



**START (Screening Tools and Referral Training)  
Oregon Pediatric Society  
2014 Annual Report**

START (Screening Tools and Referral Training) is a statewide program of the Oregon Pediatric Society promoting highest standard of care and practice change in primary care through quality improvement and other education initiatives. START works in partnership with medical clinics serving children and adolescents and local community agencies, as well as interfacing with higher level state, public and private entities that work on system of care for children and adolescent health and well-being. START trains health care providers in the detection and management of developmental delays, autism spectrum disorders, peripartum mood disorders (PPD), adolescent depression and substance use, and adverse childhood experiences (ACEs)/Trauma informed care. All of our trainings emphasize the importance of early intervention and prevention, with an end goal that all children enter kindergarten ready to learn.

START trainings support the medical home, team-based care model and include pediatric primary care providers (physicians, nurse practitioners, and physician’s assistants), nurses, and office staff. The entire team learns the science behind standardized screening, how to implement universal screening protocols into their practice, and community resources available for children and families. START provides a unique opportunity for primary care providers and community referral resources to enhance collaboration and coordinated care for Oregon’s children. START provides technical assistance calls to the individual clinics that we train, in order to help encourage practice level change, and ensure success.

**New in 2014 - Highlights**

- ❖ START conducted 32 hands-on trainings in 17 counties
- ❖ Adolescent Health Project – We successfully rolled out the first cohort of our statewide Adolescent Health Project (with funding from the Oregon Health Authority (OHA)) with regional trainings in Coos Bay, Medford, Bend/Baker City and Ontario. 4 clinics and 5 School Based Health Centers officially enrolled in this Learning Community.
- ❖ MOC-IV for Adolescent Depression Screening – We successfully applied for and received MOC-IV for our Adolescent Depression Screening project through the American Board of Pediatrics.
- ❖ Staffing – Laura Wilson joined the START team as our project assistant. Dr. Teri Pettersen has contracted with START to provide OPAL-K outreach to primary care and for leadership with our new ACEs/Trauma informed Care module.
- ❖ ACEs/Trauma Informed Care module – We convened two expert panels to inform curriculum development and create a new 2 hour training on this emerging topic. CME has been acquired. START received state funding through Trauma Informed Oregon to roll this training out statewide.

## SNAPSHOT: START Trainings in Year 6/2014

### START TRAINING PARTICIPANTS

Attendees Trained	Year 6	ALL Years
Primary Care Providers	262	1,135
Health Care Workers	342	1,514

### START TRAININGS BY YEAR

Year 1	=	18 trainings
Year 2	=	16 trainings
Year 3	=	20 trainings
Year 4	=	11 trainings
Year 5	=	32 trainings
<b>Year 6</b>	<b>=</b>	<b>32 trainings*</b>

\*For reporting purposes, this number reflects 3 trainings which took place in October 2013

### PARTICIPANT DETAILS: Y6/2014

<b>ALL Participants</b>	<b>604</b>		
<b>Other Learners</b>	<b>342</b>	<b>Other Learners:</b>	
<b>Primary Care Providers</b>	<b>262</b>	Nursing Staff	RN 77
			MA 105
<b>Provider Details:</b>		Other	MH/LCSW 31
Pediatrician	71	Admin/Office	98
Family Physician	31	Occupation Therapy	3
Psychiatrist	2	Interpreters	4
Doctor of Osteopathy	19	Care Coordinators	2
Nurse Practitioner	40	Resource Counselor	2
Physician's Assistant	23	Scribe	1
Residents, pediatric	57	Not Specified	13
Residents, family medicine	19	Students	Medical 4
			Nursing 2

### 17 COUNTIES SERVED by START in Y6(2014)

Baker , Clackamas, Clatsop, Coos, Crook, Deschutes, Douglas, Grant, Jackson, Jefferson, Josephine, Lake, Lane, Malheur, Marion, Multnomah, Washington

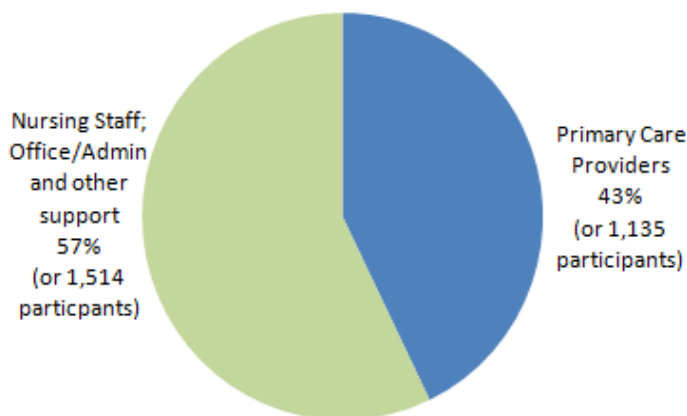
### COMMUNITY RESOURCES: START Y6/2014

211info/Parent Helpline, ADAPT, Blue Mountain Valley Mental Health, ChildCare Resource and Referral, Coos County Public Health, Deschutes Co Behavioral Health, Developmental Disability Services, Early Intervention/Early Childhood Special Education, Family2Family Health Information Center, Lifeways, Mental Health of Jackson Co, OnTrack, Options for Southern Oregon, Pfeifer and Associates, Public Health Home Visiting Nurse, Rimrock Trails Adolescent Treatment Services, St Charles Behavioral Health, Waterfall Community Health Center

### START Training Participants, All Modules

08/2008 through 12/2014

**129 trainings; 2,649 participants**



## ***START Projects – Brief Overview***

### Multnomah Project LAUNCH

This fourth year of Project LAUNCH saw the development of new training curricula, including a Behavioral Health Integration module which will become available online on our website. We also developed a new one hour START Basic Tune-up which will be offered in the last year of LAUNCH to previously trained clinics. We also partnered with the county to deliver outreach materials to primary care clinics on the Register Early for Kindergarten campaign, as well as 211 information.

