



PA Case Management System (iCMS) SaaS Implementation

Hearing Screen Provider (HSP) Training

What is iCMS?

- Internet Case Management System (iCMS), a web-based software application
- Used by the Pennsylvania Department of Health's Division of Newborn Screening and Genetics (DNSG) for case management, tracking and managing the follow-up of newborn filter paper and point-of-care (POC) screening results for infants born/residing in PA
- Developed and supported by Neometrics, a division of Natus



Service Vendor

- Neometrics, a division of Natus, incorporated in 1978
- Based in Hauppauge, NY
- Staff has over 100 years of experience in newborn screening and data management
- Market leader in newborn screening software for:
 - Testing, reporting and case management
 - Electronic data transfer (via HL7)
 - Federal reporting





Implementation Coordinator and Trainer

Lisa Hudson, Applications Systems Analyst II and Certified HL7 Control Specialist, has over 20 years of public health systems experience

Responsibilities include:

- Provide assistance and training to existing clients (users and IT staff)
- Provide technical expertise on application, network and database issues
- Create user manuals, documentation and training materials
- Prepare iCMS users for training and go-live
- Train iCMS users

Lisa Hudson

Lisa.Hudson@Natus.com

800-645-3616 x4193



PA DNSG

Kelly Holland, Public Health Program Director - kholland@pa.gov

Stacey Gustin, Public Health Program Manager - sgustin@pa.gov

Jordan Shover, Public Health Program Manager - joshover@pa.gov

Charu Pahwa, IT Project Manager - c-chapahwa@pa.gov

Training Schedule

9:00 am - 11:00 am

- Introduction
- Programmatic Requirements
- Manual Data Entry

Break

11:15 am - 1:00 pm

- Unmatched Hearing Results
- Case Management
- Reports
- User Administration
- HL7 Data Transmission
- Device Upload

Training Materials

The training folder includes the following:

- Trainer Slides
- Login Information Sheet
- Sample Hearing Screening Reporting Form
- Go Live Check List
- WebEx Schedule
- Training Evaluation Form



Implementation Goals

Provide a *single comprehensive* data system that:

- supports the newborn metabolic, hearing and critical congenital heart defects (CCHD) screening follow-up programs
- supports unlimited DOH and external users, with different scopes and levels of access based on their roles
- provides fast and accurate identification of infants and their newborn screening results
- provides a secure interface for exchanging protected health information (PHI) with the contracted laboratories, submitters and treatment centers
- increases timeliness and efficiency of follow-up and reporting



Implementation Plan

- ✓ **Phase I:** Laboratories are able to send newborn filter paper screening data to iCMS, using HL7 messaging. DOH users are able to perform newborn screening follow-up activities and run reports in iCMS. An ad-hoc reporting tool is also provided for DOH to build custom reports, as needed.

Current Phase

- **Phase II:** Hospitals, midwives and birthing centers (Hearing Screen Providers or HSPs) are able to manually enter or electronically submit hearing screening data to iCMS and treatment centers are provided access to iCMS for *specified* diagnostic follow-up activities.
- **Phase III:** Audiologists, Cardiologists and other health care professionals working with the newborns are provided access to iCMS for *specified* in-patient and out-patient diagnostic evaluation follow-up activities.



Phase II Objectives

- Hospitals, midwives and birthing centers (HSPs) are able to manually enter or upload hearing screening data to iCMS.
- Effective January 1, 2018, begin individual level reporting of hearing screening results for ALL infants, not just infants that failed the initial or outpatient screen.
- Bring the Pennsylvania newborn hearing screening program in-line with other newborn hearing screening programs across the country.
- Reduce and eventually eliminate the need for the current paper/fax reporting system.
- Allow quicker follow-up of failed hearing screens, leading to quicker diagnosis and enrollment into early intervention.



HSP Responsibilities

Following the PA iCMS HSP Training Course

- Within 2 weeks of attending this training
 - train the team members
 - complete proficiency exercises
 - coordinate a go-live date with Lisa Hudson
 - participate in weekly HSP Training Support WebEx for a total of 6 weeks

Go-Live

- Begin submitting all screened and non-screen results for infants delivered by your facility and transferred to your facility within 7 days of the screen



Data Entry Learning Objectives

- Be able to enter data into iCMS
- Use iCMS to track and monitor infant in-patient (IP) and out-patient (OP) screen status and follow-up
- Demonstrate the ability to use iCMS from a HSP perspective
- Be prepared to train others on how to use the system
- Be prepared to create user accounts in iCMS for other users
- Feel comfortable using iCMS



iCMS Key Features For HSP Users

- Report all hearing screens directly into iCMS
- There are 3 modes of hearing results data transmission:
 - Manual
 - Device Upload
 - HL7
- Access to test results for hearing screens
- Replace the paper forms and faxing currently used for result reporting
- Effective search capabilities to locate patient history and demographic information



Current Protocol

- HSP logs birth and screens the infant
- For failed screens or a 'No Show' for an OP screen, the HSP completes a form and faxes to DNSG
- HSP maintains IP screen results in the patient medical record
- HSP notifies the PCP of the IP screen results
- HSP submits a monthly hearing screening report to DNSG



New iCMS Reporting Requirements

- All infants in your facility must be entered into iCMS with demographic data and hearing screen outcome within 7 days of screen
- Non-screened infants must be entered within 7 days of transfer or discharge
- All babies born in PA or born outside PA but living in PA must be reported
- Follow-up appointment details must be provided for infants with refer or missed results
- If the infant is screened multiple times, all completed screens must be submitted

Note: The current hearing reporting form will no longer be provided by the state to the HSPs after 1/1/18.

iCMS Concepts

- MATCHED – the goal for HSP users is for their hearing results to be *MATCHED* to the filter paper results in iCMS
- When does a record become a case?
- Sequence of data entry – date and time of hearing screen
- Libraries
- PHI and emails (trusted sender Neometrics.com)

New HSP iCMS Process Flow

Enter IP or OP Screening Result into iCMS

- System looks for filter paper MATCH on Birth Hospital + MRN
- or
- System looks for secondary MATCH on demographics
 - If MATCHED, system adds hearing results to the infant record in iCMS

Unmatched Hearing Results

- Confirm all required data fields entered and record is in SUBMITTED status
- Monitor until MATCHED

Monthly Reporting

- Reconcile iCMS with your birth count to confirm all infants are in iCMS
- Continue to submit Monthly Birth Summary Report

Case Management

- Monitor infant through the follow-up process in iCMS



Let's Get Started...

Login



Pennsylvania Department of Health
Bureau of Family Health | Division of Newborn Screening and Genetics
625 Forster St. | Seventh Floor East, Health and Welfare Building | Harrisburg, PA 17120
Phone: 717-783-8143 or 877-724-3258 Fax: 717-724-6995
Web: www.health.pa.gov



iCMS Browser Requirements

Please enable Compatibility Mode for this site. (IE Users)
Ensure iCMS is set as a Trusted Site. (IE Users)
Download and Open the Quick Patch to update your browser.
Make sure your browser's Pop-up Blocker is turned off.
It's recommended to turn off header/footer for letter printing.

User Name

Password

[Forgot your password?](#)

Supported Web Browsers: IE v10 and higher

User Tip: TURN OFF the pop up blocker on first login

**If you forget or misplace your password:
Click "Forgot your Password?"
You have 5 attempts before you are locked out.**

Add 'nbs.pa.gov' to the list of trusted sites on your workstation onsite.

