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House Bill 706

Electronic Health Records Regulations and Reimbursement

A report prepared for
the Governor of Maryland and
the Maryland General Assembly

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Executive Summary

The Maryland General Assembly passed House Bill 706, *Electronic Health Records – Regulation and Reimbursement* (HB 706) in 2009, which was signed into law on May 19, 2009.¹ The purpose of the law is to advance health information technology (health IT) adoption and use among Maryland providers. HB 706 requires the Maryland Health Care Commission (MHCC) to, among other things: 1) designate a statewide health information exchange (HIE),² 2) identify electronic health record (EHR) adoption incentives from certain State-regulated payers (payers), and 3) designate one or more management service organizations (MSOs).³ Additionally, HB 706 requires the MHCC to report on the progress Maryland providers are making in the adoption and meaningful use⁴ of EHRs, and provide recommendations for changes in existing State laws and propose legislation to achieve optimal EHR adoption and meaningful use.

EHR adoption and meaningful use are increasing nationally as well as in Maryland. The widespread adoption and meaningful use of EHRs has the potential to improve the quality, safety, and efficiency of health care while reducing costs. An EHR is a digital patient medical record maintained by providers that may include clinical and administrative information such as demographics, progress notes, problem and medication lists, immunizations, laboratory data, and radiology reports. A survey conducted through the Maryland Board of Physicians found that in 2011, approximately 29 percent of all Maryland office-based physicians had adopted an EHR, an increase of about seven percent since 2009.⁵ Between 2010 and 2011, EHR adoption increased statewide by more than 5 percent. Nationally, EHR adoption has increased by about 12 percent since 2009, from 22 percent to 34 percent.⁵ Maryland office-based physicians in that national survey had an EHR adoption rate of 31 percent, which was not statistically different from the national average.

The MHCC collaborated with health systems, the statewide HIE, the Maryland Regional Extension Center (REC),⁶ management service organizations (MSOs), medical and allied health care societies, and payers in the State in developing the following recommendations.⁷ The recommendations are intended to mitigate barriers to EHR adoption and assist providers in meeting the requirements of meaningful use, including the electronic exchange of clinical information. Barriers to adoption include cost, vendor selection, and loss of productivity during implementation. The recommendations include legislative actions and strategic initiatives to increase EHR adoption, meaningful use, and HIE use among providers.

¹ See Appendix A for House Bill 706, *Electronic Health Records – Regulation and Reimbursement*.

² The statewide HIE is a clinical data sharing utility that allows for the private and secure electronic exchange of clinical information between unaffiliated health care providers throughout Maryland. The Chesapeake Regional Extension Center for our Patients is currently the statewide HIE. Other HIEs operate in Maryland.

³ An MSO offers EHR adoption and implementation services to practices. More information about the MSO State Designation Program is available at: <http://mhcc.maryland.gov/hit/hit/hit/>.

⁴ *Meaningful use* is a component of a federal EHR adoption incentive program that requires providers to demonstrate that they have integrated an EHR into their practice to achieve health and efficiency goals. Demonstration of meaningful use involves meeting certain criteria to show that the provider is using an EHR to capture and share electronic data. ⁵ From the *2010 Maryland Board of Physicians Licensure* file, which is a database of physician responses to the licensure survey. Data are compiled from responses to a bi-annual survey by Maryland physicians to renew their medical license.

The survey includes questions related to specialty, location, and Medicaid acceptance.

⁵ Hsiao, C.J., Hing, E., Socey, T.C., & Cai, B., NCHS Data Brief. *Electronic health record systems and intent to apply for meaningful use incentives among office-based physician practices: United States, 2001–2011*, vol 79, 2011. Available at:

<http://www.cdc.gov/nchs/data/databriefs/DB79.pdf>.

⁶ The Maryland REC is operated by the Chesapeake Regional Extension Center for our Patients and provides support to certain physicians in adopting EHR systems and qualifying for meaningful use.

⁷ See *Acknowledgements* for a list of partners consulted for this report.

Recommended State Laws to Achieve Optimal EHR Adoption and Meaningful Use

Suggested changes in State laws would require EHR vendors to sell only nationally certified systems, increase HIE transparency, require HIEs to connect to the State designated HIE, and increase payer reimbursement when ambulatory practices are able to produce savings from EHR adoption and HIE use.

1. By October 1, 2013, vendors that sell EHR systems used in outpatient settings in Maryland must:
 - Only sell EHR systems that:
 - Are currently certified by a nationally recognized certification organization;⁸ and
 - Have the ability to contribute and consume clinical information from an HIE⁹ using then current nationally recognized standards;¹⁰ □ Publish and keep current information about their:
 - Capabilities to contribute and consume clinical information from an HIE; and
 - Pricing for HIE capabilities and associated services.¹¹
2. By October 1, 2013, HIEs operating in Maryland must publish and keep current information about their:
 - Services available for contributing and consuming clinical information from the HIE; and
 - Pricing information for the services available.
3. By October 1, 2014, HIEs operating in Maryland shall connect to the designated statewide HIE to contribute and consume clinical information using then current nationally recognized standards.
4. Ambulatory providers¹² using an EHR system shall be required to use an HIE to both contribute and consume clinical information by January 1, 2015.
 - Providers may apply for hardship exemptions that include one of the following scenarios:
 - The lack of broadband Internet access;
 - A new practice opens after calendar year 2015 (the practice has two years to comply with the requirement); or
 - Other extenuating circumstances as determined by the MHCC.
5. State-regulated payers shall provide increased reimbursement when ambulatory practices produce savings to the State-regulated payer from participation in new or existing qualitybased care delivery models that involve the use of a certified EHR and HIE services to both contribute and consume clinical information from an HIE.

Strategies to Mitigate Barriers to EHR Adoption and Meaningful Use

The strategies focus on mitigating key barriers to EHR adoption and do not require changes in State law. These strategies are aimed at addressing adoption costs, EHR system evaluation, and education and awareness challenges. Over the next year, the MHCC intends to explore opportunities to implement these strategies.

⁸ The Office of the National Coordinator for Health Information Technology established a program to certify that EHR systems meet standards, implementation specifications and certification criteria to enable providers to achieve meaningful use.

⁹ See Appendix B for a preliminary list of services for contributing and consuming clinical information.

¹⁰ The use of commonly accepted standards amongst various products enables greater interoperability.

¹¹ HIE capabilities may include secure messaging, interfaces to labs, interfaces to an HIE, etc.

¹² Ambulatory providers include office-based providers offering direct patient care outside of the hospital setting, including clinicians in community health clinics.

1. By October 1, 2013, modifications should be made to the existing State-regulated payer EHR adoption incentive regulation, COMAR 10.25.16 *Electronic Health Record Incentives*, to extend the program from its current end date of 2014 through 2017.¹³
2. By October 1, 2013, payers required to participate in the State-regulated payer EHR adoption incentive program should make program information easily accessible on their websites and include the information in periodic provider communications.
3. The Maryland REC, in collaboration with State Designated MSOs and medical and allied health care societies, should offer EHR system educational sessions that allow providers to try out EHR products.
 - The medical and allied health care societies should offer continuing education credits for providers that participate in the EHR systems workshops.
 - The educational session should be ongoing and begin by July 1, 2013.
4. By July 1, 2013, the Maryland REC, in collaboration with State Designated MSOs and medical and allied health care societies, should establish an EHR mentoring program to pair advanced EHR users with ambulatory practices interested in learning about products and best practices from existing users.

Report Limitations

The Maryland Health Care Commission (MHCC) conducted an environmental scan, involving surveys and interviews of providers, to develop the recommendation for this report.^{14, 15} The responses to the self-reported survey were likely influenced by the respondents' perception of the questions and were not audited for accuracy. A financial impact assessment associated with implementing the recommendations detailed in this report was not completed.

Introduction

In 2009, House Bill 706, *Electronic Health Records – Regulation and Reimbursement* (HB 706) was passed by the General Assembly and signed into law by Governor Martin O'Malley.¹⁶ The goal of the law is to advance health information technology (health IT) adoption and use among Maryland providers. The law requires the MHCC and the Health Services Cost Review Commission (HSCRC) to designate a statewide health information exchange (HIE), identify incentives for the adoption of electronic health records (EHRs) from State-regulated payers, and designate one or more management service organizations (MSOs).

The MHCC has implemented all provisions of the law. In particular, the MHCC designated a statewide HIE in 2009 through a competitive process to provide private and secure electronic exchange of health information among providers.¹⁷ In May 2010, the MHCC launched the MSO State designation program to support providers in the adoption of an EHR system. In addition, the State-regulated payer EHR adoption incentive program began in

¹³ House Bill 736, *Electronic Health Records – Incentives for Health Care Providers – Regulations*, signed in to law on May 2012, requires the MHCC to study whether the scope of eligibility of the existing State-regulated payer EHR adoption incentive program (program), as established in regulation, should be expanded beyond primary care practices. The MHCC is contemplating proposing broad changes to the program based on an analysis of data gathered during the first year.

¹⁴ See Appendix C for more information on the environmental scan and data sources used in the report.

¹⁵ See Appendix D for a copy of the survey administered to providers to gather information for this report.

¹⁶ See Appendix A for House Bill 706, *Electronic Health Records – Regulation and Reimbursement*.

¹⁷ The Chesapeake Regional Information System for our Patients (CRISP) was designated the statewide HIE. ¹⁹ From 2010 Maryland Board of Physicians Licensure file, which is a database of physician responses to the licensure survey. Data are compiled from responses to a bi-annual survey by Maryland physicians to renew their medical license. The survey includes questions related to specialty, location, and Medicaid acceptance.

October 2011, which provides primary care practices with monetary incentives for the adoption of a certified EHR system.

HB 706 requires the MHCC to update the Governor and the General Assembly on the progress in implementing the requirements of the law. The MHCC is required to report on the progress achieved toward adoption and meaningful use of EHRs by health care providers in the State and provide recommendations for any changes in State laws that may be necessary to achieve optimal adoption and use on or before October 12, 2012. This report fulfills the reporting obligations.

