



THE REAL PAPER REDUCTION ACT

TRANSITIONING TO ELECTRONIC HEALTH INFORMATION EXCHANGE

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OBJECTIVES

- Describe the reporting dilemma
- Describe the benefits of transitioning to Health Information Exchange (HIE)
- Demonstrate the ways that HIE has improve work processes, communication and data
- Determine if HIE is a good fit for your program

FACTS ABOUT OREGON EHDI

- Demographics
 - 45,000+ births a year
 - Newborn Hearing Screening Mandated since 2000
- Reporting requirements
 - 5 days to report birth certificate
 - 10 days to report hearing screening results
- Multiple reporting methods
 - Birth Certificate Registry
 - Hospital's Electronic Health Record (EHR)
 - EHDI-Information System (EHDI-IS) FileMaker
 - Paper reporting form
 - Secure email

**KEEP
PORTLAND
WEIRD!**

**KEEP
PORTLAND
HEARed**

OREGON HEALTH & SCIENCE UNIVERSITY (OHSU)

- Oregon's only academic health center
- Third largest birthing hospital, average 50 births a week
- Level 4 NICU/highest acuity, receive transfers from WA, OR, ID, CA
- AABR for Well-Baby and NICU



REPORTING IN MULTIPLE DATA SYSTEMS

EHR

Multi-Copy Form

Dear Parent,
Congratulations on your new baby! As part of your newborn's care, your baby received a hearing screening using an Automated Auditory Brainstem Response (AABR).
Results indicate:
 Passed. No further testing needed.
Follow up:
 Passed, but follow up recommended in 6 months due to medical or family history.
 Right Ear passed; Left Ear did not pass and needs more testing in 2-4 weeks.
 Left Ear passed; Right Ear did not pass and needs more testing in 2-4 weeks.
 Right and Left Ears did not pass and need more testing in 2-4 weeks.
Please call the CDCRC Audiology Clinic to schedule an appointment once your baby has been discharged from the hospital. 803-418-2116.
Screening performed by: _____ Date: _____
Signature: _____ Date: _____
White Infant Medical Record Canary Parent Copy
12197 (Supersedes 03113) Order Number 135992 DS-2724

EHR Flowsheet

Hearing Screen	
Hearing Screen Left Ear ABR	
Hearing Screen Right Ear ABR	

Birth Certificate Registry

Locate Birth

Birth Locate Case

Child's Information

Child's First Name: Child's Middle Name: Child's Other Middle Name: Child's Last Name:

Date of Birth: Sex: Child's Medical Record Number:

Place of Birth Information

Place of Birth Location Type: Place of Birth:

Mother's Information

Mother's Current Legal Last Name: Mother's Name Before First Marriage:

Mother's Medical Record Number:

Enter Hearing Screening Results

Hearing Screenings

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

No data found.

Hearing Screening

Was Hearing Test Performed:

Test Date:

Test Results: Left Ear: Left Equipment Type: Right Ear: Right Equipment Type:

Screening Facility: Facility NPI:

EHDI-IS (FileMaker)

Locate Birth

EHDI Client Search

The information contained in this database is confidential. If you are not the intended viewer, any retention, dissemination, distribution, or copying of this information is strictly prohibited. If you access a child's record in error, please return to the search page immediately.

Medical Record ID:

Baby Name (First, last or full):

DOB:

Parent/Guardian Name:

Birth Facility:

Client ID:

Enter Hearing Screening Results

Test Date: Screening ID:

Facility:

Status:

Equipment: Left: OAE A-ABR Right: OAE A-ABR

If initial test is A-ABR, use A-ABR for rescreens, not OAE.

Result:

Reason Not Performed: Unable to contact Canceled Rescheduled No Show Moved out of State Refused

Screening Notes:

Rescheduled date:

JUST SOME OF THE REPORTING ISSUES.....

