

Health Information Technology

An Assessment of Maryland Acute Care Hospitals

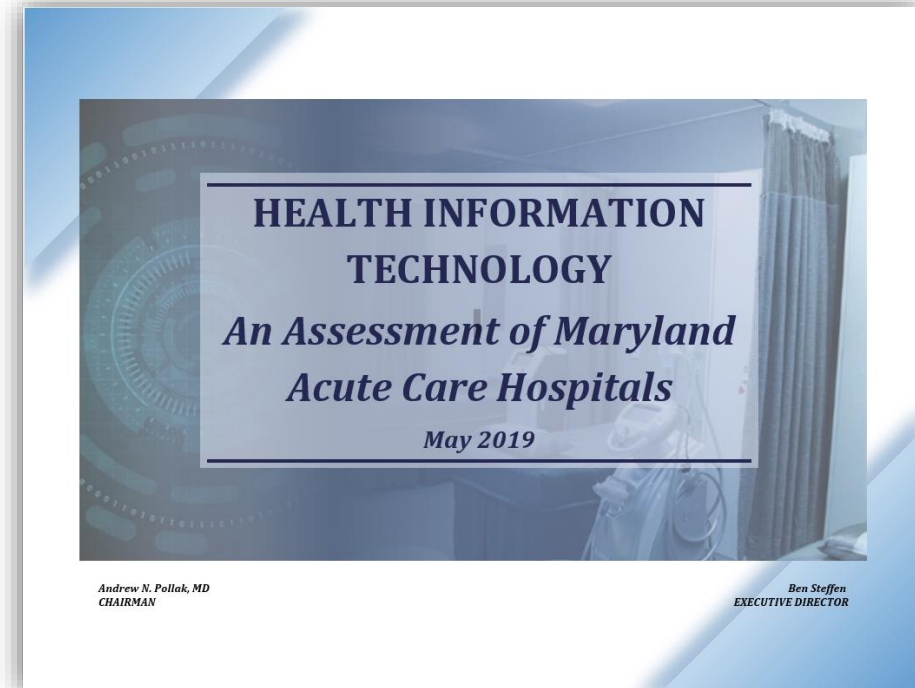
Commission Brief
June 20, 2019



The MARYLAND
HEALTH CARE COMMISSION

Overview

- Hospital health information technology (health IT) assessment conducted annually since 2008
- Assessment has evolved from evaluating hospital adoption to perceived value of health IT post-HITECH* and includes focus areas for population health and cybersecurity
- Infographic dashboards organized by five key categories and highlight findings with accompanying value statements supported by literature



**Health Information Technology for Economic and Clinical Health Act of 2009*

Highlights

- After a decade of investing in building a health IT infrastructure, focus is shifting toward leveraging data to improve care¹
- Nearly all hospitals have possessed certified EHR technology since 2015 (adoption in Maryland: 100%; Nation: 96%)²
- Statewide, hospital use of regional HIEs (100%) exceeds the nation (52%); EHR vendor-mediated networks gaining traction³
- Telehealth adoption by hospitals locally (92%) exceeds the nation (76%)⁴
- Hospitals statewide consistently report security risk assessments (100%) in three key areas as compared to about three quarters of hospitals nationally (71%-75%)⁵

Note: Refer to Appendix for references (1-5)



POPULATION HEALTH

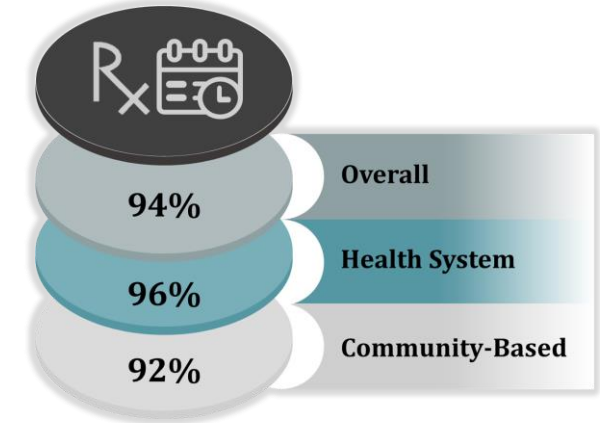
Population Health

- Building population health capabilities requires more than just a firm investment in technology
 - Hospital characteristics influence focus areas for population health; alignment among areas of focus that center on collaboration, data sharing, and analysis
 - Data driven strategies fueling interest in non-traditional data (e.g., prescription medication history and socioeconomic information)

