Maryland's Global Hospital Budgets — Preliminary Results from an All-Payer Model

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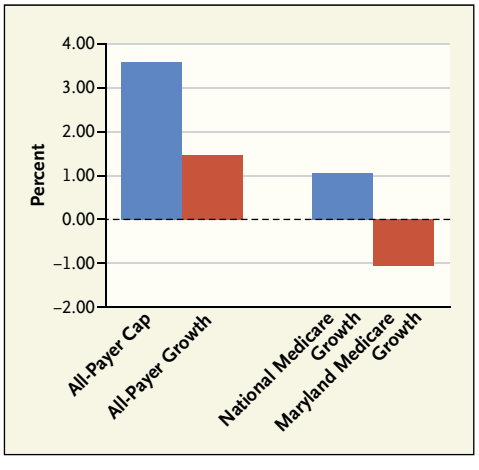
On January 1, 2014, the Centers for Medicare and Medicaid Services (CMS) Innovation Center and the state of Maryland launched the Maryland All-Payer Model,[1] under which CMS and Maryland agreed that all health care payers, including Medicare, would pay the same rates for inpatient and outpatient hospital services. This rate setting eliminated cost shifting among payers, equitably distributed the costs of uncompensated care and medical education, and limited the growth of per-admission costs.[2] It also meant, however, that Medicare paid higher rates for hospital services in Maryland than under the national payment program.

As part of the agreement, Maryland pledged to achieve substantial cost savings and quality improvements by moving its hospital-reimbursement system away from traditional fee-for-service payments. The state established a new hospital global budget payment program in which all payers in aggregate pay hospitals a fixed annual amount for inpatient and outpatient services, adjusted for quality and irrespective of hospital utilization. The premise behind hospital global budgets is simple: providing fixed, predictable revenue allows hospitals to focus on value rather than volume and rewards them for investing in population health improvement. The Maryland model requires the state to move almost all hospital revenue into value-based payment arrangements, such as global budgets, over a 5-year period.



Growth of Per Capita Hospital Costs, 2014.

The results from the first year are in, and several key findings have emerged. First, Maryland did shift away from fee-for-service hospital payments by all payers. By July 1, 2014 — earlier than required under the model — hospitals had agreed to move more than 90% of the state's aggregate hospital revenue into global budgets. The speed of that transition demonstrates hospitals' commitment to the new model and to value-based care.

Second, the initial cost results are promising. In 2013, Maryland committed to limiting annual growth of per capita hospital costs for all payers to 3.58%, the historical growth rate of the gross state product. According to hospital financial reports and claims, these costs grew by 1.47% between 2013 and 2014 for Maryland residents treated at Maryland hospitals — 2.11 percentage points lower than the agreed-on growth rate (see graph). Costs were contained despite the expansion of health insurance under the Affordable Care Act (ACA), including growth of approximately 21% in Medicaid enrollment after implementation of the state's Medicaid expansion. We believe Maryland's cost growth was below the target because of a combination of lower-than-anticipated growth in adjusted costs per admission and changes in care delivery under the global budget model.

Maryland also committed to saving Medicare $330 million by 2019. In 2014, Medicare's per capita hospital costs grew by 1.07% nationally and decreased by 1.08% in Maryland. Given these trends, Maryland has already saved Medicare $116 million. Although we are still evaluating the effects of changes in care delivery, hospital rate setting, and other factors, these preliminary results suggest that the state's global budget program could provide a meaningful foundation for sustainable delivery reform in Maryland and a model for the rest of the country.

Third, Maryland improved the

Changes in Rates of Potentially Preventable Conditions in Maryland, 2013–2014.*

Condition	All Payers	Medicare Only
	percent	
Pulmonary embolism	–19.99	–26.33
Shock	–27.68	–29.00
Venous thrombosis	–13.55	–17.69
Renal failure not necessitating dialysis	–28.63	–34.46
Renal failure necessitating dialysis	–33.31	–47.01
Diabetic ketoacidosis with coma	–26.20	–50.68
In-hospital trauma with fractures	–18.70	–15.12
Decubitus ulcer	–39.07	–47.38
Transfusion incompatibility reaction	–100.00	NA
Septicemia or severe infection	–28.56	–35.21
Postoperative infection with deep wound disruption not necessitating procedure	–14.01	–8.51
Postoperative wound infection with deep wound disruption necessitating procedure	–33.24	–44.28
Accidental puncture or laceration during invasive procedure	–32.06	–32.74
Presence of foreign bodies after operative procedure	+20.66	–81.54
Substance reaction after procedure or presence of foreign body after non–operating-room procedure	–30.11	+114.38
Other complications of medical care	–23.40	–34.10
Iatrogenic pneumothorax	–28.36	–22.98
Inflammation or other complications of devices, implants, or grafts, except vascular infection	–25.83	–26.94
Infections due to central venous catheters	+1.25	+6.57
Catheter-related urinary tract infection	+63.39	+69.39

