



# Increasing Private Provider Participation In Immunization Registries

A Toolkit and Guide

**Increasing Private Provider Participation in Immunization Registries:  
A Toolkit and Guide**

is a collaboration of The Private Provider Recruitment Workgroup and  
All Kids Count.

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# Foreword

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**H**ealthy People 2010 calls immunization registries “the cornerstone of the Nation’s immunization system” and establishes the goal of 95% of children from birth through age 5 enrolled in fully functioning immunization registries. But we’ve a long way to go to reach that goal. Although doctors and nurses in private practice settings now administer most immunizations, private practice providers lag far behind public sector providers in their participation in most immunization registries. If registries are to include information on immunizations given to all children, all providers of immunizations must use them.

In early 2000, a workgroup of registry staff from all over the country, facilitated by All Kids Count, discussed ways to increase registry developers’ knowledge and implementation of best practices to improve recruitment of private practice providers. For many years, conferences and workshops have spotlighted private provider participation; more discussion alone was not the answer. The Private Provider Recruitment Workgroup set about developing a “how to” guide, or toolkit, for public health registry developers that would help them focus their recruitment efforts.

Many perspectives about the best ways to recruit private providers needed to be incorporated; the workgroup members had years of experience to synthesize. The workgroup identified two primary areas to be addressed. First among these were knowing and understanding your environment and your customers, and how to develop a recruitment plan. They also looked at private provider recruitment from the provider’s perspective and developed a list of frequently asked questions: What does the private provider really want to know?

Because understanding your customer is the primary theme of the toolkit, examples of research instruments – surveys and focus group guides – that have been used by several different immunization registries comprise the “tools” that are included. They should serve to guide you in developing your own research instruments for understanding your environment and private providers.

The Workgroup hopes that this toolkit will help registry staff to collaborate more closely with the private providers in their area in developing and implementing their registry, whether it is just beginning or approaching maturity. A registry that meets the needs of all of its users – providers in private and public health settings – is the goal.

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# Introduction

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This toolkit and guide to increasing private provider participation in immunization registries combines techniques of social and technology marketing into a six-step process that is focused on your customer and is responsive to the internal and external environments in which you operate. It includes guidelines, questions to ask and sample surveys. Much of the information that you gather in this process may also inform other aspects of your immunization registry, such as technology, as well as other areas of the immunization program.

Two key principles should guide you as you plan and develop your immunization registry and as you “recruit” providers to participate in the registry: *Customer focus* and *partnering or collaboration*.

*Customer focus* means looking at the registry through your customer’s (the doctor’s or office staff’s) eyes. It means really knowing and understanding their concerns. It involves offering them a benefit in exchange for using the registry to manage their immunization practice.

*Partnering or collaboration* means reaching an understanding about a mutual goal (e.g., improving children’s immunization status), understanding each partner’s unique point of view, issues and concerns, and determining ways that you can work together while respecting those perspectives.

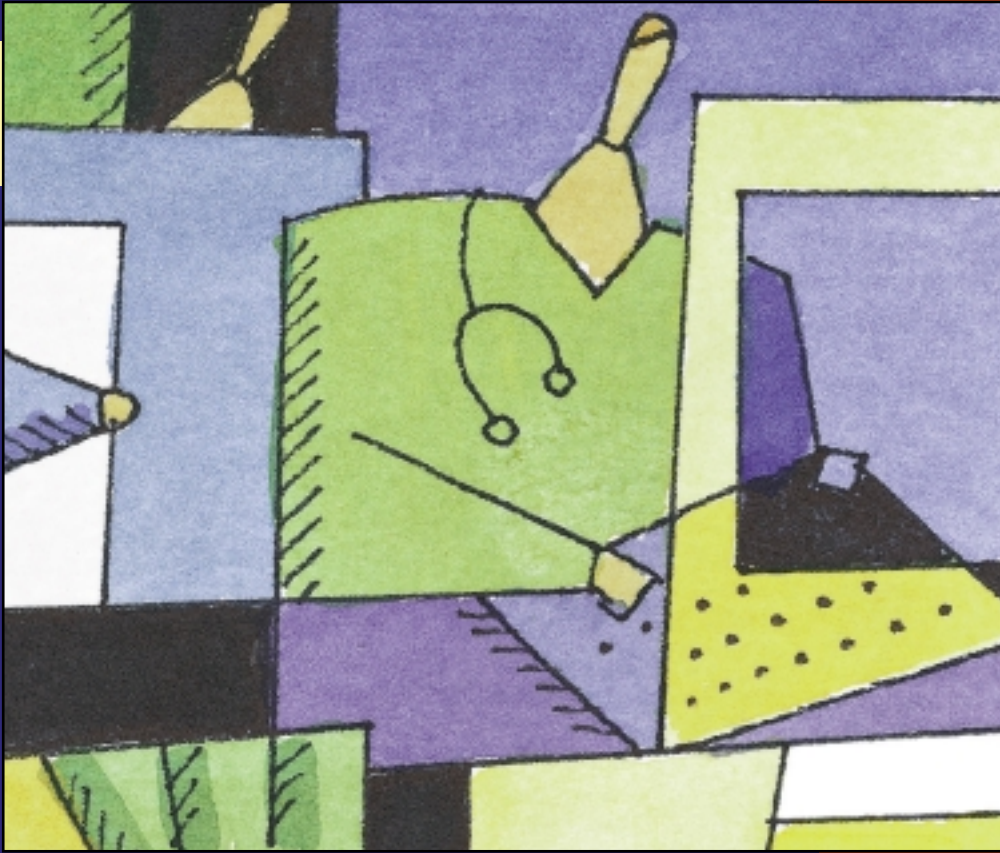
While private providers share public health professionals’ goal of immunizing their communities’ children,\* they also operate businesses. They need to know how the registry will benefit their practices, too.

This toolkit addresses how you can re-frame the way you think about the doctors, nurses, office staff, and health plans who will use the registry – going from asking *yourself* “What do they need (or what do we think they need?)” to asking *them* “What do they want?” and “How can I help?”

Recognizing that every registry is at a different point in development, the toolkit includes information that may be helpful to public health departments now planning a registry, as well as health departments that already have a registry. It’s never too late to go back and incorporate steps that were missed or to re-think how to ensure full private provider participation in the registry.

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\*This toolkit focuses on development of a childhood immunization registry, and examples reference children and child-focused organizations and services only. The same principles are applicable to development of immunization registries that include adolescents and adults.



Part I  
Six Steps  
for  
Recruiting  
Private  
Providers

# Developing the Provider Recruitment Plan

“If you don't know where you are going, you'll wind up somewhere else.”

—Lawrence “Yogi” Berra

Some immunization registries' staffs produce an overall business plan of which provider recruitment is a part. Others produce a separate provider recruitment plan. And some registries have no written plan at all. A written plan is highly recommended, whether it is separate or part of an overall business plan.

A recruitment plan can be viewed as a road map. It helps you:

- ❖ understand the environment in which you are developing the registry,
- ❖ understand what your customers think they need,
- ❖ develop the registry to meet those needs,
- ❖ communicate the benefits of the registry to your customers,
- ❖ engage their participation in the registry, and
- ❖ track your success with that process and learn from your mistakes.

A written recruitment plan helps you to prioritize your efforts so that you get the most from your expenditures of time and money. It can tell you what you have done and what the results were from that effort. It can help you look back to see where you took a wrong turn and where you were on the right path. It alerts you to prepare for what's coming so that you can make detours in your projected route, if necessary. It helps you to budget time, personnel and money. It helps keep everyone on the same path, so that everyone can see where everyone else is at the same time.

## What Does a Recruitment Plan Include?

There is no single way to develop a recruitment plan, but basic elements include:

- ❖ Situational Analysis – Internal and External Assessments
- ❖ Customer Research
- ❖ Provider Recruitment Objective
- ❖ Strategies and Tactics
- ❖ Implementation
- ❖ Evaluating and Revising Your Plan

These six steps don't necessarily follow a “linear” process because so many factors are constantly changing, from the technology of the registry, to the environment in which you are operating, to your customers and your relationships with them. *At any point, you may decide to revisit previous steps and make revisions, based on new knowledge or understanding. Not only is this likely, it is encouraged.*

# STEP 1

## Understand the Environment

**B**efore you plan the registry, you need to understand the environment in which you are operating. Two exercises that will help you are the situational analysis and stakeholder assessment.

### Situational Analysis

The goal of the situational analysis is to look objectively at your organization/program's good and bad points, achievements and failures. This activity will enable you to develop a clear picture of where your organization/program stands, what changes need to be made in order for the registry to succeed, and to recognize barriers that you will face.

A SWOT analysis is one way to analyze your organization. "SWOT" stands for Strengths, Weaknesses, Opportunities and Threats. It helps you to understand the *internal* and *external factors* that will influence the overall success of the entire registry, not just efforts to recruit private providers to participate. Analysis of these factors, along with customer research (Step 2), will enable you to set a more realistic provider recruitment objective (Step 3), and develop strategies that take advantage of your strengths and/or improve upon your weaknesses (Step 4). The results of this assessment may confirm what you already know, or they may reveal information that will profoundly change the course the registry will take.

**Strengths and weaknesses** are considered internal factors – factors within your own organization that will influence the success of the registry. These include, but are not limited to:

*Governance:* What is the governance structure and style of the health department? The immunization program? The registry? Are the right mix of organizations and people represented? Can timely decisions be made within this structure?

*Organizational structure:* What departments will work together to develop the registry? Are there overlapping responsibilities that will conflict? Are reporting lines clear?

*Vision:* Do all levels of the organization (governance, management, staff) share the same vision of what the registry should achieve?

*Financial resources:* Are there adequate financial resources to develop the registry? To sustain it? Is there a financial commitment from the top to making the registry succeed?

*Human resources:* Is there the right mix of expertise to develop and sustain a registry? To meet the provider recruitment objective? Are there training needs?

*Technological infrastructure:* Does adequate expertise reside within the organization to support a registry? Should it be outsourced? Is funding adequate for future development?

*Organizational culture:* Is staff morale high? Do staff understand the vision? Does communication flow two ways or is it "top down"? Do staff feel supported?

**Opportunities and threats** are considered external factors that can impact an organization. Examples of key forces in the environment that should be monitored include:

*Demographic forces:* Shifts in population (e.g., a baby boom, influx of children because a new school is built, migratory population trends, etc.).

*Economic forces:* Changes in local, state and federal funding sources; shifts of patients into or out of managed care; health care organizations' economic viability.

*Technological:* Advances in technology, such as web development, electronic medical records; availability and use of technology in the health departments, clinics, health plans, physician offices.

*Political:* The current political environment or upcoming changes that may influence policies toward immunizations, vaccine safety, privacy and confidentiality, or technology.

*Social:* The public's concerns about health, immunizations, vaccine safety, privacy and confidentiality, and technology.

Although you should conduct your initial SWOT analysis before you plan your registry and provider recruitment strategies, you also should constantly monitor these forces and be prepared to adjust your provider recruitment efforts to take advantage of them or to counter them. Good communication – from governance to management to staff – is critical. Continuously monitor newspapers and specialized publications. Registry staff should keep their eyes and ears alert as they participate regularly in outside organizations. Regular discussions about perceived threats and opportunities should be held among all staff.

