

CURRENT REGISTRY EFFORTS

The Immunization Registry Information System (IRIS) is currently in its third year of operation. The first year began with the test phase. It consisted of establishing a server, networking LAN workstations, software installation and database testing. This took place at the Public Health Department's main immunization clinic. After the successful completion of the testing, the "live" implementation of the registry began.

IRIS' second phase, the "pilot" phase, followed. Clinics were selected based on training requirements, registry and clinic resources, populations served, clinic willingness to participate and geographic location.

In its third year, IRIS is now fully operational in several public and private clinics and practices throughout the county. The major focus at this time is recruitment of private providers who administer early childhood immunizations.

As of 1/31/00, the registry database contained over 317,750 patient demographic records and over 149,490 records with immunization histories. This is growing at a constant average rate of 300 records per day. As more registry sites are brought on line these figures are expected to change dramatically, increasing the number of immunization records available to all providers. The power of the registry lies in the synergism of the combined efforts of all the individual clinics and practices in order to reduce overall labor involved in documenting and tracking children's immunizations.

INITIAL TIME INVESTMENT

When a site begins implementing the registry, there is an immediate concern by users that the registry is creating more work than it is saving. Staff members need to be aware that the benefits derived from the registry are not usually seen for several months. There is a time investment in populating the database that must be made before the dividends of increased efficiency become apparent. The first month is typically the most difficult since almost every patient seen must be entered into the system. The following months will show a trend of decreasing labor in data entry as more patient records are entered and a shift occurs between entering new records and updating existing records. Transcribing old records into the registry will consume more time than manual documentation but updating existing registry records will take far less. Sample Clinic XXX will also be able to take advantage of the thousands of records that have already been entered into the registry database.

REGISTRY BENEFITS

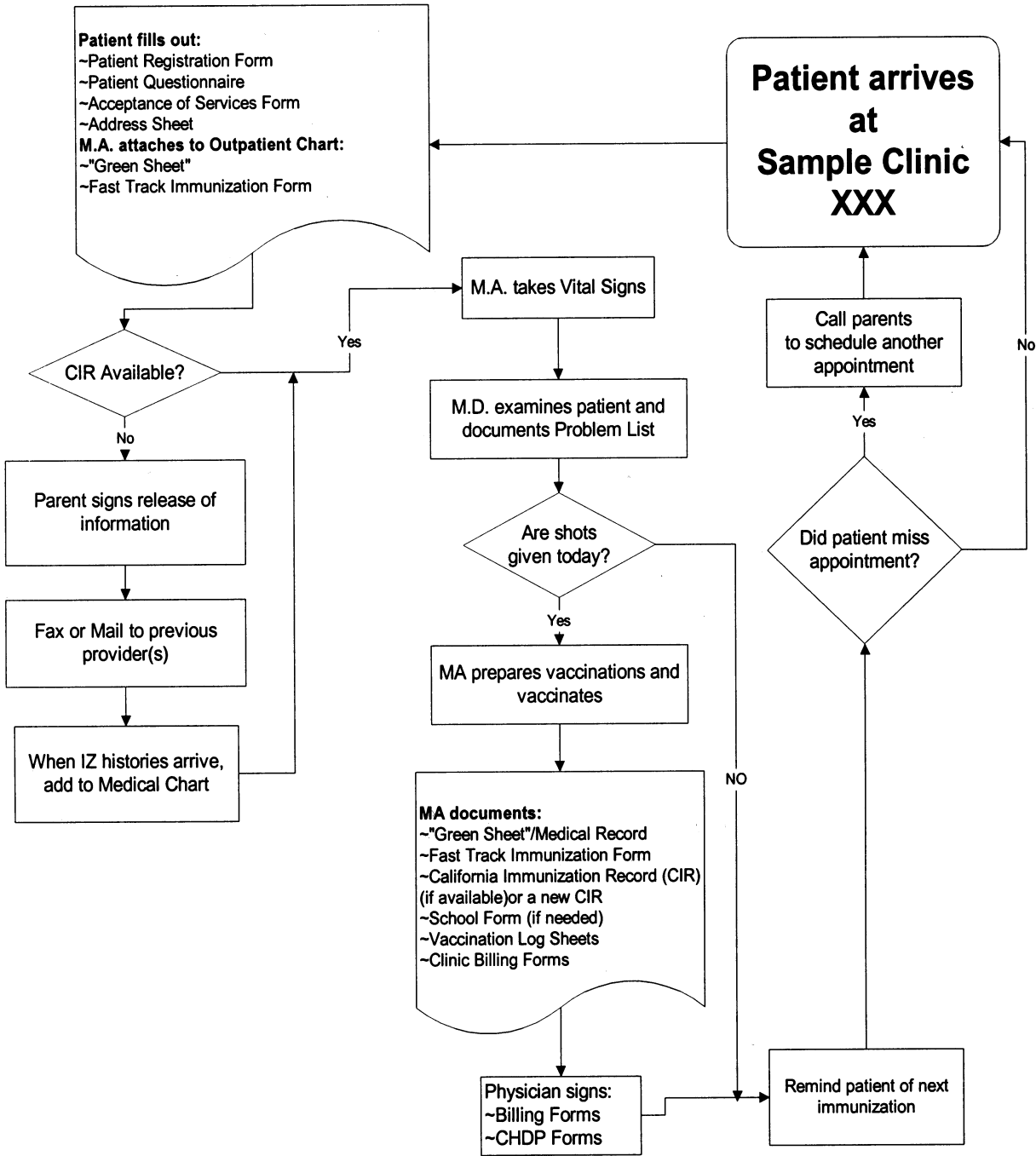
Once the registry is operational at Sample Clinic XXX, the following benefits are expected as the database becomes fully populated:

