## Achieving Triple Aim Outcomes: An Evaluation of the Texas Medicaid Waiver

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## Abstract

The Texas Medicaid Waiver, via the Delivery System Reform Incentive Payment (DSRIP) program, has provided a path for Texas to achieve the Triple Aim through its focus on a defined population at the project and system levels, and financial payment policy based on outcomes. Both iterations of the DSRIP program (Waiver 1.0 and 2.0) have helped define populations, created regional collaboration that sets the stage for a true integrator, and provided financial incentives for improving population health, enhancing patient experience, and controlling costs. The flexible design of project menus and measure bundles in DSRIP encouraged a variety of projects, numerous measures of success and (often) overlapping populations of individual served to achieve the ultimate goal of the Triple Aim. This research outlines the major features of Texas DSRIP and demonstrates the Medicaid Waiver effectively contributed to measurable improvements in health, suggesting Texas safety net providers are moving closer to Triple Aim achievement.

## Keywords

safety net providers, population health, outcome assessment, payment reform, Medicaid Waiver, Triple Aim

## Introduction

Texas health care safety net providers have been incentivized to pursue health care delivery reform during the past 8 years through 2 sequential Medicaid 1115 Transformation Waivers. As 1 of the 8 states with this type of waiver, Texas developed the Delivery System Reform Incentive Payment (DSRIP) program in which participating providers receive supplemental Medicaid payments for designing and implementing delivery system reforms.<sup>1,2</sup> Underlying DSRIP are the Triple Aim objectives of improving population health and patient experience while containing or lowering costs in the Medicaid and low-income uninsured (MLIU) population.<sup>3,4</sup> Achieving these objectives is challenging because it requires providers to broaden their typical operational scope from individuals to populations, focus on outcomes rather than process, and reduce costs rather than increase revenue.<sup>3</sup> This article addresses the question of whether Texas is moving closer to Triple Aim achievement through the DSRIP model that involves provider system and regional integration, an externally determined menu of population health objectives, and payment arrangements based on prespecified health outcome improvements at the provider system level.

## Texas DSRIP and the Triple Aim

Texas is currently in the seventh year of the waiver and its second version of DSRIP. Delivery System Reform Incentive

Payment 1.0 began in October 2011 and ended in September 2017; DSRIP 2.0 began in October 2017 and will continue through September 2021. Under the first 6 years of DSRIP 1.0, participating providers established Regional Healthcare Partnerships (RHPs—defined to approximate geographic service areas) and determine a public hospital or alternative public safety net provider to serve as the regional coordinator (RC). Led by the RC, participating providers completed a regional health care needs assessment emphasizing the unmet needs of the MLIU population, and selected from a state menu infrastructure and/or service redesign projects that addressed 1 or more regional need.<sup>2,5,6</sup> Providers were paid to design and implement innovative projects and achieve health outcome improvements in patients served by the projects.<sup>1,2</sup> Delivery System Reform Incentive Payment 1.0

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allowed participating providers the ability to more narrowly define their unique population as patients served by specific projects (ie, all patients served by an integrated care clinic). Providers often defined a narrow population based on the project. For example, a clinic-based project focused on diabetics would include only diabetics who visited the primary care clinic during the last 12 months as their population. Prior research evaluating the impact of Waiver 1.0 on improving population health suggests a reduction in preventative hospitalizations,<sup>7</sup> an increase in organizational connections leading to improved collaboration along the continuum of care,<sup>8</sup> and a decrease in the hospital growth rate of percentage of uncompensated care.9 The early published results of Waiver 1.0 suggested the Waiver may be a vehicle for Triple Aim achievement, particularly with Waiver 2.0's shift in focus on system-level outcomes.

