

A Collaborative Approach to Improving Data Collection for 1-3-6



Disclaimer

While the information in this presentation in no way proprietary, the project was implemented with CDC funds and the technology is therefore accessible to others. We know that what works for one state may not for another but these are merely lessons we learned while making system changes (*still in process*) that led to improved collaboration and increased data integrity . . . however, we gladly solicit suggestions!



Oregon EHDI Needs a Remodel

- Not sustainable-
“renting system”
- Ineffective data
- Manual data entry
burden
- Process confusion
- Negative stakeholder
feedback



*Oregon School for the Deaf
Extreme Makeover*

The Fax-Back System Bouncing back to EHDI



Finding the compelling story

- Reframed “problem” around children’s needs
- Tailored to stakeholder perspective
- Joint effort





Children from OSD

The secret is to gang up on the problem, rather than each other” –Thomas Stallkamp

Case Example: Need for Oversight of EI referrals



Increased Oversight of EI referrals

 **EHDI Diagnostic Form** 

[Return to Client](#) [Save Changes](#) [+ New Client Record](#) **Deceased** **DiagnosticID** 50113
ClientID 10001

Child
Child's Name: Smith (test), Joe **DOB:** 09/05/2008

[Test](#) [Result](#) [Recommendations](#) [EI Status](#)

Follow Up Recommendations
 Follow Up Appointment
 Early Intervention Referral
 Guide By Your Side Referral
 CoCoon Referral
 Medical Evaluation Referral
 Hearing Aid Evaluation
 Ophthalmology Referral
 Genetic Referral
 Cochlear Implant Referral

Follow Up with Audiologist:
Patient Referred To:

EI Eligibility Criteria **Date EI Referral Sent:** <Unrelated Table>
 25 dB HL: Pure tone average of 25 dBHL or greater for frequencies of 500 Hz, 1000Hz and 2000 Hz (in better ear)
 35 dB HL: Pure tone average of 35 dBHL or greater for frequencies of 3000Hz, 4000Hz and 6000 Hz (in better ear)
 Unilateral: Unilateral hearing impairment, pure tone average loss of 50dbHL or greater for frequencies 500-4000 Hz
 Sensorineural: Not medically treatable