URL For Training:

<https://www.nbs.train.pa.gov/toolbar/login.aspx>

URL For Production:

<https://www.nbs.pa.gov/toolbar/login.aspx>

In IE you must run in compatibility mode:
Tools -> Compatibility View Setting
Add this website → Click Add

Password Criteria

- Passwords must have 8 characters including an uppercase, lowercase, numeric and a symbol
- Password can not be one that was previously used within last 180 days
- Users can only change their password 1 time every 15 days
- HSP Administrators can reset a user's password at any time
- Temporary password is good for 14 days
- Password reset required every 60 days

User Terms and Conditions

Attention



**Pennsylvania Internet Case Management System
User Terms and Conditions**

By using the Pennsylvania Internet Case Management System (PA iCMS), you attest to the following:

AUTHORIZED ACCESS

- 1) I attest that the information I provided during registration is my own and is true and accurate to the best of my knowledge.
- 2) I attest that I am legally authorized to access the PA iCMS.
- 3) I understand that PA iCMS usernames and passwords are assigned to individuals and not to facilities. All authorized users must have their own accounts using their own credentials. Usernames and passwords cannot be shared. Any violations of username and password security may result in revocation of direct access.
- 4) I understand that I am only permitted to use the PA iCMS for the reasons explicitly stated in the Infant Hearing Education Assessment, Reporting and Referral (IHEARR) Act, 11 P.S. §§ 871-1 et seq.; the Newborn Child Testing Act, 35 P.S. §§ 621 et seq.; 28 Pa. Code Chapter 28; and, the Newborn Child Pulse Oximetry Screening Act, 11 P.S. §§ 878.1 et seq.
- 5) I agree to report any suspected breach or unauthorized access of the system to the Pennsylvania Newborn Screening Program immediately.

CONFIDENTIALITY

- 6) I understand that the data from the PA iCMS is protected patient health information and any information accessed must be treated as confidential as required by the authority cited in paragraph 4 above.
- 7) I understand that any person who unintentionally or intentionally makes an unauthorized disclosure of information from the PA iCMS may be subject to civil and criminal penalties.
- 8) I agree to abide by all rules and regulations set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and any subsequent amendments.

GENERAL TERMS AND CONDITIONS

- 9) I accept the above conditions and certify that I am a healthcare professional authorized to access the PA iCMS.

Agree Do Not Agree

- Users must agree to these terms and conditions to access iCMS

Landing Page



Top Toolbar:

- **Home (Landing Page)** – Daily tasks and system options
- **Release Notes** – Training Materials
- **Contact Us** – Newborn Screening home page
- **Logout** – Exit out of iCMS



Case Management

Only available to HSP Administrators



User Administration



Hearing Results Manual Entry



Unmatched Hearing Results



Hearing Device File Upload

Hearing Results Manual Entry

Home

Release Notes

Contact Us

Logout



Case Management



User Administration



Hearing Results Manual Entry



Unmatched Hearing Results



Hearing Device File Upload

- Link to enter new IP, OP or non-screened hearing results manually
- Non-screened results include Missed, No Show, Parent Refusal, Transferred, Expired or NMI (Not Medically Indicated)

Hearing Results Manual Entry

Demographics

Add Hearing Results Manual Entry

* Indicates Mandatory Fields for Submit

** Indicates Mandatory Fields for Save or Submit

Patient Information

** Medical Record #

Initial FP #

** Infant Last Name

Infant First Name

AKA Last Name

AKA First Name

* Date of Birth

* Gender

* Birth Order

* NICU

Out of State Baby

Mother's Information

** Mother Last Name

** Mother First Name

Mother Phone () -

Birth Hospital Information

* Birth Hospital

- * Mandatory data for Submit
- ** Mandatory data for Save or Submit



Option drop-down



Calendar drop-down



Library lookup

- Enter data and tab between fields

Hearing Results Manual Entry

Demographics

Add Hearing Results Manual Entry

* Indicates Mandatory Fields for Submit
 ** Indicates Mandatory Fields for Save or Submit

Patient Information

** Medical Record #

Initial FP #

** Infant Last Name

Infant First Name

AKA Last Name

AKA First Name

* Date of Birth ▼

* Gender ▼

* Birth Order ▼

* NICU ▼

Out of State Baby

Mother's Information

** Mother Last Name

** Mother First Name

Mother Phone

Birth Hospital Information

* Birth Hospital x ...

Einstein Medical Center Montgomery
 559 West Germantown Pike
 East Norriton, 19403

- Enter, at minimum, mandatory data for Save
- Birth hospital indicates where the infant was born
- Search and select the birth hospital from the iCMS Provider library by clicking the ellipsis ...
- For babies born outside PA, enter Birth Hospital as **H98769** and select **Yes** in the “Out of State Baby” box
- For home births, enter Birth Hospital as **M1227**

Hearing Results Manual Entry

Hearing Screen Results

IP/OP Screening Results

* Screen Type

** Screen Provider

 Screener

* Date of Screening

* Time of Screening

Date Screening Results Received

* Result Left Ear

* Screening Method Left

IP Malformation Left Ear

Family Notified Date

* Result Right Ear

* Screening Method Right

IP Malformation Right Ear

PCP Notified Date

Screen Type:	Screen Result:	Screening Method:	IP Malformation:
Inpatient	Missed	ABR	None
Outpatient	Pass	OAE	Atresia
	Refer	N/A	Microtia
	No Show		Both
	Parent Refusal		
	Transferred		
	NMI		
	Expired		

Hearing Results Manual Entry

Hearing Screen Results

Date and Time of Screening - Business Rules

IP/OP Screening Results

* Screen Type

** Screen Provider

Screener

* Date of Screening ←

* Time of Screening ←

Date Screening Results Received

* Result Left Ear

* Screening Method Left

IP Malformation Left Ear

Family Notified Date

* Result Right Ear

* Screening Method Right

IP Malformation Right Ear

PCP Notified Date

Date of Screening

- **Missed** – Enter the date when the baby was discharged without a hearing screen
- **No show** – Enter the date of the appt. when the family was a no show
- **Parent Refusal** – Enter the date of the parent refusal
- **Transferred** – Enter the date when the baby was transferred
- **NMI** – Enter the date when it was determined that hearing screen could not be performed
- **Expired** – Enter the date when the baby expired

Time of Screening

- For the above non-screen results, enter the Time of Screening as **00:00**.

Hearing Results Manual Entry

Hearing Screen Results

Pass Result

IP/OP Screening Results

* Screen Type

** Screen Provider

 Screener

* Date of Screening

* Time of Screening

Date Screening Results Received

* Result Left Ear

* Screening Method Left

IP Malformation Left Ear

Family Notified Date

* Result Right Ear

* Screening Method Right

IP Malformation Right Ear

PCP Notified Date

Refer Result with a Malformation

* Result Left Ear

* Screening Method Left

IP Malformation Left Ear

* Result Right Ear

* Screening Method Right

IP Malformation Right Ear

Non-Screened Result

* Result Left Ear

* Screening Method Left

* Result Right Ear

* Screening Method Right

Hearing Results Manual Entry

Appointments

Appointment Information

Referred To ▼

Referred Provider ...
 The Children's Hospital of Philadelphia,
 34th & Civic Ctr Blvd
 Philadelphia, 19104

Follow-Up Appt Date ▼

Referred To Name

Follow-Up Appt Time

Referred To Phone #

- **OP Hearing Screen** - needed if IP final results are Refer or Missed
- **Diagnostic Evaluation** - needed if OP final results are Refer
- To submit appointment details, select the appointment type in the “Referred To” drop-down and enter the details



Hearing Results Manual Entry Appointments

Referred Provider × ... ← To Search a Provider, type in a partial name then click the ellipsis

