



How Tennessee's Medicaid Program is Leading Statewide Payment Reform and Promoting High Value Care

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Abstract

Tennessee is one of many U.S. states and territories that have received federal funding to design or test health care reform models under the State Innovation Models (SIM) Initiative sponsored by the Centers for Medicare and Medicaid Services (CMS). As a grantee state, Tennessee has committed to improving health care value by reforming its delivery and payment systems. This paper describes the Tennessee reform model and five key design and implementation factors that have contributed to early cost savings and improved value. It also offers lessons learned that may be helpful to other states engaging in or planning for a similar reform.

Key Words: Health care reform, organizational innovation, Medicaid, delivery of health care, value-based purchasing, health expenditures, health policy, state government.

HOW TENNESSEE USES ITS MEDICAID PROGRAM TO LEAD PAYMENT REFORM AND PROMOTE HIGH VALUE CARE

INTRODUCTION

Tennessee is one of many U.S. states and territories that have received federal funding to design or test health care reform models under the State Innovation Models (SIM) Initiative sponsored by the Centers for Medicare and Medicaid Services (CMS).¹² As a grantee state, Tennessee has committed to improving health care value by reforming its delivery and payment systems. This paper describes the Tennessee reform model and five key design and implementation factors that have contributed to early cost savings and improved value, including: 1) central initiation and control at the state level, 2) simultaneous development and implementation of a large number of episodes of care,³⁴ 3) implementation through private Managed Care Organizations, 4) inclusion of all major payers in the state, and 5) mandatory participation in episodes with downside risk for all providers. We review lessons learned from Tennessee's reform efforts that can offer guidance on best practices for state-level health reform design and implementation.

Tennessee's Health Care Innovation Initiative

As is the case in states throughout the country, Tennessee's health system remained fragmented in the early 2010s, with patients receiving uncoordinated care from providers with misaligned incentives. Tennessee faced the formidable challenges of high and rising costs and poor outcomes. For example, health care expenditures stood at 17.5% of state gross domestic product in 2014, up from 16.4% in 2009 and 13.3% in 2000.⁵ During this same period, Tennessee's health system performance has remained poor, with the state ranked 45th among the 50 states and the District of Columbia according to an analysis of over 40 health system indicators by the Commonwealth Fund from 2013 to 2015.⁶ There were clearly opportunities for Tennessee to receive more value for its health care dollars.

This is the situation the state faced in March 2013, when Governor Bill Haslam launched the Tennessee Health Care Innovation Initiative to transform health care into "a system that is

¹ Centers for Medicare and Medicaid. "State Innovation Models Initiative: General Information." November 9, 2018. innovation.cms.gov/initiatives/state-innovations/ (accessed Feb. 5, 2019).

² Henry Kaiser Family Foundation. "The State Innovation Models (SIM) Program: A Look at Round 2 Grantees, September 2015." www.kff.org/medicaid/fact-sheet/the-state-innovation-models-sim-program-a-look-at-round-2-grantees/ (accessed Feb. 5, 2019).

³ State of Tennessee. "Episodes of Care." www.tn.gov/tenncare/health-care-innovation/episodes-of-care.html (accessed Feb. 5, 2019).

⁴ Gaither K. "Tennessee Health Care Innovation Initiative and Episodes of Care." Memorandum to TennCare Managed Care Organizations." September 2, 2014.

www.tn.gov/content/dam/tn/tenncare/documents2/ProgramDescription.pdf (accessed Feb. 5, 2019).

⁵ Lassman D, Sisko AM, Catlin A et al., "Health Spending By State 1991–2014: Measuring Per Capita Spending By Payers And Programs." Health Affairs 2017; 36, No. 7:1318-1327.