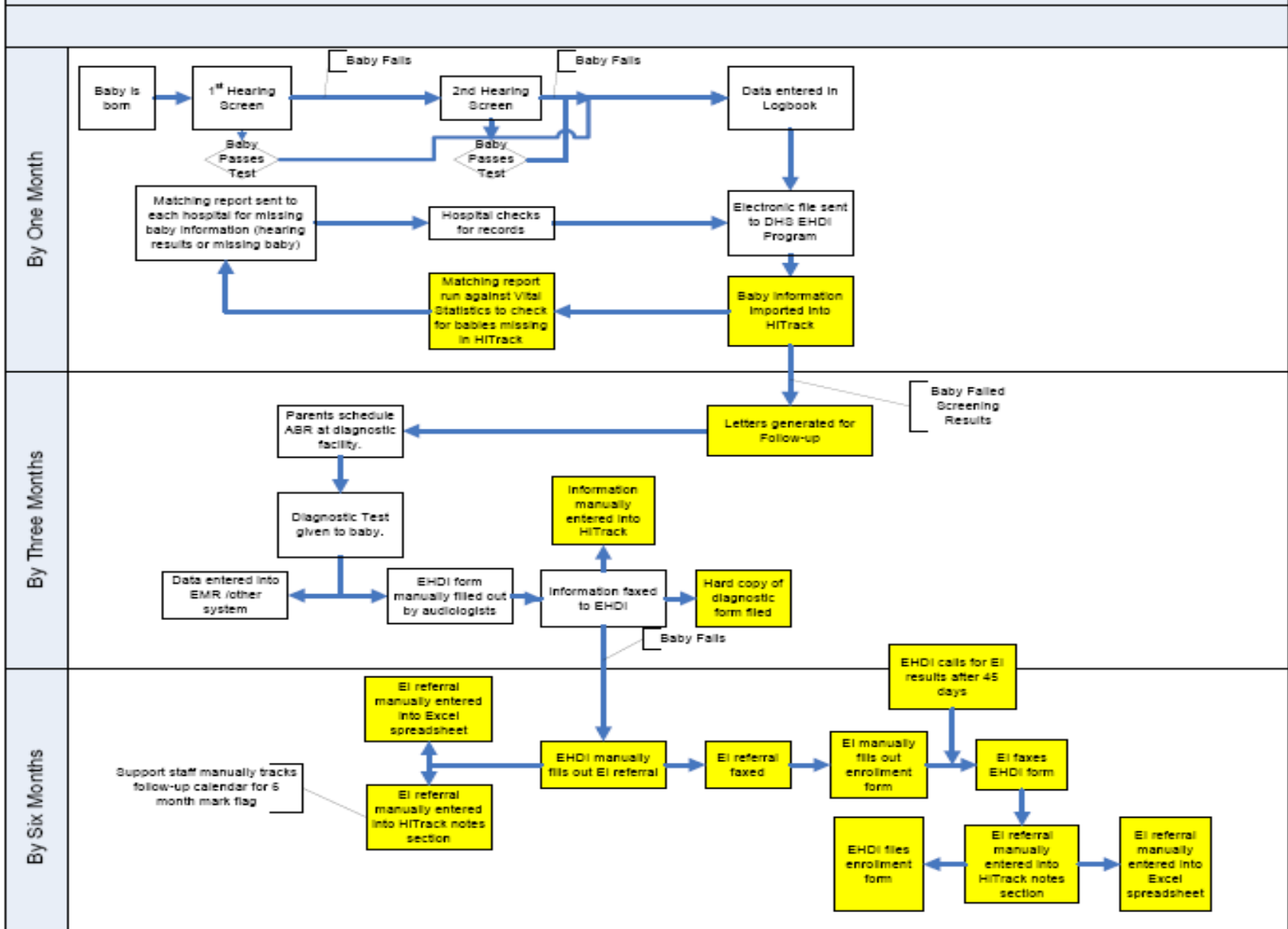
Diagnostics Notes

Survey before the bulldozing

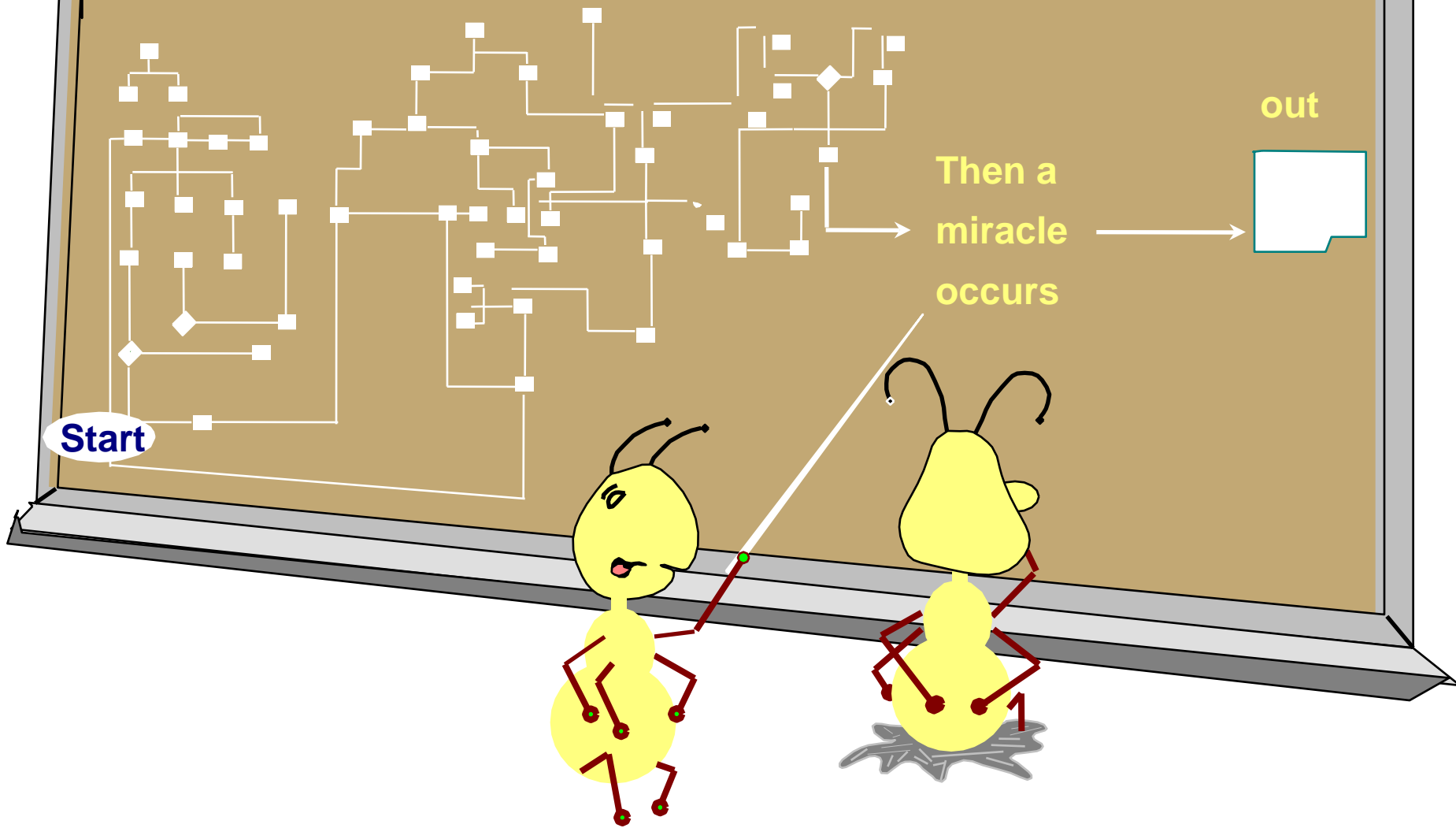
- Met with many potential partners
- Piloted data system
- Pre and post survey
- Cost/benefit analysis
- Approval for Evaluation/Data Coordinator position



