Craig Tanio, M.D.
CHAIR

STATE OF MARYLAND

Ben Steffen
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

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TELEPHONE: 410-764-3460 FAX: 410-358-1236

January 31, 2017

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 2016

Dear Governor Hogan, President Miller, and Speaker Busch:

The Maryland Health Care Commission is pleased to submit the *Report to the Governor, Fiscal Year 2016,* 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 Health and Mental Hygiene, 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
Dennis R. Schrader, Secretary of Health and Mental Hygiene
Sarah Albert – DLS (5 Copies)

THE MARYLAND HEALTH CARE COMMISSION

REPORT to the GOVERNOR

Fiscal Year 2016

(July 1, 2015 through June 30, 2016)

Larry Hogan
Governor

Craig Tanio, M.D.
Chair

Ben Steffen
Executive Director

MARYLAND
HEALTH CARE
COMMISSION

This annual report on the operations and activities of the Maryland Health Care Commission for fiscal year 2016 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 Mental Hygiene, and the Maryland General Assembly.

This report was written by Karen Rezabek and the chiefs of service for each of the Commission's centers. For additional information on this report, please contact Karen at 410-764-3259 or by email at karen.rezabek@maryland.gov.

MARYLAND HEALTH CARE COMMISSION

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MARYLAND
HEALTH CARE
COMMISSION

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.

MARYLAND HEALTH CARE COMMISSION

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MARYLAND HEALTH CARE COMMISSION

EXECUTIVE STAFF

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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 located within the Department of Health and Mental Hygiene. Our fifteen Commissioners, appointed by the Governor with the advice and consent of the Senate, reside in communities across the Maryland and represent both the State's citizens 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.

MHCC STAFF AND THE FOUR CENTERS

During FY 2016, the Commission had an appropriation for 60.7 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's Executive Director. Administrative activities, such as staffing, budget, and procurement, are managed by the Director of Administration and her staff. 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 promises to bring 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 electronic health information exchange. 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 Patient Centered Medical Home Program.

THE CENTER FOR ANALYSIS AND INFORMATION SERVICES

This Center has expertise in the creation, maintenance, and mining of large databases, in the management of information technology and networks, and in the analysis and interpretation of population surveys. The Center produces key 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 and the Commission's web site.

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 2016, the Commission was appropriated $30,161,114, which included a special fund appropriation of $12.3 million for the Trauma Fund, $3 million for the Maryland Emergency Medical Systems Operations Fund, $14,632,996 for MHCC operations and a federal fund appropriation of $228,118 for CMS's Center for Consumer Information and Insurance Oversight (CMS/CCIIO) Grant to States to Support States in Health Insurance Rate Review and Increase Transparency in Health Care Pricing – Cycle III (Cycle III). During the course of the fiscal year, a budget amendment was completed in the amount of $17,436,600, which included a special fund appropriation increase in the amount of $122,766 for employee salary increments as 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, $14,750,000 for the State designee for Health Information Exchange (CRISP) and a federal fund appropriation increase in the amount of $1,244,789 for the CMS/CCIO Cycle III Grant and $1,019,045 for the CMS/CCIO Cycle IV Grant to States to Support Health Insurance Rate Review and Increase Transparency in the Pricing of Medical Services – Cycle IV (Cycle IV).

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. Each of these entities contributes to the MHCC budget appropriation according to workload. Currently, the Commission assesses: 1) Payers for an amount not to exceed 28% of the total budget; 2) Hospitals for an amount not to exceed 33% of the total budget; 3) the Health Occupational Boards for an amount not to exceed 22% of the total budget; and 4) Nursing Homes for an amount not to exceed 17% 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. The assessment is currently capped at $12 million through legislation that was enacted in FY 2008.

SURPLUS

At the close of FY 2016, the Commission's surplus was $3,983,808. The Commission's surplus resulted from prudent management of the FY 2016 budget and from the award of grants that allowed the retention of precious State funds. The Commission continues to operate within its statutory assessment cap of $12 million that was established in FY 2008. The Commission will continue to utilize its surplus in efforts to close the gap between appropriation and revenue collection.

OVERVIEW OF FY 2016 COMMISSION ACTIONS

July 2015

The Commission granted a Certificate of Need to Lorien Harford, Inc.

The Commission approved COMAR 10.24.17 – State Health Plan for Facilities and Services: Cardiac Surgery and Percutaneous Coronary Intervention Services – Proposed Permanent Regulation.

The Commission approved Cardiac Community Core Lab to conduct external review of Percutaneous Coronary Intervention (PCI) services at Maryland hospitals.

Commission staff presented an update on the *Results of the Analysis of Payment for Professional Services*.

Commission provided an overview of version 2.0 of the Maryland Hospital Performance Evaluation Guide, available on its website.

Staff from the Maryland Patient Safety Center provided a Semi-Annual Update.

Commission staff presented a Preview of the Physician Workforce Dashboard.

August 2015

There was no Commission meeting.

September 2015

The Commission granted an Exemption from Certificate of Need for the Merger of HomeCare Maryland, LLC and Carroll Home Care.

The Commission granted a Certificate of Need to Lorien-Howard, Inc., d/b/a Encore at Turf Valley.

The Commission approved COMAR 10.25.17: Benchmarks for Preauthorization of Health Care Services – Final Regulations.

The Commission released COMAR 10.25.19: Patient Centered Medical Home for Informal Public Comment.

The Commission released COMAR 10.25.18: Health Information Technology: Privacy and Security Regulations for Informal Public Comment.

October 2015

The Commission adopted COMAR 10.24.17, State Health Plan for Facilities and Services: Cardiac Surgery & Percutaneous Coronary Intervention Services – Final Regulations.

The Commission approved the release of MCDB Data to Berkeley Research Group (BRG).

The Commission approved the release of the 2015 Preauthorization Benchmark Attainment Report.

Commission staff presented on the 2015 Health Benefit Quality Report Series.

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

November 2015

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

The Commission approved release of the Maryland Hospital Palliative Care Programs: Analysis and Recommendations report.

The Commission approved COMAR 10.24.16 – State Health Plan for Facilities and Services: Home Health Agency Services as Proposed Permanent Regulation.

The Commission approved COMAR 10.24.08 – State Health Plan for Facilities and Services: Nursing Home Services as Proposed Permanent Regulation.

The Commission approved the release of the Report of Maryland Self-Referral Provider-Carrier Workgroup.

Commission staff presented on the Maryland Multi-Payer PCMH Program (MMPP) Evaluation: Medicaid Program Impacts.

The Commission approved the release of the MCDB Data Submission Manual.

The Commission approved the release of the MCDB to Research Triangle Institute (RTI) for use in the evaluation of Maryland's new Hospital Payment Model Waiver.

The Commission approved the release of the MCDB to George Mason University for use in the evaluation of the CareFirst PCMH Program.

Commission staff presented an update on the Telehealth Grant Awards.

December 2015

The Commission approved the release of MCDB Data to Johns Hopkins Bloomberg School of Public Health.

The Commission held an Appeal Hearing: MedStar Montgomery Medical Center's appeal of Denial of Request for an Evidentiary Hearing in the Matter of the Relocation of Washington Adventist Hospital and the Establishment of a Special Hospital-Psychiatric.

The Commission held an Exceptions Hearing: Recommended Decision in the Matter of the Relocation of Washington Adventist Hospital and the Establishment of a Special Hospital-Psychiatric.

The MHCC approved a Certificate of Need in the Matter of the Relocation of Washington Adventist Hospital and the Establishment of a Special Hospital-Psychiatric.

January 2016

The Commission approved the release of MCDB Data to the Johns Hopkins School of Public Health, Center for Population Health Information Technology, Jonathan Weiner, Principal Investigator; and to the Johns Hopkins School of Public Health, Jill Marsteller, Principal Investigator.

Commission staff presented on the Electronic Health Record Incentive Report.

Commission staff presented on the Cost and Utilization Portal Version 1.0: An Overview and Our Strategy for Engagement.

Commission staff presented on the 2016 Legislative Session: Overview of MHCC's Legislative Review Process and Proposed Legislation.

The Commission held a Work Session on Hospital Conversions: the Issues, MHCC's authority, and Legislative Proposals.