### Autism ACCESS grant

We are partnering with the Oregon Center for Children and Youth with Special Healthcare Needs (OCCYSHN) on their Autism Medical Home Project. We have updated the ASD 101 module and conducted trainings in Salem, Seaside and Coos Bay. Funding has been extended into the next year for trainings in 3 additional communities.

### REAL- START (Risk Evaluation of Autism in Latinos)

In partnership with Dr. Katie Zuckerman, we have adapted the START Basic training with content specific to the Latino population for this research project. Materials have been submitted to OHSU IRB and a pilot training was completed in November at Woodburn clinic. An active Community Advisory Board helps guide development of both clinic and parent tools.

### Adolescent Health Project

The Adolescent Health Project had a successful first year. Trainings were conducted in Bend/Baker City, Coos Bay, Medford and Ontario. 4 clinics and 5 School-Based Health Centers enrolled in the project; 14 clinics participated as ‘tag ons’ to these trainings, amplifying the community impact. Participants received a day long training on Adolescent Well Visit, and Screening for Adolescent Depression and Substance Use (SBIRT). START partnered with OPIP to deliver three technical assistance webinars after the training which included QI and discussion regarding workflow, coding, and confidentiality issues. We successfully applied for and received MOC-IV for Adolescent Depression Screening through the American Board of Pediatrics.

### ACEs/Trauma informed Care

START has contracted with Dr. Teri Pettersen to spearhead the development of a new 2 hour new START module on ACEs/Trauma informed Care in a Primary Care setting. We convened an expert panel of pediatric primary care providers and child psychiatrists to inform the curriculum. It has been piloted in 2 sites and will roll out in 2015. In addition, Peg King and Teri Pettersen participate on the new statewide initiative – Trauma Informed Oregon.

### CMS SIM grant

We were contracted to provide a series of training in Eastern Oregon on Developmental Screening and Maternal Depression Screening. To maximize impact, our trainer conducted both of these trainings in a single visit to these communities, and also provided technical assistance on workflow and EHR issues. Trainings were conducted in John Day, Christmas Valley and Lakeview.

### Lane County HUB/CCO work

The Early Learning Hub in Lane County funded a training for Health Care providers in September on Developmental Screening; 5 clinics participated in this START BASIC training. We are following up with them for technical assistance. Additional trainings in 2015 are anticipated.

### Northwest Newborn – Maternal Depression Screening

START received a small grant to work with Dr. Rebecca Mischel on screening for depression in the NICU setting. Randall Children’s Hospital NICU and St. Charles NICU have been trained to date. RCH is conducting an ongoing QI project on this topic. Their data is forthcoming.

## The Impact of START

START works to ensure that all of Oregon’s children receive the best preventative, evidence-based health care. Our trainings seeks to increase provider knowledge and confidence, increase standardized screening and appropriate referral, and ultimately enhance care coordination for Oregon’s children and families. To that end, we collect data to ensure the efficacy of our work, measuring change at both the provider level (knowledge, skills, confidence) and at the clinic level (MOC Chart Review Data).

### Measuring Practice Level Change:

#### Chart Review Data from START MOC-IV Quality Improvement Project Participants

The START project provides pediatricians an opportunity to earn credit toward the American Board of Pediatrics (ABP) Maintenance of Certification (MOC) Part IV requirements. In order to receive START MOC project credit, pediatricians must attend the START BASIC training, implement the ASQ and/or M-CHAT screening tools, and collect their screening rate data using chart reviews or EHR reports.

To date, 100 pediatricians have received their Maintenance of Certification, Part IV through the START Program. That represents ~30% of pediatricians that have been START trained. These 100 MOC participants have performed 4,370 well-child visits during which ASQ and MCHAT screens were administered. Figure 1 shows cumulative ASQ screening rates for MOC participants, while Figure 2 shows the overall MCHAT screening rates. Data are shown for 9, 18, & 24 month well-child visits at 3, 6, and/or 9 months after implementation of first screening tool in practice. Table 1 depicts a different representation of the same data. Of these 100 pediatricians who have received MOC, 34 of these (34%) collected data on both ASQ and MCHAT screens. Implementation occurred at different times, with most pediatricians choosing a gradual rollout of screening tools into practice. Remarkably, START MOC participants consistently achieve an average of 88% screening rate for both the ASQ and M-CHAT at each of the recommended periodicities

Figure 1:

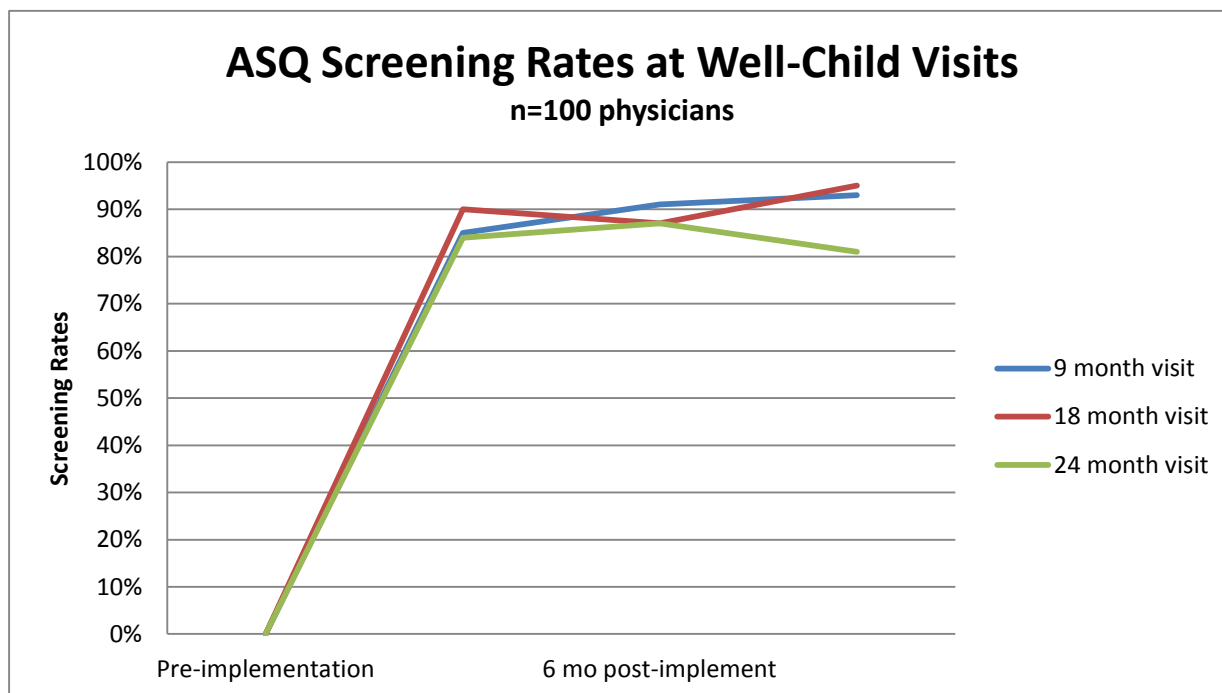
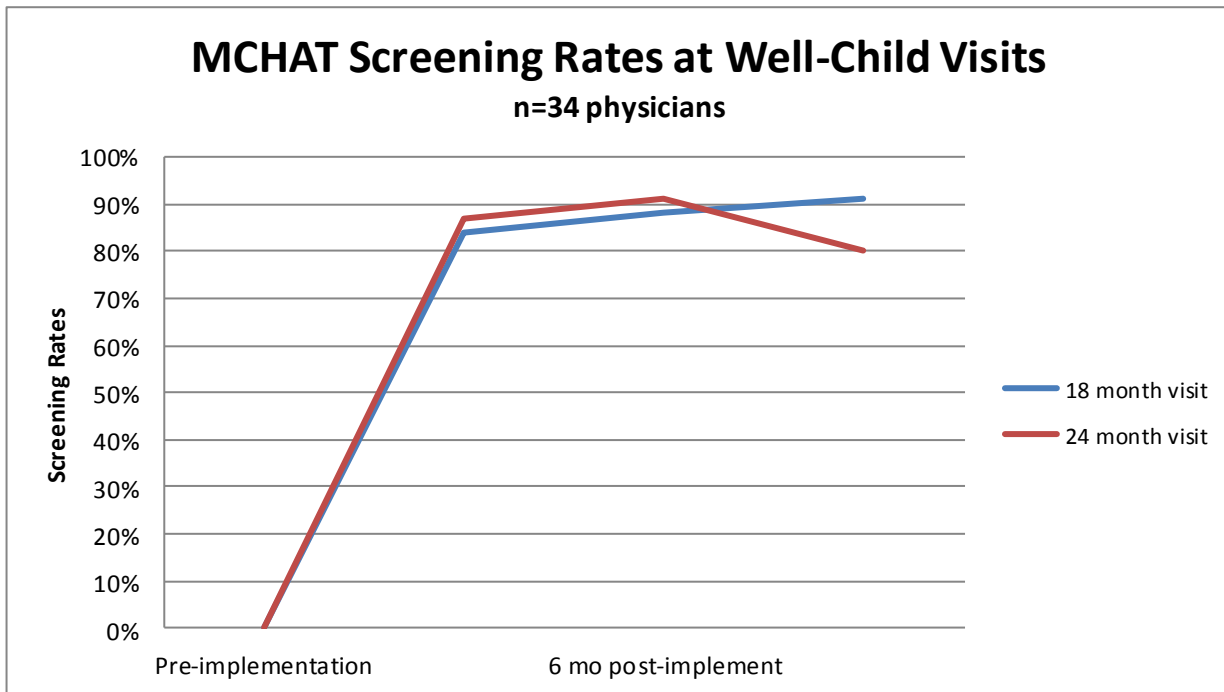


Figure 2:



Throughout our MOC project, nearly 6,000 patient encounters were audited to assess if screening occurred at well visits. Patients may be counted in multiple groups depending on the time period a practice chose to review. Practices were encouraged to begin screening with at least one AAP-recommended well visit, and increase as workflows were implemented. All providers that submitted for MOC credit demonstrated marked improvement in screening rates. Population data has shown increased referral rates from providers in areas where a significant number of providers increased screening.