Select Referred Provider

Drag a column header here to group by that column

#	ID#	Type	Description	Last Name	First Name	Address	Address 2	City	Zip Code	Phone	Fax
			the ch								
Select	aud4162	Audiologist	The Children's Hospital of Philadelphia, Specialty Care Center-Brandywine Valley	The Children's Hospital of Philadelphia, Specialty Care Center-Brandywine Valley		819 Baltimore Pike	NULL	Glen Mills	19342	(800) 551-5480	
Select	aud4161	Audiologist	The Children's Hospital of Philadelphia, Specialty Care Center-Bucks County	The Children's Hospital of Philadelphia, Specialty Care Center-Bucks County		500 West Butler Avenue	NULL	Chalfont	18914	(800) 551-5480	
Select	aud4160	Audiologist	The Children's Hospital of Philadelphia, Specialty Care Center-Exton	The Children's Hospital of Philadelphia, Specialty Care Center-Exton		481 John Young Way	NULL	Exton	19341	(800) 551-5480	
Select	aud4159	Audiologist	The Children's Hospital of Philadelphia, Specialty Care Center-King of Prussia	The Children's Hospital of Philadelphia, Specialty Care Center-King of Prussia		950 Pulaski Drive	NULL	King of Prussia	19406	(800) 551-5480	

[Description] Is like 'the ch%' Clear

Appointment Information

Referred To

Referred Provider × ...
**The Children's Hospital of Philadelphia,
 Specialty Care Center-Brandywine Valley
 819 Baltimore Pike
 Glen Mills, 19342**

Follow-Up Appt Date

Referred To Name

Follow-Up Appt Time

Referred To Phone #



Hearing Results Manual Entry

Risk Factors

Hearing Risk Factors Entry	
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Caregiver concern regarding hearing, speech, language, or developmental delay.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Family history of permanent childhood hearing loss.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Neonatal intensive care of more than 5 days or any of the following regardless of length of stay: ECMO, assisted ventilation, exposure to ototoxic medications (Gentamicin and tobramycin) or loop diuretics (furosemide/Lasix), and hyperbilirubinemia that requires exchange transfusion.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	In utero infections, such as CMV, herpes, rubella, syphilis, and toxoplasmosis.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Craniofacial anomalies, including those that involve the pinna, ear canal, ear tags, ear pits, and temporal bone anomalies.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Physical findings, such as white forelock, that are associated with a syndrome known to include a sensorineural or permanent conductive hearing loss.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Syndromes associated with hearing loss or progressive or late-onset hearing loss, such as neurofibromatosis, osteopetrosis, and Usher syndrome; other frequently identified syndromes include Waardenburg, Alport, Pendred, and Jervell and Lange-Nielson.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Neurodegenerative disorders, such as Hunter syndrome, or sensory motor neuropathies, such as Friedreich ataxia and Charcot-Marie-Tooth syndrome.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Culture-positive postnatal infections associated with sensorineural hearing loss, including confirmed bacterial and viral (especially herpes viruses and varicella) meningitis.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Head trauma, especially basal skull/temporal bone fracture requiring hospitalization.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Chemotherapy.

If Risk Factors are collected, indicate Risk Factors.
Yes - Risk exists
No - Risk does not exist
Not Entered - Risk is not indicated

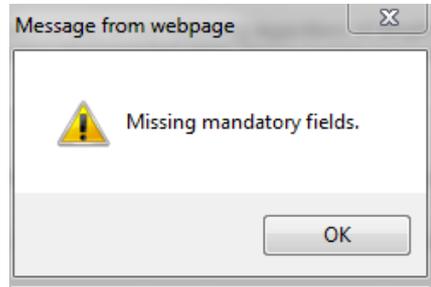
Hearing Results Manual Entry Prompts

Save	Submit	Cancel	Delete	Submit and Additional
------	--------	--------	--------	-----------------------

[Return to Previous Page](#)

- **Save** – Save incomplete data for re-editing without submitting for match
- **Submit** – Save and submit data for match with filter paper results
Note: A record must be in “Submitted” status to be matched
- **Cancel** – Cancel data entered
- **Delete** – Delete hearing result record (non-matched results only)
- **Submit and Additional** – Submit current record and then duplicate demographics to allow quick entry of another hearing result for the same infant
- **Return To Previous Page** – Discard and return to previous screen

Hearing Results Manual Entry Prompts



- If a user selects “Submit” and not all mandatory data is entered, a prompt will display
- Click “OK” to return to the Hearing Results Manual Entry screen

Home Contact Us Search Utilities Logoff

Add Hearing Results Manual Entry

- * Indicates Mandatory Fields for Submit
- ** Indicates Mandatory Fields for Save or Submit

Date of Screening : This field is required
 Time of Screening : This field is required
 Screening Method Left : This field is required
 Screening Method Right : This field is required

Patient Information

** Medical Record #

Initial FP #

- Scroll to the top of the screen to view details regarding the missing or incorrect data

Hearing Results Manual Entry Prompts

Submit Hearing Results

Patient Information

* Medical Record # 1111111
Initial FP # 7777777

* Infant Last Name BABYLAST
Infant First Name
AKA Last Name
AKA First Name

* Date of Birth 7/15/2017
Gender Female
Birth Order Not Multiple Birth
NICU No
Out of State Baby

Mother's Information

* Mother Last Name BABYLAST
* Mother First Name MOM
Mom Phone

Birth Hospital Information

* Birth Hospital Einstein Medical Center
Montgomery
559 West Germantown Pike,
2nd Floor Nursery
East Norriton, PA 19403

IP/OP Screening Results

* Screen Type Inpatient
* Screen Provider Albert Einstein Medical Center
- (Philadelphia, PA)
Screener LH

* Date of Screening 7/15/2017
Time of Screening 10:14
Date Screening Results Received

* Result Left Ear Pass
* Result Right Ear Refer

* Screening Method Left ABR
IP Malformation Left Ear
Family Notified Date

* Screening Method Right ABR
IP Malformation Right Ear
PCP Notified Date

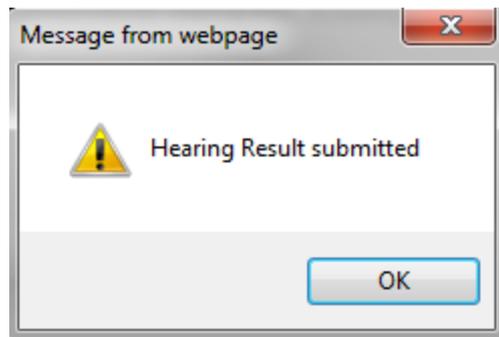
Appointment Information

Referred To Diagnostic Evaluation
Referred Provider aud4162
Follow-Up Appt Date 8/15/2017
Referred To Name Dr. Smith
Follow-Up Appt Time 15:00
Referred To Phone # (215) 555-5555

Submit **Return to Entry**

- Clicking “Submit” or “Submit and Additional” will display this confirmation screen
- Click “Submit” or “Return to Entry”
- In case the results need to be corrected to “Pass”, clear the appointment details first, and then change the results

Hearing Results Manual Entry Prompts



- Clicking “Save” and then “Submit” will display a confirmation message
- Clicking “Submit and Additional” will display a new form with the same demographics to allow you to enter a rescreen result

Non-Screened Results

- Non-Screened Results with Method (N/A)
 - Missed
 - Expired
 - Transferred
 - Parent Refusal
 - NMI (Not Medically Indicated)
 - No Show
 - Generally will not come via Device Upload
 - If not entered in your EMR, will not come via HL7
 - Expired, Transferred, Missed and No Show results will auto-fill for both ears
- Every infant in iCMS must indicate a screened or non-screened result

Hearing Results Manual Entry Exercises

- Enter IP Pass/Pass
- Enter IP Refer/Pass
- Enter IP Parent Refusal
- Enter IP Missed
- Enter IP Transferred
- Enter IP Refer/Refer Atresia w/OP Appointment
- Enter OP Refer/Refer w/ Diagnostic Appointment
- Enter OP No Show



Unmatched Hearing Results

Home

Release Notes

Contact Us

Logout



Case Management



User Administration



Hearing Results Manual Entry



Unmatched Hearing Results



Hearing Device File Upload

- Link to records with incomplete data or unmatched status
- Filter paper results are received from the lab within 6-7 days of FP submission
- Hearing results must be submitted within 7 days of the screen

Grid Sorting and Filters

Unmatched Hearing Results

Export to Excel Items Overview

Drag a column header here to group by that column

Select	Med Rec #	Infant Last Name	Infant First Name	AKA Name	DOB	Gender	Birth Order	Birth Hospital	Screening Provider	Mother Last Name	Mother First Name	NIQI	Screener	Initial FP #	Screen Date	Screen Time	Result Left	Result Right	CHN	Status
Select	45454545	kimoddo		aka last, aka first	6/15/2017	Female	Seventh Multiple	Mercy Hospital of Pittsburgh	Mercy Hospital of Pittsburgh	kimoddo	Mommy	Yes					Missed	Missed		Saved

Click the arrow on the column to see the available values to filter

Sort the column in ascending order by clicking on the column. Click the column twice to sort in descending order.

