

First STEPS—Change Package Toolkit for Improving Immunizations

Toolkit Contents:

A. Immunization System Index	Page 2
B. Immunization “Quick Picks”	Page 3
C. Immunization System Index Action Planning Template	Pages 4-5
D. Immunizations Change Package Check List	Pages 6-14

Acknowledgements:

Thanks are due to staff at MaineHealth including Cassandra Cote Grantham, Program Manager, Child Health – Childhood Immunizations, Community Health Improvement Department; staff at Maine Quality Counts including Amy Belisle, MD and Sue Butts-Dion; Jane Taylor, Ed.D.; and staff at the Muskie School of Public Service including Kyra Chamberlain, BS, RN, for providing the support and expertise necessary to make this Change Package document possible. We also wish to acknowledge and thank all of the First STEPS Phase I Immunizations Improvement practices and their coaches for contributing improvement stories and the members of the MaineHealth Childhood Immunizations Task Force for providing careful review and recommendations on use of the package in practice.

Improving Health Outcomes for Children (IHOC) is a collaborative effort in Maine and Vermont supported by a federal grant to improve child health by producing standard pediatric quality measures, improving information technology for sharing pediatric data, and supporting practice improvement efforts. First STEPS is the practice improvement effort of the IHOC Program, and is a two year Learning Collaborative based on the AAP Bright Futures Curriculum that aims to increase the rate of EPSDT (Early, Periodic, Screening, Diagnosis, and Treatment) services for children receiving MaineCare benefits, building upon the principles of the Patient Centered Medical Home (PCMH) model to promote practice improvement.

Partnering Organizations: Maine Quality Counts, Maine DHHS, MaineCare, Maine CDC, Maine Office of Information Technology, Maine Immunization Program, Muskie School of Public Service, USM, Vermont Child Health Improvement Program, Maine Chapter of the American Academy of Pediatrics, Maine Academy of Family Physicians, Maine Primary Care Association MaineHealth, Eastern Maine Health Systems, Central Maine Medical Group, MaineGeneral Health, Martin’s Point Health Care

A. First STEPS Immunization System Index¹

Practice Name: _____ Date: _____

Person(s) Completing: _____

Please circle your answer:

1. **Yes or No.** Have you identified a physician champion and an office manager or nurse champion to improve immunization rates?
2. **Yes or No.** Do you have a practice team that includes a physician champion, nurse, and office manager that meets at least once a month to review immunization data/quality metrics?
3. **Yes or No.** Have clinicians agreed upon, documented, and posted a standard immunization **schedule** for the practice?
4. **Yes or No.** Does the practice routinely use a reminder system for children who will be due for immunizations? Many practices/clinics call the patients who don't keep appointments (i.e., no shows). However, this approach misses children who never make an appointment in the first place and is not adequate.
5. **Yes or No.** Does the practice routinely use a recall system for children in need of immunizations?
6. **Yes or No.** Does your practice routinely record immunizations electronically in ImmPact2 at the time of patient visits?
7. **Yes or No.** Does your practice routinely update patient information in ImmPact2 using MOGE (Moved or Gone Elsewhere) rules?
8. **Yes or No.** Does someone from the practice routinely assess the immunizations needs of each child before *all* visits (including non-preventive care) and alert the responsible clinician about those needs?
9. **Yes or No.** Does the staff document reasons why a due vaccine cannot be administered?
10. **Yes or No.** Does your office schedule "shots only" visits?
11. **Yes or No.** Does your office offer immunizations during evening, weekend and drop-in appointments?
12. **Yes or No.** Have clinicians agreed upon, documented, and posted a common immunization **policy** for the practice?
13. **Yes or No.** Has your practice implemented standing orders for all routine vaccinations?
14. **Yes or No.** Has your staff received clinical training or refreshers on storage, handling and proper immunization techniques and how to talk with parents that are hesitant about vaccination?
15. **Yes or No.** Has your staff received training on using a standard documentation form like the "AAP immunization refusal to vaccinate form" to record refusals?

For Questions 1-15, Total Yes _____ Total No _____

¹ Systems Index adapted from a tool from the National Initiative for Children's Healthcare Quality (NICHQ).