⁶ Radley DC, McCarty D, and Hayes SL. "Results from The Commonwealth Fund Scorecard on State Health System Performance," 2017 Edition, New York: The Commonwealth Fund. www.commonwealthfund.org/interactives/2017/mar/state-scorecard/ (accessed Feb. 5, 2019).

organized around producing high-quality, high-value outcomes for Tennesseans." This vision set forth an objective of reaching 80% of the state's population with value-based payment and delivery models within five years. Strategically, TennCare, the state's experimental Medicaid managed care program, was charged with leading the initiative across the state.

Tennessee has a long history of innovative health system reform. In 1994, for example, Tennessee became the first state to place their entire Medicaid and CHIP populations in private-sector Managed Care Organizations (MCOs) under the TennCare program. Statewide, the managed care penetration rate of 32.3% is higher than the national average of 31.6% and is the highest among southern states. Across the state, major health system players on both the provider and payer side have a long history of working together to address difficult policy and contractual issues. While the implementation of managed care has been effective, resultant cost savings have been optimized and Tennessee has sought to pursue additional means to improve health care value.

As Tennessee began its federally funded reform process in 2013, it strategically placed its Bureau of TennCare as the lead agency to develop a well-thought out and realistic implementation plan that allowed for flexibility across a broad geographic state with significant mix of rural and urban areas, diverse patient populations and practice settings, and with unique challenges facing all three distinct geographic regions of the state. Because of limited existing provider infrastructure, it was not advisable to require either drastic changes to existing formal provider relationships or other major contractual adjustments. To ensure a consistent state-wide approach, all health system changes were centrally initiated by the state with very clear directions and expectations for the entire process. To maintain momentum, meanwhile, a timely and yet incremental approach was followed to allow for course corrections based on consistent and broad-based feedback.

Three Strategies for System Reform

These are: (1) primary care transformation with expansion and alignment of patient-centered medical homes (PCMH) and other population-based models to reward providers who care for their patients on an ongoing basis, promote prevention, treat chronic conditions, and coordinate care over time; (2) development of a retrospective episodes of care payment model that rewards providers for delivering high quality, cost effective care for acute and specialized events; and (3) payment and delivery system reform to address the specific needs of the long term services and supports (LTSS) population (Table 1).

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⁷ Haslam B., Tennessee Health Care Innovation Plan." December 2013. www.astho.org/Programs/Health-Systems-Transformation/Tennessee-State-Healthcare-Innovation-Plan/ (accessed Feb. 5, 2019).

⁸ Agency for Healthcare Research and Quality. "Primary care managers supported by information technology systems improve outcomes, reduce costs for patients with complex conditions". AHRQ Health Care Innovations Exchange Profile. August 13, 2014. Rockville, MD: Agency for Healthcare Research and Quality innovations.ahrq.gov/profiles/primary-care-managers-supported-information-technology-systems-improve-outcomes-reduce (accessed Feb. 5, 2019).

⁹ State of Tennessee. "Tennessee State Healthcare Innovation Plan." December 9, 2013. www.astho.org/Programs/Health-Systems-Transformation/Tennessee-State-Healthcare-Innovation-Plan/ (accessed Feb. 5, 2019).

Table 1: Tennessee's Three Supply-Side Reform Strategies

	Source of Value	Strategy Elements	Examples
Primary Care Transformation/ Patient-Centered Medical Homes (PCMH)	 Maintaining a person's health over time Coordinating care with specialists Avoiding episodic events 	 Patient centered medical homes Tennessee Health Link for people with the highest behavioral health needs Care coordination tool with admission, discharge, and transfer data 	 Encourages primary prevention for healthy consumers and coordinated care for the chronically ill Coordinating primary and behavioral health care for those with the highest behavioral health needs
Episodes of Care	Providing incentives and information to achieve provider accountability and align rewards around cost and quality	 Retrospective episodes of care implementable statewide From simpler episodes to more complex ones 55 episodes designed by 2018 Focus on both quality and cost 	 Wave I–Perinatal, joint replacement, asthma exacerbation Wave II–COPD, colonoscopy, cholecystectomy, percutaneous coronary intervention (PCI) 48 episodes now in implementation
Long Term Services and Supports (LTSS)	Provide LTSS with an emphasis on improving patient quality of life	 Quality and acuity adjusted payments for LTSS services Value-based purchasing for enhanced respiratory care Workforce development 	 Aligning payment with value and quality for nursing facilities and home and community-based care Training for providers