Current Landscape of EHR Adoption and Meaningful Use in Maryland

In Maryland and nationally, EHR adoption and use is increasing. An EHR is an electronic version of a patient's longitudinal medical history and may include clinical information such as demographics, progress notes, problem and medication lists, immunizations, laboratory data, and radiology reports. The widespread adoption and meaningful use of EHRs has the potential to improve the quality, safety, and efficiency of health care while reducing costs. In 2011, EHR adoption among office-based physicians in Maryland was approximately 29 percent. This is roughly a seven percent increase from 2009, when adoption rates were approximately 22 percent.¹⁹ Over the last year, EHR adoption increased by more than 5 percent statewide. Nationally, EHR adoption among officebased physicians is about 34 percent, an increase of about 12 percent since 2009.¹⁸ The Maryland EHR adoption rate under that survey is 31 percent, not statistically different from the national average. Although the national survey permits benchmarking Maryland's progress, the small sample size does not allow for more detailed analysis by region in the state or by physician specialty. By comparison, Maryland collects information from around 15,400 active physicians.²¹

The *Health Information Technology for Economic and Clinical Health (HITECH) Act*, part of the *American Recovery and Reinvestment Act* of 2009, authorized the Center for Medicare and Medicaid Services (CMS) to create the Medicare and Medicaid EHR Incentive Program to provide financial incentives to providers who adopt and meaningfully use a certified EHR system. The incentive program is often referred to as meaningful use and includes stages 1, 2, and 3 in subsequent years. As the stages progress, the requirements to demonstrate meaningful use will progress to more advanced use of a certified EHR system and HIE in order for providers to receive the financial incentive.¹⁹

To qualify for the federal EHR adoption incentive, eligible professionals (EPs) ²⁰²¹ must register for the program and subsequently demonstrate meaningful use. As of July 31, 2012, roughly 267,221 EPs were registered for the meaningful use program, and about 117,770 EPs received incentive payments.²⁴ About two percent of the EPs who registered for meaningful use are Maryland providers. Approximately one percent of the EPs that received federal incentive payments, or 1,369, are Maryland providers.²⁵ Around five percent of Maryland Medicare physicians

¹⁸ Hsiao, C.J., Hing, E., Socey, T.C., & Cai, B. NCHS Data Brief, *Electronic health record systems and intent to apply for meaningful use incentives among office-based physician practices: United States, 2001–2011*. vol. 79. 2011. Available at: <http://www.cdc.gov/nchs/data/databriefs/DB79.pdf>. ²¹

Data are compiled from responses to a bi-annual survey by Maryland physicians from the *Maryland Board of Physicians Licensure* file, which is a database of physician responses to the licensure survey.

¹⁹ More information on the EHR Incentive and Meaningful Use Programs is available at: <https://www.cms.gov/Regulationsand-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/EHRIncentivePrograms/>.

²⁰ Eligible providers for the Medicare program include: doctors of medicine, osteopathy, dental surgery or medicine, podiatry, optometry, or chiropractors. Eligible providers for the Medicaid program must have a minimum of 30 percent Medicaid patient volume or 20 percent for pediatricians; they must also be one of the following: physicians (MD and DO), dentists, nurse practitioners, certified nurse-midwives, or physician assistants (working for an FQHC only). ²⁴ EHR Incentive Program Report, July 2012. The Centers for Medicare and Medicaid Services, 2012. Available at: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/July2012_MonthlyReports.pdf. ²⁵ CMS combined Medicare and Medicaid payments by state. July 2012. The Centers for Medicare and Medicaid Services.

²¹ . Available at: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Medicare_Medicaid_PaymentsStatebyProviderType_July2012.pdf.

have received a meaningful use payment.^{22, 23} This percentage is lower than states with similar Medicare and physician populations.²⁴ For example, more than eight percent of Washington State physicians have received payments, while over thirteen percent of Minnesota physicians have received payments.^{25, 26, 31}

The demonstration of meaningful use among chiropractors, dentists, and optometrists in Maryland is lower than among doctors of medicine and doctors of osteopathic medicine.^{27, 28, 29} As of May 2012, roughly six chiropractors (less than one percent of active Maryland chiropractors)³⁰ and 30 optometrists (approximately four percent of Maryland optometrists)³¹ had successfully demonstrated meaningful use. During the same timeframe, around 103 podiatrists in Maryland demonstrated meaningful use, which is approximately 25 percent of Maryland podiatrists.^{32, 33, 34}

While the number of optometrists and chiropractors demonstrating meaningful use is low, as of June 2012, zero Maryland dentists have demonstrated meaningful use.³⁵

Current State Initiatives for EHR Adoption and Meaningful Use

State-Regulated Payer EHR Adoption Incentive Program

The State-regulated payer EHR adoption incentive program (program) was created under HB 706 to encourage practices to adopt and use an EHR. The EHR adoption incentive is a one-time cash incentive or an incentive of equivalent value agreed upon by the primary care practice and Stateregulated payer (payer). Primary care practices are eligible to receive up to \$15,000 per payer.

The following payers are required to provide incentives: Aetna, Inc., CareFirst BlueCross BlueShield, Cigna HealthCare Mid-Atlantic, Coventry Health Care, Kaiser Permanente, and UnitedHealthcare, Mid-Atlantic Region. Primary care practices that have adopted a certified EHR are eligible to apply for the program. The program began in October 2011, and as of July 2012, around 798 applications from primary care practices that have adopted an EHR were submitted to payers.³⁶ Primary care practices are required to have EHRs in place for approximately six months before incentive payments are issued.

The MHCC is currently collaborating with stakeholders to identify options for consideration to expand the program. House Bill 736, *Electronic Health Records – Incentives for Health Care Providers – Regulations*, (HB 736) signed in to law on May 2012, requires the MHCC to study whether the scope of the eligibility of the existing program, as established in regulation,³⁷ should be

²² Ibid.

²³ See Appendix E for the number of Maryland Medicare eligible professionals and meaningful use achievement by specialty.

²⁴ States with similar Medicare and physician population allows for a more accurate comparison with Maryland EPs that have demonstrated meaningful use.

²⁵ Ibid.

²⁶ See Appendix F for the number of physicians receiving meaningful use payments in each state. ³¹ See Appendix G for other States' strategies for increasing EHR adoption and meaningful use.

²⁷ CMS Medicare and Medicaid EHR Incentive Program, electronic health record products used for attestation dataset. July 28, 2012. Available at: <https://explore.data.gov/Other/Data-gov-Catalog/pyv4-fkgv>.

²⁹ Possible reasons for the difference in EHR adoption levels among allied health professionals include the meaningful use requirements are aimed towards primary care providers and there are less EHR products to choose from.

³⁰ Percent is based on the number of active licenses (764) as of February 2012. Data obtained from the Federation of Chiropractic Licensing Boards directory.

³¹ Percent is based on the number of active licenses (697) as of 2010. Data obtained from the Maryland Board of Optometry.

³² Percent is based on the number of active licenses (412) as of 2010. Data obtained from the Maryland Board of Podiatrists.

³³ The Maryland trend among allied health professionals is similar to the national trend.

³⁴ CMS Medicare and Medicaid EHR Incentive Program, electronic health record products used for attestation dataset.

July 18, 2012. Available at: <https://explore.data.gov/Other/Data-gov-Catalog/pyv4-fkgv>.

³⁵ Meaningful use includes the Medicaid adoption, implementation, and upgrading program that EPs can attest to in the first year.

³⁶ See Appendix H for the number of applicants per payer.

³⁷ COMAR 10.26.16, *Electronic Health Record Incentives*, became effective on October 21, 2011.

expanded beyond primary care practices. The law requires the MHCC to submit the recommendations to the Senate Finance Committee and the House Health and Government Operations Committee on or before January 1, 2013. The MHCC is currently vetting several options for program expansion with stakeholders to include in the report. In 2013, the MHCC plans to convene a workgroup to develop an implementation strategy for the option most preferred by stakeholders.

Regional Extension Center

The HITECH Act authorized the Health Information Technology Extension Program to develop Regional Extension Centers (RECs) to offer technical assistance, guidance, and information on best practices to support and accelerate the adoption and meaningful use of EHRs.³⁸ The Office of the National Coordinator for Health Information Technology (ONC) awarded 62 RECs to receive federal funds to support priority care providers (PCPs)³⁹ in adopting certified EHRs and successfully demonstrating meaningful use. The funding is distributed over a four year period that began in 2010. Each REC assists PCPs in achieving the following three milestones:

- Milestone 1: Signed contract for direct technical assistance with qualified provider.⁴⁰
- Milestone 2: Provider is “live” on certified EHR with e-prescribing and quality reporting.
- Milestone 3: Provider successfully demonstrates meaningful use.

The Chesapeake Regional Information System for Our Patients (CRISP) was designated by the ONC as Maryland’s REC in April 2010, to support 1,000 PCPs in meeting each milestone.⁴¹ In June 2011, CRISP reached 1,000 PCPs for milestone one and now has over 1,751 PCPs signed up. As of July 2012, 1,028 PCPs have reached milestone two, and 113 have reached the third and final milestone.⁴²

Management Service Organizations

MSOs are organizations that offer hosted EHR solutions to providers throughout the State and provide technical assistance, guidance, outreach, and education to support providers in achieving meaningful use. MSOs help to minimize the costs associated with technology maintenance and the responsibilities assumed by the provider that accompany the private and secure storage of electronic health information. The MHCC launched the MSO State designation program (program) on May 17, 2010. To be considered for the program, an MSO must demonstrate that it meets the established criteria for privacy and confidentiality, technical performance, business practices, resources, security, services, and operations as well as undergo a site review of their network operating center(s).⁴³

Approximately fourteen MSOs have achieved State Designation and about four MSOs are in Candidacy Status, working towards State Designation. MSOs may contract with the REC to provide support to PCPs and receive subsidies from the REC for offering services to assist PCPs with reaching each milestone.⁴⁴ During interviews with providers, those that have worked with an MSO were asked about their level of satisfaction with the MSO. In

³⁸ More information about the Health Information Technology Extension Center Program is available at: www.healthit.hhs.gov/REC.

³⁹ Priority care providers operate in individual and small group practices with fewer than 10 physicians and/or other health care professionals with prescriptive privileges and are focused on primary care. Providers include: physicians, physician assistants, or nurse practitioners who provide primary care services in public and critical access hospitals, community health centers, rural health clinics and in other settings that predominantly serve uninsured, underinsured, and medically underserved populations.

⁴⁰ Direct technical assistance includes: practice assessments, assistance with choosing and implementing an EHR system, and assistance with attesting for meaningful use.

⁴¹ The ONC and REC established the goal of 1,000 PCPs, which represents approximately 43 percent of Maryland’s 2,322 primary care physicians who have not adopted and EHR.

⁴² *Management Service Organization Milestone Report*. August 2012. Maryland Health Care Commission.

⁴³ *Management Service Organization State Designation Criteria*, Version 2.0. (2012). Maryland Health Care Commission. Available at: <http://mhcc.maryland.gov/hit/hit/hit/>.

⁴⁴ See Appendix I for information about the REC.

general, providers were highly satisfied with their experience using an MSO, and felt that they would not have been able to implement an EHR or demonstrate meaningful use without the support of their MSO.

EHR Adoption and Meaningful Use Challenges

The MHCC assessed the challenges Maryland providers face when adopting an EHR and demonstrating meaningful use to inform proposed changes in State laws to achieve optimal adoption and use of health IT. A number of challenges to EHR adoption and meaningful use were identified during the environmental scan.