B. First STEPS—

Improving Immunizations “Quick Picks” (Based on Immunization System Index)

<p>Leaders as champions for change</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Identify a physician champion <u>and</u> an office manager or nurse champion to improve immunization rates. <input type="checkbox"/> Identify a practice team that includes the physician champion, nurse, and office manager that meets at least once a month to review immunization data/quality metrics. <input type="checkbox"/> Agree upon, document and post standard immunization schedule for the practice. <input type="checkbox"/> Agree upon, document and post standard immunization policy for the practice.
<p>Information & tracking systems (HIT) that support improving immunizations</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Routinely use a reminder system for children who will be due for immunizations. <input type="checkbox"/> Routinely use recall system for children in need of immunizations. <input type="checkbox"/> Routinely record immunizations electronically in ImmPact2 at time of patient visits. <input type="checkbox"/> Routinely update patient information in ImmPact2 using MOGE (moved or gone elsewhere) rules. <input type="checkbox"/> Staff document reasons why a due vaccine cannot be administered.
<p>Access to care</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Routinely assess the immunizations needs of each child before <i>all</i> visits (including non-preventive care) and alert the responsible clinician about those needs. <input type="checkbox"/> Schedule “shots only” visits. <input type="checkbox"/> Offer immunizations during evening, weekend and drop-in appointments. <input type="checkbox"/> Implement standing orders for all routine vaccinations.
<p>Team and evidence based system of care with informed, engaged and competent staff</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Train or refresh staff on storage, handling and proper immunization techniques and how to talk with parents that are hesitant about vaccination. <input type="checkbox"/> Train staff on using a standard documentation form like the “AAP immunization refusal to vaccinate form” to record refusals
<p>Engage partners in improving immunization rates</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Educate parents and patients about the benefits and risks of vaccinations in a culturally appropriate manner, at appropriate literacy level and in a language that is easy to understand

C. First STEPS Change Immunization System Index Action Planning Template

Key Change Category	Specific Changes	Person(s) Responsible for Completing/Notes & Comments
Leaders as champions for change	<input type="checkbox"/> Identify a physician champion <u>and</u> an office manager or nurse champion to improve immunization rates.	
	<input type="checkbox"/> Identify a practice team that includes the physician champion, nurse, and office manager that meets at least once a month to review immunization data/quality metrics.	
	<input type="checkbox"/> Agree upon, document and post standard immunization schedule for the practice.	
	<input type="checkbox"/> Agree upon, document and post standard immunization policy for the practice.	
Information & tracking systems (HIT) that support improving immunizations	<input type="checkbox"/> Routinely use a reminder system for children who will be due for immunizations.	
	<input type="checkbox"/> Routinely use recall system for children in need of immunizations.	
	<input type="checkbox"/> Routinely record immunizations electronically in ImmPact2 at time of patient visits.	
	<input type="checkbox"/> Routinely update patient information in ImmPact2 using MOGE (moved or gone elsewhere) rules.	
	<input type="checkbox"/> Staff document reasons why a due vaccine cannot be administered.	
Access to care	<input type="checkbox"/> Routinely assess the immunizations needs of each child before <i>all</i> visits (including non-preventive care) and alert the responsible clinician about those needs.	
	<input type="checkbox"/> Schedule “shots only” visits.	
	<input type="checkbox"/> Offer immunizations during evening, weekend and drop-in appointments.	
	<input type="checkbox"/> Implement standing orders for all routine vaccinations.	

Key Change Category	Specific Changes	Person(s) Responsible for Completing/Notes & Comments
Team and evidence based system of care with informed, engaged and competent staff	<input type="checkbox"/> Train or refresh staff on storage, handling and proper immunization techniques and how to talk with parents that are hesitant about vaccination.	
	<input type="checkbox"/> Train staff on using a standard documentation form like the “AAP immunization refusal to vaccinate form” to record refusals	
Engage partners in improving immunization rates	<input type="checkbox"/> Educate parents and patients about the benefits and risks of vaccinations in a culturally appropriate manner, at appropriate literacy level and in a language that is easy to understand	

D. First STEPS Change Package Checklist for Improving Immunizations

Index of Key Change Categories:

Leaders as champions for change	7
Team and evidence based system of care with informed, engaged and competent staff	8
Access to care	9
Information & tracking systems (HIT) that support improving immunizations	10
Engage partners in improving immunization rates	11
Resources and references	12-13
Change package illustration	14