1. Patient-Centered Medical Homes.

PCMH have been shown to improve quality through the use of multidisciplinary teams, care coordination, and improved data flow with an emphasis on primary prevention and longitudinal care delivery. The PCMH strategy moves primary care delivery away from the traditional feefor-service model to population-based care with a focus on value by providing increased resources, training, information, and accountability to primary care providers.

By leveraging the state's role as a major health care purchaser for the Medicaid population, all state employees, and other public-sector insurance programs, the state is both leading the movement toward primary care transformation by example and actively involving and collaborating with private employers and insurers to achieve the goal of caring for 80% of the state's population in a population-based primary care model by 2020. TennCare and all commercial payers in the state have worked closely on both episode design and implementation.

¹⁰ Peikes D, Zutshi A, Genevro J et al. "Early Evidence on the Patient-Centered Medical Home." Final Report (Prepared by Mathematica Policy Research, under Contract Nos. HHSA290200900019I/HHSA29032002T and HHSA290200900019I/ HHSA29032005T). AHRQ Publication No. 12-0020-EF. February 2012. Rockville, MD: Agency for Healthcare Research and Quality.

2. Retrospective Episodes of Care.

This payment reform strategy focuses on an entire acute or specialized episode of care and assigns a single preselected primary accountable provider, or quarterback, responsible for all relevant services during the episode. Unlike the fee-for-service method that rewards volume of care, the episodes of care model rewards outcomes, promotes the use of evidence-based guidelines, encourages coordination, and reduces ineffective and/or inappropriate care by increasing provider accountability, aligning incentives, and improving the flow of information. The retrospective episode model has the advantage of using the existing claims system as its administrative platform, thus making the transition into the new payment environment easier for providers. The first three Tennessee episodes were created in September, 2013, with the reporting of actionable information to providers beginning in May, 2014. A total of 55 episodes have been designed through nine waves.

As of 2018, the commercial payers Cigna and Blue Cross Blue Shield of Tennessee have implemented ten episodes of care consistent with the TennCare model: total joint replacements, perinatal, coronary artery bypass graft (CABG), cardiac valve replacement, acute and non-acute percutaneous coronary intervention (PCI), colonoscopy, cholecystectomy, bariatric surgery, and esophagogastroduodenoscopy (EGD). The state's commercial payers have worked closely with the Bureau of TennCare on both episode design and implementation.

3. Long-Term Services and Supports.

This initiative addresses the needs of Medicaid and dual-eligible Medicaid/Medicare patients requiring LTSS, including nursing facility care and home or community-based services. Quality-and acuity-based episodes, administered on a prospective basis, reimburse providers based on an assessment of the patient's level of need, with payment adjustments made based on adherence to key quality metrics. These changes reward facilities and community-based providers that improve the patient's experience of care and promote a patient-centric care delivery model. The LTSS payment and delivery system reform works in concert with PCMH and episode-based payments to further encourage efficient, high-quality, integrated care with an emphasis on cost effectiveness. An additional strength of this initiative is the enhanced alignment of Medicaid and Medicare benefits for dual eligible patients.

By following a combination of three synergistic, efficiency-enhancing strategies and by gathering input and support from stakeholders across the state, Tennessee's health system reform is delivering better health value while optimizing stakeholder support.