- Printing of immunization records instead of manual transcription.
- Access to patient immunization histories for new patients who have received immunizations from other providers who are participating in the registry.
- Ability to create reminder/recall postcards on demand.
- Production of various clinic informational reports such as monthly shot counts and vaccine usage reports.
- Increased compliance with federal vaccine recording laws.
- Vaccine Inventory Management.
- Automatic generation of California Immunization Record "yellow card," and State School Health forms.
- Assistance in vaccine management and improved vaccine safety through tracking of contraindications and adverse reactions.

CURRENT WORKFLOW

The diagram on the following page illustrates the current workflow for immunization administration at Sample Clinic XXX.

Current Workflow at Sample Clinic XXX



Note: Patient calls for California Immunization Record for childcare, school or camp entry. Nurse/clerk pulls patient chart and manually transcribes immunization history on CIR.

CURRENT WORKFLOW

When patients initially arrive at Sample Clinic XXX, they are asked to fill out a Patient Registration/Financial Agreement form (attachment 1), a Pediatric Health Questionnaire (attachment 2) and Acceptance of Services form (attachment 3), to start the chart process. The patients are also asked to fill out an Address Sheet (attachment 4) to update or provide the most recent address. If the patient has the California State Immunization Record, CIR or “yellow card” (attachment 5), the MA makes a copy and attaches it to the chart. When a CIR is not available, the patient is asked to sign a release of information, it is faxed or mailed to previous provider(s), and, when the child’s immunization history is received, it is placed in the patient’s chart. The MA also attaches a Fast Track Immunization Record (attachment 6) and the medical record sheet or “green sheet” (attachment 7) to the chart.

Following this, the MA takes patient vital signs and gives the chart to the MD to review before he examines the patient. The MD examines the patient, documents the problem list, and determines shots to be given for the day. The MD, RN or NP may order the shots. Thereafter, the MA prepares the shots at the lab station. The MA disseminates VIS forms (attachment 8) to the patient’s parents and administers the shots. The shots are then logged on the “green sheet” (attachment 7), the CIR, and the Vaccine Log form (attachment 10).

The patients are reminded when immunizations are due prior to leaving. For immunizations due within a two-month period, appointments are made. Otherwise, patients are asked to call and make an appointment before the next immunizations are due. Reminder and recall notices for immunizations are done through phone calls to patients if specified by the MD.