Through partnership with the Oregon Pediatric Improvement Project (OPIP) and directly with our members, we continue to educate Oregon Health Care Providers on the value of screening, referring, and using the 96110 CPT code when performing screening to ensure that measures occurring at the regional level (based on claims data) accurately reflect screening rates in practices.

**Table 1: START MOC – Total Participants’ Screening Rate Data (N=100 physicians)**

	<b>3 months after implementation</b>	<b>6 months after implementation</b>	<b>9 months after implementation</b>
<b>9 MONTH WELL-CHILD VISITS</b>			
<b># well-child visits (ASQ only)</b>	575	619	600
<b>Average ASQ Screening Rate</b>	85%	91%	93%
<b>18 MONTH WELL-CHILD VISITS</b>			
<b># well-child visits (ASQ)</b>	479	464	471
<b># well-child visits (M-CHAT)</b>	319	303	281
<b>Average ASQ Screening Rate</b>	90%	87%	95%
<b>Average M-CHAT Screening Rate</b>	84%	88%	91%
<b>24 MONTH WELL-CHILD VISITS</b>			
<b># well-child visits (ASQ)</b>	369	383	410
<b># well-child visits (M-CHAT)</b>	210	243	267
<b>Average ASQ Screening Rate</b>	84%	87%	81%
<b>Average M-CHAT Screening Rate</b>	87%	91%	80%

**DISCUSSION: Adherence to AAP-recommended screening periodicity**

Though 100% screening rates at the AAP-recommended periodicity are the long term goals, QI principles call for multiple small changes over time. Those practices that did not fully implement standardized screening as recommended by AAP likely did not due to three factors:

- The numerous demands and lack of time at well-child visits.
- The gradual rollout of screening tools at practices. For example, many chose to implement one screening tool at one point in time, solve any problems with the workflow, then add on another tool at another point in time. In this case it is possible that more pediatricians eventually implement the full recommended screening schedule after the 9 month project participation period.
- The continuous QI/PDSA process by which practices attempt to work through problems in their screening protocols to increase screening rates over time. We collect information for 9 months after implementation of first screening tool. It is possible that more pediatricians eventually achieve 100% screening rates after the 9 month project participation period.

**Measuring change in provider knowledge, skills and confidence: In-Training Retrospective Survey**

We collect a retrospective survey at the conclusion of each START training. This survey seeks to measure individual level data, including intentions to change behavior post-training. It also seeks data to continually improve our materials.

**EVALUATION DATA : START Year 6 (2014)**

START Modules	Survey Questions				
	Participants agreed that the training had "increased my knowledge of community resources"	Participants agreed that the training had "increased my knowledge of screening tools"	Participants agreed that as a result of the training, they "plan to increase their use of screening tools"	Participants agreed that as a result of the training, they "plan to provide parents information about community resources" (such as 211info /Parent Helpline)	Participants indicated they are committed to "making a change in their screening practices"
<b>PPD</b> Peripartum Mood Disorders	Did not ask	94%	94%	94%	100%
	(3)Trainings: John Day; Lakeview; Christmas Valley *A fourth PPD training was held in Bend, April of 2014 with independent tabulation, that data is not represented here				
	<u>Participant Comments:</u> "Well presented"; "Great job"; "Thanks for coming out!"				
<b>BASIC</b> Developmental Health	97%	98%	72%	92%	99%
	(9) Trainings: Eugene; John Day; Lakeview; Christmas Valley; Portland (5)				
	<u>Participant Comments:</u> "Things are going great in regard to ASQs; we have implemented a great workflow for screening and our providers really like it. Thanks so much for bringing the START program to us!" - RN, Clinic Manager (1 month follow up post training) "I'm new to the area and this is very helpful to know of resources for patients"; "Excellent training"; "Great resources"				
<b>REAL</b> Risk Evaluation of Autism in Latinos	100%	100%	76%	94%	100%
	(1) Training: Woodburn				
	<u>Participant Comments:</u> "Great information"; "Very informative"				

**EVALUATION DATA : START Year 6 (2014)**

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START Modules	Survey Questions				
	Participants agreed that the training had "increased my knowledge of community resources"	Participants agreed that the training had "increased my knowledge of screening tools"	Participants agreed that as a result of the training, they "plan to increase their use of screening tools"	Participants agreed that as a result of the training, they "plan to provide parents information about community resources" (such as 211info/ Parent Helpline)	Participants Indicated they are committed to "making a change in their screening practices"
	98%	100%	56%*	54%	100%
<b>ASD 101</b> Autism Spectrum Disorders	*several providers indicated using tools prior to training				
	(3) Trainings: Coos Bay; Salem; Seaside				
	<u>Participant Comments:</u> "Very helpful!"; "Well organized and helpful"; "Great information and resources even for patients without ASD"; "Because I am an interpreter this gave me a much better understanding of patients with autism"				
<b>BHI</b> Behavioral Health Integration	Did not ask	91%	61%	87%	100%
	(3) Trainings: Lake Oswego; Portland (2) Plus one beta test, data not included here				
	<u>Participant Comments:</u> "Good information shared"; "I wish training session were longer, it had a lot of valuable information"; "Enjoyed and learned from it" "Thank you, screening tools have been de-mystified. I think I can embrace this change."				
<b>AHP</b> Adolescent Health Project	See below for Overview of Findings				



