

# TennCare Quarterly Report

April – June 2017

## Submitted to the Members of the General Assembly

### Status of TennCare Reforms and Improvements

**Demonstration Amendment 31: Program Modifications.** As discussed in the Bureau of TennCare’s previous Quarterly Report to the Tennessee General Assembly, a public notice and comment period was held during February and March 2017 to solicit feedback on a proposed demonstration amendment. Amendment 31 was based on proposed amendments from prior years that outlined program reductions that would allow TennCare to have a balanced budget in the event the General Assembly did not renew a one-year hospital assessment fee. The reductions contemplated in Amendment 31 included limits on inpatient hospital services, outpatient hospital visits, health care practitioners’ office visits, and lab and X-ray services, as well as the elimination of certain kinds of therapy.

As has been the case in previous years, however, the General Assembly renewed the hospital assessment fee, thereby eliminating any funding gap and the need for Amendment 31 to be submitted to CMS.

**Tennessee Eligibility Determination System.** Tennessee Eligibility Determination System (or “TEDS”) is the name of the system that will be used by the State to process applications and identify persons who are eligible for TennCare and CoverKids. Throughout the April-June 2017 quarter, TennCare continued collaborating with systems integrator partner Deloitte Consulting, LLP, on system design, a process that is nearing completion. As of the end of the quarter, Deloitte was scheduled to present formal design documents to TennCare in July 2017 and will commence system development and testing in the fall. Implementation of the TEDS system is planned for late 2018.

**Payment Reform.** Tennessee's Health Care Innovation Initiative is changing health care payment to reward providers for high-quality and efficient treatment of medical conditions to help in maintaining people's health over time. The Initiative has strategies in three key areas: primary care transformation, episodes of care, and long-term services and supports. Notable developments in each of these strategies occurred during the April-June 2017 quarter.

Primary care transformation supports primary care providers in promoting the delivery of preventive services and managing chronic illnesses over time. Three elements of primary care transformation are the Patient-Centered Medical Home (PCMH) program, the Tennessee Health Link program, and a Care Coordination Tool designed for providers participating in those programs.

Following much stakeholder input and design work, the PCMH program was launched by TennCare and the Tennessee Health Care Innovation Initiative on January 2, 2017. PCMH is a comprehensive care delivery model designed to improve the quality of primary care services for TennCare members, the capabilities and practice standards of primary care providers, and the overall value of health care delivered to the TennCare population. Participating providers receive training and technical assistance, quarterly reports with actionable data, and access to the state's care coordination tool. These providers are compensated with ongoing financial support and an opportunity for an annual outcome payment based on quality and efficiency performance. As of the launch date, 29 practices and approximately 250,000 TennCare members were participating in the PCMH program, with additional practices to be added in subsequent years.

The Tennessee Health Link component of the primary care transformation strategy was implemented on a statewide basis on December 1, 2016. Providers in this program coordinate health care services for TennCare members with the most significant behavioral health needs. The program is designed to produce improved member outcomes, greater provider accountability and flexibility in the delivery of care, and improved cost control for the State. From the launch date until May 2017, approximately 60,000 TennCare members have been enrolled in the program. TennCare continues to monitor enrollment and provider engagement with members and regularly solicits feedback on the implementation of the program.

Applications for new providers to enroll in PCMH and Tennessee Health Link for calendar year 2018 were released on May 1, 2017. The application deadline was June 30, 2017, and applicants were to be notified of whether they had been accepted during the July-September 2017 quarter.

Providers in the PCMH and Tennessee Health Link programs alike now have access to the third element of the primary care transformation strategy: the Care Coordination Tool went live at the end of January 2017. The Care Coordination Tool allows participating primary care providers and behavioral health providers to see their attributed patient panel, view patient risk scores, and track the completeness of quality measures for their patients. The tool also alerts providers when their patients are admitted or transferred to—or discharged from—a hospital, including instances in which emergency room care is accessed. Physicians, nurses, coordinators, and other providers at participating practices received four weeks of user training in February 2017.

Episodes of care focuses on acute or specialist-driven health care delivered during a specified time period to treat physical or behavioral conditions such as an acute diabetes exacerbation or valve repair and replacement. Each episode has a principal accountable provider (sometimes referred to as the

“quarterback”) who is in the best position to influence the cost and quality of the episode. Episodes of care are implemented in groups or—in the terminology of the program—“waves.”

Each episode is designed with significant input from stakeholders, including Tennessee providers, payers, administrators, and employers. For each episode, the program organizes Technical Advisory Groups (TAGs) composed of experts in the field to provide clinical feedback on each episode’s design. The TAG meetings for Wave 7 episodes began in March 2017 and ended in May 2017. The nine episodes covered in Wave 7 are femur/pelvic fracture; knee arthroscopy; non-operative shoulder injury; non-operative wrist injury; non-operative knee injury; non-operative ankle injury; spinal fusion; spinal decompression without spinal fusion; and back/neck. TAG recommendations concerning these episodes are summarized in the Appendix to this report.

Long-term services and supports comprises quality- and acuity-based payment and delivery system reform for Nursing Facility (NF) services and Home and Community Based Services (HCBS). During this quarter, TennCare continued working with the Tennessee Health Care Association on draft rules for a new quality- and acuity-adjusted reimbursement methodology for nursing homes. As part of TennCare’s ongoing commitment to transparency, before publishing the draft rule, TennCare sought broad stakeholder input, hearing directly from residents receiving NF services and their family members, as well as from staff of NFs participating in the Quality Improvement in Long-Term Services and Supports (QuILTSS) initiative. Each of the Medicaid NFs in the state and their Resident/Family Councils were invited to complete online survey tools to provide feedback regarding quality-related components of the new rule. Facility representatives also had the opportunity to discuss their experience with the QuILTSS initiative and ways in which the program could be improved, not only to aid the initiative’s goal of improving quality of care and quality of life for NF residents, but also to minimize administrative burden on facilities.