Delivery System Reform Incentive Payment 2.0 maintains the same level of funding for years 7 and 8, with declining amounts in years 9 and 10, and 0 in year 11. Funding is based on the same arrangement of federal/state matching dollars, regional coordination, an external menu, and a performance-based payment model but the focus is broadened from process and outcome achievement at the project level to health outcome improvement in the MLIU population at the provider system level. Rather than selecting from a menu of innovative project types for implementation, providers are required to select population outcome measures for improvement and are paid for improving the measures in their MLIU population.<sup>2</sup> Delivery System Reform Incentive Payment 2.0 maintained the RHP structure but required providers to define their populations at the broader system level (ie, all patients served by the major components of a provider's health system). Under DSRIP 2.0, a project aimed at diabetics would be expanded to include all diabetics served by any of the clinics operating within the provider's health system. This expanded definition of a population often required the development of data reporting/sharing across providers within, and sometimes between, systems to accurately capture outcome data. To date, no research has been published evaluating the impact of Waiver 2.0 on population health improvement.

These structural features of the waiver represent incremental steps in encouraging Triple Aim achievement among safety net providers in Texas.<sup>2</sup> The Triple Aim framework specifies 3 broad objectives for improving service delivery in the US health care system: identify and focus on improving the health of a defined population, enhance the defined population's experience of care—defined by the Institute of Medicine as safe, effective, patient-centered, timely, efficient, and equitable<sup>10</sup>—and reduce, or at least control, the growth in per-person cost of care.<sup>3,11</sup> The framework's architects defined 3 prerequisites for achieving these objectives: a common, well-defined, and understood population; external policy goals and/or constraints for service delivery; and an active and influential integrator at the population and individual patient levels.<sup>3</sup> Berwick

and colleagues suggested that the first prerequisite-the need for a recognized population of concern-could be a geographically located population such as a primary care physician's patient panel, or a population with a commonality such as diabetics.<sup>3</sup> Block asserted that the accountable care organization model illustrates the concern for a population at the system level.<sup>12</sup> Policy constraints that force organizations to balance outcomes and costs are considered the second Triple Aim prerequisite. Block exemplified the necessity of this constraint in the possible overuse of preventive services if evidence-based guidelines are not disseminated and followed.12 The final precondition necessary for achieving the Triple Aim requires the existence of an integrator. The integrator is necessary to monitor and coordinate services for the defined population in such a way that all 3 aims are being considered simultaneously. The Triple Aim requirements have been further delineated and illustrated by Institute for Healthcare Improvement (IHI).<sup>11,13</sup> Since its inception, the Triple Aim has been considered ambitious for healthcare providers, but a growing number of demonstrations provide evidence of its feasibility and potential,<sup>14</sup> indicating the framework has utility for Medicaid Waivers. Examples of successful large-scale implementation include<sup>15,16</sup> the Health Improvement Partnership of Santa Cruz, California,<sup>17</sup> Signature Healthcare,<sup>18</sup> and the Canadian Foundation Triple Aim Improvement Community.19

## Objectives

To assess the potential impact of the Texas DSRIP model, this study (1) explores the relationship between the major features of the model and the Triple Aim objectives and requirements and (2) shows how DSRIP metrics correspond with Triple Aim measurement and provides preliminary data on performance to date across the state. First, we examine the extent to which the features of DSRIP at the state, RHP, and participating provider level meet the preconditions for Triple Aim.<sup>3</sup> Next, we determine the alignment of DSRIP metrics and Triple Aim measurement using the IHI's guide for Triple Aim measurement<sup>11</sup> and summarize the achievement of DSRIP metrics to date.

## Methods

To assess how the DSRIP program's structure at the state, RHP, and provider level matches the IHI's stated 3 prerequisites for Triple Aim success,<sup>3,12</sup> we describe the target populations outlined by the Texas DSRIP and the actual populations served by DSRIP providers within the largest RHP. The external policy constraints imposed by DSRIP, both external (state) and internal (within provider organizations), are also described for the region. Finally, we consider how, if at all, the integrator role of DSRIP, as implemented in the region, meets this Triple Aim prerequisite.

