Health Information Exchange 101
Your Introduction to HIE and It’s Relevance to Senior Living
Objectives for Today

✓ **Provide** an introduction to Health Information Exchange

✓ **Define** a Health Information Exchange (HIE) and its basic components

✓ **Understand** concepts of exchanging Electronic Protected Health Information (EPHI)
The Affordable Care Act requires providers of health care to be able to share health information about patients with each other to achieve goals related to cost savings, enhanced care, and enhanced patient satisfaction with their care experience.

- Adopting an EHR and HIE benefits the provider in operational efficiencies and enhanced resident care.
Effect of Affordable Care Act

- Has created **penalties and incentives** for health systems to better manage health care expenses

- Consequently, health systems (like hospitals and hospital networks) are interested in **accessing data** within integrated health system serving its patients

- As a provider of clinical care and services to residents, **YOU** have what health systems need to achieve their cost savings goals
Effect of Affordable Care Act

How do health systems spend less on patient care to achieve cost saving goals and avoid penalties from Medicare and Medicaid?

- They work to keep patients **OUT** of the hospital
- They work to **prevent** patients from same diagnosis readmission to the hospital
- They better **manage** patient information across all providers caring for their patients to make better care decisions = better care management through sharing of patient data (HIE)
You Have What They Need

• Health systems want data about patients

• As a clinical provider of care to residents you have important data (EHR) about the well-being of the patients the health system is trying to better manage

• As a matter of doing business within the emerging greater health system, you must have the capacity to become an HIE partner
Let’s take a look at the foundational elements of HIE

THE BASICS OF HIE
What is an Electronic Health Record?

- An **Electronic Health Record** (EHR) is a digital version of an individual’s paper health care chart. EHRs are real-time, patient-centered records that make information available instantly and securely to authorized users across one or many systems.

- The EHR is different than the Electronic Medical Record (EMR) – the EMR is also a digital version of the paper chart, but the EMR is used and accessed within one practice or across one internal system.
• The EHR is a **real-time** patient health record. The EHR can automate and streamline a clinician’s workflow, ensuring that all clinical information is communicated because it is updated and maintained in real time. It exists within a system and is linked to HIE.

• The EHR can also support the collection of data for uses other than clinical care, such as billing, quality management, outcome reporting, and public health disease management and reporting.
The EMR, as an electronic version of a resident’s health record is useful – however, it is limited in how its contents may be shared with others – limited to an internal system using the same EMR.

The EHR, as an electronic version of a resident’s health record has different technology designed within it to allow its content to be shared with others internally and OUTSIDE of its home system.
What is Health Information Exchange?

- Health information exchange (HIE) occurs when two or more organizations **electronically exchange** health-related data.

- HIE “hubs” move health care information electronically across health care organizations within a region, community, or system.

- HIE systems increase participation of multiple providers in a patient’s **continuity of care**.
What is Health Information Exchange?

• HIE is a **verb** – the electronic sharing of health-related information among care organizations/entities

• HIE is a **noun** – an organization that provides services to enable the electronic sharing of health-related information
How HIE Will Help to Care for Seniors
Works like the Internet - obtaining end user information in real time.

✓ **Record Locator Service**
Each resident has unique personal identifying data about them (dob, SS#, etc.), allowing health care professionals to quickly and easily find health history.

✓ **Powerful Search**
Health care professionals can search an entire resident’s documented health history for specific information.

✓ **Document Retrieval**
Needed documents may be downloaded efficiently to treat residents.

✓ **Document Upload**
Documents may be uploaded and shared between health care providers.

No faxing, paper, lost records or disparate health care provider charting
How Does HIE Work?

Linking together all who care for the resident and their vendor partners
Preparation for Exchange =

**Technical Infrastructure**
EHR capability for sending, receiving and querying information. IT resources to support EHR/HIE use and goals.

**Workflow**
Understanding clinical and non clinical workflow efficiencies and improvement through HIE.

**Organizational Support**
A culture that prioritizes effective continuity of care, coordination of care and comprehensiveness of care utilizing applied technology that informs the HER.

**Training and Support**
Provider training and support. End user Champions, supportive management and motivated employees.