## Adolescent Health Project

### Overview

The goal of the **Adolescent Health Project** is to increase universal screening, brief interventions, and referral to treatment (SBIRT) for depression and substance use within the context of an adolescent well visit through performance improvement projects among adolescent providers across Oregon. We also seek to improve care coordination across health, mental health and substance abuse sectors with the ultimate goal of improving adolescent health in Oregon.

The Adolescent Health Project has successfully executed 4 regional trainings around the state – Medford, Coos Bay, Ontario, and Bend/Baker City. These day long trainings focused on Adolescent Health, and included:

<b>Numbers Trained</b>	<b>March – November 2014</b>
Primary Care Providers	108
Clinic Staff and Others	65
<b>TOTAL Trained</b>	<b>173</b>

The Adolescent Well-Visit (including consent and confidentiality); Addressing Substance Use with Adolescent Patients (SBIRT); Addressing Depression with Adolescent Patients; Community Resources & Referral Agencies; Strategies for Implementing Work Flows – Clinic Action Plans.

In addition to the larger regional trainings, we delivered the Adolescent Depression training to three ad hoc sites – Children’s Health Associates of Salem, OHSU Pediatric Residency Program, and the OHSU Family Medicine Residency Program. Interest in the project remains high across the state. Other deliverables included: a Train the Trainer event; a curriculum review with a panel of 10 expert child psychiatrists and pediatricians, filming 2 videos as resources, and recruitment for the second cohort of project.

The **Oregon Pediatric Improvement Partnership (OPIP)** is partnering with us on evaluation and policy-level implications uncovered in the project. OPIP developed a new tool for the project - the AORTA (Adolescent Office Report Tool and Assessment). There were three primary methods of collection evaluation data for this project:

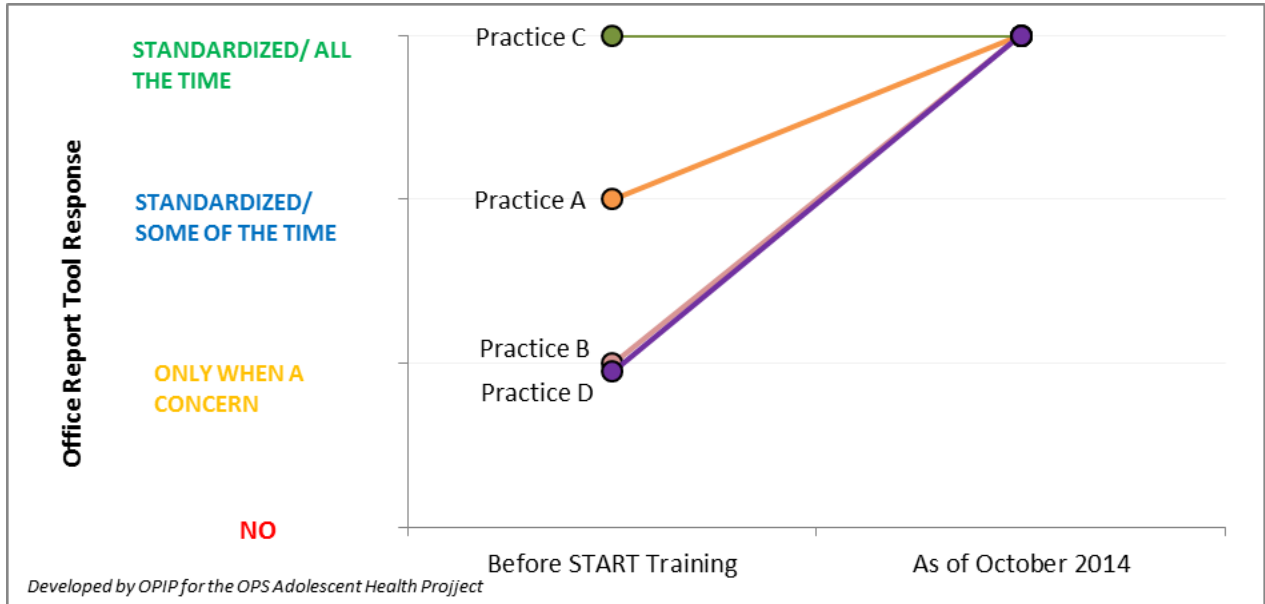
- Surveys (collected at trainings) – measuring attitudes and beliefs, as well as perception of capacity for implementation
- Office Report Tool (AORTA) – measuring office systems associated with substance abuse and depression best practices, and with QI
- Practice-Level QI Data (medical chart reviews conducted by the practices)

The following are highlights from OPIP’s strategic report.