To assess the extent to which DSRIP metrics align with Triple Aim achievement, we classified state-level outcome

Triple Aim preconditions	Level	DSRIP I.0	DSRIP 2.0
Defined population	State	Statewide MLIU population.	Unchanged.
	RHP	RHP MLIU population served across projects.	RHP MLIU population served across <u>health</u> systems.
	Provider	MLIU population served by each project.	MLIU population served by each provider.
Policy constraints	State	Specified project menu, process and outcome reporting, and payments across all projects.	Specified outcomes, outcome reporting, and payments across all health care systems.
	RHP	Some payments required participation in RHP events/learning collaboration.	Unchanged.
	Provider	Participation limited to resource limits and project priorities of the organization.	Participation limited to resource limits and system-level priorities of the organization.
Existence of an integrator	State	Created infrastructure for statewide reporting and knowledge sharing focused on infrastructure and redesign projects.	Created infrastructure for statewide reporting and knowledge sharing focused on system-level outcomes.
	RHP	Created infrastructure for interprovider communication, collaboration, and learning focused on <u>projects</u> .	Created infrastructure for interprovider communication, collaboration, and learning focused on <u>achieving system-level</u> outcomes.
	Provider	Created management structure and processes for project budgets, achieving process and service delivery objectives, improving health outcomes, and in some cases improving elements of patient-centeredness/satisfaction.	Created management structure and processes for system-level budgets and improving health outcomes at the system level.

Table 1. Relationship Between Triple Aim Preconditions and DSRIP.

Note. DSRIP = Delivery System Reform Incentive Payment; MLIU = Medicaid and low-income uninsured; RHP = Regional Healthcare Partnership. The underline was to add focus on the key differences between DSRIP 1.0 and 2.0.

metrics under 1 or more Triple Aim objectives using the IHI's guide to measuring the Triple Aim<sup>11</sup> and further definitions provided by Bisognano et al.<sup>13</sup> After classifying metrics, we report state-level outcomes aggregated across providers and projects that were self-reported by providers to receive payment. Metrics varied depending on the measure, for example, some metrics were aimed at increasing the number of individuals served, while others measured the percent of individuals receiving a service. Metrics that were not present in both DRSIP 1.0 and 2.0, or those with significant changes in their specifications, were excluded. Numerator and denominator data were not available for risk-adjusted measures because they were calculated by individual providers and reported to the state as an odds ratio; thus, project-level odds ratios were averaged to obtain a statewide metric.

Next, the raw percent change (improvement) for each metric over the first 3 years of DSRIP 1.0 (baseline to performance year 6) and over the first year of DSRIP 2.0 (baseline to performance year 1) are reported. Due to the variation in the metric definitions, computing the percent change allowed for descriptive comparisons between metrics. The baseline period for most projects in DSRIP 1.0 was October 2013 to September 2014 (year 3), while the performance periods run from October 2014 through September 2017 (years 4-6). For DSRIP 2.0, the baseline period was January through December 2017 for most measures, and the first performance year period was January through December 2018. Delivery System Reform Incentive Payment 2.0 focused on an increase in system-wide population metrics which resulted in some providers dropping measures or restarting them with a new baseline that reflected a different (and sometimes larger) patient population. Consequently, the number of projects using each metric changed between DSRIP 1.0 and 2.0, as did the size of the projects' denominators.

## Results

## Delivery System Reform Incentive Payment Model Alignment With Triple Aim Requirements

At the state level, both DSRIP 1.0 and 2.0 clearly defined geographic populations through the RHP structure (Table 1). DSRIP 1.0 and 2.0 also met the second precondition of achieving the Triple Aim through external state- and RHPlevel payment policy constraints and internal provider-level strategic policies (Table 1). At the state level, DSRIP 1.0 provided well-defined policy objectives and constraints by specifying a menu of acceptable projects and defining performance-based process and outcome metrics necessary to receive DSRIP funding. Delivery System Reform Incentive Payment 1.0 also required providers to participate in RHPlevel sponsored events such as learning collaboratives. At the provider level, many organizations consider their strategic initiatives when deciding whether to participate in DSRIP with providers only agreeing to those DSRIP projects which would be undertaken with or without DSRIP. Both DSRIP 1.0 and 2.0 required providers to adhere to state- and RHPlevel reporting requirements.

