# **Immunization Information Systems**

# What are immunization registries?

Immunization information systems (IIS) or immunization registries are confidential, computerized systems that track vaccines given within a state or community. Registries help to ensure that correct and timely immunizations are administered by consolidating vaccination records from multiple providers, generating reminder and recall notices, and providing official vaccination forms and assessments.

Immunization registries include a child's name; date and place of birth; names and addresses of parents or guardians; date of vaccination; specific type of vaccine(s) administered; and any complications or side effects from the vaccinations. Children typically are entered into a registry at birth or at the time of their first contact with the health care system. Registries increasingly record immunizations across the lifespan.

The AAP supports the use of immunization registries, as long as they are cost effective, pay for costs incurred while entering data, support interface with electronic medical records, and do not penalize physicians for low rates (*Pediatrics* 2006; 118:1293-1295).



#### What are the benefits of IIS?

One of the *Healthy People 2010* national objectives is to increase to 95% the proportion of children 6 years of age and younger who are enrolled in a fully operational, population-based immunization registry. By using registries, health care providers can promote effective immunization strategies (i.e., reminder/recall systems) while decreasing the resources needed to achieve and maintain high levels of coverage. Increasing health-care provider participation by linking Electronic Medical Records to immunization registries and/or IISs is vital to meeting the national health objective.

Studies show that families are more mobile than in the past, and approximately 23% of children visit more than one provider by 2 years of age, making it difficult to accurately assess immunization needs. Also, parents do not always have complete information about their children's immunization status. Approximately 1 in 5 US children have received at least 1 unnecessary vaccine because of incomplete immunization records, wasting approximately \$26.5 million per year on vaccine costs. Registries help address these problems by maintaining accurate immunization records and identifying children in need of vaccines so they can be called back to the health care provider's office. In addition, registries keep providers informed of new vaccines and changes in the recommended schedule.

Registries help providers fulfill school, camp, and child care immunization requirements; reduce paper work and office-based computer entries; introduce new vaccines or changes in the vaccine schedule; and generate Health Plan Employer Data and Information Set (HEDIS) reports for managed-care organizations.

Registries help communities by identifying high-risk and underimmunized populations and target interventions by providing information on community and state immunization rates. IIS may also be able to integrate immunization services with other public health functions, such as newborn and lead screening.

# **Additional Resources:**

Every Child by Two: www.ecbt.org

Immunization Action Coalition: www.immunize.org

American Immunization Registry Association:

www.immregistries.org

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### What are some concerns about registries?

Cost to implement. Many providers are concerned about the cost involved in implementing registries. According to the CDC, however, the cost for a provider to manually retrieve, review, and update immunization records is 3 times the annual cost of maintaining a child in a registry until 5 years of age. Other cost-saving benefits include reducing "no-show" rates (though the use of reminders), reducing vaccine wastage, and avoiding part or all of the cost of the National Immunization Survey (currently the primary method for assessing community coverage levels).

*Time involved.* Purchasing adequate software, training staff, and ensuring that technical support is available can be expensive and time-consuming. Although entering records into a new system takes time, once the registry is in place, the need to manually search for records will be eliminated.

Provider commitment. A lack of patient data often is a problem when starting registries. Having a fully functional

registry requires the participation of health care providers and a willingness to gather relevant information. The cost and staff time involved in implementing and maintaining registries is significant. The AAP encourages appropriate payment for these tasks.

# Are registry records confidential?

The information stored in registries is confidential, and the privacy of all users (including children, families, and providers) is protected by law. Many states dictate how registry information can be used and have strict rules about privacy. The CDC has developed the following specifications to protect the privacy of registry users and confidentiality of registry information:

- Confidentiality policies and agreements. All registries must have a
  written policy that is consistent with applicable federal, state, and local
  laws and regulations, and all users must sign an agreement to comply with
  written specifications.
- **Notification and choice.** Parents must be informed about participating in the registry, notified of the registry's existence, the information it will contain, and how the information will be used.
- **Use of registry information.** Registry information must not be used in a punitive manner.
- Access to and disclosure of registry information. Policies must clearly define who has access to registry information.
- **Penalties for unauthorized disclosure.** Policies must define what constitutes a breach of confidentiality, and penalties must be enforced.
- **Data retention.** Policies must address the length of time registry information will be held.

#### Where can health care providers find more information about registries?

The CDC Immunization Registry Clearinghouse (IRC) serves to collect, merge, and distribute information about immunization registries and maintains information on registry participation; privacy, confidentiality, and legislative issues; technical development; and guidance and registry funding. For more information about immunization registries, please visit <a href="www.cdc.gov/vaccines/programs/iis/default.htm">www.cdc.gov/vaccines/programs/iis/default.htm</a>. To find an IIS in your state, visit: <a href="www.cdc.gov/vaccines/programs/iis/contact-state.htm">www.cdc.gov/vaccines/programs/iis/contact-state.htm</a>.





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