February 2016

The Commission approved COMAR 10.25.18, Health Information Exchanges: Privacy and Security of Protected Health Information, Proposed Amendments.

The Commission approved a Certificate of Need/Change in Approved Project for Prince George's Post-Acute, LLC.

Commission staff presented on Development of a State Health Plan Chapter for Freestanding Medical Facilities.

March 2016

The Commission approved a Certificate of Conformance for Emergency and Elective Percutaneous Coronary Intervention Services: University of Maryland Shore Medical Center at Easton.

The Commission adopted COMAR 10.24.16 – State Health Plan for Facilities and Services: Home Health Agency Services as Final Regulation.

The Commission adopted COMAR 10.24.08 – State Health Plan for Facilities and Services: Nursing Home Services as Final Regulation.

Commission staff presented on the Status and an Update on Hospice Need Projections.

Commission staff presented on the status of the Legislative Session.

Commission staff presented a 2014 Patient Centered Medical Home Shared Savings Update.

Commission staff presented on the Hospital Health IT Assessment Report.

April 2016

Commission staff presented on Hospice Services in Maryland and Implementing the State Health Plan.

The Commission approved the State-Designated Health Information Exchange – Re-Designation of CRISP and Approval of the Agreement.

Commission staff presented a Final Report on Telehealth Round One Applicants.

Commission staff presented on Legislative Actions Affecting the Commission.

May 2016

The Commission approved a Certificate of Need for Suburban Hospital.

The Commission approved Release of MCDB Data to The Lewin Group.

The Commission approved the release of the Privately Insured Spending Report for 2014.

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

Commission staff presented on the Maryland Healthcare Quality Report Website: 2015 HAI Results and Plans for Promotion.

Commission staff presented on COMAR 10.24.15 - State Health Plan Chapter Update for Organ Transplant.

June 2016

The Commission approved a Certificate of Need for Kaiser Permanente South Baltimore County Medical Center for the addition of one operating room.

The Commission approved the membership of the Rural Health Workgroup.

The Commission approved COMAR 10.25.16: Electronic Health Record Incentive, Proposed Permanent Amendments to Regulations.

Commission staff presented on Telehealth Grants – Round 4 Awards.

Commission presented an overview of draft changes to COMAR 10.24.01: Certificate of Need Procedural Regulations.

Representatives from the Maryland Patient Safety Center staff presented on its Strategic Plan.

Office of the Executive Director

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 and other specialists 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, which became effective on October 1, 2012. This change enables the Commission to more effectively manage the Fund.

The Commission has been prudent in managing the balance in 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%. .

Payments to eligible providers and the administrative costs associated with making those payments were about $10 million in FY 2016. Comparing FY 2016 to FY 2015, uncompensated care payments decreased dramatically, while on call and standby payments incrementally increased. Transfers from the Motor Vehicle Administration (MVA) to the Fund increased modestly by $317,000 in FY 2016. Reimbursements to the Fund from physicians paid for uncompensated care claims and from other sources declined dramatically from FY 2015's more than $700,000 to $188,000 in FY 2016.

Implementation 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 92.5% of Maryland residents under age 65 had health insurance in calendar year 2015, 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. MHCC, in consultation with HSCRC, is permitted to make this adjustment under Health-General §19-130(d)(4)(iv). The small adjustment in reimbursement levels is in recognition of the significant reductions in reimbursement that trauma physicians were asked to absorb from FY 2010 through 2015.

CRISP

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.

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

The Commission and the Maryland Insurance Administration (MIA) plan to leverage the MCDB to support the MIA's review of rate filings. Initial internal efforts to reconcile MCDB and Actuarial Memoranda (AM) data identified some discrepancies. In order to understand these discrepancies and improve reporting from payors, the MIA and MHCC developed a two-phase approach to meet individually with payors to review data reconciliation efforts and resolve discrepancies. In FY

2015, the first phase was implemented, which focused on reconciliation of membership counts. Often different teams within each payor's organization were involved with reporting to MHCC and MIA, which lead to differences in reporting methods, assumptions, and selection of members to report. As a result of the first phase of meetings, MHCC and MIA gained a much better understanding of payor-reported data, and several payors resubmitted data to the MCDB, which improved the data reconciliation. In FY 2016, the first phase (membership counts) along with the second phase, which focused on reconciliation of cost and utilization measures, took place with payors via a series of meetings to further discuss and understand the data discrepancies.

Public Dashboards and Transparency Initiatives

In FY 2013, the Commission launched the Maryland Health Workforce Study, which has three phases: (1) assess the existing data Maryland Health Occupation Boards (Board) collect to support workforce analysis; (2) estimate the supply of and demand for health care professionals with the best available data; and (3) enhance the existing Board data systems. The first two phases were completed in FY 2013 and FY 2014. In FY 2015, the third phase was expanded to include development of a public dashboard. In FY 2016, the public dashboard (Physician Profile Dashboard) was published on the MHCC website and displays a profile of Maryland physicians, including demographics (e.g., age, gender, and race), specialties, supply and geographic distribution throughout the state, and comparisons of individual counties to other county and state averages. The dashboard provides maps of the distribution of physicians overall and for primary care providers, mental health providers, and OB/GYN providers. The dashboard also allows the users to filter and explore the data by age, gender, race, EMR adoption, specialty, setting, and acceptance of Medicare, Medicaid, and private insurance members. With growing interest in the MCDB from various stakeholders, there has been a push to make the data readily accessible to a public audience. In addition to the Physician Profile Dashboard, the following dashboards were developed and published: (i) Public version of the MIA dashboard as described above– this dashboard (Cost & Utilization) shows Calendar Year 2014 Unit Cost, Utilization and Per Member Per Month trend metrics for the Private Fully-Insured for whom health insurance contracts are written in Maryland; and (ii) Geographic Variation: shows Calendar Year 2014 Cost and Utilization metrics at the zip code level for Private Fully-Insured Maryland residents aged 0-64.

MARYLAND HEALTH CARE COMMISSION

The Center for Analysis and Information Systems

Cost and Quality Analysis Division

Overview

The Division of Cost and Quality Analysis (Division) is the unit of the Center for Analysis and Information Systems (Center) that oversees construction and maintenance of the Commission's Medical Care Data Base (MCDB)—a data base of health insurance claims for covered services received by Maryland residents enrolled in health plans from commercial insurance carriers, Medicare, and Medicaid—and 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 by Commission statute. The Division's staff examines broader health care issues as well, including the measurement and analysis of insurance. The Division'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 Department of Health and Mental Hygiene. In addition to the MCDB and insurance related activities and reports, the Division's staff is responsible for studies of the healthcare workforce.

Accomplishments

The Division's staff continued work to implement an ambitious agenda to modernize the data collection process for the MCDB, enhance trust in the MCDB, develop decision support tools, promote price transparency, and conduct timely studies. An emphasis throughout the Division's activities has been collaboration with partners and engagement of stakeholders. In addition to the Commission's budget, the Center applied for and received funding from the Center for Consumer Information and Insurance Oversight (CCIIO) in FY 2014 ($2.9 million) and in FY 2015 ($1.1 million) to support the Division's activities.

In FY 2015, the Division staff applied for and received grants. In FY 2016, the Division' staff worked on the following: (1) grant funding initiatives; (2) Gobeille v. Liberty Mutual and Impacts on the MCDB; (3) an MCDB Contract Award; (4) continued to enhance the MCDB by developing new features to the new IT infrastructure to improve automation of the data collection process, expanding the comprehensiveness of the database, and adding identifiers; (5) in partnership with the Maryland Insurance Administration (MIA), worked to enhance trust in the MCDB data and developed decision support tools; (6) developed easy-to-use dashboards for workforce data and developed plans to promote price transparency; (7) updated annual reports on healthcare spending and developed two legislative reports that leveraged the MCDB data; and (8) participated in the Total Cost of Care (TCOC) measure with Network for Regional Health

Information (NRHI) via a grant awarded by NRHI and funded by the Robert Wood Johnson Foundation (RWJF).

