Group	▲	40	9.34	7.35	1.27
Essentia Health	●	103	8.96	7.81	1.15
Fairview Health Services	●	105	7.61	8.47	0.90
HealthPartners Clinics	●	358	7.88	7.54	1.04
Heartland Orthopedic Specialists	▲	149	9.33	7.36	1.27
Hutchinson Health	●	40	5.73	7.41	0.77
Lake Region Healthcare	●	49	6.40	6.81	0.94
Mayo Clinic	▼	415	5.90	7.27	0.81
Mayo Clinic Health System	▼	286	6.72	7.78	0.86
Northern Orthopedics, Ltd.	▼	219	6.41	8.25	0.78
Northfield Hospital + Clinics	●	42	7.49	7.43	1.01
Olmsted Medical Center	▲	122	9.05	7.38	1.23
Park Nicollet Health Services	▲	481	8.60	7.49	1.15
Sanford Health - Fargo Region	●	68	7.20	6.83	1.05
The Orthopaedic & Fracture Clinic	▲	222	9.73	7.70	1.26

## Total Knee Replacement: Average Change in Patient Reported Quality of Life (Mental Health Status) at One Year After Surgery

MEDICAL GROUP	Performance	Patients	Actual	Expected	Actual / Expected Ratio
Allina Health	●	183	1.04	1.63	0.64
Altru Health System	▼	48	1.75	3.56	0.49
Avera Medical Group	●	40	1.37	1.18	1.16
Essentia Health	▲	103	3.15	1.79	1.76
Fairview Health Services	●	105	2.32	2.13	1.09
HealthPartners Clinics	●	358	1.38	1.49	0.92
Heartland Orthopedic Specialists	▲	149	3.36	1.48	2.27
Hutchinson Health	●	40	1.83	1.92	0.96
Lake Region Healthcare	●	49	1.39	1.13	1.22
Mayo Clinic	▼	415	0.58	1.34	0.43
Mayo Clinic Health System	▼	286	0.82	1.74	0.47
Northern Orthopedics, Ltd.	▼	219	1.61	3.21	0.5
Northfield Hospital + Clinics	●	42	1.72	1.61	1.07
Olmsted Medical Center	●	122	0.96	1.17	0.82
Park Nicollet Health Services	▲	481	2.80	1.70	1.65
Sanford Health - Fargo Region	●	68	1.10	0.94	1.17
The Orthopaedic & Fracture Clinic	▲	222	2.55	1.55	1.65