Early Hearing Detection and Intervention (EHDI) Program – Current Process

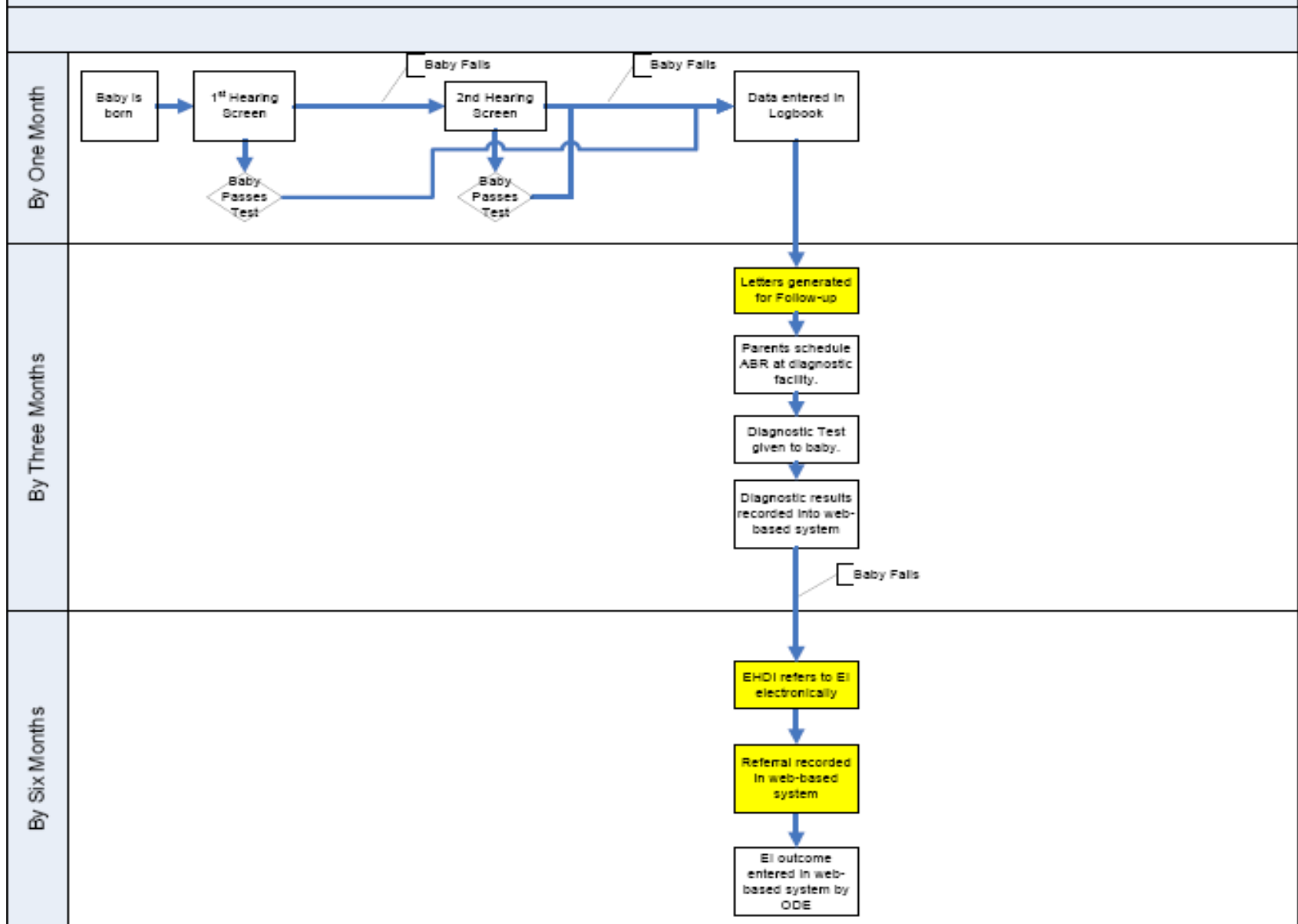


EHDI Data and Patient Information Management



Does this look familiar ?