Comments gathered from NF staff members suggest that the QuILTSS initiative has been beneficial but challenging to administer. According to the respondents, QuILTSS is having a positive impact on facilities by helping them increase resident/family engagement, focus more on residents and their needs, and advance culture change and person-centered care. At the same time, the feedback indicates that the current process-based approach could be simplified in ways that would reduce administrative burden. A commonly expressed opinion is that QuILTSS should accelerate the transition to a more outcome-based approach, which would allow NFs to innovate and tailor improvement efforts to their unique needs. With regard to performance measures, there is a desire for clear definitions, reasonable baselines, flexibility for adjustment when needed, and rewards for facilities that demonstrate significant improvement as well as those that demonstrate strong performance relative to established benchmarks. An especially helpful insight gained from the stakeholder process is that the majority of responding facilities and the overwhelming majority of resident/family council respondents want the quality component of the reimbursement rate to be higher than provided in the proposed rule in order to incentivize facilities to focus efforts on quality improvement. A more detailed summary of responses is available at:

<http://tn.gov/assets/entities/tenncare/attachments/QuILTSSResidentAndStakeholderRulesSurvey.pdf>

**AARP Scorecard of Long-Term Services and Supports.** On June 14, 2017, AARP released its *2017 Long-Term Services and Supports (LTSS) State Scorecard*, a copy of which is available with supplemental information at <http://www.longtermscorecard.org/2017-scorecard>. This is the third in a series of annual scorecards that offer a state-by-state comparison of performance across an array of measures defined by AARP as constituting a high performing LTSS system.

Tennessee is identified in the report as the most improved state, and the only state to demonstrate substantial improvement across 13 of the 23 measures, including all 6 measures related to effective transitions. However, Tennessee's overall ranking advanced only from 48th to 47th.

Many of the Scorecard measures are beyond the scope of the Medicaid program, and require solutions at a national and/or state policy level (e.g., Nurse Practice Acts, family caregiver leave policies, volunteer driver policies, housing affordability). Other measures may be difficult if not impossible for a state's Medicaid program to affect at all (e.g., the average private pay rates for nursing home or home care, the median income of state residents, whether or not people choose to purchase long-term care insurance, federal funding allocations for certain programs). Furthermore, the data on which the report is based is characterized by a lag (five years in some data elements) and, therefore, is not reflective of program improvements that have occurred subsequently.

Despite the limited applicability of the report to Medicaid programs, Tennessee, along with other states, agrees that measuring performance can help drive quality improvement and is committed to this approach in TennCare's LTSS programs.

**Incentives for Providers to Use Electronic Health Records.** The Electronic Health Records (EHR) Incentive Program is a partnership between federal and state governments that grew out of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009. The purpose of the program is to provide financial incentives to Medicaid providers<sup>1</sup> to replace outdated, often paper-based approaches to medical record-keeping with electronic systems that meet rigorous certification criteria and that can improve health care delivery and quality. The federal government provides 100 percent of the funding for the incentive payments and 90 percent of the funding for administrative costs.

Currently, Medicaid providers may qualify for the following types of payments:

- First-year payments (through the 2016 Program Year) to eligible hospitals or practitioners who either—

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<sup>1</sup> CMS allows two types of providers to participate in the Medicaid EHR Incentive Program: medical professionals (medical and osteopathic physicians, nurse practitioners, certified nurse midwives, dentists, and physician assistants who meet certain criteria) and hospitals (acute care hospitals, critical access hospitals, and children's hospitals).

- Adopt, implement, or upgrade to certified EHR technology capable of meeting “meaningful use” in accordance with CMS standards, or
- Achieve meaningful use of certified EHR technology for a period of 90 consecutive days;
- Second-year payments to providers who have received first-year payments and who achieved meaningful use for a subsequent period of 90 consecutive days;
- Third-year, fourth-year, fifth-year, and sixth-year payments to providers who continue to demonstrate meaningful use of certified EHR technology.

Eligible practitioners who successfully attest may receive incentive payments in up to six program years. With CMS approval, TennCare chose to divide the full amount of incentive payments available to eligible hospitals among three program years. Eligible hospitals must continue to attest annually beyond the three years of payments in order to avoid Medicare payment adjustments.

EHR payments made by TennCare during the April-June 2017 quarter as compared with payments made throughout the life of the program appear in the table below:

<b>Payment Type</b>	<b>Number of Providers Paid During the Quarter</b>	<b>Quarterly Amount Paid (Apr-Jun 2017)</b>	<b>Cumulative Amount Paid to Date</b>
First-year payments	380 <sup>2</sup>	\$7,590,871	\$181,372,240
Second-year payments	76	\$1,357,793	\$56,964,360
Third-year payments	69	\$1,773,396	\$30,503,055
Fourth-year payments	70	\$592,167	\$4,584,342
Fifth-year payments	63	\$527,001	\$1,929,501
Sixth-year payments	50	\$425,000	\$586,500

Technical assistance activities, outreach efforts, and other EHR-related projects conducted by Bureau staff during the quarter included the following:

- Acceptance of Program Year 2017 Modified Stage 2 and Stage 3 attestations beginning on April 3, 2017 (a development facilitated by updates to TennCare’s Provider Incentive Payment Program—or “PIPP” —attestation software);
- Achieving a cumulative total of 1,951 EHR incentive attestations (1,144 of which related to Meaningful Use) for the 2016 EHR Incentive Year by the conclusion of the April-June 2017 quarter;
- Holding more than 100 technical assistance calls, 16 of which related to Meaningful Use;
- Responding to over 800 emails received in the EHR Incentive mailbox, and to over 400 emails received in the EHR Meaningful Use mailbox;
- Distributing EHR-related information at regional provider expos hosted by TennCare health plans in May 2017 in Chattanooga, Jackson, Johnson City, Knoxville, Memphis, and Nashville;

<sup>2</sup> Of the 380 providers receiving first-year payments in the April-June 2017 quarter, 4 earned their incentives by successfully attesting to meaningful use of EHR technology.

