Robert E. Moffit
CHAIR

STATE OF MARYLAND

Ben Steffen
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE – BALTIMORE, MARYLAND 21215
TELEPHONE: 410-764-3460 FAX: 410-358-1236

January 25, 2018

The Honorable Larry Hogan
Governor
State of Maryland
Annapolis MD 21401-1991

The Honorable Thomas V. Mike Miller, Jr.
President of the Senate
H-107 State House
Annapolis MD 21401-1991

The Honorable Michael E. Busch
Speaker of the House
H-101 State House
Annapolis MD 21401-1991

RE: Maryland Health Care Commission, Report to the Governor, FY 2017

Dear Governor Hogan, President Miller, and Speaker Busch:

The Maryland Health Care Commission is pleased to submit the *Report to the Governor, Fiscal Year 2017,* as required by Health General § 19-109(b)(4) that directs the Maryland Health Care Commission to report annually to the Governor, the Secretary of Maryland Department of Health, and the Maryland General Assembly.

Please do not hesitate to contact me at (410) 764-3565, if you have any questions about the report or this transmittal letter.

Sincerely,

Ben Steffen
Executive Director

Enclosure

cc: The Honorable Thomas M. Middleton
The Honorable Shane Pendergrass
The Honorable Robert R. Neall, Secretary, MDH
Sarah Albert – DLS (5 Copies)

THE MARYLAND HEALTH CARE COMMISSION

REPORT to the GOVERNOR

Fiscal Year 2017
(July 1, 2016 through June 30, 2017)

Larry Hogan
Governor

Robert Emmet Moffit, PhD.
Chair

Ben Steffen
Executive Director

This annual report on the operations and activities of the Maryland Health Care Commission for fiscal year 2017 meets the reporting requirement set forth in Health General § 19-109(b)(4) that directs the Maryland Health Care Commission to report annually to the Governor, the Secretary of Health, and the Maryland General Assembly.

This report was written by staff of MHCC. Karen Rezabek and Andrea Allen are especially acknowledged for their work on the report. For additional information on this report, please contact Andrea Allen at 410-764-8791 or by email at andrea.allen@maryland.gov.

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Our vision is that Maryland is a state in which informed consumers hold the health care system accountable and have access to affordable and appropriate health care services through programs that serve as models for the nation.

The Maryland Health Care Commission's mission is to plan for health system needs, promote informed decision-making, increase accountability, and improve access in a rapidly changing health care environment by providing timely and accurate information on availability, cost, and quality of services to policy makers, purchasers, providers and the public.

EXECUTIVE STAFF

Ben Steffen
Executive Director

Linda Bartnyska
Director, Center for Analysis and Information Services

Theressa Lee
Director, Center for Quality Measurement and Reporting

Paul E. Parker
Director, Center for Health Care Facilities Planning and Development

David Sharp
Director, Center for Health Information Technology and Innovative Care Delivery

EXECUTIVE SUMMARY

The Maryland Health Care Commission is an independent state agency that functions within the Department of Health. Our Commissioners, appointed by the Governor with the advice and consent of the Senate, reside in communities across Maryland and represent both the State's residents and a broad range of stakeholders.

Our mission is simply stated:

To plan for health system needs, promote informed decision-making, increase accountability, and improve access in a rapidly changing health care environment by providing timely and accurate information on availability, cost, and quality of services to policy makers, purchasers, providers and the public.

We pursue this mission through our information gathering and dissemination, our health planning and regulatory powers, and our health policy analyses with a particular focus on four priorities to drive increases in health care value for Maryland residents.

1. **Expand Public Reporting of Health System Performance to Drive Transparency**: The MHCC has assembled detailed quality and outcomes information on hospitals and nursing homes, Maryland's All Payer Claims Database (APCD), disease specific registries in cardiac services, and detailed data on health care facility service capacity and use. The APCD and other MHCC data resources can be used to increase the transparency of health care price, quality, and value. MHCC makes this information broadly available and understandable to consumers, providers, payers, and private sector intermediaries.

2. **Elevate Advancement of Primary Care in Maryland:** Primary care, can drive health system improvement by promoting prevention and ongoing care management. ,. At 6 percent of total medical spending, the investment in primary care in Maryland is lower than other states. Maryland needs to significantly improve primary care capacity and capability in order to make the health system more affordable. MHCC is involved at multiple levels, from assembling information on the primary care work force, to working with payers and providers to launch new initiatives.

3. **Modernize Health Planning to Address Changing Capacity Needs of a High-Performing, Integrated System:** There is a strong need to reinvent the hospital Certificate of Need (CON) process due to the new Medicare Hospital All-Payer Model, which will require coordination across a broader range of health care providers, well beyond hospitals. The Commission is committed to working with

stakeholders to improve value through a more comprehensive population-based planning process that also links to a broader community-based view of health.

4. **Promote Use of Health Information Technology (HIT) to Maximize Meaningful Information Sharing:** Maryland has been ahead of most states in developing our Heath Information Exchange infrastructure. HIT adoption continues to grow among health care organizations of all sizes, there remains large untapped potential for HIT to drive more value to Maryland's economy and for health care. An ongoing focus for the MHCC is to help stakeholders use this infrastructure to create practical applications that the system needs to increase efficiency, improve safety, and reduce costs. Efficiently implemented telehealth can offer increased economic returns for the state.

These four priorities are shared among the four centers and have shaped many of the specific initiatives during 2017.

MHCC STAFF AND THE FOUR CENTERS

During FY 2017, the Commission had an appropriation for 57.9 full time positions.

Many of the Commission's activities focus upon collaborative initiatives related to broadening Marylanders' access to high-quality and cost-effective health care services. Particular attention is given to areas such as access to health care, quality and patient safety, innovative health care delivery, health information technology, and information for policy development. These activities are directed and managed by the Commission and the Executive Director. Administrative activities, such as staffing, budget, and procurement, are managed by the Director of Administration and staff in the office of the Executive Director. The Commission's Assistant Attorneys General provide legal advice and counsel to the Executive Director, the Commission members, and Commission staff. The Commission's staff members' backgrounds and skills encompass a broad range of expertise, including public policy analysis, data management and analysis, health planning, health facilities construction and financing, Medicaid administration, quality assessment, clinical and health services research, and public performance reporting.

The Commission is organized around the health care systems we seek to evaluate, regulate, or influence, utilizing a wide range of tools (data gathering, public reporting, planning and regulation) in order to improve quality, address costs, or increase access. Two of the centers —those for Health Care Facilities Planning and Development and for Quality Measurement and Reporting —are organized around provider organizations, bringing together under one leadership the expertise and tools to address cost, quality, and access in those sectors of our health care system. The Center for Information Services and Analysis conducts broad studies, using both Maryland databases and national surveys, but also has specific responsibilities relating to physician services. Our fourth center, Health Information and Innovative Care Delivery, has responsibilities that cut across sectors to facilitate the adoption of

electronic health records and to enable the private and secure transfer of personal health information among sectors as well as managing the Commission's Patient Centered Medical Home program. The organizational chart is attached as Appendix 1. A brief description of each of the Centers follows:

THE CENTER FOR HEALTH CARE FACILITIES PLANNING AND DEVELOPMENT

The Center develops plans for the supply and distribution of health care facilities and services and regulates the supply and distribution of facilities and services through Certificate of Need and related oversight programs.

- The Center is responsible for the development and updating of the State Health Plan, a body of regulation that establishes criteria and standards for considering the need, costs and effectiveness, impact, and viability of health care facility capital projects.
- The Center collects information on health care facility service capacity and use. Annual data sets on the service capacity of general and special hospitals, freestanding ambulatory surgical facilities, nursing homes, home health agencies, hospices, assisted living facilities, and adult day care facilities are developed. The Center also obtains hospital registry data bases on cardiac surgery, cardiac catheterization, and percutaneous coronary intervention for use in regulatory oversight of these services.
- The Center administers the Certificate of Need, Certificate of Conformance, and Certificate of On-going Performance programs that regulate certain aspects of health care service delivery by health care facilities.

THE CENTER FOR HEALTH INFORMATION AND INNOVATIVE CARE DELIVERY

Electronic health information exchange brings vital clinical information to the point-of-care, helping to improve the safety and quality of health care while decreasing overall health care costs. Health information technology requires two crucial components to be effective – widespread use of electronic health records and the ability to exchange electronic information in a rapid and secure manner. The Center for Health Information and Innovative Care Delivery is responsible for the Commission's health information technology and advanced primary care initiatives. The Center:

- Guides the implementation of the statewide health information exchange and harmonizes service area health information exchange efforts throughout the State.
- Serves as a policy center for health information technology, identifying challenges to adoption and formulating solutions that can expand meaningful use.

- Promotes the adoption and optimal use of standards-based health information technology for the purposes of improving the quality and safety of health care through consultative, educational, and outreach activities.
- Develops programs to promote electronic data interchange between payers and providers and certifies electronic health networks that accept electronic health care transactions originating in Maryland.
- Manages the Commission's Advanced Primary Care programs.

THE CENTER FOR ANALYSIS AND INFORMATION SERVICES

This Center's main function is to rapidly create, securely maintain, and carefully analyze large health care databases and to interpret population surveys. The Center produces reports to guide health policy, including reports on health expenditures, health insurance, the uninsured, and uncompensated care.

- The Center assembles the Medical Care Data Base from claim and eligibility information submitted by more than 40 private payors, Medicare, and Medicaid.

- The Center reports on total health care costs and costs for each health care sector, including hospitals, health care professionals, and prescription drugs. The Center works closely with the Health Services Cost Review Commission, the Maryland Insurance Administration, and the Maryland Health Benefit Exchange in developing information on cost and utilization.

The Center provides analytic and programming services to other divisions of the Commission and is responsible for the intranet, social media platforms, and the Commission's public website (mhcc.maryland.gov).

THE CENTER FOR QUALITY MEASUREMENT AND REPORTING

The Center is committed to providing meaningful information to consumers about the quality and outcomes of care provided by Maryland hospitals, long-term care facilities, and health benefit plans. It publishes this information through the Maryland Health Care Quality Reports, a website that provides a common access point for all quality reporting at MHCC. The Center publishes:

- A Hospital Guide, containing both general information and specific quality and outcome measures.
- A Long Term Care Guide for Marylanders, providing an easy way to locate and compare nursing homes on quality and outcome measures. The Center has also pioneered the public reporting of resident and family satisfaction measures.
- A report on the performance of, and satisfaction with, health plans in the Health Benefit Quality Report Series.

The Center also leads the Commission's Racial and Ethnic Disparities initiative.

BUDGET & FINANCES

In FY 2017, the Commission was appropriated $34,274,756, which included $15,074,756 for MHCC operations and $4,000,000 for the statewide designated health information exchange. Also included is a special fund appropriation of $12 million for the Trauma Fund, which MHCC administers, and $3.2 million for the Maryland Emergency Medical Systems Operations Fund.

During the course of the fiscal year, a budget amendment was completed in the amount of $17,856,581, which included a special fund appropriation increase in the amount of $124,365 for employee salary increments, approved by the Governor, $100,000 for the Network for Regional Health Initiatives (NRHI) Total Cost of Care Site Expansion project, $200,000 for the Shock Trauma Center Operating Grant, $16,880,210 for the statewidedesignated health information exchange and a federal fund appropriation increase in the amount of $157,201 for the CMS/CCIIO Cycle III Grant and $694,805 for the CMS/CCIIO Cycle IV Grant to States to Support Health Insurance Rate Review and Increase Transparency in the Pricing of Medical Services.

ASSESSMENT

The Maryland Health Care Commission's budget is 100% special funds and is funded through a user fee assessment on Hospitals, Nursing Homes, Payers, and through the licensing process of the Health Occupational Boards. During FY 2017, the Commission completed ist four (4) year workload study. The workload study reallocates the percentages each entity contributes towards the budget. Each of these entities contributes to the MHCC budget appropriation according to workload. Beginning with the FY 2018 budget, the Commission assesses: 1) Payers for an amount not to exceed 26% of the total budget; 2) Hospitals for an amount not to exceed 39% of the total budget; 3) the Health Occupational Boards for an amount not to exceed 16% of the total budget; and 4) Nursing Homes for an amount not to exceed 19% of the total budget. The amount is derived differently for each industry and is set every four years based on a retrospective review of the Commission's work load. Additionally, during the FY 2017 Legislative Session, the General Assembly increased the Commission's assessment cap to $16 million effective with the FY 2018 budget. The assessment was previously capped at $12 million through legislation that was enacted in FY 2008.

SURPLUS

At the close of FY 2017, the Commission's surplus was $4,488,296. The Commission's surplus resulted from prudent management of previous fiscal years' budgets and from the award of grants that allowed the retention of precious State

funds. Entering the 2017 Legislative Session, the Commission maintained a sizeable surplus to ensure that the FY 18 appropriation could be funded if the General Assembly did not increase the assessment cap. As the cap has been raised, we have taken several steps to implement a plan to lower the surplus within 10% of the budget by reducing the assessed amount to all industries for FY 18 and again in FY 19.

OVERVIEW OF FY 2017 COMMISSION ACTIONS

July 2016

The Commission granted a Certificate of Need to Chesapeake Treatment Center.

The Commission approved COMAR 10.24.15 – State Health Plan for Facilities and Services: Organ Transplant Services Chapter as Proposed Permanent Regulation.

The Commission approved COMAR 10.24.19 – State Health Plan for Facilities and Services: Freestanding Medical Facilities Chapter as Proposed Permanent Regulation.

Commission staff provided an UPDATE on the Health Care Quality Reports Website: Health-Associated Infections Results.

The CEO of the Leapfrog Group, Leah Binder, and Commission staff presented on the potential for including Maryland hospitals' data on the Leapfrog Group's Website for the Leapfrog Hospital Safety Score initiative.

Niharika Khanna, M.D., Associate Professor of Family and Community Medicine at the University of Maryland School of Medicine, Judy Lapinski, Chief Operating Officer of the Mid-Atlantic Association of Community Health Centers, and Commission staff presented on the Practice Transformation Network.

August 2016

There was no Commission meeting.

September 2016

The Commission granted a Certificate of Need to Sheppard Pratt at Elkridge.

The Commission granted a Certificate of Need to Green Spring Station Surgery Center.

The Commission approved a Request to Recognize the Institutional Review Board (IRB) of University of Maryland College Park.

The Commission approved a Request by the University of Maryland, School of Public Health, Health Services Administration for Release of Medical Care Data Base (MCDB) Data.

The Commission approved COMAR 10.24.15 – State Health Plan for Facilities and Services: Organ Transplant Services Chapter as Proposed Permanent Regulation.

The Commission approved additional members for the Rural Health Workgroup and a report on its Status.

October 2016

The Commission adopted additional revisions to COMAR 10.24.15 – State Health Plan for Facilities and Services: Organ Transplant Services Chapter as Proposed Permanent Regulation.

The Commission approved the Certificate of Need for Dimensions Health Corporation d/b/a Prince George's Hospital Center and Mt. Washington Pediatric Hospital, Inc.

The Commission adopted COMAR 10.25.16 – Electronic Health Record Incentives as Final Regulation.

The Commission approved the Certificate of Need for Northampton Manor Nursing and Rehabilitation Center, LLC.

The Commission approved the Quality Measures and Performance Thresholds for Home Health Agency Certificate of Need Review.