- *Cost of an EHR system:* Costs include EHR software and hardware (for a five physician practice, the cost could be approximately \$162,000).^{45, 46} Costs also involve additional short-term staff, training, and decreased patient volume during the implementation.
- *Selecting an EHR system:* Over 1,700 certified EHR systems exist in the market.⁴⁷ Providers who had adopted an EHR system indicated that they found it difficult to choose a vendor and specific EHR product due to the large number of choices. Dental providers face an alternate challenge, as only three dental EHR systems have been certified, severely limiting dentists who have already adopted a non-certified system. Chiropractors and optometrists also have fewer EHR systems to choose from than primary care providers.
- *Workflow modifications:* Providers generally make modifications to the working environment and processes to include use of the EHR system.⁴⁸ Some of the changes are due to using an electronic record, rather than a paper record, while other changes are due to the need to meet meaningful use requirements. Workflow modifications can be challenging since they require additional time and effort as the practice transitions to the EHR, which can result in loss of productivity.

Recommended State Laws to Achieve Optimal EHR Adoption and Meaningful Use

HB 706 requires the MHCC to develop recommendations for changes in State laws that may be necessary to achieve optimal adoption and use of EHRs. These recommendations are aimed at increasing provider adoption and meaningful use of EHRs. The recommendations also seek to assist providers with meeting the requirements of advanced stages of meaningful use that will include the electronic exchange of clinical information. HIE can ensure that the right information is at the right place at the right time, thereby improving patient care.

Suggested changes in State laws are designed to expand EHR adoption and use by requiring EHR vendors to sell only nationally certified systems, increasing HIE transparency and requiring HIEs to connect to the State designated HIE, and requiring State-regulated payers to increase reimbursement to ambulatory practices when practices are able to produce savings from use of EHRs and HIE.

1. *By October 1, 2013, vendors that sell EHR systems used in outpatient settings in Maryland must:*

- *Only sell EHR systems that:*
 - *Are currently certified by a nationally recognized certification organization;⁴⁹ and*

⁴⁵ Fleming, N. S., Culler, S. D., McCorkle, R., Becker, E.R., & Ballard, D. J. Health Affairs. *The financial and nonfinancial costs of implementing electronic health records in primary care practices.* vol. 30:3481-489. March 2011. Available at: <http://content.healthaffairs.org/content/30/3/481.abstract>.

⁴⁶ There are a handful of EHR systems that have received certification and are free.

⁴⁷ A list of certified health IT products is available at: <http://oncchpl.force.com/ehrcert?q=CHPL>.

⁴⁸ Lynn, J. *Selecting the right EMR.* 2010. Available at: <http://www.emrandhipaa.com/wp-content/uploads/2010/08/SelectingThe-Right-EMR.pdf>.

⁴⁹ The Office of the National Coordinator for Health Information Technology established a program to certify that EHR systems meet standards, implementation specifications and certification criteria to enable providers to achieve meaningful use.

- *Have the ability to contribute and consume clinical information from an HIE⁵⁰ using then current nationally recognized standards;*⁵¹
- *Publish and keep current information about their:*
 - *Capabilities to contribute and consume clinical information from a HIE; and*
 - *Pricing for HIE capabilities and associated services.*⁵²

HB 706 requires that by January 1, 2015, providers using an EHR system that seek payment from a State-regulated payer shall use a system that is nationally certified and is capable of connecting to the statewide HIE. In order to assist providers with meeting this requirement, vendors that sell ambulatory EHR systems to Maryland providers should be required to only sell EHR systems that have current certification from a nationally recognized organization.⁵³ While most vendors are seeking meaningful use certification to support providers who participate in the meaningful use program, there are other national certification options for vendors. Organizations such as the Certification Commission for Health Information Technology would qualify as a national certification body.

Requiring vendors to only sell EHR products that have the ability to contribute clinical information to and consume clinical information from an HIE, supports the requirement placed on providers in HB 706. While many EHR vendors have this capability, in practice the EHR technology is not easily integrated with an HIE. Unlike other industries, such as banking, where interfaces between disparate organizations' systems are based on standards and are interoperable, standards in the health industry are still in development. This requires vendors to build custom, often proprietary, interfaces to HIEs. These custom interfaces often requires complex and costly work to build and the coordination of the EHR vendor and the HIE to mutually agree upon standards.^{54,55}

Findings from environmental scan indicated that it is often not clear to practices prior to purchasing an EHR system what will need to be done in order to connect to an HIE, and how much it will cost in addition to the base price of the EHR system. The environmental scan revealed that providers are reluctant to pay additional fees after purchasing the EHR system in order to connect to an HIE. Requiring EHR vendors to publish and keep current information about connectivity capabilities and pricing can lead to a more informed purchasing decision.

2. By October 1, 2013, HIEs operating in Maryland must publish and keep current information about their:

- *Services available for contributing and consuming clinical information from the HIE; and*
- *Pricing information for the services available.*

Providers may pay fees to an HIE to exchange patient information in addition to the fees paid to an EHR vendor. The services an HIE offers and the pricing for each service are not always readily available.⁵⁶ HIEs operating in the State may offer various services at different price points. In order to help providers make an informed decision about which HIE they would like to utilize, HIEs should publish their HIE capabilities, services, and the pricing.

3. By October 1, 2014, HIEs operating in Maryland shall connect to the designated statewide HIE to contribute and consume clinical information using then current nationally recognized standards.

A leading goal of HIE is to make patient information available at the right time and place of care. In order to achieve this, all HIEs in the State must facilitate the exchange of patient information beyond a selective region or group of entities. HIEs that are connected to each other allow for the exchange of information across service areas,

⁵⁰ See Appendix B for a preliminary list of services for contributing and consuming clinical information.

⁵¹ The use of commonly accepted standards amongst various products enables greater interoperability.

⁵² HIE capabilities may include secure messaging, interfaces to labs, interfaces to an HIE, etc.

⁵³ Certification standards typically change over time and therefore vendors would be required to ensure that certification is current.

⁵⁴ Hammonds, W. E. Health Affairs. *The making and adoption of health data standards*. vol. 24:51205-1213. September

⁵⁵ . Available at: <http://content.healthaffairs.org/content/24/5/1205.full>.

⁵⁶ Based on a scan of HIE websites, pricing information was not available for a number of operational HIEs. Additionally, discussions with a number of HIEs found that pricing information is not always shared publicly.

making the information available to any provider a patient may visit. To ensure that providers have the capability of exchanging patient information throughout the State, all organizations that meet the definition of an HIE must connect by 2014 to the State designated HIE to allow their participating providers to contribute and consume clinical information from the State designated HIE.⁵⁷

4. *Ambulatory providers⁵⁸ using an EHR system shall be required to use an HIE to both contribute and consume clinical information by January 1, 2015.*

- *Providers may apply for hardship exemptions that include one of the following scenarios:*
 - *The lack of broadband Internet access;*
 - *A new practice opens on or after calendar year 2015 (the practice has two years to comply with the requirement); or*
 - *Other extenuating circumstances as determined by the MHCC.*

As indicated above, EHR systems must be capable of connecting to an HIE. Providers that adopt these systems must also use the capability to electronically exchanging patient information in order for the health system to realize the benefits of HIE. Providers should be afforded with options for contributing and consuming data and be allowed to choose the option that best meets the needs of their practice. For example, some providers may use secure messaging⁵⁹ to send and receive clinical information from an HIE, while others may choose to build interfaces between their EHR system and an HIE.⁶⁰

5. *State-regulated payers shall provide increased reimbursement when ambulatory practices produce savings to the payer from participation in new or existing quality-based care delivery models that involve the use of a certified EHR and HIE services to both contribute and consume clinical information from an HIE.*

EHR systems and HIE are tools used to facilitate care coordination and preventative care. A number of states that are creating patient centered medical home (PCMH) programs⁶¹ require or encourage the use of an EHR system and HIE.⁶² Additionally, the CMS Pioneer Accountable Care Organization (ACO) program requires that by the end of 2012, Pioneer ACOs have 50 percent of their primary care physicians meeting the requirements of the Medicare and Medicaid EHR Incentive Program.⁶³ Since EHR systems and HIE are essential infrastructure in quality-based care delivery models, providers should receive an increased reimbursement when they demonstrate savings to the payer in these programs through the use of EHR systems and HIE. Quality-based care delivery models may include existing initiatives or payers may design new models.

Strategies to Mitigate Barriers to EHR Adoption and Meaningful Use

Strategies were formulated to address the barriers of EHR adoption including offsetting adoption costs, simplifying EHR system evaluation, and mitigating education and awareness challenges. Implementing these strategies does

⁵⁷ An HIE, as defined in State law, is an infrastructure that provides organizational and technical capabilities for the exchange of protected health information electronically among entities not under common ownership.

⁵⁸ Ambulatory providers include office-based providers offering direct patient care outside of the hospital setting, including clinicians in community health clinics.

⁵⁹ Secure messaging is a method, similar to e-mail, that allows for encrypted messages containing a patient's health information to be sent over the Internet, where each account holder is appropriately credentialed and part of a trusted community of users.

⁶⁰ See Appendix B for a preliminary list of services for contributing and consuming clinical information.

⁶¹ A PCMH program is a health care model that typically involves facilitated partnerships between a health care setting, individual patients, and their personal physicians, and the patient's family aimed at improving primary and preventative care.

⁶² The Ohio Behavioral Health Home Initiative requires the use of a certified EHR system. The BlueCross BlueShield of Rhode Island PCMH program encourages the use of EHRs.

⁶³ *Pioneer Accountable Care Organization Model: General Fact Sheet*. May 2012. Available at: <http://innovations.cms.gov/Files/fact-sheet/Pioneer-ACO-General-Fact-Sheet.pdf>.

not require changes in State law. Over the next year, the MHCC intends to explore opportunities to implement these strategies.

1. *By October 1, 2013, modifications should be made to the existing State-regulated payer EHR adoption incentive regulation, COMAR 10.25.16 Electronic Health Record Incentives, to extend the program from its current end date of 2014 through 2017.*

The State-regulated payer EHR adoption incentive program (program) aims to encourage primary care practices to adopt EHR systems. Presently, about 38 percent of eligible practices have applied for the program. Selection and implementation of an EHR system takes time and by extending the program beyond 2014 to 2017, practices who have not already adopted an EHR system will be provided with more time to adopt and take advantage of program incentives. The MHCC is currently studying whether the scope of the eligibility for the existing program should be expanded beyond primary care practices as required under HB 736. The MHCC is collecting data from Stateregulated payers on the program and may consider changes to the regulation based on analysis of the data and stakeholder feedback.

2. *By October 1, 2013, payers required to participate in the State-regulated payer EHR adoption incentive program should make program information easily accessible on their websites and include the information in periodic provider communications.*

Interviews with providers indicated that many have not been made aware of the incentive program. It is recommended that the State-regulated payers involved in the program make information about the program easily accessible on their websites. This typically means that it takes no more than three clicks to reach content.⁶⁴ In addition, since providers and their practice managers routinely review payer communications, this can be a valuable resource for educating them about the program.

3. *The Maryland REC, in collaboration with State Designated MSOs and medical and allied health care societies, should offer EHR system educational sessions that allow providers to try out EHR products.*
 - *The medical and allied health care societies should offer continuing education credits for providers that participate in the EHR systems workshops.*
 - *The educational session should be ongoing and begin by July 1, 2013.*

There are currently more than 1,700 certified EHR systems. The environmental scan revealed that providers' ability to see an EHR system product demonstration was incredibly helpful to their own adoption of an EHR system and would be helpful to those who are looking for a system. Convening educational sessions that allow providers to see and test EHR systems (a hands-on demonstration) will assist them with making the best choice for their practice, and offering CME credits to providers who attend these workshops will encourage them to participate.