Click the Key to select other filter options

Filter on a specific value entered into the column

- The filter and sorting options described for this grid can be used throughout iCMS
- The “Export to Excel” will take all data displayed on the grid and create an excel file. This option also appears on all iCMS grids. When selected, a popup message will display at the bottom of the screen:

Do you want to open or save **Export_8_5_2017_2_49_PM.xls** from 10.24.3.131?

Open

Save

Cancel



Unmatched Hearing Results

Unmatched Hearing Results

Export to Excel Items Overdue

Drag a column header here to group by that column

Select	Med Rec #	Infant Last Name	Infant First Name	AKA Name	DOB	Gender	Birth Order	Birth Hospital	Screening Provider	Mother Last Name	Mother First Name	NICU	Screeener	Initial FP #	Screen Date	Screen Time	Result Left	Result Right	CHN	Status
Select	4534220	Reaves	BB		6/16/2015	Male	Not Multiple Birth	Albert Einstein Medical Center	Albert Einstein Medical Center	Reaves	Lori	No	321		6/17/2015	12:33	Pass	Pass	Kim Billow	Submitted

- Displays results that:
 - have incomplete data to be edited
 - have complete data but have not been matched to a filter paper
- Highlights results that are unmatched for over 10 days
- To view and edit a record, click “Select” next to it

Unmatched Hearing Results

Edit Hearing Results Manual Entry

* Indicates Mandatory Fields for Submit

** Indicates Mandatory Fields for Save or Submit

Patient Information

** Medical Record #

Initial FP #

** Infant Last Name

Infant First Name

AKA Last Name

AKA First Name

* Date of Birth

* Gender

* Birth Order

* NICU

Out of State Baby

Mother's Information

** Mother Last Name

** Mother First Name

Mother Phone () -

- The record opens in edit mode
- Make any changes needed
- Scroll to the bottom and select a response
 - **Save**
 - **Submit ****
 - **Cancel**
 - **Delete**
 - **Submit and Additional**

** Remember a record must be flagged as Submit to be Matched

Matching the Hearing Results to the Filter Paper

- Primary Match (Processed Overnight)
 - The system will automatically match a hearing result to a filter paper based on Birth Hospital + MRN
- Secondary Match (Reviewed by CHN)
 - The CHN will review unmatched hearing results and compare demographics to find possible matches
 - Last Name, AKA Name, DOB, Gender, Birth Hospital, Birth Order, Mom Last and Mom First
- Manual Match (Reviewed by CHN)
 - A CHN can manually match a hearing result to any filter paper

Case Management

Home

Release Notes

Contact Us

Logout



Case Management



User Administration



Hearing Results Manual Entry



Unmatched Hearing Results



Hearing Device File Upload

- Allows users to search for specific cases based on selected criteria

Case Management

Newborn ID	<input type="text"/>	Mother's First Name	<input type="text"/>
Filter Paper #	<input type="text"/>	Mother's Last Name	<input type="text"/>
Medical Record #	<input type="text"/>	Mother's DOB	<input type="text" value="▼"/>
Infant Last Name	<input type="text"/>	Mother's Phone #	<input type="text"/>
From Date of Birth	<input type="text" value="▼"/>	Birth Facility	<input type="text" value="..."/>
To Date of Birth	<input type="text" value="▼"/>	Submitter's Name	<input type="text" value="..."/>
Gender	<input type="text" value="▼"/>	Case Status	<input type="text" value="▼"/>

<input type="button" value="Search"/>	<input type="button" value="Reset"/>
---------------------------------------	--------------------------------------

- To find a record, enter a value in one or more of the fields and click “Search”
 - A combination of fields can be used, e.g. Infant Last Name and DOB
 - Wildcard cards can also be used, e.g. Infant Last Name as “SM*”
- Click “Reset” to clear the search
- If the search returns more than 10,000 records, a warning message will be displayed

Case Management

Newborn ID	<input type="text"/>	Mother's First Name	<input type="text"/>
Filter Paper #	<input type="text"/>	Mother's Last Name	<input type="text"/>
Medical Record #	<input type="text" value="866700"/>	Mother's DOB	<input type="text"/>
Infant Last Name	<input type="text"/>	Mother's Phone #	<input type="text"/>
From Date of Birth	<input type="text"/>	Birth Facility	<input type="text"/>
To Date of Birth	<input type="text"/>	Submitter's Name	<input type="text"/>
Gender	<input type="text"/>	Case Status	<input type="text"/>

Filter Paper(s)

Drag a column header here to group by that column

Select	Newborn ID	Filter Paper #	Med Rec #	Infant Last Name	DOB	Gender	Mother First Name	Mother Last Name	Mom DOB	Phone	Birth Facility
<input type="button" value="Select"/>	xxx123	abc123	866700	Test	3/1/2017	Male	PAULA	Test			Unknown Birth Facility

Case(s)

Drag a column header here to group by that column

Select	Newborn ID	Filter Paper #	Med Rec #	Infant Last Name	DOB	Gender	Mother First Name	Mother Last Name	Mom DOB	Phone	Birth Facility
<input type="text"/>											

- Click "Select" to view a record from the search results



Case Management

Home	Contact Us	Search	Utilities	Logoff	Screen 1 of 1 < Prev 1 Next >
Case Information					
<ul style="list-style-type: none"> Demographics (C) Appointments Dried Blood Spot Lab Demographics Point of Care - Hearing IP/OP Screening Results Hearing Risk Factors Hearing Diagnostic Evaluation 					
Newborn ID: PA110027690 Case Status: Open Birth Order:		Infant Name: BARY, Mother's Name: BARY, MLNAME Mother DOB: 07/20/2000 Submitter Name:		Gender: Female Date of Birth: 07/20/2017 @ 00:00 Birth Weight: 500 grams Results Released:	
Filter Paper #: PA110027690 TPN:		Birth Facility: CHP - PKU Treatment Center MRN #: 1234		PCP: Praful Bhatt, MD Practice PCP Phone: (570) 748-4565	
Transfused Date: 07/20/2017 Gestation Age:		Collection Date:		Hearing Date: 06/08/2015 Reason:	
Pulse Ox Date:		Pulse Ox Result:		<input type="button" value="Cancel"/> <input type="button" value="Retry"/>	

The header of a case has several components:

- The center, blue banner identifies the infant
- The left-side navigation menu includes links for other case details
- The right top corner allows for system navigation
 - **Cancel** - Return to the previous screen
 - **Retry** - Return to the grid from where you selected the case
 - **Prev** and **Next** - Allow you to view additional filter papers for the case



Case Management

Follow-up Options Menu

Case Information	▲
○ Demographics (C)	
○ Appointments	
Dried Blood Spot	▲
○ Lab Demographics	
Point of Care - Hearing	▲
○ IP/OP Screening Results	
○ Hearing Risk Factors	
○ Hearing Diagnostic Evaluation	

- **Demographics** – current demographic data for the case
- **Appointments** – OP, Diagnostic or Other scheduled appointments
- **Lab Demographics** – demographics from the filter paper
- **IP/OP Screening Results** – hearing results
- **Hearing Risk Factors** – risk factors for the case
- **Hearing Diagnostic Evaluation** – diagnosis evaluation results

Note: The Filter Paper and CCHD results are not accessible to the HSP.

