

## Sentinel Practices

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*“One of the exciting potentials for family medicine research is to develop collaborative investigations from different practice sites. Both common and unusual problems should be studied from the unique perspective of the practicing family physician. With widely dispersed practices collecting standardized data, we can perform meaningful research for the advancement of our discipline and for the betterment of our patient care. Residency practices should also be involved in collecting and sharing data for these common goals.”—J. Christopher Shank, MD, Editor, Research Highlights*

The term *sentinel practices* is a label for a network of primary care practices collecting a standard minimum data set and conducting carefully designed studies about problems and processes in primary care. At once, the network can fulfill the complementary functions of a surveillance system and a laboratory for primary care research. Maurice Wood, MD, referred to the North American Primary Care Research Group's (NAPCRG) efforts with sentinel practices in the January-February 1981 issue of *Family Medicine*.<sup>1</sup> The purpose of this article is to provide further information about sentinel practices and invite participation and input as this developmental project continues.

### International Perspectives

Other countries have pursued sentinel practice efforts. Systems exist in England, Canada, Australia, and Finland. Perhaps the most completely developed is the Continuous Morbidity Registration System in The Netherlands. This system has been operating for approximately a decade and captures 1% of the Dutch population, allowing for geographic representation. Each participating practice is counted and described

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every 2 years, and frequencies of problems are reported for age and gender groups per 10,000. A program committee selects topics for reporting each year using two criteria: 1) It must be possible to formulate strict criteria. 2) Application of these criteria may not be too time-consuming. They have so far reported on more than 30 issues, including prescriptions for the morning-after pill, suspicion of battered child, measles, skull trauma in traffic accidents, request for euthanasia, patterns of sterilization requests, and home management of myocardial infarction. Communications have been established with participants in these networks and others and continue to be helpful.

### National Perspectives

Standardized taxonomies and computers have encouraged the development of regional data-sharing systems. For example, the Dartmouth “Co-op” system continues to demonstrate its ability to collect information of sufficient quality to permit study of selected primary care issues, from a network of New England practices. Colorado's Family Medicine Information System has already collected 4 years of data from some 20 practices doing complete service and morbidity reporting. The Departments of Family Medicine in New Mexico, Arizona, Nevada, Utah, and Colorado have identified a minimum data set, accepted variables for this data set, and are nearing completion of a project demonstrating their ability to report these data centrally and to each other. In Canada, a National Influenza Surveillance program has been developed by the College of Family

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Physicians. This system markedly increases sensitivity in detecting influenza activity throughout the country. The NAPCRG sentinel practice project envisions the linkage of regional efforts such as these across the United States and Canada to form a North American Sentinel Practice System.

### US Progress to Date

At the 1979 NAPCRG meeting in Seattle, Eugene Farley, Jr, MD, MPH, summarized a written proposal about sentinel practices. He stated:

We are now in a position to develop a network of practices that contribute their data for various studies to add to our knowledge of disease, our ability to recognize and understand epidemics, and our ability to use health resources wisely.

The membership immediately commenced debate about strengths and weaknesses of the idea and appointed a steering committee to further develop the proposal. By the 1980 NAPCRG meeting, careful reviews of several problematic areas were prepared. A minimum data set for collection at registration and encounter was proposed:

At registration:

Name of patient  
Age  
Gender  
Socioeconomic status  
Geocode  
Race  
Date of registration  
Family relationship  
Name of provider

At encounter:

Name of patient  
Date of service  
Diagnosis or problem  
Name of provider

By the 1981 NAPCRG meeting, a concept paper was approved by the steering committee, and a subcommittee had designed and implemented, on a pilot basis, a study about the problem of headache in primary care. Under the direction of Jack Froom, MD, principal investigator, an updated research design has been completed. This "headache study" awaits full funding and assignment of actual study practices.

Currently, the sentinel practice project has received an initial year of funding from The Rockefeller Foundation. The steering committee has been adjusted to include physicians in actual private practice. Critical questions still to be dealt with include:

1. What benefit, if any, can be expected from a sentinel system that is not obtainable from alternative and perhaps cheaper sources?
2. Why should a busy practitioner want to initiate and maintain participation in a sentinel practice system?
3. Who should pay for the collection, processing, and use of data from real primary care practices?
4. What critical questions are being overlooked?

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### REFERENCE

1. Wood M. What is NAPCRG? *Fam Med* 1981;13(1):23-4.