- Participation throughout the quarter in several Southeast Regional Collaboration for HIT/HIE (SERCH) calls;
- Newsletters and alerts distributed by the Bureau's EHR ListServ; and
- A quarterly reminder to Tennessee providers who had registered at the federal level but who have not registered or attested at the state level.

TennCare's EHR Incentive Program team continues to work with a variety of provider organizations to maintain the momentum of the program. The focus of outreach efforts has shifted from enrolling new providers in the program to bringing back providers who attested to EHR requirements only once.

***Wilson v. Gordon.*** *Wilson v. Gordon* is a class action lawsuit filed against the Bureau of TennCare by the Tennessee Justice Center, the Southern Poverty Law Center, and the National Health Law Program. The suit, which is being heard by the U.S. District Court for the Middle District of Tennessee, alleges federal noncompliance in the Medicaid application and appeals process TennCare has been using since implementation of the Affordable Care Act.

Central to the *Wilson* suit is the issue of whether applications for TennCare coverage are being resolved in a proper and timely manner. In the fall of 2016, the State filed a Motion to Decertify the Class and Dismiss the Case. The basis of the motion was that processes used by TennCare and CMS for Medicaid applications and application appeals in Tennessee had evolved substantially. As a result of this evolution, the Motion contends, there are no remaining members in the Plaintiff class originally certified by the District Court, and any eligibility issues arising in 2016 are completely different from the issues that originally prompted the *Wilson* suit.

On April 27, 2017, oral argument on the State's Motion was heard. Magistrate Judge Alistair Newbern ordered both sides of the suit to submit supplemental briefing in support of their oral arguments, and both sides did so on May 11, 2017. Each party also responded to the other's supplemental brief on May 25, 2017. As of the end of the April-June 2017 quarter, Magistrate Judge Newbern had not rendered a decision on the State's Motion.

**Essential Access Hospital (EAH) Payments.** The TennCare Bureau continued to make EAH payments during the April-June 2017 quarter. EAH payments are made from a pool of \$100 million (\$35,017,500 in State dollars) appropriated by the General Assembly and funded by the hospital assessment fee.

The methodology for distributing these funds, as outlined in Special Term and Condition 53.a. of the TennCare Demonstration Agreement with CMS, specifically considers each hospital's relative contribution to providing services to TennCare members, while also acknowledging differences in payer mix and hospitals' relative ability to make up TennCare losses. Data from the Hospital Joint Annual Report is used to determine hospitals' eligibility for these payments. Eligibility is determined each quarter based on each hospital's participation in TennCare. In order to receive a payment for the quarter, a hospital must be a contracted provider with TennCare Select and at least one other Managed Care Organization (MCO), and it must have contracted with TennCare Select for the entire quarter that

the payment represents. Excluded from the Essential Access Hospital payments are Critical Access Hospitals, which receive cost-based reimbursement from the TennCare program and, therefore, are not included, and the four State mental health institutes.

The Essential Access Hospital payments made during the fourth quarter of State Fiscal Year 2017 (for dates of service during the third quarter) are shown in the table below.

**Essential Access Hospital Payments for the Quarter**

<b>Hospital Name</b>	<b>County</b>	<b>EAH Fourth Quarter FY 2017</b>
Vanderbilt University Hospital	Davidson County	\$3,432,915
Regional One Health	Shelby County	\$3,169,454
Erlanger Medical Center	Hamilton County	\$2,588,947
University of Tennessee Memorial Hospital	Knox County	\$1,542,189
Johnson City Medical Center (with Woodridge)	Washington County	\$1,201,426
Parkridge Medical Center (with Parkridge Valley)	Hamilton County	\$888,939
LeBonheur Children's Medical Center	Shelby County	\$731,246
Metro Nashville General Hospital	Davidson County	\$565,069
Jackson – Madison County General Hospital	Madison County	\$554,396
East Tennessee Children's Hospital	Knox County	\$518,754
TriStar Centennial Medical Center	Davidson County	\$468,191
Methodist Healthcare – Memphis Hospitals	Shelby County	\$467,472
Saint Jude Children's Research Hospital	Shelby County	\$438,580
Methodist Healthcare – South	Shelby County	\$391,029
Parkridge East Hospital	Hamilton County	\$366,501
TriStar Skyline Medical Center (with Madison Campus)	Davidson County	\$330,238
Parkwest Medical Center (with Peninsula)	Knox County	\$313,712
Baptist Memorial Hospital – Memphis	Shelby County	\$288,813
Methodist Healthcare – North	Shelby County	\$279,227
University Medical Center (with McFarland)	Wilson County	\$257,541
Saint Francis Hospital	Shelby County	\$252,781
Saint Thomas Rutherford Hospital	Rutherford County	\$238,691
Lincoln Medical Center	Lincoln County	\$234,738
Baptist Memorial Hospital for Women	Shelby County	\$217,868
Wellmont – Holston Valley Medical Center	Sullivan County	\$213,281
Fort Sanders Regional Medical Center	Knox County	\$211,885
Saint Thomas Midtown Hospital	Davidson County	\$210,726
Wellmont – Bristol Regional Medical Center	Sullivan County	\$207,292
Cookeville Regional Medical Center	Putnam County	\$206,384
Maury Regional Hospital	Maury County	\$190,697
Pathways of Tennessee	Madison County	\$183,584
Tennova Healthcare – Newport Medical Center	Cocke County	\$174,389
Ridgeview Psychiatric Hospital and Center	Anderson County	\$164,734
TriStar StoneCrest Medical Center	Rutherford County	\$152,953