Commission staff presented on the 2016 Preauthorization Benchmark Attainment Report.

Commission staff presented on the Hospital Cyber Security Report: Evolving Threats Require New Approaches.

November 2016

The Commission adopted COMAR 10.24.19 – State Health Plan for Facilities and Services: Freestanding Medical Facilities Chapter as Proposed Permanent Regulation.

The Commission granted a Certificate of Need for Calvert Memorial Hospital Renovation and Expansion.

The Commission granted a Certificate of Need Modification for Kaiser Permanente South Baltimore.

The Commission approved updates to the MCDB Data Submission Manual for release.

The Commission approved the release of the Maryland Trauma Physicians Services Fund Annual Report for FY 2016.

The Commission approved release of COMAR 10.25.18 – Health Information Exchanges: Privacy and Security of Protected Health Information for informal public comment.

December 2016

The Commission approved the Release of the Annual Mandate Report: Coverage for Digital Tomosynthesis (3-D Mammograms) and Coverage for Lymphedema Diagnosis, Evaluation, and Treatment.

The Commission approved the Certificate of Need – Reviewer's Recommended Decision for the Recovery Centers of America – Earleville.

The Commission approved the Certificate of Need for Maryland House Detox.

The Commission approved the Certificate of Need for Massachusetts Avenue Surgery Center.

The Commission approved the Report on User Fee Assessment for Release.

The Commission adopted the Amendments to COMAR 10.25.02, User Fee Assessment on Health Care Practitioners, and to COMAR 10.25.03, User Fee Assessment of Payers, as Proposed Permanent Regulation.

The Commission approved the award of a grant to the Johns Hopkins Pediatrics at Home program for Improving Patient Outcomes Using mHealth Technology.

January 2017

Howard Haft, M.D., Deputy Secretary for Public Health Services at the Department of Health, and Chad Perman, Director of Health Systems Transformation in the Office of Population Health Improvement, presented an Overview of Maryland's Comprehensive Primary Care Redesign Program.

The Commission approved the Certificate of Need – Reviewer's Recommended Decision for the Recovery Centers of America – Waldorf.

The Commission approved the Certificate of Need – Reviewer's Recommended Decision for the Recovery Centers of America – Upper Marlboro.

The Commission adopted COMAR 10.24.15: State Health Plan for Facilities and Services: Organ Transplant Services as Final Regulation.

The Commission adopted COMAR 10.25.18 – Health Information Exchanges: Privacy and Security of Protected Health Information as Proposed Permanent Regulation.

Commission staff announced the award of the Round 5 Telehealth Grant to University of Maryland Shore Regional Health (UMSRH).

February 2017

Commission staff presented on the 2017 Legislative Session: Overview of MHCC's Legislative Review Process and Key Proposed Legislation.

The Commission granted a Certificate of Need for Lorien Elkridge.

The Commission adopted the revised COMAR 10.24.19 – State Health Plan for Facilities and Services: Freestanding Medical Facilities as Proposed Permanent Regulation.

Commission staff presented on the status of the Legislative Session.

Robert Imhoff, President and CEO of the Maryland Patient Safety Center, Inc. presented highlights of its Annual Report to the Commission.

March 2017

The Commission held an Exceptions Hearing on the Revised Recommended Decision – Baltimore/Upper Shore Cardiac Surgery Review – Anne Arundel Medical Center and the University of Maryland Baltimore Washington Medical Center.

In the Matter of the Certificate of Need – Baltimore/Upper Shore Cardiac Surgery Review – the Revised Recommended Decision was Adopted as the Decision of the Commission. The application of Anne Arundel Medical Center was APPROVED, and the application of University of Maryland Baltimore Washington Medical Center was DENIED.

The Commission approved Changes in the Membership of the Cardiac Services Advisory Committee.

Commission staff presented an Update of State Health Plan Regulations for General Surgical Services, COMAR 10.24.11.

April 2017

Commissioners and staff thanked Chairman Tanio for his leadership and dedication to the residents of Maryland, as it was his last meeting. Chairman Tanio thanked his fellow Commissioners and staff for their hard work.

The Commission went into closed session pursuant to Annotated Code of Maryland, General Provisions Article § 3-305(b)(7). Present at the closed session were: Commissioners Fleig, Metz, Moffit, O'Grady, Phillips, Pollak, Sergent, Stollenwerk, Tanio, and Carr-York; Ben Steffen, Executive Director; Paul Parker, Director of the Center for Health Care Facilities Planning & Development; Suellen Wideman, AAG; and Siobhan Madison, AAG. Pending litigation was discussed at the closed session. Commission staff presented a wrap-up of the Commission's activities during the 2017 session of the Maryland General Assembly and provided an overview of the Commission's budget.

The Commission Approved the Release of All Payer Claims Data (APCD) to the University of Massachusetts-Amherst.

The Commission granted a Certificate of Need for Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc., d/b/a Kaiser Permanente Gaithersburg Medical Center.

The Commission commented and requested additional revisions to the Proposed Regulations – Repeal and Replacement of COMAR 10.24.11 – State Health Plan for Facilities and Services – General Surgical Services.

The Commission adopted COMAR 10.25.02 – User Fee Assessment of Health Care Practitioners, and COMAR 10.25.03 – User Fee Assessment of Payers, Hospitals, and Nursing Homes as Final Regulation.

Commission staff presented on updates to the Maryland Health Care Quality Reports Website.

May 2017

The newly appointed Commission Chairman, Robert Emmet Moffit, Ph.D., introduced and welcomed new Commissioner Marcus Wang.

Commission staff, in collaboration with the University of Maryland, Lorien Health Systems, Howard County Health Department, and CRISP, submitted a grant application to the Patient Centered Outcomes Research Institute (PCORI) to examine the effectiveness of telehealth for transitioning patients from a skilled nursing facility to home, as compared to the traditional comprehensive care approach. PCORI has made available a total of $9 million that will be disbursed to grantees over a four-year period.

The Commission released a Cybersecurity Self-Assessment Readiness Tool.

The Commission granted a Certificate of Need for Stella Maris, Inc.

The Commission adopted COMAR 10.24.19 – State Health Plan for Facilities and Services: Freestanding Medical Facilities as Final Regulation.

The Commission adopted COMAR 10.15.18 – Health Information Exchanges: Privacy and Security as Final Regulation.

The Commission approved Release of COMAR 10.25.19 – State Recognition of Electronic Advance Directives Service Provider for Informal Public Comment.

Commission staff presented on the status and work plan for revising COMAR 10.24.11 – State Health Plan for Facilities and Services – General Surgical Services.

June 2017

The Commission approved the change in the Membership of the Cardiac Services Advisory Committee.

The Commission approved a Certificate of Need for Columbia Surgical Institute, LLC.

The Commission approved a Certificate of Need for Franklin Square Hospital Center d/b/a MedStar Franklin Square Medical Center.

The Commission adopted COMAR 10.25.19 – State Recognition of an Electronic Advance Directives Service as Proposed Permanent Regulation.

Commission staff presented key points from an informational brief on *Health Care Data Breaches: A Changing Landscape.*

Office of the Executive Director

Rural Health Workgroup

The Rural Healthcare Delivery Workgroup (the Workgroup) was required by Chapter 420 of 2016 - Freestanding Medical Facilities - Certificate of Need, Rates and Definition, and required MHCC to establish a Rural Health Care Delivery Workgroup to oversee a study of health care delivery in five counties of the Mid-Eastern Shore, Caroline, Dorchester, Kent, Queen Anne's and Talbot. The report, which was approved for release by the Commission in October of 2017, summarized the Workgroup's activities over fourteen months and presented the final recommendations for enhancing a healthcare delivery system for rural Marylanders.

The Workgroup achieved broad consensus on recommendations which have three aims; fostering collaboration and building coalitions in rural communities around healthcare delivery, bringing care as close to the patient as possible, and fostering participation in statewide models in rural Maryland. The recommendations covered under each of those three aims are briefly described.

1. **Fostering collaboration and building coalitions:** The Workgroup heard – during its meetings, in its advisory groups, and at public hearings – repeated calls for more community engagement in the planning of health care services. The most critical recommendations in the report focus on reenergizing local coalitions to plan for health care delivery. In some communities, as we found in the Mid Shore region, an existing local health improvement coalition (LHIC) can be reenergized to take on the essential convener and planning function. In other communities, the coalition will need to be built from the ground up. The MHCC concurs with the Workgroup that a local vigorous planning coalition, working closely with the health care organizations, is essential for establishing a viable rural delivery model.
2. **Bringing care as close to the patient as possible:** Making essential care available to rural residents is a central mission of the planning coalition. Residents want to receive as much care as they possibly can in the communities in which they live and work. They also recognize that some care, such as complex inpatient care, will need

to be accessed at safe, high quality, efficient medical centers. The desire to access care locally, and failures to link more distant medical centers with local resources, have spawned the growth of Save Our Hospital movements, not just in Maryland but across the country. The Workgroup recommended that residents, communities, and health systems work together to make essential care available in Maryland communities in Health Care Complexes scaled to the needs of those communities. The Health Care Complex and supporting recommendations provide the framework for bringing care closer to the patient and the patient to the broader health care system.

3. **Fostering participation of rural communities in statewide models:** The All Payer Hospital Demonstration and the proposed Total Cost of Care Demonstration have the potential for reshaping health care delivery for the better in Maryland. Work currently underway, or planned, is being watched across the US. Despite the potential, much of rural Maryland is at risk of being left behind unless additional steps are taken to buttress the rural health care system. Many of the new delivery models assume an ample and energized primary care work force. In much of rural Maryland, providers of all types are in short supply and trends are not positive. The Workgroup recommended a multipronged effort to strengthen the health care workforce. It is unlikely that a single initiative will be sufficient. Instead, initiatives at various points in the supply chain will be needed, such as the development of scholarship programs to attract local students to health care occupations and expanded primary care residency programs and specialty rotations will be needed. The State's existing MLARP program needs to be modernized and streamlined, as does the J-1 Visa Program. Training programs for physician assistants and nurse practitioners willing to practice in rural areas need to be developed. The Maryland Health Services Cost Review Commission (HSCRC) may need to examine how Global Budget Revenue could be adjusted to incentivize isolated rural hospitals to launch innovative programs that could better support the community and help sustain the hospital.

Despite significant challenges, the Workgroup identified innovations already under way in rural areas that could be models for the rest of the State. The Workgroup recommends expanding the Mobile Integrated Community Health (MICH) program launched in Queen Anne's County three years ago. This program utilizes the emergency medical service (EMS) providers and other skilled health care professionals, such as nurses, to care for high utilizers of the EMS system. Treating this population in their homes and linking the patient with a primary care practice or other routine source of care reduces emergency department utilization and improves the quality of life for the patient. The initial program, developed through a grant from CareFirst BlueCross BlueShield and supported by personnel from the local health department and the EMS system, has already produced impressive results. Other jurisdictions are developing similar programs through partnerships

with the local hospital system. Maryland can take a step forward by developing sustainable funding mechanisms to enable MICH programs to take root in more jurisdictions.

As these recommendations move through the legislative and regulatory processes, it is imperative to consider how they can be applied more broadly to all of rural Maryland, as well as suburban and urban communities. Each community is different and the Workgroup recommendations recognize the need for community involvement in improving health outcomes. Community investment.

During a time of tight budgets, the State will need to be creative in identifying public and private funds to sustain these efforts. To maintain momentum, funding for the rural collaborative should be an immediate priority. The Workgroup suggested that the Community Health Resources Commission could award a grant for the initial establishment funding. To sustain the rural collaborative, a permanent source of funding could be identified in future years. The rural health complexes could be sustained by health systems, FQHCs, or other health care organizations, but in some small communities local and state support could be required. Expanding the health workforce will require the collaboration of multiple State agencies, academic medical centers, community hospitals, and local communities' representatives.

Maryland Trauma Physician Services Fund

Overview

The Maryland Trauma Physician Services Fund ("Trauma Fund" or "Fund") was established to protect hospitals and physicians that deliver trauma care. The statute governing the Fund has been expanded over the years as demands on the Fund became more predictable. Today, the Fund covers the costs of medical care provided by trauma physicians that treat patients at Maryland's designated trauma centers. The Fund also covers trauma-related on-call expenses incurred by trauma centers, including specialty trauma centers. In addition, Level II and Level III trauma center hospitals participate in a biannual trauma equipment grant program that was established in FY 2007. The Fund is financed through a $5 surcharge on motor vehicle registrations and renewals.

The General Assembly has provided MHCC with greater flexibility in managing the Fund as balances and demands on the Fund have changed. During the 2012 Legislative Session, the Maryland General Assembly removed the restriction that expenditures from the Fund may not exceed the Fund's revenues in a fiscal year. This change enables the Commission to more effectively manage the Fund.

The Commission has been prudent in managing the balance of the Fund. The economic downturn in 2008-2010 reduced revenue from automobile registrations

and renewals even as demands on the Fund grew. In FY 2010, the MHCC approved an 8 percent across the board reduction in payment rates (with the exception of Medicaid) to maintain the solvency of the Fund. This reduction continued through FY 2015.

Accomplishments

The 8 percent funding reduction for payment rates and reimbursements was rescinded at the end of FY 2015. Beginning in FY 2016, reimbursement and payments returned to 100% and continued throughout FY 2017.

Payments to eligible providers and the administrative costs associated with processing these payments were approximately $10 million in FY 2017. Comparing FY 2017 to FY 2016, uncompensated care payments remained dramatically lower than prior years, while on call and standby payments incrementally increased. Transfers from the Motor Vehicle Administration to the Fund increased modestly by about $85,000 in FY 2017. Reimbursements to the Fund from physicians paid for uncompensated care claims and from other sources increased modestly from $188,000 in FY 2016 to $226,905 in FY 2017.

Continuation of the insurance coverage provisions of the Patient Protection and Affordable Care Act (ACA) led to reduced financial pressure on the Fund, as a significant share of those uninsured have gained access to coverage. As 92.8% of Maryland residents under age 65 had health insurance in calendar year 2016, uncompensated care payments should continue to slowly decline.

The MHCC recommended raising reimbursement for uncompensated care and on-call services to 105% of the Medicare payment beginning in FY 2017 and continuing in FY 2018. MHCC, in consultation with HSCRC, was permitted to make this adjustment under Health-General §19-130(d)(4)(iv). The small adjustment in reimbursement levels was made in recognition of the significant reductions in reimbursement that trauma physicians absorbed from FY's 2010 through 2015.

The MHCC set forth options for reducing the $10.5 million Trauma Fund balance, inconsideration with the agency's current statutory authority. The MHCC also identified other options that require statutory changes and emphasized that any new uses of the balance should address deficiencies in Maryland's Trauma System. The Commission noted that as those options are considered, the uncertainty on the future of the Affordable Care Act, as well as the need to maintain the Emergency Medical System in Maryland should be kept in mind.

Statewide Designated Health Information Exchange Oversight

MHCC is responsible for advancing the adoption and meaningful use of health information technology (health IT) in the State to improve the experience of care, the health of the population, and reduce the costs of health care. Key aspects of health IT include electronic health records, health information exchange (HIE), mobile health, and telehealth. MHCC's initiatives focus on balancing the need for information sharing with the need for strong privacy and security policies, and transforming care delivery.