- No sheet of paper = no baby = delayed reporting
- Paperwork with mother's information rather than baby
- Birth certificate-transpose MRN numbers or wrong DOB
- Adoptions/Surrogate = babies not in birth certificate registry-issued different kind of birth certificate
- Birth certificate not entered, cannot enter screening results
- Transfer babies have different names in EHDI-IS (FileMaker) than EHR
- Birth/Transfer hospital not completed birth certificate, couldn't report results



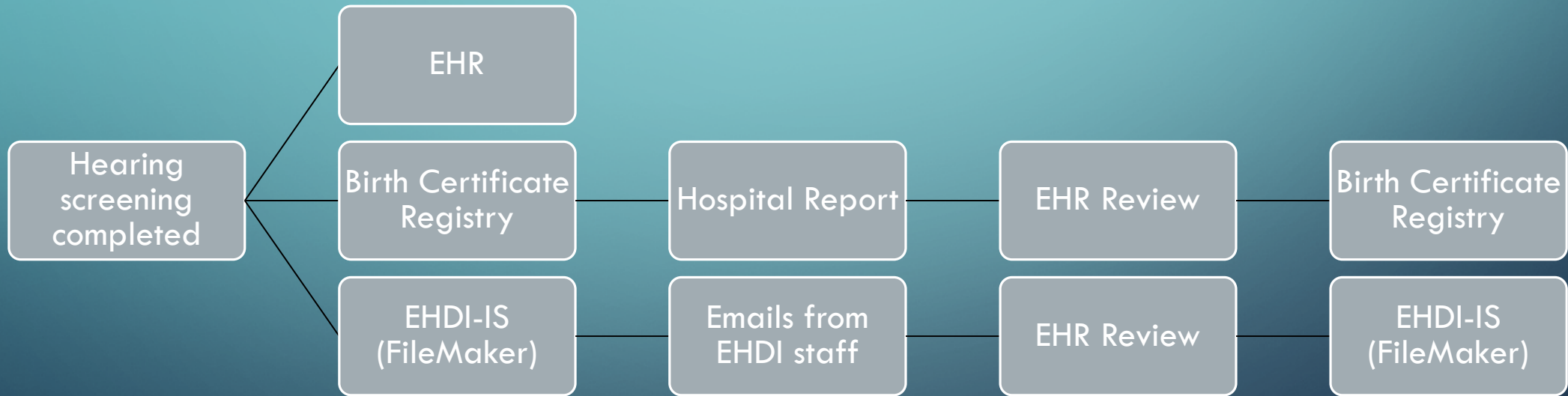
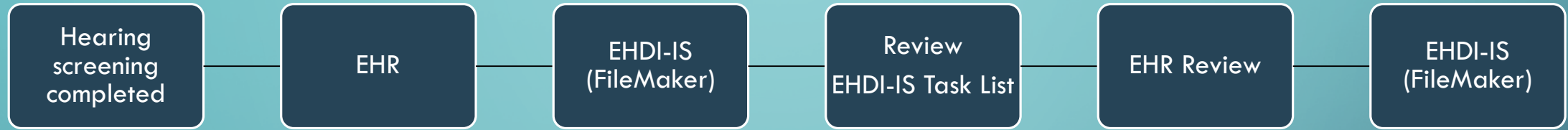
MOMENTS OF SHARING