Improving Immunization Rates Change Package Check Sheet

Leaders as champions for change

- **Identify and support professional development of internal champions**
 - Identify a leader within the organization who can assure that resources will be allotted; mitigate challenges, and who will take responsibility for the success of the improvement initiative.
 - Establish characteristics for the champions (provider, clinical support and administrative champions)—one of each per project received. Ensure champion agrees to coordinate and support all immunization activities and keep staff up to date on current practices and new information. (see Training & Staff Competencies)
 - Champion writes (in conjunction with team) and communicates improvement vision to the entire practice and take on responsibility for engaging other providers in support of the vision.
 - Write job descriptions for all staff that clearly delineate roles, responsibilities, and interdependencies related to administering vaccinations; defined enough so that staff can hold themselves and others accountable but flexible enough to change as standard processes evolve.
- **Design infrastructure to support improvement**
 - Secure and use quality improvement coaching support.
 - When available, participate in collaborative, networking--quality improvement activities.
 - Hold daily 15-minute "stand-up" team "huddles" to review specific strategies relative to improving immunizations.
 - Use an improvement methodology (e.g., Model for Improvement, PDSA) that forces clear aim statement development that drives PDSAs.
 - Continually assess that disciplined administrative support and resources are present and adequate for the improvement effort (i.e., to support MOGE, reminder recall, data collection, data analysis, etc.)
- **Providers reach agreement on ACIP vaccination schedule and catch up schedule and approve contraindication lists**
 - Host meeting of physician leaders and clinicians to review ACIP vaccination schedule and determine their application in practice. Agree on recommended minimum interval schedule and contraindication.
 - Implement system for monitoring compliance with the schedules at least annually.
 - Post current ACIP vaccination schedule in all exam rooms.
 - Write & post vaccination policy statement in all exam rooms.
 - Champions provide practice staff with continual updates about the immunization schedule. Post immunization schedule in key places in the office.
- **Align improvement with evaluation and incentives**
 - Whenever feasible, align/tie financial incentives for improvement to rate achieved by system/network and/or individual practice.
 - Whenever feasible, align/tie staff incentives to improvement work.
 - Recognize and celebrate individual and practice team accomplishments.

Team and evidence based system of care with informed, engaged and competent staff

- ***Provide staff training and develop systems to ensure staff competencies***
 - Inventory staff and physicians regarding education, training, and competencies.
 - Write plan for and systematically train all appropriate staff on immunization best practice, policies, standing orders, and patient education & conversations.
 - Write plan for measuring and monitoring the training, for verifying competencies and tracking all staff and physicians to determine stage of completion of education and training.
 - Have a plan for sustainability (staff turnover).
 - Participate in evidenced based continuing education events.
- ***Develop staff training policy***
 - Write office policies on physical exam requirements for immunization administration with staff to clarify that a physical exam is not required when scheduling an immunization appointment.
 - Write staff procedures for questioning patient's health status, immunization history, and vaccine contraindications.
- ***Ensure staff competent in storage and handling of vaccines***
 - Regularly assess that storage measures are in place at every link in the cold chain.
 - Regularly inspect stock for spoiled vials, rotate stock so that earliest dated material used first and contact appropriate people if any question about integrity.
 - Write and communicate routine vaccine storage and handling plan.
 - Write and communicate emergency vaccine retrieval and storage plan.
 - Perform regular vaccine reconciliation (weekly).
- ***Ensure vaccination protocols accessible in all locations where vaccines administered***
 - Provide protocols on treatment and reporting of adverse events, vaccine benefit and risk communication, and vaccination record maintenance and accessibility where parents can easily see them.
 - Provide protocols on treatment and reporting of adverse events, vaccine benefit and risk communication, and vaccination record maintenance and accessibility where parents can easily see them.