Case Demographics

Patient Information

* Newborn ID PA9990
 DBS CHN
 POC-Hearing CHN
 POC-CHD CHN
 Infant Last Name BABY
 Infant First Name BOY
 Gender Male
 Race White
 Black
 Asian
 Native Indian/Alaskan
 Other
 Hawaii/Pacific Island
 Not Indicated
 Hispanic Origin
 Multiple Races
 Newborn Hispanic
 Birth Order
 * Date of Birth 1/17/2017
 Birth Time 1233
 Birth Weight 3200
 Medical Record Number 2090
 Medical Assistance
 Transfused
 Transfused Date
 Antibiotics
 AKA Last Name
 AKA First Name
 TPN
 Carnitine Supplement
 NICU
 Guardian's First Name
 Guardian's Last Name

Mother's Information

Mother Last Name MARY
 Mother First Name JABNE
 Mother Initial
 Street Address
 Zip Code
 City
 State PA
 Mother's County
 Home Phone
 Cell Phone
 Work Phone
 Mother DOB
 Email Address
 Work Extension

Emergency Contact

Emergency Contact UNCLE JOE
 Emergency Contact # 939-699-9999
 Emergency Contact Info
 This is a new entry for Emergency contact info.

Birth Hospital Information

Birth Hospital ID
 Edit Save Cancel

- Displays the most recent demographic information in view-only mode
- If you have more recent demographic information, please email it to the CHN assigned to this case

Appointments

Appointments									
	Appointment Type ▾	Appointment Date ▾	Appointment Time ▾	Provider ▾	Comment ▾	Entered By ▾	Date Created ▾	Modified By ▾	Date Updated ▾
Select	OP Hearing Screening	08/15/2017	15:00	Albert Einstein Medical Center		Lisa State Admin	08/08/2017 15:51:01	Lisa State Admin	08/08/2017 15:51:01

[Add New Appointment](#)

- Lists existing hearing appointments for the case: OP Hearing Screening, Diagnostic Evaluation, and other
- Click “Select” to view the details

Appointments

Update Appointment

Entered By **Lisa State Admin**
 Date Created **Aug 8 2017 3:51PM**

Sequence

* Appointment Type ▼

* Appointment Date ▼

Appointment Time

Provider ID ⋮

Albert Einstein Medical Center
 5501 Old York Road
 Philadelphia PA 19141

Provider Name

Provider Phone

Comments

Edit
Save
Cancel

- View only screen
- For changes, email the CHN assigned to the case

[Return to Appointments Grid](#)



Lab Demographics

Lab Demographics Screen

Child's Information Submitter / Physician

<p>Newborn ID PA1500 Filter Paper # PA1500 Name BAR Collection Date / Time 01/02/2016 @ 0950 Med Rec Number 92208 Birth Date / Time 01/01/2016 @ 0924 Sex Male Race White Hispanic No Birth Order Birth Weight 2296 grams Current Weight Transfused No Trans Date/Time Specimen Age 63 Specimen Type Initial Specimen Age of Collection 24 Date Spec Received 01/05/2016 NICU No Hyperal Carnitine Meconium Ileus Antibiotics Weeks Gestation 37</p>	<p>Submitter Harrisburg Hospital Address 111 S Front Street Harrisburg PA 17101 Phone (717) 782-3131 Fax (717) 782-5980 Physician Name ANN BOGDAN Address City State Zip Code Phone (717) 691-1212 Birth Hospital Harrisburg Hospital Address 111 S Front Street Harrisburg PA 17101 Phone (717) 782-3131</p>
---	---

- View only
- Populated from the filter paper

Mother's / Guardian's Information Mother's Medical History

<p>Mother's Name Mother's DOB 08/30/1998 Mailing Address City CARLISLE State PA County CUMBERLAND Zip Code 17013 Email Address Phone (717) Medical Assistance Emergency Contact KARA Emergency Phone (717) Emergency Contact Info Guardian's First Name Guardian's Last Name</p>	<p>Thyroid Disease Diabetes On Sterioids Maternal Hepatitis NEG Other</p>
--	---

IP/OP Screening Results

IP Screening Results						
	Screening Type	Screening Order	Result	Screening Provider	Screen Date	Error
Select	Inpatient Hearing	First	L - ABR: Refer, R - ABR: Refer	Albert Einstein Medical Center	07/22/2017	No

OP Screening Results						
	Screening Type	Screening Order	Result	Screening Provider	Screen Date	Error
No data to display						

[Add Screening Result](#)

- Lists existing IP and OP hearing results for the case
- Click “Select” to view the details



IP/OP Screening Results

Update IP/OP Infant Screen Information

Medical Record No.	14849637
FP #	14849637
Infant Last Name	TRSTWBSJEC
Infant First Name	LRMOYDMTIP
AKA Last Name	SNOW
AKA First Name	JON
Date of Birth	07/21/2017
Gender	Female
Birth Order	Fourth Multiple
NICU	Yes
Birth Hospital	Albert Einstein Medical Center
Mother Last Name	YUGMTKVMPJ
Mother First Name	ILVEHOKICO
Mother Phone #	
Out of State Baby	Yes

Screen No.	1
Screen Type	Inpatient
* Screening Provider	H251 Albert Einstein Medical Center 5501 Old York Road, Department of Pediatrics Philadelphia PA 19141
Screeener	LH
* Date of Screening	7/22/2017
Time of Screening	1354
Date Screening Results Received	7/22/2017

* Result Left Ear	Refer	* Result Right Ear	Refer
* Screening Method Left	ABR	* Screening Method Right	ABR
Malformation Left Ear	None	Malformation Right Ear	None
Family Notified Date	7/22/2017	PCP Notified Date	7/22/2017
Data Entry Error	<input type="checkbox"/>		

Edit	Save	Cancel
------	------	--------

- View only
- If the result was entered in error contact the CHN
- For corrections, enter a new result on the Manual Entry Screen and email the CHN to discard the previous entry

Hearing Risk Factors

Risk Factors	
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Caregiver concern regarding hearing, speech, language, or developmental delay.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Family history of permanent childhood hearing loss.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Neonatal intensive care of more than 5 days or any of the following regardless of length of stay: ECMO, assisted ventilation, exposure to ototoxic medications (Gentamicin and tobramycin) or loop diuretics (furosemide/Lasix), and hyperbilirubinemia that requires exchange transfusion.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	In utero infections, such as CMV, herpes, rubella, syphilis, and toxoplasmosis.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Craniofacial anomalies, including those that involve the pinna, ear canal, ear tags, ear pits, and temporal bone anomalies.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Physical findings, such as white forelock, that are associated with a syndrome known to include a sensorineural or permanent conductive hearing loss.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Syndromes associated with hearing loss or progressive or late-onset hearing loss, such as neurofibromatosis, osteopetrosis, and Usher syndrome; other frequently identified syndromes include Waardenburg, Alport, Pendred, and Jervell and Lange-Nielson.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Neurodegenerative disorders, such as Hunter syndrome, or sensory motor neuropathies, such as Friedreich ataxia and Charcot-Marie-Tooth syndrome.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Culture-positive postnatal infections associated with sensorineural hearing loss, including confirmed bacterial and viral (especially herpes viruses and varicella) meningitis.
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Head trauma, especially basal skull/temporal bone fracture requiring hospitalization
<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Entered	Chemotherapy

Edit	Save	Cancel
------	------	--------

- View only
- One set per case

Hearing Diagnostic Evaluation

Hearing Diagnostic Evaluation								
	Evaluation Status	Diagnosis Date	Referred Date	Diagnostic Provider	Hearing Results - R	Hearing Results - L	Created Date	Created By
	Completed	07/15/2017	07/18/2017	Children's Hospital of Philadelphia Audiology	Normal Hearing	Sensorineural Loss	08/08/2017	Lisa State Admin

