Disease Surveillance Sentinel Practice Network Project Report

Author: Dr Michael Joyce, Project Director

Other members of the project

I run the project on behalf of the ICGP in collaboration with the Health Protection Surveillance Centre (HPSC) and the National Virus Reference Laboratory. The Health One User Group (HIUG) provides valuable technical support. Valuable assistance is provided by my practice nurse, Ms Olga Levis.

Summary of the project

The project involves running a computerised surveillance network for certain infectious diseases in the community and involves 60 sentinel practices spread throughout the country. There is a particular emphasis on the surveillance of influenza.

Background to the project

There is a need to monitor certain infectious diseases in the community, especially influenza

To address this need, this project was set up in 2001. The aim was to recruit practices that had a high level of recording computerised information in their practices already. This meant that when a GP saw a case with one of the index conditions, he/she was recording it anyway and there was no need for any extra work on behalf of the GP to have the case recorded. Then, at the end of the week, a computerised search, which can be delegated to a staff member, is run and the result is sent to the ICGP. The data is cleaned and forwarded to the HPSC.

The process was successful from the outset with very good return rates being achieved immediately and all the stake holders were very pleased. Initially, there were 20 practices involved, all using Health One software and the conditions covered were influenza, chicken pox and shingles. Health One was chosen, in particular, because of its suitability for this type of project. There are now 60 practices involved including some practices using software other than Health One. Measles, mumps, rubella and gastroenteritis have been added to the conditions that are covered.

Although I have been involved in the project since its inception through my practice being one of the sentinel practices and also through HIUG, I took over the ICGP role formally from Dr Dermot Nolan in September 2004.

Educational aims of the project

- Illustrates the use and application of computerised practice
- Demonstrates the power of data available and collected in general practice

Benefits to members of the project

There is a wealth of data out there in general practice which will be sought after in increasing amount as time goes by. It is absolutely critical that general practice and the members of the ICGP remain in control of this data so that it is used for the general good and not used inappropriately. This project provides a method for the control and distribution of GP generated computerised data that can be built on in the future in

different areas. The lessons learned have already contributed to the developments in Heartwatch and the Independent National Data Centre (INDC), and will continue to do so in the future.

Project activities

- Collection of incidence data for influenza, measles, mumps, rubella, chickenpox, shingles and gastro-enteritis in the community
- Cleaning and preparation of data
- Forwarding of this data on behalf of the ICGP to the HPSC
- Taking swabs from suspected cases of influenza to confirm cases and determine what type of influenza virus is in circulation

The results of the surveillance is available on the HPSC website at: http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/Surveillance/InfluenzaSurveillanceReports/20122013Season/

At the time of writing (21/3/13), it looks like the influenza activity has peaked for this year, giving us a quiet influenza year for the second year in a row. This season was dominated by type B influenza.

Although not technically a part of this ICGP project, a significant number of the network participants have volunteered to take part in a pan European study of influenza vaccine effectiveness in conjunction with the HPSC which was first carried out in the 2009/2010 season and has been continued during each season since. A paper on this was published in the IMJ, volume 105, no. 2, February 2012, pgs. 39 to 42.

Project milestones/deliverables/outputs

- Whereas previously surveillance was carried out from week 40 to week 20, it now takes place throughout the entire year
- With 60 participating practices, we now have the desired 5% population coverage.
 Some limited further recruitment is currently planned to cover areas that have poor coverage

Achievements to date

The project has achieved its goals of community surveillance of the specified conditions. The project needs to continue as it has become a cornerstone of surveillance, particularly with regard to seasonal and pandemic influenza. Return rates well in excess of 90% continue to be achieved consistently.

This year, some improvements were made to the Health One programme for extracting the data which is now easier and more consistent which has made the data collection more streamlined.

Future plans

Continued surveillance is planned.

Funding source

Funding is provided on an agreed annual budget basis by the HPSC.