Grant Funding Initiatives

In FY 2014, MHCC received funding ($2.9 million) from CMS/CCIIO under its Cycle III Grant to develop an Extract, Transform, and Load (ETL) system to automate MCDB data capture and ultimately shorten the timeline for making data available for MHCC analyses and to State partners. 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. In FY 2015, the Division developed and implemented these initiatives through commitment of staff resources and a contract with the database vendor, Social and Scientific Systems, Inc. (SSS). In FY 2016, the Division continued to refine the data and analytics through effective collaboration between Division staff and MIA staff and developed a process for standardizing and streamlining ongoing data monitoring. In FY 2015, MHCC received a second grant ($1.1 million) from CCIIO 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 In FY 2016, staff worked on the following grant initiatives: (1) completed the data dashboard created for the MIA which displays cost and utilization trends for rate review analyses and which also serves as a tool for the reconciliation of MCDB data with data reported to the MIA in Actuarial Memoranda as part of carrier rate filings; (2) developed a data dashboard that shows the geographic variation of health care spending in Maryland, broken down by either zip code or county; and (3) developed a web application that will provide users with both a practitioner view and a procedure view of medical prices.

The Impact of the Supreme Court's Ruling in Gobeille v. Liberty Mutual on the MCDB

On March 1, 2016, the Supreme Court affirmed a judgment of the US Court of Appeals for the Second Circuit that the federal Employee Retirement Income Security Act (ERISA) pre-empted states from mandating self-insured ERISA plans to report claim data to All-Payer Claims Databases (APCDs). MHCC staff has assessed the impact on the Medical Care Data Base (MCDB), Maryland's APCD. The MCDB will continue to have 2.5 million covered lives for privately insured Maryland residents and 1.5-2 million members for Medicare and Medicaid combined, which altogether will capture about 80% of Maryland's insured population. Although, MHCC staff expects the MCDB to continue to be useful for most use cases, the loss of data (approximately 34% of the privately insured Maryland and Non-Maryland residents' APCD data) directly affects some APCD data use cases in Maryland, including the following: (i) supporting the measurement of Total Cost of Care as required under Maryland's new global payment model demonstration established with the Center for Medicare and Medicaid Innovation (CMMI); (ii) certain State Legislature studies; (iii) Total Cost of Care benchmark studies; (iv) and Episodes of Care studies, to name a few.

MHCC actions since the Gobeille ruling: The Department of Labor (DOL) has the statutory authority to require self-funded plans to submit health care claims and related data under the Public Health Service Act, which is incorporated into ERISA and applied to group health plans by ERISA. The goal of APCD states, including Maryland, is to encourage the DOL to revise the ERISA self-funded group health plans reporting requirements to include membership and claim-level

data consistent with APCD reporting. Staff is collaborating with the National Academy of State Health Policy (NASHP), National Association of Health Data Organizations (NAHDO), APCD Council, and other APCD states to develop a comprehensive plan to collaborate with the Department of Labor and support the federal rule making process to revise ERISA reporting requirements to include membership and claim-level data consistent with APCD reporting. NASHP, *et al* have submitted comments to the DOL on behalf of APCD states, including Maryland, on proposed changes to the Form 5500 annual report for employee benefit plans, including the new Schedule J that will be tied to the CDL. Staff have also submitted comments to DOL endorsing what NASHP, *et al* have suggested. The DOL expects to implement its new Schedule J in 2019.

MCDB Contract Award

MHCC staff released an RFP in December 2015 for a database vendor to collect MCDB data, validate and process data, and provide access to data. The RFP represented a major leap forward in technology and standards from past procurements for the MCDB. All data will be collected via a web-portal with an Extract, Transform, and Load (ETL) system to validate, process, and enhance the data. In addition, MHCC staff and its partners will have access to the data in a secure, federally-certified data enclave. After a thorough application and review process, MHCC staff selected Social and Scientific Systems, Inc., the incumbent. This decision was reviewed and approved by the Board of Public Works (BPW) on April 27, 2016; however, the BPW decided to remove 20% of the budget reserved for Ad hoc analyses and projects. While the main data operations are not at risk, there will not be funds available for changes in scope that occur often in this type of effort. For example, there are currently no funds available to accommodate any changes that may be required to accommodate the Supreme Court's ERISA ruling. MHCC staff continues to consider its alternatives for addressing this gap.

MCDB Enhancements

The Division's staff worked to enhance the MCDB by: (a) continued development of the new IT infrastructure to automate the data collection process; and (b) adding a master patient identifier.

New IT Infrastructure

Social and Scientific Systems (SSS), the MCDB database vendor, continues to develop and evolve the MCDB data warehouse (DW) to meet MHCC needs. After successful implementation of the secure data center, the portal, and Extract, Transform, and Load (ETL) system in FY 2015, throughout FY 2016, Division staff through its contract with SSS, implemented the structured data warehouse. The ETL system implements a three-tier validations process to verify conformance with the MCDB Data Submission Manual: (1) Tier 1 validation checks verify the file format and layout; (2) Tier 2 validation checks field type and format and compliance with the thresholds set for completeness of fields. The thresholds checked are dynamically generated based on any approved variances on the portal; and (3) Tier 3 validation checks include cross-year trend analyses, comparisons to benchmark data, complex cross-field analyses, and other Ad hoc analyses. A key element of these processes is automation to expedite review, feedback to payors, and resubmission, if needed. Once data has been processed, it is loaded to a structured data warehouse (a SQL database), and the data is available, both through direct access to the data warehouse (DW) and via analytic extracts made available in a secure data center, where the Division staff may access data on virtual machines. This provides a secure environment to access and analyze the sensitive health care data contained in the MCDB.

Provider Directory and Patient Attribution

SSS has started construction (analysis) on the Provider Directory with an estimated delivery date of 2/28/2017. Data from the MCDB provider directory file provided by payors, National Plan and Provider Enumeration (NPPES) file, and the Maryland Board of Physicians will be used to construct the directory. The directory will be used to improve analyses of health care claims data in the MCDB. The directory will also be a reference document that describes the way health care organizations (federal tax-IDs, billing NPIs) are related to each other and to individual clinicians (individual NPIs). It will also include the geographic locations of provider practice locations to help us better determine the location in which a service was rendered by a provider (e.g., physician). Patient Attribution models (HealthPartners TCoC w/ NRHI, and the model used for MHCC's PCMH) showed similar and consistent results compared to Total Cost of Care (TCoC) benchmark results in the number of patients attributed to providers. Next step is to perform one more test of the models using federal tax-ID, billing provider NPI, and service provider NPI. After that, the model with the best results will be chosen.

Master Patient Index (MPI)

The Division staff continue to work with the State-designated Health Information Exchange (HIE), the Chesapeake Regional Information System for our Patients (CRISP), to develop a process to add the CRISP Enterprise Identifier (EID), which is a masked version of CRISP's Master Patient Index, to the MCDB Eligibility File. This new patient identifier is expected to be helpful in linking medical and pharmacy information on members enrolled in self-insured plans where there would not be existing common identifiers. This permits a better ability to understand per member costs, a key measure for understanding healthcare spending. Beyond this use case, this identifier is expected to be useful in linking the MCDB to other administrative and clinical databases. In FY 2015, the four largest medical insurance carriers and two largest pharmacy benefit managers were asked to participate in a pilot effort and submit demographic information to CRISP for CY 2014. CRISP assigned an EID to each member in a payor's file and then sent a cross-walk file between the CRISP EID and the payor's patient identifier to SSS. SSS tested the ability to link self-insured medical and pharmacy claim data, the key use case for the MCDB. Based on this analysis, which found good matching, MHCC decided expand this process to all payors in its CY 2015 reporting. Implementation of the MPI has been delayed until late FY 2016 as most payors experienced difficulties in meeting scheduled data submission timelines to CRISP. Also, the Supreme Court's ruling has affected CY 2015 data (especially Q4-2015) resulting in delays as most payors were required to resubmit data to the MCDB Portal due to various data issues. As a result, some payors were required to resubmit demographic data to CRISP as well. However, starting on 1/1/2016, payors were no longer required to submit data to CRISP but submit the demographic data directly to the MCDB Portal as part of the MCDB Eligibility data submission requirements. This work was funded with support from the CMS/CCIIO Cycle IV grant.