CRISP (Chesapeake Regional Information System for our Patients) is one of the strongest HIEs in the country. Maryland's current framework for oversight and development of health information technology has contributed to the increased adoption of electronic health records and use of CRISP by providers. MHCC and HSCRC share responsibility for the development of the HIE. The MHCC provides technical oversight of CRISP's efforts and works with stakeholders to promote the broadest use of CRISP while protecting the privacy and the security of protected health information. CRISP is playing a key role in building the information technology infrastructure needed to support essential information needs in Maryland's All Payer Model.

The Commission staff continues to work with the CRISP staff to develop a process to add the CRISP Enterprise Identifier (EID), which is a masked version of CRISP's Master Patient Index, to the Medical Care Data Base (MCDB) eligibility file.

Maryland Patient Safety Center

The Maryland Patient Safety Center, Inc. (MPSC) was first designated by the MHCC as Maryland's Patient Safety Center in 2004. The MHCC re-designates the MPSC, Inc. every three years. The goal of the MPSC, Inc. is to make health care in Maryland the safest in the nation by fostering a shared culture of safety among patient care providers by mandatory reporting of serious adverse events to the Maryland Department of Health and Mental Hygiene, and encouraging voluntary reporting of other patient safety events. It also offers education and training on quality and facilitates patient safety collaborative arrangements. The Maryland Health Care Commission re-designated the MPSC, Inc. in December, 2014.

Benchmarking Medical Care Data Base (MCDB) data

Commission staff collaborated with the Maryland Insurance Administration (MIA) staff to (a) benchmark MCDB data to the Actuarial Memoranda data submitted to the MIA in order to enhance trust of the MCDB for use in state regulatory decisions in evaluating the MCDB for rate review activities; and (b) to develop decision support tools for the MIA rate review process. Throughout most of FY 2017, Commission staff worked closely and successfully with our largest payor to align the carrier's MCDB data with

data submitted by the company to the MIA via Actuarial Memoranda. Collaboration and partnership between the Commission staff and the company made this effort a great success. Staff continues to work with other payors to align the MCDB with Actuarial Memoranda data for the individual and small group markets. Throughout FY 2017, the Commission staff provided the MIA with trends and per member per month (PMPM) analyses to support the MIA's 2018 rate review cycle.

Total Cost of Care

Social and Scientific Systems (SSS), the MCDB database vendor, under MHCC's guidance, continued to develop and evolve the MCDB data warehouse to meet the Commission's needs. SSS has developed DataMarts for MHCC users to access data from the structured data warehouse (an SQL database). Currently, the DataMarts have data from 2010 to 2014 for eligibility, professional, institutional, and pharmacy services. The DataMarts divide data into two sections: a historical section which houses data from 2010 to 2015; and, starting with 2016 data, a dynamic section which will eventually consist of three years of data plus quarterly data for the current year. Users can access the data via SQL or SAS querying via the DataMarts, which are made available through a secure data center, where staff can access data on virtual machines. The secure data center provides a safe environment to access and analyze the sensitive healthcare data contained in the MCDB. Also new for 2016 data, staff have successfully collected line-level data for institutional services, which is very important for analyses such as the Network for Regional Healthcare Improvement Organization (NRHI) Total Cost of Care project.

The Network for Regional Healthcare Improvement (NRHI) Total Cost of Care Project

In FY 2017, MHCC contributed to a report published by NRHI. This first-ever comparison of what commercial insurers are paying for healthcare in different regions shows wide variation in spending. The report from NRHI, a national organization representing more than 35 regional multi-stakeholder groups working to improve healthcare, analyzed spending by commercial health insurance plans in five different regions nationwide (Utah, Maryland, St. Louis, Minnesota, and Oregon). Staff, in partnership with The Hilltop Institute at the University of Maryland, Baltimore County (UMBC), participated in the NRHI study and produced the Maryland results using data from the MCDB.

Analysts found a $1,080 yearly difference in the amount plans spend, on average, per enrollee, with a high of $369 per-enrollee-per-month in Minnesota and a low of $279 in Maryland. In addition to having the lowest overall risk-adjusted PMPM cost of $279, Maryland also had the lowest overall total cost index (TCI) (0.86), which was 14 percent below the all-region average. The State's TCI reflects its lower overall service utilization (RUI)—lowest among the regions at 0.88—and its slightly below average prices (PI) at 0.97. The study results are detailed in *From Claims to*

Clarity: Deriving Actionable Healthcare Cost Benchmarks from Aggregated Commercial Claims Data, which was developed with support from the Robert Wood Johnson Foundation. (Available online at: http://www.nrhi.org/uploads/g2a-benchmark-report-final-web.pdf)

HSCRC's 2015 Total Cost of Care (TCOC) Per Capita Cost Estimates Using Privately Insured Commercial Data

The estimate is reported to CMS by the Health Services Cost Review Commission (HSCRC) and is used to track annual changes in privately-insured spending under the agreement with CMS. During FY 2017, Commission staff completed total cost of care 2015 per capita cost estimates (medical services only) for the HSCRC. The cost estimates included per capita cost estimates for self-insured ERISA health plans which were calculated using a regression model and the fully-insured large employer PMPMs to predict self-insured ERISA PMPMs for 2015. Results show that annual per capita costs (medical only) increased by about 6.7% from 2014 to 2015.

Wear the Cost

Commission staff continued working with its contractors on the design and launch of a consumer website and on the development of episode-based measures for display on the website as part of its mission to promote price transparency, including implementing changes to the website design and content based on consumer usability testing. This public facing consumer website displays healthcare prices and quality measures for entire episodes of care and associated informational resources for visitors including an FAQ's section, blog posts, and the opportunity to participate in MHCC's social media campaign for the website. The site is entitled "Wear the Cost" and illustrates the variation that exists in price and quality for the same episode type across Maryland hospitals. The first public version of the site includes four procedural episodes: total hip replacement, total knee replacement, hysterectomy, and vaginal delivery. For each of these episodes, the user will be able to see, by hospital, the cost for typical/expected care, the cost that went towards potentially avoidable complications, and the annual average cost. Quality measures are also reported for each hospital's episodes. Data used to populate the first version of the website are exclusively commercial claims data (2014 to 2015) from the MCDB.

After the initial launch, Commission staff continues working with its contractors to produce similar episode costs using Medicare data. Later in FY 2018, that information will be displayed in the second iteration of the website. The Commission will release price information on common outpatient procedures and other inpatient procedures in future years.

The Center for Analysis and Information Systems

Overview

The Center for Analysis and Information Systems develops and maintains the Medical Care Data Base (MCDB), which is Maryland's All Payer Claims Database (APCD). The MCDB is a database of health insurance claims for covered services received by Maryland residents enrolled in health plans from commercial insurance carriers, Medicare, and Medicaid. The detailed information regarding the regulations, submission process, and release of these data can be found on the Commission's website. The MCDB is also used for the preparation of annual reports on health care expenditures in Maryland and the utilization of privately insured professional health care services. Both the MCDB and these annual reports are mandated under statute. The MCDB supports estimates of cost and utilization, policy analyses, evaluations of demonstration programs, and is a decision support tool for State partners, such as the Maryland Insurance Administration (MIA) and the Health Services Cost Review Commission (HSCRC). This Center is responsible for examining broader health care issues as well, including the measurement and analysis of insurance. The Center's staff conducts more narrowly focused studies of health care service use and spending, at the discretion of the Commission and as requested by the Maryland General Assembly, the Governor's Office, and the Maryland Department of Health. In addition to the MCDB and insurance-related activities and reports, the Center also conducts studies of the healthcare workforce.

Accomplishments

The Center continued work to implement an ambitious agenda to modernize the data collection process for the MCDB, enhance trust in the MCDB, enhance decision support tools, promote medical price transparency, and conduct timely studies. An emphasis throughout the Center's activities has been a collaboration with partners and engagement of stakeholders. In addition to the Commission's budget, the Center applied for and received funding from the Network for Regional Healthcare Improvement (NRHI) in FY 2017 to support a total cost of care initiative.

In FY 2017, the Center worked on the following: (1) grant funding initiatives; (2) continued to enhance the MCDB by developing new features to the new IT infrastructure to improve user access to MCDB data from the warehouse via DataMarts

and successfully started line-level data collection from payors for 2016 and beyond for institutional services; (3) continued the partnership with the Maryland Insurance Administration (MIA), working to align the MCDB data with payor Actuarial Memoranda data from the MIA to support rate reviews; (4) developed a consumer website as a pricing transparency tool for consumers; (5) updated legislative/annual reports related to healthcare spending; and (6) participated in the Total Cost of Care (TCOC) measure with NRHI via grants awarded by NRHI and funded by the Robert Wood Johnson Foundation.

Grant Funding Initiatives

In FY 2014, MHCC received funding ($2.9 million) from The Centers for Medicare and Medicaid Services, Center for Consumer Information and Insurance Oversight, or CMS/CCIIO under its Cycle III Rate Review/Medical Pricing Transparency Grant Program to develop an Extract, Transform, and Load (ETL) system to automate MCDB data capture and ultimately shorten the timeline for making data available to State partners and for MHCC analyses. A key deliverable of the grant was to make MCDB data and analytics available to the Maryland Insurance Administration (MIA) to support its health insurance premium rate review activities. From FY 2014 through FY 2016, the Center's staff, in collaboration and consultation with several contractors who were part of a Data Center Team, developed and implemented these grant initiatives; continued to refine the data and analytics through effective collaboration between Center staff and MIA staff; and developed a process for standardizing and streamlining ongoing data monitoring.

In FY 2017, other staff from this Center finalized and deployed a web application that provides users with both a practitioner view and a procedure view of medical prices, including out of pocket costs. This web portal will be continually refined and updated. In FY 2015, MHCC received a second grant ($1.1 million) from CCIIO under it's Cycle IV Rate Review/Medical Pricing Transparency Grant Program to enhance the capabilities of the MCDB with price transparency tools that can be used by consumers, physicians, and other practitioners to assist in healthcare decision-making. Throughout FY 2017, staff worked on the following grant initiatives: (1) began providing the MIA with three consecutive years of recreated, validated data sets from the MCDB for the MIA to use in future rate review activities; (2) developed episode of care pricing measures for display on a consumer website; (3) began the design and build of the consumer website to display those health care prices – both (2) and (3) are described in more detail later in the report under Accomplishment #4; and (4) developed and deployed a continuing medical education (CME) course directed at primary care clinicians on the appropriate use of imaging in patients with low back pain and the costs associated with inappropriate imaging, including patient out-of-pocket costs.

MCDB Enhancements

The Center worked to enhance the MCDB by: (a) continued development of the new IT infrastructure to improve user access to the MCDB warehouse data via DataMarts; (b) moved from a claim level data format to line level data for institutional services; (c)

implemented methods to improve faster data collections with fewer data quality issues; and (d) continued evaluation of a master patient identifier.

IT Infrastructure
Results show that the quality of data submitted by most payors to the MCDB has improved when comparing submissions for 2017 to 2016. For example, as of September 2017, 100% of all payors passed all data validation checks for 2017 first quarter data submissions, compared with only 38% for 2016 first quarter data submissions. Also, 86% of all payor data submissions for the second quarter of 2017 passed all data validation checks, compared with only 3% for the second quarter of 2016. This improvement in data quality submissions is mainly due to the more strict enforcement of penalties allowed under regulation and imposed by MHCC. For example, under COMAR 10.25.12, MHCC has the authority to impose a fine of up to $1,000 per day on a payor for late data submissions.

Legislative/Annual Reports
The Center published the following reports in FY 2017: a report on commercially insured spending in Maryland; a report on HMO payments to non-participating providers; and a report on two proposed mandated health insurance services that failed to pass during the preceding legislative session.

Commercially Insured Spending in Maryland
The Center reports annually on overall spending by major market segments, geographic regions, and age of enrollees. The report restricts analyses to fully-insured plans. Given the continued impact of the Affordable Care Act (ACA), the most recently published Privately Fully-Insured Report, based on 2015 data files, continues to have a special focus on the individual market. Many individuals with significant medical conditions who had previously been covered through the state-based "*high-risk*" pool (MHIP) have transitioned to the individual market. Also, many individuals who did not have health insurance before 2014 and 2015 have also entered the individual market as a result of health insurance expansion due to the ACA enactment. As a result, in the individual market the median expenditure risk score increased from 0.19 to 0.37 in 2015, indicating that members in the 2015 individual market population were sicker and needed more care than in 2014. Per member per month (PMPM) spending for all services increased by about 33 percent from 2014 to 2015, mainly due to increased volume of services. In contrast, PMPM spending among small and large employers increased by about 7 percent from 2014 to 2015. The 2015 PMPM costs by market were $411 for individuals; $368 for small employers; and $365 for large employers.

HMO Payments to Non-Participating Providers
Maryland Health-General Article, §19-710.1 specifies a methodology to calculate minimum payment rates that Health Maintenance Organizations (HMOs) must pay to non-contracting (non-trauma) providers that provide a covered evaluation and management (E&M) service to an HMO patient. The Commission is required to update these minimum payment rates annually. During FY 17, the Center completed the 2018

HMO Payments to Non-Participating Providers fee schedule, sent the data to the MIA as specified in the law, and the MIA published these rates on its website.

Mandated Health Insurance Services Evaluation

With the enactment of the Affordable Care Act in 2010, all health benefit plans offered through the State's health benefit exchange must include certain "essential health benefits" beginning January 1, 2014. Federal reform also requires that each state must pay, for every health benefit plan purchased through the exchange, the additional premium associated with any state-mandated benefit beyond the essential health benefits. Any new mandate in effect after December 31, 2011, or any benefits that do not apply to the benchmark plan, will not apply to the essential health benefits package, and thus the State will be liable for the cost of the additional premiums associated with those benefits. In FY 2017, a fiscal analysis on two proposed mandates that failed during the 2016 legislative session was conducted by an actuarial consultant under a small procurement: Coverage of Digital Tomosynthesis and Coverage for Lymphedema Diagnosis, Evaluation, and Treatment. Both reports were approved by the Commission and submitted to the Senate Finance Committee and the Health and Government Operations Committee, as required under Insurance Article §15-1501, Annotated Code of Maryland.

Also, in FY 2017, staff received a request from the Senate Finance Committee and the Health and Government Operations Committee to conduct an actuarial analysis on the medical, fiscal, and social impact of mandating insurance coverage in the fully-insured individual and large group markets for the coverage of fertility preservation procedures for iatrogenic infertility. Coverage for this service was proposed under Senate Bill 918 during the 2017 legislative session but failed to pass. MHCC contracted with an actuarial consulting firm to prepare this analysis in FY2018.

The Center for Quality Measurement and Reporting

Hospital Quality Initiatives

Overview

Chapter 657 (HB 705) of the Acts of 1999 required the Commission to develop a performance evaluation system for hospitals to improve the quality of care and to promote informed decision making among consumers, providers, policymakers, and other interested parties. In fulfillment of this legislative requirement, the Commission released its initial version of the web-based Hospital Performance Evaluation Guide (Guide) on January 31, 2002. The Guide has continued to evolve since its inception with new performance measures added each year; webpages have been redesigned to improve the display of consumer information, and a secure web portal for direct submission of quality data from Maryland hospitals has been developed.