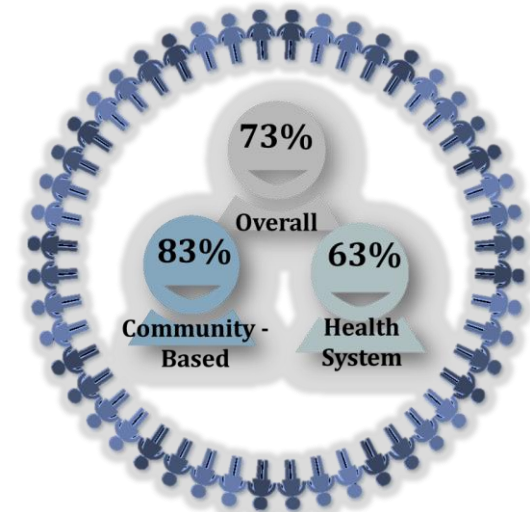
Note: See Appendix for more information on hospital top three health IT strategic focus areas

Hospital Interest in Non-Traditional Data

Patient Medication History



Social Determinants of Health





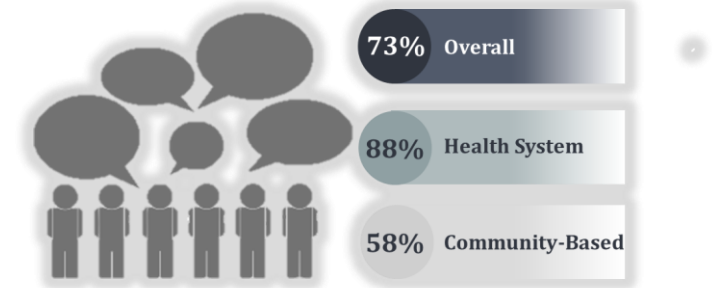
ELECTRONIC HEALTH RECORDS

Electronic Health Records

- Improving the seamless flow of information within a health care infrastructure and critical in revolutionizing how digital data can transform health care
 - Viewed favorably in supporting quality improvement through better communication, patient safety, and utilization management
 - Viewed less favorably for cost-controlling and improving physician satisfaction

Hospital Views about Value

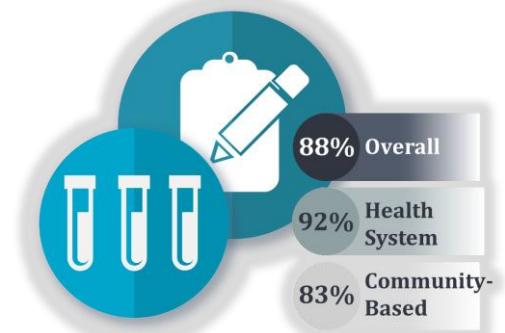
Enhances Interdisciplinary Communication



Reduces Adverse Medical Events



Reduces Unnecessary Utilization



Note: See Appendix for information on hospital views about EHRs lowering cost and contributing to physician satisfaction



HEALTH INFORMATION EXCHANGE

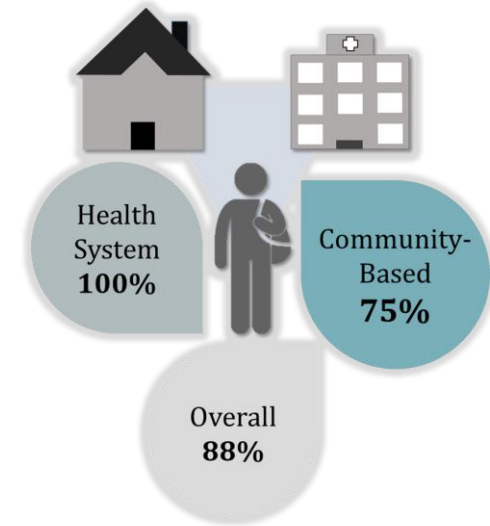
Health Information Exchange

- Critical functionality for care coordination and population health, though limited by interoperability barriers that impede keeping pace with rapidly emerging delivery system reforms
 - Viewed favorably for improvements in care coordination and transitions
 - Viewed less positively for helping increase awareness of primary care services
 - Satisfied with CRISP, with high reliance on HIE services in the emergency department

