

# **A Prescription for Innovation**

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**Maryland's Data-Driven Approach to Containing Costs and Advancing Health**

**August 2014**

**Governor Martin O'Malley  
Lt. Governor Anthony G. Brown**

Governor Martin O'Malley and Lieutenant Governor Anthony Brown would like to thank the following agencies for their contributions: Department of Health and Mental Hygiene, Maryland Health Care Commission, Health Services Cost Review Commission, and Chesapeake Regional Information System for our Patients.

Suggested citation: State of Maryland. *A Prescription for Innovation: Maryland's Data Driven Approach to Containing Costs and Advancing Health*. (Annapolis, MD: 2014)

## Overview

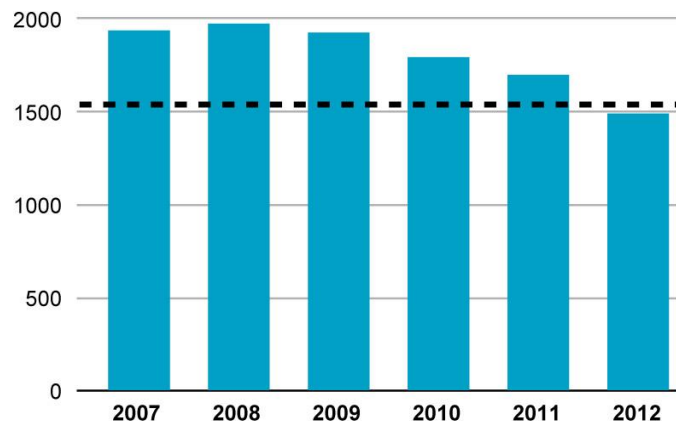
Maryland has long been a national leader in healthcare policy and practice, with world-class hospitals, talented practitioners, and dedicated community leaders. In the past seven and a half years, the O'Malley-Brown Administration has worked with private sector leaders to build on this foundation. The Administration's innovative policy efforts and investments in new data platforms have sparked unprecedented progress inside and out of the health care system, leading to lower costs, better health outcomes, and improved patient care.

Every state in the nation is facing the twin challenges of rising health care costs and a wave of illness and disability from such chronic illnesses as heart disease, diabetes, and cancer. To respond to these challenges, Maryland is empowering patients, doctors, and communities with actionable data and providing financial incentives for preventing illness and promoting health.

This approach is generating results. In 2011, there were 1,692 preventable hospitalizations for every 100,000 state residents, and Governor O'Malley [set](#) a strategic goal to reduce this rate by 10% by 2015. In one year, the rate dropped by 11.9%, saving more than \$65 million and prompting state officials to set even more aggressive goals for the future.

This paper will review four major data-driven innovations in Maryland:

*Preventable Hospitalizations per 100,000 Marylanders, 2007-2012*



1. **The Chesapeake Regional Information System for our Patients**, a secure health information exchange that all 46 acute care hospitals in the State — and more than 150 other healthcare provider organizations — use to keep track and assess care for millions of patients in real time. This common data platform also supports a Prescription Drug Monitoring Program, a physician search feature, and other innovative programs.
2. **Local Health Improvement Coalitions** that set priorities and guide local action with unprecedented access to population health data through a new electronic platform.
3. **Maryland's model all-payer hospital system**, which reflects a unique agreement with the federal government that enables hospitals in Maryland to break from the traditional fee-for-service model of medicine and enact what Princeton economist Uwe Reinhardt

has [called](#) “without any question the boldest proposal in the United States in the last half century to grab the problem of cost growth by the horns.”

