

Short Communication

CHILD Profile: an immunization registry and more—a new approach to tracking and surveillance

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WHAT IS CHILD PROFILE?

CHILD (Children's Health, Immunization, Linkages, and Development) Profile began in January 1993 as a two-county-wide child health and immunization project co-sponsored by Snohomish Health District, Seattle-King County Department of Public Health, and the Washington State Department of Health. Support for the project includes funding from the Robert Wood Johnson Foundation's All Kids Count Project, Washington State Department of Health, the Centers for Disease Control's Immunization Action Plan, and the two sponsoring health departments.

CHILD Profile Immunization Tracking System is a centralized computer system accessible to *all* vaccine providers in the project area. The ultimate goal of CHILD Profile is to establish electronic linkages among health, educational and social service providers in the area, to enhance the quality and coordination of care for children and their families.

STEPS USED FOR THE DEVELOPMENT OF CHILD PROFILE

CHILD Profile was established using the following stepwise approach.

Establish a population-based database

In early 1993, in coordination with the Washington State Center for Health Statistics and their electronic birth certificate system, we developed mechanisms to enter all resident births in the project area into the CHILD Profile database. There are several advantages to populating the database in this manner. By supplying the child's addresses it facilitates the mailing of health promotion materials to their parents, as well as reducing the data entry burden for vaccine providers when using the on-line immunization tracking system. Those not born in the area are entered into the system by their health care provider as they seek health care.

Distribute health education materials to the families of all newborns

A comprehensive universal health promotion components has been developed and implemented. This includes age-appropriate materials regarding immunizations, well-child check-ups, safety tips and normal growth and development, that are mailed to parents 30

days prior to recommended immunizations or check-ups. There are eight mailing in the first 2 years of a child's life and two each year up to the age of six.

Include health care providers in the development of the system

Throughout the development of the system, health care providers have been involved. A 65 member advisory committee, the Combined Immunization Advisory Group, and four standing subcommittees were formed in late 1992. One of the subcommittees, Tracking and Systems Development, has health care provider representation from both the public and private sector and has been integral in all aspects of developing the immunization tracking system. This subcommittee discusses and makes recommendations on technical aspects of the immunization tracking system, such as data to be collected, network and communications technology, hardware, and functionality of the software.

Confidentiality and privacy issues surrounding the use of the tracking system were addressed by working with the provider community and with advice from an assistant attorney general assigned to the Washington State Department of Health. An agreement was developed that providers must sign prior to being allowed to access the system.

Recruit and link health care providers

In 1994, a marketing workgroup was formed with representation from both the private and public provider communities. This group both developed a marketing plan and the materials necessary for provider recruitment. In 1995, a multi-faceted marketing and outreach campaign was implemented. The campaign consisted of direct mailings to health care providers, articles about CHILD Profile in provider newsletters, presentations to managed care organizations and seminars for providers and their office staff. In the future, marketing to providers has been contracted to a private company.

Once a provider agrees to participate CHILD Profile, staff conduct a technical assessment of their office, the provider is linked and given access to the

system, and their staff are trained in use of the system. CHILD Profile provides a toll-free Help Desk for users that go to pages during non-business hours.

Expand to include other child health information

The next module under development of CHILD Profile will assist with the coordination of care for special needs children, by linking the diverse service systems often utilized by these children.

Current status of the system as of October 1, 1997:

- CHILD Profile receives immunization information from 56 medical organizations, encompassing 120 clinic sites and over 45 individual providers. Six of the medical organizations are public and 50 are private.
- Nearly 675 000 client records and nearly 2.5 million immunizations are in the database.
- CHILD Profile is currently in six counties repre-

sented nearly 50% of the state's children. Expansion statewide is being planned.

LESSONS LEARNED

Allow for flexible methods to access the central system as 'one size does not fit all'. A survey conducted in the project area to determine our health care providers' current information system capabilities clearly showed the need for developing a system that can be accessed by multiple methods, using a variety of equipment and operating systems. This led us to develop a host-based, centralized immunization registry, accessible via multiple methods.

It is important to work with your health care community through all phases of planning, development and implementation of the system, thus building the system using a 'bottom-up' rather than a 'top-down' approach. By using this approach the system will be much better accepted by our community.