Depending on the complexity of your external environment and your internal organizations, it may require several months to conduct a thorough SWOT analysis. It should involve participants from all facets of the registry team, the immunization program and health department leadership. Because it is difficult to objectively assess your own situation, it may be preferable to have an outside consultant help you do your SWOT analysis, present the results and make recommendations for any changes.

With information from your situational analysis in hand, you can identify possible strategies to encourage provider participation in the registry. You may choose to build on your strengths, resolve your weaknesses, explore opportunities or avoid threats.

## **Stakeholder Assessment**

To be successful, a registry needs partners that share its goal (see *Partners in the Community*). The stakeholder assessment can help you identify organizations that are potential partners, as well as those who are not, and it can help you better understand their perspectives. A stakeholder assessment examines current perceptions of all groups that have a potential interest in or influence on the immunization program and the registry. This extensive list should include *all* stakeholders that are or may be affected by the registry, listed by name. If yours is a state registry, the list should be statewide.

Do not assume that you correctly understand *any* stakeholder's perceptions about the immunization program or the registry. Registry staff can collect this information through interviews, but an outside consultant may have more success in obtaining candid responses. Like the situational analysis, a thorough stakeholder assessment may require several months.

Issues identified through the stakeholder assessment should be further explored through customer research (Step 2).

## Who Are The Stakeholders?

- Private providers (solo, group)
- Health plans and Individual Practice Associations (IPAs)
- Public health departments (other preventive health services within the health department)
- Clinics
- Community-based organizations
- Ethnic organizations
- Service organizations (Junior League, Kiwanis, Rotary)
- Professional physician and nurses associations – local or state chapters (AAP, AAFP, AOA, NMA, ANA, APHA, NAPNAP, etc.)
- State or city medical associations
- Hospital pediatrics departments
- Health plan trade organizations
- Medical informatics associations
- Health care quality associations
- Faith community organizations
- Local elected officials; local legislators
- Private foundations
- Media, print and electronic
- Large corporations that purchase health insurance
- Technology software and hardware vendors
- Parent groups
- Schools and School boards
- Head Start and child care programs

## Community Partners

**P**ublic health agencies need the support of the community in developing an immunization registry. They should not attempt to develop registries alone, even if they have the jurisdiction to do so. These projects need input from a wide range of partners to assure that the registry will be able to meet a broad range of needs. It is important to remember that the problem of under-immunization affects the entire community, and all partners can work together to develop strategies to solve the problem.

Partner organizations share a mutual goal – in this case, improving the health of children by immunizing them on time. Each organization may also have other goals, but to truly be partnering organizations, the focus of discussion must remain on the mutual goal.

It's important to involve partner organizations in every stage of your registry, from assessing feasibility of a plan, to planning and development of the product. As partners, they can help you achieve your goals with diverse constituencies. Three key partners are the community immunization coalition, health plans, and health professional associations.

**Community immunization coalitions.** Because coalitions represent multiple organizations within a community, they can build support with policy makers and the public in a way that is difficult for public health agencies to do alone. They can provide a registry with input from multiple constituents, communicate the value of the registry to their constituents, and communicate its progress.

Ideally, an effective, broad-based immunization coalition formally adopts the development of a registry as an important objective, integrating it into the overall immunization strategy. Some coalitions have a specific registry subcommittee, while others integrate registry objectives through existing standing committees. Each partner organization within the coalition has a specific area of expertise to lend to the registry effort, and each has a unique perspective that registry staff should carefully consider.

## Community Partners

**Health plans.** Health plans' quality improvement (QI) directors and other staff involved in the delivery and management of care can be major supporters of population-based registries. The registry also provides valuable tools to health plans in measuring the performance level of the plan overall. The assessment tools built into registries allow proactive strategies to be used when working with health care providers. Regular assessments, reminder/recall, vaccine utilization reports and forecasting patient needs can improve vaccine delivery at the provider level. Health plan leaders should be active members of the immunization coalition, as well. Their input regarding confidentiality, liability, access to data, technology and other issues are essential.

All health plans want to do a good job of delivering immunization services to their members. Bringing representatives from the health plans together to jointly discuss these issues in a constructive manner often creates an informal sense of "competition" among plans to do the best job. Cooperative strategies will emerge that benefit everyone.

**Professional medical associations.** The support of state or local chapters of professional medical associations can be vital to the success of the registry. Make sure that these groups are targeted for special attention and that their leadership is fully supportive. Individuals in leadership positions in these groups are frequently influential with their peers, and their support and guidance is necessary. Find out if there are Pediatric, Maternal and Child Health (MCH), or Immunization subcommittees. Enlist their help in your effort to bring this service to their members. Make sure to address any issues these groups raise about the registry, and keep them regularly apprised of the status of the project.

**Other community partners.** As the registry starts to develop and is populated with more children and more immunization records, its value grows. Schools, child care programs, Head Start programs, foster care agencies, homeless shelters, and WIC agencies are among the potential partners who can benefit from registry information. Use every opportunity to communicate the benefits of the registry to these groups and work with them to address their specific needs, such as special reports and specialized technology. Schools, for example, may prefer a "light" version of the registry that includes only look-up functions and not data entry.

### Working With A Medical Association

In Arizona, the state registry (ASIS) used the Maternal and Child Health Subcommittee of the Arizona Medical Association (ARMA) as an informal focus group while designing the registry. The subcommittee's input and feedback throughout the development and implementation phase of ASIS was invaluable. Support for the registry was so strong that ARMA supported the legislation mandating reporting of immunizations by all Arizona immunization providers. Today, Arizona is among the states with the most providers participating in a registry.

## STEP 2

# Know Your Customers

A registry's customers are its users: the doctors, nurses, office staff and health plans (as a group, "providers") who deliver immunizations and will use the registry to manage information about the shots they give.

Some customers will use the registry because they already believe it is the best way to manage immunization information. On the other extreme, some customers will never be convinced that the registry would help them to manage immunizations. Most customers lie somewhere in between. To recruit these customers to participate, you need to know who they are and understand what *benefits* they want from the registry. In return for these benefits, they will use the immunization registry to manage immunization information.

Customer research will provide you with this information about what each customer wants so that you can then offer them timely, explicit benefits that motivate them to participate in the registry and deliver the customer satisfaction that will motivate them to continue to use the registry.

Customer research also can help you understand perceived *barriers* that may prevent doctors and their office staff from using the registry. If, for example, a customer believes that entering data takes too much time, your job is to find out why it is taking so long and find a solution. You may provide additional training to improve staff data entry skills, find someone to enter the data, or improve the registry software so that data entry is faster. Or, if you are not able to provide a solution immediately, communicate to the provider that you understand his/her concern and demonstrate that you are working on finding a solution. If a solution is, in fact, not possible, communicate that fact, but work to find a benefit that will offset the barrier.

### Avoid Costly Mistakes with Customer Research

Registries that have ongoing input from providers through surveys, focus groups, or one-on-one contacts can avoid costly strategic mistakes.

Based on early research, one state registry designed its software to meet the needs of the "lowest common denominator" of providers' available technology. But, three years later, when provider participation rates refused to move any higher, they conducted additional research. This time they found out that customers' technical capacity had increased, so that the registry's technology was now outdated.

A new strategic plan resulted, with newer technology featured. In the meantime, the registry would offer providers alternative ways to submit data and receive reports so that the outdated software was not an issue.

## Customer Research

The goals of your research are:

- ❖ Identify Your Customers
- ❖ Understand Your Customers
- ❖ Prioritize Your Customers

### ❖ Identify Your Customers

You first must build a customer database. This can be time-consuming, but it is essential for understanding your customers, staying in contact with them, and targeting your efforts. It is also necessary for determining your provider recruitment objective. You need to know how many providers give immunizations in your catchment area.

Using multiple sources for identifying customers (see *How Do You Find Providers?*, page 11), create an electronic database that includes names and information about *individual customers* who give immunizations in your catchment area, cross-referenced by *site* (i.e., address of clinic, office, hospital, etc.).

Collecting individual customer data is essential for establishing a true denominator – the number of providers in your area. Providers that are enrolled in the registry will provide the numerator. These two numbers determine your progress toward your provider recruitment objective, as discussed in Step 3. Collecting site (i.e., group practice, clinic, hospital, etc.) information will enable you to target multiple providers at one time. Relationships between providers, clinics, groups, health plans and hospitals can be complex; make sure you understand the relationships.

Having both individual and site information will allow you to prioritize your customers. Information will help you manage your staff time (a site with multiple providers will require more resources, but may result in more providers recruited). It will help you target your customers accurately (e.g., a provider who is a strong registry advocate should be noted within the database and recruited early on). It will help you manage mailings (e.g., should you send one newsletter about technical updates to the registry to the office manager at a site or one to each provider at a site?). Once you have gathered basic contact information on individual customers and sites, you can collect most additional information by phone or a short fax survey. You will need to constantly update the database for it to be accurate.

Information to gather may include:

- ❖ Customer name and contact information
- ❖ Specialty (pediatrician, family practice specialist, general practitioner, nurse practitioner )
- ❖ Practice/clinic name (including corporate/business affiliations with other practices)
- ❖ Type of site: Private offices (solo, group or multi-specialty); clinics (county health clinics, federally qualified health centers and community health centers); hospitals (newborn nurseries, newborn intensive care nurseries, hospital-based clinics, pediatric ambulatory care departments, and emergency rooms); health plan clinic; foster care agency, WIC clinic, etc.
- ❖ Names of all clinical providers, administrative/support and business/technical personnel
- ❖ Other site(s) where the provider works
- ❖ Volume of immunizations administered
- ❖ Name of decision-maker and office manager
- ❖ Patient management system
- ❖ Existing relationships with the registry
- ❖ Notes (e.g., VFC provider, Medicaid provider, contacts by registry staff, other relevant information)

## ❖ Understand Your Customers

Within each site, there are clinical customers (physicians, nurses, physician's assistants, medical assistants), administrative support customers (receptionists and clerks), and business and information technology customers (business managers/administrators, and information systems directors/managers, and/or staff). You need to understand what is important to all these customers and how the registry will impact each of their roles and responsibilities. This information will be used to develop and target strategies.

### ***Survey instruments***

You can use a telephone or mail survey to obtain detailed information about your customers' practice, computer use, thoughts about the registry, perceived benefits and perceived barriers. Different surveys should be developed to obtain information from the different types of customers, (e.g., managed care vs. private provider; office manager vs. physician). Try to obtain as many responses as you can and ensure a representative sample of different types of providers. You will probably have to make follow-up phone calls with as least some providers' offices to get them to fill out and return the survey. Incentives may encourage them to participate. (See **Part III** for examples of surveys.)

### ***Focus groups***

Focus groups provide more in-depth exploration than a survey into what your customers think and feel about an immunization registry, but they include a smaller sample. Proceed with caution: focus groups are extremely hard to run and interpret, so hiring a professional is advised. A person who is not associated with the registry may be able to elicit more candid responses than a person involved with the registry.

The goal of the focus group is to obtain more detailed information about the perceived benefits/rewards of the registry and the perceived barriers to using a registry. The focus group leader can ask more specific questions than a survey and delve into customers' thought processes. You should conduct focus groups with representative samples of the registry's customers: office managers, nursing staff and/or pediatricians. (See **Part III** for example of provider focus group questions.)

Focus groups also can be conducted with other stakeholders, such as parents, to obtain valuable information. (See **Part III** for example of parent focus group questions.)