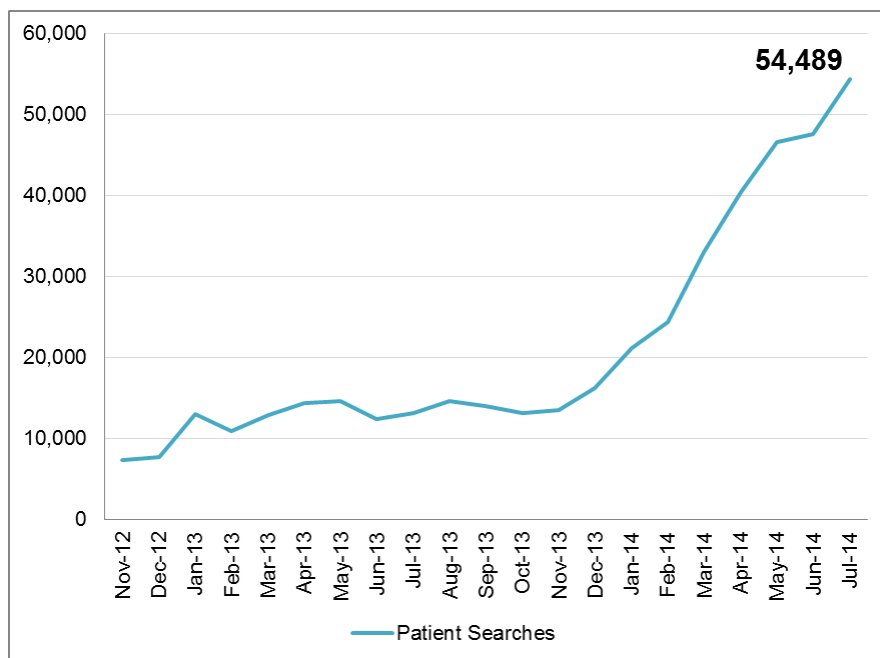
4. **Investments in primary care and community health**, which include public and private medical home models, support for primary care in the state’s Medicaid program, the establishment of Health Enterprise Zones, and initiatives that promote aging in place at home.

Since 2007, the O’Malley-Brown Administration has expanded access to health coverage to more than 650,000 Marylanders. The long-term sustainability of this coverage -- and of the health care system itself -- depends on controlling costs and making meaningful improvements in health. Maryland’s efforts, in a diverse state of 5.9 million people with significant urban and rural populations, are accomplishing both goals at the same time.

## CRISP: The Chesapeake Regional Information System for our Patients

The healthcare industry has lagged behind other industries when it comes to using modern technologies to improve our lives, but the growing use of electronic health records and health information exchanges is allowing electronic health information to be available securely — anytime and anywhere doctors, nurses and patients need it. Maryland has been a pioneer in this effort, even before the 2009 American Recovery and Reinvestment Act authorized the Medicare and Medicaid Electronic Health Record incentive program.

**Monthly Patient Searches by Providers through CRISP, 2012-2014\***

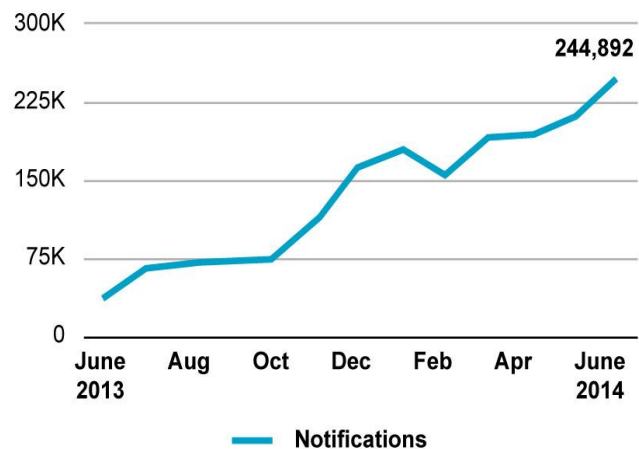


With the support of the O'Malley-Brown Administration, the [Chesapeake Regional Information System for our Patients](#), otherwise known as CRISP, launched its health portal in October 2010. This non-profit organization was funded by grants from the federal and state government, and was created with the simple, but hard-to-achieve goal of making prior medical records, lab results, and radiology results, immediately available to doctors and nurses who treat patients. State officials worked together with software designers, EHR vendors, hospital administrators, federal officials, and providers to ensure that the platform was both secure and compatible with both national standards and a wide range of record-keeping systems. The system includes [strong protections for patient privacy](#), including an opt-out option.