- Lists existing hearing diagnostic evaluations for the case
- Evaluation Status indicates the following:
 - **In Progress** - not complete
 - **Completed** - marked as final
- Click “Select” to view the details

Hearing Diagnostic Evaluation

Edit Hearing Diagnostic Evaluation

* Date of Diagnostic Evaluation
7/15/2017

* Results Right Ear
Normal Hearing

* Results Left Ear
Sensorineural Loss

* Degree of Loss Right Ear
Normal (0 - 15 dB)

* Degree of Loss Left Ear
Mild (26 - 40 dB)

Diagnosis Method

Click ABR Tone Burst ABR Bone Conduction ABR

TEOAE DPOAE Tympanometry

High Frequency Tymp BOA VRA

ASSR CPA Other

Recommendations

Medical Follow up ENT Consult/Clearance Amplification

Genetic Counseling EI

Other(Specify)

Audiological Re-Evaluation and/or Monitoring (when/how often)

EI Office Referred to

Date Referred
7/18/2017

Comments

Created Date
08/08/2017

Created By
Lisa State Admin

Final Diagnosis

Edit Save Cancel

- View only
- Multiple hearing diagnostic evaluations can be submitted
- “Final Diagnosis” box indicates a completed evaluation

Case Menu – Exercise

- Go to Case Management
- Search for NB ID# PA160146019
 - Use the Case Menu to review the data for this case
- Search for an infant born 9/1/2017
- Search for an infant born between 9/1/2017 and 10/1/2017 with last name starting with T*



Case Information	▲
◦ Demographics (C)	
◦ Appointments	
Dried Blood Spot	▲
◦ Lab Demographics	
Point of Care - Hearing	▲
◦ IP/OP Screening Results	
◦ Hearing Risk Factors	
◦ Hearing Diagnostic Evaluation	

Reports

Home	Help	Contact Us	Search	Utilities	Logoff
<div style="border: 1px solid black; padding: 2px; display: inline-block;"> Birth Log Birth Summary </div>					
Newborn ID	<input type="text"/>	Mother's First Name	<input type="text"/>		
Filter Paper #	<input type="text"/>	Mother's Last Name	<input type="text"/>		
Medical Record #	<input type="text"/>	Mother's DOB	<input type="text"/>	▼	
Infant Last Name	<input type="text"/>	Mother's Phone #	<input type="text"/>		
From Date of Birth	<input type="text"/>	Birth Facility	<input type="text"/>	...	
To Date of Birth	<input type="text"/>	Submitter's Name	<input type="text"/>	...	
Gender	<input type="text"/>	Case Status	<input type="text"/>	▼	

- Click “Case Management” from the Landing Page
- Click the “Utilities” tab
- Select **Birth Log** and **Birth Summary** report

Reports – Birth Log

Search Filter

Enter the required search criteria below.

Select Provider Start Date End Date

Albert Einstein Medical Center
5501 Old York Road
Philadelphia, 19141

Filter Results

Birth Log – By Birth Hospital and Date of Birth

Lab MRN	Lab Infant Last Name	Lab DOB	MRN	Infant Last Name	Infant First Name	AKA Last Name	AKA First Name	DOB	Gender	Birth Order	Birth Hospital	Mother Last Name	Mother First Name	Final IP Hearing Screen Date	Final IP Screening Method	Final IP Screen Results	Final OP Hearing Screen Date	Final OP Screening Method	Final OP Screen Results
10132	AL	05/25/2017	10132	AL	pass	passpassaka	Femi	07/10/2017	Male	First Multiple	Albert Einstein Medical Center	AKAnametest	LOURDESA	07/30/2017	L: ABR R: ABR	L: Refer R: Refer			

- To run your report, enter the search criteria and click “Filter Results”
- Results will include infants whose birth hospital matches the selected provider, and DOB is within the selected date range
- Report lists filter paper data along with the matched hearing results
- Review it monthly to confirm all infants have a matched screening



Reports – Birth Summary

Search Filter

Enter the required search criteria below.

Select Provider Start Date End Date

Albert Einstein Medical Center
5501 Old York Road
Philadelphia, 19141

Filter Results

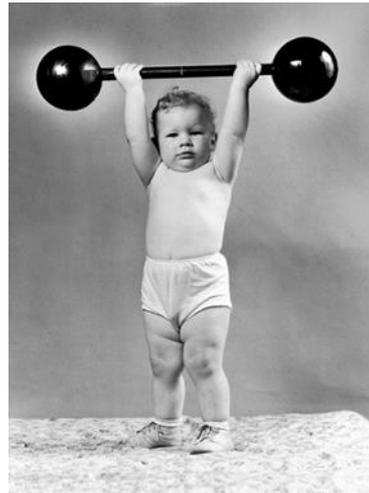
Birth Summary – By Birth Hospital and Date of Birth

Export to Excel						
Number of Live Births	Number of Newborns Screened Prior to Discharge	Number Newborns Not Initially Screened	Number of Families That Refused Initial Screening	Number of Newborns Who Did Not Pass Initial Screening	Number of Newborns Who Completed Follow-Up Rescreen	Number of Newborns Who Did Not Pass Follow-Up Rescreen
1	1	0	0	1	0	0

- Matches the monthly report submitted to DNSG
- Results filtered by provider and birth date range
- To run your report, enter the search criteria and click “Filter Results”
- Reconcile birth and screen log counts to confirm all infants are correctly updated
- Use the final details from this report to update your monthly report and submit
- Continue to send the monthly report via email

Reports - Exercise

- Run the Birth Log for 9/1/17 to 9/30/17
- Run the Birth Summary for 9/1/17 to 9/30/17



User Administration



Case Management

Only available to HSP Administrators



User Administration



Hearing Results Manual Entry



Unmatched Hearing Results



Hearing Device File Upload

HSP Administrators can:

- Create New Users
- Unlock Users
- Reset Passwords

User Administration

Add New User

Status: Active Inactive Locked

Drag a column header here to group by that column

Select	User ID	User Name	Full Name	Email	Phone	Last Login	Organization	Audits	Reset Password
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Select	1721	da_hspuser	Doni HSP User Test	DONI.ANTONELLI@N... () -		7/10/2017 1:32:56 PM		Audit	Reset Password
Select	1748	jsmith2	John Smith	LISA.HUDSON@NATU... () -				Audit	Reset Password

- Lists all users in your affiliated facilities
- Has color coded entries for active, inactive and locked users

Add Users

Add New User

Status: **Active** **Inactive** **Locked**

Drag a column header here to group by that column

Select	User ID	User Name	Full Name	Email	Phone	Last Login	Organization	Audits	Reset Password
	<input type="text"/>								
Select	1721	da_hspuser	Doni HSP User Test	DONI.ANTONELLI@N...	() -	7/10/2017 1:32:56 PM		Audit	Reset Password

- Click “Add New User”



Add Users

< Prior Next >

User ID	Roles	Affiliations	User Information
* User Name			JSMITH
* Full Name			Joe Smith

** Indicates required field*

Save Cancel

- Enter the user name and full name
- Use the first name initial + last name as the user name for a max of 10 characters
- If the username already exists, add a number at the end, e.g. JSMITH2

Add Users

< Prior Next >

User ID **Roles** Affiliations User Information

Roles Hearing Screen Provider User

Save Cancel

- Select the user's role, which should be limited to:
 - "Hearing Screen Provider User"
- Note that HSP Admins can only create HSP users

Add Users

< Prior **Next >**

User ID Roles **Affiliations** User Information

Affiliations

#	ID	Description
No data to display		

Page 1 of 0 (0 items) < Prev Next >

Providers

** Do NOT press Enter while filtering affiliations or your screen will refresh and data will be lost.*

#	ID	Description
Add	H251	Albert Einstein Medical Center

Save Cancel

- Select the user's affiliations
- HSP Admins can only create users with the same affiliations