* NA denotes not applicable. Data are from Maryland Health Services Cost Review Commission Discharge Abstracts.

quality of care in many areas. To ensure that cost savings were achieved appropriately, the state aimed to reduce its aggregate rate of 65 potentially preventable conditions (as defined by 3M's Potentially Preventable Conditions algorithm) by 30% over 5 years. By implementing a quality-incentive program in which hospitals' global budgets were adjusted on the basis of all-payer performance on these measures, Maryland was able to reduce the rate of potentially preventable conditions by 26.3% between 2013 and 2014, according to its Health Services Cost Review Commission. A number of the 65 potentially preventable conditions also overlap with conditions in Medicare's Hospital-Acquired Condition program. Maryland reduced the rates of almost all these conditions among patients covered by all payers and among Medicare patients (see table). However, in 2014 both Medicare and non-Medicare patients in Maryland hospitals had increased rates of infections due to central venous catheters and catheter-related urinary tract infections — a recent area of focus for CMS. In order to continue its progress, the state will target these two conditions in the coming years.

Fourth, after pledging to bring its high rate of all-cause readmissions among Medicare patients in line with the national rate, Maryland shrank this gap from 1.2% to 1.0% between 2013 and 2014.

Although a formal evaluation using a propensity scoring method with matched comparison hospitals and market areas is still under way, these preliminary results are promising. Maryland has taken a substantial step forward in its first year of payment and delivery-system transformation, but it must keep making progress.

Maryland will need to continue to reduce its rate of hospital admissions and per capita spending for Medicare patients, both of which are still among the highest in the country. The rate of inpatient admissions per 1000 Medicare beneficiaries has decreased throughout the United States, in part because of alternative payment models launched under the ACA.[3] Maryland has reduced its rate of inpatient admissions per 1000 beneficiaries by nearly 5% — a greater reduction than the national average. This reduction contributed to the state's positive performance in 2014. Maryland should continue to press to further reduce utilization rates.

Similarly, despite improvement over the past year, Maryland continues to perform worse than the national average in terms of Medicare all-cause readmission rates. In addition, the state's most recent patient-experience scores remain among the lowest in the country.[4] Hospitals, physicians,

community health workers, payers, and policymakers will need to continue to address these issues through better communication with patients and families and increased care coordination and by providing care in the most appropriate setting.

The terms of Maryland's agreement with CMS require the state to transition to a model that will reduce costs and improve quality over the full spectrum of care — not just hospital services — by 2019. In 2014, the state's total per capita costs of care decreased by 0.64%, almost entirely as a result of reductions in hospital expenditures. CMS has launched a number of programs that can guide efforts to promote delivery-system transformation, such as bundled-payment initiatives and patient-centered medical homes. Because of the unique nature of the all-payer rate-setting system, however, CMS has empowered Maryland to develop its own payment models. This opportunity to test all-payer reform over the full spectrum of care will not only benefit Maryland but also provide important insights for other states seeking to further accelerate delivery-system reform.

CMS is committed to working with Maryland to design and launch new all-payer payment models that connect all health care providers, hospital and nonhospital, through value-based care models that are appropriate for the state's rate-setting system. Maryland can also integrate local delivery-system reform efforts with public health activities and regional collaboration efforts to build the infrastructure to support these new approaches. The global budget program promises to catalyze such integration. Through their fixed and guaranteed budgets, hospitals can offer providers incentives such as per-member per-month payments, shared savings, or capital funding for investments in care redesign.

CMS has previously described engaging multiple payers in payment models as a foundational principle in achieving delivery-system reform.[5] Maryland is moving closer to that goal. As its all-payer model evolves, it will be important for hospitals, physicians, payers, consumer groups, and policymakers to combine their efforts to reflect a unified vision.

Both the state of Maryland and its hospitals deserve credit for these promising early results. CMS remains committed to working with Maryland and the provider community to ensure the continued success of this model. We see innovation in hospital payment as an important part of CMS's growing efforts to reform delivery systems.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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Docs and Nukes — Still a Live Issue

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Seventy years ago, the medical profession alerted the world to the devastating effects of nuclear weapons. Just weeks after the bombing of Hiroshima, Dr. Marcel Junod, a representative of the International

Committee of the Red Cross in Japan, visited the devastated city and sent back one of the first eyewitness reports to reach the outside world: "The center of the city was a sort of white patch, flattened and smooth like the palm of a hand. Nothing remained."

Ever since that time, members of the medical profession have played a key role in warning governments and the public about the danger of nuclear war and the urgent need to abolish nuclear weapons. During the period of intense international tension that