4. *By July 1, 2013, the Maryland REC, in collaboration with State Designated MSOs and medical and allied health care societies, should establish an EHR mentoring program to pair advanced EHR users with ambulatory practices interested in learning about products and best practices from existing users.*

Oftentimes, providers consult with their peers on patient diagnoses and discussing EHR systems with their peers is likely to enhance purchasing decisions. Providers repeatedly suggested that having a mentoring program where providers could visit a practice and see the EHR system in use would help providers with choosing an EHR system. Advanced EHR users can be champions of health IT by articulating the benefits of EHR systems to their peers and showing them how they optimize use of the EHR system in their practice. They can also help their peers with choosing an EHR system that best meets the needs of their practice.

⁶⁴ Zeldman, J. *Taking your talent to the web: A guide for the transitioning designer*. 2001. Available at: http://www.zeldman.com/talent/Taking_Your_Talent_to_the_Web.pdf.

Remarks

The MHCC worked closely with payers, HIEs, and State medical and allied health care associations, in developing the recommendations contained in this report. These stakeholders agreed that implementing the proposed changes in State law and adopting broad strategies to mitigate barriers will increase adoption of EHRs, meaningful use, and use of HIE. Most states are grappling with ways to take advantage of health IT to improve care delivery by creating efficiencies in the health care system. The collaboration by these stakeholders, where on occasion views differ, to arrive at consensus on the recommendations in this report is commendable. The MHCC anticipates continued coordination with stakeholders in implementing any changes made to State law and strategies to mitigate barriers to EHR adoption, meaningful use, and HIE use in 2013.

Health IT is generally considered a viable tool in increasing access to health care, reducing health disparities, and creating efficiencies in health care delivery. The widespread adoption and meaningful use of EHRs, together with HIE, offers the possibility to more effectively connect providers and efficiently coordinate care. HB 706 was instrumental in establishing initiatives for the advancement of health IT in Maryland to ensure that the full potential of health IT is realized. As a result of this legislation, Maryland continues to be well positioned to be at the forefront of health IT innovation and excel in the advancement of health IT.

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Appendix A: House Bill 706

Ch. 689

CHAPTER 689

(House Bill 706)

AN ACT concerning

Electronic Health Records – Regulation and Reimbursement

FOR the purpose of requiring the Maryland Medical Assistance Program to reimburse certain health care providers in accordance with certain provisions of this Act; ~~requiring the Maryland Health Care Commission, in consultation with the Department of Health and Mental Hygiene and the Maryland Insurance Administration, to adopt certain regulations on or before a certain date requiring certain payors to include certain costs in a certain reimbursement structure; requiring the Commission to designate a certain health information exchange on or before a certain date; requiring the Commission to determine the appropriate level of additional reimbursement in a certain manner; providing that certain regulations shall apply to certain entities under certain circumstances; requiring the Commission, in consultation with the Department and the Administration, to adopt certain regulations that specify certain certification requirements on or before a certain date; requiring the Maryland Health Care Commission and the Health Services Cost Review Commission to designate a health information exchange for the State on or before a certain date; requiring the Maryland Health Care Commission, on or before a certain date, to report on progress in implementing certain provisions of this Act; requiring, on or before a certain date, the Maryland Health Care Commission, following consultation with certain stakeholders, to post on its website for a public comment and submit to the Governor and certain legislative committees, a report on certain aspects of health information technology; requiring the committees to have a certain period of time for review and comment; requiring, on or before a certain date, the Maryland Health Care Commission, in consultation with the Department of Health and Mental Hygiene and others, to adopt regulations that require certain payors to provide incentives to health care providers to promote the adoption and certain use of electronic health records; establishing certain requirements for the incentives; providing that the incentives may include certain items and services; specifying that the regulations need not require incentives for certain types of health care providers; requiring the regulations to apply to certain entities under certain circumstances; requiring the Health Services Cost Review Commission and the Department, in consultation with certain other entities, to take certain actions that relate to the American Recovery and Reinvestment Act of 2009 and certain rules and regulations; requiring the Maryland Health Care Commission, on or before a certain date, to report to the Governor and the General Assembly on certain progress achieved and recommendations for changes that may be necessary for certain adoption and use of electronic health records; requiring the~~

Maryland Health Care Commission to designate a certain management service organization organizations on or before a certain date; authorizing the Maryland Health Care Commission to use certain grants and loans in a certain manner; requiring certain health care providers to use certain electronic health records on or and after a certain date; prohibiting certain payors from reimbursing certain health care providers on or after a certain date under certain circumstances; providing that certain provisions of this Act shall apply to certain entities under certain circumstances; providing that certain provisions of this Act apply to health maintenance organizations; requiring certain carriers State-regulated payors to reimburse provide incentives to certain health care providers in accordance with certain provisions of this Act; requiring the Secretary of Budget and Management to ensure that the State Employee and Retiree Health and Welfare Benefits Program complies with certain provisions of this Act; defining certain terms; and generally relating to the regulation of and reimbursement for the use of electronic health records.

BY repealing and reenacting, without amendments,

Article – Health – General

Section 1-101(a) and (c), 15-101(a) and (h), and 19-101

Annotated Code of Maryland

(2005 Replacement Volume and 2008 Supplement)

BY adding to

Article – Health – General

Section 15-105.2; 19-142 ~~through 19-145~~ and 19-143 to be under the new part

“Part IV. Electronic Health Records – Regulation and Reimbursement”;

and 19-706(ttt)

Annotated Code of Maryland

(2005 Replacement Volume and 2008 Supplement)

BY adding to

Article – Insurance

Section 15-132

Annotated Code of Maryland

(2006 Replacement Volume and 2008 Supplement)

BY repealing and reenacting, without amendments,

Article – State Personnel and Pensions

Section 2-501(a) and (b)

Annotated Code of Maryland

(2004 Replacement Volume and 2008 Supplement)

BY repealing and reenacting, with amendments,

Article – State Personnel and Pensions

Section 2-503(a)

Annotated Code of Maryland

(2004 Replacement Volume and 2008 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article – Health – General

1–101.

- (a) In this article the following words have the meanings indicated.
- (c) “Department” means the Department of Health and Mental Hygiene.

15–101.

- (a) In this title the following words have the meanings indicated.
- (h) “Program” means the Maryland Medical Assistance Program.

15–105.2.

THE PROGRAM SHALL REIMBURSE HEALTH CARE PROVIDERS IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 19, SUBTITLE 1, PART IV OF THIS ARTICLE.

19–101.

In this subtitle, “Commission” means the Maryland Health Care Commission.

PART IV. ELECTRONIC HEALTH RECORDS – REGULATION AND REIMBURSEMENT.

19–142.

(A) IN THIS PART IV OF THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

- (B) “CARRIER” MEANS:
 - (1) AN INSURER;
 - (2) A NONPROFIT HEALTH SERVICE PLAN;
 - (3) A HEALTH MAINTENANCE ORGANIZATION; OR

(4) ~~A DENTAL PLAN ORGANIZATION; OR~~

~~(5)~~ ANY OTHER PERSON THAT PROVIDES HEALTH BENEFIT PLANS SUBJECT TO REGULATION BY THE STATE.

(C) "ELECTRONIC HEALTH RECORD" MEANS AN ELECTRONIC RECORD OF HEALTH-RELATED INFORMATION ON AN INDIVIDUAL THAT:

(1) INCLUDES PATIENT DEMOGRAPHIC AND CLINICAL HEALTH INFORMATION; AND

(2) HAS THE CAPACITY TO:

(I) PROVIDE CLINICAL DECISION SUPPORT;

(II) SUPPORT PHYSICIAN ORDER ENTRY;

(III) CAPTURE AND QUERY INFORMATION RELEVANT TO HEALTH CARE QUALITY; AND

(IV) EXCHANGE ELECTRONIC HEALTH INFORMATION WITH AND INTEGRATE THE INFORMATION FROM OTHER SOURCES.

(D) (1) "HEALTH BENEFIT PLAN" MEANS A HOSPITAL OR MEDICAL POLICY, CONTRACT, OR CERTIFICATE ISSUED BY A CARRIER.

(2) "HEALTH BENEFIT PLAN" DOES NOT INCLUDE:

(I) COVERAGE FOR ACCIDENT OR DISABILITY INCOME INSURANCE;

(II) COVERAGE ISSUED AS A SUPPLEMENT TO LIABILITY INSURANCE;

(III) LIABILITY INSURANCE, INCLUDING GENERAL LIABILITY INSURANCE AND AUTOMOBILE LIABILITY INSURANCE;

(IV) WORKERS' COMPENSATION OR SIMILAR INSURANCE;

(V) AUTOMOBILE OR PROPERTY MEDICAL PAYMENT INSURANCE;

(VI) CREDIT-ONLY INSURANCE;

(VII) COVERAGE FOR ON-SITE MEDICAL CLINICS;

(VIII) DENTAL OR VISION INSURANCE;

(IX) LONG-TERM CARE INSURANCE OR BENEFITS FOR NURSING HOME CARE, HOME HEALTH CARE, COMMUNITY-BASED CARE, OR ANY COMBINATION OF THESE;

(X) COVERAGE ONLY FOR A SPECIFIED DISEASE OR ILLNESS;

(XI) HOSPITAL INDEMNITY OR OTHER FIXED INDEMNITY INSURANCE; OR

(XII) THE FOLLOWING BENEFITS IF OFFERED AS A SEPARATE INSURANCE POLICY:

1. MEDICARE SUPPLEMENTAL HEALTH INSURANCE, AS DEFINED IN § 1882(G)(1) OF THE SOCIAL SECURITY ACT;

2. COVERAGE SUPPLEMENTAL TO THE COVERAGE PROVIDED UNDER CHAPTER 55 OF TITLE 10, U.S.C.; OR

3. SIMILAR SUPPLEMENTAL COVERAGE PROVIDED TO COVERAGE UNDER AN EMPLOYER-SPONSORED PLAN.

~~(D)~~ (E) (1) "HEALTH CARE PROVIDER" MEANS:

(I) A PERSON WHO IS LICENSED, CERTIFIED, OR OTHERWISE AUTHORIZED UNDER THE HEALTH OCCUPATIONS ARTICLE TO PROVIDE HEALTH CARE IN THE ORDINARY COURSE OF BUSINESS OR PRACTICE OF A PROFESSION OR IN AN APPROVED EDUCATION OR TRAINING PROGRAM; OR

(II) A FACILITY WHERE HEALTH CARE IS PROVIDED TO PATIENTS OR RECIPIENTS, INCLUDING:

1. A FACILITY, AS DEFINED IN § 10-101(E) OF THIS ARTICLE;

2. A HOSPITAL, AS DEFINED IN § 19-301 OF THIS TITLE;

3. A RELATED INSTITUTION, AS DEFINED IN § 19-301 OF THIS TITLE;

4. AN OUTPATIENT CLINIC;
5. A FREESTANDING MEDICAL FACILITY, AS DEFINED IN § 19-3A-01 OF THIS TITLE;
6. AN AMBULATORY SURGICAL FACILITY, AS DEFINED IN § 19-3B-01 OF THIS TITLE; AND
7. A NURSING HOME, AS DEFINED IN § 19-1401 OF THIS TITLE.