The design of DSRIP 1.0 and 2.0 did not provide a clear integrator, as required by the Triple Aim, as no single organization was fully tasked with achieving the 3 aims (Table 1). However, specific provisions of DSRIP required various entities to integrate, such as statewide reporting, RHP-level communications, and provider-level project integration across a health system. Arguably, the RHP anchor was best positioned to serve as the population integrator; however, DSRIP did not require RHP-level coordination and individual providers who maintained full responsibility for improving health outcomes within their projects/systems. The RHP anchors did provide opportunities for communication, collaboration, and shared learning across provider systems.<sup>20</sup> For example, RHPs typically had monthly provider calls, regular newsletters, and biannual learning collaborations. The individual provider organizations did serve as integrators at the patient level because they were responsible for maintaining or increasing access to services and improving the patient experience. And as providers transitioned from DSRIP 1.0 to 2.0, it became necessary for them to consider multistakeholder efforts to improve their population health outcomes.

# Association of DSRIP and Triple Aim Metrics and Performance to Date

Table 2 categorizes each of the DSRIP 1.0 and 2.0 metrics according to Triple Aim's objectives and frequency of the measure in each DSRIP program, respectively, as well as descriptive statistics including the range, median, and mean of the denominators used (individuals served) for each metric. Baseline and performance year 3 measurement levels are also included in the table. Measures included in Table 2 reflect metrics used in both DSRIP 1.0 and 2.0 programs and include the top 5 most frequently chosen measures for each DSRIP program. Note, this is not a comprehensive list of measures in the DSRIP program. Because some providers had the same measures for multiple projects, it is possible that some duplication may have occurred.

Under the Triple Aim objective of improving the health of a defined population (population health), DSRIP metrics were categorized using the IHI categories<sup>11</sup> as those aimed at reducing disease burden and those aimed at improving behavioral and/or physiological factors of health. The most frequently selected DSRIP metrics in population health, chosen a total of 81 times in Texas (Table 2), focused on reducing disease burden and had notable 3-year improvements, as shown in DY6, in Depression remissions at 12 months (143%) and Influenza immunizations (133%). The median number of patients served (baseline denominator) across the 81 projects targeting disease burden was 2387 individuals. Improvements in behavioral and/or physiological factors of health were measured through the 5 most frequently chosen DSRIP metrics chosen 278 times with the total median number of individuals served in those projects as 10 013 individuals. All these frequently selected behavioral and physiological factor

metrics showed improvement from the baseline score with overall impact ranging from a 7% improvement in controlling high blood pressure to a 78% increase in diabetic foot screenings. The metric, *Comprehensive Diabetes Care: HbA1c poor control*, was the most selected measure for both iterations of the DSRIP programs, chosen 113 times in DSRIP 1.0 and 91 times in DSRIP 2.0 (Table 2).

In DSRIP 2.0, there was an increase in the majority of measures in the denominator attributable to the expansion of the defined target population. The measure of Adult immunization status went from an average of 665 individuals in DSRIP 1.0 to 20 635 individuals in DSRIP 2.0 (Table 2). Likewise, the most selected measure in DSRIP 1.0, Comprehensive Diabetes Care: HbA1c poor control, despite being selected fewer times (113 times in DSRIP 1.0 to 91 times in DSRIP 2.0) increased in the average number of individuals served. The average of 1942 individuals in DSRIP 1.0 increased to 2929 individuals in DSRIP 2.0. In DSRIP 1.0, there was improvement in all measures shown for population health. Improvement is less prominent in DSRIP 2.0 though still exists after 1 year of data. The Comprehensive Diabetes Care: eye exam metric improved by 16% in DSRIP 2.0, while Influenza immunization improved by 12%. There were some metrics that got worse over the 1-year DSRIP 2.0 measurement period such as latent tuberculosis infection treatment rate (declined by 27%) and controlling high blood pressure (decreased by 7%; Table 2).