Collaboration with the Maryland Insurance Administration

The Division collaborated with the MIA to: (a) benchmark MCDB data to the Actuarial Memoranda data submitted to the MIA in order to enhance trust of the MCDB for use is in State regulatory decisions in evaluating the MCDB for rate review activities; and (b) develop decision support tools for the MIA premium rate review process.

Consumer Website

In FY 2016, MHCC has contracted with Wowza to design and build the consumer website. MHCC has also contracted with the Health Care Incentives Improvement Institute (HCI3), developers of PROMETHEUS Analytics Software, to develop episode-based measures for the website. As part of its mission to promote cost transparency, HCI3 has licensed the software to MHCC without any fee. HCI3 is currently working in the Social and Scientific System's (SSS) Secure Data Center (SDC), where MHCC houses its MCDB data. SSS supports HCI3 in providing technical support for MCDB data. The website is now in its prototype phase. Data used to populate the first version (prototype) of the website are exclusively commercial claims data (2013 to 2014) from the MCDB. The data has been processed through PROMETHEUS Analytics which has a number of features, one of which differentiates the costs of various episodes of care between those referred to as typical and those referred to as potentially avoidable complications.

Another process that HCI3 considers when analyzing data is adjusting for the severity of patients by studying risk factors in order to adjust for co-morbidities. HCI3 also adjusts for the subtype of an episode (e.g., Type I Diabetes vs Type II Diabetes). A series of adjustments are made during comparisons of the price of an episode from one hospital or health system or one physician or physician group to another. Adjustments are taken into account for severity of the patients (patient mix). These are done for typical costs and costs associated to potentially avoidable complications.

As mentioned above, the website is designed and built by Wowza using data processed through the PROMETHEUS Analytics Software by HCI3. SSS will be responsible for running the PROMETHEUS Analytics Software to populate the website on an ongoing basis. According to Wowza, the goal of the consumer website is to engage within the data in such a way that will generate conversation that is centered on caring and the awareness of costs and to generate a discussion that encourages improvements in the system and improvements in the costs of episodes. The website will be visually and conceptually tied to the community, individual people, and not create a decision aid for a particular individual, but rather create a program around the general community and the impact and effect that costs and quality have on everyone's health and the health of the Maryland community. The website will consist of nine episodes (knee and hip replacements, colonoscopies, vaginal deliveries, asthma, coronary artery disease (CAD), diabetes, hypertension and hysterectomies) for a user to choose from. For any given episode, a user will be able to see by hospital, cost for expected care (typical), cost that went towards potentially avoidable complications, and the average annual average cost. Target release of the website is the first quarter 2017. These activities are supported by funding from CMS/CCIIO Cycle III and IV grants.

Legislative and Annual Reports

The Division worked to produce one legislative report and three annual reports in FY 2016: (a) an analysis of the divestment of MRI machines from physician practices and the implications for the Maryland self-referral law; (b) a report on commercially insured spending Maryland; (c) a report on the payments for professional services in Maryland; and (d) a report on HMO payments to non-participating providers.

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 Maryland mandates that apply to the selected benchmark plan apply to the essential health benefits package in 2014 and 2015. 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. MHCC does not anticipate producing mandate studies unless specifically requested to do by the General Assembly. As such, no mandate analyses were conducted during FY 2016. A fiscal analysis on two proposed mandates that failed during the 2016 legislative session (Coverage of Digital Tomosynthesis and Coverage for Lymphedema Diagnosis, Evaluation, and Treatment), will be conducted by an actuarial consultant under a small procurement. The most recent Comparative Evaluation was last approved and published in December 2011. Due to budget constraints , MHCC did not procure a contractor to re-evaluate all current state mandates during FY 2016, and notified the General Assembly that it does not plan to conduct further Comparative Evaluations unless directed to do so by the standing Committees with jurisdiction over the MHCC.

Commercially Insured Spending

The Division staff reports annually on overall spending by major market segments, geographic regions, and age of enrollees. The report restricts analyses to fully-insured plans, as there has not been complete data on pharmacy benefits for the self-insured, which is being collected as of the 2014 data collection, which commenced in FY 2015. For FY 2016, the Privately Fully-Insured report special focus was on the Individual Market because many individuals with significant medical conditions who had previously been covered through the state-based "high-risk" pool (MHIP) have transitioned into the Individual Market since the ACA went into effect on 1/1/2014. Also, many individuals who did not have health insurance prior to 2014 have also entered the Individual Market since ACA enactment. Total members (insureds) as of December 31, 2014, in the Individual Market increased by about 26 percent. Per member per month (PMPM) spending in the individual market for all services increased between 2013 ($208) and 2014 ($273) by about 31 percent, mainly due to increased use of services. Utilization per 1,000 members increased for all service categories, ranging from 14 percent for professional services to 47 percent for prescription drugs. In spite of increases in PMPM spending in the individual market, this market continued to have the lowest PMPM spending across all markets; however, the PMPM portion for insurers increased by 37 percent, while the out-of-pocket (OOP) PMPM for members increased by 19 percent. This difference resulted in a decrease (29 percent) in the members' OOP share of total spending in 2014. However, OOP spending remained the highest in the individual market compared with the other markets (small employer and large employer). The median expenditure risk score increased from 0.19 to 0.24 between 2013 and 2014, indicating that new members entering this market in 2014 were likely sicker, as expected, needing more care, which increased PMPM spending. For the Small Employer and Large Employer Markets, PMPM spending for all services combined remained unchanged between 2013 and 2014 for large employers, but declined for small employers. Also, PMPM spending for inpatient services decreased in both the small employer and the large employer markets, but increased in the individual market. Across

markets, unit costs for all service categories increased in 2014, except for inpatient facility services, in which unit costs declined across all markets in 2014. This decrease in unit costs for inpatient facility services likely resulted from the State's new hospital global budget program initiated in 2014. Data for the report was provided by SSS under contract with MHCC. However, the report was written by MHCC staff.

Payments for Professional Services

The Division staff reports annually on pricing of professional services. The original goal of this legislative requirement was to provide information to policymakers, providers, and payors regarding the variations in rates for professional services. These reports include analyses of variation by payor market share, in-network versus out-of-network rates, region, and type of service, and include comparisons to Medicare and Medicaid payment rates. While early reports yielded valuable insights into pricing variation, recent reports have not revealed much new information, as the trends have been stable over time. With this in mind, the Division staff shifted the focus to be a high-level monitoring report. Reported prices are based on the Medicare Relative Value Unit (RVU) to provide a standardized comparison across payors and services. The analysis found a marginal increase (0.3%) in payment rates between 2013 ($39.7/RVU) and 2014 ($39.8 /RVU). Commercial plan rates are about 1% lower than Medicare rates in this analysis. This comparison was slightly lower in magnitude than last year's result which was about 3% lower than Medicare. In 2014, the average payment rate for all services reimbursed by private payers was slightly higher (3%) than what Medicaid would have paid for a similar set of services. This comparison was slightly higher in magnitude than last year's result, which was about 1% higher than Medicaid. The variation of the payment rate ratios (Commercial payment rate to Medicare or Medicaid) was not sufficient to have any impact on the trend of payment rate comparison.

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 annually update these minimum payment rates. The Division staff develops this report and provides it to the MIA annually. As specified in the law, E&M services as defined by CMS in the Berenson-Eggers Type of Services (BETOS) terminology are calculated from the CMS Medicare Physician Fee Schedule that applied in August of 2008, adjusted by the cumulative Medicare Economic Index (MEI) prior to the start of each new calendar year. MHCC and MIA have agreed to modify the methodology in the event that there is a new E&M services code included in the BETOS E&M categories. Fee levels for new codes are based on the current Medicare Physician Fee Schedule for the geographic region and inflated using the MEI in subsequent years. The Division updated the minimum HMO payment rates to non-participating providers, as specified in the law, and the MIA published these rates on its website. Staff have completed the 2017 HMO Payment to Non-Participating Providers fee-schedule and delivered it to the MIA.

Total Cost of Care Measure

Total Cost of Care is a measure of the total cost of treating a population in a given time period expressed as a risk adjusted per member per month (PMPM). The measure includes all services associated with treating a patient, including inpatient, outpatient, professional, pharmacy, and ancillary services; and depending on the application, can include members of a population that have not incurred any medical care expense (per capita). Using appropriate and comprehensive risk adjustment tools/methods allows for fair comparisons between providers, insurers, and regions over time.