1. Practices reported improving on a number of systems related to confidentiality, privacy, screening and QI capacity. With continued collaboration with clinics we are learning how reliable and systematic those processes are spread within the clinics.

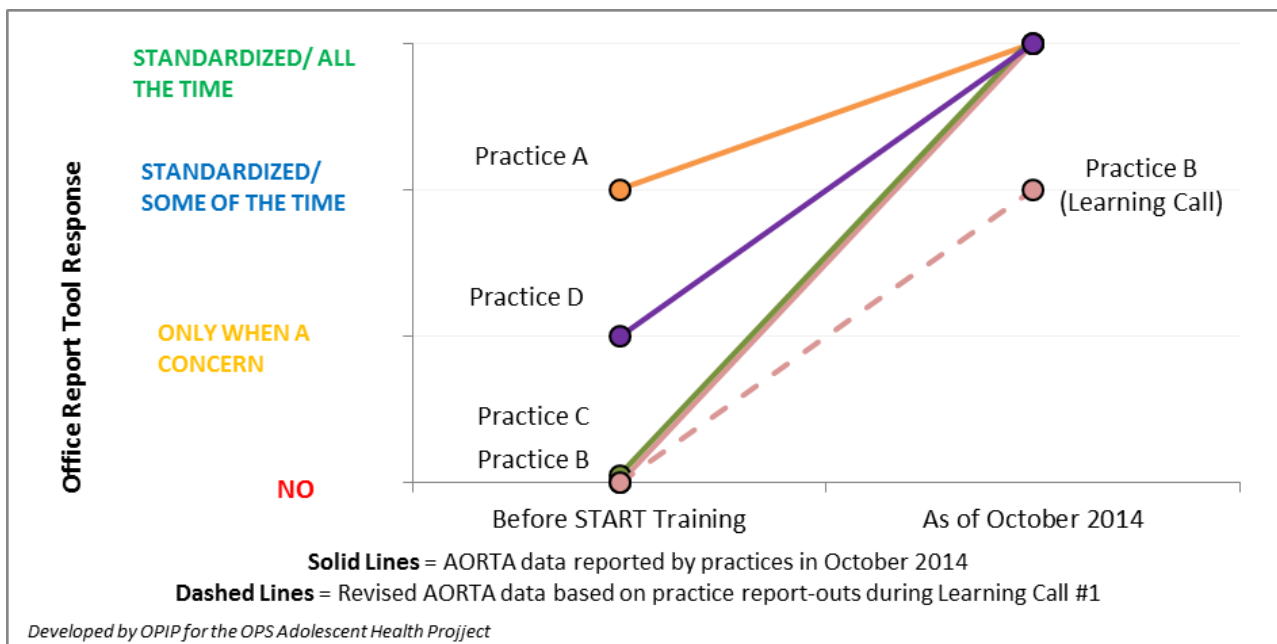
2. Practices reported improvements to nearly all office systems/ processes in the Improvements on
  - a. Depression Screening – All practices now report that all providers use a standardized tool to screen for depression all of the time.

Figure 1. Practice Responses to the AORTA Item “The practice uses a validated tool to screen for depression”



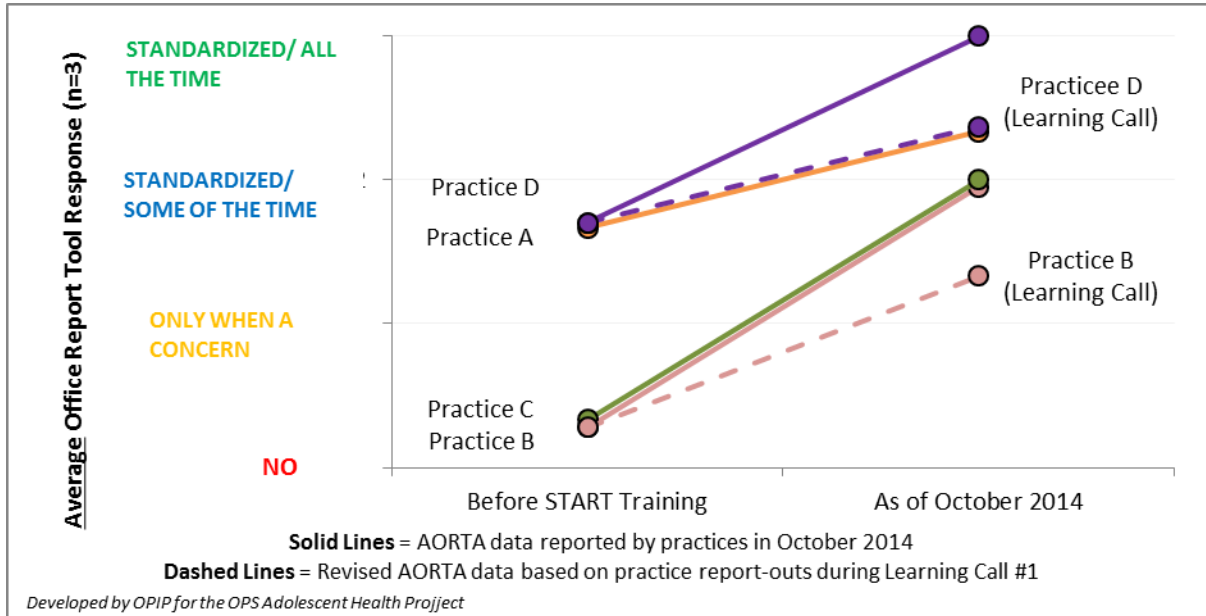
- b. Substance Abuse screening – All practices report improvements following the training session.