System Reform Incentive Payment metrics related to the Triple Aim objective of enhancing the experience of care were categorized into the IOM's areas of enhanced safety, effectiveness, timeliness, and patient centeredness. The area of equitable and efficient is not included in the table, due to the measurement of these constructs. Delivery System Reform Incentive Payment was designed to serve the underserved; all projects included process measures requiring a high percentage (actual value varied across projects) of individuals served to be Medicaid, low income, or uninsured. Thus, equitable care was the backbone across all projects and not directly measured in this research. Efficient care requires the reduction of waste. The Waiver did not require projects or organizations to measure a reduction in waste. However, both DSRIP projects and system-wide initiatives were all newly created services or interventions, so it is likely project managers designed the initiatives with minimal waste, but this is not measurable. Four DSRIP metrics, measured 31 times in DSRIP 1.0, were aimed at improving safety; overall changes in these measures ranged from a 30% reduction in expected Patient falls to an 81% reduction in expected surgical site infections (Table 2). The majority of metrics aimed to improve the effectiveness of care. The 8 most frequently chosen metrics focused on improving the effectiveness of care through better post-treatment follow-up, care coordination, and screenings.

In general, the state saw large 3-year improvements across all effectiveness of care metrics, with rates of *chlamydia* 

Table 2. DSRIP's Achievement of the Triple Aim Objectives.

		Waive	ir 1.0					Waiver 2.0			
Triple Aim	Health outcomes	Frequency of measure	Baseline denominators: median, range, average	Baseline (DY3)	, DY6	% change (%)	Frequency of measure	Baseline denominators: median, range, average	Baseline (DY6)	DY7	6 change (%)
Population [	Disease Burden										
health	Depression remission at 12 months	=	79; 87; 126	0.05	0.11	143	16	34; 470; 117	0.09	0.09	m I
	Latent tuberculosis infection	80	281; 589; 305	0.56	0.78	39	80	172; 926; 282	0.45	0.33	-27
	treatment rate										
	Adults (18+ years) immunization	9	305; 2377; 665	0.34	0.40	8	37	9132; 101 078; 20 635	0.45	0.44	с Г
	status										
	Pneumonia vaccination status for older adults	26	640; 26 956; 2012	0.56	0.81	45	83	1317; 34 401; 2944	0.58	0.62	9
	lafinonza immunization	<u>с</u>	854. JN 641. J2JJ		050	122	46	8129. 67 837. 13 610	0 34	82 U	2
		2	001, 20 011, 2022	17.0	00		0F	010 01 , 100 10 , 10 010	10.0	00	4
	Immunization for adolescents— Tdap/TD and MCV	ъ	228; 3748; 756	09.0	0.74	23	8	749; 22 622; 2690	0.41	0.45	=
ш	sehavioral and physiological factors										
	Comprehensive Diabetes Care:	113	317; 30 837; 1942	0.36	0.31	12	16	793; 43 760; 2929	0.33	0.30	7
	HbAIc poor control (>9.0%)										
	Diabetes care: BP control	35	553; 14 192; 1531	0.65	0.71	0	85	840; 41 417; 3100	0.66	0.64	r I
	Controlling high blood pressure	75	190; 38 828; 1582	0.62	0.66	7	52	1807; 50 553; 5496	0.66	0.61	-7
	Comprehensive Diabetes Care: eye	8	8703; 26 342; 13 282	0.31	0.51	64	19	3007; 13 959; 3105	0.36	0.42	16
	exam										
	Comprehensive Diabetes Care: foot	37	250; 3060; 650	0.38	0.68	78	72	998; 13 959; 3499	0.47	0.51	8
	exam										