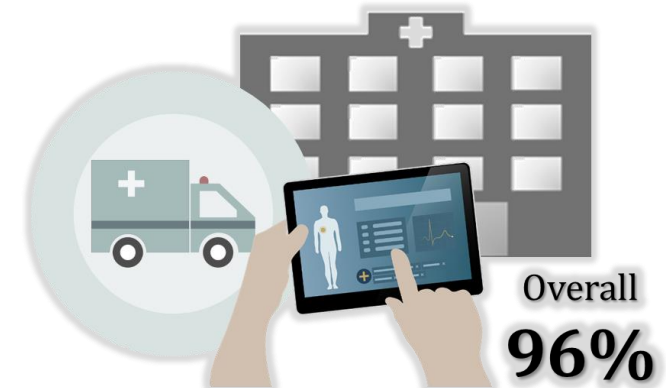
Note: See Appendix for more information on hospital views about HIE increasing awareness of primary care services

Hospital Views about Value

Improves Care Coordination



Emergency Department Reliance on CRISP

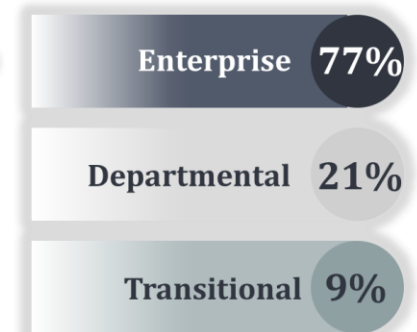
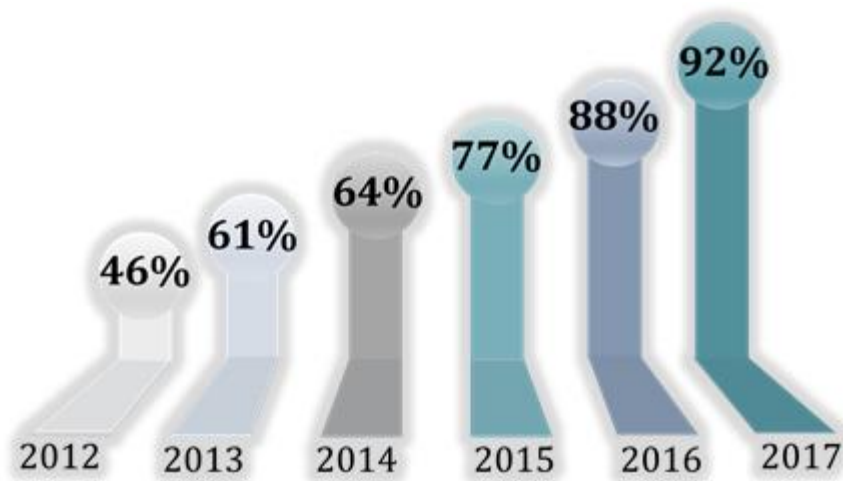




TELEHEALTH

Telehealth

- Building momentum in its promise to address supply and demand challenges in and out of the hospital
 - Hospitals are centralizing implementation and management of telehealth across disciplines and specialties to support a broader value-based care strategy.