Add Users

< Prior Next >

User ID Roles Affiliations **User Information**

* Indicates Mandatory Field

Phone () -

Fax () -

* Email joe.smith@childhosp.org

Title

Organization

Address

City

* State PA

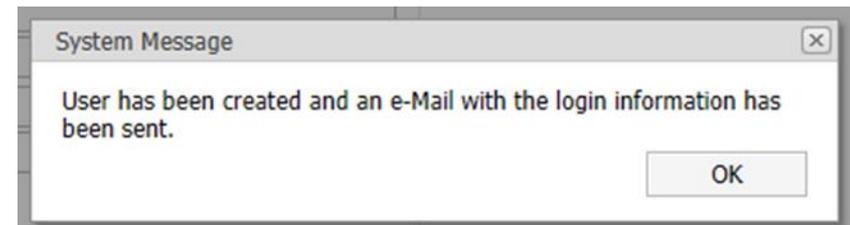
* Zip Code 19019 x

Active

Save Cancel

- Enter the mandatory information
- Click “Save”

If the configuration for the user account is correct, a confirmation message will display



Add Users

The items below require attention:

- It is required to select at least one affiliate.



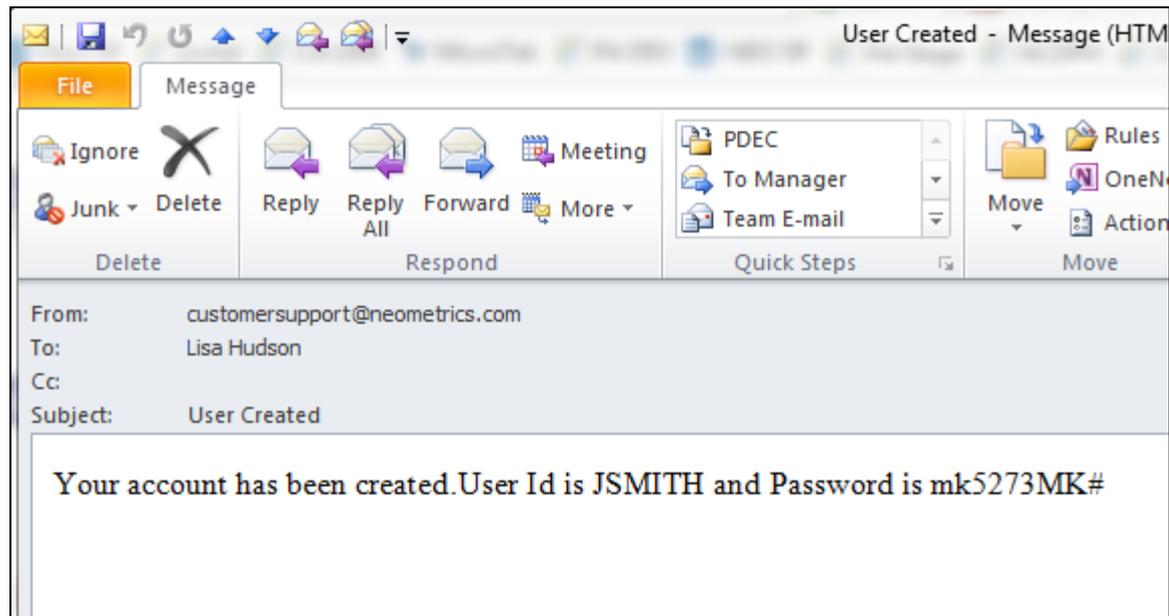
< Prior Next >

User ID	Roles	Affiliations	User Information
* Indicates Mandatory Field			
Phone	() -		
Fax	() -		
* Email	joe.smith@childhosp.org		
Title			
Organization			
Address			
City			
* State	PA		
* Zip Code	19019	x	
Active	<input checked="" type="checkbox"/>		

Save Cancel

- If any required data is missing, a red prompt will display on the top of the “User Information” Tab
- Enter the missing data, and click “Save” again

Add Users



- An email will automatically be sent to the new user with their user name and initial temporary password
- The users will have 14 days to setup their new password and security question or the HSP Administrator will need to reset the password for them
- Email is sent from customersupport@neometrics.com

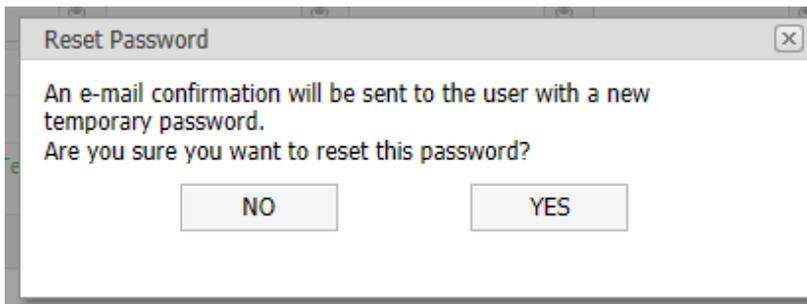
Reset Password

Add New User

Status: Active Inactive Locked

Drag a column header here to group by that column

Select	User ID	User Name	Full Name	Email	Phone	Last Login	Organization	Audits	Reset Password
Select	1721	da_hspuser	Doni HSP User Test	DONI.ANTONELLI@N...	() -	7/10/2017 1:32:56 PM		Audit	Reset Password



- Click “Reset Password” to reset the password for a user
- A prompt will confirm the reset and an email will be sent to the user with their new temporary password

Unlock User

Add New User

Status: Active Inactive Locked

Drag a column header here to group by that column

Select	User ID	User Name	Full Name	Email	Phone	Last Login	Organization	Audits	Reset Password
Select	1721	da_hspuser	Doni HSP User Test	DONI.ANTONELLI@N...	() -	7/10/2017 1:32:56 PM		Audit	Reset Password
Select	1748	jsmith2	John Smith	LISA.HUDSON@NATU...	() -			Audit	Reset Password

- Click “Select” to view the user details
- Click through the configuration tabs until you get to the “User Information” tab

Unlock User

< Prior Next >

User ID Roles Affiliations **User Information**

* Indicates Mandatory Field

Phone () -

Fax () -

* Email LISA.HUDSON@NATUS.COM

Title

Organization

Address

City

* State PA

* Zip Code 99999

Active ←

Save Cancel

- Check the “Active” box
- Click “Save”

Inactivate User

< Prior Next >

User ID Roles Affiliations **User Information**

* Indicates Mandatory Field

Phone () -

Fax () -

* Email LISA.HUDSON@NATUS.COM

Title

Organization

Address

City

* State PA

* Zip Code 99999

Active ←

Save Cancel

- Uncheck the “Active” box
- Select “Save”

Status: Active Inactive Locked

Drag a column header here to group by that column

Select	User ID	User Name	Full Name	Email	Phone	Last Login	Organization	Audits	Reset Password
Select	745	JSMITH	Joe Smith	LISA.HUDSON@NAT...	() -			Audit	Reset Password
Select	746	SGREEN	Sara Green	LISA.HUDSON@NAT...	() -			Audit	Reset Password

User Administrator - Exercise

- Add new user
- Inactive a user
- Re-active a user



HSP Responsibilities - Review

Following the PA iCMS HSP Training Course

- Within 2 weeks of attending this training
 - train the team members
 - complete proficiency exercises
 - coordinate a go-live date with Lisa Hudson
 - participate in weekly HSP Training Support WebEx for a total of 6 weeks

Go-Live

- Begin entering all screened and non-screen results for infants delivered by your facility and transferred to your facility within 7 days of the screen

Questions



Lisa Hudson

Lisa.Hudson@Natus.com

800-645-3616 x 4193

Kelly Holland

kholland.pa.gov

717-783-8143

Charu Pahwa

c-chapahwa@pa.gov

717-547-3336

Natus Helpdesk

866-639-3439

Slide deck created with assistance from the Pennsylvania Department of Health.