In 2009, MHCC established the Quality Measures Data Center (QMDC) website and secure portal to enable direct and timely access to detailed hospital quality and performance measures data for public reporting and for support of the HSCRC Quality Based Reimbursement (QBR) Program. In FY 2015, the QMDC was redesigned into a single point of access to the Commission's consumer guides on hospitals, long term care facilities, ambulatory surgery centers, as well as commercial health benefit plans. The QMDC, now called the Maryland Health Care Quality Reports website, creates a comprehensive, consumer friendly resource tool that includes information on consumer ratings of the care provided, safety and quality results, and pricing information on hospital services.

Patients' perspectives on the care provided by hospitals is an important and valuable indicator of hospital quality and performance. The Commission utilizes the results of a national, standardized survey of hospital patients to obtain and report on measures of hospital performance. The data from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) includes measures reflecting key topics, including: communications with doctors and nurses, responsiveness of hospital staff, pain management, communication about medicine, discharge information, cleanliness of the hospital environment, transitions of care, and quietness of the hospital

environment. In addition, the Guide includes data on how patients rate the hospital (10 for best, 0 for worst) and whether patients would recommend the hospital to friends and family. The MHCQR also reports hospital performance using the HCAHPS Summary 5-Star Rating, which compiles all HCAHPS reporting measures into one metric.

The Guide also includes information on healthcare associated infections (HAIs) in Maryland hospitals. HAIs are infections that patients acquire during the course of receiving medical treatment for other conditions and represent the most common complication affecting hospitalized patients.

As part of the enabling legislation, MHCC was tasked to work on the design and development of a performance evaluation system in consultation with the MHA, the Maryland Ambulatory Surgical Association, and interested parties, including consumers, payers, and employers. The Hospital Performance Evaluation Guide (HPEG) Advisory Committee meets on a quarterly basis and has provided expert advice to the Commission on performance measures and quality improvement strategies since the inception of the Guide. This multi-disciplinary committee includes members representing health care consumers, hospitals, nursing, medical research, and organizations involved in quality and patient safety initiatives.

Accomplishments

In FY 2017, MHCC's quality and performance data collection for Maryland hospitals continued to evolve. In January 2014, the MHCC and the HSCRC issued a joint policy directive that significantly expanded the quality measures data that Maryland hospitals were required to collect and report. As part of Maryland's exemption from the Centers for Medicare and Medicaid Services (CMS) Value-Based Purchasing Program (VBP) for hospital reimbursement, Maryland must maintain a comparable hospital quality program that meets or exceeds the CMS program in cost and quality outcomes standards. In response to this CMS directive, MHCC expanded its hospital quality measures data collection requirements to comply with evolving CMS Inpatient Quality Reporting (IQR), Hospital Outpatient Quality Reporting (OQR) and VBP data collection requirements.

Hospital performance on Healthcare Associated Infections (HAIs) metrics was mixed in FY 2017. Central-line associated bloodstream infections in ICUs had decreased by over 40% during the six years since the information was first publicly reported on Maryland's Hospital Guide. For the first time since 2014, when public reporting for *Clostridium Difficile* began, the statewide performance improved to "better" than the national benchmark. *Methicillin-Resistant Staphylococcus Aureus* performance was better than years past, but still highlights an area for improvement. The MHCC worked in collaboration with hospitals, the Maryland Hospital Association (MHA), and a committee of experts in infection prevention and control, to facilitate implementation of evidence based patient safety activities designed to reduce hospital infections. Of

note, NHSN (the National Centers for Disease Control and Prevention's National Healthcare Safety Network, the nation's most widely used healthcare-associated infection tracking system) has stated its intent to update the baseline time-period to CY 2015 next year for all HAIs. Preliminary analysis shows that this update will likely have a negative impact on the trending for Maryland's hospitals as subsequent years will be compared to a year after which much progress had already been made.)

Similarly, public reporting of hospital employee influenza vaccination rates continued to be a focus in FY 2017. For the past seven years, MHCC has conducted an annual survey of hospitals to gather information on employee vaccination rates and hospital policies and practices designed to promote employee flu vaccination. Hospital worker flu vaccination rates have been published in the Hospital Guide for the past six years. Since the release of this information on the Hospital Guide in 2010, Maryland hospitals have achieved a 19% increase in their employee influenza vaccination rates from 78% to over 97%. The hospital flu vaccination rate for the 2016-2017 flu season was 97.2%, which is about the same as the 97% during the previous flu season. The state as a whole has maintained a rate above 96% for the past four flu seasons. Information on hospitals with mandatory employee vaccination policies was first added to the Guide in 2012. In FY 2017, the number of hospitals that reported mandatory employee vaccination policies did not change from last year, with 46 of 47 hospitals having a policy in place.

HAI Data Public Reporting

Healthcare-Associated Infections Data Collection

In response to the significant impact that Healthcare-Associated Infections (HAIs) have had on both patients and the health care system, mandatory public reporting of HAIs has become a priority for states and the federal government. In the State of Maryland, Senate Bill 135, Hospitals-Comparable Evaluation System-Health Care-Associated Infection Information, became law on July 1, 2006 as Chapter 42 of Maryland law. This law required that the Hospital Performance Evaluation Guide (now Maryland Health Care Quality Reports) be expanded to include healthcare-associated infection information from hospitals.

To assist in developing a plan for expanding the HAI data on the Hospital Performance Evaluation Guide, the Commission appointed an HAI Technical Advisory Committee, or TAC. The purpose of the TAC was to study and develop recommendations to the Commission on the design and content of a system for collecting and publicly reporting HAI data. The Final Report and Recommendations of the HAI Technical Advisory Committee was approved by the Commission in December 2007 and staff was directed by the Commission to proceed with implementation of the recommendations. A copy of the report is available on the Commission's website at the following link: http://mhcc.maryland.gov/mhcc/pages/apcd/apcd_quality/apcd_quality_hai.aspx

The HAI Technical Advisory Committee recognized that the implementation and sustainability of the Committee's recommendations would require ongoing

involvement of individuals with expertise in infection prevention and control. To facilitate implementation of the recommendations, a permanent HAI Advisory Committee was established to provide ongoing guidance and support to this task. The HAI Advisory Committee meets quarterly to review data reporting requirements and other HAI initiatives. As a result, the Commission has made significant progress toward the implementation of the original TAC recommendations. Seven of the eight TAC recommendations for publicly reporting HAI data have been achieved. The 2008 Report and Recommendations for Developing a System for Collecting and Publicly Reporting Data on HAI in Maryland is available on the Commission's website at this link: http://mhcc.maryland.gov/mhcc/pages/apcd/apcd_quality/documents/CQM_HAI_Developing_A_System_For_Collecting_Publicly_Reporting_Data_HAI_RPT_20071201.pdf

In 2015, on the recommendation of the HAI Advisory Committee, the MHCC aligned with CMS reporting requirements. The National Healthcare Safety Network (NHSN) continues to be the vehicle for collecting these data. The NHSN is an internet-based surveillance system that integrates patient and healthcare personnel safety surveillance systems. It is managed by the Division of Healthcare Quality Promotion of the Centers for Disease Control and Prevention (CDC).

The current reporting requirements are: (1) Central-Line-Associated Bloodstream Infections (CLABSIs) in all intensive care units with an expansion to adult and pediatric medical, surgical and medical/surgical wards effective January 1, 2015; (2) Catheter-Associated Urinary Tract Infections (CAUTIs) in all intensive care units (effective January 1, 2014) with an expansion to adult and pediatric medical, surgical and medical/surgical wards effective January 1, 2015; (3) Surgical Site Infections (SSIs) for coronary artery bypass graft (CABG), hip (HPRO), knee (KPRO), colon (COLO) and abdominal hysterectomy (HYST) surgeries; (4) Health Care Worker (HCW) Influenza Vaccination; (5) *Clostridium difficile* infections (CDI) in all inpatient locations (baby locations are excluded) (effective July 1, 2013) with an expansion to emergency departments and 24-hour observation locations (effective January 1, 2015); (6) Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia in all inpatient locations (effective January 1, 2014) with an expansion to emergency departments and 24-hour observation locations (effective January 1, 2015). Of note, the Health Care Worker (HCW) Influenza Vaccination reporting requirement moved from using an in-house survey to the NHSN Health Care Personnel (HCP) Influenza Vaccination module for the 2013/2014 flu season.

In October 2010, the Commission first reported on CLABSIs for the 12-month period from July 1, 2009 through June 30, 2010. During that data period, Maryland acute care hospitals reported 424 CLABSIs in adult ICUs and 48 CLABSIs in Neonatal ICUs (NICUs). In FY 2017, the CLABSI data was updated with calendar year 2016 data. The updated data showed a 57% reduction in CLABSIs in Maryland adult/pediatric ICUs, with 183 CLABSIs since 2009. Maryland NICUs saw a 60% reduction in CLABSIs since 2009, with 19 CLABSIs reported for calendar year 2016. Based on a performance measure (the Standardized Infection Ratio or SIR) developed by the CDC, Maryland hospitals in total performed better than the national experience for CLABSIs in ICUs,

meaning there were fewer CLABSIs reported than expected. As noted earlier, the SIR will likely be impacted negatively next year when NHSN changes the baseline time-period from 2006-2008 to CY 2015.

For the first time since *Clostridium Difficile* infection (CDI) data has been reported on the Maryland Health Care Quality Reports website, statewide performance was better than the national benchmark. Eight hospitals performed better than expected, while only 3 hospitals performed worse than expected (compared to 14 in CY 2015) with 2,070 hospital-onset CDI LabID events reported.

Surgical site infections (SSI) data for Hip, Knee, CABG, Colon, and Abdominal Hysterectomy procedures were updated on the Guide with CY 2016 data. Catheter Associated Urinary Tract Infections (CAUTI) in ICUs and MRSA Bacteremia were also updated with CY 2016 results.

Long Term Care Quality Initiatives

Overview

Maryland Annotated Code, Health General 19-134(d) requires the Commission to "implement a system to comparatively evaluate the quality of care and performance of nursing facilities on an objective basis...and annually publish summary findings ...". The stated purpose is to "improve the quality of care provided ... by establishing a common set of performance measurements and annually disseminating the findings ... to facilities, consumers and other interested parties."

In compliance with state regulations, the Long Term Care Quality and Performance Evaluation system focuses on improving long-term care (LTC) services provided in the state of Maryland through public reporting of LTC quality metrics, inspection reports and provider characteristics. This information is made available to consumers via an interactive web-based *Consumer Guide to Long Term Care* (LTC guide) through the *Maryland Health Care Quality Reports* website. Quality metrics, provider characteristics, and inspection reports are obtained from the Center for Medicare and Medicaid Services (CMS), partner State agencies, such as the Office of Health Care Quality (OHCQ) and Commission-specific sources to keep the LTC guide up-to-date. The LTC guide includes quality data (where available), facility characteristics and health inspection reports (as applicable) for nursing home, assisted living, adult day care, home health, and hospice providers. Making valuable consumer information available from OHCQ's and MHCC's resources, in addition to CMS', allows reporting of provider characteristics and quality information where the federal government does not track, as in the case of assisted living and adult day care providers. In addition to publicly reported data, feature stories highlighting long term care topics of importance to consumers as they engage in health care decision making are also made available on the LTC guide's webpages.

Description of Key Programs
The Commission first developed a *Nursing Home Guide* in 2001. In 2010, the *Nursing Home Guide* was redesigned and expanded to become the *Consumer Guide to Long Term Care (http://mhcc.maryland.gov/consumerinfo/longtermcare/)*. The redesigned LTC guide was initiated to respond to the trend to "age in place" – a consumer preference for receiving care in the home or in a home-like setting. In addition, the LTC guide accomplishes a key goal of making publicly available and easily accessible information necessary for consumers to make informed health care decisions. The availability and accessibility of quality data assists in improving a patient's experience of care, one of the Triple Aims to improve the United States' health care system. The interactive *Consumer Guide to Long Term Care* includes services received in one's home, community, or in facilities such as assisted living and nursing homes, with emphasis on in-home and community services. Information categories include living at home, adult day care, assisted living, home-based care such as home health agencies that provide skilled care, nursing homes and rehabilitation facilities, and hospice services.

Key features of the *Consumer Guide to Long Term Care*:
Planning for Long Term Care - This feature defines key terms and types of LTC services; offers resources for planning and links to resources for estimating the cost of LTC; discusses ways to finance LTC; and provides Maryland-specific advance directive planning information. It includes:

- Information about home modifications to allow seniors and persons with disabilities to remain in their home;
- Locations of community support services, such as senior centers, meal programs, resources for family caregivers, and transportation;
- A resource section that includes links to federal, state, and local websites to assist in answering questions about prescription drugs, legal resources for seniors and persons with disabilities, and local resources for health care, such as county clinics; and
- Guidance on health insurance benefits, Medicare, special transportation for persons with disabilities, and resources for family members or friends who help seniors and persons with disabilities.

Services Search - The LTC guide's interactive search tool assists users in locating LTC providers by facility type, county, and facility name. Based on facility type selected, search results generate information on facility characteristics, such as facility ownership, agency accreditation and certification, number of licensed beds, and clinical services provided. Based on the facility type, consumers can then access information. Pictures of nursing homes and assisted living facilities, as well as a location map, are displayed to assist Marylanders in narrowing their choices ahead of initiating contact directly with facilities. In addition to the facility characteristics displayed, consumers will also have access to quality data gathered from the below sources.

Quality and Performance Reporting - Users can view an extensive set of quality and performance measures for nursing homes and Medicare certified home health agencies, as well as several important measures for assisted living facilities. Measures include: the results of the Office of Health Care Quality (OHCQ) annual and complaint surveys; staff influenza vaccination rates; results of the Experience of Care (satisfaction) surveys; and outcome and process measures on many clinical aspects of care. Division staff work with federal agencies, such as the Centers for Medicare and Medicaid (CMS), the Agency for Healthcare Research and Quality (AHRQ), and other national organizations, such as the National Quality Forum (NQF), to ensure that the quality measures reported within the LTC guide are reliable, validated, and suitable for public reporting.

MHCC Long Term Care Survey (surveys feed NHs, AL and AMDC)
Under COMAR 10.24.03, long term care providers are required to complete the Long Term Care Survey annually. Data collected include facility information such as location, ownership type, bed capacity, and clinical and assistive services provided. Results of the survey is made available to consumers seeking information on nursing homes, assisted living facilities, and adult medical day care centers on the LTC guide.

MHCC Home Health Agency Survey
Under COMAR 10.07.10.12, Maryland home health agencies are required to complete the annual Home Health Agency Survey. Data collected include facility information such as location, including branch locations, ownership, license, certification, accreditation, services provided, staffing, and resident characteristics. Results of the survey are made available to consumers on the LTC guide.

MHCC Staff Influenza Vaccination Survey in LTC Settings
Influenza (flu) infection causes considerable morbidity and mortality among older adults. Persons aged 65 years and older account for the majority of the 36,000 deaths that occur from flu and its complications each year. MHCC staff initiated the collection of nursing home and assisted living staff flu vaccination rates beginning with the 2009-2010 flu season. Results are reported for each facility in the *Consumer Guide to Long Term Care* to inform consumers of the vaccination rates of workers at facilities of interest and provides a useful feedback to long term care providers for continuous improvement in vaccination rates. The rates are also used by the Department of Health's Medicaid Office of Long Term Services and Supports as a component of the Medicaid Nursing Home Pay for Performance Program. Results of the 2016-2017 survey are currently available on the LTC guide.