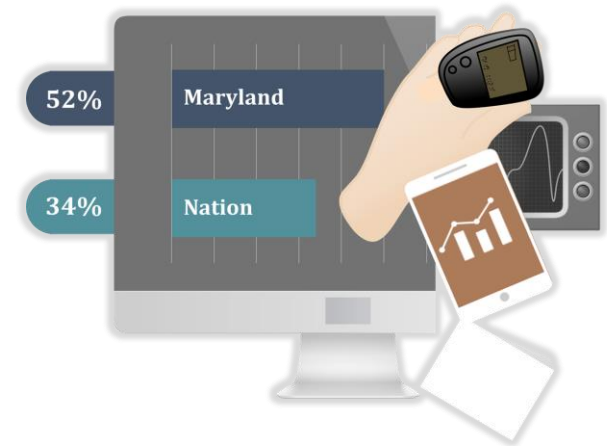
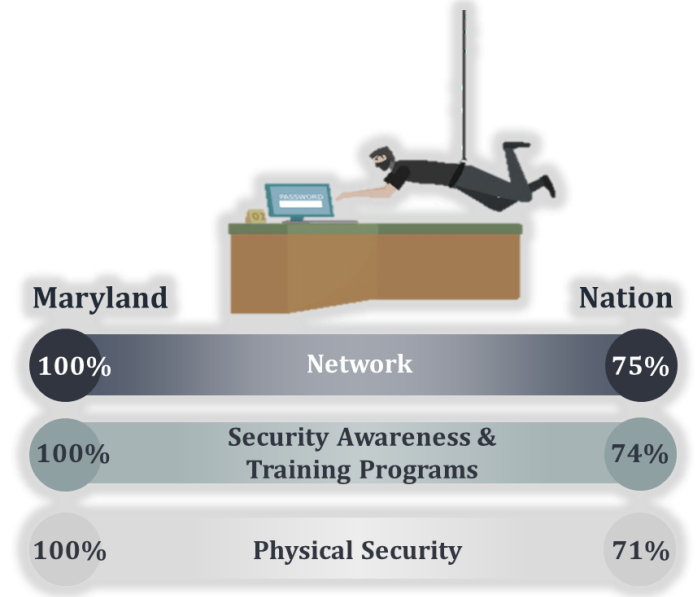


CYBERSECURITY

Cybersecurity

- A strategic issue for hospitals once considered easy targets with obsolete defenses
 - Hospital security risk assessments (SRA) evolving with the threat landscape that requires new and improved security measures to protect data and patient safety
 - Patient safety is a top medical device security concern requiring more uniformity among hospitals and device manufacturers to ensure protections for an array of devices connected to their networks