<b>Hospital Name</b>	<b>County</b>	<b>EAH Fourth Quarter FY 2017</b>
Tennova Healthcare	Knox County	\$151,419
Blount Memorial Hospital	Blount County	\$147,676
TriStar Horizon Medical Center	Dickson County	\$128,624
TriStar Summit Medical Center	Davidson County	\$127,178
Gateway Medical Center	Montgomery County	\$126,323
TriStar Southern Hills Medical Center	Davidson County	\$125,949
Sumner Regional Medical Center	Sumner County	\$124,465
Skyridge Medical Center	Bradley County	\$119,741
Rolling Hills Hospital	Williamson County	\$119,729
TriStar Hendersonville Medical Center	Sumner County	\$113,303
Dyersburg Regional Medical Center	Dyer County	\$111,930
NorthCrest Medical Center	Robertson County	\$108,170
Morristown – Hamblen Healthcare System	Hamblen County	\$105,478
LeConte Medical Center	Sevier County	\$101,744
Methodist Medical Center of Oak Ridge	Anderson County	\$94,806
Jellico Community Hospital	Campbell County	\$86,133
Takoma Regional Hospital	Greene County	\$85,081
Tennova Healthcare – Harton Regional Medical Center	Coffee County	\$75,730
Tennova Healthcare – LaFollette Medical Center	Campbell County	\$68,412
Indian Path Medical Center	Sullivan County	\$64,210
Sycamore Shoals Hospital	Carter County	\$61,306
Starr Regional Medical Center – Athens	McMinn County	\$60,582
Skyridge Medical Center – Westside	Bradley County	\$58,241
Grandview Medical Center – Jasper	Marion County	\$57,058
Heritage Medical Center	Bedford County	\$55,618
Bolivar General Hospital	Hardeman County	\$55,228
Regional Hospital of Jackson	Madison County	\$54,670
Southern Tennessee Regional Health System – Winchester	Franklin County	\$54,216
Henry County Medical Center	Henry County	\$50,978
Baptist Memorial Hospital – Union City	Obion County	\$50,949
Henderson County Community Hospital	Henderson County	\$49,708
Saint Thomas River Park Hospital	Warren County	\$48,651
Hardin Medical Center	Hardin County	\$46,989
Roane Medical Center	Roane County	\$46,605
Lakeway Regional Hospital	Hamblen County	\$46,057
Southern Tennessee Regional Health System – Lawrenceburg	Lawrence County	\$42,438
Hillside Hospital	Giles County	\$36,653
Claiborne County Hospital	Claiborne County	\$36,103
PremierCare Tennessee, Inc.	Putnam County	\$31,953
McKenzie Regional Hospital	Carroll County	\$31,394
Erlanger Health System – East Campus	Hamilton County	\$30,605

<b>Hospital Name</b>	<b>County</b>	<b>EAH Fourth Quarter FY 2017</b>
Saint Thomas DeKalb Hospital	DeKalb County	\$28,299
Jamestown Regional Medical Center	Fentress County	\$27,258
Saint Thomas Stones River Hospital	Cannon County	\$25,669
Volunteer Community Hospital	Weakley County	\$24,287
Wayne Medical Center	Wayne County	\$20,338
United Regional Medical Center and Medical Center of Manchester	Coffee County	\$16,973
Southern Tennessee Regional Health System – Sewanee	Franklin County	\$10,431
<b>TOTAL</b>		<b>\$25,000,000</b>

## Number of Recipients on TennCare and Costs to the State

During the month of June 2017, there were 1,396,150 Medicaid eligibles and 15,819 Demonstration eligibles enrolled in TennCare, for a total of 1,411,969 persons.

Estimates of TennCare spending for the fourth quarter of State Fiscal Year 2017 are summarized in the table below.

Spending Category	Fourth Quarter FY 2017*
MCO services**	\$1,513,552,600
Dental services	\$39,710,400
Pharmacy services	\$296,395,000
Medicare "clawback"***	\$57,317,300

\*These figures are cash basis as of June 30 and are unaudited.

\*\*This figure includes Integrated Managed Care MCO expenditures.

\*\*\*The Medicare Part D clawback is money that states are required to pay to the federal government to help offset costs the federal government incurs by covering the prescription benefit for enrollees who have both Medicare and Medicaid.

## Viability of Managed Care Contractors (MCCs) in the TennCare Program

**Claims payment analysis.** TennCare's prompt pay requirements may be summarized as shown below.

Entity	Standard	Authority
MCOs (services other than CHOICES and ECF CHOICES)	90% of clean claims for payment for services delivered to TennCare enrollees are processed and, if appropriate, paid within 30 calendar days of the receipt of such claims.  99.5% of all provider claims are processed, and, if appropriate, paid within 60 calendar days of receipt.	TennCare contract and in accordance with T.C.A. § 56-32-126(b)
MCOs (CHOICES and ECF CHOICES services)	90% of clean electronically submitted Nursing Facility and applicable Home and Community Based Services claims <sup>3</sup> are processed and paid within 14 calendar days of receipt.  99.5% of clean electronically submitted Nursing Facility and applicable Home and Community Based Services claims <sup>4</sup> are processed and paid within 21 calendar days of receipt.	TennCare contract

<sup>3</sup> Excludes Personal Emergency Response Systems (PERS), assistive technology, minor home modifications, and pest control claims. Claims for delivery of these services are handled like general MCO claims.

<sup>4</sup> Ibid.