Figure 2. Practice Responses to the AORTA Item “The practice uses a validated tool to screen for substance abuse”



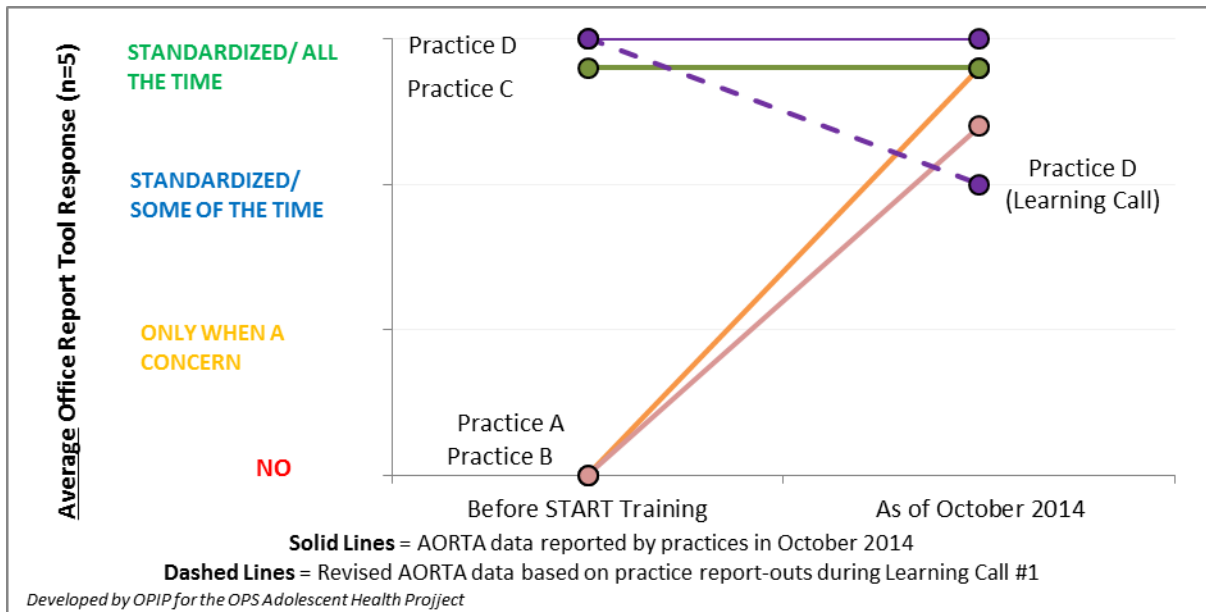
- c. Privacy and Confidentiality – All practices reported improvements on office processes related to privacy and confidentiality.

Figure 3. Average Practice Responses to AORTA items (N=3) related to Privacy & Confidentiality



- d. Improvements in Quality Improvement (QI) – Two practices have now developed office processes related to QI; as a result, all practices now have standardized QI processes.

Figure 4. Average Practice Responses to AORTA items (N=5) related to Quality Improvement



e. Improvements in Follow Up Steps to Address Screening Results – Since the training, two practices developed systems and assigned staff roles to track the status of referrals for substance abuse. As such, practices now report using standardized practices all the time to:

- maintain up-to-date contact information for referral and community based resources available for both substance abuse and depression;
- conduct referrals for substance abuse and depression; and
- track the status of these referrals.

Repondents from 3 practices reported that they felt their lack of knowledge about providers in the community to refer to for substance abuse and/or depression was a barrier to referring their adolescent patients.

**Measuring Changes in Referrals: Secondary Data**

In the six years since START began, we have been tracking the number of physician referrals to Early Intervention/Early Childhood Special Education (EI/ECSE) in the counties in which we have trained.

While we have not been able to track this down to the level of provider trained, it is one piece of secondary data that our outreach efforts may have impacted and improved. It is also important to note that by some estimates 50-60% of children referred to EI/ECSE do not make it to the referral for a variety of reasons. Increasing awareness and supporting clinics in improving the follow through on referral from families is a goal for 2015.

**Table 3: Number of Referrals to Early Intervention (0 - 2 years old) from Physicians and Healthcare Clinics by select counties (START has trained here in Years 5 and 6)**

County	PRE-START	Year 3 START	Year 6
	2007 - 2008	2011	2014
Baker	0	4	12
Clackamas	64	163	240
Deschutes	64	83	138
Douglas	na	43	73
Lake	na	0	0
Lane	na	262	132
Malheur	25	58	46
Marion	25	295	430
Multnomah	150	572	776
Umatilla	25	65	145
Washington	198	428	502

**Table 4: Number of Referrals to Early Childhood Special Education (3 years - Kindergarten) from Physicians and Healthcare Clinics in select counties (START has trained here in Years 5 and 6)**

County	PRE-START	Year 3 START	Year 6 START
	2007 - 2008	2011	2014
Baker	0	<6	3
Clackamas	37	86	110
Deschutes	38	42	46
Douglas	na	28	34
Lake	na	0	0
Lane	na	121	126
Malheur	8	17	14
Marion	<6	229	218
Multnomah	94	264	265
Umatilla	20	29	39
Washington	na	210	147

### Challenges

#### Organizational level

We are struggling to keep pace with the growth and demand for our trainings, and continue to look for the best structure of staffing. Developing new curricula while maintaining current (growing) levels of training is also a challenge.