In July 2015, MHCC was awarded a grant by the Network for Regional Health Information (NRHI) to test the implementation of the HealthPartners Total Cost of Care (TCOC) measure, which has been endorsed by the National Quality Forum. MHCC has contracted with the Hilltop Institute (Hilltop) to do the code implementation and testing of the measure. MHCC and Hilltop staff have been participating in NRHI's multi-site meetings, learning from other sites and sharing our experiences. Following the signing of a Memorandum of Understanding with Hilltop in December 2015, Hilltop has been sent MCDB data for 2012-2014 and has begun the process of developing initial quality control tables to be sent to NRHI. Over the past ten and a half months of 2016, MHCC and Hilltop submitted a series of reports to NRHI, including quality control tables, risk adjustment results using the Johns Hopkins Adjusted Clinical Groups (ACG) software, and resource use measures using the Total Care Relative Resource Value (TCRRV), the resource use measure used in the HealthPartners TCOC measure. These measures and data were used to calculate the TCOC measure.

The Total Resource Use measure is very similar to the total cost of care measure with the only difference being that costs are replaced with a value that measures resource consumption (e.g., the frequency and intensity of services utilized to manage a patient). In short, resource consumption is measured by using standardized pricing to value all medical services. The Total Care Relative Resource Values (TCRRV) assesses the frequency and intensity of all services and is relative across the entire health care continuum. TCOC is reported in terms of Total Cost Index (TCI), Resource Use Index (RUI) and Price Index. TCI equals RUI times Price Index where RUI equals Total Resource Use PMPM divided by Benchmark Total Resource Use PMPM and Price Index equals Total Price divided by Benchmark Total Price.

Maryland participated with five other regions or states (CO, MN, MO, OR and UT) in the TCOC measure. In a final report (the first of its kind) to be released publicly by NRHI by the end of November of2016,, results will show that Maryland has the lowest Risk Adjusted Total Cost and Total Resource Use PMPMs ($277 and $282 respectively) compared to the five other states (CO, MN, MO, OR and UT) participating in the TCoC project. When comparing the PMPMs to an average risk adjusted benchmark PMPM, Maryland also has the lowest Total Cost Index (TCI) and Resource Use Index (RUI) of 0.82 and 0.86 respectively. This means that Maryland is approximately 18% (TCI = 0.82) more cost-efficient than the benchmark compared to all five states. Maryland also uses about 14% (RUI = 0.86) less resources on average than the benchmark to treat patients, which is the lowest compared to the other five states. Also, Maryland has the lowest share in Facility Inpatient and Outpatient spending (IP: 16%, OP: 27%) compared with all five states. The commercial data (excluding Medicare and Medicaid) was used in the TCoC

measure. The TCoC project ended on October 31, 2016 and the final TCoC report is due to NRHI on November 15, 2016.

Also in parallel, MHCC along with Hilltop participated in developing a plan to identify and recruit large physician practices to serve as a pilot group to test and provide feedback on practice level reports that were developed based on the TCOC measure. TCOC reports were provided to each physician practice based on each practice's attributed patients. All practices found value in the reports. Going forward, MHCC will provide report updates to each practice every six months and will develop plans on engaging more practices in the future.

MARYLAND HEALTH CARE COMMISSION

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. The new *Maryland Health Care Quality Reports* (MHCQR) website was first released to the public in December of 2014.

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.

Accomplishments

The most significant accomplishment for the Center in FY 2016 has been the expansion of the *Maryland Healthcare Quality Reports* website to include the interactive web-based display of Commercial Health Plan performance information. In previous years, a series of Health Plan Reports were published on an annual basis to communicate Plan performance to the public. In FY2016, the Health Plan Report series was transformed into an interactive web-based guide and incorporated into the Commission's consumer website – *Maryland Health Care Quality Reports (MHQR)*. The MHQR website was developed with the input and involvement of consumers and consumer advocacy groups. The site continues to evolve and expand with new information and improved functionality. Consumers will continue to play a key role in future enhancements to the site.

In FY 2016, 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.

In FY 2016, hospital performance on Healthcare Associated Infections (HAI) metrics was mixed. Central-line associated bloodstream infections in ICUs had decreased by over 50% during the five years since the information was first publicly reported on the Hospital Guide. 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 has stated their intent to update the baseline time-period to CY 2015 next year for all HAIs. If this occurs, it is likely to have a negative impact on the trending as subsequent years will be compared to a year after which much progress has already been made.) Similarly, public reporting of hospital employee influenza vaccination rates was a major focus in FY 2016. For the past six 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 five 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 2015-2016 flu season was 97%, which is about the same as 96.9% during the previous flu season. The state as a whole has maintained a rate above 96% for the past 3 flu seasons. Information on hospitals with mandatory employee vaccination policies was first added

to the Guide in 2012. In FY 2016, the number of hospitals that reported mandatory employee vaccination policies did not change from last year with 45 of 46 hospitals having a policy in place.

Hospital Performance Evaluation Guide (HPEG) Advisory Committee
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.

Healthcare-Associated Infections Data Collection

Background
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 (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 http://mhcc.maryland.gov/mhcc/pages/apcd/apcd_quality/apcd_quality_hai.aspx

Healthcare Associated Infections (HAI) Advisory Committee
The HAI Technical Advisory Committee (TAC) 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 project. The HAI Advisory Committee meets quarterly to review data reporting requirements and other HAI initiatives. As a result, the Commission has made significant progress towards 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 http://mhcc.maryland.gov/mhcc/pages/apcd/apcd_quality/documents/CQM_HAI_Developing_A_System_For_Collecting_Publicly_Reporting_Data_HAI_RPT_20071201.pdf

HAI Data Public Reporting

With the focus shifting to align with CMS reporting requirements, several new reporting requirements occurred in 2015. 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 *Staphylocccus 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 with 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 2016, the CLABSI data was updated with calendar year 2015 data. The updated data showed a 39% reduction in CLABSIs in Maryland adult/pediatric ICUs, with 175 CLABSIs. Maryland NICUs saw a 51% reduction in CLABSIs with 22 CLABSIs reported for calendar year 2015. 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 less CLABSIs reported than expected. As noted earlier, the SIR will likely be impacted negatively next year if NHSN changes the baseline time-period from 2006-2008 to CY2015.

In FY2016, Clostridium Difficile Infection (CDI) data was first reported on the Maryland Health Care Quality Reports website. While six hospitals performed better than expected, 14 hospitals and the state overall performed worse than expected with 2,355 hospital-onset CDI LabID events reported.

Surgical site infections (SSI) data for Hip, Knee, and CABG procedures were updated on the Guide with CY 2015 data. Colon and Abdominal Hysterectomy SSI data were reported for the first time as well. Catheter Associated Urinary Tract Infections (CAUTI) in ICUs and MRSA Bacteremia were also reported for the first time in FY 2016.

In FY 2016, HQI staff continued to participate in a multi-state workgroup to standardize HAI data display for both technical and consumer audiences. Biweekly conference calls were held and representatives from CDC and CSTE participated to facilitate the process. MHCC staff played a major role in the development of a toolkit for HAI data display to assist other state public reporting efforts.

HAI Data Validation Project

In 2009, the Commission initiated a procurement project to engage the services of a contractor with expertise and experience in the review of healthcare-associated infections data. The project included the on-site review of patient medical records to assess the accuracy of the hospital data submitted through NSHN. The one year validation project was completed in FY 2010 and the results were used to educate hospital data providers and to facilitate process improvement activities. The final report is available online at http://mhcc.dhmh.maryland.gov/hai/Documents/sp.mhcc.maryland.gov/healthcare_associated_infections/hai/clabsi_final_rpt_20100618.pdf.

In FY 2011, the Commission initiated the procurement process to establish a five year contract for ongoing validation of the accuracy of all healthcare associated infections data collected for public reporting on the Hospital Guide. The contract includes the provision of educational webinars and training for hospital infection prevention staff to facilitate accurate and complete data reporting. In FY 2016, the CLABSI, CAUTI, SSI, CDI and MRSA Bacteremia data submitted through the CDC NHSN surveillance system was audited and compared with similar hospital lab data and HSCRC administrative data. The results of the audit were reported to hospitals and shared through a statewide educational webinar to facilitate data quality improvement.