Entity	Standard	Authority
Dental Benefits Manager (DBM)	90% of clean claims for payment for services delivered to TennCare enrollees are processed, and, if appropriate, paid within 30 calendar days of the receipt of such claims.  99.5% of all provider claims are processed, and, if appropriate, paid within 60 calendar days of receipt.	TennCare contract and in accordance with T.C.A. § 56-32-126(b)
Pharmacy Benefits Manager (PBM)	100% of all clean claims submitted by pharmacy providers are paid within 10 calendar days of receipt.	TennCare contract

The MCOs, the DBM, and the PBM are required to submit monthly claims data files of all TennCare claims processed to the Tennessee Department of Commerce and Insurance (TDCI) for verification of statutory and contractual prompt pay compliance. The plans are required to separate their claims data by claims processor (e.g., MCO, vision benefits manager, etc.). Furthermore, the MCOs are required to identify separately non-emergency transportation (NEMT) claims in the data files. Finally, the MCOs are required to submit separate claims data files representing a subset of electronically submitted Nursing Facility and applicable Home and Community Based Services claims for CHOICES and ECF CHOICES enrollees. TDCI then performs an analysis and reports the results of the prompt pay analyses by NEMT and CHOICES and ECF CHOICES claim types, by claims processor, and by total claims processed for the month.

If an MCO does not comply with the prompt pay requirements based on the total claims processed in a month, TDCI has the statutory authority to levy an administrative penalty of \$10,000 for each month of non-compliance after the first instance of non-compliance was reported to the plan. The TennCare Bureau may also assess liquidated damages pursuant to the terms of the TennCare Contract. If the DBM and PBM do not meet their contractual prompt pay requirements, only the TennCare Bureau may assess applicable liquidated damages against these entities.

**Net worth and company action level requirements.** According to Tennessee’s “Health Maintenance Organization Act of 1986” statute (T.C.A. § 56-32-101 *et seq.*), the minimum net worth requirement for each TennCare MCO is calculated based on premium revenue reported on the National Association of Insurance Commissioners (NAIC) Annual Financial Statement for the most recent calendar year, as well as any TennCare payments made to the MCO that are not reported as premium revenue.

During the April-June 2017 quarter, the MCOs submitted their NAIC First Quarter 2017 Financial Statements. As of March 31, 2017, TennCare MCOs reported net worth as indicated in the table below.<sup>5</sup>

MCO	Net Worth Requirement	Reported Net Worth	Excess/ (Deficiency)
Amerigroup Tennessee	\$33,420,759	\$196,913,870	\$163,493,111

<sup>5</sup> The “Net Worth Requirement” and “Reported Net Worth” figures in the table are based on the MCOs’ company-wide operations, not merely their TennCare operations.

MCO	Net Worth Requirement	Reported Net Worth	Excess/ (Deficiency)
UnitedHealthcare Plan of the River Valley (UnitedHealthcare Community Plan)	\$57,158,856	\$467,868,097	\$410,709,241
Volunteer State Health Plan (BlueCare & TennCare Select)	\$46,879,872	\$431,981,971	\$385,102,099

During the April-June 2017 quarter, the MCOs were also required to comply with Tennessee’s “Risk-Based Capital for Health Organizations” statute (T.C.A. § 56-46-201 *et seq.*). Risk-based capital (RBC) involves a method of calculating the minimum amount of capital necessary for a health entity to support its overall business operations depending on its size and risk profile. A health entity with a higher amount of risk is required to hold a higher amount of capital. The RBC statute gives TDCI the authority and mandate to use preventive and corrective measures that vary depending on the amount of capital deficiency indicated by the RBC calculations. A “Company Action Level” deficiency (defined at T.C.A. § 56-46-203(a)) would require the submission of a plan to correct the entity’s capital deficiency.

The following table compares the MCOs’ net worth to the Company Action Level requirements as of March 31, 2017:

MCO	Company Action Level	Reported Net Worth	Excess/ (Deficiency)
Amerigroup Tennessee	\$122,877,816	\$196,913,870	\$74,036,054
UnitedHealthcare Plan of the River Valley (UnitedHealthcare Community Plan)	\$205,480,268	\$467,868,097	\$262,387,829
Volunteer State Health Plan (BlueCare & TennCare Select)	\$148,059,416	\$431,981,971	\$283,922,555

All TennCare MCOs met their minimum net worth requirements and Company Action Level requirements as of March 31, 2017.

### Success of Fraud Detection and Prevention

The mission of the Tennessee Office of Inspector General (OIG) is to identify, investigate, prosecute, and arrest persons who commit fraud or abuse against the TennCare program and to recoup money owed to the State of Tennessee. The OIG receives case information from a variety of sources, including local law enforcement, the TennCare Bureau, Health Related Boards (HRB), the Department of Human Services (DHS), other State agencies, health care providers, MCCs, and the general public via the OIG website, fax, written correspondence, and phone calls to the OIG hotline. Cases adjudicated during a particular fiscal year may have no relationship to dates of arrest during the same year. Selected statistics for the fourth quarter of Fiscal Year 2017 are as follows:

<b>Fraud and Abuse Complaints</b>	<b>Fourth Quarter FY 2017</b>
Fraud Allegations	1,113
Abuse Allegations*	939
<b>Arrest/Conviction/Judicial Diversion Totals</b>	<b>Fourth Quarter FY 2017</b>
Arrests	49
Convictions	25
Judicial Diversions	8

\* Abuse cases may be referred to the appropriate Managed Care Contractor (MCC), the TennCare Bureau, or DHS for further review/action.

