

APPENDIX

Detailed Medical Group and Clinic Level Tables

ORTHOPEDIC SURGERY MEASURES

2018 MINNESOTA HEALTH CARE
QUALITY REPORT

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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 |