Integrating the Healthcare Enterprise: Vital Statistics and Electronic Medical Records

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Is the Linkage of Electronic Health Records Part of our Future Greatness?
Modernization of Information Systems

- **Vital Statistics Systems**
  - Meet Daily Operations
  - Provide Greater Inter-Connectivity
  - Meet Emerging National Data and Communications Standards

- **Health Care Delivery Systems**
  - Implementing electronic health record systems
  - Other clinical systems
Challenge with VR Modernization

- **Our Challenge:**
  - Need for a long-term, shared strategy for achieving the vision of interoperable vital records systems with electronic health record systems
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Issue of interoperability of systems --- Not New!
- Recognized in 2000-2001 Re-engineering Oversight Committee work
- Examples:
  - Online verification of social security numbers system
  - Electronic verification of vital events system
Focus of Discussion

- What are we doing?
- Why are doing it?
- What have we achieved?
- What’s next?
Acronyms and Terms

- HL-7 = Health Level 7
- IHE = Integrating the Healthcare Enterprise
- VR DAM = Vital Records Domain Analysis Model
- PHFP = Public Health Functional Profile
- VRFP = Vital Records Functional Profile
Acronyms and Terms

- HL7 V2.5.1 IG = Health Level 7 Version 2.5 Implementation Guide
- DSTU = Draft Standards for Trial Use
- HL7 V3 CDA = Health Level 7 Version 3 Clinical Document Architecture
- HER-S FM = Electronic Health Record System Functional Model
Goals with the HL-7 Project

- Develop nationally approved standards that enabled the electronic transfer of information between EHRs and vital record systems.

- Assess the business practices that may or may not need to change if electronic transfer became a practice.

- Test these standards in real life.

- Implement if possible.
Debate about Electronic Health Records

- Can quality and timeliness actually be improved?
- Can data collection become more standardized?
- Will there be a reduction in the redundancy of data entry?
- Will electronic health systems be reliable?
- Etc.
Why connect to electronic medical records?

- Hypothesis: Improve timeliness and quality
- Opportunity to influence the standards development process for relevant data items
- Minimize the need to retrofit VR requirements later
- Opportunity to better mesh clinical and vital records requirements
What have we done to date?
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- Produced the HL-7 Vital Records Domain Analysis Model
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- Produced the Vital Records Functional Profile
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- Produced the Vital Records Functional Profile
- Produced the Messaging Standards and associated Implementation Guides
- Produced the Birth and Fetal Death Content Profile
Summary
Vitals Standards Development Timeline

2007
CDC/NCHS Call to develop VR Standards for EHRs

2008
Vital Statistics Standards Committee Formed

2009
Developed HL7 VR Domain Analysis Model

2010
Developed HL7 VR Functional Profile

2011
Developed HL7 V2.5.1 Implementation Guides (IG) for Birth, Death and Fetal Death Reporting

2012
Developed HL7 CDA IGs for Birth, Death and Fetal Death Reporting
What’s Next?

- Simulation Testing of Profiles
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- Certification Criteria for EHRs
  - Reach out to the certification bodies to explore the potential for developing the VR certification criteria based on the HL-7 EHR-S Vital Records Functional Profile
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- Piloting in States ——— Goals?
  - Feasibility and readiness of a State to do this
  - Test our ability to be able to transfer the relevant information
  - Assess the impact on business practices---make it better, make it worst, or no impact?
  - Assess quality and timelines—does it make a difference?
State Piloting

- To implemented as Special Projects under the new VSCP Contract

- Pilot the transfer of relevant birth information
  - Undertaking exchanges using HL-7 CDA release 2 specifications, the birth summary, and selected content of the birth and fetal death content profile.

- Pilot the transfer of relevant death information
  - Undertaking exchanges using HL-7 V2.5.1 draft standards for trial use
Conclusion

Back to the beginning:

- “Is the Linkage with Electronic Health Records part of our Future Greatness?”
“Twenty years from now, you will be more disappointed by the things that you did NOT do than by the things that you did do. So throw off the bowlines. Sail away from the safe harbor. Catch the trade wings in your sails. Explore. Dream. Discover.”

Mark Twain
Conclusion

“Greatness is road leading towards the unknown.”

Charles de Gualle