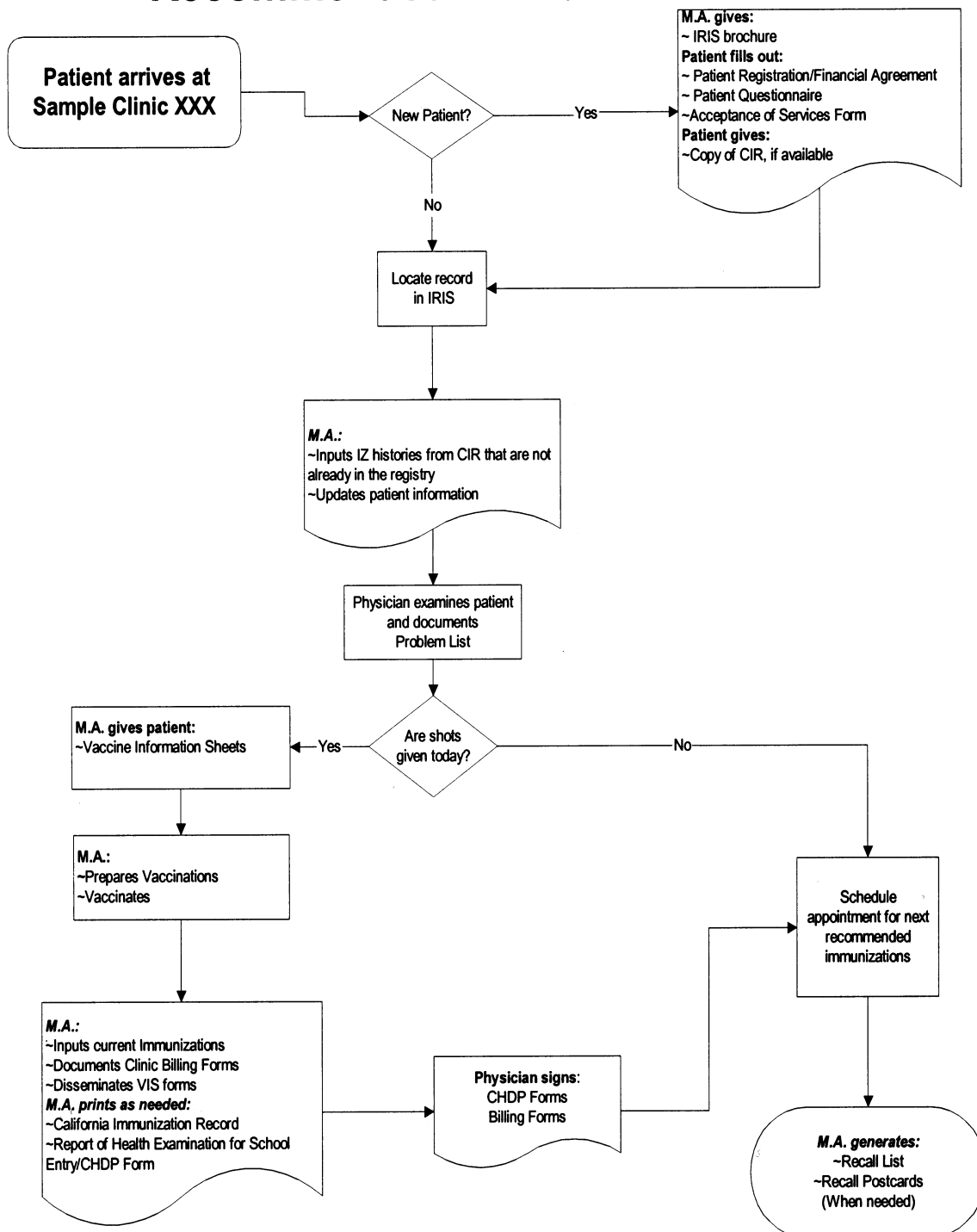
When a patient calls to request a new California Immunization Record for school, childcare or camp entry, the patient’s chart is pulled and the child’s immunization history is manually transcribed on a new CIR.

IMPLEMENTATION RECOMMENDATION

Taking into consideration the current workflow of Sample Clinic XXX, the registry staff recommend the following changes for registry implementation:

1. The clinic discloses registry participation as required by CA law to all patients (eventually only new patients). If the clinic wishes to get written consent from patients regarding registry inclusion, they can print the Registry Disclosure/Consent Form (which can be generated and printed by the system) and include it in the chart.
2. As part of the chart processing, the clinic registers the patient by inputting the information into the registry database. This insures the most current address and related information and expedites patient care at later visits.
3. Input immunizations into the database when shots are given.
4. Replace the existing “green sheet” with the registry’s clinic immunization record which meets all federal and state requirements for medical charting.
5. Vaccine inventory (for private and public vaccines) will be maintained through the registry software.
6. Print by laser printer:
 - California Immunization Record for the patient’s parent.
 - IRIS Clinic Immunization Record—the medical record for the patient’s chart.
 - IRIS Vaccine Immunization Record Signature Sheet (if used).
 - Report of Health Examination for School Entry/CHDP Form (as needed).
7. Recall listings will be used to QA registry data and identify patients behind in their immunizations.
8. The clinic can print reminder/recall postcards generated by the registry software to notify patients when immunizations are due/overdue.
9. When a parent calls to request a new CA Immunization Record for school, child care, or camp entry, pull the patient up on the registry and print the record.