(2) "HEALTH CARE PROVIDER" DOES NOT INCLUDE A HEALTH MAINTENANCE ORGANIZATION AS DEFINED IN § 19-701 OF THIS TITLE.

~~(F)~~ (F) "HEALTH INFORMATION EXCHANGE" MEANS A STATEWIDE INFRASTRUCTURE THAT PROVIDES ORGANIZATIONAL AND TECHNICAL CAPABILITIES TO ENABLE THE ELECTRONIC EXCHANGE OF HEALTH INFORMATION BETWEEN HEALTH CARE PROVIDERS AND OTHER HEALTH SERVICES ORGANIZATIONS AUTHORIZED BY THE COMMISSION.

~~(G)~~ (G) "MANAGEMENT SERVICE ORGANIZATION" MEANS AN ORGANIZATION THAT OFFERS ~~MULTIPLE~~ ONE OR MORE HOSTED ELECTRONIC HEALTH RECORD SOLUTIONS AND OTHER MANAGEMENT SERVICES TO MULTIPLE HEALTH CARE PROVIDERS.

~~(G) "MEDICARE" MEANS THE HEALTH INSURANCE FOR THE AGED ACT, TITLE XVIII OF THE SOCIAL SECURITY AMENDMENTS OF 1965, AS AMENDED.~~

(H) (1) "STATE-REGULATED PAYOR" MEANS:

~~(1) THE MARYLAND MEDICAL ASSISTANCE PROGRAM;~~

~~(2)~~ (I) THE STATE EMPLOYEE AND RETIREE HEALTH AND WELFARE BENEFITS PROGRAM; AND

~~(3)~~ (II) A CARRIER ISSUING OR DELIVERING HEALTH BENEFIT PLANS IN THE STATE.

(2) "STATE-REGULATED PAYOR" DOES NOT INCLUDE A MANAGED CARE ORGANIZATION AS DEFINED IN TITLE 15, SUBTITLE 1 OF THIS ARTICLE.

19-143.

~~(A) ON OR BEFORE OCTOBER 1, 2010, THE COMMISSION, IN CONSULTATION WITH THE DEPARTMENT AND THE MARYLAND INSURANCE ADMINISTRATION, SHALL:~~

~~(1) ADOPT REGULATIONS THAT REQUIRE STATE REGULATED PAYORS TO INCLUDE IN THEIR REIMBURSEMENT STRUCTURE FOR HEALTH CARE PROVIDERS THE COST OF THE ADOPTION OF ELECTRONIC HEALTH RECORDS BY HEALTH CARE PROVIDERS; AND~~

~~(2) DESIGNATE A HEALTH INFORMATION EXCHANGE FOR THE STATE THAT:~~

~~(I) INCORPORATES PRIVACY RULES THAT ARE CONSISTENT WITH EXISTING FEDERAL AND STATE LAWS AND REGULATIONS; AND~~

~~(II) MAKES ITS SERVICES AVAILABLE TO HEALTH CARE PROVIDERS, STATE REGULATED PAYORS AND OTHER HEALTH CARE SERVICES ORGANIZATIONS AS AUTHORIZED BY THE COMMISSION.~~

~~(B) (1) THE COMMISSION SHALL DETERMINE THE APPROPRIATE LEVEL OF ADDITIONAL REIMBURSEMENT TO BE REQUIRED UNDER THIS SECTION, TAKING INTO ACCOUNT ANY GRANTS OR LOANS THAT ARE AVAILABLE TO HEALTH CARE PROVIDERS FROM THE FEDERAL GOVERNMENT.~~

~~(2) THE COMMISSION MAY NOT REQUIRE ADDITIONAL REIMBURSEMENT UNDER THIS SECTION FOR A HOSPITAL THAT IS REGULATED BY THE HEALTH SERVICES COST REVIEW COMMISSION.~~

~~(C) IF FEDERAL LAW IS AMENDED TO ALLOW THE STATE TO REGULATE SELF-INSURED ENTITIES AND MEDICARE, REGULATIONS ADOPTED UNDER THIS SECTION SHALL APPLY TO REIMBURSEMENT BY SELF-INSURED ENTITIES AND MEDICARE.~~

~~19-144.~~

~~(A) (1) ON OR BEFORE OCTOBER 1, 2012, THE COMMISSION, IN CONSULTATION WITH THE DEPARTMENT AND THE MARYLAND INSURANCE ADMINISTRATION, SHALL ADOPT REGULATIONS THAT SPECIFY CERTIFICATION REQUIREMENTS FOR ELECTRONIC HEALTH RECORDS.~~

~~(2) THE COMMISSION SHALL INCLUDE IN REGULATIONS ADOPTED UNDER THIS SUBSECTION A REQUIREMENT THAT ELECTRONIC HEALTH RECORDS MUST MEET ANY STANDARDS FOR ELECTRONIC HEALTH RECORDS THAT ARE PROVIDED FOR IN FEDERAL LAW.~~

~~(B) (1) ON OR BEFORE OCTOBER 1, 2012, THE COMMISSION SHALL DESIGNATE A MANAGEMENT SERVICE ORGANIZATION TO OFFER HOSTED ELECTRONIC HEALTH RECORDS AND OTHER MANAGEMENT SERVICES THROUGHOUT THE STATE.~~

~~(2) THE COMMISSION MAY USE AVAILABLE GRANTS AND LOANS FROM THE FEDERAL GOVERNMENT TO HELP SUBSIDIZE THE USE OF THE MANAGEMENT SERVICE ORGANIZATION BY HEALTH CARE PROVIDERS.~~

~~19-145.~~

~~(A) ON OR AFTER OCTOBER 1, 2014, EVERY HEALTH CARE PROVIDER IN THE STATE SHALL USE ELECTRONIC HEALTH RECORDS THAT ARE:~~

~~(1) CERTIFIED IN ACCORDANCE WITH STANDARDS ADOPTED BY THE COMMISSION; AND~~

~~(2) HAVE INTEROPERABILITY WITH, ARE CONNECTED TO, AND EXCHANGING DATA WITH THE HEALTH INFORMATION EXCHANGE DESIGNATED BY THE COMMISSION UNDER § 19-143 OF THIS SUBTITLE.~~

~~(B) (1) ON OR AFTER OCTOBER 1, 2014, A STATE REGULATED PAYOR MAY NOT REIMBURSE A HEALTH CARE PROVIDER THAT DOES NOT MEET THE REQUIREMENTS OF SUBSECTION (A) OF THIS SECTION FOR HEALTH CARE SERVICES.~~

~~(2) IF FEDERAL LAW IS AMENDED TO ALLOW THE STATE TO REGULATE SELF-INSURED ENTITIES AND MEDICARE, THIS SUBSECTION SHALL APPLY TO REIMBURSEMENT BY SELF-INSURED ENTITIES AND MEDICARE.~~

~~(C) ON OR AFTER OCTOBER 1, 2014, A HOSPITAL THAT IS REGULATED BY THE HEALTH SERVICES COST REVIEW COMMISSION THAT DOES NOT MEET THE REQUIREMENTS OF SUBSECTION (A) OF THIS SECTION MAY NOT BE REIMBURSED BY ANY PAYOR FOR HEALTH CARE SERVICES.~~

(A) ON OR BEFORE OCTOBER 1, 2009, THE COMMISSION AND THE HEALTH SERVICES COST REVIEW COMMISSION SHALL DESIGNATE A HEALTH INFORMATION EXCHANGE FOR THE STATE.

(B) ON OR BEFORE JANUARY 1, 2010, THE COMMISSION SHALL:

(1) REPORT, IN ACCORDANCE WITH § 2-1246 OF THE STATE GOVERNMENT ARTICLE, TO THE SENATE FINANCE COMMITTEE AND THE HOUSE HEALTH AND GOVERNMENT OPERATIONS COMMITTEE ON PROGRESS IN IMPLEMENTING THE REQUIREMENTS OF SUBSECTIONS (A) AND (D) OF THIS SECTION; AND

(2) INCLUDE IN THE REPORT RECOMMENDATIONS FOR LEGISLATION SPECIFYING HOW INCENTIVES REQUIRED FOR STATE-REGULATED PAYORS THAT ARE NATIONAL CARRIERS SHALL TAKE INTO ACCOUNT EXISTING CARRIER ACTIVITIES THAT PROMOTE THE ADOPTION AND MEANINGFUL USE OF ELECTRONIC HEALTH RECORDS.

(C) (1) ON OR BEFORE JANUARY 1, 2011, FOLLOWING CONSULTATIONS WITH APPROPRIATE STAKEHOLDERS, THE COMMISSION SHALL POST ON ITS WEBSITE FOR PUBLIC COMMENT AND SUBMIT TO THE GOVERNOR AND, IN ACCORDANCE WITH § 2-1246 OF THE STATE GOVERNMENT ARTICLE, THE SENATE FINANCE COMMITTEE AND THE HOUSE HEALTH AND GOVERNMENT OPERATIONS COMMITTEE A REPORT ON:

(I) THE DEVELOPMENT OF A COORDINATED PUBLIC-PRIVATE APPROACH TO IMPROVE THE STATE'S HEALTH INFORMATION INFRASTRUCTURE;

(II) ANY CHANGES IN STATE LAWS THAT ARE NECESSARY TO PROTECT THE PRIVACY AND SECURITY OF HEALTH INFORMATION STORED IN ELECTRONIC HEALTH RECORDS OR EXCHANGED THROUGH A HEALTH INFORMATION EXCHANGE IN THE STATE;

(III) ANY CHANGES IN STATE LAWS THAT ARE NECESSARY TO PROVIDE FOR THE EFFECTIVE OPERATION OF A HEALTH INFORMATION EXCHANGE;

(IV) ANY ACTIONS THAT ARE NECESSARY TO ALIGN FUNDING OPPORTUNITIES UNDER THE FEDERAL AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 WITH OTHER STATE AND PRIVATE SECTOR INITIATIVES RELATED TO HEALTH INFORMATION TECHNOLOGY, INCLUDING:

1. THE PATIENT-CENTERED MEDICAL HOME;
2. THE ELECTRONIC HEALTH RECORD DEMONSTRATION PROJECT SUPPORTED BY THE FEDERAL CENTERS FOR MEDICARE AND MEDICAID SERVICES;
3. THE HEALTH INFORMATION EXCHANGE; AND

4. THE MEDICAID INFORMATION TECHNOLOGY ARCHITECTURE INITIATIVE; AND

(V) RECOMMENDED LANGUAGE FOR THE REGULATIONS REQUIRED UNDER SUBSECTION (D) OF THIS SECTION.