		Waiv	rer 1.0					Waiver 2.0			
Triple Aim	Health outcomes	Frequency of measure	Baseline denominators: median, range, average	Baseline (DY3)	DY6	% change (%)	Frequency of measure	Baseline denominators: median, range, average	Baseline (DY6)	DY7	% change (%)
Experience	s Safe										
	Central line–associated	9	49; 31 883; 5347	0.01	0.00	65	39	9; 130; 18	0.87	0.65	26
	bloodstream infection rates <sup>a</sup>										
	Catheter-associated urinary tract infection rates <sup>a</sup>	œ	19; 29 253; 3676	0.01	0.01	39	39	9; 65; 15	00 <sup>.</sup> I	0.91	01
	Surgical site infections rates <sup>a</sup>	Ŷ	77· 8998· 1574	100	000	8	37	11. 65. 78	0 77	0 7 0	6
	Patient fall rate <sup>b</sup>	° =	10 144; 143 695; 27 667	0.004	0.003	30	36	58 942; 65; 83 315	2.59	2.62	\ <u>-</u>
	Effective										
	Preventative care and screening:	16	335; 14 375; 1523	0.44	0.74	67	47	4198; 344 032; 6939	0.45	0.53	8
	screening for high blood pressure										
	and tollow-up documented										
	Body mass index screening and follow-up	26	432; 20 248; 1776	0.62	0.90	45	64	6924; 151 691; 18 949	0.48	0.66	38
	Tobacco use: screening and	01	886: 13 495: 3485	0.54	0.61	13	122	3920: 139 993: 10 457	0.75	0.82	0
	cessation intervention										
	Follow-up after hospitalization for	33	98; 2622; 442	0.24	0.52	116	31	201; 85 953; 576	0.35	0.61	75
							ł				
	Chlamydia screening in women	6	107; 1405; 355	0.28	0.86	212	33	509; 9351; 1082	0.54	0.55	_
	Breast cancer screening	29	681; 28 437; 2853	0.51	0.62	21	38	2458; 43 042; 6885	0.67	0.70	ъ
	Cervical cancer screening	23	813; 15 408; 2259	0.49	0.56	16	35	6313; 99 390; 13 811	0.52	0.64	23
	Colorectal cancer screening	30	489; 37 692; 3832	0.48	09.0	26	38	4290; 73 353; 12 944	0.48	I.09	=
	Timely										
	Third next available appointment <sup>c</sup>	20	3; 12; 4	46.65	10.56	77	_	1; 1; 1	12.00	11.60	m
	Patient centered										
	Hospice and palliative care—	15	112; 1049; 241	0.42	0.70	67	16	508; 2726; 767	0.62	0.53	-15
	treatment preferences										
	Beliefs and values—percentage	8	137; 301; 185	0.49	0.86	74	16	291; 2792; 649	0.65	0.68	4
	of hospice patients with										
	documentation in the clinical										
	record of a discussion of										
	spiritual/religious concerns or										
	documentation that the patient/										
	caregiver did not want to discuss.										

<sup>a</sup>Measured as actual observed events over calculated expected events. <sup>b</sup>Measured as falls per patient days. <sup>c</sup>Continuous measure with a denominator including number of providers in DSRIP 1.0 and denominator of 1 in 2.0. The measure looks at the average number of days to next available appointment.

Trinle Aim Heal		1 1 1	ver I.0					Waiver 2.0			
	th outcomes	Frequency of measure	Baseline denominators: median, range, average	Baseline (DY3)	DY6	% change (%)	Frequency of measure	Baseline denominators: median, range, average	Baseline (DY6)	DY7	% change (%)
Cost Per	capita cost										
LFili:	one zation										
Ri	sk-adjusted CHF 30-day	51	I	1.07	0.88	81	ſ	I	1.37	1.25	6
Ē	eadmission rate <sup>a</sup>										
Ri	sk-adjusted all-cause	56	I	10.1	0.78	23	22	I	0.96	0.96	_
-	eadmission <sup>a</sup>										
Ŗ	educe emergency department	25	10 968; 93 296; 23 240	0.08	0.08	7	œ	44 579; 220 711; 66 589	0.09	0.14	-63
> 0	isits for behavioral health and										
S	ubstance abuse										
Ri	sk-adjusted behavioral health/	13	I	1.02	0.82	20	ъ	I	0.80	0.88	6-
Ś	ubstance abuse 30-day										
Ĺ	eadmission rate <sup>a</sup>										
Ŗ	educe mental health	35	74.5; 4144; 439.43	0.20	0.17	-12	5	2886; 8526; 3239	0.08	0.10	-   4
а	dmissions and readmissions to										
U	riminal justice settings										
Ŗ	sduce rate of emergency	23	17 274; 164 960; 28 750	0.09	0.10	-7	74	2915; 74 342; 7778	0.25	0.29	-16
P	epartment visits for diabetes										