We are in the process of looking at our evaluation processes. In the past, with just one training module, the Pre-Post test model worked relatively well, though the Post data proved difficult to retrieve. As our program has grown dramatically, and now includes 6 modules, that system of evaluation has become outdated. We continue to try and strike a balance between collecting meaningful evaluation data and not burdening clinics.

Statewide level

A new challenge has been the emerging CCO rollout at the state level, and how our initiative fits into the new system. As the new CCO structure reforms Medicaid, it has a direct impact on our capacity to sustain the START Initiative. As our trainings now address 4 CCO incentive metrics (developmental screening, adolescent well visit, adolescent depression, adolescent substance use/SBIRT), we are now being looked to for much larger scale trainings. This has enormous implications with regard to resource and staff capacity, evaluation and the QI model. We continue to work at the CCO level to look for new resources, and ways to embed our work into their stated goals, while balancing our organizational capacity.

**Trainers**

In appreciation of our START trainers, we thank them for their time, expertise and commitment to the health and wellbeing of Oregon’s children!

Greg Blaschke, MD, MPH  
Peter Boehm, MD  
Kenneth Carlson, MD  
Keith Cheng, MD  
David Conant-Norville, MD

R.J. Gillespie, MD, MHPE  
Laura Jordhen, MD  
Robin McCoy, MD  
Rebecca Mischel, MD  
Teri Pettersen, MD

Michele Raddish, MD  
Jim Winkle, MPH  
Kirk Wolfe, MD  
Katharine Zuckerman, MD,MPH

## APPENDIX A

### START Initiative : Year 6/2014, trainings

Date	Training Site	County	Training Module	Training Attendees	
				Total # attendees	Total # PCPs
2/5/2014	Adventist I*	Multnomah, Clackamas, Wash	BASIC	31	12
2/18/2014	Adventist II*	Multnomah +	BASIC	37	10
2/27/2014	Adventist III*	Multnomah +	BASIC	38	6
3/3&4/2014	OHSU Pediatric Residents, parts 1 & 2	Multnomah	Adol Depr	27	27
3/5/2014	Young Child Wellness Council*	Multnomah	BHI	10	-
3/17&18/2014	OHSU Pediatric Residents, parts 1 & 2	Multnomah	SBIRT	39	39
3/28/2014	CHAOS (Salem)	Marion	Adol Depr	15	13
4/22/2014	NICU training, Session 1 (Bend)*	Deschutes	PPD	13	2
4/28/2014	Bay Clinic Pediatric Clinic (Coos Bay)	Coos, Douglas	ASD	9	4
5/17/2014	Siskiyou, La Clinica (Medford)*	Jackson, Josephine	Adol He	27	9
5/31/2014	NBMC, Bay Clinic (Coos Bay)*	Coos , Douglas	Adol He	31	16
6/22/14	Treasure Valley Pediatric Clinic (Ontario)	Malheur	Adol He	11	8
7/15/2014	Olson Pediatric Clinic	Multnomah	BHI	14	6
7/23/2014	OHSU FM Residents	Multnomah	Adol Depr	23	23
8/26/2014	Broadway Medical Clinic	Multnomah	BHI	18	7
8/28/2014	Deschutes & Baker Co SBHCs (BEND)*	Deschutes, Baker Crook, Jefferson	Adol He	54	14
9/12/2014	CHAOS (SALEM)	Marion	ASD	36	10
9/18/2014	Lane HUB (EUGENE)*	Lane	BASIC	15	5
9/23/2014	PMG Glisan	Multnomah	BASIC	25	8
9/25/2014	Broadway Medical Clinic	Multnomah	BASIC	22	8
11/6/2014	<i>The Childrens Clinic @ Peterkort</i>	Washington	BHI	8	8
11/10/2014	<i>Woodburn Pediatrics</i>	Marion	REAL	27	7
11/18/2014	<i>Strawberry Wild, GrantCHD (JOHN DAY)*</i>	Grant, Malheur	BASIC	19	3
11/18/2014	<i>Strawberry Wild, GrantCHD (JOHN DAY)*</i>	Grant, Malheur	PPD	19	3
11/19/2014	<i>PMG - N Coast Clinic (SEASIDE)*</i>	Clatsop	ASD	12	7
12/15/2014	Warner Mountain, LakeCoMC (LAKEVIEW)*	Lake	BASIC	9	2
12/15/2014	Warner Mountain Clinic (LAKEVIEW)	1Lake	PPD	7	2
12/16/2014	North Lake Health (CHRISTMAS VALLEY)	Lake	BASIC	4	2
12/16/2014	North Lake Health (CHRISTMAS VALLEY)	Lake	PPD	4	2

**TOTAL TRAINED**

**604**

**262**