

Table 7: Ratio of All MRI to All CT Scans within 30 days of Evaluation for Atraumatic Seizure Among Eligible Children In Seven States – MAX Data

| State | Ratio Components | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------|--------------------|------|------|------|------|------|
| Colorado | Numerator (# MRI) | 139 | 149 | 136 | 172 | 244 |
| | Denominator (# CT) | 204 | 216 | 223 | 171 | 242 |
| | Ratio | 0.68 | 0.69 | 0.61 | 1.01 | 1.01 |
| Florida | Numerator (# MRI) | 1259 | 1144 | 1287 | 1903 | 2137 |
| | Denominator (# CT) | 1484 | 1351 | 1321 | 1977 | 2013 |
| | Ratio | 0.85 | 0.85 | 0.97 | 0.96 | 1.06 |
| Illinois | Numerator (# MRI) | 959 | 1000 | 1093 | 1244 | 1424 |
| | Denominator (# CT) | 1642 | 1691 | 1744 | 1925 | 1678 |
| | Ratio | 0.58 | 0.59 | 0.63 | 0.65 | 0.85 |
| State | Ratio Components | 2006 | 2007 | 2008 | 2009 | 2010 |
| Massachusetts | Numerator (# MRI) | 264 | 227 | 184 | 198 | 70 |
| | Denominator (# CT) | 254 | 230 | 181 | 186 | 62 |
| | Ratio | 1.04 | 0.99 | 1.02 | 1.06 | 1.13 |
| Michigan | Numerator (# MRI) | 380 | 646 | 1056 | 1025 | 1152 |
| | Denominator (# CT) | 461 | 902 | 1242 | 1124 | 1025 |
| | Ratio | 0.82 | 0.72 | 0.85 | 0.91 | 1.12 |
| Texas | Numerator (# MRI) | 1575 | 1746 | 1980 | 2139 | 2295 |
| | Denominator (# CT) | 2206 | 2485 | 2469 | 2632 | 2629 |
| | Ratio | 0.71 | 0.70 | 0.80 | 0.81 | 0.87 |
| Utah | Numerator (# MRI) | 89 | 84 | 94 | 87 | 78 |
| | Denominator (# CT) | 76 | 84 | 101 | 94 | 88 |
| | Ratio | 1.17 | 1.00 | 0.93 | 0.93 | 0.89 |

Note: The rate for this measure, the ratio of all MRI to all CT scans among children ages 1 through 17 years old who undergo imaging of the head on or within 30 days after the date of evaluation for atraumatic seizure, was calculated using 5 consecutive years of claims data drawn from Medicaid Analytic eXtract (MAX) administrative claims data provided by the Centers for Medicare & Medicaid Services (CMS).

Table 8. State Medicaid Plan Reliability for Measure

| State Medicaid Program | Number of MRIs | Number of CTs + MRIs | Reliability |
|------------------------|----------------|----------------------|------------------|
| Colorado | 840 | 1896 | 0.90 |
| Florida | 7,730 | 15,876 | 0.99 |
| Illinois | 5,720 | 14,400 | 0.99 |
| Massachusetts | 943 | 1856 | 0.90 |
| Michigan | 4,259 | 9013 | 0.98 |
| Texas | 9,735 | 22,156 | 0.99 |
| Utah | 432 | 875 | 0.81 |
| Median (range) | | | 0.98 (0.81-0.99) |

Table 9: Contingency Table for Presence of Exclusions in Administrative Claims and Charts for Children with at Least 1 MRI Scan within the Measurement Year

| Exclusion Documented in Charts | | | | |
|-----------------------------------|---------|---------|--------|-------|
| | | Present | Absent | Total |
| Exclusion present based on claims | Present | 3 | 4 | 7 |
| | Absent | 10 | 87 | 97 |
| | Total | 13 | 91 | 104 |

Table 10: Contingency Table for Presence of Exclusions in Administrative Claims and Charts for Children with at Least 1 CT Scan within the Measurement Year

| Exclusion Documented in Charts | | | | |
|-----------------------------------|---------|---------|--------|-------|
| | | Present | Absent | Total |
| Exclusion present based on claims | Present | 6 | 6 | 12 |
| | Absent | 13 | 70 | 83 |
| | Total | 19 | 76 | 95 |