**Privacy and Security**
HIPAA privacy and security requirements (administrative, physical, and technical safeguards).

**Software Elegance**
An interoperable electronic health record (EHR) and a working relationship with the vendor (Eldermark).
Health Information Exchange has its own vocabulary

COMMON TERMINOLOGY
Continuity of Care Document

- Also known as the CCD and related to the Clinical Care Record (CCR)
- **Standardized** fields for data – CCD must contain certain data fields – other data fields are optional
- Data fields established as STANDARDIZED at the Federal level
- Is a clinical care summary in real time
Unified Continuity of Care Document

- Data from multiple health records consolidated into **one** summary clinical care document in real time
- Provides a more complete picture of an individual’s current and immediate status of health and well-being
The data warehouse that contains clinical data in a central location – in the ‘cloud’. Data stored here is data that conforms to established universal format criteria (the standard is referred to as HL7).

The Repository aggregates the data about a person and then it creates a unified view of a single patient.

Typical data types found within a repository include: lab test results, patient demographics, Rx info, radiology reports/images, hospital admission/discharge/transfer dates, diagnosis/treatment codes, discharge summaries and progress notes.
E-Health (Electronic Health)

• This is the adoption and effective use of the Electronic Health Record (EHR) systems and other Health Information Technology (HIT)

• Senior Living Providers that have adopted the EHR and then practice the exchange of health information with other healthcare providers are practicing E-Health
The Personal Health Record (PHR) is a health record where health data and information related to the care of an individual provides a complete and accurate summary of an individual’s medical history that is accessible online and accessible by the patient.

The health data in a PHR might include care outcome data, lab results, allergies, imaging reports, medications and dosing, vaccinations, illnesses and hospitalizations, etc.
Personal Health Record (PHR) Benefits

• Potential to help analyze an individual’s health profile, identify threats and improvement opportunities based on:
  – Analysis of drug interactions, current best medical practices, gaps in current medical care plans, and identification of medical errors.

• Make it easier for clinicians to care for the individual by facilitating continuous communication about health status.

• Especially in emergencies, a PHR can quickly provide critical information to proper diagnosis and treatment.
Health Information Exchange (HIE)

• **HIE means** the electronic transmission of health related information between organizations in accordance with nationally recognized standards

• **HIE facilitates access** to and retrieval of clinical data to provide safer, more timely, efficient, effective, equitable, patient-centered care

• The movement of health information through an Exchange involves the services of entities such as a **Health Data Intermediary (HDI)** like Eldermark Exchange
The goal of HIE is to facilitate access to and retrieval of clinical data to provide safer, more timely, efficient, effective, equitable, patient-centered care.
• Main components are:
  – Use of EHR in a meaningful manner – like e-prescribing
  – Use of EHR for HIE to improve quality of healthcare
  – Use of EHR to submit clinical quality measures
• Providers need to show they are using EHR technology in ways that can be measured in quality and quantity (in a “meaningful” and appropriate manner)
  – Improve care coordination
  – Reduce healthcare disparities
  – Engage patients and their families
  – Improve population and public health
  – Ensure adequate privacy and security
Meaningful Use of a Pumpkin
There are different Stages of Meaningful Use (3) spread out over time (years)

Each Stage has its own goals related to HIE for those entities who are affected by the requirements of the Affordable Care Act (ACA)
Protected Health Information (PHI)

- Means individually identifiable health information that is transmitted or maintained by electronic media or is transmitted or maintained in any other form or medium.

- “Health Information” is any information relating to the past, present, or future physical or mental health or condition of an individual, including information regarding payment for health care.
Record Locator Service (RLS)

• This is an electronic index of patient identifying information that directs providers in a health information exchange to the location of a patient’s health records that are held by providers and group purchasers.

• Within a HIE, the RLS seeks out the information requested by the user – like a search engine – within the index of patient identifying information and pulls it to the user.
Direct vs. Connect

• **Direct**: messaging within the HIE that is **point-to-point** – like sending a secure email message (and attachments). Sometimes, Direct is referred to as **Push**.

• **Connect**: related to the action of **Query** – the act of **performing a query**, or search, for certain PHI about a certain patient that brings the data to the user. Sometimes, Connect/Query is referred to as **Pull**.
HIE Security is ruled by HIPAA and goes beyond what we are used to managing.

ASSURING SECURITY & PRIVACY
Compliance with Law and Policy

- HIPAA Rules – this is the legal framework for the privacy and security of Protected Health Information (PHI)

- The HIPAA Privacy Rule deals with PHI

- The HIPAA Security Rule deals with EPHI (Electronic Protected Health Information)
Compliance with Law and Policy

• The **HIPAA Security Rule** establishes national standards to protect EPHI that is created, received, used, or maintained by a covered entity – our provider clients are covered entities.