By January 2012, doctors working at all 46 acute care hospitals in Maryland could access lifesaving data in real-time. As Dr. Farzad Mostashari, then the director of the Office of the National Coordinator for Health IT at the U.S. Department of Health and Human Services, stated, "Using this critical infrastructure, you will save lives in emergency rooms, improve care coordination when patients leave the hospital and track costly readmissions." Dr. Mostashari's prediction has proven correct. CRISP now includes hundreds of smaller practices and laboratories throughout the state, six hospitals in Washington D.C., and is in the process of linking up with hospitals in Delaware. Doctors across Maryland report learning about critical and lifesaving patient information quickly through the Query Portal. Use of this Portal is now growing more quickly than ever.

CRISP has greatly improved coordination of care between hospitals and ambulatory providers by sharing critical information that informs care and reduces the need to repeat costly diagnostic tests. Primary care physicians can now use a free service to receive immediate patient updates via secure emails, allowing them to find out what's happening and start working with their hospital and other community partners on an effective discharge plan. These alerts are part of CRISP's Electronic Notification Service (ENS), which sent out 244,892 real-time secure alerts to Maryland physicians in June 2014.

**ENS Notifications Sent Through CRISP, 2013-2014**



**Provider Search.** Maryland has used the CRISP infrastructure as a common data platform for a range of efforts to improve health and empower patients. For example, in October 2013, CRISP launched a [provider search feature](#) that allows Marylanders to look for physicians in specific specialties and zip codes who are part of their health plans. This “one-stop shop” means that consumers do not have to navigate through multiple insurer web pages to figure out which plan works best for their family.

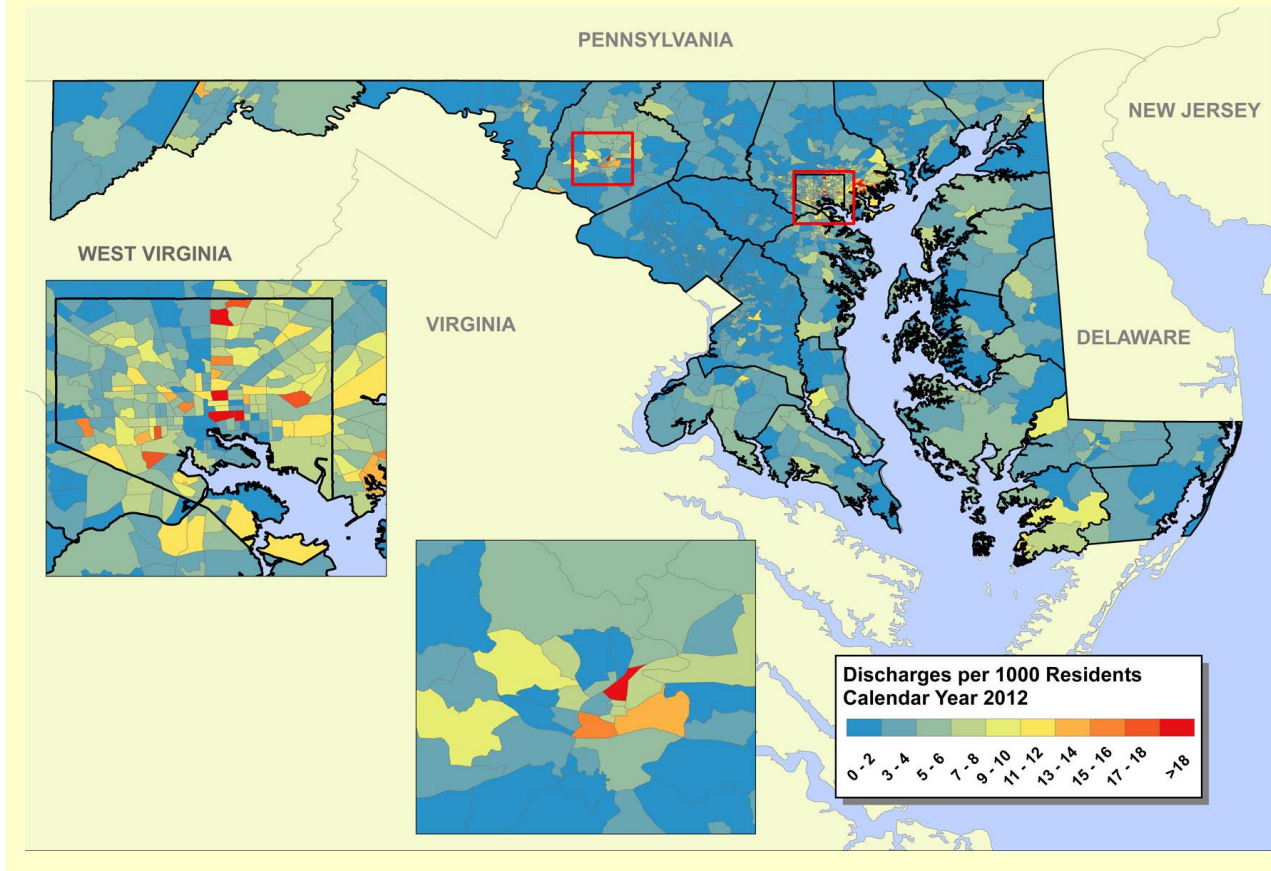
**Provider Search Function Powered by CRISP  
on the Maryland Health Connection**