Nursing Home Quality Reporting

Experience of Care Surveys

MHCC oversees the administration of the Family Experience of Care Survey (Family Survey) which measures experience and satisfaction with the nursing home staff, care, and living environment from the perspective of a resident's family member or designated responsible party. The 2016 Family Survey results have been posted in the LTC guide to assist Marylanders when choosing a nursing home. The Family Survey results are also used by the Medicaid Long Term Care Division within the Department of Health as a component of the Medicaid Nursing Home Pay for Performance Program.

Home Health Quality Reporting

Reporting of health care quality data by Medicare-certified home health agencies to the CMS is mandated under section 1895(b)(3)(B)(v)(II) of the Social Security Act. To satisfy these requirements, Medicare-certified home health agencies must submit health care quality data in the form of the Outcome and Assessment Information Set (OASIS) data and experience of care data in the form of the Home Health Consumer Assessment of Healthcare Providers and Systems (HHCAHPS). The Maryland results of the two surveys are incorporated into the LTC guide for consumers' use.

Hospice Quality Reporting

As part of the CMS Hospice Quality Reporting Program, developed in compliance with the ACA, Medicare-certified Hospices were required to submit quality data on the Hospice Information Set (HIS) beginning on January 1, 2014 and Consumer Assessment of Health Providers and Systems (CAHPS) Hospice data beginning on January 1, 2015. Since then, qualifying programs submit HIS and CAHPS data to CMS in two ways. HIS data is submitted and processed through the CMS Quality Improvement and Evaluation System (QIES) Assessment Submission and Processing (ASAP) system. CAHPS Hospice data is submitted through a CMS approved third-party vendor that then submits the data to the Hospice CAHPS Survey Data Center. On August 16, 2017, CMS began public reporting of the HIS data with a new Hospice Compare site. Public reporting of CAHPS Hospice data will begin in the winter. Staff is preparing to make the Maryland hospice quality data available on the LTC guide.

Accomplishments

Influenza Vaccination Survey among Nursing Home and Assisted Living Health Care Workers (HCWs)

Public reporting of nursing home-specific results has been in place since 2011 as an incentive for facilities to improve their HCW vaccination rates. Since inception of the nursing home and assisted living survey, nursing home staff flu vaccination rates have increased from 58% during the 2009-2010 flu season to 87% during the 2016-2017 flu season. The staff flu vaccination rates for Assisted Living Facilities (ALF) have not

been as positive. The ALF rates have increased from 50% in 2012-2013 to 55% in 2016-2017 flu season.

Home Health Experience of Care

The Commission's *Consumer Guide to Long Term Care* has reported the Home Health Compare quality measures from the Outcome and Assessment Information Set (OASIS) for each Maryland Medicare-certified Home Health Agency (HHA) since the fall of 2011. Public reporting allows greater transparency to the consumer of an agency's relative performance to that of others.

Comparing 2015 aggregate Maryland and national scores for the outcome and process measures, Maryland demonstrates better scores than the nation on all measures and slightly lower scores on one measure. This includes slightly lower scores (in this case, lower scores are better) on hospital admissions and urgent care and unplanned ER visits without admissions.

Medicare-certified Home Health Agencies (HHAs) in Maryland that serve 60 or more patients in a year participate in the Home Health Consumer and Assessment of Healthcare Providers and Systems (HHCAHPS) Survey. HHCAHPS reports three composites: how well staff communicated, to what degree staff gave care in a professional way, and to what degree the home health staff discussed medications, pain, and home safety, and reports two overall questions: an overall rating on a scale of 1-10 (10 represents the best rating) and "would you recommend the home health agency?"

The average Maryland rating for home health providers for FY 2016 shows the three composites were rated above 80%. The percent of patients giving the HHA an overall rating of 9 or 10 was 84%; the percent of patients reporting that they would definitely recommend the HHA to friends and family was 78%. Comparing 2015 aggregate Maryland and national scores for the experience of care measures, Maryland performed slightly worse on all measures except on "percent of patients who reported that their home health team communicated well with them."

Health Plan Quality and Performance

Overview

Using quality and performance information supports informed health care choices, and aids in the selection and purchase of the best quality of care specific to the needs of each consumer, whether the consumer is an employer, individual, or family. Public reporting of standardized quality and performance measures and indicators promotes competition among health insurance carriers and stimulates their health benefit plans' efforts toward continuous quality and performance improvement activities that target consumer needs and expectations. In theory, the result of developing and reporting quality information is that quality attains a value in the open market. As health benefit

plans begin to compete on the basis of quality, they will devote greater attention and resources to quality improvement activities. Ultimately, high performing health benefit plans should be rewarded with greater market share as quality begins to influence consumer choice.

The Division of Health Benefit Plan Quality and Performance collects and reports meaningful, comparative information regarding the quality and performance of commercial health benefit plans licensed to operate in the State of Maryland. The comparative information supports employers, employees, individual purchasers, academics, and public policymakers, in assessing the relative quality of services provided by health benefit plans that are required under COMAR 10.25.08 to report to the Maryland Health Care Commission. Health-General Article, Section 19-134(c), *et seq.*, is the statute that gives MHCC its authority to establish and implement a system to evaluate and compare, on an objective basis, the quality and performance of care provided by commercial health benefit plans. The statute also permits MHCC to solicit and publish data collected using standardized health benefit plan quality and performance measurement instruments.

MHCC currently utilizes the Healthcare Effectiveness Data and Information Set (HEDIS)®, which focuses on measuring clinical performance; the Consumer Assessment of Healthcare Providers and Systems (CAHPS)® survey, which focuses on health benefit plan members' satisfaction with their experience of care; Maryland Race/Ethnicity, Language, Interpreters, and Cultural Competency Assessment (RELICC)™, which focuses on disparities issues; Maryland Plan Behavioral Health Assessment (BHA), which details the behavioral health care provider network; and Maryland Health Plan Quality Profile (QP), which centers on carrier-specific health care quality improvement initiatives in Maryland. MHCC is required to annually publish the findings of the evaluation system for dissemination to consumers, purchasers, academics, and policymakers. All information is reported within a framework of the type of delivery system that a health benefit plan is structured as, including delivery system categories such as Health Maintenance Organization (HMO) plans, Preferred Provider Organization (PPO) plans, Point of Service (POS) plans, and Exclusive Provider Organization (EPO) plans.

Accomplishments

Historically, MHCC produced an annual series of three Health Plan Quality Reports. In FY 2016, the Quality Report series was transitioned into an interactive web-based guide and incorporated into the Commission's consumer website – the Maryland Healthcare Quality Reports (MHQR). The MHQR website shows that Maryland's health benefit plans are maintaining a track record of good performance across many of the measures and indicators being evaluated. When considering all measures, several stand out for high performance, including primary care for children and adolescents, adult and child respiratory conditions, and primary care for adults with respiratory and cardiovascular conditions and behavioral health.

Overall, the health benefit plans continue to perform well when compared to the national average. However, there are areas where overall performance is less than desired, including Human Papillomavirus vaccination rates for children and adolescents, body mass index (BMI) screening for adults ages 18-74 years old, and bronchitis medication management for children and adults.

To ensure that reported information is accurate, audits of commercial health benefit plans are conducted annually. This audited data provides a higher level of confidence in the integrity of the data that is used for reporting health plan performance to the public.

MHCC has successfully streamlined the Health Plan Quality Reporting Initiative by eliminating Maryland member-specific HEDIS® and CAHPS® survey data collection and transitioning to the use of NCQA plan-wide results. This change was necessary to reduce redundancy in the reporting system as well as to fulfill the State mandate to report on commercial health plans utilizing the most efficient and cost effective strategy. The revised strategy for HEDIS® and CAHPS® data collection is expected to result in significant savings to the MHCC and will be implemented with the 2018 data audit and member survey cycle.

Center for Health Care Facility Planning and Development

Acute Care Policy and Planning

Overview

The Acute Care Policy and Planning Division is responsible for health planning and policy analysis related to services provided by general hospitals and short-stay special hospitals, ambulatory surgical facilities, residential treatment centers, and intermediate care facilities for substance abuse treatment. Planning for these services is supported by data collection. The Division administers two annual surveys and receives and maintains two service registry data sets, one for cardiac catheterization and percutaneous coronary intervention (PCI) and one for cardiac surgery, created by national organizations. The Division undertakes special policy and planning studies and updates regulations in the State Health Plan (SHP), as needed. The Division coordinates its acute care policy development and planning efforts with other appropriate state agencies and stakeholders, and provides leadership and direction to technical advisory committees and workgroups conducting analyses of applicable acute care facility service issues.

Accomplishments

State Health Plan

Organ Transplantation

A comprehensive update of the State Health Plan chapter for organ transplantation, COMAR 10.24.15, was adopted by the Commission as a final permanent regulation in December 2016 and became effective in February 2017. Final work on updating these regulations was based on discussion at the Commission's July 2016 meeting and additional feedback from the Commission's Organ Transplantation Work Group at a meeting convened in August 2016. The updated SHP chapter provides greater opportunities for a new organ transplant program to be considered by eliminating specific standards that severely limited consideration of new organ transplant programs.

Freestanding Medical Facilities

The Commission adopted COMAR 10.24.19, a new SHP chapter of regulation for freestanding medical facilities, as final permanent regulation in May 2017 and these new regulations

became effective in June 2017. Freestanding medical facilities (FMFs) are emergency centers established by general hospitals at off-campus sites and provide medical services similar to those available in a hospital emergency room seven days a week and 24 hours per day under the direction of board-certified emergency medical physicians. This category of health care facility was established in Maryland law about twelve years ago and two pilot facilities were established between 2006 and 2010. The operation of these pilot programs was evaluated by MHCC and, beginning in 2015, establishment of FMFs came within the scope of the Certificate of Need program. COMAR 10.24.19 contains policies and standards that will guide the Certificate of Need review process for a general hospital that seeks to establish a satellite freestanding medical facility to address access issues or overcrowding. It also contains policies and standards that will guide the exemption from Certificate of Need review process for a hospital seeking to convert to a freestanding medical facility. Statutory provisions for this latter type of review was established in 2016.

General Surgical Services

A surgical services work group was formed to update the SHP chapter for general surgical services, COMAR 10.24.11. The work group met a total of four times between January and June 2017. Staff presented draft regulations for consideration by the Commission in April 2017, but the Commission did not take action on the draft regulations. Staff revised the draft regulations based on feedback from the Commission. The revised draft regulations allow for establishment of certain types of ambulatory surgical facilities through an exemption from Certificate of Need review process.

Data Collection

Acute Care Hospital Bed Inventory

MHCC's Annual Report on Selected Maryland General and Special Hospital Services for Fiscal Year 2017 was developed and posted on the MHCC website.
https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chcf_Annual_Rpt_Selected_Hospital_Services_FY2017.pdf

The updated licensed acute care general hospital bed inventory for FY 2018 has also been posted and will be replaced, in FY 2018, with a full updated annual hospital service report.
https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chcf_Licensed_AcuteCare_Update_Hospital_Beds_FY18.pdf

Maryland Ambulatory Surgery Provider Directory

The nineteenth edition of the Commission's Maryland Ambulatory Surgery Provider Directory was published on the MHCC web site in August 2017. It provides information for CY 2015 on 325 freestanding centers providing outpatient surgery and on outpatient surgery at the 47 general hospitals operating in 2015. The Directory includes utilization data, information on reported surgical specialties, and contact information. The survey used as a primary information source for this directory provides the core data for the Commission's web-based Maryland Ambulatory Surgical Facility Consumer Guide. Raw data from the survey can be accessed on the Commission's web-based Public Use Files.
https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_amsurg/hcfs_amsurg.aspx

Other Initiatives

Throughout FY 2017, staff participated in selected meetings of the following agencies, or groups convened by these agencies, to assure appropriate coordination and collaboration on policy and regulatory matters: General Assembly committees, individual legislators, the Health Services Cost Review Commission, the Office of Health Care Quality of the Maryland Department of Health, and other units of MDH, and the Maryland Institute for Emergency Medical Services and Systems.

A quality improvement organization was formed by Maryland hospital cardiac surgery programs in the latter half of 2013, known as the Maryland Cardiac Services Quality Initiative (MCSQI.) The Chief of the Acute Care Policy and Planning Division serves as an ex officio (non-voting) member of MCSQI's Board, attending and participating in Board meetings of this organization, which are generally held monthly. Further information is available online at this link: MCSQI | Maryland Cardiac Services Quality Initiative

Long-Term Care Policy and Planning

Overview

The Long-Term Care Policy and Planning Division is responsible for health planning and policy analyses related to community-based and institutional long term care and post-acute care services. This includes comprehensive care facilities (CCFs), or nursing homes, home health agency services, hospice services, and special hospital-chronic services. Planning for these services is supported by data collection. The Division staff administers three annual surveys and undertakes special studies as needed. The Division staff coordinates its long-term care policy development and planning efforts with other appropriate state agencies and stakeholders, and provides leadership and direction to technical advisory committees and workgroups conducting analyses of long-term care facility and service issues.

Accomplishments

State Health Plan

Selection of Home Health Agency (HHA) Quality Measures and Establishment of Performance Levels

In order to implement the updated State Health Plan chapter adopted in FY 2016, the Division worked in early FY 2017 on selection of quality measures and establishment of performance levels for those quality measures to be achieved by Certificate of Need applicants seeking to either expand or establish HHA services. The Division was assisted by Christmyer Consulting, Inc. in development of an analysis of the Centers for Medicare and Medicaid Services (CMS) Home Health Compare website data. A background paper on "Implementing Quality Metrics in Review of HHA Certificate of Need Applications" was developed to provide a context for the quality measures to be selected and performance levels to be achieved as qualifying criteria that would be used in a given HHA CON review cycle. The background paper generally describes the quality measures and summary star

ratings publicly available on CMS Compare websites across the different types of potential CON applicants. Performance scores and star ratings for the quality measures for Maryland HHAs, hospitals, and nursing homes were obtained from the CMS Home Health, Nursing Home and Hospital Compare datasets available from Medicare.data.gov

Public Notice: Expanding Opportunities for Delivery of Quality HHA Services in Maryland.

In accordance with COMAR 10.24.16.07, Commission staff posted draft quality measures and performance requirements for a 30-day public comment period. This notice sought public comment on the draft quality measures and performance benchmarks to be achieved by applicants and to be used in determining need for additional HHA services. No comments were received during the comment period, which ended September 22, 2016. At the October 2016 Commission meeting, staff presented the draft quality measures and required performance levels, as well as the regional configuration of the 15 qualifying jurisdictions to be used for the 2017 CON review of HHA projects. The Commission approved the staff recommended quality measures and performance benchmarks to be used.

Guidelines for 2017 Home Health Agency Certificate of Need (CON) Review

Commission staff developed guidelines for those interested in submitting a CON application to establish a new HHA in Maryland, or to expand an existing HHA to a jurisdiction which it is not currently authorized to serve. These guidelines include: a description of the multi-jurisdictional regions; types of applicants able to apply; qualifications for accepting a CON application; and qualifying Maryland applicants. These guidelines are posted on the Commission's website at the following link:
http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_con/documents/chcf_con_hha_guidelines_20161114.pdf

Planning staff worked together with CON staff in updating the CON application form for the 2017 HHA CON review cycles, bringing these applications in conformance with the updated SHP regulations established in April 2016. At pre-application conferences, planning staff coordinated with CON staff and clarified the CON review standards in the HHA Chapter. Planning staff distributed information on the HHA public use data files and described to the applicants how to navigate the Commission's website in order to access the HHA utilization tables and raw data from the Commission's HHA Annual Surveys. Planning staff also provided technical assistance to CON staff in the assessment of information submitted by the applicants to determine their qualification as CON applicants.