*Note*. DSRIPs = Delivery System Reform Incentive Payment; CHF = congestive heart failure; BP = blood pressure. <sup>a</sup>Measure's denominator and numerator are rates. Baselines and DY6 were averaged.

screenings improving by 212% and follow-up after hospitalization for mental illness improving by 116%. The total median population served for the 176 highlighted projects aimed at improving care effectiveness was 3841 individuals. One DSRIP metrics, comprising 20 projects in DSRIP 1.0, assessed timeliness of care through the average number of days until the *third next appointment*; it demonstrated a 77% improvement over 3 years (Table 2). Patient-centered care was measured by 2 DSRIP metrics within 33 projects in DSRIP 1.0, both of which improved the experience of care for hospice patients. There was a 67% improvement in the rate of hospice and palliative care patients whose preferences were discussed and documented and a 74% improvement in the rate of hospice patients whose religious or spiritual needs were discussed. The total median population served in the 33 DSRIP 1.0 patient-centered projects was 249 hospice patients.

In DSRIP 2.0, the majority of patient experience measures continued to show improvement. All the safety metrics except *patient falls* improved, but the rate of improvement in the patient safety measures was less during DSRIP 2.0 than in DSRIP 1.0. For example, central line-associated infection rates, catheter-associated urinary tract infections, and surgical site infection rates improved by 26%, 10%, and 9%, respectively, in DSRIP 2.0 (Table 2). The same can be said of measures in effectiveness, timeliness, and patient-centered care. The majority of these measures improved over the 1-year DSRIP 2.0 time period, though the improvement was less than the improvement gained during DSRIP 1.0. It is notable that even with a slower rate of improvement, the impact was significantly higher, given the tremendous growth in denominator size. For example, colorectal cancer screening had an average of 3832 individuals during DSRIP 1.0, yet in DSRIP 2.0, the average denominator size was 12 944 individuals (Table 2).

## Reducing Per Capita Costs

Using utilization as a proxy for costs, DSRIP did not clearly reduce costs, despite having measures focused on reducing unnecessary utilization. Four metrics, *CHF, risk-adjusted all-cause*, and *behavioral health 30-day readmissions*, as well as *reduction in emergency department visits for behavioral health and substance abuse* did show improvement between the baseline year and performance year 3 (DY6) in DSRIP 1.0. However, the other utilization measures, including *mental health admissions* and readmissions and *emergency department visits for diabetes*, showed an increase in utilization.

In DSRIP 2.0, only 2 measures showed an improvement in utilization: *Risk-adjusted CHF 30-day readmissions* and *risk-adjusted all-cause readmissions*. The remaining utilization metrics showed an increase rather than the expected decrease in utilization.

## Discussion

The Texas 1115 Waiver preserved hospital supplemental payments under the Upper Payment Limit (UPL) program while allowing Medicaid managed care expansion. Although the Waiver did not expand coverage for uninsured, it does increase the accountability of safety net services provided to MLIU through performance-based payments. The participating providers and project types reflect major shifts in the direction of support of Medicaid supplemental payments under DSRIP compared with the former UPL program most notably from hospital inpatient care to ambulatory care for the MLIU, particularly those who have behavioral health conditions.<sup>2</sup> These shifts are apparent through the DSRIP program's innovative projects aimed at health improvements for MLIU, and the success is shown by the outcome measures discussed in this research. However, there is not enough evidence to ascertain whether DSRIP's successes are equivalent or better than those achieved by Medicaid expansion states, particularly because the rate of uninsured in Texas remains high.