The screenshot shows the Maryland Health Connection website's provider search interface. The header includes the logo and navigation links for Home, FAQ, and For Providers. The search form on the left includes fields for Provider Name, County, Specialty, Carrier Name, Plan Name, and Provider ZIP Code, with a 'Search' button and a 'Simple Search' link. The main content area is titled 'Provider Search' and includes a descriptive paragraph, two callout boxes for FAQs and For Providers, and contact information for health insurance coverage questions and data error reporting.

**Prescription Drug Monitoring Program.** When Maryland rolled out its [Prescription Drug Monitoring Program](#) in 2013 to reduce inappropriate prescribing of prescription drugs, CRISP was ready and able to serve as a central access point for pharmacists and other healthcare practitioners. There are now more than 10,000 patient queries each month.

**Hot-spotting.** Through CRISP, health officials now use customizable mapping software that allows them to identify disease “hotspots.” For example, CRISP can generate an up-to-date map of asthma readmission rates by census tract (a unit of geography smaller than zip code), providing the kind of targeted information that healthcare leaders can use to direct public health resources where they are needed to keep Marylanders healthy.

## Inpatient Asthma Discharges by Census Tract, 2012



## Local Health Improvement Coalitions

Maryland has made strengthening community health infrastructure a priority. In September 2011, the O'Malley-Brown Administration launched the **State Health Improvement Process**, which feeds data to public-private partnerships focused on improving health in their communities.




Through a [new web portal](#), Maryland has made data accessible and easy to use at the community level, building a regularly updated dashboard of 41 key population health measures in five focus areas: Healthy Beginnings, Healthy Living, Healthy Communities, Access to Health Care, and Quality Preventative Care. Through the website, members of the public can review data for their county against national goals, history, and by racial and ethnic groups.

To act on these data, local officials established 20 **Local Health Improvement Coalitions** to pursue the goal of improved population health and reduced health disparities. These coalitions create a forum where hospitals, community groups, primary care providers, and local officials

can establish priorities and pool resources. Each Local Health Improvement Coalition has a linked website where citizens can learn about activities in their area and get involved.



### Example of Allegany County Health Planning Coalition's Local Health Action Plan, 2014

ALLEGANY COUNTY HEALTH PLANNING COALITION- April 2014 Update



The status symbol is based on a comparison of the county baseline with latest available data. (\*= county goal met)  
 **Improved**       **No change**       **Worsened**

NOTES: \*\*BRFSS measure, SHIP Network of Care data unless stated

#### Priority #1: Tobacco

	County Baseline	County Update	County 2014 Goal	MD 2014 Goal	STATUS
Tobacco use by Adults** Chg to CHR (MD went from 18 to 15)	26% (2011) 03-09avg	24% (2014) 06-12 avg	21.8%	14.4%	
Tobacco use by Youths**	27.5%	No update	25.5%	22.3%	Not available
Tobacco Use during Pregnancy (Prenatal Risk Assessment)	38% (08-10avg)	37.2% (10-12avg)	36%	19.7 (MD Baseline)	

