The Office of the National Coordinator for Health Information Technology

## Health Information Exchange:

What is it and How is it Useful?

# Health Information Exchange (HIE) refers to the secure and timely sharing of electronic health data across the boundaries of health care institutions.

An HIE organization is an entity that oversees or facilitates the exchange of health information among a diverse group of healthcare stakeholders within and across regions, according to nationally recognized standards. The exchange of health information has the potential to transform the way care is delivered by improving physician workflow, fostering increased communication among providers and patients, improving the ability to access and analyze data, and reducing healthcare costs.

## Benefits of HIE

- Improves communication between health care providers during a transition of care.
- Increases comprehensiveness and accuracy of patient data.
- Provides the assurance that individuals and their care teams have the right information available at the point of care, which enables fully-informed care decisions and reduces unnecessary hospital readmissions and length of stay.
- Increases efficiency by saving Long Term Post-Acute Care (LTPAC) team's significant time and money upon admission.

#### Long-term economic sustainability

Emerging payment models will reward quality and outcomes, rather than individual services. Health IT and exchange of health information support this type of reimbursement model and is crucial for long-term economic sustainability.

- Enhances ease of public health reporting and population health analytics.
- May increase market competitiveness of the LTPAC facility by increasing its referral network.

### Why do we need HIE?

- Three-quarters of hospitals electronically exchanged health information with outside providers in 2014.<sup>1</sup>
- When multiple physicians are treating an individual following a hospital discharge, 78 percent of the time information about the individual's care is missing.<sup>2</sup>



- Poor care coordination increases the chance that an individual will suffer from a medication error or other health care mistake by 140%.<sup>3</sup>
- Sixty percent of medication errors occur during times of transition.<sup>4</sup>

140% increased chance that individuals will suffer from a medication error

## **Current Landscape**

Long-term post-acute care facilities have much lower Electronic Health Record (EHR) adoption rates than acute care settings. One recent study indicated that EHR adoption rates in long-term acute care hospitals and rehabilitation hospitals were less than half those among short-term acute care hospitals and only six percent of long-term acute care hospitals and four percent of rehabilitation hospitals had a basic EHR.<sup>5</sup> This study also noted a low level of exchange of health information among these settings, particularly the ability to send and receive data electronically to inform care. Limited funding, workforce experience and technological expertise, as well as lack of participation from local hospitals, acute care facilities and Medicaid are all factors contributing to the low level of EHR and HIE adoption among LTPAC facilities.

<sup>&</sup>lt;sup>1</sup> Swain, Matthew, MPH, Dustin Charles, MPH, Vaishali Patel, PhD, MPH, and Talisha Searcy, MPA. "ONC Data Brief 24: Health Information Exchange among U.S. Non-federal Acute Care Hospitals: 2008-2014." (n.d.): n. pag. The Office of the National Coordinator for Health IT, Apr. 2015. Web.

<sup>&</sup>lt;sup>2</sup> Van Walraven, C., Bennett, C., Jennings, A., Austin, P. C., & Forster, A. J. (2011). Proportion of hospital readmissions deemed avoidable: a systematic review. *CMAJ : Canadian Medical Association Journal*, *183*(7), E391–E402. http://doi.org/10.1503/cmaj.101860

<sup>&</sup>lt;sup>3</sup> Lu, et al., 2011 Lu, C. Y and E. Roughead. "Determinants of Patient-Reported Medication Errors: A Comparison Among Seven Countries." International Journal of Clinical Practice (April 6, 2011): 65: 733–740. doi: 10.1111/j.1742-1241.2011.02671.x. http://onlinelibrary.wiley.com/doi/10.1111/j.1742-1241.2011.02671.x/pdf

<sup>&</sup>lt;sup>4</sup> JD Rozich & RK Resar, Medication Safety: One Organization's Approach to the Challenge, J. Clin. Outcomes Manag. 8:27-34 (2001).

<sup>&</sup>lt;sup>5</sup> Wolf L, Harvell J, Jha AK. Hospitals ineligible for federal meaningful-use incentives have dismally low rates of

adoption of electronic health records, Health Affairs. 2012 Mar;31(3):505-13.