Early Hearing Detection and Intervention (EHDI) – Proposed Process



All pilot hospitals reported improved ease of use and reduction in data entry from 6.6 to 1.4 minutes per record

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Hearing Screenings

Currently there are no Hearing Screenings entered. Press 'New Screening' to enter a screening.

Hearing Screening

Was Hearing Test Performed	<input type="button" value="Inpatient"/>	<input type="button" value="Save"/>
Test Date	<input type="button" value="Inpatient"/> <input type="button" value="Outpatient"/> <input type="button" value="Refused"/> <input type="button" value="Transfer"/> <input type="button" value="Missed"/>	<input type="button" value="Clear"/>
Test Results	Left Ear <input type="button"/>	<input type="button" value="Cancel"/>
	Right Ear <input type="button"/>	

Cost comparison

	2010	2011	2012	Total
OLD SYSTEM	\$74,200	\$74,200	\$74,200	\$222,600
Vendor	\$50,000	\$50,000	\$50,000	\$150,000
Servers and Hosting	\$19,200	\$19,200	\$19,200	\$57,600
OIS Support	\$5,000	\$5,000	\$5,000	\$15,000
INTEGRATION COST	\$35,000	\$18,000	\$16,000	\$69,000
Development	\$26,000	\$9,000	\$7,000	\$42,000
Server	\$3,000	\$3,000	\$3,000	\$9,000
Filemaker Support	\$2,000	\$2,000	\$2,000	\$6,000
Vital Statistics Maintenance fee	\$4,000	\$4,000	\$4,000	\$12,000

You can't know what is behind the bus before the big reveal

- Set expectations high even if unsure how to meet them
- Collaboration comes with compromise
- Expect unexpected issues
 - Internal resistance
 - Difficulty actually communicating the switch
 - Legislation issues with data elements



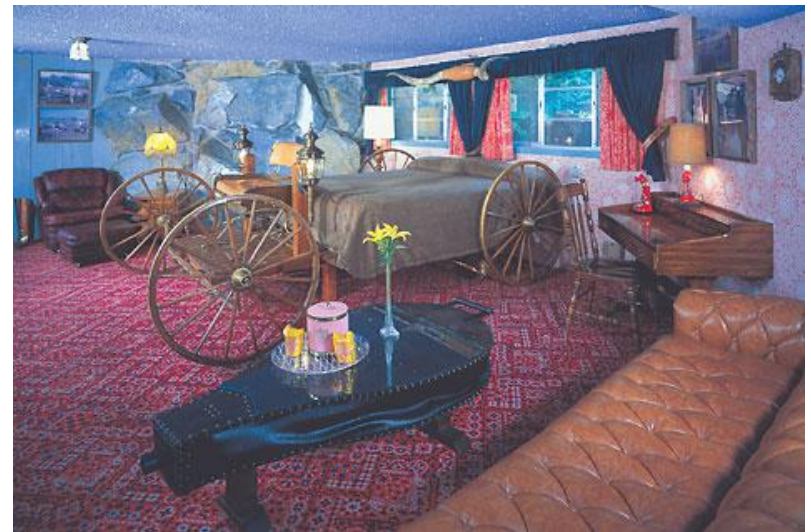
Owning a one room Bungalow can be more beneficial than renting a Mansion

- Self reliance and Sustainability
- Sacrificed data elements but clean
- Increased responsibility but also increased understanding



Avoid having the engineer do the interior decorating

- Used another program's developer
- Recruited specialized data skills "in-house"
- Contracted out projects
- Increased efficiency



Many ideas grow better when transplanted into another mind than the one where they sprang up.
— Oliver Wendell Holmes

Don't paint the house fuchsia

- Ability to blend easily
- Data consistency
- Build slowly with a solid foundation



Future collaborations

- Incorporating PCP/ENT's into system
- Linking Results with Immunizations
- Automating follow up processes and prompting facility FU
- Geographical Mapping and “Zoning”



“If you want to build a ship, don’t drum up people together to collect wood and don’t assign them tasks and work, but rather teach them to long for the endless immensity of the sea”

--Antoine de Saint-Exupery

Thank you

Bridget Roemmich, M.P.A.
EHDI Program Coordinator
Office of Family Health
(971) 673-0251
bridget.r.roemmich@state.or.us



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Questions, Answers, or Suggestions. . . ?