### ***Key informant/structured interviews***

Personal interviews are an excellent way to explore how customers think and feel about an immunization registry. They provide in-depth information that isn't available through surveys, help you to identify registry "champions," and can assist in establishing the one-on-one relationships that are critical to successfully recruiting providers. Your environment will determine the individuals that you will interview, but you should include a representative sampling. Examples include a pediatric leader and non-leader, a health plan medical director, a clinic manager and a support staff person, a business manager of a leading pediatric practice and an office clerk. If your interviews are not representative, one group of customers may feel "left out." Interviews not only serve to inform you about the customer, but also are an opportunity to inform customers about the registry. Customers feel "included" when their opinions are sought and carefully considered. (See **Part III** for example of a structured interview.)

## How Do You Find Providers ?

Here are the most frequently used sources for provider names and sites:

- Physician/local medical association
- Local chapters of the American Academy of Pediatrics (AAP) and American Association of Family Practitioners (AAFP)
- State medical licensing boards for physicians, nurse practitioners and physician assistants
- Health plans (Quality Improvement Directors are an excellent source of information for large pediatric sites. They have an established relationship with the office managers of the large sites and may know something about their practice environment. They also will have provider representatives assigned to these sites.)
- VFC coordinator at your state/local health department (also a good source for identifying high volume sites)
- Office manager associations
- Hospital departments of pediatrics and family practice
- Public health physician lists for notification of disease outbreaks
- Early Periodic Screening and Diagnostic Testing (EPSDT), Children's Health and Disability Program (CHDP) and other Maternal, Child and Adolescent Health (MCAH) program provider lists
- Internet yellow pages and the yellow pages in local phone books
- Sites that assess immunizations, such as foster care agencies and WIC
- Vaccine companies, manufacturers, distributors

### **What Customer Research Will Tell You**

What you learn about your customers will depend on the questions you ask in your surveys, focus groups, and interviews. The surveys included in **Part III** ask questions about the health care setting, the immunizations given, experience with a registry, technological capacity, perceptions of benefits and barriers, satisfaction with the existing system, how it might be improved and more. The information will inform you about needs, wants, and perceptions of the individual providers/staff who answer the survey. It also will give you a picture of “trends” among types of customers (i.e., solo practice vs. group practice, rural vs. urban; clinic vs. staff model health plan, physicians vs. office managers, etc.) that could impact participation if not addressed. You may find, for example, that rural providers as a group don’t think they have enough training. This could have implications for staffing, technology enhancements or other areas of operation.

One of the most important parts of customer research is the questions about the benefits (advantages or incentives) of participating in the registry. Remember that marketing a registry to providers means offering them something in exchange for their participation. Unless participation in the registry is mandated, providers can choose not to participate. (And in those places where it is mandated, providers may participate minimally if there is no advantage to them.)

**A final note:** Customer research is not a one-time activity. You should conduct surveys and focus groups before you start your registry and continue to do so throughout its operation. Providers frequently change locations, affiliations, staff, technology and policies, which results in changes in your database. In addition, their perceptions of the registry, immunization issues or technology are constantly changing. You want to remain in touch with what your providers are thinking and doing.

#### **Research Benefits All Partners**

After two previous failed attempts to launch a registry in Maryland, the Maryland Department of Health and Mental Hygiene (DHMH) and the Maryland Chapter of the American Academy of Pediatrics (AAP) wanted to “get it right.” Key to their successful effort was comprehensive customer research that included practice visits; physician and office manager surveys; physician, office manager and parent focus groups; meetings with managed care organizations and external stakeholders.

The assessment yielded valuable information for both AAP and DHMH. AAP gained valuable information about its members; the opportunity to shape the registry to meet its members needs; a closer relationship with DHMH; and a strategic plan for achieving the registry goal. DHMH gained access to and credibility with private providers; information on registry customers; and insight on better ways to accomplish registry goals.

## ❖ **Prioritize Your Customers**

Information from the situational analysis, completed database and customer research can now be factored into the decision about who to target first.

Your research may find that some providers are strongly motivated to participate in the registry without being offered incentives or benefits because they have a strong interest in the registry, in technology or public health. These providers should be given high priority.

You should give low priority to providers who you know are struggling with staff turnover, new staff, other technology issues, health system turmoil, etc. – anything that could be perceived as a barrier that you are unable to address.

Most providers will fall in between these two extremes and should be ranked within different criteria.

Criteria may include:

- ❖ Volume (number of children seen, amount of vaccine used, number of physicians).
- ❖ Geographic location (clusters of sites, denser populations, higher birthrates).
- ❖ Potential for “visible” successes (large practice or well-known provider) that other providers will want to follow; physician leaders in the community.
- ❖ Requirements for technical support.
- ❖ Population served (e.g., children most at-risk due to poverty, mobility, poor access to health care, uninsured or under-insured, and recent and/or undocumented immigrants).

It is possible to have a provider that ranks low because of volume, but high because of visibility within the community or minimal technical requirements. This information will be useful when choosing strategies to increase provider participation.

## STEP 3

# Develop a Provider Recruitment Objective

**A**t its inception, your registry should have established an overall goal (sometimes called a mission) that has been communicated to everyone in the project. Sometimes the registry and its stakeholders develop the goal together. Broad communication about and understanding of the goal is important because everyone who works on behalf of the registry and all of your partners and all of your customers need to know what you ultimately plan to achieve. This statement provides focus and inspiration for all of the various partners involved with the registry.

The registry goal is often stated in terms of the percentage of children (limited by age) entered into the registry within a certain time frame. The *Healthy People 2010* goal, for example, is to enroll “95% of all children from birth through age 5 in a fully functioning immunization registry.”

Whether you choose to adopt the *Healthy People 2010* registry goal as your registry goal or not, your goal should be specific and achievable.

Benchmark data, such data from other registries, as well as data from national organizations and government agencies may also help you define your registry goal.

To reach the registry goal, you will also need to establish a provider recruitment objective. (You may also have objectives for technology, functions of the registry, etc. Remember that none of these objectives can be considered in isolation from the others; they all must work together for the registry goal to be achieved.)

How your provider recruitment objective is established and measured needs to be carefully thought through. Anticipated results need to be set in the context of public health objectives and *reasonable* expectations for what can be achieved, yet they must also challenge registry staff. Again, benchmark data may be helpful. You will need to consider the realities of the registry's situation (current provider participation, support for the registry from key stakeholders, etc.), customers' perceptions of the registry, and the resources (personnel, financial) that can be committed to provider recruitment. All of this information you will have gathered from your situational analysis and customer research.

The provider recruitment objective should be quantified, with a time limit. The more specific you can be, the clearer everyone involved in the registry will be about what they need to do to achieve the objective. By being specific, you will be better equipped to identify what resources, personnel and strategies you will need to achieve the objective. By eliminating ambiguity, you will be better able to determine if/when you reach the objective, and if not, why not.

### Tip

Your registry goal provides focus and inspiration for all involved with the registry.

An example of a provider recruitment objective might be:

*By XX date, 90% of public and private providers within the catchment area are enrolled in the registry.*

You will need to define “provider” – are you counting individual providers or are you counting sites?

You will also need to define “enrolled.” For example, do you require a provider to sign an official user agreement to be considered enrolled?

Or you might have a recruitment objective that specifies the percentage of providers who are submitting data; you will need to clearly define what you mean by “submitting.” How often? How complete?

Or you may decide that you need objectives specifying percentages for enrolled providers and submitting providers. All Kids Count and the National Immunization Program/CDC have used data on enrolled and submitting providers to measure registry progress in the past, and CDC will continue to do so in future annual surveys of 317 immunization grantees. For more information on CDC quantitative measures, check the annual immunization registry survey, online at [http://www.cdc.gov/nip/registry/ar\\_freq.html](http://www.cdc.gov/nip/registry/ar_freq.html). All Kids Count quantitative indicators for immunization registries are online at <http://www.allkidscount.org>.

## STEP 4

# Develop Strategies and Tactics

- A**t this point in the development of your plan, you know:
- ❖ the strengths, weaknesses, opportunities and threats in your environment;
  - ❖ who your customers are and how they rank in terms of volume, geography, visibility, etc.;
  - ❖ what will motivate them to participate in a registry;
  - ❖ what they see as barriers to participating; and
  - ❖ which customers you should target first to get the greatest benefit for the registry.

The next step is to develop *strategies* (broad categories of approaches). Motivating someone to act differently is not easy, especially when their habits are long-established (i.e., doctors who have been using paper records for a long time) and they do not see the benefits to changing the way they do business. Because changing behavior is not easy, it may take a long time and it is unrealistic to expect that it will happen quickly. Often it happens in stages.

*Awareness* is achieved by informing customers of something through communication.

*Understanding* requires educating customers.

*Changing behavior* usually requires a clear demonstration of the benefit (“what I want”) that will result from the action.

*Continuing a behavior* requires that you build and maintain a relationship with your customer through continuing those benefits and providing additional benefits.

*Tactics* are specific actions that will help the registry carry out each strategy. You’ll need multiple tactics to accomplish a strategy because you’re not likely to reach everyone in the same way or in just one way. Some tactics may help to accomplish more than one strategy.

Following are some identified strategies and tactics to:

- ❖ increase providers’ awareness/understanding,
- ❖ motivate them to participate in the registry by providing benefits, and
- ❖ maintain your relationship with them.

***This is not a comprehensive list of strategies and tactics. Use them as ideas for developing strategies and tactics tailored to your registry project. Because immunization registries are all different, what works for one registry may not work for another. Additionally, all provider environments are different. What works in one state, county, city or community may not work in another.***

### Tip

Promising a doctor that the registry can reduce his/her paperwork, or telling a nurse that the registry will take care of managing vaccine inventory is probably not enough to convince them. Before you attempt to recruit a provider, you need to back up your “benefits” with data. Doctors and nurses respond well to hard facts and demonstrations.

## Strategies for Increasing Provider Awareness/Understanding

**Strategy:** Educate your broad stakeholder audiences about the problem (how to increase a low immunization rate or how to sustain high one) and how registries can be a tool to address the problem.

**Tactics:**

- Encourage your local immunization coalition to develop a campaign to increase stakeholders' knowledge of local immunization rates, vaccine-preventable diseases, and the role of a registry. Use public media (who, ideally, are part of the immunization coalition), special events, schools, etc. as vehicles for reaching the public.
- Encourage vaccine manufacturers' representatives to help educate providers about the role of registries in managing immunization information.
- Develop a speakers bureau that addresses different topics in immunization (vaccine safety, new immunizations, decreasing awareness of vaccines) and include the role of registries in these discussions.

**Strategy:** Give providers a stake in the success of the registry, ensuring their "buy-in" and support, by involving them in planning, developing, implementing and marketing the registry.

**Tactics:**

- Develop a group of formal and informal physician leaders and "non-leaders" to assist in planning the registry. Ensure a wide variety of providers are involved (e.g. different types of practices; different ages; sophisticated and unsophisticated computer users). By involving a representative group, you will counter concerns that different types of users didn't have input.
- Ask diverse physician and office staff leaders to assist in planning and development of the registry to ensure their concerns about privacy, access, etc., are addressed.