Hospice Services

Implementation of the updated State Health Plan regulations for general hospice services (COMAR 10.24.13) was initiated in FY 2017. Division staff worked with CON staff to present materials to applicants and to provide technical assistance to CON staff. Review schedules for hospice services were posted for letters of intent for Prince George's County (August, 2016) and Baltimore City (October, 2016).

Data Collection and Analysis

The Centers for Medicare and Medicaid Services (CMS) Minimum Data Set (MDS)

The Minimum Data Set (MDS) is a federally mandated process for clinical assessment of all residents in Medicare or Medicaid certified nursing homes. The data, required by CMS, provides a comprehensive assessment of each resident's functional capabilities and needs. Resource Utilization Groups (RUGs) are part of this process and provide the foundation for the resident's care plan.

Since this patient-level data set is so complex and voluminous, the Commission has worked in the past with a contractor to create and maintain an MDS Manager program to run the data necessary for long term care policy and planning work. A new contract for this work was awarded to the Hilltop Institute, effective February, 2017 and a kickoff meeting was held during that month. Further activities are described under "Other Initiatives" below.

Long-Term Care Data Set (CCF, Assisted Living, Special Hospital-Chronic, and Adult Day Care Facilities)

The public use data sets for CY 2015 for the four licensure categories, Comprehensive Care, Assisted Living, Special Hospital-Chronic, and Adult Day Care facilities, covered by the Commission's annual Maryland Long Term Care Survey were completed and made available on the Commission's web site in April, 2017. This data set is used to create the nursing home occupancy report, and participation by payer source report, both of which are published in the *Maryland Register*. The long term care data supports the Commission's *Consumer Guide to Long-Term Care*, and provides data and trend information needed to support CON regulation.

The 2016 Maryland Long Term Care Survey data collection began in April 2017. During the past year, staff began work with the Hilltop Institute on the auditing process for the Long Term Care Survey.

User Fee Assessment

The Long Term Care Survey is the repository of data to support the User Fee Assessment for Comprehensive Care facilities. Data for the FY 2018 User Fee Assessment was completed in May 2017. With this data collection, staff supports the work of the administrative unit of the Commission in order to support budget and planning activities.

Health Information Technology in Nursing Homes

The Long Term Care Survey also includes data collection on the adoption of electronic health records and health information technology by nursing homes in Maryland. The report based on this data may be found at the following link:
http://mhcc.maryland.gov/mhcc/Pages/plr/plr_ltc/plr_ltc.aspx

Home Health Agency Data Set
In July 2016, Commission staff began work on updating the home health agency survey application. The application is being tested and is expected to be finalized for the 2015 and 2016 data collection in December 2017. Data from this survey is used to update the Commission's Consumer Guide to Long Term Care on home-based care, and provides information needed to support planning and CON functions.

Hospice Data Set
The data collection and data cleaning process for the FY 2015 hospice survey was completed in July 2016. The public use data set was posted on August 15, 2016. Subsequent to posting, staff discovered some inconsistencies with some data in Eastern Shore counties. A revised and updated public use data set was posted on September 20, 2016. The public use data set may be found at:
http://mhcc.maryland.gov/public_use_files/index.aspx

In planning for the FY 2016 Hospice Survey, the Hospice Network expressed an interest in reviewing and modifying some questions. A meeting was held in November 2016 with MHCC staff and hospice providers. The current Maryland Hospice Survey was reviewed, and recommendations were made for some modifications to make the survey more consistent with national data collection. In addition, changes were recommended to make data collection consistent with updates to the Medicare cost report. A final draft was prepared in December 2016 and the survey was available for online data collection beginning on March 13, 2017.

CCF Bed Occupancy and Payor Mix
In accordance with COMAR 10.24.08.05B (3), the Commission annually publishes reports on Nursing Home Occupancy and Required Medicaid Participation Rates. These reports are derived from data reported by nursing homes on the Commission's Annual Long Term Care Survey. Data is used for Certificate of Need review and planning. Tables were published in the March 31, 2017 issue of the *Maryland Register* and posted on the Commission's website at: http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_shp/hcfs_shp.aspx

Chronic Hospital Bed Occupancy
As required by COMAR 10.24.08, the Commission published information on FY 2015 special hospital-chronic bed occupancy in the *Maryland Register* on December 9, 2016. It reports data for both private chronic hospitals and state hospitals. This report is available on the Commission's website at:
http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/CHCF_LTC_Chronic_Hospital_Occupancy_fy15_20161209.pdf

Other Initiatives

Hilltop Institute Contract for MDS Work:
As described under the data section above, a contract for the continuation of work on the MDS Manager programs was awarded to the Hilltop Institute in February 2017. Initial work under this contract involved a review of the SAS programs that comprise the MDS

Manager. Subsequent to that review, bi-weekly phone conferences have been held to plan and review work in progress and provide guidance on the work being performed. Products reviewed and approved during FY 2017 include a draft and final work plan, federal updates to MDS 3.0 and their incorporation into the MDS Manager program, federal and state updates to Medicaid and their incorporation into the MDS Manager program, development of updated Consumer Guide tables, and development of a Design Plan for updating and maintaining MDS Manager programs. SAS programs were tested, evaluated, updated as needed with documentation. All products were submitted to MHCC staff for review and approval prior to finalizing documents.

Certificate of Need (CON)

Overview

The Certificate of Need Division implements the Commission's statutory authority to review and approve certain health care facility and service capital projects. In its administration of this program, the Commission uses the policies and standards it develops and adopts as regulation in the State Health Plan for Facilities and Services. The procedural regulations that guide CON reviews, at COMAR 10.24.01, establish administrative rules and procedures under which all reviews are conducted, and all decisions are brought to the Commission for action.

The Commission may approve, approve with conditions, or deny applications by health care providers to: (1) establish new facilities or services; (2) relocate facilities; (3) expand certain service capacities of health care facilities; (4) change the type and scope of services provided by existing health care facilities in certain ways; or (5) undertake capital expenditures for projects that exceed a set dollar threshold. In administering the program, the Commission also issues determinations of coverage, providing guidance on the regulatory requirements for health care facility capital projects and validating compliance of persons undertaking health care facility projects that, while not requiring a CON, may be required by law to provide certain information to the Commission in a prescribed form.

All projects requesting CON approval are evaluated for consistency with review standards and need projections in the State Health Plan for Facilities and Services, and are also evaluated against five additional general criteria. These are need, viability, impact of the project, the cost and effectiveness of alternatives to the proposed project, and the applicant's track record in complying with conditions and terms of CON approvals previously issued to the applicant.

Accomplishments

Certificate of Need Applications and Modifications

During FY 2017, the Commission approved seventeen (17) CON applications and one (1) change to a previously approved project. One application was denied and two applications were withdrawn from the review process.

After a lengthy review process that included submission of replacement and modified applications, the relocation of Prince George's Hospital Center was approved in October 2016. As approved, the project complied with conditions set out by the Commissioner/Reviewer that mandated specific changes in project scope and cost.

Another lengthy review involved competing applications to introduce cardiac surgery services in Anne Arundel County. Anne Arundel Medical Center prevailed in that review, a decision that is currently under appeal by the University of Maryland's Baltimore Washington Medical Center and Prince George's Hospital Center. Other hospital reviews that were completed involved an addition and renovation to expand and modernize Calvert Memorial Hospital, the relocation of the psychiatric specialty hospital currently operated by Sheppard Pratt Health System in Ellicott City, and a replacement of the surgical facilities at MedStar Franklin Square Medical Center.

The Commission approved three CON applications from Recovery Centers of America to establish alcohol and drug abuse intermediate care facilities in Cecil, Prince George's, and Charles Counties. These facilities will add a total of 140 medically-monitored intensive inpatient detoxification beds and another 174 medically-monitored intensive inpatient treatment beds to the State's inventory of treatment beds. Each of these was challenged by interested parties. Another 16-bed ICF for medically-monitored intensive inpatient detoxification, Maryland House, was approved for development in Linthicum (Anne Arundel County) during FY 2017.

Three nursing home projects involving additions to and/or renovations of nursing homes were approved, as were three applications to establish or expand ambulatory surgical facilities.

Approved CONs

Chesapeake Treatment Center d/b/a New Directions and the Right Moves – (Baltimore City) – Docket No. 15-24-2371
Introduction of a specialized program for persons aged 18 to 20 years who are not adjudicated juvenile sex offenders, a resident population to which this residential treatment center was previously dedicated.
Approved Cost: $80,000

Sheppard Pratt Hospital at Elkridge – (Howard County) – Docket No. 15-13-2367
Relocation and replacement of a 78-bed special hospital-psychiatric located in Ellicott City with an 85-bed special hospital-psychiatric to be located near the intersection of Route 103 and Route 1, in Elkridge.
Approved Cost: $96,532,907

Green Spring Station Surgery Center – (Baltimore County) – Docket No. 15-03-2369
Establishment of a free-standing ambulatory surgical facility with five operating rooms and four non-sterile procedure rooms to be located at 2330 West Joppa Road, in Lutherville.
Approved Cost: $16,340,840

Prince George's Hospital Center and Mt. Washington Pediatric Hospital– (Prince George's County) – Docket No. 13-16-2351
Relocation and replacement of a general hospital and special hospital-pediatric with a 205-bed general hospital and a 15-bed special hospital-pediatric to be located in Largo.
Approved Cost: $543,000,000

Northampton Manor – (Frederick County) – Docket No. 16-10-2377
Addition of 66 comprehensive care facility (CCF) or nursing home beds and renovation of an existing CCF.
Approved Cost: $10,195,736

Calvert Memorial Hospital – (Calvert County) – Docket No. 15-04-2270
Capital expenditure for a three-story building addition expanding the number of private patient rooms, creating a dedicated observation unit, and providing more space for outpatient, ancillary, and support services.
Approved Cost: $51,654,138

Maryland House Detox – (Anne Arundel County) – Docket No. 16-02-2374
Establishment of a Track 1 Alcoholism and Substance Abuse Treatment Intermediate Care Facility with 16 medically-monitored intensive inpatient detoxification beds to be located at 817 South Camp Meade Road, in Linthicum.
Approved Cost: $1,936,275

Massachusetts Avenue Surgery Center – (Montgomery County) – Docket No. 16-15-2378
Addition of a fourth operating room.
Approved Cost: $266,397

Recovery Centers of America-Earleville – (Cecil County) – Docket No. 15-07-2363
Establishment of a Track 1 Alcoholism and Substance Abuse Treatment Intermediate Care Facility with 21 medically-monitored intensive inpatient detoxification beds. The facility is being developed in conjunction with 28 residential treatment beds (non-regulated) and is located at 314 Grove Neck Road, in Earleville.
Approved Cost: $5,595,384 (The entire project cost estimated is $32,581,335.).

Recovery Centers of America – Upper Marlboro – (Prince George's County) – Docket No. 15-16-2364
Establishment of a Track 1 Alcoholism and Substance Abuse Treatment Intermediate Care Facility with 55 medically-monitored intensive inpatient detoxification beds. The facility is being developed in conjunction with 70 residential treatment beds (non-regulated) and will be located at 4620 Melwood Road, in Upper Marlboro.
Approved Cost: $12,239,219 (The entire project cost estimate is $27,816,407).

Recovery Centers of America – Waldorf – (Charles County) – Docket No. 16-08-2362
Establishment of a Track 1 Alcoholism and Substance Abuse Treatment Intermediate Care Facility with 64 medically-monitored intensive inpatient detoxification beds. The facility is

being developed in conjunction with 76 residential treatment beds (non-regulated) and will be located at 1110 Billingsley Road, in Waldorf.
Approved Cost: $10,712,744 (The entire project cost estimated is $28,669,470.)

Lorien Nursing & Rehabilitation Center – (Howard County) – Docket No. 16-13-2379
Addition of 25 CCF beds to an existing CCF located at 7615 Washington Blvd., in Elkridge.
Approved Cost: $5,457,500

Anne Arundel Medical Center – (Anne Arundel County) – Docket No. 15-02-2360
Introduction of cardiac surgery services in partnership with Johns Hopkins Medicine.
Approved Cost: $2,500,381

Kaiser Permanente-Gaithersburg – (Montgomery County) – Docket No. 17-15-2390
Addition of a third operating room to an existing ambulatory surgical facility.
Approved Cost: $1,998,352

Stella Maris – (Baltimore County) – Docket No. 16-03-2376
Capital expenditure for construction of a four-level building addition for purposes of modernization and updating to current design standards.
Approved Cost: $29,691,826

Columbia Surgical Institute – (Howard County) – Docket No. 17-13-2392
Establishment of an ambulatory surgical facility through the addition of a second operating room.
Approved Cost: $216,925

MedStar Franklin Square Medical Center – (Baltimore County) – Docket No. 16-03-2380
Capital expenditure for replacement of surgical facilities.
Approved Cost: $70,000,000

Denied CONs

University of Maryland Baltimore Washington Medical Center – (Anne Arundel County) – Docket No. 15-02-2361
Introduction of cardiac surgery services as a third location for the University of Maryland Cardiac Surgery Services Program.
Proposed Cost: $1,259,117

Changes in Approved CONs

Kaiser Permanente South Baltimore County Medical Center – (Baltimore County) – Docket No. 16-03-2372
An increase in the approved project cost for addition of operating room capacity.
Increase in Approved Cost: $652,834 (New total approved cost is $2,253,239.)

CONs Withdrawn

Seasons Residential Treatment Program – (Prince George's County) – Docket No. 14-16-2357
Establishment of an 80-bed residential treatment center to be located at 13400 Edgemeade Road, in Upper Marlboro.
Estimated Cost: $3,693,760

Greater Chesapeake Surgery Center – (Baltimore County) – Docket No. 16-03-2373
Relocation and replacement of an existing two-operating room ambulatory surgical facility located on York Road in Lutherville with a four-operating room facility to be located at 2118 Green Spring Drive, in Lutherville.
Estimated Cost: $1,938,633

Determinations of Coverage and Other Actions

In FY 2017 the Commission issued 169 determinations involving actions proposed by persons or health care facilities requiring a decision with respect to the need for CON review or other Commission authorization. These actions were made in accordance with statutory and regulatory provisions outlining: (1) the scope of CON coverage; (2) the types of projects or actions that, while similar in their general nature to projects that require CON review and approval, can be implemented outside of the CON regulatory process; and (3) the notification requirements and attestations which must be met to obtain the Commission's determination that CON is not required. These determinations are profiled in the following table. Chief among these types of determinations are those involving establishment of outpatient surgical centers with fewer than two sterile operating rooms, acquisitions of health care facilities, temporary de-licensure of beds (for up to one year), and small increases in the bed capacity of facilities ("waiver" beds), primarily nursing homes, which are allowed increases of 10% of bed capacity or ten beds, whichever is less, every two years so long as the facility maintains operation of all of its bed capacity without changes during that period of time.

