

CASE STUDY
Health Protection Surveillance
Centre



THE POSSIBILITIES ARE INFINITE

“New and re-emergent infectious diseases offer a real challenge that requires the timely communication of quality information. Fujitsu and the HPSC have worked hard together to design and build a solution to meet this challenge.”

John Brazil, IT Manager, HPSC



Customer's Challenge

In 1998 Ireland's Health Protection Surveillance Centre (HPSC) was set up to monitor and control the spread of infectious diseases within the population. Their objective was simple, "Improve the health of the Irish population by the collection, interpretation and provision of the best possible information on diseases". These activities are achieved through surveillance and independent advice, epidemiological investigation, research and training.

Public health surveillance is the cornerstone of public health decision making and practice. It takes centre stage as threats of infectious diseases loom larger. Public Health Organizations at the national and local levels maintained numerous systems for health surveillance. However, these systems were designed separately and in most cases could not easily share data, so much potential benefit to public health practitioners was being lost.

The HPSC recognised the enormous power this data represents, and launched the development of a Computerised Infectious Disease Surveillance Centre (CIDR) which provides a standards-based, integrated approach to disease surveillance. The challenge for HPSC was to connect public health surveillance to the growing body of clinical and laboratory information so that emerging public health threats and trends could be detected more quickly.

Fujitsu Solution

In 2001 HPSC chose Fujitsu to design, develop and implement the CIDR solution. The key design principles which ran through the project were security, flexibility and the provision of an enterprise wide reporting capability.

SUMMARY OF KEY FACTS

Organisation

Health Protection Surveillance Centre

Service's delivered

Fujitsu designed, developed, implemented and maintain a national web based Infectious Disease and Outbreak Surveillance System.

Key Metrics

The Fujitsu solution concentrated on delivering a secure and flexible national central repository for disease and patient information.

Benefits

The health of the Irish Population will be improved by the collection, interpretation and provision of the best possible information on diseases.

- **Security:** It was essential, owing to the confidential nature of medical data contained within CIDR that a secure, and controlled environment was established. Fujitsu employed two-factor authentication to extend basic authentication using RSA ACEServer and SecurID tokens integrated with Microsoft Active Directory over SSL encrypted communications.
- **Flexibility:** CIDR needed to be a flexible, extensible system capable of facilitating user-configurable additions in order to meet, for example, changing surveillance and reporting needs. To support this Fujitsu's technical solution was based on a flexible service-orientated architecture with business objects and web services developed directly in Visual Basic .NET utilising XML communication.
- **Reporting:** CIDR is primarily a reporting system, providing necessary information to over 300 users. To support the extensive reporting requirements Fujitsu implemented a Business Objects™ Business Intelligence platform and developed in excess of 200 template reports.
- Be assured CIDR is fully secure. CIDR's security infrastructure and procedures are designed to ensure maximum security.
- Ensure the most up to date and reliable information is available, through aggregated patient medical information, when tracking infectious disease and anticipating potential outbreaks. Many clinical notifications and tests can be associated with an individual patient to create an infectious disease alert.
- Automatically alert Public Health officials about an infectious disease through integration with Laboratory Information Systems.
- Have a fully operational and resilient system in the event of a disaster through the use of Fujitsu's Data Centre facilities.

Our Expertise

Fujitsu has a proven track record in providing innovative and reliable IT services and solutions, incorporating the best and most appropriate technology that creates value for its customers by helping them to realise their business vision and deliver impeccable customer service.

Benefits to our Customer

Suzanne Cotter, Specialist in public health medicine, HSPC comments, "The main impact of CIDR is that it will make things easier, not just for us (HSPC) but also for the HSE and community care areas to deal with infectious diseases because it will integrate the information."

The national rollout of CIDR commenced in 2004 and allows HPSC to:

- Ensures the availability of the best possible information on diseases within Ireland and internationally, which in turn contributes to the improved health of the Irish population. This is facilitated through CIDR been a web based solution and so enabling a communications infrastructure between those health professional concerned with the management of infectious diseases and outbreaks.
- Enable medical professionals to notify public health officials about an infectious disease case in a timely manner, through workflow processes which are built into CIDR.

Fujitsu's Microsoft Gold Partner status and in-depth knowledge of the required technologies, especially Business Objects and the .NET framework, were a key benefit for the HPSC.

Fujitsu's MacroScope® ProductivityCentre™ is a robust, structured and evolving development approach encapsulating more than thirty years of know-how, and described by Gartner as the most extensive set of integrated methods, techniques and tools in the marketplace today.

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Contact us on +353 (0)1 813 6000 or
Marketing@ie.fujitsu.com or visit ie.fujitsu.com