(2) THE SENATE FINANCE COMMITTEE AND THE HOUSE HEALTH AND GOVERNMENT OPERATIONS COMMITTEE SHALL HAVE 60 DAYS FROM RECEIPT OF THE REPORT FOR REVIEW AND COMMENT.

(D) (1) ON OR BEFORE SEPTEMBER 1, 2011, THE COMMISSION, IN CONSULTATION WITH THE DEPARTMENT, PAYORS, AND HEALTH CARE PROVIDERS, SHALL ADOPT REGULATIONS THAT REQUIRE STATE-REGULATED PAYORS TO PROVIDE INCENTIVES TO HEALTH CARE PROVIDERS TO PROMOTE THE ADOPTION AND MEANINGFUL USE OF ELECTRONIC HEALTH RECORDS.

(2) INCENTIVES REQUIRED UNDER THE REGULATIONS:

(I) SHALL HAVE MONETARY VALUE;

(II) SHALL FACILITATE THE USE OF ELECTRONIC HEALTH RECORDS BY HEALTH CARE PROVIDERS IN THE STATE;

(III) TO THE EXTENT FEASIBLE, SHALL RECOGNIZE AND BE CONSISTENT WITH EXISTING PAYOR INCENTIVES THAT PROMOTE THE ADOPTION AND MEANINGFUL USE OF ELECTRONIC HEALTH RECORDS;

(IV) SHALL TAKE INTO ACCOUNT:

1. INCENTIVES PROVIDED TO HEALTH CARE PROVIDERS UNDER MEDICARE AND MEDICAID; AND

2. ANY GRANTS OR LOANS THAT ARE AVAILABLE TO HEALTH CARE PROVIDERS FROM THE FEDERAL GOVERNMENT; AND

(V) MAY INCLUDE:

1. INCREASED REIMBURSEMENT FOR SPECIFIC SERVICES;

2. LUMP SUM PAYMENTS;

3. GAIN-SHARING ARRANGEMENTS;

4. REWARDS FOR QUALITY AND EFFICIENCY;

5. IN-KIND PAYMENTS; AND

6. OTHER ITEMS OR SERVICES TO WHICH A SPECIFIC MONETARY VALUE CAN BE ASSIGNED.

(3) THE REGULATIONS NEED NOT REQUIRE INCENTIVES FOR THE ADOPTION AND MEANINGFUL USE OF ELECTRONIC HEALTH RECORDS, FOR EACH TYPE OF HEALTH CARE PROVIDER LISTED IN § 19-142(E) OF THIS SUBTITLE.

(4) IF FEDERAL LAW IS AMENDED TO ALLOW THE STATE TO REGULATE PAYMENTS MADE BY ENTITIES THAT SELF-INSURE THEIR HEALTH BENEFIT PLANS, REGULATIONS ADOPTED UNDER THIS SECTION SHALL APPLY TO THOSE ENTITIES TO THE SAME EXTENT TO WHICH THEY APPLY TO STATE-REGULATED PAYORS.

(E) THE HEALTH SERVICES COST REVIEW COMMISSION, IN CONSULTATION WITH HOSPITALS, PAYORS, AND THE FEDERAL CENTERS FOR MEDICARE AND MEDICAID SERVICES, SHALL TAKE THE ACTIONS NECESSARY TO:

(1) ASSURE THAT HOSPITALS IN THE STATE RECEIVE THE PAYMENTS PROVIDED UNDER § 4102 OF THE FEDERAL AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AND ANY SUBSEQUENT FEDERAL RULES AND REGULATIONS; AND

(2) IMPLEMENT ANY CHANGES IN HOSPITAL RATES REQUIRED BY THE FEDERAL CENTERS FOR MEDICARE AND MEDICAID SERVICES TO ENSURE COMPLIANCE WITH § 4102 OF THE FEDERAL AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AND ANY SUBSEQUENT FEDERAL RULES AND REGULATIONS.

(F) THE DEPARTMENT, IN CONSULTATION WITH THE COMMISSION, SHALL DEVELOP A MECHANISM TO ASSURE THAT HEALTH CARE PROVIDERS THAT PARTICIPATE IN THE MARYLAND MEDICAL ASSISTANCE PROGRAM RECEIVE THE PAYMENTS PROVIDED FOR ADOPTION AND USE OF ELECTRONIC HEALTH RECORDS TECHNOLOGY UNDER § 4201 OF THE FEDERAL AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AND ANY SUBSEQUENT FEDERAL RULES AND REGULATIONS.

(G) ON OR BEFORE OCTOBER 1, 2012, THE COMMISSION SHALL REPORT TO THE GOVERNOR AND, IN ACCORDANCE WITH § 2-1246 OF THE STATE GOVERNMENT ARTICLE, THE GENERAL ASSEMBLY ON PROGRESS ACHIEVED TOWARD ADOPTION AND MEANINGFUL USE OF ELECTRONIC HEALTH RECORDS BY HEALTH CARE PROVIDERS IN THE STATE AND RECOMMENDATIONS FOR ANY CHANGES IN STATE LAWS THAT MAY BE NECESSARY TO ACHIEVE OPTIMAL ADOPTION AND USE.

(H) (1) ON OR BEFORE OCTOBER 1, 2012, THE COMMISSION SHALL DESIGNATE ONE OR MORE MANAGEMENT SERVICE ORGANIZATIONS TO OFFER SERVICES THROUGHOUT THE STATE.

(2) THE COMMISSION MAY USE FEDERAL GRANTS AND LOANS TO HELP SUBSIDIZE THE USE OF THE DESIGNATED MANAGEMENT SERVICE ORGANIZATIONS BY HEALTH CARE PROVIDERS.

(I) ON AND AFTER THE LATER OF JANUARY 1, 2015, OR THE DATE ESTABLISHED FOR THE IMPOSITION OF PENALTIES UNDER § 4102 OF THE FEDERAL AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009:

(1) EACH HEALTH CARE PROVIDER USING AN ELECTRONIC HEALTH RECORD THAT SEEKS PAYMENT FROM A ~~STATE-DESIGNATED~~ STATE-REGULATED PAYOR SHALL USE ELECTRONIC HEALTH RECORDS THAT ARE:

(I) CERTIFIED BY A NATIONAL CERTIFICATION ORGANIZATION DESIGNATED BY THE COMMISSION; AND

(II) CAPABLE OF CONNECTING TO AND EXCHANGING DATA WITH THE HEALTH INFORMATION EXCHANGE DESIGNATED BY THE COMMISSION UNDER SUBSECTION (A) OF THIS SECTION; AND

(2) THE INCENTIVES REQUIRED UNDER SUBSECTION ~~(c)~~ (D) OF THIS SECTION MAY INCLUDE REDUCTIONS IN PAYMENTS TO A HEALTH CARE PROVIDER THAT DOES NOT USE ELECTRONIC HEALTH RECORDS THAT MEET THE REQUIREMENTS OF PARAGRAPH (1) OF THIS SUBSECTION.

19-706.

(TTT) THE PROVISIONS OF § 15-132 OF THE INSURANCE ARTICLE APPLY TO HEALTH MAINTENANCE ORGANIZATIONS.

Article – Insurance

15-132.

~~(A) IN THIS SECTION, "CARRIER" MEANS:~~

~~(1) AN INSURER;~~

~~(2) A NONPROFIT HEALTH SERVICE PLAN;~~

~~(3) A HEALTH MAINTENANCE ORGANIZATION;~~

~~(4) A DENTAL PLAN ORGANIZATION; OR~~

~~(5) ANY OTHER PERSON THAT PROVIDES HEALTH BENEFIT PLANS
SUBJECT TO REGULATION BY THE STATE.~~

~~(B) A CARRIER SHALL REIMBURSE HEALTH CARE PROVIDERS IN
ACCORDANCE WITH THE REQUIREMENTS OF TITLE 19, SUBTITLE 1, PART IV OF
THE HEALTH - GENERAL ARTICLE.~~

(A) IN THIS SECTION, "CARRIER" HAS THE MEANING STATED IN §
19-142 OF THE HEALTH - GENERAL ARTICLE.

(B) A CARRIER SHALL PROVIDE INCENTIVES TO HEALTH CARE
PROVIDERS IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 19, SUBTITLE
1, PART IV OF THE HEALTH - GENERAL ARTICLE.

Article - State Personnel and Pensions

2-501.

(a) In this subtitle the following terms have the meanings indicated.

(b) "Program" means the State Employee and Retiree Health and Welfare Benefits Program.

2-503.

(a) The Secretary shall:

(1) adopt regulations for the administration of the Program;

(2) ensure that the Program complies with all federal and State laws governing employee benefit plans; [and]

(3) each year, recommend to the Governor the State share of the costs of the Program; AND

(4) ENSURE THAT THE PROGRAM COMPLIES WITH TITLE 19, SUBTITLE 1, PART IV OF THE HEALTH – GENERAL ARTICLE.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect ~~October~~ July 1, 2009.

Approved by the Governor, May 19, 2009.

Appendix B: Options to Contribute and Consume Clinical Information from an HIE

Options to *contribute* clinical information to an HIE:

- Use of nationally recognized secure messaging protocols⁶⁵ to send clinical information to any of the following: providers, hospitals, an HIE connected to the State designated HIE, or the State designated HIE. At a minimum, providers must send a summary of care document, but may also send lab results, radiology results, immunization reports, advance directives, and other pertinent information.⁶⁶
- Use of nationally recognized secure messaging protocols to send the patient's clinical information to the patient. At a minimum, providers should send a summary of care document to a patient's preferred electronic personal health record (PHR). Providers may also send lab results to a patient's PHR.
- Use of an interface between the provider's EHR system and an HIE to, at a minimum, send patients' summary of care documents. The interface may also send and receive laboratory results, radiology results, immunization reports, advance directives, and other pertinent information to an HIE.
- Send an outbound summary of care document through a single interface between the hosted EHR solution and an HIE (the HIE should be sharing information with the State designated HIE), for those practices relying on a hosted EHR solution supplied by a hospital or hospital system only.

Options to *consume* clinical information:

- Use of an HIE portal⁶⁷ to query patient information, such as radiology images, laboratory results, and transcribed reports.
- Use of nationally recognized secure messaging protocols to receive electronic referrals and summaries of care from other providers.
- Receipt of electronic notifications that include pertinent patient information when a provider's patient is admitted or discharged from the hospital, when available.

Appendix C: Data Sources

The MHCC utilized the following data sources to provide a benchmark of the current progress Maryland providers are making in the adoption and meaningful use of EHRs:

- The Centers for Medicare and Medicaid Services (CMS) meaningful use data and reports;⁶⁸
- The CMS Medicare and Medicaid EHR Incentive Program, EHR products used for meaningful use report dataset;⁶⁹
- Maryland Regional Extension Center (REC) reported milestone data;
- National Ambulatory Medical Care Survey results on EHR adoption and meaningful use; 2001-2011;

⁶⁵ The current national standard is Direct messaging, which is a secure and encrypted e-mail service that supports electronic communication between physicians, nurse practitioners, physician assistants, and other health care providers.