#### Priority # 2: Obesity

	County Baseline	County Update	County 2014 Goal	MD 2014 Goal	STATUS
% of Adults who are at a healthy weight**	28.4%	32.4%	30.1%	35.7%	 *
% of elementary age children who were in the 95 <sup>th</sup> percentile or higher (School Health Nurses)	20%	17%	13.6%	11.3%	

This new framework has enabled jurisdictions to work creatively on specific problems affecting their communities and monitor the results. For example, in Montgomery County, a suburb outside Washington, D.C., the Healthy Montgomery coalition has [developed a program](#) that helps prevent hospital readmissions (an O'Malley-Brown administration [goal](#)) by connecting low-income patients who regularly are admitted to the emergency room with a range of behavioral health services. In Harford County, the coalition forged a partnership between senior centers, farmer's markets, and local agencies to reduce obesity and increase access to healthy food. Other local initiatives include a community garden on the Eastern Shore to encourage access to fruits and vegetables, a [dentist volunteer program](#) in Frederick County to improve oral health among children, and a [transportation assistance program](#) which was implemented in Allegany County after a survey revealed that 25% of respondents at local clinics were missing appointments because they couldn't access transportation. The coalitions regularly report their outcomes, and the state provides a [toolkit](#) that allows for the sharing of education literature and dissemination of best practices.



## Maryland's Model All-Payer Hospital System

On January 10, 2014, at a press conference in downtown Baltimore, Governor O'Malley announced that the Centers for Medicare and Medicaid Services approved a groundbreaking approach to hospital finance in Maryland. This new [model](#) is helping Maryland improve patient experience, deliver better health outcomes, and control healthcare costs.

The model builds on a system developed in the 1970s, when the federal government granted Maryland the ability to establish the Health Services Cost Review Commission (HSCRC), an independent entity that set rates for care that are applied to all hospitals. Every payer -- including Medicare, Medicaid, and private insurers -- is reimbursed according to these uniform prices, instead of individually negotiating with hospitals. This unique waiver from the federal government -- which commits Medicare to paying the same prices as all other payers -- has allowed the state to control the cost of hospital admissions, cover the costs of uncompensated care, ensure financial stability, and support medical education at the state's leading research universities.

### ***New York Times Article Featuring Western Maryland Health System, August 27, 2013***



Maryland is now using the tools of rate-setting to support the transition toward a new model that actively incentivizes hospitals to keep members of the communities they serve healthy. It will replace the fee-for-service paradigm, which has long rewarded hospitals for increasing inpatient volume and expensive procedures even if health outcomes did not improve. It is projected that the new model will save Medicare at least \$330 million over the next five years, while reducing patient complications and readmissions.

The new approach has earned the acclaim of health policy experts. Professor Uwe Reinhardt, an economist at Princeton University, said, "This is without any question the boldest proposal in the United States in the last half century to grab the problem of cost growth by the horns." John McDonough, a Harvard University

professor and former state legislator who helped design Massachusetts' 2006 insurance-coverage expansion, stated, "Maryland is actually doing a leapfrog over Massachusetts.... It really establishes a new frontier in terms of controlling growth."

The transition from fee-for-service medicine began three years ago in ten rural hospitals, which were provided a global budget through the rate-setting system. One of these hospitals, Western Maryland Medical Center in Cumberland, made targeted [investments](#) out of its global budget to establish dedicated outpatient programs for specific chronic medical conditions. Patient satisfaction and health improved, as emergency department visits for diabetes patients dropped by 16% while the rate of hospital admissions for congestive heart failure patients fell by more than a third.

To provide more effective and efficient care, Maryland hospitals and community practices are using CRISP to receive alerts about their patients in real-time, and are collaborating with Local Health Improvement Coalitions to support health and prevention in the community. For example, Meritus Hospital in Hagerstown has taken over the [school health program](#) in Washington County in order to reduce unnecessary asthma admissions. Frederick Memorial Hospital in Frederick has partnered with local groups to support community-based emergency mental health care to reduce the use of the emergency department. Lifebridge Health in Baltimore City is working with a local community-based organization to visit frequent users of emergency departments to see if better coordinated care can keep them healthy.

Governor O'Malley and his administration worked with Maryland hospitals, payers, and the federal government for more than 18 months to bring this initiative into reality.

