Electronic Death Registration

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What is an EDR System?

- Electronic filing of death certificates
- On-line collaboration among multiple death data providers and death registration users
- User-friendly death record data entry screens
  - Built-in real-time edits
  - On-line help and instructions
- Internet accessibility
- Electronic authentication
Who benefits from an EDRS?

- Families
- Physicians, physician assistants, certified nurse practitioners
- Medical Examiners, Coroners
- Funeral directors
- Local and state registrars
- Federal, state and local agencies
- Public health researchers
Benefits of an EDRS

- Greater efficiency because participants interact electronically
- Improved timeliness of death registration
- Higher quality mortality data via real-time edits
  - Reduces errors in and rejection of death certificates
  - Promotes uniformity in demographic and cause-of-death statistics
  - Online verification of the SSN
- Increased security and fraud prevention
- Mortality data more readily available for use as a surveillance tool
  - Pandemic flu
  - H1N1
- Automated means to mark birth records with deceased indicator to reduce fraud
History of EDR systems

• **Late 1990’s**
  - Small handful of jurisdictions embarked on EDRS development
  - NAPHSIS funded by SSA to study these systems and pilot SSN verification software
  - Developed an EDRS Standards & Guidelines Document
    - Death Data Provider Buy-in
    - EDRS functionality
EDRS Development Challenges

- Internet application with a need for high-levels of security
- Multiple users working on the same death record
- Many users accessing the system from many points
- Detailed business rules and workflow
- Numerous data items with extensive edit checks
EDRS Development Challenges
What we Learned

- Need well defined requirements
- Schedule must be realistic
- Funding must be adequate
- Identify sufficient technical expertise in developing an EDR system
- Need participation by stakeholders in the full project lifecycle
- Sufficient infrastructure and connectivity to the Internet
History of EDR Systems - cont.

• **Early 2000’s – SSA funding available**
  - For jurisdiction EDRS development
  - For NAPHSIS EDR re-engineering and technical assistance to jurisdictions, rollout of SSN verification software

• **2002 - National Model developed**
  - Funded by NCHS and SSA
  - Participation from many vital records jurisdictions, NAPHSIS, NCHS, SSA
  - Conducted validation sessions to identify EDRS requirements and develop re-engineering artifacts
    ▪ Use Cases – functionality/workflow
    ▪ System requirements/Business rules
    ▪ Reports, Files, and other EDRS outputs
NAPHSIS Activities

- Developed EDRS documentation
  - Updated the Standards & Guidelines
  - Training Materials and Marketing Brochures
  - Best Practices and Lessons Learned
  - RFP Template and Proposal Review Forms
- Outreach to national death data provider organizations
- Facilitate EDR-related communication among jurisdictions
- Provide consulting services to jurisdictions for implementing EDR systems
- Assist jurisdictions with the tailoring of the EDRS National Model to meet their needs
- Attend and speak at jurisdiction EDR stakeholders/working groups
EDRS Implementation Challenges

- Lack of internet access
- Funding for rollout
- Training
  - Logistics and Resources
    - Training facilities
    - One-on-one training vs. train the trainer
    - Computer Training modules
- Management of users/authentication methods
  - User IDs/Passwords
  - PINs
  - Biometric Devices
- Physician buy-in
  - Fax/Phone Attestation
- Quality of cause-of-death entries
Future of EDR systems

- Electronic Heath Records/Electronic Medical Records
  - Vital Records Domain Analysis Model
  - HL7 Electronic Health Record System Vital Records Functional Profile
- Revisions to the National Model Law
- More robust cause-of-death quality checks via VIEWS
- Real-Time Surveillance Activities
- Automated exchange of inter-jurisdictional death data via STEVE
NAPHSIS contact information

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