Access to care

- **Look for every opportunity to minimize and eliminate missed opportunities to vaccinate**
 - Health care professionals review vaccination status of all patients at all health care visits (e.g., well child visit, acute, sick, and follow up) to determine status and if don't provide vaccinations, provide referral to provider who does.
 - Health care professionals honor only medically-accepted contraindications.
 - Track children who do not receive vaccinations and for what reasons.
 - Use recommended "Catch Up" schedule for children who have missed or delayed immunizations.
 - Adjust check-out routine to ensure that all parents schedule the next visit before they leave the office.
 - Test and standardize time for immunization records to be reviewed prior to patient appointment (e.g., day before, morning of visit, time patient arrives).
 - Include an age-specific visit/encounter form or message that indicates immunizations due.
- **Standing order for all routine vaccinations**
 - Review existing example standing orders from evidence based resources.
 - Customize standard order set based on individual practice and provider needs.
 - Review standing orders with clinical support staff to identify potential challenges, including processes related to where standing orders will be available for staff to use (EMR, binder, etc.)-revise orders as necessary.
 - Seek any necessary approvals and test standing orders using PDSA cycles.
 - Implement standing orders to allow staff to independently screen patients, identify opportunities for immunization, and administer vaccines under physician supervision (or in accordance with local regulations).
- **Design systems to ensure vaccinations are readily available to all patients**
 - Hold flexible office hours at non-traditional times such as weekends, evenings, early mornings or lunch hours.
 - Open access (walk in or same day) immunization availability
 - Establish opportunities for walk in "nurse only" and/or "nurse only" vaccination visits.
 - Ensure immunizations are available at all visits, sick or well, regular hours, or weekend clinics.
 - Increase hours during peak demand (i.e., back to school, flu season).
 - Provide routine and "catch up" vaccine clinic (e.g., once a week during normal office hours; hire temporary staff to cover a temporary clinic; hold clinics after hours or on weekends using permanent or temporary staff as practice sees fit).
 - Recognize staff role models and celebrate successes.
- **Develop office policies and procedures that address that patient costs are minimized**
 - Participate in Maine's Universal Childhood Immunization Program.
 - Vaccines for Children (VFC) at every encounter.

Information & tracking systems (HIT) that support improving immunizations

- **Collect report and analyze data for improvement on a monthly and annual basis**
 - Enter data (per patient) into ImmPact2 and EMR.
 - Assess office based immunization rates monthly as to compare data over time.
 - Assess office based immunization rates using the CDC's CoCASA (at least annually per the Standards for Child and Adolescent Immunization Practices)
- **Maintain a centralized vaccination record at the practice to easily assess the vaccine status of every child at every visit**
 - Obtain records of immunizations given by other providers.
 - Prominently display vaccine records in the chart so they are easy to locate OR make sure they are easy to see in the electronic medical record.
 - Provide parents with a portable record to have with them at all times and encourage them to use it.
 - Participate in the immunization registry in order to have access to the most complete immunization records.
- **Population management systems in place**
 - Ensure capacity to produce a list of children who are due or overdue for immunizations
 - Establish a recall process (.e.g., using phone calls, letter, emails, post cards, text, etc.) informed by the list of children overdue for immunizations.
 - Establish a reminder process (.e.g., using phone calls, letter, emails, post cards, text, etc.) informed by the list of children due for immunizations.
 - Note: For all ideas above, start small (target a smaller population such as a certain age group) and then scale up.
- **Assure adequate documentation systems**
 - Do an assessment/gap analysis of current documentation practices (The National Childhood Vaccine Injury Act) and close gaps by improving process through standardization.
 - Assess process of distribution of Vaccine Information Statements including how to maintain most up-to-date edition and how to document in medical record/chart.
 - Standardize process for having parents not wishing to vaccinate their children sign an informed refusal document at each visit during which vaccination is declined. Scan to EMR or include in record.
 - Write office policy for process of working with parents who refuse to vaccinate--standardize process and procedure and train all.
 - Adopt Maine's Moved or Gone Elsewhere (MOGE) standards.