This service is being offered by the statewide HIE. More information is available at: <http://www.crisphealth.org/ForProviders/CRISPDIRECTMessaging/tabid/282/Default.aspx>.

⁶⁶ Direct messaging costs about \$120-180 per year per Direct address.

⁶⁷ The CRISP Portal is a free tool available to clinical staff that allows providers to securely look up patient information through the Internet; the portal retrieves the clinical data from participants and displays it in a view-only screen at the point of care. More information is available at: http://www.crisphealth.org/LinkClick.aspx?fileticket=3_lbxVrj8UA%3d&tabid=172&mid=780.

⁶⁸ CMS releases monthly national and State reports regarding provider participation in the meaningful use programs.

Available at: <https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/DataAndReports.html>.

⁶⁹ CMS releases quarterly reports regarding the EHR systems providers are using to attest to the meaningful use program.

Available at: <https://explore.data.gov/Science-and-Technology/CMS-Medicare-and-Medicaid-EHR-Incentive-Program-el/eybk-7w2b>. ⁷³ See Appendix D for survey questions.

- Maryland State Board of Physicians Licensing Database; 2009-2011; and
- State-regulated payer EHR adoption incentive program application submission data.

To supplement the available data, additional information was gathered from Maryland providers using a brief survey tool and structured interviews.⁷³ The MHCC sought to ensure a diverse group of providers participated, including providers with various levels of EHR adoption, specialties, and geographic areas. The survey was sent via e-mail or fax to 64 providers or their office administrators who agreed to participate, and 30 completed surveys were received. Follow-up interviews were conducted via phone with 23 willing providers. Interviews allowed for more probing into the reasons provided within the survey and more details regarding the providers' specific experiences.

Appendix D: Provider Survey

Instructions

The Maryland Health Care Commission is conducting a brief survey to assess the progress made by providers toward adoption and meaningful use of electronic health records (EHRs) and to identify existing barriers and practical solutions to connecting ambulatory practices to the statewide health information exchange (HIE). The survey will only take a few minutes to complete. Responses will be kept confidential and reported anonymously.

The following terms are used throughout the survey.

Electronic Health Record (EHR): An electronic system that captures clinical patient information.

CMS Medicare and Medicaid EHR Incentive Program: The federal incentive program intended to encourage the adoption of EHRs. For more information visit: <https://www.cms.gov/EHRIncentivePrograms/>.

Meaningful Use: The set of requirements that providers must meet in order to show that they are meaningfully using their EHR system in order to qualify for the CMS Medicare and Medicaid EHR Incentive Program.

ONC-ATCB Certification: In order to qualify for the CMS Medicare and Medicaid EHR Incentive Program, providers must utilize an EHR system that has been certified by the Office of the National Coordinator -Authorized Testing and Certification Body (ONC-ATCB). For more information visit:

<http://onc-chpl.force.com/ehrcert>.

Health Information Exchange (HIE): The process of sending patient information electronically. An HIE organization is responsible for securely transporting patient information between providers.

Direct Project: A federal project to develop a standard messaging system, to enable providers to securely send patient health information electronically to other providers.

Regional Extension Center (REC): A resource for Maryland providers needing technical assistance in adopting EHRs. For more information visit:

<http://www.crisphealth.org/LinkClick.aspx?fileticket=uPjFqKJTJAA%3d&tabid=172&mid=780>.

Management Service Organization (MSO): Local organizations that provide technical assistance, guidance, outreach and education to support providers in demonstrating meaningful use. For more information visit:

http://mhcc.maryland.gov/electronichealth/mso/mso_providers.html.

State-Regulated Payer EHR Adoption Incentive Program: Maryland House Bill 706 created the program whereby primary care providers can apply to the six largest private payers in Maryland for incentive payments for the adoption of an ONC-ATCB certified EHR. For more information visit:

<http://mhcc.maryland.gov/electronichealth/stateincentive/stateehrincentive.html>.

Practice Questions

1. Is the practice:
 - ☐ Primary Care (family, general, geriatric, internal medicine, pediatric, or gynecologic practices)
 - ☐ Specialty, please specify: _____
2. Number of physicians in practice (Include Chiropractor and Doctor of: Medicine, Osteopathy, Dental Medicine or Surgery, Podiatric Medicine, Optometry)
 - ☐ 1
 - ☐ 2-3
 - ☐ 4-5
 - ☐ 6-7
 - ☐ 8-10
 - ☐ More than 10

EHR Adoption Questions

3. Does your practice currently use an EHR system?
 - ☐ Yes (*proceed to question 4*)
 - ☐ No (*proceed to question 10*) For those that are using an EHR:
4. How long has the practice been using an EHR (current and prior products)?
 - ☐ Less than one year
 - ☐ Between one and two years
 - ☐ Between two and three years
 - ☐ Three or more years

5. Are you currently using an ONC-ATCB certified version of your EHR system?
- ☐ Yes (*proceed to question 9*)
 - ☐ No (*proceed to question 6*)
 - ☐ Unsure (*proceed to question 9*)
6. Do you have plans to upgrade to a certified version?
- ☐ Yes (*proceed to question 8*)
 - ☐ No (*proceed to question 7*)
7. What are the challenges around upgrading your EHR to a certified version? (check all that apply)
- ☐ Upfront software cost of upgrading
 - ☐ Ongoing maintenance cost of the upgraded EHR
 - ☐ Disruption to the practice
 - ☐ Lack of vendor resources for the upgrade
 - ☐ The need to update hardware, such as computers and servers, before the EHR can be upgraded
 - ☐ Vendor does not offer a certified version of the product
 - ☐ Other: _____
8. What is the timeframe for upgrading?
- ☐ 0-3 months
 - ☐ 6-12 months
 - ☐ 13-18 months
 - ☐ 19-24 months
 - ☐ More than 24 months
 - ☐ Undecided
9. What are the main benefits for EHR adoption to your practice? (check all that apply)
- ☐ Increased workflow efficiencies
 - ☐ Increased staff productivity
 - ☐ Increased reimbursement, collection and revenue management
 - ☐ Decreased medical errors
 - ☐ Improved service to patients
 - ☐ Improved health and health care of patients
 - ☐ Connectivity with other entities
 - ☐ Decreased cost of service
 - ☐ Other, specify: _____

Proceed to question 14

For those who are not using an EHR:

10. Do you have plans to adopt a system?

- ☐ Yes (*proceed to question 11*) ☐ No (*proceed to question 12*)

11. What is the timeframe for purchasing and implementation?

- ☐ 0-3 months
☐ 6-12 months
☐ 13-18 months
☐ 19-24 months
☐ More than 24 months
☐ Undecided

Meaningful Use Questions

12. Do you have an understanding of the requirements of meaningful use?

- ☐ Yes ☐ No

13. Do you plan to attest for meaningful use?

- ☐ Yes (*proceed to questions 15*) ☐ No (*proceed to question 14*)

14. Why not? (*select all that apply*)

- ☐ I do not meet eligibility requirements
☐ Meaningful use requirements are too burdensome to meet
☐ Financial costs to the practice is too great
☐ Do not trust that any incentive payment would be received even if the requirements are met
☐ Concerns with liabilities that may be involved if attested
☐ Other, specify: _____

(*proceed to question 17*)

15. Which EHR Incentive Program do you plan to participant in?

- ☐ Medicare ☐ Medicaid

16. Please enter the timeframe you anticipate first attesting to meaningful use, calendar years:

- ☐ 2011
☐ 2012
☐ 2013
☐ 2014-2017
☐ 2018-2021

Questions on Other EHR Initiatives

17. Have you applied or do you plan to apply for the State-regulated payer EHR adoption incentive program?

- ☐ Yes ☐ No

18. Have you worked with a Management Service Organization (MSO)?

☐ Yes (*proceed to question 20*) ☐ No (*proceed to question 20*)

19. Would you have been able to adopt/implement and reach meaningful use without the services of the MSO?

☐ Yes ☐ No

20. Have you worked with the State Regional Extension Center (REC)?

☐ Yes (*proceed to question 21*) ☐ No (*proceed to question 22*)

21. Would you have been able to adopt/implement and reach meaningful use without the services of the REC?

☐ Yes ☐ No

Thank you for your time!! We greatly appreciate your responses.

Appendix E: Maryland Medicare Eligible Professional Meaningful Use Attestation by Specialty

The following chart identifies the specialties of eligible professionals (EPs) that have successfully demonstrated meaningful use. It details the total number of providers for each specialty, and the percent of the total number of EPs that have received a meaningful use payment.⁷⁰

Specialties	Maryland EPs	
	#	%
Internal Medicine	181	16
Family Practice	125	11
Podiatry	90	8
Cardiology	63	6
Urology	52	5
Gastroenterology	47	4
Pulmonary Disease	34	3
Endocrinology	30	3
Obstetrics/Gynecology	50	4
General Surgery	26	2
Optometrist	23	2
Otolaryngology	24	2
Ophthalmology	21	2
Neurology	25	2
Nephrology	17	2
Dermatology	11	1
Chiropractic	6	1
Dentist	0	0
Other	300	26
Total	1,125	100

As of June 2012

Appendix F: Medicare Meaningful Use Payments by State

The table below provides information on each state's Medicare population, the number of physicians practicing in the State, and the number of Medicare eligible professionals (EPs) that have been paid through July 2012.

⁷⁰ Information is from a data set that merges information about the Centers for Medicare and Medicaid Services, Medicare EHR Incentive Programs attestations with the Office of the National Coordinator for Health IT, *Certified Health IT Products List*. June 2012. Available at: <https://explore.data.gov/Other/Data-gov-Catalog/pyv4-fkgv>.

State	Medicare Population ⁷¹ #	Physicians ⁷² #	Medicare Eligible Professionals Paid ⁷³ #
Alabama	852,740	10,051	908
Alaska	65,356	1,616	37
Arizona	933,435	14,823	1,166
Arkansas	536,817	5,548	537
California	4,806,469	92,228	4,696
Colorado	631,387	12,621	1,057
Connecticut	571,020	11,770	841
Delaware	151,077	2,588	360
District of Columbia	78,860	5,851	149
Florida	3,390,801	45,641	4,276
Georgia	1,256,047	20,925	1796
Hawaii	210,009	3,414	278
Idaho	232,471	2,664	156
Illinois	1,854,402	34,116	3,917
Indiana	1,014,432	14,382	1,071
Iowa	519,726	6,883	845
Kansas	435,802	6,160	629
Kentucky	767,801	9,908	861
Louisiana	692,718	10,807	481
Maine	267,012	3,973	293
Maryland	794,039	19,480	1,058
State	Medicare Population ⁷⁵ #	Physicians ⁷⁶ #	Medicare Eligible Professionals Paid ⁷⁷ #

⁷¹ Kaiser Family Foundation: State Facts, Total Number of Medicare Beneficiaries, 2011. Data Source: Mathematica Policy Research analysis of CMS State/County Market Penetration Files. Available at:

<http://www.statehealthfacts.org/comparemaptable.jsp?ind=290&cat=6>.