<b>Criminal Court Fines and Costs Imposed</b>	<b>Fourth Quarter FY 2017</b>
Court Costs & Taxes	\$3,703
Fines	\$24,500
Drug Funds/Forfeitures	\$978
Criminal Restitution Ordered	\$115,276
Criminal Restitution Received <sup>6</sup>	\$19,851
<b>Civil Restitution/Civil Court Judgments</b>	<b>Fourth Quarter FY 2017</b>
Civil Restitution Ordered <sup>7</sup>	\$0
Civil Restitution Received <sup>8</sup>	\$5,661

<b>Recommendations for Review</b>	<b>Fourth Quarter FY 2017</b>
Recommended TennCare Terminations <sup>9</sup>	153
Potential Savings <sup>10</sup>	\$559,428

<sup>6</sup> Restitution may have been ordered in a fiscal year other than the one in which payment was actually received.

<sup>7</sup> This total reflects dollars identified for recoupment by the OIG in such non-criminal contexts as civil cases, administrative hearings, and voluntary reimbursements to TennCare.

<sup>8</sup> Restitution may have been agreed to in a fiscal year other than the one in which payment was actually received.

<sup>9</sup> Recommendations that enrollees' TennCare coverage should be terminated are sent to the TennCare Bureau for review and determination of appropriate action. These recommendations are based on information received and reviewed by the OIG. The Bureau determines whether these referrals meet the criteria for termination. In reviewing these recommendations, TennCare must factor in some limitations, such as the inability to disenroll individuals in certain federally protected categories.

<sup>10</sup> Potential savings are determined by multiplying the number of enrollees whose coverage would be terminated, assuming all of the State's criteria for termination are met, by the average annual cost per enrollee for MCO, pharmacy, and dental services (currently estimated by TennCare to be \$3,656.39).

## **Statewide Communication**

In an effort to stay connected with local law enforcement and achieve the OIG's mission, Special Agents continue to meet in person with sheriffs and police chiefs throughout the state. These meetings further collaborative relationships and aid the mutual goal of stopping TennCare fraud and prescription drug diversion.

# **Appendix**

## **TAG Recommendations for Wave 7 Episodes of Care**

## Back/Neck Pain episode design summary

### Identifying episode triggers

A Back/Neck episode is triggered by an office, outpatient hospital, or emergency department (ED) visit where the primary diagnosis indicates back or neck pain, or related diagnosis (i.e., spine conditions such as sprains, degenerative and other disc disorders, disc displacement, radiculopathy, spondylosis, spondylolisthesis, stenosis, closed fractures, and pathological fractures). In addition, a visit where the primary diagnosis is a spine deformity with a secondary diagnosis code for back or neck pain is also a potential trigger event.

### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that is with the plurality of evaluation and management (E&M) visits for back/neck pain or related diagnoses during the episode window; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

### Identifying services to include in episode spend

The Back/Neck Pain episode begins on the day of the triggering visit and ends 89 days after the triggering event. During the episode window, all related care – such as imaging and testing, surgical and medical procedures, and medications – is included in the episode.

### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (<18 or >64 years), patients with paralysis, active cancer, HIV, discitis, osteomyelitis, ankylosing spondylitis, neurologic involvement or patients who undergo spine surgery (e.g., spinal fusion, spinal decompression without fusion, surgery for spine fracture) in the episode window. High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window and MED/day during the episode window, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the post-trigger window, across valid episodes; percent of valid episodes with non-surgical management (e.g., physical therapy) during the episode window; percent of valid low back pain episodes with no spine X-ray during the 29 days after diagnosis; percent of valid low back pain episodes with no spine MRI during the 29 days after diagnosis; percent of total (valid and invalid) episodes with neurologic involvement; percent of valid episodes with a prescription filled for an opioid during the episode window that had a drug screening test during the episode window.

### Femur/Pelvis Fracture episode design summary

#### Identifying episode triggers

A Femur/Pelvis Fracture episode is triggered by a professional claim that has one of the defined procedure codes for the surgical treatment of a femur or pelvis fracture and an associated inpatient facility claim.

#### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that performed the surgical treatment of the femur or pelvis fracture; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

#### Identifying services to include in episode spend

The Femur/Pelvis Fracture episode begins 60 days before the triggering inpatient admission and ends 60 days after discharge. During this time period, the following services are included in episode spend: all medical services and related medications during the triggering surgical treatment of femur or pelvis fractures (trigger window); specific care after discharge, complications, follow-up care, and post-acute care up to 30 days after discharge (post-trigger window 1); all opioids and repeat procedures during 31-60 days after discharge (post-trigger window 2).

#### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (>64 years), patients who present with an open femur/pelvis fracture, severe trauma, coma, paralysis, malunions/nonunions or non-elective total hip replacement.

High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

#### Determining quality metrics performance

Quality metrics tied to gain sharing are: percentage of valid episodes with related follow-up care during the post-trigger window 1; average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window and MED/day during the post-trigger window 2, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the post-trigger window 2, across valid episodes; percentage of valid episodes with a related readmission during post-trigger window 1; percentage of valid episodes with a related ED visit during post-trigger window 1; percentage of valid episodes with a surgical complication during the trigger window and post-trigger window 1; percentage of total (valid and invalid) episodes resulting in death in the episode window.

#### Knee Arthroscopy episode design summary

##### Identifying episode triggers

A Knee Arthroscopy episode is triggered by a professional claim that has one of the defined procedure codes for knee arthroscopy and an associated outpatient facility claim.

##### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that performed the knee arthroscopy; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

##### Identifying services to include in episode spend

The Knee Arthroscopy episode begins 60 days before the triggering procedure and ends 60 days after discharge. During this time period, the following services are included in episode spend: specific care with relevant diagnosis, imaging, and testing up to 60 days prior to the knee arthroscopy (pre-trigger window); all medical services and related medications during the triggering knee arthroscopy (trigger window 1); specific care after discharge, complications, follow-up care, and post-acute care up to 30 days after the knee arthroscopy (post-trigger window 1); all opioids during 31-60 days after the knee arthroscopy (post-trigger window 2).

### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (<18 or >64 years), patients who receive a total knee arthroplasty during the trigger window. High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 31-60 days prior to the trigger window and average MED/day during the post-trigger window 2, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 31-60 days prior to the trigger window, across valid episodes; percentage of valid episodes with a non-indicated primary diagnosis on the trigger claim; percentage of valid episodes triggered on a diagnosis of patellofemoral conditions with physical therapy in the pre-trigger window; percentage of valid episodes with more than one MRI during the pre-trigger window.

### Non-Operative Ankle Injury episode design summary

#### Identifying episode triggers

A Non-Operative Ankle Injury episode is triggered by a professional claim for evaluation and management that has either a primary diagnosis code for an ankle injury or a primary diagnosis of pain and a secondary diagnosis of an ankle injury diagnosis.

#### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that diagnoses the ankle injury; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

#### Identifying services to include in episode spend

The Non-Operative Ankle Injury episode begins on the day of the triggering visit and ends 30 days after the end of the triggering event. During this time period, the following services are included in episode spend: specific procedures, laboratory testing, imaging, medications, and other medical care relating to the diagnosis and treatment of the

diagnosis on the day of the trigger diagnosis; specific procedures, laboratory testing, imaging, medications, and other medical care relating to follow-up visits and complications during the 30 days after the initial diagnosis.

#### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (>64 years), patients receiving treatment in inpatient or observation settings during the trigger window, patients receiving operative treatment (e.g., ankle arthroscopy), or patients whose injury is a result of trauma and indicative of a different patient journey, identified as having two or more concurrent injuries in addition to the non-operative ankle injury (e.g., rib fracture, ankle dislocation, and elbow sprain). High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

#### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the episode start and average MED/day during the episode window, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the episode window, across valid episodes; of the valid episodes with a diagnosis of sprain or strain, the percentage of which had X-ray imaging during the episode window; of the valid episodes with an MRI, the percentage of which had X-ray or ultrasound imaging up to 60 days prior to the MRI; percentage of valid episodes with an ED visit during the post-trigger window.

#### Non-Operative Knee Injury episode design summary

##### Identifying episode triggers

A Non-Operative Knee Injury episode is triggered by a professional claim for evaluation and management that has either a primary diagnosis code for a knee injury or a primary diagnosis of pain and a secondary diagnosis of a knee injury diagnosis.

#### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that diagnoses the knee injury; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

#### Identifying services to include in episode spend

The Non-Operative Knee Injury episode begins on the day of the triggering visit and ends 30 days after the end of the triggering event. During this time period, the following services are included in episode spend: specific procedures, laboratory testing, imaging, medications, and other medical care relating to the diagnosis and treatment of the diagnosis on the day of the trigger diagnosis; specific procedures, laboratory testing, imaging, medications, and other medical care relating to follow-up visits and complications during the 30 days after the initial diagnosis.

#### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (>64 years), patients receiving treatment in inpatient or observation settings during the trigger window, patients receiving operative treatment (e.g., knee arthroscopy), or patients whose injury is a result of trauma and indicative of a different patient journey, identified as having two or more concurrent injuries in addition to the non-operative knee injury (e.g., rib fracture, knee dislocation, and elbow sprain). High-cost outlier exclusions: episode's risk adjusted spend is three standard deviations above the mean.

#### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the episode start and average MED/day during the episode window, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the episode window, across valid episodes; of the valid episodes with a diagnosis of sprain or strain, the percentage of which had X-ray imaging during the episode window; of the valid episodes with an MRI, the percentage of which had X-ray or ultrasound imaging up to 60 days prior to the MRI; percentage of valid episodes with an ED visit during the post-trigger window.

## Non-Operative Shoulder Injury episode design summary

### Identifying episode triggers

A Non-Operative Shoulder Injury episode is triggered by a professional claim for evaluation and management that has either a primary diagnosis code for a shoulder injury or a primary diagnosis of pain and a secondary diagnosis of shoulder injury.

### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that diagnoses the shoulder injury; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

### Identifying services to include in episode spend

The Non-Operative Shoulder Injury episode begins on the day of the triggering visit and ends 30 days after the end of the triggering event. During this time period, the following services are included in episode spend: specific procedures, laboratory testing, imaging, medications, and other medical care relating to the diagnosis and treatment of the diagnosis on the day of the trigger diagnosis; specific procedures, laboratory testing, imaging, medications, and other medical care relating to follow-up visits and complications during the 30 days after the initial diagnosis.

### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (>64 years), patients receiving treatment in inpatient or observation settings during the trigger window, patients receiving operative treatment (e.g., shoulder arthroscopy), or patients whose injury is a result of trauma and indicative of a different patient journey, identified as having two or more concurrent injuries in addition to the non-operative shoulder injury (e.g., rib fracture, shoulder dislocation, and elbow sprain). High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the episode start and average MED/day during the episode window, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the episode window, across valid episodes; of the valid episodes with a diagnosis of sprain or strain, the percentage of which had X-ray imaging during the episode window; of the valid episodes with an MRI, the percentage of which had X-ray or ultrasound imaging up to 60 days prior to the MRI; percentage of valid episodes with an ED visit during the post-trigger window.

### Non-Operative Wrist Injury episode design summary

#### Identifying episode triggers

A Non-Operative Wrist Injury episode is triggered by a professional claim for evaluation and management that has either a primary diagnosis code for a wrist injury or a primary diagnosis of pain and a secondary diagnosis of wrist injury.

#### Attributing episodes to quarterbacks

The quarterback is the physician or physician group that diagnoses the wrist injury; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

#### Identifying services to include in episode spend

The Non-Operative Wrist Injury episode begins on the day of the triggering visit and ends 30 days after the end of the triggering event. During this time period, the following services are included in episode spend: specific procedures, laboratory testing, imaging, medications, and other medical care relating to the diagnosis and treatment of the diagnosis on the day of the trigger diagnosis; specific procedures, laboratory testing, imaging, medications, and other medical care relating to follow-up visits and complications during the 30 days after the initial diagnosis.

#### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons,

such as age (>64 years), patients receiving treatment in inpatient or observation settings during the trigger window, patients receiving operative treatment (e.g., wrist arthroscopy), or patients whose injury is a result of trauma and indicative of a different patient journey, identified as having two or more concurrent injuries in addition to the non-operative wrist injury (e.g., rib fracture, wrist dislocation, and elbow sprain). High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

#### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the episode start and average MED/day during the episode window, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the episode window, across valid episodes; of the valid episodes with a diagnosis of sprain or strain, the percentage of which had X-ray imaging during the episode window; of the valid episodes with an MRI, the percentage of which had X-ray or ultrasound imaging up to 60 days prior to the MRI; percentage of valid episodes with an ED visit during the post-trigger window.

#### Spinal Decompression without Fusion episode design summary

##### Identifying episode triggers

A Spinal Decompression without Fusion episode is triggered by a professional claim that has one of the defined procedure codes for cervical laminectomy, cervical discectomy, lumbosacral laminectomy, laminectomy for extradural lesions and a corresponding inpatient or outpatient facility claim.

##### Attributing episodes to quarterbacks

The quarterback is the physician or physician group performing the spinal decompression without fusion procedure; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

##### Identifying services to include in episode spend

The Spinal Fusion episode begins 30 days before the triggering procedure and ends 60 days after discharge. During this time period, the following services are included in episode spend: specific care and evaluation and management services for relevant diagnoses, imaging and testing, procedures, and medications during the 30 days prior to

the decompression without spinal fusion (pre-trigger window); all professional and facility medical services and medications during the day when the decompression without spinal fusion procedure is performed or length of admission (trigger window); specific care and evaluation and management services for relevant diagnoses including complications, imaging and testing, procedures, and medications during the 30 days following discharge from the facility where the decompression without spinal fusion was performed (post-trigger window 1); all narcotics and repeat procedures during 31-60 days following discharge from the facility where the decompression without spinal fusion was performed (post-trigger window 2).

#### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (<18 or >64 years), patients who undergo a spinal fusion, or have HIV, active cancer, osteomyelitis, discitis, paralysis. High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

#### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 31-60 days prior to the trigger window and MED/day during the post-trigger window 2, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 31-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the post-trigger window 2, across valid episodes; percent of valid episodes with a related readmission during post-trigger window 1; percent of valid cervical procedural episodes with a surgical complication during the trigger window or post-trigger window 1; percent of valid episodes with a surgical complication during the trigger window or post-trigger window 1 (lower value indicative of better); percent of valid episodes with related follow-up care during post-trigger window 1; percent of valid episodes with a non-surgical management (e.g., physical therapy) during the 365 days before the triggering procedure; percent of valid episodes with physical therapy during post-trigger window 1 or post-trigger window 2.

## Spinal Fusion episode design summary

### Identifying episode triggers

A Spinal Fusion episode is triggered by a professional claim that has one of the defined procedure codes for cervical spinal fusion, lumbar spinal fusion, cervical laminoplasty, or total disc arthroplasty and a corresponding inpatient or outpatient facility claim.

### Attributing episodes to quarterbacks

The quarterback is the physician or physician group performing the spinal fusion procedure; the contracting entity ID or Tax ID number of the physician (or group) on the professional claim will be used to identify the quarterback.

### Identifying services to include in episode spend

The Spinal Fusion episode begins 30 days before the triggering procedure and ends 60 days after discharge. During this time period, the following services are included in episode spend: specific care and evaluation and management services for relevant diagnoses, imaging and testing, procedures, and medications during the 30 days prior to the spinal fusion (pre-trigger window); all professional and facility medical services and medications during the day when the spinal fusion procedure is performed or length of admission (trigger window); specific care and evaluation and management services for relevant diagnoses including complications, imaging and testing, procedures, and medications during the 30 days following discharge from the facility where the spinal fusion was performed (post-trigger window 1); all narcotics and repeat procedures during 31-60 days following discharge from the facility where the spinal fusion was performed (post-trigger window 2).

### Excluding episodes

There are three types of exclusions. Business exclusions: available information is not comparable or is incomplete (e.g., third party liability, non-continuous eligibility, left against medical advice). Clinical exclusions: patient's care pathway is different for clinical reasons, such as age (<18 or >64 years), patients who undergo combined anterior and posterior surgeries, spinal fusion more than six levels (with posterior instrumentation), spinal fusion more than seven levels (with anterior instrumentation), staged procedures, HIV, active cancer, osteomyelitis, discitis, paralysis. High-cost outlier exclusions: episode's risk-adjusted spend is three standard deviations above the mean.

#### Determining quality metrics performance

Quality metrics tied to gain sharing are: average difference in morphine equivalent dose (MED)/day during the 31-60 days prior to the trigger window and MED/day during the post-trigger window 2, across valid episodes.

Quality metrics not tied to gain sharing are: average morphine equivalent dose (MED)/day during the 31-60 days prior to the trigger window, across valid episodes; average morphine equivalent dose (MED)/day during the post-trigger window 2, across valid episodes; percent of valid episodes with a related readmission during post-trigger window 1; percent of valid cervical procedural episodes with a surgical complication during the trigger window or post-trigger window 1; percent of valid episodes with a surgical complication during the trigger window or post-trigger window 1 (lower value indicative of better); percent of valid episodes with related follow-up care during post-trigger window 1; percent of valid episodes with a non-surgical management (e.g., physical therapy) during the 365 days before the triggering procedure; percent of valid episodes with physical therapy during post-trigger window 1 or post-trigger window 2.