MEUY HAPPENED



STREAMLINED WORKFLOW FOR OHSU

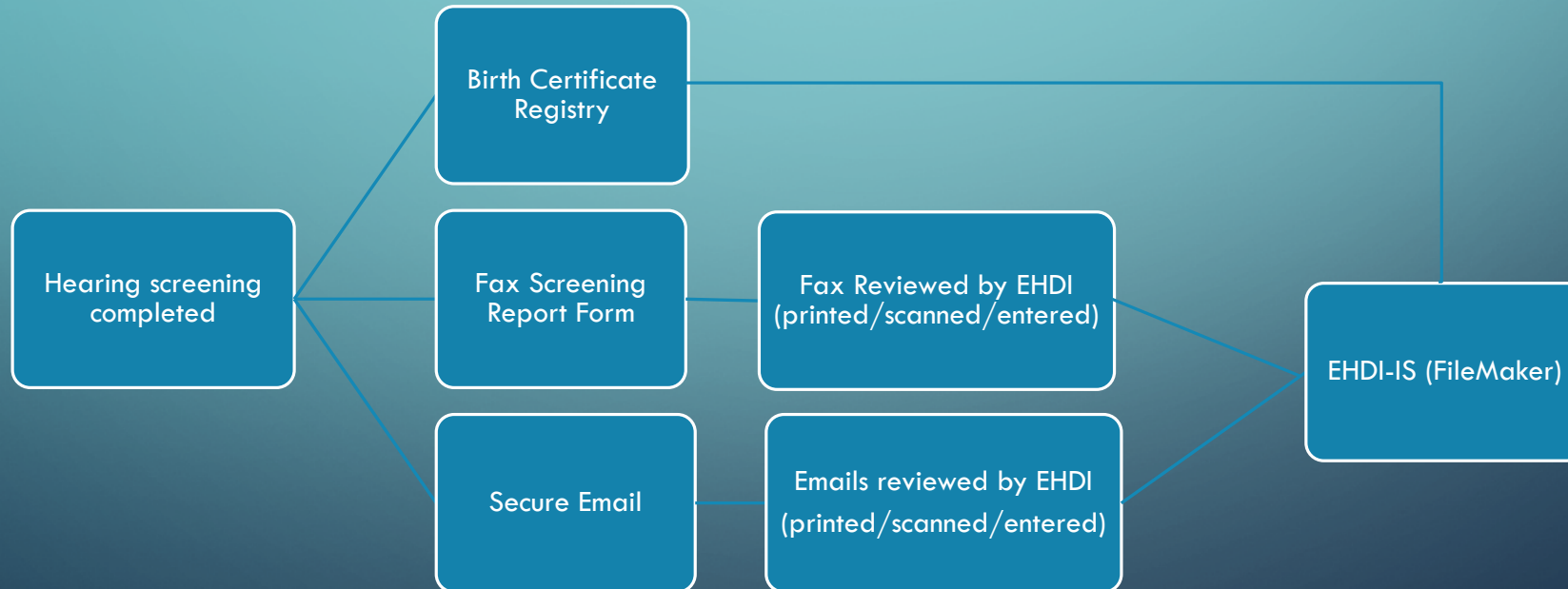




REPORTING ISSUES FOR EHDI

- Different reporting methods = delayed reporting and data errors
- Limitations on access to the birth certificate for birthing hospital
 - Transfers
 - Adoptions/Surrogate-babies
 - Home births
- Duplicate records in EHDI-IS (FileMaker)
 - No birth certificate
 - Names are different

DUAL WORKFLOW FOR EHDI



BENEFITS OF TRANSITIONING TO HIE

- Efficiency
- Optimize timeliness of reporting
- Completeness of data
- Sustainability
- Centralized communication and Quality Assurance reports



BENEFITS OF TRANSITIONING TO HIE

- Use of national standards for electronic reporting
 - Health Level Seven message type (ex. HL7 v2.6 ORU^R01)
 - LOINC and SNOMED-CT (ex. 183924009^Refer^SCT)
- Financial Incentives to the hospital
 - Stage 2 (Eligible Providers and Professionals)
 - Stage 3 (Public Health Meaningful Objectives)
- CMS 90/10 Matching funding opportunities for the state EHDI Program



HIE CAN IMPROVE WORK PROCESSES, COMMUNICATION AND DATA

OHSU/EHR sends HL7
messages



EHDl receives HL7
messages

EHDl-IS serves as a centralized hub to facilitate faster communication to partners, families, and providers.

Actions	Results
Automated tasks <ul style="list-style-type: none">• Confirm final status• Identify babies without screening results	<ul style="list-style-type: none">• Eliminates fax and emails• Eliminates chart review for hospital
Hospital reviews No-match report	Resolves errors such as MRN or name
Obtain and review Hospital Summary report	Provides quick review of hospital stats (births, screened, #refers, # hearing loss)
Improve communication between Audiologists, hospitals, and early intervention, Guide by Your Side, Public Health Nurses	Streamlines communication for all providers in care of child

IS HIE A GOOD FIT FOR YOUR PROGRAM?

- Cost of Interface for EHR software (\$5000)
- IT staff support required at hospital and EHDI Program
- Determine if electronic HIE setup exists that you can mirror (i.e. Immunization, Lab, Communicable disease reporting)
- If trying to meet Public Health Meaningful Use Objectives
 - Financial incentives available to hospital from Centers for Medicaid and Medicare Services (CMS)

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QUESTIONS



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Please check out our posters:

#10 "Collect and Match: The Essentials to a Functional Data Wardrobe"

#25 "Informatics Project: Electronic Health Information Exchange for Diagnostic Audiology"