### Early Collaboration Key to Success

Collaboration between private providers and public health in the development of an immunization registry is recognized as essential to their success. Denia Varasso, MD, FAAP, New York City, noted in a 1997 article in *Pediatric News* that "without early collaboration from the pediatric community, it is unlikely the registry will be user-friendly to private pediatric practice." She offered *10 Top Suggestions to Enhance Practitioner Participation*, which still hold true.

- Don't assume you are doing anyone any favors.
- Involve your practitioners from the beginning.
- Use the American Academy of Pediatrics.
- Know who and where your practitioners are.
- Visit your practitioners in action.
- Understand the economic and time constraints.
- Provide computer support
- Use immunizations as a tool and an indicator.
- Realize that there is more to pediatric care than just immunizations.
- Plan to keep your promises.

- Develop a speakers bureau composed of physician registry advocates who can address different audiences.
- Beta test your software or registry with a variety of private provider sites (e.g., target large, small, urban, rural practices) to involve them in its development.

**Strategy:** Put a “face” on the registry by making registry staff known in the provider community.

**Tactics:**

- Have staff members develop one-on-one relationships with office staff and physicians through regular personal meetings.
- Hold Grand Rounds presentations at hospitals.
- Exhibit and present at statewide physician association conferences.
- Develop a speakers bureau for addressing health care, community and business groups (e.g., hospitals, medical associations, health plans, Rotary, Kiwanis, parent groups, ethnic groups, major health care purchasers, etc.).

**Tip**

It is important to keep providers up to date on the registry's progress. Be sure you are realistic. You'll have difficulty winning back their confidence if the registry doesn't “deliver” on its promise.

**Strategy:** Develop regular vehicles for communicating the progress of the registry to providers and stakeholders.

**Tactics:**

- Establish a newsletter to report on the progress of the registry. Shorter is better. Find out if providers prefer a fax, email or printed version.
- Make a registry update a regular part of coalition meetings, pediatric department meetings, medical society publications, health department publications, etc. Emphasize new features/benefits of the registry to providers.
- Capture the interest of a local health reporter in the registry. Send regular updates on milestones achieved, progress, or human interest stories.

**Strategy:** Demonstrate the health department's commitment to the registry.

**Tactics:**

- Ensure that all public clinics fully participate in the registry. Private providers will view full participation by public clinics as a sign of the health department's commitment to the registry.
- Demonstrate the health department leadership's commitment by having top administrators present at registry meetings with key stakeholders (e.g. coalition, health plans, medical associations).
- Write an op-ed piece for local media with the head of the health department's by-line about the need for the registry and its benefits to the community.

**Strategy:** Engage physicians in education efforts.

**Tactics:**

- Identify a registry “champion” – a private provider who understands the benefits of registries to sustaining immunization rates and improving practitioners’ business practices, who is recognized by his/her peers as a leader, and who is willing to lead your campaign.
- Develop an education program for health care professionals led by private sector physician leaders or early adopters. Include information on the registry as an important tool for sustaining high immunization rates and eliminating peaks and valleys of disease, as well as for managing providers’ immunization practices.
- Ask a private sector provider who supports the registry to write an op-ed piece for local media or a medical association publication.

**Strategy:** Educate providers about immunization registry development and progress in other communities/states.

**Tactics:**

- Include information about other registries in informational materials (e.g., newsletters, presentations).
- Invite a provider leader from another registry to present his experience at a special provider meeting or Grand Rounds presentation.
- Take provider leaders to visit a successful registry in another community.
- Keep providers informed about support for registries from other organizations (e.g., endorsements from national organizations such as AMA, AOA, AAHP, etc.)

## Strategies for Moving Providers to Participate

**Strategy:** Demonstrate that you understand the private providers' concerns, that you have answers to most questions, and that you are willing to find answers to others.

**Tactics:**

- Listen carefully to explicit concerns as well as for unstated concerns.
- Develop a list of Frequently Asked Questions, based on questions your potential customers have asked, and make sure all staff know the answers. In personal interactions with providers, don't wait for the questions to be asked. Address the questions early and often, so providers can see that the registry is ready with answers.
- Use communication vehicles (newsletters, news releases, media interviews) to address questions.

*(See **Part II**, *Frequently Asked Questions*, for examples of questions a registry will encounter.)*

**Strategy:** Impress on providers the registry staff's commitment to meeting their needs.

**Tactics:**

- Develop alternative ways for providers to submit data if they are not yet ready to use a computer: bar coding, fax, mail-in disks, etc.
- Continually ask what they want from the registry. As they become familiar with what a registry can do, they may have new ideas.
- Respond to all questions and concerns quickly and with the goal of finding a solution.
- Establish and promote a Help Desk with a toll-free number and hours that correspond to projected hours of system use. These should include "before" and "after" hours for offices that stay open late or where work is done before and after the office closes.
- Establish a maximum time for technical site visits to troubleshoot a problem, (e.g., within 8 hours).

### One-on-One Works Best

A visit to a provider's practice may be your most valuable strategy. You'll gather information not available through interviews and demonstrate your commitment to meeting the individual provider's needs. However, depending on the number of providers in your registry's database, it can also be very time intensive.

The Santa Clara Co., Calif., registry took the concept of one-on-one even further, using "work flow analyses" as a key strategy to recruit providers who were interested in registry. In a scheduled visit to the practice, they gather information on office operations, then – in collaboration with office staff – develop a recommendation for improving the workflow of the practice and explain how the registry could streamline operations. For the registry, the analysis provides a greater understanding of practice issues, and for providers, the analysis provides understanding of the benefit of the registry to the practice (See **Part III**, *Work Flow Analysis*).

**Strategy:** Demonstrate to providers that registry staff are knowledgeable about all aspects of immunization.

**Tactics:**

- Provide a workflow analysis of the practice/clinic, with recommendations for improving all immunization practices and the flow of customers through the practice. (See **Part III, Work Flow Analysis.**)
- Respond to providers' questions about immunizations. If you don't have the answer, research it and deliver the answer to the requester within a specified time period.
- Include new information about immunizations in the registry newsletter. Demonstrate how the registry can help incorporate that information into practice, (e.g., a schedule change, new vaccine, etc.)

**Strategy:** Keep all providers not yet enrolled apprised of who is enrolling.

**Tactics:**

- Publicize names of new enrollees in the registry newsletter.
- Run a newspaper ad recognizing enrolled providers.

**Strategy:** Strive for early successes and publicize them.

**Tactics:**

- Identify and publicly recognize "early adopters" and high volume providers.
- Include information on numbers of new registry users, how the registry has benefited a provider or a patient in newsletters, presentations, etc.

**Strategy:** Continually add enhancements to the registry that will make the provider's job easier. Enhancements may be available to all providers (e.g., vaccine inventory module) or customized for a provider.

**Tactics:**

- Provide a technology incentive: a piece of hardware, a modem, Internet access, etc.
- Offer to enter historical data for a practice. Lack of staff time may be the biggest barrier to participation.
- Provide customized reports that will enhance a provider's office operations or improve immunization practices.

## Tip

Registry reports that give private providers information that will help improve their immunization practices as well as their business operations are invaluable for convincing them to participate in a registry. Reports can be generated by the central registry or by the provider.

Reports can include all patients or a specific segment of patients (e.g., by age, antigen, time period); customized reminder and recall; vaccine ordering and inventory; coverage assessments (including coverage over time); WIC patient rosters; feedback on data quality or minimum interval violations; or a list of patients and the shots they need for the upcoming day.

Notes Jeff Weihl of the Michigan Childhood Immunization Registry, "We tell providers that the registry can do everything but the dishes."

## Strategies for Building and Maintaining Relationships with Providers

**Strategy:** Establish personal relationships with providers through regular visits to their offices.

**Tactics:**

- Plan to do office “observations” to get a better picture of how a provider office operates.
- Schedule regular meetings with a site’s physician(s) and with the office manager. Make meetings separate so you hear both viewpoints.
- Introduce registry staff (who otherwise may remain faceless voices on the phone) to providers so that they can communicate better.
- “Humanize” staff: use humor, personal recognition of providers, holiday cards, etc.

### Tip

“Recruiting” a provider means developing a long-term, reciprocal relationship. Familiar, friendly faces go a long way in developing that relationship.

**Strategy:** Provide frequent, ongoing education and training opportunities.

**Tactics:**

- Offer frequent training sessions in providers’ offices or in locations that are convenient to groups of providers (hospital, medical office building). Accommodate the schedules of those who attend (office staff).
- Position training sessions as opportunities for registry users to share ideas about the registry and other immunization issues.
- Provide incentives for attending training sessions, i.e., lunch or dinner.

**Strategy:** Develop regular channels for communicating registry news to providers.

**Tactics:**

- Establish a regular newsletter to provide updates on registry progress (number of providers, children, immunization events); new registry features; new providers; etc.
- Contact provider groups (health plans, hospital pediatric department grand rounds, medical societies) to get on their meeting agendas.

**Strategy:** Provide ongoing opportunities for feedback.

**Tactics:**

- Administer a periodic customer survey (phone, fax, or personal)
- Hold periodic focus groups with representative types of customers (physician, nurse, office manager, medical director) so that they can share concerns and ideas with one another, as well as with registry staff.
- In a registry publication, highlight the feedback you receive, including your response, so that customers can see your responsiveness.

**Strategy:** Develop additional user support mechanisms.

**Tactics:**

- Establish user support groups for office managers and staff at times and locations most convenient for them.
- Develop a user newsletter with helpful hints, updates, and information on other users.
- If the technology support person does “office calls,” give him/her a cell phone so he can be reached on the road for prompt response.

### **A Community Birthday**

The Savannah, GA, registry holds an annual “birthday party” for all up-to-date 2-year-olds in the community. The highly visible event brings providers, volunteers, parents and children together to celebrate the community's high immunization rate and the success of the registry in helping to achieve that goal.

**Strategy:** Reward providers who participate in the registry with public recognition, especially among their peers, but also with the community.

**Tactics:**

- Take out ads in community publications or medical society publications to announce physicians who have enrolled in the registry.
- Work with local media on developing stories that spotlight providers who use the registry.
- Work with the coalition to publicly recognize providers who participate in the registry (awards ceremonies, publications, at meetings). Make recognition in a prime venue an annual event.
- Join/participate in professional organizations and meetings attended by physicians and office staff.
- Develop a special event to bring recognition to the registry and participating parents and providers.
- Send “rewards” to provider offices that submit immunization data promptly: small gifts, such as coffee cakes or a box of candy, are greatly appreciated. (If this is not an acceptable practice in your health department, consider working with a partner organization or business to provide recognition.)

## Communicating with Customers

When communicating with your customers, it is helpful to think about the main points you want to make as “messages.” Here are some tips on using messages effectively.

**What is a message?** This is what you want your target audience to think, understand, or do. A message needs to be viewed from the **customer’s** perspective, not your own. It should have three parts:

**The frame** – What’s the problem?

**The benefit** – What’s in it for the customer?

(Use audience research to determine what will resonate.)

**The call to action** – What do you want your customer to do?

Remember that what “resonates” with one customer will not necessarily work with another. Messages should focus on the customer’s “wants.”

*Example:* Message targeted to provider in a busy office.

“Because kids go to so many different providers, it’s hard to keep track of their past shots (*problem*). By consolidating shot records, registries reduce phone calls and paperwork for office staff (*benefit*). Your staff can devote more time to patient care if you participate (*action*) in the registry.”