Long Term Care Quality Initiatives

Overview

Long Term Care Quality and Performance focuses on improving long-term and community-based care through public reporting of long term care (LTC) service provider descriptive information and performance on a variety of metrics. An interactive web-based consumer guide developed and maintained by staff is the platform for presenting a wide range of information about Maryland LTC service providers, including specific performance and quality measures applicable to each service category. The Long Term Care Guide can be accessed through the new *Maryland Health Care Quality Reports* website.

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."

Description of Key Programs

The Commission first developed a *Nursing Home Guide* in 2001. In 2010, the Guide was redesigned and expanded to become the *Consumer Guide to Long Term Care (http://mhcc.maryland.gov/consumerinfo/longtermcare/)*. The redesigned 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. The interactive Long Term Care Consumer Guide 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*:

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 *Consumer Guide's* interactive search tool assists users in locating LTC services by facility type and county. Users can view information about facility characteristics such as ownership information; agency accreditation or certification; number of beds or client capacity; clinical and assistance services available; and resident characteristics. Pictures of nursing homes and assisted living facilities, as well as a location map, are displayed to assist Marylanders in narrowing their choice without having to travel.

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. 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 Consumer Guide are reliable, validated, and suitable for public reporting.

Nursing Home 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 Long Term Care guide. Short Stay Survey results from 2015 are also available on the guide. These survey results are displayed on the MHCC website 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 & Mental Hygiene (DHMH) as a component of the Medicaid Nursing Home Pay for Performance Program.

Home Health Experience of Care Survey
The Centers for Medicare and Medicaid (CMS) requires all Medicare-certified home health providers to participate in Home Health CAHPS (Consumer Assessment of Healthcare Providers and Systems). The first HHCAHPS survey results were released in April 2012. The Maryland HHCAHPS results are incorporated into the Consumer Guide for consumer use.

Future Hospice Experience of Care Survey
CMS announced expansion of hospice measures beginning in calendar year 2014. MHCC staff is closely following this process so the Consumer Guide can be expanded when new measures are available.

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. The rates are also used by the DHMH Medicaid Office of Long Term Care and Community Support as a component of the Medicaid Nursing Home Pay for Performance Program.

Accomplishments

Nursing Home Experience of Care Survey Results

2016 Family Survey results show that statewide "overall satisfaction" was rated 8.1 on a scale of 1-10 (10 represents the best rating). Additionally, 86% of respondents said they would recommend the nursing home to others.

Maryland Statewide results on the 2013 Short Stay Survey show an overall rating of 7.9 on a scale of 1-10; a slight increase from 7.8 in 2012. 83% of short stay respondents reported they would recommend the nursing home in 2013 versus 81% in 2012.

The Maryland Family Survey consistently yields a response rate of over 50%, which is well above the national average for similar surveys.

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 88% during the 2015-2016 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 56% in 2015-2016 flu season.

Home Health Experience of Care

The Commission's Maryland Guide to Long Term Care Services has reported the 22 Home Health Compare quality measures from the Outcome and Assessment Information Set (OASIS) for each Maryland Medicare-certified HHA since the fall of 2011. Public reporting allows greater transparency to the consumer of an agency's relative performance to that of others.

2015 results showed the HHA scores range from a high of 99.5% for the measure "checked patients' risk of falling" to 61.2% for "how often patients got better at taking medications by mouth." Comparing 2015 aggregate Maryland and national scores for the 22 outcome and process measures, Maryland demonstrates better scores than the nation on 18 measures, including slightly lower scores on hospital admissions and urgent care and unplanned ER visits without admissions; and scores worse than the nation for 4 measures.

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 82%; the percent of patients reporting that they would definitely recommend the HHA to friends and family was 76%. Comparing 2015 aggregate Maryland and national scores for the five experience of care measures, Maryland demonstrates a higher score on how well staff communicated and worse scores for the four remaining measures.

Hospice Quality Reporting

CMS has implemented a hospice item set ("HIS"). The HIS is a set of data elements that can be used to calculate 7 quality measures:

- NQF #1641 – Treatment Preferences;
- NQF #1647 – Beliefs/Values Addressed;
- NQF #1634 & NQF #1637 – Pain Screening and Pain Assessment;
- NQF #1639 & NQF #1638 – Dyspnea Screening and Dyspnea Treatment; and
- NQF #1617 – Patients treated with an Opioid who are Given a Bowel Regimen.

Hospices began using the HIS for all patients beginning July 1, 2014 however, data is not yet available for this instrument. Once available, the quality measures will be adapted to the Long Term Care Guide as appropriate.

Health Plan Quality and Performance Division

Overview

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.

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.

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, child respiratory conditions, and primary care for adults with respiratory and cardiovascular conditions.

Overall, the health benefit plans continue to perform well when compared to the national average. In fact, rates went up in all areas in comparison to prior years of reporting and areas needing improvement decreased. However, there are areas where overall performance is less than desired, including flu shots for adults, Human Papillomavirus vaccination rates, Aspirin Use and Discussion, and asthma medication management.

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.

MARYLAND HEALTH CARE COMMISSION

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 acute care services, which includes State Health Plan (SHP) regulations. This includes 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, for cardiac catheterization and percutaneous coronary intervention (PCI) and for cardiac surgery, created by national organizations. It undertakes special policy and planning studies 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

Cardiac Services
In October 2015, the Commission approved final regulations to amend COMAR 10.24.17, the SHP Chapter of regulations governing regulatory oversight of PCI and cardiac surgery services. The amended regulations are essential for assuring a consistent approach to external review of PCI cases. External review requirements are intended to assure that Maryland hospitals are using PCI services appropriately. Staff also reviewed a request from Cardiac Core Community Lab for approval as an external reviewer of PCI cases for Maryland Hospitals, which received this approval. Staff also distributed the application for a Certificate of Ongoing Performance for cardiac surgery services to hospitals with these services and posted the application on MHCC's web site.

Organ Transplantation
Staff developed a draft revised State Health Plan (SHP) chapter for organ transplantation services for informal public comment and posted it on the MHCC website in May of 2016. It is anticipated that a comprehensive update of the organ transplant chapter of the SHP will be adopted and become effective in FY 2017.

Freestanding Medical Facilities
Staff posted a draft of this new SHP chapter of regulations, COMAR 10.24.19, for informal comment in December 2015. As of July 1, 2015, this category of health care facility moved from "pilot program" status to regular status, subject to CON regulation. Due to anticipated legislation in the 2016 General Assembly session that would potentially alter the path to development of FMFs if they are developed as part of general hospital conversions to ambulatory care campuses, Staff postponed developing proposed regulations until after the legislative session. Staff then posted revised draft regulations for informal comment in June 2016. It is anticipated that this new SHP chapter will be adopted and become effective in FY 2017.

Regulatory Activity

Society of Thoracic Surgeons' (STS) National Database
MHCC initiated an audit of this data set that was completed in November 2015. The results were shared with hospitals individually at a webinar produced by MHCC.

Certificate of Conformance Reviews
A Certificate of Conformance to establish primary (emergency) and non-primary (elective) PCI services was authorized on March 17, 2016 for the University of Maryland Shore Medical Center at Easton, with conditions. A staff report recommending denial of a Certificate of Conformance for the establishment of primary PCI services by Holy Cross Germantown Hospital (HCGH) was issued in March 2016. This application was subsequently withdrawn by HCGH.

Procedural Regulations
Acute care policy and planning staff worked in conjunction with the Center's other Divisions, on updating these regulations and presented a progress report on these changes at the June, 2015 Commission meeting. This work is aimed at identifying opportunities for regulatory process streamlining and incorporating updates needed to reflect statutory changes that have occurred in recent years in the regulation of cardiac services and FMFs. Staff plans to finish a complete draft of changes in these procedural regulations in FY 2017.