Engage partners in improving immunization rates

- **Discuss reasons for delayed immunizations with parents**
 - Identify financial barriers and suggest Vaccines for Children's Program or other health clinics.
 - Offer flyer of public transportation options.
 - If parent calls for appointment with one child, have a script offering a block of appointments for all children in the family.
 - Have variety of visual and written information to address vaccine hesitancy for all literacy levels.
 - Inquire as to barriers to vaccination and help address and provide resources when possible.
- **Promote importance of immunizations**
 - Poster in the office.
 - "On hold" telephone message with flu shot reminder.
 - Post results of the immunization improvement project in the office.
 - Do special mailings (emailing to families).
- **Engage patients and family representatives (parent partners) in improvement work**
 - Incorporate mechanism for collecting feedback from patients and families to inform improvement activity and changes.
 - Care plan on file for every patient.
 - Form patient and parent partner advisory groups.
- **Educate parents and patients about the benefits and risks of vaccinations in a culturally appropriate manner, at appropriate literacy level and in a language that is easy to understand**
 - Track common parental concerns and have written materials available to address those concerns that are culturally and linguistically appropriate.
 - Display culturally diverse pictures, posters, magazines, brochures, etc.
 - Create and provide to parents a list of reliable websites or a tool to help them evaluate immunization materials they might encounter on line.
- **Help parents navigate web to find reliable information**
 - Encourage parents to bring questions about things they find on the internet to visits.
- **Employ shared decision making processes (providers and parents/patients)**
 - Be available to answer questions and concerns, particularly myths and misconceptions, in a way that is open and dispassionate.
 - All staff able to facilitate discussions.
- **Engage with schools and day care (community)**
 - Research and self-educate on local school and childcare immunization entry requirements.
 - Communicate with local child care centers about the importance of herd immunity--how unvaccinated children put others (staff and children) at risk.
 - Consider integrating immunization services into days and hours when other child health services are offered (e.g., Special Supplemental Food Program for Women, Infants and Children).
- **Coordinate vaccinations with other healthcare services and partners to optimize services**
 - Create a contingency plan for referring children to other providers in the event you experience a shortage--collaborate with nearby offices and public health facilities to create a referral plan so that your children can remain up-to-date on vaccinations.
 - Include practice champion providers on boards and committees of other community health care services as appropriate.
 - Communicate with local school nurses. Encourage them to refer patients to their primary care provider for any missing vaccinations. Share hours, provide handouts and contact information.
 - Work with local hospital emergency rooms to encourage referrals for primary care.
- **Use Medical Home concepts as foundation for improvement work**
 - Encourage patients who receive vaccinations outside of the medical home to bring documentation that can be included in their records.
 - Engage state health department, coalitions, and others working on improving immunizations.
 - Encourage patients who receive vaccinations outside of the medical home to bring documentation that can be included in their records.

Resources & References

Leaders as champions for change

- [Science of Improvement: Forming the Team](#)
- [Executive Review of Improvement Projects](#)
- [Seven Leadership Leverage Points for Organization-Improvement.](#)
- [“Leading Change” by John Kotter,](#)
- [“Leading Change: Why Transformation Efforts Fail” by John Kotter](#)
- Assess current staff roles using [Outpatient Primary Care Workbook \(Greenbook\)](#)
- [MaineHealth’s Call to Action Paper](#)
- Links to be established via Maine Quality Counts website: Accountability agreements; job descriptions/roles & responsibilities; sample aim statements
- [Quality Improvement Coach description and resources on Quality Improvement and Innovation Partnership](#)
- [Huddles](#)
- [On Demand Introduction to the Model for Improvement](#)
- Meeting tools from [Outpatient Primary Care Workbook \(Greenbook\)](#)
- [Maine Chapter of the AAP website](#)
- Resources and learning opportunities from [Maine Quality Counts](#)
- Links to be established via Maine Quality Counts website: sample PDSA form; example use of PDSA; sample run charts of immunization data; sample process map
- [2012 Child and Adolescent Immunization Schedule--CDC](#)
- [2012 Immunization Schedule-AAP](#)
- [Childhood Immunization Support Program Web site](#)
- [CDC National Immunization Program’s Website](#)
- [Status of Licensure and New Recommendations for New Vaccines](#)
- Alerts, Newsletters and other resources at [AAP Red Book Online](#)
- Maine Health Management Coalition’s Pathways to Excellence <http://www.getbettermaine.org/>
- [Anthem State of Maine Preferred Primary Care Providers](#)

Team and evidence based system of care with informed, engaged and competent staff

- [AAP Sponsored CME](#)
- [CDC Educational Events](#)
- [Maine Chapter of the AAP website](#)
- [AAP Red Book Online](#)
- [CDC’s Provider Resources for Conversations with Parents about Vaccines](#)
- [Children’s Hospital of Philadelphia—resources and videos on holding conversations about HPV vaccination](#)
- [Motivational Interviewing](#)
- Training through State Department of Health
- Insert links to sample competency check-list, plan for measuring and monitoring competencies and training
- Maine Immunization Program—cal 207-287-3746 and speak with Provider Relations Specialist and/or link to <http://www.maine.gov/dhhs/mecdc/infectious-disease/immunization/providers/index.shtml>
- [AAP Periodicity Schedule](#)
- [CDC’s Vaccine Storage and Handling Toolkit and Resources](#)
- [Cold Chain Document and Reconciliation](#) from Maine.gov
- [Vaccine Adverse Events Reporting System website and resources including list of reportable events](#)