### Tips for Effective Message Delivery

- Visualize a single, individual person as your customer. Speak/write to the individual. Be sensitive to his/her style – does he/she respond to rational or logical arguments? Data? Emotion?
- Messages need to be tailored to resonate with each customer on emotional and rational levels. A message should be based on facts, but the context and language should appeal to emotions, i.e., needs and wants.
- Messages are only effective if they are repeated. Some experts say a minimum of seven repetitions for a message to sink in. Others say 27 times! The spirit of the key messages should permeate all communications – meetings, publications, training, presentations, etc.
- Messages are not just for brochures, flyers, posters and videos – all staff who interact with providers need to use them in everyday work. Once you’ve decided on your strongest messages, make sure that all those affiliated with the registry know what they are, can express them in their own words, and understand they need to stick to the messages when ever the registry is discussed.

## STEP 5

# Implement The Plan

**A**t this point, your situational analysis, customer research, provider recruitment objective and strategies you would like to use come together as a provider recruitment plan. The plan should include:

- ❖ Strategies and tactics to accomplish each strategy.
- ❖ Estimate of each tactic's cost.
- ❖ Estimate of time each tactic will require.
- ❖ Name of person responsible for each tactic.

It is most helpful to lay out a plan on a spreadsheet, with the weeks going across the page and the strategies and tactics that you think you should employ to reach your provider recruitment goal going down the page, with notations for person(s) responsible and estimated time and cost.

Once it is all on paper, step back and realistically assess whether you can accomplish the strategies and tactics in the time frame stated in the provider recruitment objective. Determine if the financial resources available are adequate to support these strategies. Working with appropriate immunization program and health department management, adjust strategies, tactics, staff and budget as needed until you think you have a workable plan that will enable you to achieve your provider recruitment objective.

### Who Recruits Providers?

Although your registry may have a person who is officially in charge of recruiting private providers (sometimes called marketing, providers relations, customer relations), everyone involved in the registry – including administrative, technical and support personnel – needs to understand that they are recruiters too. Any contact they have with their customers is a recruitment opportunity. Thus leadership, registry technology development, partnerships, outreach to customers, training on the system, customer support – all are recruitment activities because they influence the way providers *perceive* the registry. Ultimately, how providers *perceive* what the registry can do for them will determine if they participate in the registry.

Once you have an approved plan, each tactic will need to be broken down into steps or activities. For example, “Develop a speakers bureau” may include:

- Develop a list of potential speakers.
- Contact speakers about availability.
- Contact all hospitals to determine dates for Grand Rounds.
- Contact medical associations to determine meeting dates.
- Contact all health plans to determine QI department meeting dates.
- Match speakers with dates.
- Follow-up with speaker and organization for feedback.

The person responsible for each step should be noted, as well as the estimated completion date and actual completion date. Accountability is essential to achieving your provider recruitment objective.

### **Helpful hints:**

- Just as it is important to involve providers in developing a plan for the registry, it's important to involve the staff that will be implementing the recruitment plan in its development – and that may mean all staff (see *Who Recruits Providers?*, pg. 25).
- Recognize that the environment in which you operate will change. You may hit major barriers, i.e., staff attrition, budget constraints, technology problems, etc. Don't let your provider recruitment efforts come to a standstill while you resolve these problems. Shift emphasis to a different strategy or develop new strategies.
- Recognize from the beginning that recruiting providers will probably take longer and will require more staff effort and more resources than anticipated. Plan for this, but also plan to adjust as you move along.
- Consider hiring an outside consultant or facilitator to develop/assist with development of the plan.
- Remain positive and maintain the initial enthusiasm. Work hard to repeat successes and address problems as they occur. Never ignore “red flags” (those sneaking feelings that something isn't quite right). Trust your instincts.
- Make sure your strategies are appropriate to the audience. What's appropriate to one customer group (e.g., a solo practitioner) may not work with another (a clinic).
- Be prepared to seize opportunities that arise.
- You cannot listen too carefully to your customers.

## STEP 6

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# Evaluate and Revise The Plan

**Y**ou should check your progress toward your provider recruitment goal at regular intervals. How often you evaluate your plan will depend on whether you are operating in a rapidly changing environment and whether you are making satisfactory progress. At minimum, a six-month review is a good idea.

Be sure you are measuring what you intended to change. For example, if your goal is individual providers submitting data, be sure you are not measuring providers enrolled or sites enrolled. Make sure that you check your denominator (the total number of providers) and the numerator (the number of providers enrolled/submitting) each time. The denominator changes as providers move into or out of your market, or merge practices, which can inflate or deflate your percentage of increase.

It is helpful to track progress over time graphically (e.g., line or bar charts) so that your staff can see the progress that is made. Look at progress in relation to changes that might have been made to the registry, recruitment strategies, or changes in the environment. Compare your recruitment progress to that of similar registries.

To keep your plan effective and responsive, evaluate it for strengths and weaknesses. Specific questions will depend on your registry's development, your recruitment objective and your strategies. Following is a sampling of general questions that would apply to most recruitment plans.

### Questions to Ask

- Does your customer research (situation analysis, stakeholder assessment, customer research, database development) yield useful information to make informed decisions?
- Does new information necessitate adjustments to recruitment strategies?
- Has something in the environment changed? If it is a barrier, is it something you can address?
- Which of your recruitment strategies coincide with the greatest progress?
- Should you re-prioritize which providers to enroll first?
- Are you getting enough feedback from your customers to respond to their needs?
- Are providers enrolling but not submitting data regularly? If not, why not?
- Are there new resources or technologies that could improve or streamline recruitment strategies?
- Is the provider recruitment objective still realistic? If not, now is the time to change it.
- Is your budget adequate? Are resources being spent wisely?
- Is your staffing adequate?

Discuss progress with staff for their insights into why progress was or was not made as anticipated. You should also discuss progress/lack of progress with private provider leaders in the community to keep them apprised, as well as to seek their input about the registry's recruitment progress and their suggestions for changes in strategies.

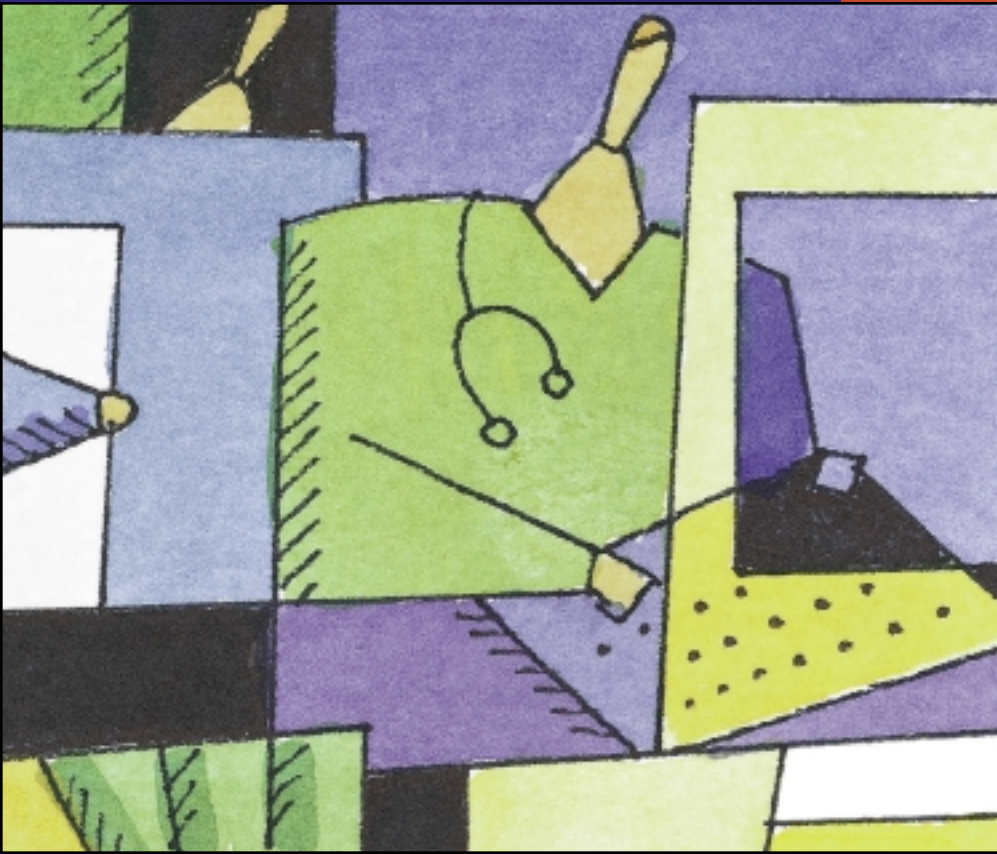


Part 2:  
Providers'  
Frequently  
Asked  
Questions

## Providers' Frequently Asked Questions

*Be ready with answers to all these questions – and more – before you approach any provider to participate in the registry. If the questions are not asked, that doesn't necessarily mean the provider doesn't want the answer. Bring up the question and provide a solid answer at every opportunity to put these issues to rest.*

- Will patient care be affected by participation in the registry?
- How will confidentiality be protected? For my patients? For me? What if I do not want my performance published?
- How will my patients be identified?
- How will costs be divided among providers? In my practice? In my area? Will costs stay the same over time? Will costs be reduced as more providers participate?
- How much will the computer cost? The software?
- What will upgrades to the system cost?
- Do I need a dedicated phone line? Installation costs? Monthly costs?
- Will the system interface to my existing billing system?
- Will the registry do vaccine inventory and meet VFC requirements?
- Will the registry link with visit and diagnosis information?
- What other benefits will the system offer?
- Will you come to my office when it's convenient for my staff?
- How long will it take to train my staff?
- How many staff should be trained?
- If my staff changes, who will train new staff?
- How long does it take:
  - To enter the required immunization information?
  - To print a report?
- Will double entry be required?
- Who will check for incorrect data? Who will correct it?
- Who will enter historical data?
- Will I find records for all the children in my practice? If not, when will I?
- What data quality mechanisms are set up?
- How will you help me with HEDIS and NCQA?
- Why do you care about a medical home? What defines a medical home?



Part 3:

Tools

# Research

## Provider Survey (for current users)

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### Letter to Provider

September 30, 1998

Dear Healthcare Provider:

Thank you for your participation in the Michigan Childhood Immunization Registry or MCIR! Your involvement in this statewide initiative is helping Michigan's children to have an up-to-date and complete immunization history. The MCIR Coordinators -- Nancy Deising, Therese Hoyle, and myself -- have been busy getting more healthcare providers connected to and trained on the MCIR. Currently, 264 provider offices are registered as MCIR users in Region 2. Of these, 105 are online and 79 are trained.

Now that you are trained and using the MCIR, we are asking for your valuable input in order to find out your past and present experience with the MCIR. The information we gather will help us develop materials and training methods to encourage more providers to become involved in the registry. It will also enable us to learn how we might improve the system to increase the benefits of participation. We will not be reporting data on individual health care providers, but rather will report on the group as a whole, and on subgroups such as hospitals, private practices, integrated health systems and managed care organizations.

This survey might involve up to three people in your office: the person most familiar with how your immunization records are maintained, the person most familiar with your computer equipment and the person most likely to make a decision about participation in the statewide immunization registry. It might be useful for you to speak with others in your office who oversee these other areas to get their input.