HL7 Data Transmission

- **HL7** messaging extracts data from your EMR system and send it to iCMS daily
- To confirm data has loaded via HL7, go to the “Unmatched Hearing Results” grid. All transmitted records should be in this grid.
- Check for the following:
 - Status is “Review” as these records need to be edited for missing information then “Submitted”
 - Final Refers – Make sure appointment information is loaded or add the appointments if not configured in your EMR system
 - Enter non-screened results if they are not entered into your EMR system
 - Status is “Saved” as there is missing information still needed before case will match
 - Transferred infants must be updated with the correct birth hospital

HL7 Data Transmission

Unmatched Hearing Results

Report to: Items Overdue

Drag a column header here to group by that column

Select	Mat Rec #	Infant Last Name	Infant First Name	AMA Name	DOB	Gender	Birth Order	Birth Hospital	Screening Provider	Mat Rec Last Name	Mat Rec First Name	NGU	Sensor	Initial PP #	Screen Date	Screen Time	Result Left	Result Right	Status	DOB
Select	155555555	Isaiah	pos	pasopasala, Ismael	7/10/2017	Male	First Multiple	More Hospital of Pittsburgh	More Hospital of Pittsburgh	Isaiah	mi	No	RDUALD	1234567891	8/10/2017	18:38	Transferred	Pass	Review	
Select	123456	Isak			8/17/2017	Female	Not Multiple Birth	Allegheny General Hospital	Albert Einstein Medical Center	Isak	Isakara	No			8/17/2017	12:22	Refer	Refer	Submitted	
Select	8521321545	Isak			1/1/2018	Female	Second Multiple	Allegheny Hospital	More Hospital of Pittsburgh	Isak	Ham	Yes	Tractor		1/8/2017	08:00	Pass	Pass	Saved	

(Default Last Name) is like 'Isak'

- Prior to exiting the grid, you must update the “Review” and “Saved” records
- If these are not completed and changed to “Submitted” the results will NOT be matched to a filter paper in iCMS
- Compare counts of screens on the grid to your screening log



EXERCISE: Go to your grid and update “REVIEW” records

Device File Upload

- Home
- Release Notes
- Contact Us
- Logout



Case Management



User Administration



Hearing Results Manual Entry



Unmatched Hearing Results



Hearing Device File Upload

Device File Upload

Hearing Device Upload

** Indicates Mandatory Fields for Upload*

*** Hearing Screening Provider**

H251 - Hosp/IP Prov
5501 Old York Road, Department of Pediatrics
Philadelphia, PA 19141
(215)456-8724

*** Select Screening File**

.xml or .txt file only

[Return to Landing Page](#)

- Allows user to upload data from their hearing device into the “Unmatched Hearing Results” grid
- Accepted file formats: HiTrack.txt, Algo5.xml and Audble.xml

Note: The file name cannot be more than 200 characters, and the file size cannot be larger than 1MB.

Device File Upload

Hearing Device Upload

*** Indicates Mandatory Fields for Upload**

* Hearing Screening Provider **Albert Einstein Medical Center - (Philadelphia, PA)** ▼
 H251 - Hosp/IP Prov
 5501 Old York Road, Department of Pediatrics
 Philadelphia, PA 19141
 (215)456-8724

* Select Screening File **Browse...**

.xml or .txt file only

- To upload a file, select the hearing screening provider
- Click “Browse” to locate the file to upload
 - The device file should either be on your thumb drive, usually (E:), or on a mapped network drive
- Click “Upload” to load

Device File Upload

* Hearing Screening Provider

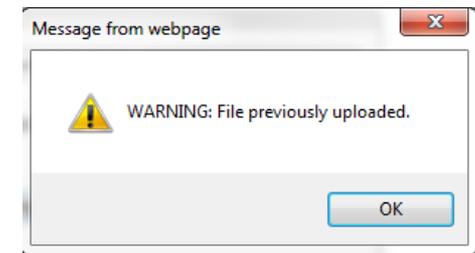
H251 - Hosp/IP Prov
5501 Old York Road, Department of Pediatrics
Philadelphia, PA 19141
(215)456-8724

* Select Screening File

The file has successfully been uploaded.

.xml or .txt file only

- If the file loads successfully, a confirmation message will display
- If not successful, an error message will display
- Files should always have a unique name
- A warning message will display if it is a duplicate file name
 - Click “OK” to acknowledge the message
 - Click “Upload” to continue to process the file
- Click “Cancel” to stop a file reload



Device File Upload

- When your file has been loaded, go to the “Unmatched Hearing Results” grid. All records should be in the grid.
- Check for the following:
 - That all records from the file are on the grid
 - Status is “Review” as these records need to be edited for missing information then “Submitted”
 - Final Refers – Make sure appointment information is loaded or add the appointments if not configured in your device
 - Non-screened infants that are not merged from device
 - Status is “Saved” as there is missing information still needed before case will match
 - Transferred infants must be updated with the correct birth hospital

HL7 Data Transmission

Unmatched Hearing Results

Report to Grid Items Overdue

Drag a column header here to group by that column

Select	Mat Rec #	Infant Last Name	Infant First Name	AMA Name	DOB	Gender	Birth Order	Birth Hospital	Screening Provider	Mat Rec Last Name	Mat Rec First Name	HCU	Sensor	Initial PP #	Screen Date	Screen Time	Result Left	Result Right	Status	DRN
Select	155555555	Isaiah	pos	pasopasala, Ismael	7/10/2017	Male	First Multiple	Henry Hospital of Pittsburgh	Henry Hospital of Pittsburgh	Isaiah	mi	No	RDUALD	1234567891	8/10/2017	18:38	Transferred	Pass	Review	
Select	123456	Isak			8/17/2017	Female	Not Multiple Birth	Allegheny General Hospital	Albert Einstein Medical Center	Isak	Isakara	No			8/17/2017	12:22	Refer	Refer	Submitted	
Select	8521321545	Isak			1/1/2018	Female	Second Multiple	Allegheny Hospital	Henry Hospital of Pittsburgh	Isak	Ham	Yes	Tractor		1/8/2017	08:00	Pass	Pass	Saved	

[Default Last Name] is like 'Isak'

Clear

- Prior to exiting the grid, you must update the “Review” and “Saved” records
- If these are not completed and changed to “Submitted” the results will NOT merge to iCMS to a matched filter papers
- Compare counts of screens on the grid to your screening log



EXERCISE: Go to your grid and update “REVIEW” records

Device File Upload

	HiTrack	Algo5	Audble	Note
Gender/Sex	M, F	M, F	M, F	If the gender is 'Unknown', then the entry will have to be updated manually on the Manual Entry Form.
Birth Order	S, A, B, C, D, E, F, G, H	N/A	N/A	If left 'Blank' then the field will default to a 'Single' birth.
Stage	I, O	IP, OP, Inpatient, Outpatient	N/A	If left 'Blank' then the field will default to 'Inpatient'. All Audble screenings will default to 'Inpatient'.
Acuity	1, 2	0, 1	0, 1	If left 'Blank' then the field will default to 'WBN'.
Out of State	Y, N	0, 1, Y, N	N/A	Default will be 'No'.
Birth Hospital	N/A	N/A	N/A	Default to the HSP Code of the User Uploading the file.
Screening Provider	N/A	N/A	N/A	Default to the HSP Code of the User Uploading the file.
Hearing Results	M, E, 1, 2, B, R, T, D, C, I	3, 2	1, 2, C, I	Hearing results with 'C', 'I' or a not defined value will not create a record. Blank results will also not create a hearing record.
Risks	RF01, RF02, RF03, RF05, RF07, RF09, RF10	RF01, RF02, RF03, RF04, RF05, RF06, RF07, RF08, RF09, RF10, RF11	N/A	Any Risk Factors not provided will default to 'Not Entered'.