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## MODELS FOR PRACTICE

### FOCUS AREA: IMMUNIZATIONS AND INFECTIOUS DISEASES

**Program Name:** Regional Early Childhood Immunization Network

**Location:** Marshfield, Wisconsin

**Problem Addressed:** Immunization and Infectious Diseases

**Healthy People 2010 Objective:** 14, 14-26

**Web Address:** [www.recin.org](http://www.recin.org)

#### SNAPSHOT

Regional Early Childhood Immunization Network (RECIN), a service of the Marshfield Clinic, began in 1994 and was developed to assist counties in central and northern Wisconsin to meet the Healthy People 2000 goal—90 percent of children up to date with immunizations by age two. RECIN is a population-based immunization registry that is shared by immunization providers and is used to track immunizations for patients across the lifespan while focusing on children ages zero to 18. The mission of RECIN is to improve access to complete and current immunization data, facilitate the analysis of immunization trends, and support intervention activities to improve vaccine coverage. RECIN covers a 23-county service area, approximately the size of West Virginia, with a total population of 1,377,254 residents. Many of the counties are classified as health professions shortage areas or medically underserved areas or both.

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#### THE MODEL

**Blueprint:** Recognizing the problem of low private provider participation in immunization registries, RECIN was developed in a private provider environment with significant public sector input. Participating providers are able to obtain complete immunization data from a centralized registry, including current information for each patient regarding immunizations that are due, along with the appropriate contraindications and warnings. Data are housed on a central server, which is maintained by Marshfield Clinic staff and can be accessed by modem or the Internet at any time. After the provider has entered the vaccination data and administered the vaccine, RECIN generates a copy of the immunization record for the parent and a cumulative medical record document, as well as vaccine administration forms for local use.

The Marshfield Clinic is a regional multi-specialty group practice system of care under the direction of more than 700 physicians. Marshfield Clinic Information Systems department is responsible for the development, implementation, training, and support of the RECIN program. RECIN staff include the following: a medical director, program manager, one and a half

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programmers, two coordinators, one intervention specialist, a training and development liaison, and one community health center director. In addition, RECIN receives secretarial, legislative, and editorial support. There is one grant-funded staff member, and no volunteers. RECIN also receives assistance from over 200 information systems staff in terms of system security, server administration, and other forms of system management.

Program organizers realized the importance of building and enhancing the registry based on the needs of the users to maximize utility. To foster this collaboration, currently, RECIN users gather on a quarterly basis with end users to discuss topics such as program enhancements, immunization requirements, and intervention strategies.

RECIN addresses the problem of incomplete immunization records due to the fragmentation of care by linking providers to a common repository where all immunization and alert information on patients is stored. Utilizing this consolidated immunization repository enables providers to efficiently target interventions on a community-wide basis to raise immunization rates and protect children from vaccine-preventable diseases. RECIN also strives to eliminate over- and under-immunization by providing cross facility documentation for immunizations and patient alerts, educating through the use of standard schedules, providing decision support based on the patient's age and previous history, improving the efficiency of the immunization process in both provider practices as well as schools, and most importantly improving service to those needing the protection vaccine provides.

**Making a Difference:** RECIN currently serves a region where approximately 15 percent of Wisconsin's population resides. Through successful intervention campaigns in several Wisconsin counties, RECIN has been able to raise the up-to-date population-based immunization rate of the zero to two-year-old population in these counties to above 93 percent. RECIN has also been an integral part in raising Health Plan Employer Data and Information Set (HEDIS) immunization rates for Security Health Plan, a nonprofit HMO located in central Wisconsin.

In 2000, RECIN became a part of a study that was undertaken on behalf of the Marshfield Medical Research Foundation entitled *Vaccine Safety Datalink (VSD): Comprehensive Linked Data Collection of Medical Events and Immunization*. The project aims to improve and understand vaccine safety by minimizing vaccine injuries. There are no reportable outcomes at this time.

**Beginnings:** In 1994, RECIN received a \$2500 grant from the Family Health Center of Wisconsin to develop a regional immunization tracking system. At the same time, Marshfield Clinic decided to support the RECIN system based on its goal to prevent vaccine-preventable disease through the use of a common repository. An advisory board was formed and organized in

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a partnership structure. The board provided recommendations regarding the future growth and direction of the RECIN initiative, major program delivery issues, and areas of program research priority.

The program has seen steady growth since 1995 and continues to receive funding and support from various groups, although RECIN continues to operate with a deficit budget. The original stakeholders of RECIN were Marshfield Clinic, Family Health Center of Marshfield, Inc., Clark County Public Health Department, Rusk County Public Health Department, Marathon County Public Health Department, and Memorial Medical Center. To date, no stakeholders have left the program. In addition, Marshfield Clinic, Family Health Center of Marshfield, Inc., and the Children's Miracle Network provided funding to begin development of RECIN and are still involved today. RECIN received additional funding through Merck Pharmaceuticals as well as Rotary International. RECIN has grown to include 65 private provider facilities, 15 public health departments, eight hospitals, 17 school districts, eight daycare facilities, and one retirement community.

**Challenges and Solutions:** One of the challenges RECIN faces is the development of an ongoing funding mechanism to offset user fees. RECIN staff look for additional funding opportunities by working with local service groups, foundations, pharmaceutical companies, as well as the state budget.

RECIN staff take a grassroots approach to seeking out funding opportunities. Every occasion is taken to present RECIN on both a local as well as national level through newsletters, websites, quarterly user group meetings, national presentations, and the development of journal publications. In 2001, RECIN entered into a Memorandum of Understanding with the Wisconsin Department of Health and Family Services to develop a statewide immunization registry network. RECIN was able to secure additional funding through the state legislature to offset the costs for public health departments through the biennium ending June 2003. Plans have been made to expand the service in terms of provider participation in the registry and services provided throughout the registry such as preventative services.

To successfully integrate registries into private practices, providers must recognize the added value of a registry. RECIN staff demonstrate the flexible and time-saving features of the registry to providers, which will improve their workflow and, ultimately, save them money. Currently, RECIN staff is developing a five-year plan to sustain and expand the service.

Recognition for their efforts and continued success includes the following:

- the 2002 Rotary International distinguished Paul Harris Award in recognition of the program's continued efforts to prevent vaccine-preventable disease;

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- the 2002 Protect Award from the American Academy of Pediatrics and the National Immunization Program of the Centers for Disease Control and Prevention; and
  - a citation by the assembly from the state of Wisconsin on December 2002 for its collaborative effort and service, which contributed to the improvement in health care for the children of central Wisconsin.

### **PROGRAM CONTACT INFORMATION**

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