**Please complete and return the survey by Friday, October 16, 1998** in the enclosed pre-addressed envelope. Or, you may fax it to my attention at 616-373-5109. If you have any questions, please contact me at 616-373-5142.

Your participation is greatly appreciated! Please accept the enclosed pen and letter opener as a token of our gratitude.

Sincerely,

Laura Z. Korten  
MCIR Coordinator

## Provider Feedback Survey

### A. HEALTH CARE SETTING

1. Which of the following best describes your situation?

- hospital                       individual practice                       group practice  
 clinic                               managed care org.                       integrated health system

2. What is your specialty?

- general     family medicine     internal medicine     pediatrics  
 other (specify) \_\_\_\_\_

3. Percentage of patients who are children: \_\_\_\_\_

4. Number of physicians in this practice who provide primary care for children 0 to 35 months:

Names: \_\_\_\_\_  
\_\_\_\_\_

### B. IMMUNIZATIONS

1. Number of immunizations provided *in a typical month* to children between the ages of 0 and 35 months: \_\_\_\_\_ (If none, enter "0")

### C. INTERACTION WITH MCIR

1. What software package do you use for tracking immunizations?

- |           |  |
|-----------|--|
| 1) None   | 5) The Medical Manager                         |
| 2) MCIR   | 6) Vaccination Automated Control System (VACS) |
| 3) CMHC   | 7) Other commercial package (please name)      |
| 4) +Medic | _____  |

2. How long has your office been using the MCIR system?

- |                       |                     |
|-----------------------|---------------------|
| 1) Not using          | 5) 7 to 8 months    |
| 2) Less than 2 months | 6) 9 to 10 months   |
| 3) 3 to 4 months      | 7) 11 to 12 months  |
| 4) 5 to 6 months      | 8) More than a year |

3. What methods are you using to interact?

- 1) Use computer to connect to MCIR
- 2) Use phone/fax to request data
- 3) Use mail to send MCIR child vaccine data form

4. Which best characterizes your interaction with MCIR?

- 1) Send and retrieve data directly into MCIR using the MCIR Link CIP
- 2) Send new information via the MCIR transfer
- 3) Retrieve immunization information via phone or fax
- 4) Only interaction is via mail (sending completed MCIR Child Vaccine Data forms)

5. Would you like to change your method of interaction with MCIR?

- 1) No
- 2) Yes, add retrieval of data by phone or fax
- 3) Yes, add capability to send information via computer
- 4) Yes, add capability to enter immunizations directly in MCIR



9. Does your practice use a computerized billing software?

Yes--> Name of vendor/software package: \_\_\_\_\_  
 No

E. STAFF'S PERCEPTIONS OF INCENTIVES FOR PARTICIPATING IN MCIR

1. What have been the advantages to your office of participating in the Statewide immunization registry?

1. Rate the importance for your office of each of the following benefits/incentives to participation in the MCIR.

**Not Somewhat Very**  
**Important Important Important**

- a. Computer generated recall/reminder notices for patient immunizations. .... 1 ..... 2 ..... 3
- b. Information regarding which immunizations are due. .... 1 ..... 2 ..... 3
- c. Immediate access to a child's immunization record. .... 1 ..... 2 ..... 3
- d. Access to computer generated reports of a child's immunization history and status accepted by schools, day care, camps, etc., as valid document..... 1 ..... 2 ..... 3
- e. Access to accurately generated reports detailing quality assurance, reimbursement, outreach, VFC requirements, etc..... 1 ..... 2 ..... 3
- f. Access to a vaccine inventory module..... 1 ..... 2 ..... 3
- g. Time/cost savings of printing computer generated standardized immunization records vs manual record pulling and hand writing immunizations on each shot record card ..... 1 ..... 2 ..... 3
- h. Onsite training for staff..... 1 ..... 2 ..... 3
- l. Toll free assistance help line..... 1 ..... 2 ..... 3
- j. Avoid legal penalties of non-compliance ..... 1 ..... 2 ..... 3
- k. Other : (Please specify and rate) ..... 1 ..... 2 ..... 3

**F. STAFF'S PERCEPTIONS OF BARRIERS TO PARTICIPATING IN MCIR**

1. Before your office participated in MCIR, what costs or disadvantages did you anticipate, if any?
2. Now that you have been using MCIR, do you think any of the following are barriers? Please rate the importance of each of the following barriers to participating in the MCIR.

	<u>Did Not Perceive as Barrier</u>	<u>Not Important</u>	<u>Somewhat Important</u>	<u>Very Important</u>
a. Cost and time associated with training staff to participate in the MCIR.....	0.....	1.....	2.....	3
b. Cost, or time involved, in purchasing and/or upgrading computer equipment or software.....	0.....	1.....	2.....	3
c. Confidentiality issues regarding patient information.....	0.....	1.....	2.....	3
d. Cost and time associated with staff entering and retrieving data from the MCIR.....	0.....	1.....	2.....	3
e. Additional reporting requirements.....	0.....	1.....	2.....	3
f. Waiting for billing software vendor to develop an interface.....	0.....	1.....	2.....	3
g. Coordination between clinical, administration and information systems departments to facilitate participation in the MCIR.....	0.....	1.....	2.....	3
h. Participation in the MCIR is subject to review or approval by our parent organization.....	0.....	1.....	2.....	3

3. Can you think of any other barriers to participation? (please specify )

**G. SATISFACTION WITH TRAINING & MCIR SYSTEM**

1. Please indicate your level of satisfaction with:

	<u>Did Not Use</u>	<u>Not Satisfied</u>	<u>Somewhat Satisfied</u>	<u>Very Satisfied</u>
a. Training received from MCIR staff.....	0.....	1.....	2.....	3
b. MCIR Help Line .....	0.....	1.....	2.....	3

If you indicated "Not Satisfied", could you briefly explain why:

2. What features do you like most about the MCIR?

	<u>Not Important</u>	<u>Somewhat Important</u>	<u>Very Important</u>
a. Ease of access.....	1.....	2.....	3
b. Ease of entering data.....	1.....	2.....	3
c. Pull down menu screens (Vaccine vendors).....	1.....	2.....	3
d. Defaults (State, Vendor, Zip code, County, Area code, City).....	1.....	2.....	3
e. Immunization status screen .....	1.....	2.....	3
f. Patient history format.....	1.....	2.....	3
g. Date of birth status on all screens .....	1.....	2.....	3

- h. The date of birth format written in years and months ..... 1..... 2..... 3
- i. Reminder recall notices ..... 1..... 2..... 3
- j. Increased opportunities to immunize ..... 1..... 2..... 3
- k. Increase bonus dollars from insurance companies for having complete immunization records ..... 1..... 2..... 3
- l. More complete records for our own files..... 1..... 2..... 3
- m. Availability of the system 24 hours a day..... 1..... 2..... 3
- n. Security...access of system is required with individual ID and Passwords ..... 1..... 2..... 3
- o. Information kept through age 20 ..... 1..... 2..... 3
- p. Other (please specify and rate): ..... 1..... 2..... 3

**5. What changes would you like to see in the MCIR? (Circle all that apply)**

- a. Records kept longer than age 20 for outbreaks, travel, college, etc.
- b. Availability of county data
- c. Patient history printed on official state form
- d. Add patient roster check off to the data entry screen
- e. On data entry screen, add a verify prompt to the name and date of birth fields to verify correct spelling and date
- f. Add individual reporting capabilities, (please specify) \_\_\_\_\_
- g. Other (please specify) \_\_\_\_\_

**H. IMPROVING PARTICIPATION IN THE MCIR SYSTEM .**

- 1. Are there any things the MCIR staff could do to help make your participation in the system easier?
- 2. Do you have any other comments about the MCIR System?

**I. PROVIDER INFORMATION**

**1. Organization:** Please note any desired changes to your organization's name or information.

Org. Name: \_\_\_\_\_ MAILING LABEL HERE

Address: \_\_\_\_\_

What county is your office in?: \_\_\_\_\_

**2. Contact:**

Your Name: \_\_\_\_\_

Position: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

***THANK YOU for your time and thoughtful answers to our questions.***

**Please mail by Friday, October 16** in the pre-addressed envelope.

Or, you may fax it to Laura Korten, MCIR Coordinator, at 616-373-5109.

## Parent Focus Group Moderator's Guide and Demographic Questions

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### Demographic Questions

1. Are you or is anyone in your immediate family a health care professional? yes no
2. Are you the parent (or legal guardian) of a child who is under the age of 2? yes no
3. Do you make the decisions about the health care of children in your home? yes no
4. Do you have regular access to: Internet? yes no      E-mail? yes no
5. Where does your child receive his/her immunizations?
  - Health Department
  - Private Doctor's Office
  - HMO/Clinic
  - Other:
6. What is your highest level of education completed?
  - High school
  - Vocational Training
  - Associate Degree
  - Bachelor's Degree
  - Graduate Degree
7. What is your ethnic origin?
  - African-American
  - Asian/Pacific Islander
  - Caucasian
  - Hispanic
  - Native American
8. Are you:  Female     Male
9. What is your age group?
  - under 20
  - 20-25
  - 25-30
  - 30-35
  - over 35
10. In the past 12 months, how many times have changed your address?
11. If you have moved, did you change:      *City?* yes no    -    *State?* yes no

## **Opening Comments and Introductions**

- Introductions / Roles
- Explain what a focus group is (purpose is to obtain different ideas)
- Review process and ground rules for discussion;  
*participants should speak freely, not seek consensus, speak one at a time, ask for more information when something is not clear*
- Disclose recording devices

## **Discussion**

### **1. Disease Prevention**

- Identify problems in having children stay healthy.
- Assess knowledge/attitude of/towards disease
  - a) what are some diseases that you as parents are most concerned about?

### **2. Immunization Importance**

- Identify; motivation to/not to immunize
- List current effective reminders
- Describe relationship with immunization provider
  - b) what are some reasons people get vaccinations / do NOT get vaccinations?
  - c) do you think immunizations are necessary even when your child is healthy?
  - d) how do you know when it is time for your child to get a vaccine? (ie; postcards, reminder from school, use personal records)
  - e) what ways can you think of that would make it easier for you to keep track of what vaccines your child has had or will need in the future?
  - f) describe the length/depth of conversation with receptionist/nurse/doctor?
  - g) who would you prefer explain "programs" to you receptionist/nurse/doctor?

### **3. Registry - Overview**

- Discuss and identify reactions to:
  - ✓ Main purpose is to provide seamless communication between providers (both public and private)
  - ✓ Allows for child's complete immunization history to be available to all health care providers
  - ✓ Tells a doctor which immunizations your child has already had/needs
  - ✓ Can produce a copy of your child's record for school/camp/etc entry
  - ✓ Accessible within state regardless if child moves/changes address
- h) what is your initial reaction to a registry?
- i) what appeals to you most about a registry?
- j) what concerns immediately come to mind?
- k) what further questions would you want to have answered?
- l) what have you heard about an immunization registry prior to this discussion?

#### **4. Registry - Data/Contents**

Discuss and identify reactions to:

- ✓ Shot Data (vaccine type, immunization date, manufacturer, lot #)
- ✓ Demographic Data (child's full name, birth date, gender, address, guardian information)

- m) what is your initial reaction to the above?
- n) what information are you most comfortable with sharing/why?
- o) what information are you uncomfortable with sharing/why?
- p) specific reaction to; address, social security number?
- q) who should/should not have access to the information?
- r) any circumstances that change access permission?
- s) how do you feel about the registry being linked to other systems such as:
  - WIC, Medicaid,
  - lead poisoning other health programs
  - schools, day-care
  - researches
  - health insurers

#### **5. Registry - Consent**

- Discuss 2 methods of registry "population" and identify reactions/attitudes toward each.
  - t) What are your initial reactions - to each - any preference?
  - u) When is consent important/not important?