⁷² Kaiser Family Foundation: State Facts, Total Professionally Active Physicians, May 2012. Data Source: Special data request on State Licensing Information on Redi-Physicians from Redi-Data, Inc. Available at:

<http://www.statehealthfacts.org/comparemaptable.jsp?typ=1&ind=934&cat=8&sub=100&sortc=3&o=a>. Physicians include MD and DO, as well as allergy and immunology, dermatology, geriatrics, medical genetics, neurology, ophthalmology, orthopedics, otolaryngology, pathology, plastic surgery, radiology, and urology.

⁷³ CMS Combined Medicare And Medicaid Payments by State Report. July 2012. Available at:

http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Medicare_Medicaid_PaymentsStatebyProviderType_July2012.pdf.

Massachusetts	1,067,929	28,580	3,341
Michigan	1,669,386	29,827	1,967
Minnesota	791,566	14,892	2,050
Mississippi	501,142	5,489	458
Missouri	1,009,613	16,022	1,495
Montana	171,499	2,049	137
Nebraska	280,441	4,313	414
Nevada	359,968	5,059	403
New Hampshire	221,168	3,561	915
New Jersey	1,336,988	24,379	2,328
New Mexico	316,973	4,684	139
New York	3,009,756	65,334	4,042
North Carolina	1,505,942	22,468	1,908
North Dakota	108,878	1,586	200
Ohio	1,909,462	33,442	3,492
Oklahoma	607,465	7,827	689
Oregon	625,594	9,953	1,368
Pennsylvania	2,290,509	39,481	4,028
Rhode Island	183,433	3,855	309
South Carolina	783,904	10,082	560
South Dakota	137,314	1,832	232
Tennessee	1,067,534	16,052	1,152
Texas	3,044,936	52,275	4,447
Utah	286,630	5,560	417
Vermont	112,831	1,972	87
Virginia	1,155,428	20,022	2,207
Washington	983,167	17,964	1,443
West Virginia	383,035	4,528	527
Wisconsin	918,344	14,616	1,804
Wyoming	80,994	1,035	68
Total	46,984,250	804,188	68,039

Appendix G: Other States' Strategies for Increasing EHR Adoption and Meaningful Use

The MHCC examined a number of states that are having success with achieving EHR adoption. Representatives from each state were interviewed about the programs they have in place and the strategies they are pursuing to encourage providers to adopt an EHR system and demonstrate meaningful use.

Massachusetts

In 2008, the Massachusetts legislature approved Chapter 305 of the Acts of 2008. Effective January 1, 2015: *The board shall require, as a standard of eligibility for licensure, that applicants show a predetermined level of competency in the use of computerized physician order entry, e-prescribing, electronic health records and other forms of health information technology, as determined by the board.*⁷⁸ The Department of Health and Human Services has determined a number of ways that providers can demonstrate competency, including:

- Adopting, implementing, or upgrading to a federally certified EHR and qualifying for the Medicare and Medicaid EHR Incentive Program;
- Satisfying the standards and certification requirements for EHR from the Office of the National Coordinator;
- Submitting proof of completion of at least three hours of a hospital's health IT training program; or
- Obtaining at least three credits of continuing professional development in basic electronic health records systems.⁷⁹

Providers will also have to complete the above to maintain their license. The legislation applies to physicians of all specialties, but does not apply to allied health professionals such as dentists or optometrists. In addition to the licensing requirement for providers, Massachusetts also requires hospitals to adopt an EHR system by October 2012 or they face losing their license. Consequently, hospital EHR adoption is currently at approximately 70 to 75 percent, with 100 percent adoption expected by October 2012.

Minnesota

In 2008, the Minnesota Legislature passed the *2015 Interoperable Electronic Health Record Mandate*, requiring all hospitals and health care providers to adopt a certified interoperable EHR by January 1, 2015.⁸⁰ In addition, an *e-Prescribing Mandate* was passed the same year, requiring hospitals, pharmacies, and health care professionals to utilize e-prescribing by January 1, 2011. In addition to these mandates, the Minnesota legislature also appropriated \$14.6 million in loans and

⁷⁸ MGL Title XVI, Ch. 112 §2. The 187th General Court of the Commonwealth of Massachusetts, 2012. Available at:

<http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleXVI/Chapter112/Section2>.

⁷⁹ 243 CMR 2.06(2)(d). Massachusetts Board of Registration in Medicine, 2012. Available at:

<http://www.mass.gov/eohhs/docs/borim/reg-243-cmr-2.pdf>.

⁸⁰ 2011 Minnesota Statutes. 62J.495. Minnesota Office of the Revisor of Statutes, 2011. Available at:

<https://www.revisor.mn.gov/statutes/?id=62J.495>.

grants to assist providers with adopting EHRs.⁸¹ Since the legislation passed, the Minnesota Department of Health has been working to support providers and hospitals in meeting the mandates. The Department has developed guides to assist providers in choosing and implementing an EHR, utilizing e-prescribing, and connecting to a health information exchange. The Department has also created grant programs, supported the Regional Extension Center program, and obtained federal funding through the State HIE Cooperative Agreement program. Through all of these efforts, Minnesota has achieved a 72 percent adoption rate among ambulatory practices and a 93 percent adoption rate among hospitals.⁸²

North Carolina

The North Carolina Area Health Education Center (AHEC) is the REC for North Carolina. The NC AHEC has worked with the nine local AHECs to provide localized support to providers in adopting an EHR system and meeting meaningful use. In addition to the REC program, Blue Cross Blue Shield of North Carolina (BCBSNC) has partnered with Allscripts to subsidize the purchase of the MyWay EHR for up to 600 primary care providers and 39 free clinics. For primary care providers, BCBSNC covers 85 percent of the EHR license fee and 100 percent of the cost for free clinics. As of March 2012, the program had 26 physicians and 12 free clinics enrolled.

Ohio

The Ohio Health Information Partnership (The Partnership) is the regional extension center (REC) for Ohio. One of the ways The Partnership has increased EHR adoption is through the use of physician champions that are located in communities across the State. The physician champions are well known in their communities and through their relationships encourage providers to adopt EHR systems. In addition, Ohio is exploring quality-based care delivery models through two programs, the behavioral health home initiative and patient centered medical homes (PCMH). The behavioral health home initiative requires the use of a certified EHR system in order for providers to participate in the program. While the PCMH program does not require the use of an EHR system, providers participating in the program are utilizing EHRs to create efficiencies in their practice that enable them to spend additional time with patients in the program. A number of providers have indicated they would not have enough time for the program without their EHR system.

Rhode Island

In order to help providers with choosing an EHR, the Rhode Island REC created the vendor marketplace. The marketplace includes EHR vendors that have been pre-qualified by the REC based on the vendor's stability, strategy to meet meaningful use objectives, experience in the Rhode Island EHR market and in-depth assessment of their services. Each vendor has a vendor profile that includes general company information as well as system capabilities. The participating vendors agreed to a Standard Uniform Software Licensing and Services Agreement for Rhode Island providers or a standard contract, but they may also use a standard contract with modifications as

⁸¹ Minnesota e-Health Initiative: Report to the Minnesota Legislature 2012. Minnesota Department of Health, March 2012. Available at: <http://www.health.state.mn.us/e-health/leg rpt2012.pdf>. ⁸² Ibid.

long as their vendor profile states this. The vendor marketplace strives to make choosing an EHR system easier for providers.

In addition, Rhode Island requires payers in the State to take a certain percentage of their income and use it for programs for primary care providers. The Health Insurance Commissioner sets the criteria for what they can count towards this requirement. Under this requirement, some payers are offering higher fee schedules to primary care providers who qualify and successfully demonstrate meaningful use. Some payers, such as Blue Cross Blue Shield of Rhode Island (BCBSRI) have also implemented a fee schedule reduction for primary care providers who do not meet the requirements of the Medicare and Medicaid EHR Incentive program. BCBSRI also encourages providers participating in its PCMH program, called Patients First in the First State, to use EHR systems.

Appendix H: State-Regulated Payer EHR Adoption Incentive Program Activity

The State-regulated payer EHR adoption incentive program provides practices with financial incentives to adopt an EHR system. Six payers participate in the program. In order to receive an incentive payment, practices must first submit an application to each payer. The payers must follow-up with an acknowledgement letter to the practice. The table below provides the number of practices that have applied to each payer, and the number of acknowledgement letters returned to the practices. The table also lists the number of inquiries each payer has received about the program.

Payer*	Applications Received**	Application Acknowledgement Letters Sent	Payment Requests Received	Inquiries Received
Aetna, Inc.	173	173	10	50
CareFirst BlueCross BlueShield	151	151	11	3
Cigna HealthCare Mid-Atlantic	161	128	8	13
Coventry Health Care	43	43	1	0
Kaiser Permanente	123	113	7	1
UnitedHealthcare	147	112	7	14
Total	798	720	44	81

*The MHCC received the above data from the six participating payers.

**Application data is from program commencement, October 2011, through July 2012.

Appendix I: Regional Extension Center Milestones

The Regional Extension Center (REC) provider technical assistance to priority care providers (PCPs) in adopting and using an electronic health record (EHR). The REC contracts with State designated management service organizations (MSOs) to provide services to PCPs. The table below provides the number of PCPs that have reached milestones one, two, and three of the REC program by MSO as of July 2012.

MSO	Milestone 1*: Sign-Up		Milestone 2**: Go-Live		Milestone 3***: Meaningful Use	
	#	%	#	%	#	%
Adventist	31	1.8	24	2.4	0	0.0
Anne Arundel	14	0.8	9	0.9	0	0.0
AVS Medical	2	0.1	0	0.0	0	0.0
Calvert Memorial	30	1.7	30	3.0	0	0.0
Children's IQ	109	6.3	104	10.3	1	1.1
CHIP	170	9.8	120	11.8	0	0.0
Darnell & Associates	4	0.2	1	0.1	1	1.1
D'Souza	21	1.2	1	0.1	0	0.0
Frederick Memorial	65	3.8	63	6.2	0	0.0
GBMC	14	0.8	7	0.7	3	3.4
MedChi	668	38.5	311	30.7	12	13.5
MedPlus	39	2.3	10	1.0	0	0.0
MedTech	16	0.9	15	1.5	3	3.4
Syndicus	10	0.6	10	1.0	3	3.4
Sydian Solutions	17	1.0	7	0.7	0	0.0
Wavelength	374	21.6	214	21.1	59	66.3
ZaneNet Connect	149	8.6	87	8.5	7	7.8
Total	1,733	100	1,013	100	89	100

*Milestone 1: A PCP that has signed a participation agreement with a management services organization.

**Milestone 2: A PCP that has adopted an EHR and is using certain functionalities of the system.

***Milestone 3: A PCP that has achieved meaningful use defined by the Centers for Medicare & Medicaid Services.

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