SRA Components





COMMISSIONER COMMENTS



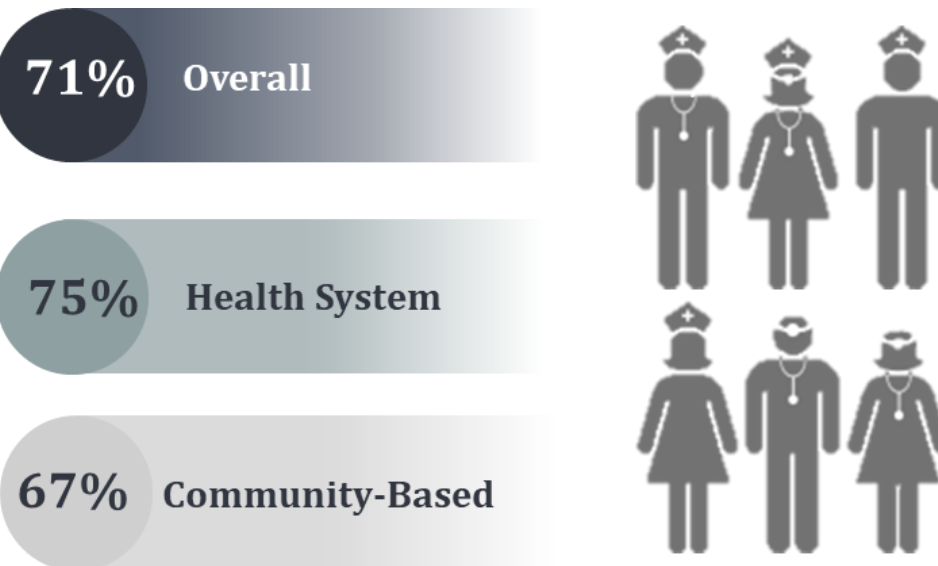
APPENDIX

References

- 1.Stanford Medicine. 2017 Health Trends Report: *Harnessing the Power of Data in Health*, June 2017. Available at: <https://med.stanford.edu/content/dam/sm/sm-news/documents/StanfordMedicineHealthTrendsWhitePaper2017.pdf>.
- 2.Office of the National Coordinator for Health Information Technology. *Non-federal Acute Care Hospital Electronic Health Record Adoption*, 2017. Available at: <https://dashboard.healthit.gov/quickstats/pages/FIG-Hospital-EHR-Adoption.php>.
- 3.Journal of the American Medical Association. *Gaps in Health Information Exchange Between Hospitals that Treat Many Shared Patient*, Volume 25, Issue 9, September 2018, Pages 1114-1121. Available at: <https://doi.org/10.1093/jamia/ocy089>. (See Exchange Methods and Perceived Value - Community HIE appeared moderately widely adopted (52%)).
4. American Hospital Association. *Fact Sheet: Telehealth*, February 2019. Available at: www.aha.org/system/files/2019-02/fact-sheet-telehealth-2-4-19.pdf.
- 5.HIMSS. *Cybersecurity Survey*, 2018. Available at: www.himss.org/sites/himssorg/files/u132196/2018_HIMSS_Cybersecurity_Survey_Final_Report.pdf.

