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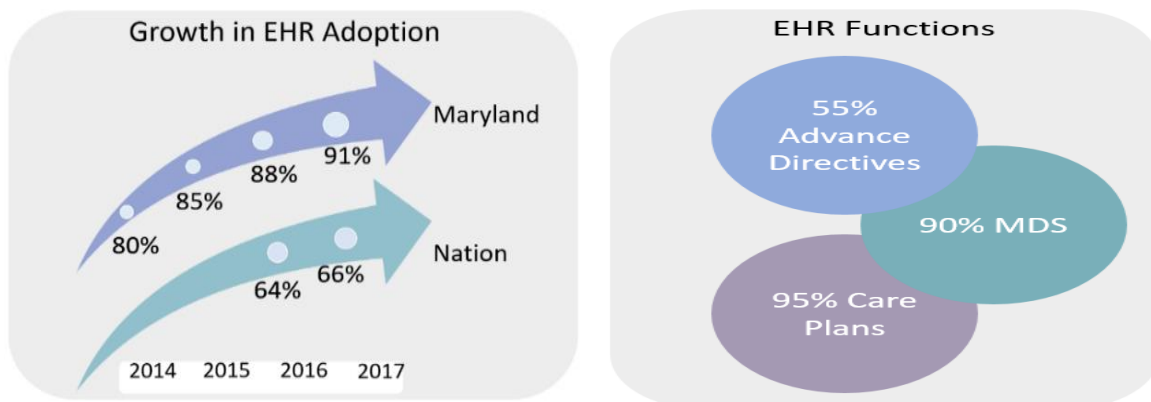
Health Information Technology
A Snapshot of Diffusion in Nursing Homes

The Landscape

Health information technology (health IT) holds promise for improving quality, increasing patient safety, and reducing costs. Health IT enables access to information that at one time was not easily accessible. Unlike hospitals and ambulatory care providers, nursing homes have not received federal incentives to adopt health IT. Diffusion barriers such as cost, lack of financial resources to invest in technology, resistance to change, and training support has impeded diffusion. While nursing homes[1] have been slow to adopt the technology, they are beginning to embrace aspects of health IT.[2] Precise rates of health IT use are unknown as technology tends to support administrative or operational activities more so than care delivery.[3]

Electronic Health Records

Widespread adoption of electronic health records (EHRs) are critical to transforming care delivery.[4] EHRs are longitudinal records where information generated by various encounters inform future treatment decisions. EHRs contain medical information, allow access to evidence-based tools, reduce the need for repeat or unnecessary tests, store advance directives,[5] and streamline workflows.[6] EHRs include information that is required to complete the Minimum Data Set (MDS),[7] a federally mandated standardized assessment of patients at admission and discharge.

Growth in EHR Adoption

Maryland: 80%, 85%, 88%, 91%
Nation: 64%, 66%
2014 2015 2016 2017

EHR Functions

55% Advance Directives
90% MDS
95% Care Plans

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[1] Referred to as comprehensive care facilities under Maryland law.

[2] A National Report of Nursing Home Quality and Information Technology available at: nursinghomehelp.org/wp-content/uploads/2018/05/JNCQ-MOQI-NH-Qual-and-IT-333-2018.pdf.

[3] Building a Health Information Technology Infrastructure in Long-Term Care available at: www.managedhealthcareconnect.com/articles/building-health-information-technology-infrastructure-long-term-care.

[4] Office of the National Coordinator for Health Information Technology (ONC), Health IT in Long-term and Post Acute Care, December 2013. Available at: www.healthit.gov/sites/default/files/pdf/HIT_LTPAC_IssueBrief031513.pdf.

[5] Advance directives are legal documents that allows an individual to direct their medical care, particularly treatment preferences in an emergency or near end of life. A care plan is required by Medicare and identifies patient needs to ensure appropriate care and safe transitions from one setting to another.

[6] Information obtained from the ONC website at: www.healthit.gov/faq/what-electronic-health-record-ehr.

[7] The MDS contains items that measure physical, psychological and psycho-social functioning, providing a multi-dimensional view of a patient's functional capacities. The MDS plays a key role in Medicare and Medicaid reimbursement and monitoring quality of care provided in nursing homes. More information is available at: www.healthypeople.gov/2020/data-source/minimum-data-set.

Health Information Exchange

HIEs are entities that enable electronic health information sharing across care settings.[8] Access to clinical information through CRISP's clinical query portal (portal) helps providers coordinate care. Information included in the portal is not integrated into most EHRs. Accessing the portal often causes disruption to provider workflows, which can diminish its use. Encounter notification service provide users with a patient's current hospital status.[9] In recent years, exchange functions that were once unique to HIEs are now included in some EHRs. In general, HIE is a low priority (29 percent) for nursing homes due to the lack of interoperability of EHRs (7 percent) and a culture that continues to rely on manual processes.[10]
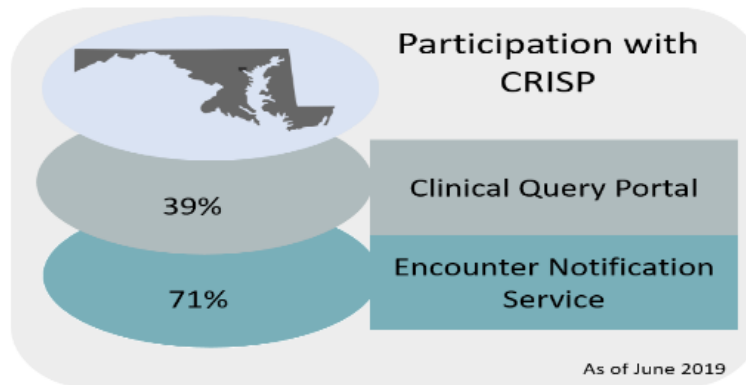
Rewarding for Value

Risk-sharing has become part of the health care reform landscape. Value-Based Programs (VBPs) reward providers for the quality of care they provide. The *Protecting Access to Medicare Act of 2014*[11] requires the Centers for Medicare & Medicaid Services (CMS) to implement a VBP to prevent hospital readmissions whenever possible as an opportunity to control costs by improving quality. CMS reports that approximately 23 percent of patients discharged from hospitals to nursing homes are readmitted within 30 days, at a financial cost of about $10,362 per readmission, roughly $4 billion per year.[12] Beginning October 2018, nursing homes receive payment adjustments ranging from a 2 percent reduction to potentially a 1.5 percent increase based on re-hospitalization rates in the prior years.[13] A robust health IT infrastructure is essential to nursing homes as they strive to earn VBP incentives.

> *Data source: Maryland Health Care Commission's Annual Long Term Care Survey. Nursing homes are required to complete the survey: 2014 N= 230; 2015 N= 230; 2016 N= 229; 2017 N=228.*

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[8] Information obtained from the ONC website at: www.healthit.gov/topic/health-it-and-health-information-exchange-basics/what-hie.

[9] ENS , visit history, and whether they have recently been admitted, discharged, or transferred between care settings

[10] Skilled Nursing Facilities Lag Acute Care Settings in EHR Adoption, HIE Use at: www.fiercehealthcare.com/tech/patient-handoffs-to-post-acute-care-providers-still-largely-a-manual-process-report.

[11] Protecting Access to Medicare Act of 2014, 42 USC §113-193 (2014).

[12] Brennan N, Engelhardt T. Data Brief: Sharp reduction in avoidable hospitalizations among long-term care facility residents. The CMS Blog published January 17, 2017 available at: wayback.archive-it.org/2744/20170118123718/https://blog.cms.gov/.

[13] More information is available at: www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/value-based-programs/value-based-programs.html.