Access to Care

- [CDC's Chart of Contraindications and Precautions to Commonly Used Vaccines](#)
- [2012 Immunization and Catch up Schedule-AAP](#)
- [CISP Immunization Quality Improvement Website](#)
- Sample standing orders and resources from the [Immunization Action Coalition](#)
- [Recommendations from the National Vaccine Advisory Council](#)
- [Immunization in the Medical Home David Wood Powerpoint](#)
- [Maine's Universal Childhood Immunization Program](#)
- [Maine's Vaccines for Children \(VFC\) Program](#)

Information & tracking systems (HIT) that support improving immunizations

- [ImmPact2 Immunization Registry](#)
- [CDC's CoCASA](#)
- Contact state public health department to initiate an AFIX visit. If you are part of the Vaccines for Children (VFC) program, your office may already participate in these visits. [Assessment, Feedback, Incentives eXchange Program](#)
- [CDC Immunization Information Systems \(Registry\) page](#)
- The CDC maintains an Immunization Registry Clearinghouse. Information about this clearinghouse is available at <http://www.cdc.gov/nip/registry/>.
- Articles. Immunization Registries. Special edition of *Pediatric Annals*- July 2006 edition.
- CDC Immunization Information Systems Information. Available at: www.cdc.gov/nip/registry/Default.htm.
- CISP. Immunization Registries Background and Fact Sheets. Available at: <http://www.aap.org/immunization/pediatricians/pdf/RegistriesFactSheet.pdf>.
- If paper-based, establish a tickler file of index cards or postcards. If electronic, work with EMR create electronic system. (Insert link to First STEPS PDSAs)
- CISP. Reminder-Recall Fact Sheet. <http://www.aap.org/immunization/pediatricians/pdf/ReminderRecall.pdf>
- [Vaccine Administration Record and Screening Forms](#) available from AAP Bookstore
- [AAP Refusal to Vaccinate Form](#)
- Provide link via Maine Quality Counts website to MOGE procedure

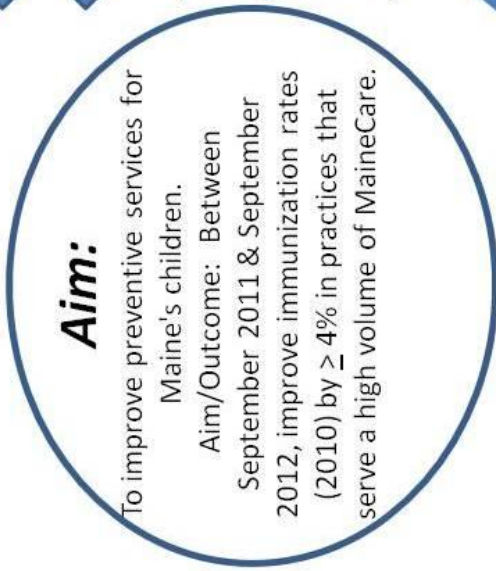
Engage partners in improving immunization rates

- [CDC's Vaccines for Children Program](#)
- Strategies for Pediatricians: Addressing the Concerns of Vaccine-Hesitant Parents. Available at: <http://www.aap.org/immunization/pediatricians/communicating.html>.
- Six Common Misconceptions About Vaccination and How to Respond to Them. Available at: www.cdc.gov/nip/publications/6mishome.htm.
- Maine Quality Counts website www.mainequalitycounts.com.
- [Engaging Parent Partners Handbook](#)
- [Vaccine Education Center at Children's Hospital of Philadelphia](#)
- [Immunization Action Coalition website](#)
- [Immunization Action Coalition website](#)
- [AAP/CISP Immunization in a Medical Home Training Tool](#)
- [All Kids Count website](#)
- [Center for Medical Home Improvement](#)

Improving Immunization Rates Change Package (Updated 09.12.12)

D R I V E R S
P R O C E S S

- Leaders as champions for change.
- Team based and evidence based system of care with informed, engaged and competent staff.
- Access to care.
- Immunization information and tracking systems (HIT) that support improving immunizations.
- Engage partners in improving immunization rates.



M E A S U R E S