#### **6. Marketing**

- Identify effective ways to communicate the registry message/encourage parents to join.
  - w) What would be the best way to let people know about the registry?
  - x) Who is the most believable source to "sell" the registry?
    - Doctor/Staff
    - Older adult/relative
    - Health Department city/county or state?
    - Celebrity/spokesperson
    - Medical Association
    - Brochure/Printed Pamphlet
    - Endorsement by: ?(name)
  - y) What message would convince parents to trust the registry?

#### **Summary:**

If there is one thing you could say to people who are responsible for how the registry system works, what would it be?

# Provider Focus Group

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## Opening Comments and Introductions

- Explain what a focus group is (purpose is to obtain different ideas)
- Review process and ground rules for discussion; participants should speak freely not seek a consensus, speak one at a time, ask for more information
- Disclose recording devices

## Review “Registry”

- Captures private and public provider’s immunization data - tells a provider which immunizations a child has had/needs
- Providers reminders, reports and assessments
- Saves providers time, resources, money

## Discussion

### **1. Level of Interest (perceived value of a Registry):**

What appeals to you about a registry?

How do you think this would help you/your work?

### **2. Concerns Regarding a Registry:**

Would your office have concerns about sharing data with a registry?

Would your office be willing to contribute historical data if there was an (easy) way to transfer the information?

### **3. Types of Assessment Procedures Currently in Place:**

Does your office use CASA or other software to assess the immunization coverage levels of your patients?

What resources (people, amount of time) go into performing an assessment?

How often do you perform assessments?

Does anyone/organization require you to perform/report assessments?

### **4. Office Needs (to join a registry):**

Hardware

Computer Training

Additional Information on the Registry

Legislation for Mandatory Reporting

Capability to generate reports - what type would be helpful?

### **5. Community Relationships:**

What are your (office) interactions with the surrounding community?

Describe your (office) relationship with: local immunization programs/coalitions, WIC, etc.

### **6. Incentives:**

Are incentives currently being provided by any outside organization/person to your office?

If so, what is the incentive, requirement to obtain the incentive? What type of incentive most appeals to you/your office?

Would your office be willing to participate in a pilot project without an incentive in place?

## Managed Care Structured Interview Questions

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Interviewed:

Date/time:

Participants:

Issue/Phase	Question and Response
<p>Current Measurement Process</p>	<ol style="list-style-type: none"> <li>1. Describe the process your organization currently implements to determine the immunization coverage level of your patients (0-2 years).</li> <li>2. What resources are required?                Number of FTE's:                Level/type of staff positions involved?</li> <li>3. How long does it take to complete the process?</li> <li>4. How (estimated) accurate are the results of this process?</li> <li>5. What is the estimated cost of this process?</li> <li>6. What are the frustrations/feedback with this process?</li> </ol>
<p>Privacy/Confidentiality Issues</p> <p>(Important for surveyor to discuss that the registry will not maintain health plan enrollment status, enrollment dates or span of enrollment.)</p>	<ol style="list-style-type: none"> <li>1. What issues would this organization have with sharing data with the statewide registry?</li> <li>2. Can historical immunization data the organization collects be provided to the statewide registry?                If not why:</li> <li>3. Would this organization require to provide historical data to the registry?</li> </ol>

Issue/Phase	Question and Response
MCO Model	<ol style="list-style-type: none"> <li>1. What does the “business” relationship with the provider involve? (Contract, direct employment with no private practice, etc.)</li> <li>2. What is required of the provider in order to meet MCO’s requirements? (Attend quarterly meetings, provide weekly/monthly reports, etc.)</li> <li>3. What influence does this MCO have over the provider’s office management?</li> </ol>
Registry Functions	<ol style="list-style-type: none"> <li>1. What types of functions would you like to see the registry provide for you?</li> </ol>
Coalition	<ol style="list-style-type: none"> <li>1. Would you be interested in attending the state coalition meetings?</li> </ol>
MCO Demographic	<p>Number of private providers in network:  Number with Patient Management Systems (PMS):  Name of PMS:</p> <p>Number with electronic billing links:</p> <p>Who are your high volume immunization providers?</p>
MCO Technical Status	<p>On a scale of 1 to 5:  Describe the technical status of your typical provider office:  Type of Hardware:  Electronic billing capabilities:  Level of computer knowledge:  Internet capabilities:</p> <p>If data is collected now and sent to the City registry, how is it sent?</p>
Incentives	<p>Are incentives in place to increase immunization rates?</p> <p>How well are the incentives working?</p> <p>What would the organization be willing/interested in providing providers who want to submit data to the registry? (Hardware, upgrade costs, etc.)</p>

<b>Issue/Phase</b>	<b>Question and Response</b>
Confirm MCO Commitment	<ol style="list-style-type: none"> <li data-bbox="500 279 1040 310">2. Do you agree with the registry vision?</li> <li data-bbox="500 342 1333 405">3. Are there any reasons why your organization would not submit data to the registry?</li> <li data-bbox="500 447 1016 478">4. Is liability relief legislation an issue?</li> <li data-bbox="500 510 1208 541">5. Do you support mandatory reporting to the registry?</li> <li data-bbox="500 573 1256 636">6. Would you consider providing cost sharing incentives to encourage provider's participation?</li> <li data-bbox="500 678 1289 709">7. Are there concerns you have that we have not addressed?</li> </ol>

## Provider Office Structured Interview Questions

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Date \_\_\_\_\_ Time \_\_\_\_\_

Number Participating: \_\_\_\_\_

### Questions:

1. What was the first thing that came to your mind when you learned of the USIIS computer system?
2. How do you feel about the USIIS computer system now that you have heard a description of it?  
-Why do you say that?
3. What do you think are the most attractive things about this system?  
-Are there any distinct advantages of the system?  
-Are there any distinct disadvantages of the system?
4. How many of you would consider using this computer system?  
-Why?  
-What are the top two or three things that would influence you to use this system?
5. How would the decision be made to use the USIIS system in your office?  
-Who would make this decision?

**If the answer to Q#5 is Doctor, proceed to Q# 6. If the answer is not Doctor, Proceed to Question 7.**

6. What do you think are the most attractive things about this system for doctors?
7. What would be an incentive for you, as an office manager, to use this system?
8. What is the best way to communicate/reach out to all office managers in Utah to inform them about this computer system?
9. The USIIS program is planning on sending out a survey to assess potential user's technical capacity and administrative willingness to use this computer system----
  - A. Who in your office would be able to answer such questions as:  
\* What is the estimated number of children (<18 years) immunized per month in your office?  
OR  
\* Is your practice involved in the Vaccine for Children Program?
  - B. Who in your office would be able to answer the following type of questions:  
\* What is the name of the company or vendor that supports your application?  
\* Do you have immunization records on the computer?  
\* Does your office have access to the Internet?
  - C. Who in your office would be able to answer a question about:  
\* An immunization registry's ability to interface with existing billing systems, track inventory, or forecast and identify when shots are due?
10. Should such a survey be sent to every physician at each practice, if there are multiple physicians working at one office?  
-Who would/should receive such a survey?  
- Only the office manager?  
- What about the physician's nurse?
11. What do you think of the name: USIIS - Utah Statewide Immunization Information System?

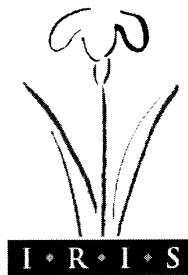
## **Provider Practice Workflow Analysis**

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### **Immunization Registry Information System (IRIS) Recommendations for Registry Implementation**

**Sample Clinic XXX**

**February 15, 2000**



Immunization administration is becoming increasingly complex. With advances in technology, more vaccines and vaccine combinations are becoming available and are increasingly important in health care. At the same time, families are more mobile and children frequently see more than one provider during childhood. To facilitate immunizing children on schedule and to give health care providers easier access to more complete immunization histories, the Santa Clara Valley Health and Hospital System Public Health Department is implementing an immunization registry.

The immunization registry is a tool that can assist providers with immunization management. The registry enables clinics to expedite the documentation of immunizations, access immunization histories of patients participating in the registry, assess immunization levels of patients, and send reminders to patients when vaccinations are due or past due. An immunization registry benefits the patient and his/her parents, health care providers, educational institutions, and the community as a whole.

In agreeing to participate in the registry, Sample Clinic XXX will be able to better serve its patients by having easy access to patient's immunizations that were administered by other providers, by avoiding painful and costly over-immunization, by providing recall notices to parents of children who are overdue for vaccination, and, ultimately, by saving time in record-keeping. The following proposal presents a summary of Sample Clinic XXX's feasibility/workflow assessment and recommendations for immunization registry implementation.

## **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**

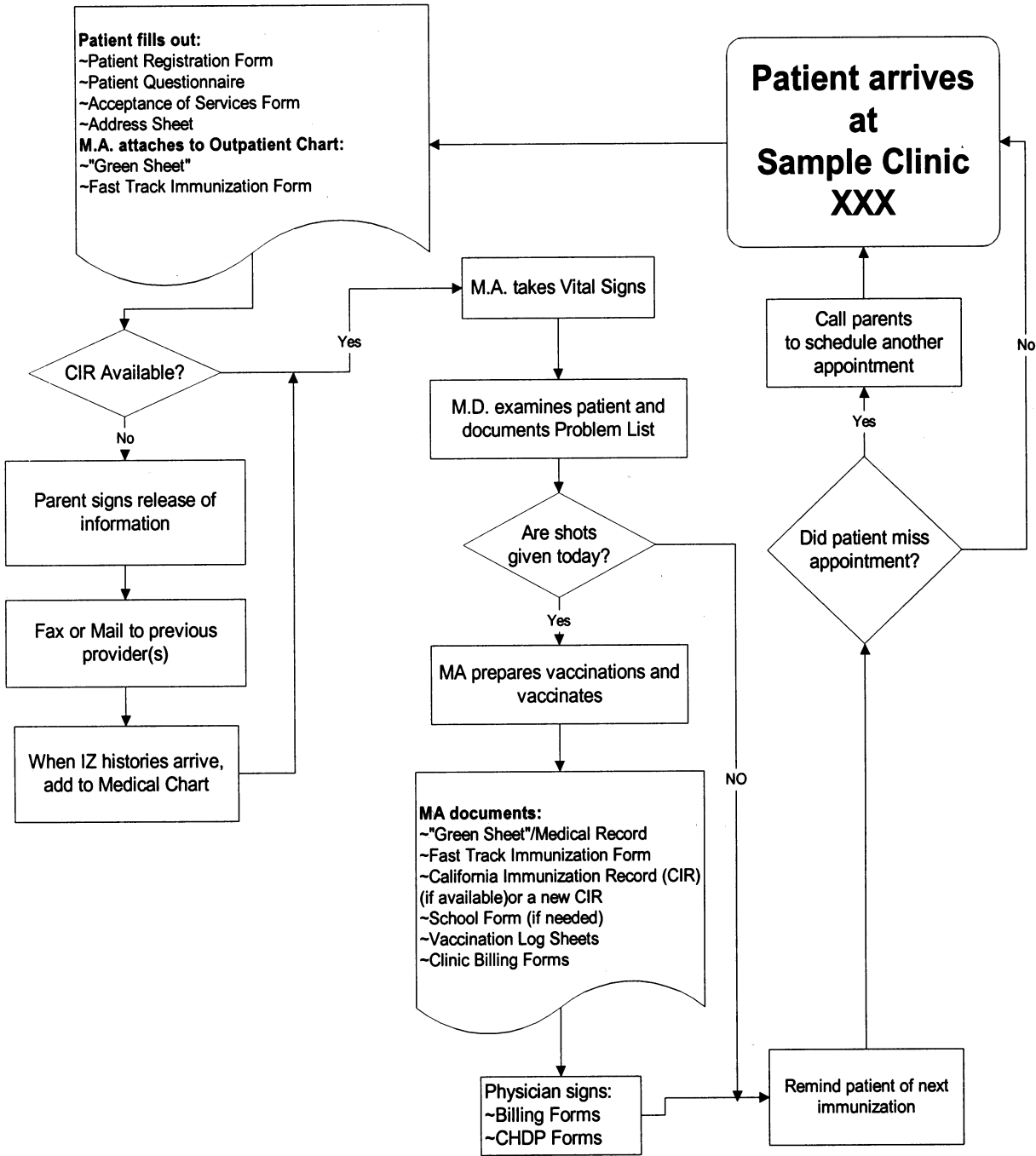
Once the registry is operational at Sample Clinic XXX, the following benefits are expected as the database becomes fully populated:

- 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.