Implementation Strategies

To ensure success and produce reform beyond the Medicaid population, Tennessee drew on a long history of public-sector health reform and one of the most valuable lessons learned was to seek input from many stakeholders. Since 2013, TennCare has convened over 1,200 community meetings statewide receiving feedback from all major payers, professional organizations, provider groups, hospitals, physicians, other providers, employers, business organizations, political leaders, and the public. Of special importance have been the over 80 clinical meetings called Technical

Advisory Groups (TAGs) organized specifically to design medical parameters for each part of the program. There have been 27 separate TAG groups with 370 different providers participating. These meetings were held for each specific episode of care as well as for the creation of the Patient Centered Medical Home and Health Home models. Appropriate clinical specialists relevant to each episode gathered voluntarily from across the state to provide detailed clinical feedback.

The structure and format of these TAG meetings have been critical to program progress. Each of the TAGs started by discussing the journey of a typical patient and best practices and sources of value that were used to achieve value and inform clinical recommendations. These clinical recommendations included key implementation components such as the specific procedure or diagnosis codes used to trigger an episode, who should be assigned as the primary accountable provider, how long the episode should last, what costs should be included for accountability, what specific conditions should lead to exclusion or risk adjustment, and what metrics should be used to measure quality. The TAG meetings focused on clear expectations around clinical inputs and decision-making processes with special attention paid to frank and thorough discussions of these decision-making parameters.

Generally, all specific clinical recommendations made by the TAGs regarding the design and implementation of the Tennessee's three coordinated reform strategies were adopted and followed by the state. Despite the diverse composition of providers by specialty, professional interest, practice type, and region of location, the TAGs have consistently come to clinical consensus on recommendations. The decision-making process of the groups has been to make clinical recommendations objectively based on data and transparency.

Tennessee's TAGs also sought to develop fair risk adjustment processes for episode-based payments to assure that both patients with complex conditions and the providers serving them are not disadvantaged financially. For each episode, this was accomplished through a series of steps in the development of the incentive-based payment model that began with the exclusion of patients with conditions that would cause them to have a significantly different clinical course of action. After these, more complex patients were excluded and a risk adjustment process was performed based on individual patients' co-morbidities to ensure fair financial comparison. Throughout the TAG process, significant effort was consistently made to be as inclusive in patient sample selection as possible to reflect the true costs of treatments so as to achieve payment adequacy and equity.

As this process moved forward, the TAG groups encountered several opportunities and challenges. For example, it was quickly recognized that a one-size-fits-all design would not work and, instead, flexibility would work better than a rigid adherence to rules in a state that had both significant rural and urban populations and three distinct and diverse geographic regions with no statewide integration of providers.

Several other unique characteristics have also contributed to early success. For example, TennCare has over the last ten years established stable and trusting managed care relationships with three experienced private MCOs and a long history of health system innovation. In addition, the innovation initiative has had commitment and support from the state's Governor and key health officials since the beginning and throughout the implementation process. These positive and

forward-looking factors emphasize opportunity for success and the possibility that these Tennessee solutions can influence the national direction of state-level healthcare reform.

Early Accomplishments and Lessons Learned

Tennessee is now six years into its statewide healthcare reform initiative and has made significant progress in implementation. Key objectives accomplished have included the design and testing of 55 episodes of care, with 48 currently in full implementation in the TennCare population as of January, 2019. As shown in Table 2, estimated annual savings have increased each year since 2015.

