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SENTINEL GENERAL PRACTICES

The NSW Public Health Bulletin has recently highlighted the usefulness of sentinel general practices for monitoring non-notifiable infectious diseases such as influenza[1]. Another recent review article shows general practice surveillance need not be confined to infectious diseases, but can cover other conditions such as asthma and injuries and other risk factors like hypertension and smoking[2].

Sentinel general practices have operated in the UK[3], other parts of Europe[4,5] and parts of the US[6] for several years. They have also been running successfully in South Australia[7] and more recently Queensland[8].

The National Health and Medical Research Council recommended at its 97th session in 1986 "that each State and Territory health authority be encouraged to produce sentinel morbidity survey similar to the survey in South Australia"[9].

Although there have been attempts to establish general practitioner sentinel networks in NSW since 1975[10], long-term general practice surveillance has generally been unsuccessful in this State, partly because of a lack of the necessary administrative support. The network of new Public Health Units (PHUs) could be the catalyst in helping set up the schemes throughout NSW.

A network of six sentinel general practices covering five disease entities (Table 1) was established in the Illawarra in June 1990, and has been producing regular reports (Figure 1). Between 500 and 600 patients are seen in participating practices each week. The general practitioners (GPs) also receive regular feedback of the results, and found these sufficiently useful to have asked that the network be expanded to 12 practices (a surveillance base of 1000 to 1300 patients weekly) from October 1990.

The number of conditions under surveillance is likely to be increased to a (maximum) of 12 over a one- to two-year period.

Experience from the Illawarra may be of use to other PHUs in setting up similar networks.

SUCCESSFUL IMPLEMENTATION

Successful implementation depends on an understanding of the strengths and limitations of sentinel general practice surveillance. It is not intended to provide complete prevalence data or a comprehensive data set.

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TABLE 1

DISEASE AND CLINICAL DEFINITIONS — DISEASE RECORDING

Number	Disease	Clinical Criteria
01	Influenza	Fever, chills, headache, myalgia, coryza, sore throat, cough and prostration (six out of eight required); nasopharyngeal aspirate for index cases only (send patient to Path. OPD, Wollongong Hospital).
02	Measles	Fever, coryza, cough, florid rash beginning on the face, conjunctivitis, Koplick's spots. May be modified in vaccinated people.
03	Lower RTI	Fever, new or changed cough, production of new or changed sputum (no pathology initially).
04	Asthma	Recurrent wheeze, cough, dyspnoea (existing and new cases where symptoms/treatment is primary reason for consultation).
05	Infectious Mononucleosis	Fever, sore throat, often exudative pharyngitis or tonsillitis and/or lymphadenopathy; morabilliform rash; splenomegaly or persistence of exudative pharyngitis (for more than 3/7 in spite of antibiotic therapy); FBC (lymphycytosis more than 50 per cent with more than 10 per cent atypical cells); ± positive Monospot.
06	Free Comment	Space is provided for your free comments. This may be an interesting case which you think is worthy of reporting to us if there is a cluster/epidemic occurring.

But it does show changes in incidence (in terms of general practice attendance), allow the GP to make more confident diagnoses, and facilitate an early response to changing incidence or distribution of particular diseases.

Important initial steps are:

- Enlist the support of local GPs. (The sub faculty of the RACGP, or postgraduate education group is an obvious route.)
- Emphasise the value to them of active participation (such as early feedback on changing disease patterns, greater certainty in diagnosis and prescribing and reduced need for confirmatory laboratory tests).
- Form a management committee with majority representation from local GPs.
- Allow the management committee to select participating practices. A good geographic and sociodemographic spread is essential — there should be a minimum of 1 per cent of possible general practices in the area, but more is desirable.
- Allow the management committee to select initial list of diseases and conditions. Keep it short — no more than four or five. There should be one or two relatively common conditions (to maintain interest). Others should reflect local priorities and interests.
- Allow a space on the form for free comment. This will provide early warning of increased incidence of other diseases, such as infantile gastroenteritis, or anything unusual.
- Ensure regular feedback to the GPs.
- Develop an outer circle of interested practices to allow interchange of participating practices over time.
- Have regular meetings of the management committee to fine-tune the network.

CONCLUSIONS

Most people continue to regard the GP as their main source of primary health care and advice[11].

Links formed between PHUs and GPs in setting up a successful sentinel general practice network will be valuable in securing their co-operation in other public health initiatives such as improved immunisation and notification rates.

The Illawarra sentinel general practice network now consists of 12 practices and 14 GPs — about 10 of whom are active at any one time. The network has already proved its value several times:

- It was able to ascertain rapidly the extent of spread of a measles outbreak at Woonona.
- It was able to reassure authorities that a patient with Legionella was an isolated case, and that there was no major upsurge in lower respiratory tract infection at the time.
- It also revealed that despite reports in the media of a 'late flu epidemic' there had been no rise in influenza cases monitored by the network.

There is a proposal for a national network of sentinel general practices — Australian Sentinel Practice Research Network (ASPERN)[12]. The research committee of the NSW Faculty of the Royal Australian College of General Practitioners has been contacted about NSW participation.

With infrastructure and support provided by the PHUs, a NSW network of sentinel general practices would not only provide additional useful public health data for this State, but would complement the proposed national network. Most unit directors appear to favour such a network. Dr Michael Levy from the Epidemiology Branch will co-ordinate efforts to implement this approach in 1991.

Dr David Jeffs
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1. Manning W, Levy M, Sentinel Monitoring of Influenza NSW Public Health Bulletin 1990; 1: (7-9) 22.
2. Dunstone M, Macharper T, Cameron S, White C, Surveillance and Sentinel Systems, *Aust Fam Phys* 1990; 19: (8) 1267-1277.
3. Donaldson R, Donaldson L, Essential Community Medicine, Lancaster 1983; p34.
4. Stroobant A et al, Epidemiological Surveillance of Measles through a Network of Sentinel General Practices in Belgium, *Int J Epidemiol* 1986; 15: (3) 386-391.
5. Valleran A-J et al, A Complete Network of the Surveillance of Communicable Diseases: The French Experiment, *AJPH* 1986; 76: (11) 1289-1292.
6. Green LA, Wood M, Becker L et al, The Ambulatory Sentinel Practice Network: Purpose, Methods and Policies, *J Fam Pract* 1984; 18: (2) 275-280.
7. Dunstone M, Cameron S, Sentinel General Practices — South Australia, South Australian Health Commission 1989; SBNO: 7308-0200-0.
8. Pincus D, Sentinel Practices in Queensland — The First 12 Months, *Aust Fam Phys* 1988; 17: (8) 700-704.
9. National Health and Medical Research Council, Canberra 1983.
10. Fisher S, Swan N, Rozalla M, Morbidity Monitoring in General Practice, *Med J Aust* 1975; 1: 207-213.
11. Australian Bureau of Statistics, Australian Health Survey 1983, Sydney ABS 1986; (Catalogue No 4311.0).
12. Steven ID, Sentinel Network is a Quality Assurance Option, *Aust Fam Phys* 1990; 19: (11) 1625.

FIGURE 1

SAMPLE WEEKLY RETURNS FROM ILLAWARRA SENTINEL GENERAL PRACTICES