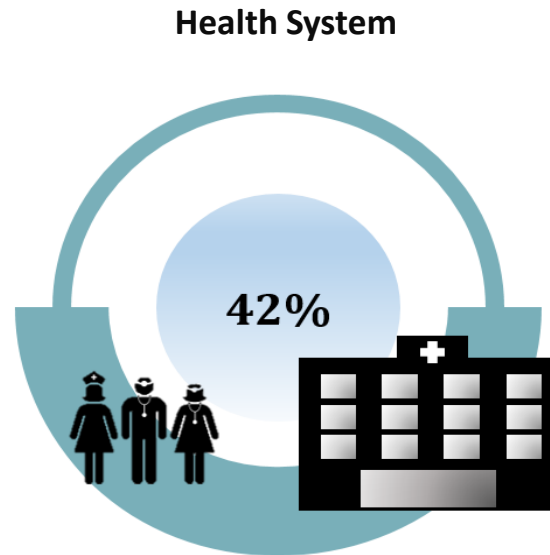
#1 Health IT Strategic Focus Areas

Forming or expanding clinically integrated networks

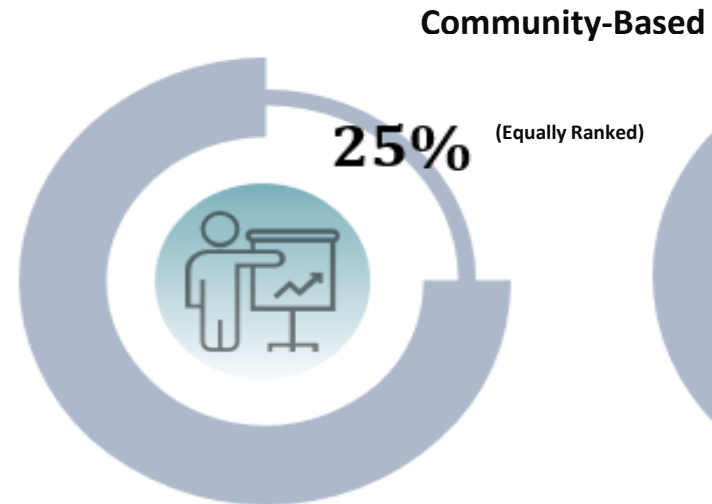


#2 Health IT Strategic Focus Areas

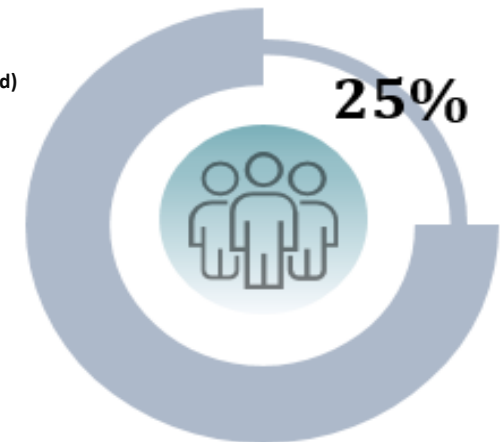
Improving physician-hospital alignment



Advancing predictive analytic capabilities

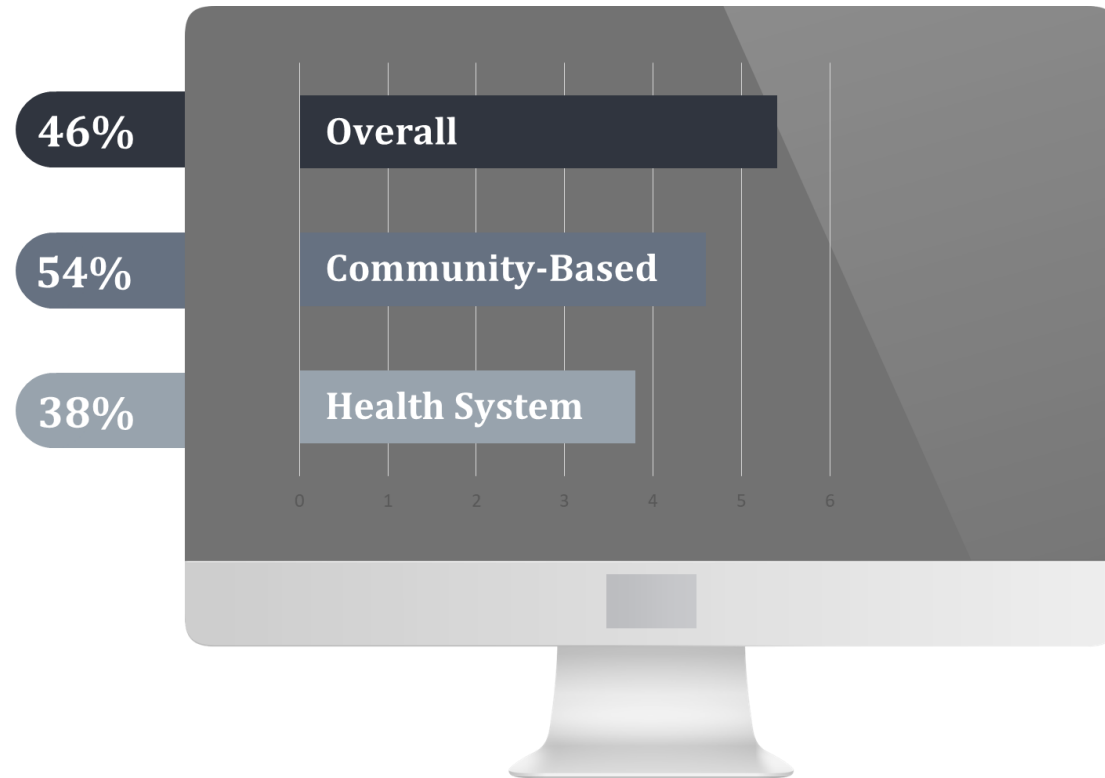