Additionally, the Commission reviewed one request by a holder of a CON to acknowledge completion of their projects and readiness for operation ("first use review"). The Commission acknowledged four cases in which facilities with temporarily delicensed beds did not take timely action to bring these beds back into operation or to extend temporary de-licensure status, thus eliminating these beds from the state's inventory. In FY 2017 sixty (60) of these permanently delicensed beds were CCF beds, and 19 were residential treatment center beds.

Determinations of Coverage and Other Actions – FY 2017

NATURE OF DETERMINATION/ACTION	
Capital projects with costs below the threshold of reviewability	14
Acquisition of health care facility Comprehensive-care facility (nursing home): Ambulatory surgical facility: Home health agency:	79 47 31 1
Establishment of new physician outpatient surgery center (no more than one sterile operating room) Baltimore City (1), Baltimore Co. (6), Harford (1), Howard (3), Prince George's (2), and Montgomery (3)	16
Changes in ambulatory surgery center facilities or services (e.g., addition of non-sterile procedure rooms, surgical staff, surgical specialties, changes in ownership, or facility capital expenditures)	18
Relocation of physician outpatient surgery center	2
Temporary delicensure of CCF beds (127 total beds)	7
Temporary delicensure of residential treatment center beds (192 total beds)	3
Temporary delicensure of psychiatric hospital beds (33 total beds)	2
Relicensure of temporarily delicensed CCF beds (53 total beds)	4
Relicensure of temporarily delicensed psychiatric hospital beds (10 total beds)	1
Permanent delicensure of CCF beds (60 total beds)	3
Permanent delicensure of residential treatment center beds (19 total beds)	1
Addition of "waiver" beds* Comprehensive care facilities -4 (25 total beds) Special hospital-psychiatric facility – 1 (10 total beds)	5
Miscellaneous	14
TOTAL COVERAGE DETERMINATIONS	169
Pre-licensure and/or first use approval for completed CON projects (including partial first-use)	1

*Facilities other than acute care hospitals may add beds in limited increments over time without obtaining CON approval, subject to conditions outlined in regulation.

The Center for Health Information Technology and Innovative Care Delivery

Overview

The Commission's Center for Health Information Technology and Innovative Care Delivery (Center) is responsible for advancing the adoption and meaningful use of health information technology (health IT) in the State to improve the experience of care, the health of the population, and reduce the costs of health care. The use of health IT enables electronic access to clinical information at the point of care delivery. Key aspects of health IT include electronic health records (EHRs), health information exchange (HIE), mobile health (mHealth) and telehealth. The Center's initiatives focus on balancing the need for information sharing with the need for strong privacy and security policies, and transforming care delivery. Health IT is considered to be a vital component to achieving the goals under health care reform, including the aims of Phase 2 of the new waiver model by providing the critical infrastructure and data to allow the health care industry to perform efficiently. The Center has an ambitious plan for advancing health IT and innovative care delivery that involves:

- Advancing value-based care delivery programs;
- Identifying and addressing challenges regarding health IT implementation and interoperability;
- Promoting standards-based health IT through educational and outreach activities;
- Implementing a statewide HIE and harmonizing local area HIE efforts;
- Testing innovative telehealth and mHealth projects with various patient types, geographic locations and health care settings and disseminating lessons learned;
- Designating Management Service Organizations (MSOs) that meet select health IT requirements; and
- Promoting electronic data interchange (EDI) between payors and providers, and certifying electronic health networks.
- Managing the Commission's Advanced Primary Care programs.

Accomplishments

Electronic Data Interchange & Electronic Health Networks

The health care industry has used EDI for more than 30 years as a means for organizations to exchange information in a standardized electronic format. State-regulated payors and select specialty payors (payors) whose premium volume exceeds $1 million annually are required by COMAR 10.25.09, Requirements for Payors to Designate Electronic Health Networks, to report to MHCC health care administrative transaction data by June 30th each year. A total of 54 payors were required to submit an EDI progress report this year; aggregate data is included in an information brief released in September. EDI activity in Maryland is consistent with activity across the nation at approximately 94 percent. The most notable change from prior years is the growth in dental EDI, approximately 23 percent, which is largely attributable to increased activity among CareFirst providers.

An EHN, or claims clearinghouse, functions as an intermediary between a provider's financial management system and payors. An EHN enables the electronic exchange of health care information, including patient demographics, diagnosis, and other health care administrative related information, reducing the need for mail, fax, telephone, and e-mail. COMAR 10.25.07, Certification of Electronic Health Networks and Medical Care Electronic Claims Clearinghouses, requires that third party payors that accept electronic health care transactions originating in Maryland only accept transactions from MHCC certified EHNs. In order to achieve MHCC certification, EHNs must provide evidence that they achieve national accreditation and meet standards related to privacy and confidentiality, business practices, physical and human resources, technical performance, and security. Certification is valid for a two-year period. As of June 30, 2015, approximately 36 EHNs operate in Maryland.

Hospital Health IT Assessment

The Center conducted its annual health IT assessment of Maryland hospitals. The report, Health Information Technology, An Assessment of Maryland Acute Care Hospitals, evaluates diffusion of health IT, including adoption and planning trends of hospitals locally with some comparisons to hospitals nationally. Hospitals' implementation and use of EHRs, automated surveillance technology, electronic prescribing, patient portals, telehealth, mobile applications, HIE, and data analytic tools are highlighted in the report. The report also presents information on incentive payments received from hospitals participating in the Centers for Medicare & Medicaid Services (CMS) EHR Incentive Programs (federal incentive programs). A notable finding from the 2015 survey is that interest in telehealth is growing, with approximately 77 percent of Maryland hospitals reporting telehealth capabilities. In general, Maryland continues to meet or exceed most national adoption rates. Findings from the assessment are used to evaluate progress, identify trends, and assess policy issues impacting the future direction health IT in the State.

Cybersecurity

The Center worked with stakeholders to identify opportunities for developing cybersecurity peer learning forums and other resource tools. A hospital cybersecurity survey was distributed to collect information on how hospitals are preparing for and managing cyber risks, including incident response planning, employee awareness and education, and plans for modifying cyber liability insurance coverage, among other things. All acute care hospitals in the State participated in the assessment. Findings suggests that hospitals are making efforts to plan for and enhance cybersecurity controls in response to emerging threats. In collaboration with the Healthcare Information Management Systems Society Maryland Chapter, the Health Services Cost Review Commission, and the Maryland Hospital Association, the Center organized a Hospital Cybersecurity Symposium (symposium). The symposium was targeted to senior leadership at hospitals where industry leaders discussed the changing landscape of cyber-crime in health care and shared best practices for assessing risks, including vendor accountability and cyber liability insurance.

The Center plans to release a Cybersecurity Self-Assessment tool (tool) in early 2017. The tool will utilize the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF), which was developed to assist organizations in assessing their cybersecurity environment and offer voluntary guidance to organizations to understand, select, and implement cybersecurity controls. The tool will contain five sections, each to address the five core functions of the NIST CSF: Identify, Protect, Detect, Respond, and Recover. The tool aims to assist small health care organizations in the identification of gaps and potential risks in their cybersecurity processes in order to understand, select, and implement cybersecurity controls.

Advance Directives

House Bill 1385, Public Health – Advance Directives – Procedures, Information Sheet, and Use of Electronic Advance Directives alters witness requirements for an electronic advance directive and expands the scope of education and outreach. The law also requires MHCC to establish criterion and develop a process to recognize vendors offering electronic advance directive services to connect with the State-Designated HIE. Planning activities for the development of a statewide advance directives program were initiated in collaboration with the Maryland Department of Health (MDH) pertaining to the law's requirements. The MHCC and MDH formed two workgroups to deliberate on policy issues related to advance directives: Criteria and Connectivity and Engagement and Special Issues. The output from the workgroups will be used to draft language for the regulations.

State-Regulated Payor Electronic Health Record Incentives

Maryland law enacted in 2009, Md. Code Ann., Health-Gen. § 19-143, requires MHCC to establish incentives from certain State-regulated payors as a way to promote EHR adoption and use among practices in Maryland. At that time, roughly 19 percent of

office-based physicians in Maryland had adopted an EHR compared to 22 percent nationally. The State incentive program was implemented in October 2011 through regulations. As of February 2016, the State incentive program has provided incentives of over $9.1M to 1,665 primary care practices in Maryland; average annual growth rate in program participation is about 29 percent. The Center convened the State incentive program workgroup consisting of payors and provider representatives on April 18, 2016 to discuss the impact of the incentives on advancing meaningful use of EHRs and opportunities to increase the number of meaningful users by extending the sunset date by two years to December 2018. While the State incentive program has had moderate impact on advancing meaningful use of EHRs, the workgroup agreed to a one-time extension of two years. Amendments to the regulations extending the sunset go into effect November 24, 2016.

Management Service Organizations

COMAR 10.25.15, Management Services Organizations–State Designation, details the requirements for an MSO to obtain voluntary State-Designation. The revised MSO State Designation requirements, effective April 3, 2014, include flexibility in demonstrating compliance with federal and State privacy and security laws through either national accreditation or an independent third-party assessment. During the year, the Center re-certified the remaining two State Designated MSOs under the revised criteria; all seven MSOs meet the revised criteria. Since 2015, needs have shifted from implementation of an EHR to optimal utilization of health IT in enabling practice transformation. The Center began the planning phase for developing new criteria for MSO State Designation that will include expanded services to support practice transformation, such as providing support to practices in developing transition of care policies, care management standards, and managing population health. Practice transformation aims to enable ambulatory primary care and specialty practices to deliver high-quality care that is efficient, coordinated, and patient-centered to improve patient health outcomes and reduce health care costs. State Designated MSOs currently offer services to providers in the areas of EHR planning, implementation, staff training, technical support, and becoming advanced EHR users. Additional MSO services include: 1) providing assistance with redesigning workflows and care delivery processes for optimized use of health IT, and 2) supporting providers in achieving meaningful use under the federal incentive programs.

Local Health Departments

The Center released the LHD EHR Resource Guide (guide). The guide was developed following an EHR environmental scan (scan) conducted by staff in the fall of 2014 to assess use of EHRs among all 24 LHDs. Staff collaborated with LHDs in developing the guide, which aims to help LHDs navigate the process of acquiring EHR systems and becoming meaningful users of health IT. The guide serves as a centralized source of information related to LHDs' use of EHRs to support specific programs, such as behavioral health or dental, as well as other administrative functions, including scheduling and billing. Nearly 96 percent of LHDs have implemented an EHR; however, several challenges to health IT adoption were identified, such as: cost,

limited technical resources, and the ability of an EHR system to meet LHD needs. The guide also includes presentation materials from the lunch and learn webinar series (series) hosted by MHCC over the past year. The series included three webinars that focused on EHR workflow redesign, utilization of HIE services, and value-based care delivery.

Telehealth

Since October 2014 the Center has awarded 10 telehealth grants with matching fund requirements, over four rounds of funding, focusing on several different use cases with the aim of improving access to care and patient experience, and decreasing cost of care. The diverse telehealth use cases provide an opportunity to test the effectiveness of telehealth with various technologies, patients, providers, clinical protocols and settings. Additionally, these telehealth demonstration projects help to inform the implementation of telehealth more broadly in Maryland to support Phase 2 of the new waiver model and health care reform. The Center released an information brief (brief) for the round one telehealth grantees. The round one projects demonstrated the impact of using telehealth to improve transitions of care between a hospital and a LTC facility. The brief provides an overview of the telehealth implementation efforts and lessons learned from Atlantic General Hospital, Dimensions Healthcare System, and University of Maryland Upper Chesapeake Health (grantees). The information from this and other telehealth grantees will help inform: 1) better telehealth care delivery practices and industry implementation efforts, 2) policies to support the advancement of telehealth, and (3) the design of larger future telehealth initiatives. Ensuring adequate and ongoing training and appropriate professional liability coverage were among the key lessons learned by grantees. All of the grantees reported a reduction in hospital encounters for patients whose non-emergency conditions were being monitored remotely from a LTC facility, which contributed to cost savings. The round one grantees continue to expand their telehealth projects.

In June 2015, the Center awarded a second round of telehealth project funding. A combined total of $90,000 was awarded to: (1) Crisfield Clinic, LLC (Somerset County); (2) Lorien Health Systems (Howard County); and (3) Union Hospital of Cecil County (Cecil County). Crisfield Clinic is a family practice clinic in Somerset County that is using remote patient monitoring to address asthma, diabetes, childhood obesity, and behavioral health issues among students in two county schools. Lorien Health Systems has a skilled nursing facility and residential service agency in Howard County that are using remote patient monitoring and videoconferencing to address certain hospital prevention quality indicator (PQI) conditions among discharged residents, including uncontrolled diabetes, congestive heart failure, and hypertension. Union Hospital of Cecil County is also using remote patient monitoring to address PQI conditions among discharged patients, including angina, asthma, chronic obstructive pulmonary disease, diabetes, heart failure, and hypertension. The experience gained from implementing the projects will inform the design of large telehealth programs in the State. Projects continued through November 2016.

In December 2015, MHCC awarded a third round of telehealth grants totaling approximately $90,000 to demonstrate the impact of using telehealth technology to improve the overall health of the population being served and the patient experience. Awards were given to: (1) Associated Black Charities-Dorchester County; (2) Gerald Family Care, LLC; and (3) Union Hospital of Cecil County. Associated Black Charities (ABC) is a community association that assists minority and rural communities with navigating the health care system in Maryland's Mid-shore Region Health Enterprise Zone. ABC deployed Community health workers to meet with patients in the community and use mobile tablets to connect patients with a licensed nurse practitioner at Choptank Community Health System, Inc. (CCHS). Gerald Family Care, LLC (GFC) is a primary care practice utilizing telehealth technology to exchange images and provide remote video consultations between GFC family practices in Prince George's County and specialists at Dimensions Health System (DHS) to connect patients in real-time with specialty care. Union Hospital of Cecil County (UHCC) will provide chronic care patients discharged to home with mobile tablets and peripheral devices[1] that allow UHCC to monitor the status of patients' condition. Use of this technology will allow patients to remotely share clinical information with the UHCC's care management team, including blood pressure, temperature, pulse, weight and glucose levels. These projects will be completed in May 2017.

In June 2016, the Center awarded of two telehealth grants, totaling over $115,000, to demonstrate the impact of using telehealth technology to support value-based care delivery in primary care. The two awardees are: (1) Gilchrist Greater Living (Gilchrist); and (2) MedPeds, LLC (MedPeds). Gilchrist, a comprehensive primary care geriatric medical practice, will provide patients with in-home telehealth monitoring to support case management and early intervention for chronically ill patients. MedPeds, a family medicine practice, will use mobile technology to provide 24/7 telehealth services, enable patients to make appointments, and provide patients with access to their electronic health records. These projects will continue through November 2017.

The MHCC collaborated with Lorien Health Systems, the University of Maryland, and CRISP (collaborative) to prepare an application for a funding announcement by the Patient-Centered Outcomes Research Institute (PCORI), Improving Health Systems – Cycle 1 2016. A letter of Intent (LOI) submitted by the collaborative in February 2016 was approved by PCORI in April 2016, allowing the collaborative to submit a full application. The application outlines plans to examine the effectiveness of telehealth to support care coordination purposes. The plan includes use of RPM devices 24/7 at home for patients after they transition from a long-term care facility. The duration of the project is for four years with funding up to $5M. PCORI funds research projects to study the comparative effectiveness of alternative features of health care systems with the intent to optimize quality, outcomes, and efficiency of patient care. The full application was submitted on June 6, 2016; selections will be announced in December with projects getting underway in January 2017.