Table 2: Implementation of Episodes of Care in Tennessee and Associated Savings

Year	New Episodes of Care Implemented	Total Number Implemented	Estimated Annual Savings* (\$)
2015	Perinatal, joint replacement, asthma exacerbation [List new ones by full name]	3	10,500,000
2016	perinatal, TJR, acute asthma exacerbation, colonoscopy, acute PCI, non-acute PCI, cholecystectomy, COPD	10	14,500,000
2017	perinatal, acute asthma exacerbation, total joint replacement, colonoscopy, cholecystectomy, chronic obstructive pulmonary disease (COPD), acute percutaneous coronary intervention (PCI), and non-acute percutaneous coronary intervention (PCI), upper GI endoscopy (EGD), gastrointestinal hemorrhage (GIH), respiratory infection, pneumonia, urinary tract infection (UTI)-outpatient, urinary tract infection (UTI)-inpatient, congestive heart failure (CHF) acute exacerbation, oppositional defiant disorder (ODD), coronary artery bypass graft (CABG), valve repair and replacement, and bariatric surgery.	19	28,600,000
2018	Perinatal, asthma acute exacerbation, total joint replacement (hip & knee), screening and surveillance colonoscopy, chronic obstructive pulmonary disease (COPD) acute exacerbation, outpatient and non-acute inpatient cholecystectomy, acute percutaneous coronary intervention (PCI), non-acute percutaneous coronary intervention (PCI), upper GI endoscopy (esophagogastroduodenoscopy (EGD)), respiratory infection, pneumonia (PNA), urinary tract infection (UTI) – outpatient, urinary tract infection (UTI) – inpatient, gastrointestinal hemorrhage (GIH), attention deficit and hyperactivity disorder (ADHD), bariatric surgery, coronary artery bypass graft (CABG), congestive heart failure (CHF) acute exacerbation, oppositional defiant disorder (ODD), valve repair and replacement, tonsillectomy breast biopsy, otitis media, skin and soft tissue Infection, HIV, pancreatitis, diabetes acute exacerbation	29	Data not yet available

Source: Tennessee Bureau of TennCare

The results based on internal data shared by the Bureau of Tennessee show that total episode costs were \$28.6 million less than expected, with total savings now exceeding \$53 million after just

three years. Out of 19 quality metrics tied to gain sharing, eight of them improved, nine remained the same, and two metrics worsened, from 2015 to 2017. Significantly, incentive rewards in the form of "gain sharing payments" to providers have exceeded "risk payments" (a form of revenue clawbacks) in each year of implementation, by \$280,000 in 2015, \$395,000 in 2016, and \$206,900 in 2017.

Implementation of TennCare's PCMH strategy that began in 2017 now covers over 460,000 TennCare patients who are assigned to 67 state-approved PCMH providers. ¹¹ All of these primary care practices meeting the definitions and regulatory requirements of "Medical Homes" for Medicaid population authorized under Section 2703 of the Affordable Care Act (ACA) are either already NCQA accredited or are in the process. In addition, 69,000 patients with severe behavioral health conditions are now assigned to 22 Health Homes at 223 sites across the state through TennCare's Health Link program. ^{12 13}

Reflecting on the reform experiences and challenges of the last six years, we attribute these early process and outcome accomplishments to the following five key design and implementation factors.

1. Central Initiation and Control at the State Level.

Reform is most effectively when driven at the state level and when an optimal leverage exists for building and maintaining critically needed momentum. From the beginning, the Tennessee innovation initiative has been completely driven and managed centrally at the state level by the TennCare program and implemented with the close collaboration of experienced TennCare MCOs and other state health insurance contractors. While centralized control at the state level allows for a large-scale ramp-up and timely implementation, it is not so removed from the actual provision of care on the ground that requires flexibility and responsiveness from the state. Reliance solely on either the TennCare MCOs or commercial payers to implement the needed changes statewide would not have allowed for adequate scale, momentum, or motivation for substantive and significant progress.

2. Simultaneous Development and Implementation of Episodes of Care.

While several state Medicaid programs, including Arkansas and Ohio, have similar episodes of care models, no state has designed and implemented more episodes. ¹⁴¹⁵ The Tennessee program, because, in part, of its effective Technical Advisory Group (TAG) process, has been able to rapidly

¹¹ State of Tennessee. "Patient-Centered Medical Homes." www.tn.gov/content/tn/tenncare/health-care-innovation/primary-care-transformation/patient-centered-medical-homes-pcmh.html (accessed Feb. 5, 2019).
¹² State of Tennessee. "Tennessee Health Link."

www.tn.gov/content/dam/tn/tenncare/documents2/TennesseeHealthLinkOvervie-w.pdf (accessed Feb. 5, 2019).
¹³ State of Tennessee. "Primary Care Transformation: Tennessee Health Link for TennCare members with significant behavioral health needs." August 11, 2016.