Adapting to consumer demands and expectations



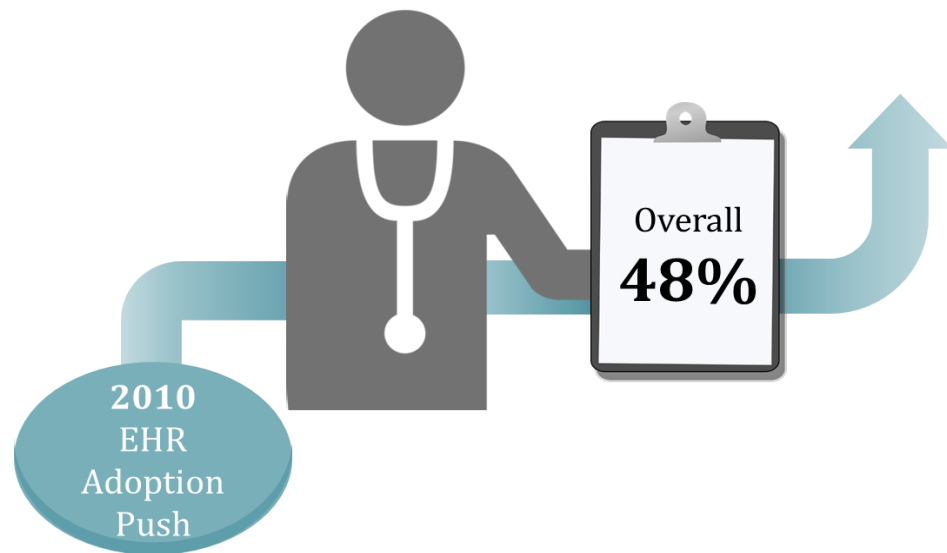
#3 Health IT Strategic Focus Areas

Implementing telehealth

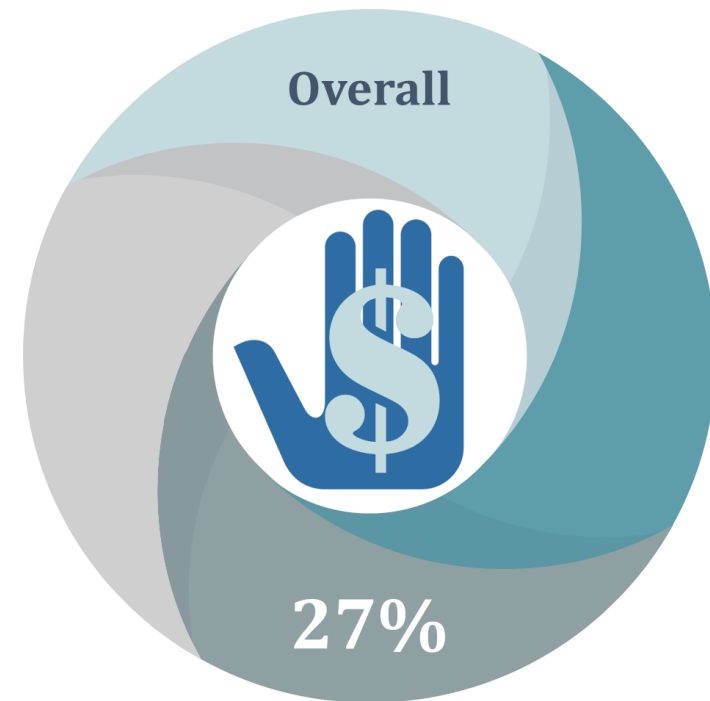


EHRs: Hospital Views about Value

Partially contributes to physician satisfaction

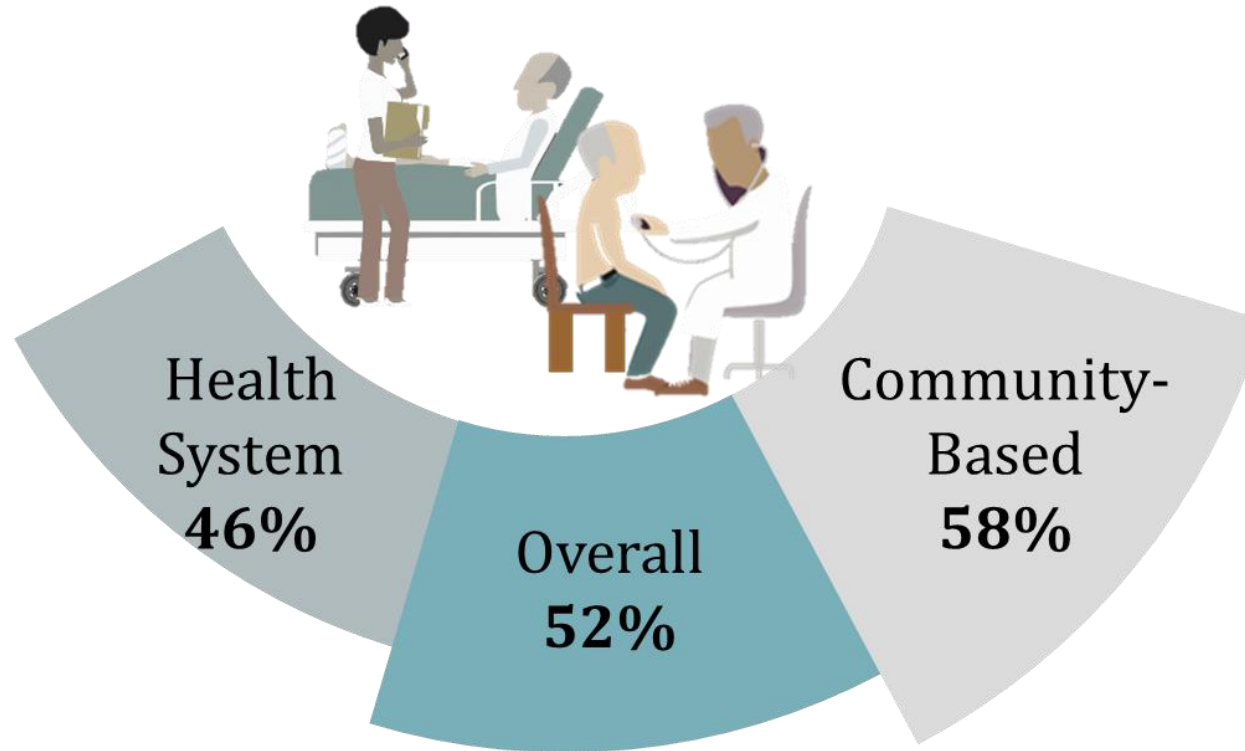


Cost-controlling capability not widely evident