Data

Acute Care Hospital Bed Inventory
An interim report on the changes in licensed acute care hospital beds in Maryland was posted on the MHCC website in September 2016. A full report covering hospital bed and selected service inventories, including information on emergency department services, surgical services, obstetric and perinatal services, and psychiatric facilities and services will be published in FY 2017.

For the sixth consecutive year, Maryland's licensed acute care hospital bed inventory declined. Effective July 1, 2015, Maryland's 46 acute care general hospitals were licensed for a total of 9,800 acute care beds. The licensed bed inventory in the state has shed 1,080 acute care beds since FY 2010, approximately a 10 percent decline. The final report can be viewed at: http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chcf_acute_care_license_rpt_2016_20151130.pdf

Maryland Ambulatory Surgery Provider Directory

The eighteenth edition of the Commission's Maryland Ambulatory Surgery Provider Directory was published on the MHCC web site in February 2016. It provides information for CY 2014 on 342 freestanding centers providing outpatient surgery and on outpatient surgery at the 47 general hospitals operating in 2014. The Directory includes utilization data, surgical specialties, and contact information. The survey used as an 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.
http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_amsurg/documents/con_ambsurg_directory_report_2015_20160209.pdf

Other Initiatives

Throughout FY 2016, 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 Department of Health and Mental Hygiene and other units of DHMH, 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 Surgery Quality Initiative (MCAQI.) 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.

Long-Term Care Policy and Planning

Overview

The Long-Term Care Policy and Planning Division is responsible for health planning and policy analysis 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 administers three annual surveys and undertakes special studies as needed. The Division 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

Update of the Home Health Agency (HHA) Chapter of State Health Plan
A comprehensive update of the Home Health Agency Chapter of the State Health Plan (COMAR 10.24.16) became effective in April, 2016. It may be found at: http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_shp/documents/shp_chapter_10_24_16.pdf This updated chapter takes a very new approach to regulatory oversight of the supply of home health agencies, using market concentration levels, consumer choice, and observed performance on quality measures by HHAs to guide CON regulation going forward. Work on selecting quality measures and performance levels to be used in selecting areas for expansion of HHA services and in qualifying applicants for review of CON applications started in June 2016. It is anticipated that the first opportunity for consideration of changes in the supply and distribution of HHAs will begin in FY 2017.

Updating the Hospice Chapter of the State Health Plan
The Hospice Chapter of the State Health Plan (COMAR 10.24.13) includes a methodology for identifying what jurisdictions in Maryland should receive consideration for authorization of new hospice programs or the entry of existing hospice programs through service area expansion. The hospice need projections were updated in February 2016, using data from the FY 2014 Maryland Hospice Survey, updated population death data from the Maryland Vital Statistics Administration, and population data from the Maryland Department of Planning. A status report, including a history of plan development, updated use rate trends, and updated hospice need projections were presented at the March 2016 Commission meeting. This report is posted at: http://mhcc.maryland.gov/mhcc/pages/home/meeting_schedule/documents/presentations/MHCC_Prst_20160317.pdf

The updated projections indicated unmet need in Baltimore City and Prince George's County. Staff recommended that the next steps include the publication of the updated projections, as well as the initiation of Certificate of Need reviews in these two jurisdictions. A report to the Commissioners was developed in April 2016 addressing questions on implementation of this SHP chapter. The chapter was adopted in 2013, but delayed in implementation, based on discussions with the hospice industry and legislators over the last three years. Staff's presentation to the April 2016 Commission meeting is posted at: http://mhcc.maryland.gov/mhcc/pages/home/meeting_schedule/documents/presentations/MHCC_Prst_20160421.pdf

Staff's recommendation to implement the Plan Chapter by publishing a CON review schedule was accepted by the Commission and a review schedule was published in the May 27, 2016 issue of the Maryland Register.

Nursing Home Bed Need Projection
Nursing home, or CCF, bed need projections were updated in April, 2016 using the current methodology in the State Health Plan (COMAR 10.24.08.07) with updated population data and current nursing home inventory data:
http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_ltc/documents/chfc_ccf_bedneed_projections_fy16_corrected_20160429.pdf.
These projections will be used to govern CON reviews. An updated schedule for CON reviews, including nursing home beds, was published in the April 29, 2016 issue of the Maryland Register.

Data

Centers for Medicare and Medicaid Services (CMS) Minimum Data Set (MDS)
The CMS Minimum Data Set (MDS) Resident Assessment Instrument is a nursing home data set that supports planning and policy development and related research necessary for the Commission to fulfill its planning and regulatory responsibilities. An MDS Manager Program was developed and refined, with the help of a consultant, between 2009 and 2014 to maximize the utility of this resource.

During FY 2016, work was completed on programming to support the Consumer Guide for Long Term Care, as well as programming to support the Long-Term Care Survey and various component reports. Since this was the last year of a multi-year consulting contract, training sessions for Commission staff were conducted and a transition plan was developed.

During FY 2016, a Request for Proposals (RFP) to secure a new MDS consultant was developed and the level of interest was gauged to refine and finalize this RFP. It is anticipated that a new consultant contract will be finalized in FY 2017.

Long-Term Care Data Set (CCF, Assisted Living, Special Hospital-Chronic, and Adult Day Care Facilities)
The public use data sets for FY 2014 for the four facility and program categories covered by MHCC's annual Maryland Long Term Care Survey were completed and made available on the Commission's web site in February, 2016. 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. Also, long term care data supports the Commission's Consumer Guide to Long-Term Care, and provides data and trend information needed to support Certificate of Need (CON) regulation.

2015 survey data collection began in April 2016. Initiation of this annual survey includes the User Fee Assessment for CCFs.

Home Health Agency Data Set
The HHA public use data sets, including the utilization tables for fiscal year 2014, were posted on the Commission's website in January, 2016. The data provides an overview of HHA characteristics, utilization, and costs. 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 CON activities.

In April, 2016, Commission staff began work on revising the HHA survey for use in the FY 2016 survey. Staff collaborated with the Maryland National Capital Homecare Association and HHA representatives in improving this data collection instrument.

Hospice Data Set
A Public Use Data set for the FY 2014 Maryland Hospice Survey was posted on the Commission's website in November, 2015. Data collection for the FY 2015 Hospice Survey, began in February, 2016. Public use files for hospice data for FY 2003-2015 is available at:
http://mhcc.maryland.gov/public_use_files/hospicedownload.html

CCF Bed Occupancy and Payor Mix
COMAR 10.24.08.05B (3) requires that the Commission publish an annual update on nursing home occupancy and required Medicaid participation rates. This is used for Certificate of Need reviews. Updated tables were published in the February 5, 2016 issue of the Maryland Register. These tables were also posted on the Commission's website at:
http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_ltc/documents/chcf_ltc_occupancy_fy12_14.pdf
http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_ltc/documents/chcf_ltc_part_rate_fy2014.pdf

Chronic Hospital Bed Occupancy
As required by COMAR 10.24.08, the Commission published information on FY2014 special hospital-chronic bed occupancy in the Maryland Register on December 11, 2015 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_20151216.pdf

Other Initiatives

Hospital Palliative Care Programs
Legislation passed during the 2013 legislative session required the Commission to select at least five hospital palliative care pilot programs and, in conjunction with the Maryland Hospital Association (MHA) and the Office of Health Care Quality (OHCQ), establish reporting requirements for the pilot sites and develop a report on certain aspects of, and best practices for, hospital palliative care.

Work on this report was done in FY 2014-2015. The report was reviewed at the Commission's November 2015 meeting and the final report and cover letter were submitted to the Governor on November 24, 2016. The final report may be found at:
http://mhcc.maryland.gov/mhcc/pages/plr/plr/documents/LGSRPT_MD_Hosp_Palliative_Care_Programs_rpt_20151201.pdf

During FY 2016, staff also consulted with the Office of Health Care Quality (OHCQ) in the development of regulations governing hospital palliative care. Draft regulations were circulated to members of the Commission's Hospital Palliative Care Advisory Group.

Certificate of Need (CON)

Overview

The Certificate of Need (CON) Division implements the Commission's statutory authority to review and approve certain new or expanded health care facilities and services. 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) modify existing facilities or previously approved projects: (4) incur capital expenditures for projects that exceed a set dollar threshold, or: (5) close certain facilities or services. 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 2016, the Commission approved five (5) CON applications. No applications were denied. It also reviewed and approved one (1) exemption from CON and did not deny an exemption request. One (1) change to a previously approved project was approved. One (1) CON was relinquished.