 $www.tn.gov/content/dam/tn/tenncare/documents 2/Tennessee Health Link Overview.pdf \ (accessed \ Feb.\ 5,\ 2019).$

¹⁴ Carroll C, Chernew M, Fendrick AM, Thompson J, Rose S. Effects of episode-based payment on health care spending and utilization: Evidence from perinatal care in Arkansas. J Health Econ. 2018 Sep;61:47-62.

¹⁵ Rosenbaum S, Schmucker S, Rothenberg S, Gunsalus R, Beckerman JZ. Medicaid Payment and Delivery System Reform: Early Insights from 10 Medicaid Expansion States. Issue Brief (Commonw Fund). 2017 Oct 1;2017:1-15.

design and implement these payment models in under six years with extensive input and buy-in from provider groups. By involving front-line providers early and by valuing their input and experiences, this technically complicated and challenging process has avoided many unintended consequences and led to a workable, rapid, and reproducible implementation schedule. To date, the time from first design of an episode to first gain sharing payments has consistently been three years or shorter.

3. Implementation Through Managed Care Organizations.

Because of the structure of the TennCare program, the actual implementation has been completely performed by the private MCOs, which have both the incentives and experience in improving quality and cost-effectiveness. This goal and incentive alignment between the state and TennCare MCOs was a win-win for both sides, taking advantage of the comparative advantages of the state as the policy architect and the MCOs as the contractors that deliver the results. This model builds on the over two decades of public-sector managed care experiences in the state, while optimizing next steps in value creation.

4. Inclusion of all Major Payers in the State.

TennCare has also effectively included all the other major third-party payers in the state, both through contractual obligations and overt inclusion in the process. With the considerable leverage provided by TennCare's covering almost 25% of the state's population, the innovation initiative was able to involve all payers early in the process and specifically included mandatory participation in Medicaid MCO contracts.

5 Mandatory Participation in Episodes of Care with Downside Risk for all Providers.

Tennessee's experience shows that successful reform must have teeth to be effective. Requiring provider participation with mandatory downside financial risk in all implemented payment episodes is essential to changing provider behavior. There is a national trend in both federal and state programs reporting results thus far that voluntary participation without provider risk does not overcome the inertia of the existing fee-for-service model and will not effectively change provider behavior. Meaningful change requires reform elements that are mandatory and yet flexible and that have enforcement teeth by, for example, placing providers at financial risk.¹⁶

DISCUSSION

Although states throughout the U.S. are undertaking different approaches in health care delivery and payment reform, many states are contemplating or involved in similar reforms as those used

¹⁶ Centers for Medicare and Medicaid. "State Innovation Models Initiative: Bundled Payments for Care Improvement Advanced." January 16, 2019. innovation.cms.gov/initiatives/bpci-advanced (accessed Feb. 5, 2019).

in Tennessee. 171819 The following "lessons learned" based on the five success factors we identified should help to guide the efforts of other states seeking to improve health care value.

First, effective and efficient implementation is paramount. Reform efforts must build up and maintain momentum by developing a practical and consistent timeline within reasonable resource and political constraints. The Tennessee initiative has been able to obtain early success and momentum by setting attainable goals for both cost and quality. Progress has been maintained over the last six years through an iterative and yet aggressive approach with constant feedback from both formal and informal mechanisms and channels driving incremental changes.

Second, states must be prepared to aggressively leverage increased information flow and technology in order to develop creative solutions and optimal results. Valuably, state agencies such as the Tennessee Department of Health, Bureau of Tennessee, and the Department of Finance and Administration all have unique data and information technology assets that shared with each other to assist greatly in the reform. The Tennessee reform initiative has also included enhanced data flow through quarterly provider reports and a Care Coordination Tool available to primary care providers. Further, the state has worked closely with the Tennessee Hospital Association to arrange Admission, Data, and Transfer (ADT) feeds from the state's hospitals to the centrally managed Care Coordination Tool. TennCare, with guidance from the TAG process, has also developed unique pathways to measure meaningful quality interactions, such as information from existing Quality Registries, state health and population health databases, and other non-claims data sources, that go beyond just claims data.

