



Define Interoperability

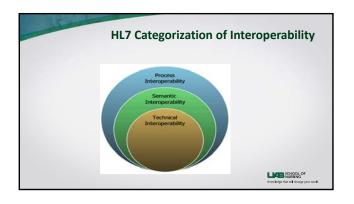
- Ability of different information technology systems and software applications to communicate, exchange data, and <u>use information</u>.
- Is not just specific to medical care data.

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Levels of Interoperability

- Technical the ability to move data from system A to system B. It defines the degree to which the information can be successfully "transported" between systems.
- Semantic ensures that both systems understand the data in the same way. The sent information will be unaltered in its meaning.
- **Process** enables business processes and organizations housing system A and system B to work together. It defines the degree to which the integrity of workflow processes can be maintained between systems.

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Policy Drivers

- US Department of Health and Human Services
 - Office of the National Coordinator
 - Interoperability Roadmap
- UK Academy of Medical Royal Colleges
 - Transfer of Care Initiative
- Established guidelines and timelines for technical and structural exchange of data that goes beyond the standard medical data.

Preparation now... As informaticians, we need to prepare... Why and how? We are still in a struggle to interoperate medical data.





Determinants of Health

- What makes some people health and others not healthy?
- Contribute to many population health issues and readmission problems.
- Need to be considered when developing programs to address those issues that drive patients back to our acute, or primary, or the Emergency Departments.

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Policy Social Physical Health and medical services Individual behavior Biology and genetics

Policy Driven Factors Alcohol taxes Anti-smoking activities Federal acts Speed limits Seatbelt use Environmental

Social Factors Educational levels Job opportunities Discrimination Crime Poverty levels Transportation access Public safety

Physical Determinants Natural environment – weather, climate, geography Built environment – buildings, transport, lighting, walkways Worksites Schools Housing Exposure to toxins Physical barriers

Health and Medical Services Type of care Quality of care Insurance Limited language Delays in receiving care Inability to access prevention



Biology and Genetics

- Age
- Sex/Gender
- Inherited conditions
- Genomics****
- Family History

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So how do we consider these determinants and plan for data interoperability?

- We can use community planning models as a framework.
- The Informatics Nurse Specialist (INS) can lead this
 endeavor.
- This process is in alignment with the core competencies of the INS.



Community Planning Frameworks

- Reviews of the literature conducted focusing on disciplines of social science, community and urban planning, and public health.
- Literature and best practice models extracted and reviewed for relevance.
- Translations allowing for potential nursing leadership selected.
- ✓ Association for Community Health Improvement,
- ✓ Mobilizing for Action through Planning and Partnership,
- ✓ State Health improvement Planning,
- ✓ Planned Approach to Community Health reviewed.

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Practical Planning Processes extracted...

- Analyze current strengths and weaknesses of community.
- Determine community level health needs and services.
- Define local continuity of care trajectory.
- Describe a common vision for care path.
- Account for factors or organizations that either support or detract from health trajectory.

- Develop collaborative team(s).
- Craft strategies with team to support goals.
- Engage all stakeholders and determine specific community data exchange needs.
- Plan for sustainability.
- Remember all communities are different.



- Develop use cases that depict the data and information needs.
- Determine people, processes, systems, and communications methods.
- Implement strategies of exchange between team partners.
- Evaluate process and progress.

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So for the next two working sessions, we will...

- Divide into working teams.
- Each team will:
 - Receive a fictitious community description.
 - Determine a health issue within that community to tackle.
 - Develop a list of data sources that encompass the social determinants and the medical data.
 - · Craft a use case.
 - Recommend a decision support tool to be used.



Goal...

- To turn the use cases over to HIMSS to be used in the next Interoperability Showcase to be used as nurse led demonstrations.
- To give credit where credit is due... to the teams!

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- Do we go here?
 - https://www.youtube.com/watch?v=RNJI9EEcsoE
- Or, here?
 - http://link.brightcove.com/services/player/bcpid32335455 26001?bckey=AQ^~,AAAAD5g3Zok~,ubRtqb7Li5VEXXc5WD TOEG3UDI3kHQu0&bctid=4142204516001