During FY 2015, applicants for two major general hospital replacement and relocation projects submitted replacement applications for CON applications originally filed in FY 2014. The replacement applications contained financial projections that were re-worked by the applicants to reflect the implications of a new hospital payment model implemented by HSCRC after their initial applications were filed. This new payment model required the applicant hospitals to revise the financial projections made in their applications to align with the Global Budget Agreements negotiated with HSCRC. These applications were docketed in the second half of FY 2015 and it was anticipated that both would be brought to the Commission for action in FY 2016. One was,

the relocation of Washington Adventist Hospital and redevelopment of the existing Takoma Park campus and the other project, the relocation of Prince George's Hospital Center, was approved, with required changes, in October, 2016. Review of a major modernization of Suburban Hospital was also completed in FY 2016 along with three much smaller projects.

Approved CONs

Lorien- Bel Air – (Harford County) – Docket No. 15-12-2358
Addition of 27 CCF beds at the facility. Facility is now authorized to develop 117 CCF beds
Approved Cost: $5,807,345

Lorien- Howard, Inc. d/b/a Encore at Turf Valley – (Howard County) – Docket No. 15-13-2365
Addition of 28 new CCF beds. Facility is now authorized to develop 91 CCF beds
Approved Cost: $3,639,000

Washington Adventist Hospital – (Montgomery County) – Docket No. 13-15-2349
Relocation of Washington Adventist Hospital to 12100 Plum Orchard Drive in the White Oak area of Silver Spring. Replacement 170 bed general hospital. Redevelopment of the Takoma Park campus acute psychiatric hospital facilities.
Approved Cost: $330,829,524

Suburban Hospital – (Montgomery County) – Docket No. 15-15-2368
Building addition and renovations to the existing hospital building in Bethesda, the addition of a parking garage, and associated site work. The project will create private patient rooms and modernize the hospital's surgical facilities.
Approved Cost: $200,550,831

Kaiser Permanente South Baltimore County Medical Center – (Baltimore County) – Docket No. 16-03-2372
Addition of an operating room (OR) to a two-OR ambulatory surgery center in Halethorpe.
Approved Cost: $1,600,405

Changes in Approved CONs

Prince George's Post-Acute, LLC – (Prince George's County) – Docket No. 13-16-2347
Increase in approved cost of the project from $19,070,505 to $27,929,096 and a change in the physical plant design

CON Exemptions Approved

HomeCare Maryland, LLC and Carroll Home Care
Acquisition of the assets of Carroll Home Care which is authorized to provide home health services in Baltimore, Carroll and Frederick Counties by HomeCare Maryland, LLC which is authorized to provide home health services in Baltimore City and Baltimore, Cecil and Harford Counties. Carroll Home Care will cease to exist after the merger.

CONs Relinquished

Lorien Harford, III, LLC – (Harford County) – Docket No. 15-12-2359
Construction of a new three-story 70-bed CCF in Forest Hill.
Approved Cost: $12,215,376

Determinations of Coverage and Other Actions

In FY 2016, the Commission issued 115 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 five requests by holders of CONs to acknowledge completion of their projects and readiness for operation ("first use review"). The Commission acknowledged five 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 2016, all these permanently delicensed beds (38) were CCF beds.

Determinations of Coverage and Other Actions – FY 2016

NATURE OF DETERMINATION/ACTION	
Capital projects with costs below the threshold of reviewability	21
Acquisition of health care facility Comprehensive-care facility (nursing home): Ambulatory surgery center: Home health agency:	34 24 7 3
Establishment of new physician outpatient surgery center (no more than one sterile operating room) Anne Arundel (3), Baltimore Co. (1), Calvert (1), Carroll (1), Charles (1), Frederick (2), Harford (1), Howard (2), Prince George's (1), and Montgomery (8)	21
Changes in ambulatory surgery center facilities or operation (e.g., addition of non-sterile procedure rooms, surgical staff, surgical specialties, ownership structure)	7
Relocation of physician outpatient surgery center	3
Temporary delicensure of comprehensive care facility beds (77 total beds)	5
Temporary delicensure of hospice care facility beds (8 total beds)	1
Relicensure of temporarily delicensed comprehensive care facility beds (104 total beds)	7
Relicensure of temporarily delicensed ambulatory surgery center	1
Permanent delicensure of comprehensive care facility beds (38 total beds)	5
Addition of "waiver" beds* Comprehensive care facilities -7 (29 total beds) Rehabilitation facilities – 1 (5 total beds)	8
Miscellaneous	2
TOTAL COVERAGE DETERMINATIONS	115
Pre-licensure and/or first use approval for completed CON projects (including partial first-use)	5

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

MARYLAND HEALTH CARE COMMISSION

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.

Health Information Technology Division

The Health IT Division is tasked with planning for and increasing the diffusion of health IT in Maryland by working in collaboration with a variety of stakeholders. Activities include assessing the adoption, implementation and optimization of health IT and its impact on health care reform. The Health IT Division is responsible for implementing a statewide advance directives program to facilitate use of electronic advance directives using web-based technology, which can be made accessible to health care providers through the State-Designated HIE. The Health IT Division assists with building momentum of additional data and services available through the State-Designated HIE while ensuring privacy and security. Activities also include evaluating the landscape of cybersecurity in health care, which includes assessing trends, identifying best practices, and developing

cybersecurity risk-assessment tools. In addition, the Health IT Division also evaluates the implementation and utilization of electronic preauthorization and EDI standards across the State.

Health Information Exchange Division
The HIE Division is tasked with facilitating the development of an interoperable system for the sharing of electronic health information and developing programs to expanding the use of health IT statewide. This includes collaborating with the State Designated HIE: the Chesapeake Regional Information System for our Patients (CRISP). The HIE Division also develops strategies to advance community-based HIEs and regional HIEs in Maryland. The HIE Division works with diverse stakeholders in developing privacy and security policies that lead to regulations for protecting electronic health information that is exchanged through an HIE in Maryland. The HIE Division leads the Center's HIE initiatives aimed at quality improvement and public health and certifies electronic health networks (EHNs). The HIE Division manages the Center's telehealth and mHealth initiatives including providing support to grantees in implementing innovative projects, including measuring project progress and developing a final report on lessons learned. Grantees include qualified health care organizations selected through a competitive process under MHCC's grant-making authority, signed into law in 2014. The HIE Division is responsible for establishing programs to increase the meaningful use of EHRs, and manages the implementation of the State-Regulated Payor EHR Incentive Program (State incentive program). Additionally, the HIE Division is responsible for managing the Center's health IT initiatives in long term care (LTC), local health departments (LHDs) and diffusing EDI.

Innovative Care Delivery Division
The Innovative Care Delivery Division supports, facilitates, and administers advanced care delivery initiatives with the aim to improve quality and efficiency of health care delivery. Advanced care delivery models include patient center medical homes (PCMHs), accountable care organizations (ACOs), and value-based purchasing models. The Innovative Care Delivery Division is tasked with advancing existing care delivery models and developing new models that support higher quality health care delivery, higher patient satisfaction, and health care cost control. The Innovative Care Delivery Division uses health IT as the framework for building successful innovative care delivery programs. The Innovative Care Delivery Division develops strategies for advanced care delivery programs statewide in support of health care reform initiatives. Activities include establishing the criteria for MSOs that seek State designation in Maryland. MSOs focus their business model on supporting practices in transformation and expanding the use of health IT to improve the overall health of the population being served and the patient experience while lowering cost of care.

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 Department of Health and Mental Hygiene (DHMH) pertaining to the law's requirements. The MHCC and DHMH 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

[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.

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.

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,

[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.

and store electronic data in a secure manner that minimizes the potential for an unauthorized disclosure or breach of protected health information. New cyber-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. DHMH, 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 during the same time last 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 not 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.

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. The report details findings from the final evaluation of the MMPP, which assessed 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 – Maryland Health Care Commission's organizational chart

THE MARYLAND HEALTH CARE COMMISSION