• The HIPAA Security Rule safeguards the confidentiality, integrity, and security of EPHI – standards established at the federal level.

• Participants in HIE must develop internal P&Ps to implement the requirements of the Security Rule.
Security Rule - General Rules

- Must ensure the confidentiality, integrity, and availability of all EPHI you create, receive, maintain, or transmit
- Must identify and protect against reasonable anticipated threats to the security or integrity of the data
- Must protect against reasonably anticipated impermissible uses or disclosures
- Must ensure compliance by your workforce
Security Rule - Physical Safeguards

• Must limit physical access to your facilities while ensuring that authorized access is allowed

• Must implement policies and procedures to specify proper use of and access to workstations and electronic media

• Must have in place P&P regarding the transfer, removal, disposal, and re-use of e-media to ensure appropriate protection of EPHI.
Security Rule - Technical Safeguards

• **Access Control** – must implement technical P&P that allow only authorized persons to access EPHI.

• **Audit Controls** – must implement hardware, software, and/or procedural mechanisms to record and examine access and other activity in information systems that contain or use EPHI.

• **Integrity Controls** – must implement P&P to ensure EPHI is not improperly altered or destroyed. Electronic measures must be put in place to confirm that EPHI has not been improperly altered or destroyed.

• **Transmission Security** – must implement technical security measures that guard against unauthorized access to EPHI that is being transmitted over an electronic network.
Security Rule - Organizational Reqs

- If a covered entity knows of an activity or practice of the business associate that constitutes a material breach or violation of the BA’s obligation, the covered entity must take reasonable steps to cure the breach or end the violation. Violations include the failure to implement safeguards that reasonably and appropriately protect EPHI.
The Security Rule establishes a set of national standards for confidentiality, integrity and availability of EPHI. The Department of Health and Human Services (HHS), office for Civil Rights (OCR) is responsible for administering and enforcing these standards, in concert with its enforcement of the Privacy Rule, and may conduct complaint investigations and compliance reviews.
Data Classifications

• **Public Information**: information that may or must by open to the general public; i.e., publicly posted press releases, marketing materials, job announcements

• **Internal Information**: information that must be guarded due to proprietary, ethical, or privacy considerations and must be protected for unauthorized access, modification, transmission, storage, or other use; i.e. employment data, contracts

• **Confidential Information**: information protected by statutes, regulations, policies, or contractual language – is sensitive in nature and access is restricted – disclosure limited on a “need-to-know” bases only; i.e. protected health information, social security numbers, payroll records, data so identified to be treated as confidential
Protecting Confidential Information
Protecting Confidential Information

• **Access Control**: HIE established policy for granting and revoking access to information – must demonstrate a business need

• **Acceptable Use**: security of HIE is dependent on safe computing practices by users – established acceptable use guidelines – user agreement

• **Incident Management**: HIE established policy for reporting, analyzing, resolving and reviewing incidents that compromise security – includes Breach management
HIE Security Policy Topics Include:

- Access to HIE and Authorization to use - TRAINING
- Business Associates
- Confidentiality Agreement for various roles
- Data backup and Use
- Email Use
- Emergency access
- Staff termination/access revocation
- USB/Portable devices
- Release(s) of information and Consents
- Audits and monitoring
- Notices to patients/residents
Training Workforce, Agents and Contractors

- HIE participants are responsible for developing and implementing training programs for workforce members, agents, and contractors who will have access to the HIE.

- Annual training is a minimum standard.

- Must cover:
  - Confidentiality of PHI and EPHI under HIPAA
  - Access to HIE for purposes of treatment of an individual or necessary health care operations.
Role of the Privacy/Security Officer

- **Oversee security protocol** standards as practiced by the provider organization
- **Provide training** and implementation guidance
- Regularly review records of information **system activity**
  - Audit logs
  - Access reports
  - Incident tracking and report discrepancies
- **Maintain a comprehensive listing of hardware used to store and transmit EPHI**
- **Manage passwords and credentials**
- **Manage security incidents** and outcomes
Useful Web Sites

- Resources through OneHealthPort: [http://www.onehealthport.com/home](http://www.onehealthport.com/home)
Other HIE Session Today Includes:

- Deeper look at HIE in Senior Living
- Meet Hope – use cases for the EHR and HIE in Senior Living
- A look at screen shots from Eldermark Exchange
Questions - Discussion - Comments

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