Recommended Workflow with IRIS

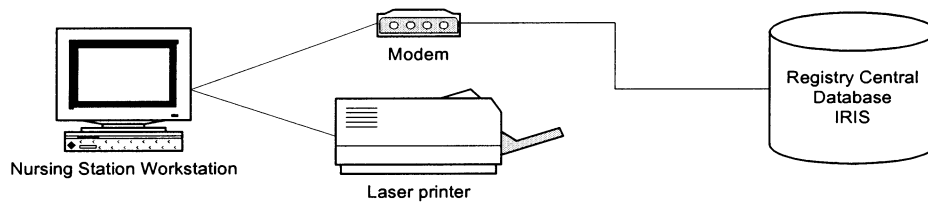


Note: Patient calls for CIR for school, childcare or camp entry. Nurse/clerk pulls patient up on the registry screen and prints the CIR.

RECOMMENDED SOFTWARE/HARDWARE

The recommended hardware for installing the registry is a single PC and a laser printer to be installed at the nurses' station. Communication with the central registry will be via a modem using Windows NT dial in. Recommended equipment includes:

- 1 Pentium 200 PC with 32 MB RAM running Windows NT 4.0/ Windows 95.
- 1 Modem at 28,800 BPS (minimum).
- 1 laser printer.
- 1 available phone line.



The registry will provide the registry software application, modem (donation of a local business), training, and technical support. The registry will also loan a laser printer for up to 6 months until the clinic can obtain resources to purchase its own. Sample Clinic XXX will be responsible for providing an available single phone line for registry operation.

TIMELINE FOR IMPLEMENTATION

The time it will take to implement Sample Clinic XXX is dependent on:

- Availability of Registry and Clinic Staff for training and back data entry.
- Availability of a single phone line.

DATA ENTRY ASSISTANCE

Initial data entry will be provided by the registry, at no cost to the clinic, to input records of all children 2 and under into the database. The data entry staff will also input next-day visits, enabling the clinic to utilize the registry's services as early as possible. The clinic staff will be provided instructions on maintaining an inventory of the vaccinations through the software application as well. Data entry will occur at the clinic's convenience. Data entry support will continue until the clinic staff is successfully trained and comfortable with the software application. The registry estimates a time period of approximately two months for the data entry staff to enter all records (0-2) years of age into the database.

STAFF TRAINING

The training process will consist of an introduction to the registry and registry software operations. Staff members will first be assessed to determine their level of familiarity with computer operations. A training schedule will be developed (with the clinic staff's approval) taking into account the clinic staff's computer skills, responsibility in registry implementation, and clinic workload. The training will continue until the clinic staff has mastered the application. Training will occur on-site.

ONGOING SUPPORT

As new technologies arise the IRIS staff will be available to assist in maintaining your registry connection. IRIS will work with the practice's staff to monitor quality assurance and assess additional training needs as they arise. Technical support is available during normal business hours. IRIS will also provide patient registry educational materials that meet registry disclosure requirements of CA law.

The clinic is responsible for providing consumables such as printer paper and replacement toner cartridges.

Contact Names and Numbers:

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Noel Panlilio, Immunization Registry Director