## Investments in Primary Care and Community Health

Complementing Maryland's innovative approach to hospital finance, the O'Malley-Brown administration has launched exciting programs in primary care and community health.

**Medical homes.** The O'Malley-Brown Administration has put Maryland in the vanguard of states that are supporting new models of primary care that incorporate information technology, extended practices hours, expanded care management for patients that need attention between office visits, and continuing practice improvement all aimed to keep patients healthy. This model, called a patient centered medical home, is now taking root across Maryland.



Beginning in April 2011, the state launched the [Maryland Multi-Payer Patient Centered Medical Home Program](#) with the participation of about 50 primary care practices, 200,000 patients, five large commercial insurance carriers, and six Medicaid Managed Care Organizations. Through

this initiative, each practice receives additional funds from all payers to become a fully functioning patient centered medical home capable of managing care for healthy and chronically ill patients. If a practice is successful in reducing the total costs of care for its patients, all participating payers contribute to the incentive payment shared with the practice. Early [results](#) from this closely evaluated pilot program demonstrated increased satisfaction among patients with chronic conditions, a decrease in the average number of visits to specialists, and a large drop in adolescent hospital admissions due to uncontrolled asthma.

Several insurers, including CareFirst, Maryland's largest, have invested in their own medical home program. CareFirst's program involves over 4,000 practitioners and more than a million patients, and [early results](#) indicate that the program is successfully driving down costs while enhancing access to high-quality care.

**Primary care support in the Medicaid program.** Maryland's Medicaid program significantly increased fees for primary care doctors and specialists billing in primary care codes, and the state has maintained this increased support after the end of federal assistance. The result is greater participation in Medicaid and [strong support](#) from the state's Medical Society. Medicaid is also supporting care coordination for individuals with severe mental illness and substance abuse disorders, in new "behavioral health homes" across the state.

**Health Enterprise Zones.** With input from academic experts and community leaders, Maryland established five innovative [Health Enterprise Zones](#) across the state in 2012. The zones are located in areas with poor health outcomes that contribute to unjust and unacceptable health disparities. In each, a public-private partnership has come together to support innovative projects, loan repayment, tax credits, and an array of other incentives for improved health.



**Partnering with CEOs and business leaders.** Maryland launched [Healthiest Maryland Businesses](#) in 2010, an initiative that provides technical assistance to businesses so they can support employees and their families in making healthier lifestyle choices that can help reduce their risk of chronic disease while decreasing healthcare costs. The program has provided educational materials and technical assistance in navigating the healthcare system, with a focus on promoting smoking cessation, nutrition, and preventive screenings for conditions such as diabetes. More than 250 employers — which range in size from the 2,000 employees of McCormick & Company, Incorporated to smaller local companies like Jolles Insurance — have





These innovations are also producing results throughout the state. For example, the number of preventable hospitalizations and readmissions [are falling](#). Infant mortality [has fallen substantially](#). Initiatives [such as Prince George's County Tapestry program](#) -- which provides comprehensive care to women with high-risk pregnancies -- and the statewide information campaign on safe sleep have led to fewer preventable deaths. And the Centers for Disease Control and Prevention [has cited](#) Maryland as a state that is starting to reverse the obesity epidemic among low-income preschool children.

In April 2014, the Commonwealth Fund published a report entitled [Aiming Higher: Results from a Scorecard on State Health System Performance, 2014](#). The report is a report card on U.S. state health systems, based on a comprehensive analysis of access and affordability, prevention and treatment, healthy lives, and avoidable hospital use and cost.

The report states that Maryland, a diverse state with a wide variety of communities, is one of only four states that “stand out for their net improvement across indicators.”

The State improved in fourteen of 42 indicators, while only four indicators deteriorated, making Maryland only one of two states to have a +10 differential. Additionally, Maryland was one of five states that improved on ten or more measurement of health equity, rising from a rank of 30 to a rank of 12. Overall, Maryland was ranked as one of the top five states in providing preventative screening to older adults, ensuring that as many residents as possible had seen a doctor in the past two years and keeping patients from going without care because of cost.

There is significant work yet to be done in Maryland, as there is across the country. But with the building of common platforms and new incentives in place, Maryland is well on a path to success.