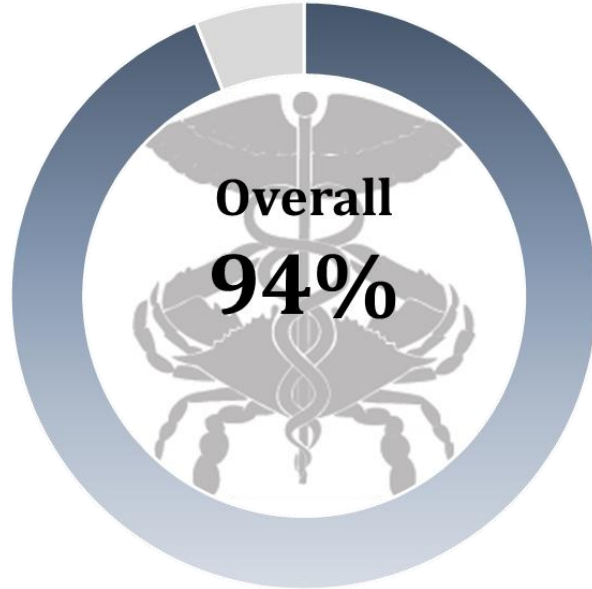
HIE: Hospital Views about Value

Increases awareness of primary care services

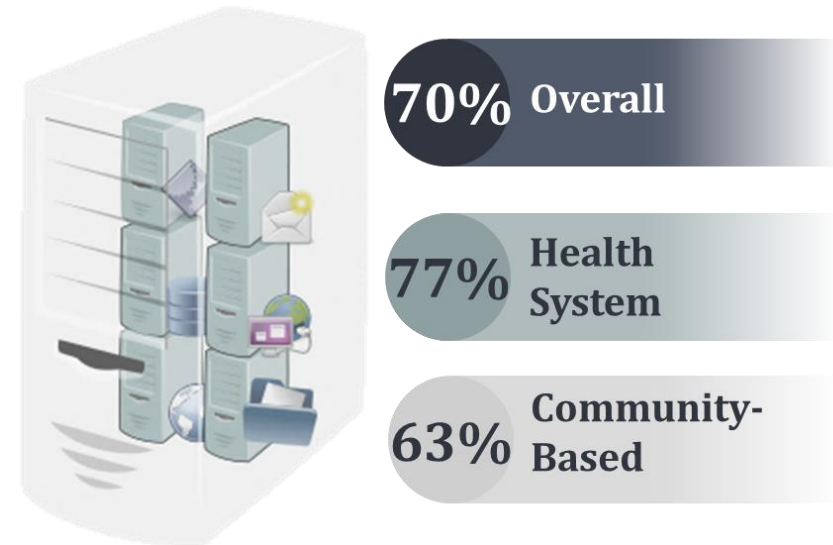


HIE: Hospital Views about Value *(continued...)*

Satisfied with CRISP HIE services



CRISP reporting services central to improving quality of care



Cybersecurity: Security Risk Assessment Frequency