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[1] Peripheral devices include blood pressure cup, thermometer, pulse oximeter and scale that synch with the mobile tablet and allow transmission of information to the remote site.

Long Term Care

The Center released an annual assessment of health IT adoption and use among comprehensive care facilities (CCFs) in Maryland, which provides an overview of CCFs' EHR, telehealth and HIE adoption levels. Data collected through Maryland's Annual LTC Survey was used. The report presents survey results from 2013 through 2015, including health IT adoption challenges and opportunities to advance health IT adoption among CCFs, particularly within the context of health care reform. Based on a preliminary analysis, approximately 85 percent of CCFs adopted an EHR system, compared to 43 percent at the national level in 2004.[2] The Center worked with stakeholders to identify a core set of EHR features that constitute a basic level of EHR use by CCFs, including activities of daily living, allergy list, care plans, demographic characteristics of residents, diagnosis or condition list, discharge summaries, vital signs and laboratory data. Using this categorization, approximately 41 percent of CCFs have implemented an EHR at the basic level. Additionally, telehealth adoption more than tripled from 2014 to 2015, with approximately 11 percent of CCFs using telehealth. Results from the survey are used to inform broad strategies for enhancing health IT adoption and use among CCFs in Maryland.

Health Information Exchange

The MHCC provides guidance to the State Designated HIE, CRISP, in advancing health information exchange statewide. The MHCC and the Health Services Cost Review Commission designated CRISP in 2009, as required by law (Md. Code Ann., Health-Gen. § 19-143 (2009), to build and maintain the technical infrastructure to support and enable the exchange of electronic health information statewide. In accordance with industry-recognized best practices and standards, the State Designated HIE facilitates the secure exchange of health information between Maryland's health care organizations, providers, and public health agencies. Every three years, CRISP must be re-designated under the terms of the State-Designated HIE State Designation Agreement (SDA). CRISP was re-designated for three years beginning in April 2016; this marks the third designation of CRISP as the State Designated HIE. New to the SDA are requirements for CRISP to develop Cybersecurity, Business Continuity, and Disaster Recovery Plans. The MHCC provided guidance to CRISP in the development of the draft plans which are to be completed by Q2 2017.

Annually, the Center participates in financial audits of CRISP conducted by independent third party auditors, CliftonLarsonAllen LLP (CLA). CLA audits CRISP financial statements, which include a review of their compliance with certain provisions in law, regulations, contracts, and federal grant agreements. The Center also facilitates the annual privacy and security audit of CRISP conducted by Myers and Stauffer. The audit evaluates the extent to which CRISP and its vendors process, transmit, and store electronic data in a secure manner that minimizes the potential for an unauthorized disclosure or breach of protected health information. New cyber-

[2] Hsiao CJ, Hing E., Adoption of health information technology among U.S. ambulatory and long-term care providers. National Conference on Health Statistics. Washington, DC: 2012. Available at: http://www.cdc.gov/nchs/ppt/nchs2012/SS-03_HSIAO.pdf.

security testing procedures were added to the audit scope this year to assess CRISP controls on preventing unauthorized access from both internal and external threats, such as hackers. The Center works closely with CRISP as they implement a corrective action plan for remediation of the audit findings.

Currently in its ninth year of operation, CRISP continues to make progress towards building a robust statewide HIE. Participants in Maryland that submit clinical information to CRISP include all 47 general acute care hospitals, 2 specialty hospitals, 41 long-term care facilities, 12 radiology facilities, and 3 laboratories. State governmental agencies also submit information to CRISP. MDH, Behavioral Health Administration collects information regarding the prescribing and dispensing of drugs that contain controlled dangerous substances (CDS). This information is shared with CRISP to support the Prescription Drug Monitoring Program (PDMP). CRISP serves as the access point for clinical providers, including prescribers, pharmacists, and other licensed healthcare practitioners for viewing filled CDS prescriptions. DHMH's Infectious Disease and Environmental Health Administration also provides immunization information from ImmuNet, Maryland's Immunization Registry, to CRISP, which is available through the CRISP query portal. A wide variety of health care provider organization access data is published by CRISP; these include ambulatory practices, Federally Qualified Health Centers (FQHCs), hospitals, LTCs, and independent laboratory and radiology companies. Certain payors, pharmacy organizations, and governmental agencies also access data made available through CRISP. Additionally, CRISP offers interstate connectivity to certain hospitals and providers in the District of Columbia and Delaware.

Information made available through CRISP is accessible for query through an Internet-based portal (Query Portal). Provider utilization of the Query Portal and other CRISP services has generally increased over the last fiscal year. As of June 2016, there were 744 health care organizations using the Query Portal, compared to 620 organizations in the previous year. Participation among ambulatory providers has increased by 36 percent from 1,094 providers in June 2015 to 1,505 providers in June 2016; CCF participation has also increased from 95 facilities in 2015 to 116 facilities in 2016, an increase of 22 percent. The average number of portal queries per month has also grown by 71 percent from 72,148 to 104,506. The Encounter Notification System (ENS) offers real-time notification alerts to providers when one of their patients has an encounter at a participating hospital, and are used to coordinate and facilitate post-acute care follow up. ENS has also seen an increase in participation from 424 to 727 organizations. Users of the PDMP, which provides information on all Schedule II-V drugs prescribed at any Maryland pharmacy though the Query Portal, have increased by approximately 30 percent from 6,052 in 2015 to 7,902 in 2016.

Ambulatory Information Exchange Project

The Center worked with CRISP to continue to implement a use case that integrates information on administrative transactions from ambulatory providers in electronic encounter notifications. Two MHCC-certified EHNs doing business in Maryland are participating: Cyfluent, a Maryland-based EHN, and RelayHealth. Select data elements

from administrative transactions of the nearly 500 practices that use Cyfluent's network are being utilized. The data will be repurposed by CRISP in the form of electronic alerts that will be available to care managers when their patient has an encounter with another provider. Approximately 49 practices using RelayHealth, have signed a participation agreement with CRISP. Staff is supporting CRISP in analyzing the lag time between when patient encounters occur and when the relevant data is submitted by RelayHealth and received by CRISP. The Center and CRISP are also exploring a long- term strategy for integrating data from RelayHealth and other clearinghouses with CRISP services.

HIE Policy Development

The MHCC was given the authority in law, Md. Code Ann., Health-Gen. §§4-301 and 4-302 (2011), to adopt regulations for the privacy and security of protected health information obtained and released through an HIE. The MHCC convened the HIE Policy Board (Board), a staff advisory group, to develop policy recommendations for the private and secure exchange of health information through HIEs. The recommendations of the Board are used by the Center to help guide the development of the regulations. The MHCC adopted COMAR 10.25.18, Health Information Exchanges: Privacy and Security of Protected Health Information (regulation), which became effective on March 17, 2014. National concerns exist about the sufficiency of the Health Insurance Portability and Accountability Act of 1996, including the Health Information Technology for Economic and Clinical Health Act; the regulations that help to ensure that consumers' information is protected.

Several meetings with the Board were held during the year. Board members finalized policies related to allowing health care consumers electronic access to their health information being made available by an HIE. The Center drafted amendments based on the recommendation of the Board, to be released in November 2016 for informal comment. HIEs that operate in Maryland are required to safeguard consumers' information and register as an HIE annually with MHCC. Information for HIE registration includes the HIE's current audited financial statements, the HIE's core education content and other necessary provisions detailed in the application form. The Center renewed the registration of all eight registered HIEs in Maryland, including Calvert Memorial Hospital, CRISP, Children's IQ Network, Frederick Memorial Hospital, Peninsula Regional Medical Center, Prince George's County Public Health Information Network, and Western Maryland Health System.

Electronic Preauthorization

In 2012, Maryland law (Md. Code Ann., Health-Gen. 19-108.2) established three benchmarks aimed at standardizing and automating the preauthorization process for medical and pharmaceutical services in order to minimize administrative burdens for health care professionals, payors, and pharmacy benefit managers (PBMs). These benchmarks were required to be implemented by July 1, 2013. The law was amended in May 2014 adding a fourth benchmark requiring payors and PBMs to implement an electronic process to allow providers to override a step therapy or fail-first protocol for pharmaceutical services by July 1, 2015. The MHCC is required to report annually

through 2016 to the Governor and General Assembly on payors' and PBMs' implementation and compliance with the law.

All payors and PBMs have implemented the four benchmarks and are in compliance with the law. Electronic preauthorization for medical services increased by 64 percent between 2012 and 2015. In comparison, pharmaceutical electronic preauthorization requests experienced more nominal growth of less than six percent during this same time period. This can be attributed to stand-alone online portal use requiring providers to complete electronic preauthorization outside of existing workflows. As a result, EHR vendors have developed applications that are able to be integrated into the e-prescribing workflow, thereby eliminating the need for a provider to leave the existing workflows to complete electronic preauthorization. As the industry shifts to value based care delivery (VBCD), which aims to improve care quality and reduce health care costs, preauthorization requirements are likely to change. VBCD requires a shift in the way that providers, payors, and PBMs collaborate and places an emphasis on the use of technology to apply more automation to the preauthorization process.

Patient Centered Medical Home (PCMH)

Maryland law, Md. Code Ann., Health-General. § 19-1A-02 (2010) required MHCC to establish a PCMH program to analyze the effectiveness of the PCMH model of primary care in which a team of health care professionals, guided by a primary care provider, delivers recurring, comprehensive, and coordinated care to patients in a culturally sensitive manner. In April 2011, MHCC launched the Multi-payor PCMH program (MMPP or pilot). The pilot included 52 primary care practices, spanning a range of geographical areas, patient populations, and organizational demographics. Two FQHCs participated, as well as private primary care practices in urban, suburban, and rural settings. By law, the program included participation by Medicaid and the four largest commercial health insurance carriers in the State: CareFirst BlueCross Blue Shield; Aetna, Inc. (now merged with Coventry); CIGNA Health Care; and UnitedHealthcare. In addition, the military care plan, TRICARE, the Federal Employees Health Benefits Program, and the Maryland State Employee and Retiree Health and Welfare Benefits Program elected to participate in the pilot.

The Center developed a migration plan for practices in the MMPP, as the commercial pilot concluded on December 31, 2015 and the Medicaid pilot concluded on June 30, 2016. The migration plan aimed to assist participating practices with transitioning from the MMPP into an existing commercial carrier's advanced care delivery program. The goal was to enable practices to make informed decisions about enrolling into an advanced care delivery program based on their business needs. The Center convened commercial carrier advanced care delivery program education sessions to help practices learn about the different aspects of each program. Enrollment in a commercial carrier program allows practices to continue delivering advanced primary care in a long term model with financial incentives for achieving the triple aim: improving quality of care, increasing patient satisfaction, and controlling cost. The Center provides practices with several other options to enroll in

opportunities beyond PCMH programs. One of these options includes enrollment in an ACO, which also aims to catalyze continued growth in advanced care delivery.

Practice Transformation Workgroup

The Center convened several meetings of the Practice Transformation Workgroup (PTW) to continue discussions on the progression of advanced care delivery models in the State. The PTW was established in the winter of 2014 and was tasked with developing recommendations for expanding advanced care delivery models once the MMPP concluded. Participants included physicians, nurses, and quality improvement experts from academia, ACOs, and FQHCs. During the meetings, several PTW members proposed developing a single sign-on platform for all carrier provider portals for reporting and accessing patient information in an effort a help ease the administrative burden associated with accessing multiple portals with different usernames and passwords. PTW members also proposed creating a centralized quality measures reporting portal which would allow providers to send information on specific quality measures to all requesting entities, such as single carrier PCMH programs.

Primary Care Council

The Center convened a panel of primary care providers (Council) to identify opportunities to align primary care with the requirements of the new payment models, such as the hospital global payment model. The Council includes leaders from physician groups and State agencies. The Council identified a number of topics, such as what primary care can contribute under the new payment for quality models and balancing governance in the evolving global care payment models, such as the Maryland hospital global payment model. The Council also identified opportunities under the proposed Pay for Outcomes (P4O) program. P4O is a voluntary program under Maryland's new All-Payer Model that allows hospitals to incentivize community providers and practitioners to reduce potentially avoidable hospitalizations by implementing care redesign interventions. One objective of the Council is to help Maryland reach its goal of achieving an all-payer, population-based, hospital model by developing recommendations that can reduce hospital expenditures while maintaining or improving quality of care. The Council also provides recommendations on other emerging payment reform models.

Practice Transformation Network (PTN)

Staff executed a sub-contract partnership with MedChi, The State Medical Society, and the Department of Family and Community Medicine at the University of Maryland School of Medicine. The sub-contract is with the New Jersey Innovation Institute (NJII) for implementing practice transformation activities in Maryland. CMS entered into a cooperative agreement with NJII for a PTN. Under this cooperative agreement, NJII is tasked with collaboratively leading practices through a transformation process developed by CMS designed to improve health outcomes and better coordinate care delivery. The Center began enrolling practices in the Maryland PTN program, which includes advancing the exchange of health care information between CRISP and ambulatory practices and engaging in educational sessions. The Center continues to synchronize recruitment activities by sharing information with two other PTN

awardees working with Maryland-based practices, The Virginia Health Quality Center and Health Partners Delmarva. At this time, 1,500 providers expressed interest in participating in the PTN.

MMPP Evaluations

The Center released the Evaluation of the Maryland Multi-Payor Patient Centered Medical Home Program (report) in July 2016. The report details the progress made by pilot participants from July 2011 through June 2014, including: 1) practice transformation; 2) provider satisfaction; 3) patient satisfaction and experience, including access to care; 4) quality, utilization and costs of care; and 5) health care disparities. Findings indicate that more adult patients rated patient-provider communication higher than earlier in the pilot, and respondents for children indicated they were highly satisfied with care. Chronic disease management of some ambulatory care sensitive conditions also improved. Findings also suggest the MMPP had success in slowing the growth of health care costs among MMPP practices for inpatient payments among Medicaid patients and outpatient payments for both Medicaid and commercially insured patients. Staff prepared a press release for this report in August.

The Center released an issue brief on evaluation findings applicable to the Maryland Medicaid program and their patients in the Maryland Multi-Payor Patient Centered Medical Home Program (MMPP) pilot. The issue brief, which was derived from an independent evaluation of the MMPP released in July of 2015, assessed the impact of the PCMH model on the MMPP Medicaid patients. The findings indicate that the program had a positive impact on patient satisfaction, provider satisfaction, health care disparities, practice transformation, and health care cost, quality and utilization. Most notably, health care disparities improved for all three racial quality measures, all five racial utilization measures, two of four payor quality of care measures, and four of nine payor utilization measures. Continuing to reduce health care disparities will improve health outcomes for the Medicaid population; reduce expenditures related to medical care and indirect costs; and align Maryland's health care system with the U.S. Department of Health and Human Services' Healthy People Initiative, which aims to identify and educate Americans on national health improvement priorities. The Center presented the evaluation results to stakeholders, including the MMPP pilot practices, at a collaborative learning event.

APPENDIX 1

THE MARYLAND HEALTH CARE COMMISSION