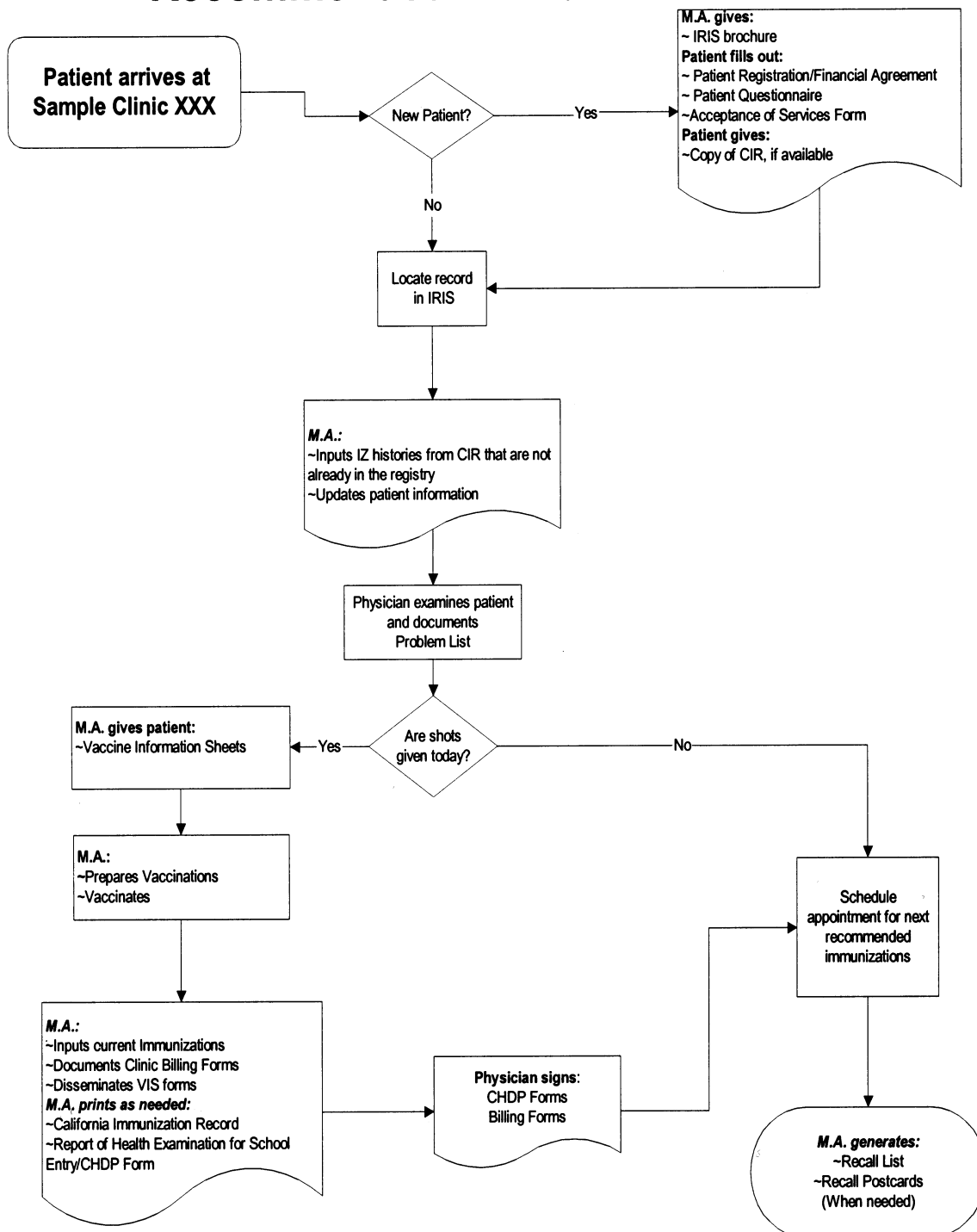
When a patient calls to request a new California Immunization Record for school, childcare or camp entry, the patient’s chart is pulled and the child’s immunization history is manually transcribed on a new CIR.

## 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

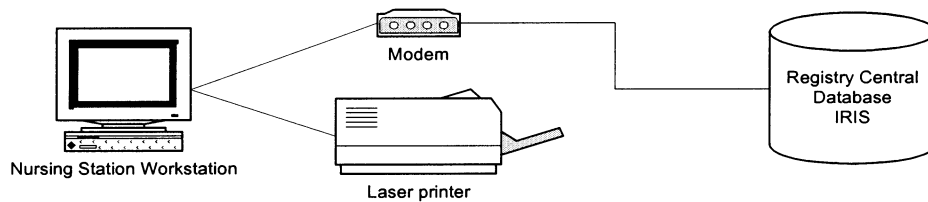


**Note:** Patient calls for CIR for school, childcare or camp entry. Nurse/clerk pulls patient up on the registry screen and prints the CIR.

## 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:**

#### **Joanna DeLeon, Help Desk**

(408) 793-2037 fax (408) 793-2035

#### **Noel Panlilio, Immunization Registry Director**

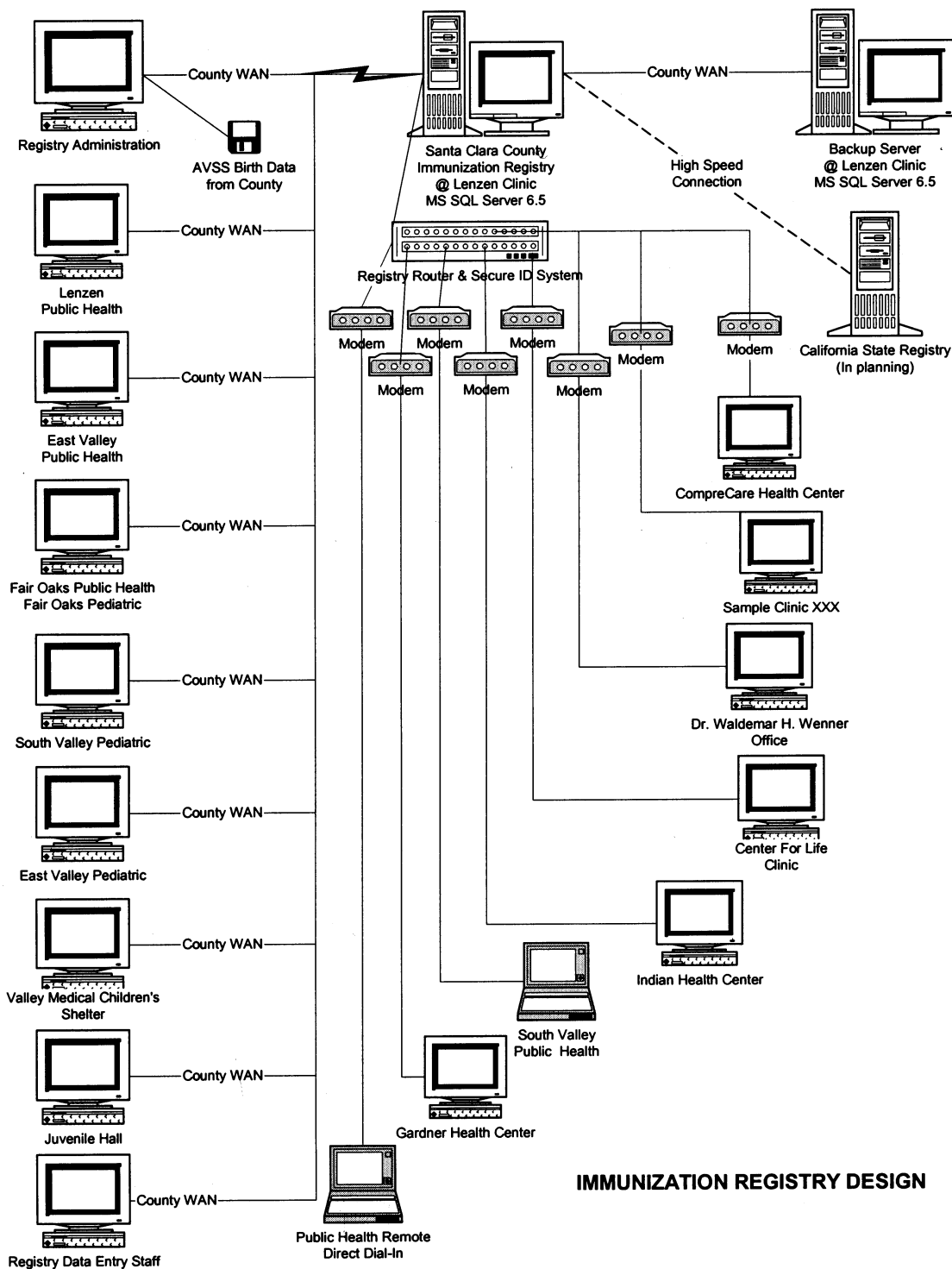
(408) 793-2033 fax (408) 793-2035

#### **Heidi Bazan, Immunization Registry Secretary**

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## IRIS PUBLIC, COMMUNITY & PRIVATE CLINIC DESIGN

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



**IMMUNIZATION REGISTRY DESIGN**

# Resources

All Kids Count

404-687-5615

800-874-4338

Contact: Terry Hastings email: [info@allkidscount.org](mailto:info@allkidscount.org)

[www.allkidscount.org](http://www.allkidscount.org)

American Immunization Registry Association (AIRA)

Contact: Amy Metroka, President

212-676-2319

email: [ametroka@dohlan.cn.ci.nyc.ny.us](mailto:ametroka@dohlan.cn.ci.nyc.ny.us)

[www.immregistries.org](http://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](mailto:aos9@cdc.gov)

[www.cdc.gov/nip/registry](http://www.cdc.gov/nip/registry)



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