

Computerised Infectious Disease Reporting (CIDR) Progress on National Roll-out 2005-2006

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Background

- Processes for the notification of infectious diseases (ID) in Ireland are changing
- Paper-based and telecommunication systems:** transfer of information between clinician, laboratories and public health occurs via
 - time consuming
 - labour intensive and
 - inadequate for effective surveillance and control of infectious diseases.
- Electronic communication is** the most efficient method for transfer of high quality information.
- CIDR was developed** to meet the needs of Infectious Disease reporting in Ireland - a challenging task.

Pre-CIDR Paper-based or Local Systems



- Loss of Data Qu and Timeliness
- Islands of Information
- Multiple Report
- Extensive Reconciliation Required

CIDR development: a Partnership approach



- Inland Population: 4 million
- 8 health boards
- >100 clinical laboratories
- 4 reference laboratories
- Consultation with partners to identify requirements
- Review of systems in place elsewhere to ease if existing systems would meet requirements

Anticipated Benefits of CIDR

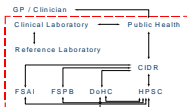
- A system available nationwide
- A single consistent database
- Near real-time data / reporting
- Provides appropriate role-based access to data / reports
- Improves data quality
- Enables public health workers to work at different locations
- Secure and resilient

CIDR



- One national database of information on infectious diseases and Anti Microbial Resistance
- Combines and links clinical epidemiological and laboratory based information
- Uses web technology for access

Dataflows in CIDR



Information Governance

- Business rules developed for appropriate sharing of information
 - Legal issues
 - Confidentiality agreements
- Access control
 - IS 17799 Information security management standard certification in HPSC
 - CIDR awarded IS 17799 certification for Information Security Management in 2005

Security and Availability

- Three Level User Authentication
 - User name
 - User Personal Identification Number
 - RSA Keyfob Token
- Government VPN
- 128-bit SSL encryption
- Multiple firewalls / intrusion detection
- Business Continuity / Disaster Recovery Site with 'live' data

Training

- CIDR Users
 - Public health doctors, surveillance scientists
 - Microbiologists and laboratory scientists in laboratories
- Centralised training in HPSC (Dublin)
- Pool of trainers available
- On-going support
 - Training manuals, CD roms, CIDR Helpdesk

Status May 2006

- CIDR is now reporting tool in
 - HSE SE, HSE S, HSE MA, HSE NE, HSE NW
- IN areas implementing CIDR, it provides a
 - one-stop shop for surveillance and control of communicable disease, outbreaks
 - Common system for surveillance work
 - Standard reports
 - Controlled and secure access to information
 - Adaptable and flexible system that will meet future needs

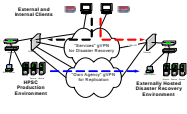
Conclusions

- Before CIDR
 - Considerable duplication in effort in multiple manual and/or locally based electronic systems
- Infectious disease surveillance is now (May 2006)
 - More easily managed, and more efficient
 - More timely (real time data available to all CIDR users)
 - Data is of better quality (more complete), and data validation is easier
 - More accessible to CIDR users through the country, with appropriate access and confidentiality assured
 - Less cumbersome, with one streamlined database used for most diseases (instead of the numerous databases previously used)
 - More standardised- and standard reports are routinely being used

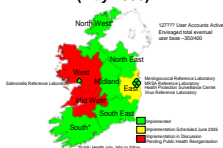
Reporting Framework



CIDR Topology



CIDR National Implementation (May 2006)



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- All HSE Areas
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