The DSRIP framework provided the necessary structure for health care providers to begin seeking the Triple Aim through its focus on a defined population at the project and system levels, and financial payment policy based on outcomes. However, it fell short in establishing a strong integrator role with oversight for balancing the achievement of the Triple Aim at the regional level and including cost reduction as an objective. Although DSRIP did establish 20 geographically defined RHPs, each with an anchor entity to perform the integrator role, the anchors had no authority or oversight over project or provider achievement. Rather, the anchor served an administrative role focused on reporting, communicating, and voluntary collaborating. Further weakening the focus on shared responsibility for Triple Aim achievement was the lack of shared financial risk across providers. If the DSRIP framework included an RHP- or state-level bonus pool, the RHP anchors may have been in a more influential position to serve as integrators by creating opportunities for providers to collaborate across projects and systems to achieve the Triple Aim. The lack of requirements or financial incentive for organizations (ie, hospitals, physician groups, community mental health centers, local health departments) to work together to integrate the full continuum of care for the population was evident.

The operational design of DSRIP created incentives for providers to seek Triple Aim achievement. Through the menu of acceptable projects set forth in DSRIP 1.0, the defined set of metrics and bundles, and the shift to a larger population definition in DSRIP 2.0, the Texas DSRIP program successfully set forth the necessary conditions to improve the population's health, enhance the patient experience, and reduce unnecessary utilization. As providers transitioned from DSRIP 1.0 to DSRIP 2.0, financial incentives required providers to expand from assessment of individual project-based metrics to metric bundles for a population which often necessitated new partnerships and data sharing. Providers were required to conduct cost-benefit and financial savings analyses, which puts a greater emphasis on the Triple Aim objective to reduce per capita cost. Furthermore, the population affected by DSRIP grew because the state required a broader definition of population for each individual project.

Unlike other IHI-led efforts focused on Triple Aim achievement, the flexible design of project menus and measure bundles in DSRIP encouraged a variety of projects, numerous measures of success, and overlapping population definitions. This created challenges in assessing the impact of DSRIP on Triple Aim achievement. Although the metrics used to assess improvement were standardized, allowing for aggregation at the project and provider system levels, quantifying total impact at the region or state level is not possible. It is inevitable that projects aimed at improvements in 1 area also improved other (nonmeasured) areas. For example, projects aimed at improving behavioral and/or physiological factors likely improved screening rates or reduced emergency department visits. Similarly, projects which increased access or enhanced patient navigation likely overlapped with others designed to increase preventative measures and/or screenings. Likewise, some DSRIP projects served overlapping populations, particularly because the target population was MLIU patients. Despite the challenges of quantifying DSRIP's overall impact, it seems clear that the major features of DSRIP and the measurable effects to date suggest Texas safety net providers are moving closer to Triple Aim achievement.

## Conclusion

The Texas Medicaid Waiver, via the DSRIP program, has provided Texas with a path to achieving the Triple Aim. Both iterations of the DSRIP programs have helped define populations in Texas, create regional collaboration that sets the stage for a true integrator, and provide financial incentives for improving population health, enhance patient experience and control costs. Delivery System Reform Incentive Payment provided the necessary impetus for Texas providers to demonstrate their willingness and ability to collaborate for the betterment of the population's health, when financially motivated. Presently, there are 53 approved Medicaid 1115 Waivers across 42 states, with another 23 pending approval. Of the 53 approved Waivers, 16 include Delivery System Reform with 2 additional pending.<sup>21</sup> Given the continued interest and growth in Medicaid 1115 Waivers, and more specifically Delivery System Reform, future Medicaid payment policy should consider modifications that strengthen the integrator role with greater authority, promote data sharing, and create incentives for financial savings within and across provider systems.

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