Third, detailed technical understanding of the direction of other reform initiatives, including CMS programs with Medicare, other state Medicaid initiatives, and national payer programs, is crucial to optimizing supply-side health system redesign. Tennessee has effectively taken advantage of an evolving national trend toward combining primary care transformation through a PCMH model and episodic care accountability. Over time, these models will likely mature with increasing provider accountability and momentum moving toward greater provider risk through capitation or Accountable Care Organizations.

Fourth, it is critical to develop a holistic and synergistic approach to reform, with integration and coordination among the key components of the reform model. In terms of the breath of reform, for example, Tennessee's initiative focused on the growth and development of both PCMHs and Health Homes to emphasize chronic conditions and behavioral health conditions, respectively. Meanwhile, the new payment model based on 55 episodes of acute and specialized care provided the greatest opportunity to achieve the ultimate goal of increasing access, improving outcomes, and stabilizing costs as we move toward a system that integrates and rewards coordinated care at the population level.

¹⁷ Silow-Carroll S and Lamphere J. State innovation models: early experiences and challenges of an initiative to advance broad health system reform. Issue Brief (Commonw Fund). 2013 Sep;25:1-12.

¹⁸ Grembowski D, Marcus-Smith M. The 10 Conditions That Increased Vermont's Readiness to Implement Statewide Health System Transformation. Popul Health Manag. 2018 Jun;21(3):180-187.

¹⁹ Begley C, Hall J, Shenoy A, Hanke J, Wells R, Revere L, Lievsay N. Design and Implementation of the Texas Medicaid DSRIP Program. Popul Health Manag. 2017 Apr;20(2):139-145.

Last and strategically, the state took advantage of Tennessee's existing Medicaid managed care program, known as TennCare, as a vehicle to carry the heavy load of reform work. The TennCare program has over the years used creative methods to inform and educate providers about clinical opportunities including videos, webinars, and in person seminars to engage as many providers as possible and to positively influence behavior. This outreach vehicle has been designed to educate providers about best practices and sources of value and to help them transition to these new models of care and the SIM initiative took full advantage of this existing asset.

This study and its lessons learned are subject to a number of limitations. For example, though it details the early results of a natural experiment in state-level payment reform, it is not a controlled experiment and hence is subject to the usual shortcomings of an observational study. In addition, Tennessee is not the only state that has initiated SIM innovation reform and Tennessee's experiences reported here may or may not be readily comparable to other states. However, Tennessee's implementation experience and results can help guide the efforts of other states or provide inspiration to them to improve health care value.

CONCLUSION

This study has reviewed Tennessee's health system reform strategy and discussed the implementation strategies and lessons learned in the Tennessee model to date. In 1932 Supreme Court Justice Brandeis declared the states "laboratories of democracy" and this is certainly the case today, with multiple state-led initiatives providing real world results reforming our broken national health system. As states gather momentum, there appears to be national momentum building around models that transform primary care relationships and create enhanced accountability for specific episodes of care.

These reforms are encouraging and rewarding coordination of care, communication and collaboration between providers of all types, access to care in the appropriate setting, improved flow of information to allow better clinical decision-making, and changed incentives that reward providers based on outcomes and cost-effectiveness rather than the volume of services provided. There is a clear movement away from the historic fee-for-service model that rewarded quantity of treatment toward one that rewards quality and value. These changes can be summed up by the proven managed care principle of delivering the right care by the right provider at the right time and place.

Tennessee has a long history of health care innovation and is well-positioned to continue leadership in payment and delivery reform. As they continue to build momentum and produce data, the objective results and ongoing lessons will be valuable to the national reform debate.

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