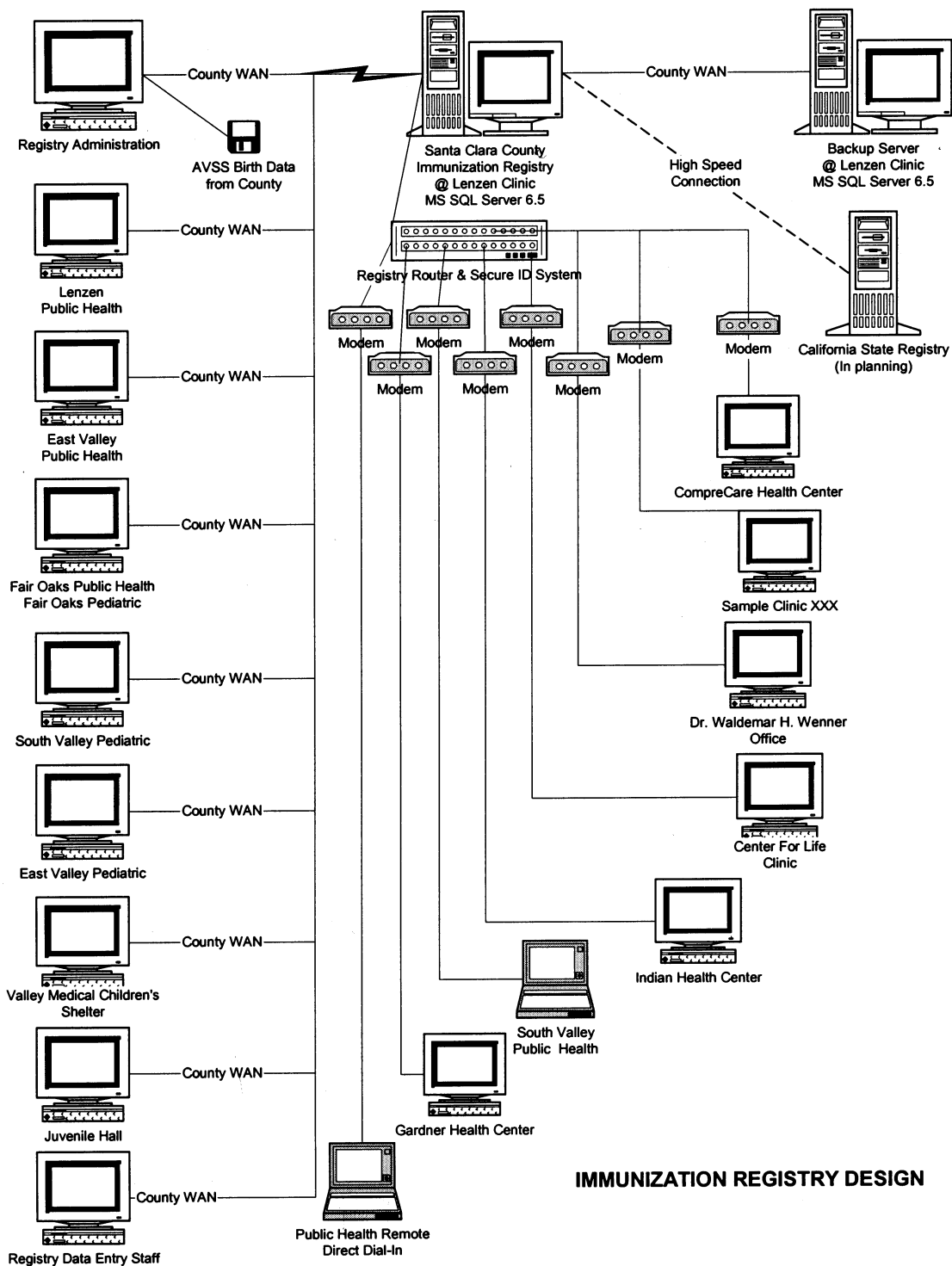
(408) 793-2033 fax (408) 793-2035

Heidi Bazan, Immunization Registry Secretary

(408) 793-2038 fax (408) 793-2035

IRIS PUBLIC, COMMUNITY & PRIVATE CLINIC DESIGN

The diagram below shows the current implementation of the registry and where Sample Clinic XXX will fit in.



Resources

All Kids Count

404-687-5615

800-874-4338

Contact: Terry Hastings email: info@allkidscount.org

www.allkidscount.org

American Immunization Registry Association (AIRA)

Contact: Amy Metroka, President

212-676-2319

email: ametroka@dohlan.cn.ci.nyc.ny.us.

www.immregistries.org

National Immunization Program

Centers for Disease Control and Prevention

Contact: Angela Salazar, Registry Support Team

404-639-8089

email: aos9@cdc.gov

www.cdc.gov/nip/registry



A national program supported by The Robert Wood Johnson Foundation
with direction and technical assistance by
The Task Force for Child Survival and Development

750 Commerce Drive, Suite 400
Decatur, GA 30030
800.874.4338

Email: info@allkidscount.org

Website: www.allkidscount.org