

PA Case Management System (iCMS) SaaS Implementation

Treatment Center (TC) 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

1:30 pm - 3:00 pm

- Introduction
- Programmatic Requirements
- Pending Referrals
- Final Diagnosis Needed
- Completed Evaluations

Break

3:15 pm - 4:30 pm

- Case Management
- User Administration

Training Materials

The training folder includes the following:

- Trainer Slides
- Login Information Sheet
- 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:** Treatment Centers (TCs) are provided access to iCMS for *specified* diagnostic follow-up activities and hospitals, midwives and birthing centers are able to manually enter or electronically submit hearing screening data to iCMS.
- **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

- Bring the Pennsylvania newborn screening and genetics program in-line with other newborn screening and genetics programs across the country.
- Reduce and eventually eliminate the need for the current email of workbooks between state and TCs.
- Provide TCs direct access to referred cases for easy and quicker reporting of diagnostic results, leading to timely follow-up and treatment.

TC Responsibilities

Following the PA iCMS TC 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 TC Training Support WebEx for a total of 6 weeks

Go-Live

- Begin updating all referrals and diagnostic results directly in iCMS

Data Entry Learning Objectives

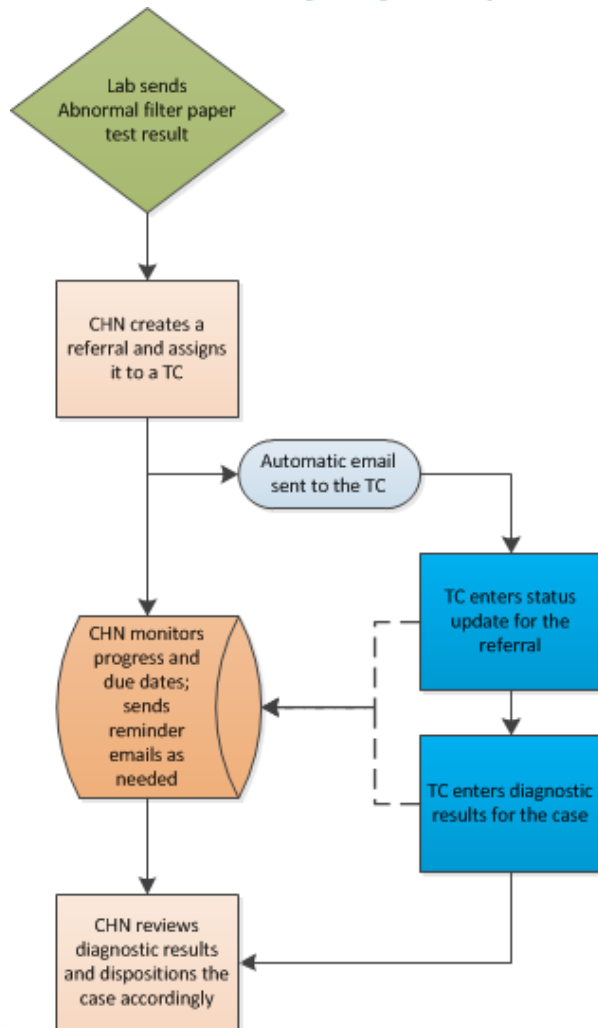
- Be able to log into iCMS
- Use iCMS to track and complete referrals
- Use iCMS to track and complete diagnostic evaluations
- Be prepared to train others on how to use the system
- Be prepared to create user accounts in iCMS for other users
- Feel comfortable using PA iCMS

iCMS Concepts

- Sequence of data entry
- Work grids
- PHI and emails (trusted sender Neometrics.com)
- Individual logins

Let's Get Started...

Referral-Diagnosis Work Flow



Current Process

- CHN creates a referral in iCMS and emails a workbook to the TC
- TC submits status information via email and CHN enters it into iCMS
- TC submits diagnostic workbook via email and CHN enters it into iCMS

To-Be Process

- CHN creates the referral in iCMS and an automatic email notification is sent to the TC
- TC completes the referral or cancels it in iCMS
- TC enters the diagnostic results directly in iCMS

New Referral-Diagnosis Work Flow

- The MS Excel workbooks will no longer be needed
- TCs will have direct access to the system, to provide status update and enter diagnostic results for assigned cases
- TCs will be notified by an automatic email when a new referral is assigned to their facility
- Expected response time for status updates and final diagnosis will vary based on the disorder

Disorder	Max # of Days to Update Referral
CAH	within 4 days of referral
CF	within 3 weeks of referral (21 days)
CH	within 4 days of referral
HGB	within 3 weeks of referral (21 days)
META	within 4 days of referral
SCID	within 4 days of referral

- TC users will have the ability to log into iCMS at any time to access new and pending referrals, cases that need final diagnosis and completed cases for their facility

Referral Email

From: customersupport@neometrics.com
To:
Cc:
Subject: Newborn Screening Referral from PA DOH

You are receiving this email because a referral was made to your facility for a condition listed on the Pennsylvania Newborn Screening Panel. Please log into the Pennsylvania Department of Health's newborn screening case management system, iCMS, to view the case details.

You must update the referral in iCMS with initial contact and initial assessment information. Once a diagnosis is determined, you must enter the Diagnostic Results in the system, no later than ten business days following the date of diagnosis.

Please do not hesitate to contact the Newborn Screening Follow-up Program with any questions or concerns, by calling 717.783.8143.

[Click here](#) to access this information.

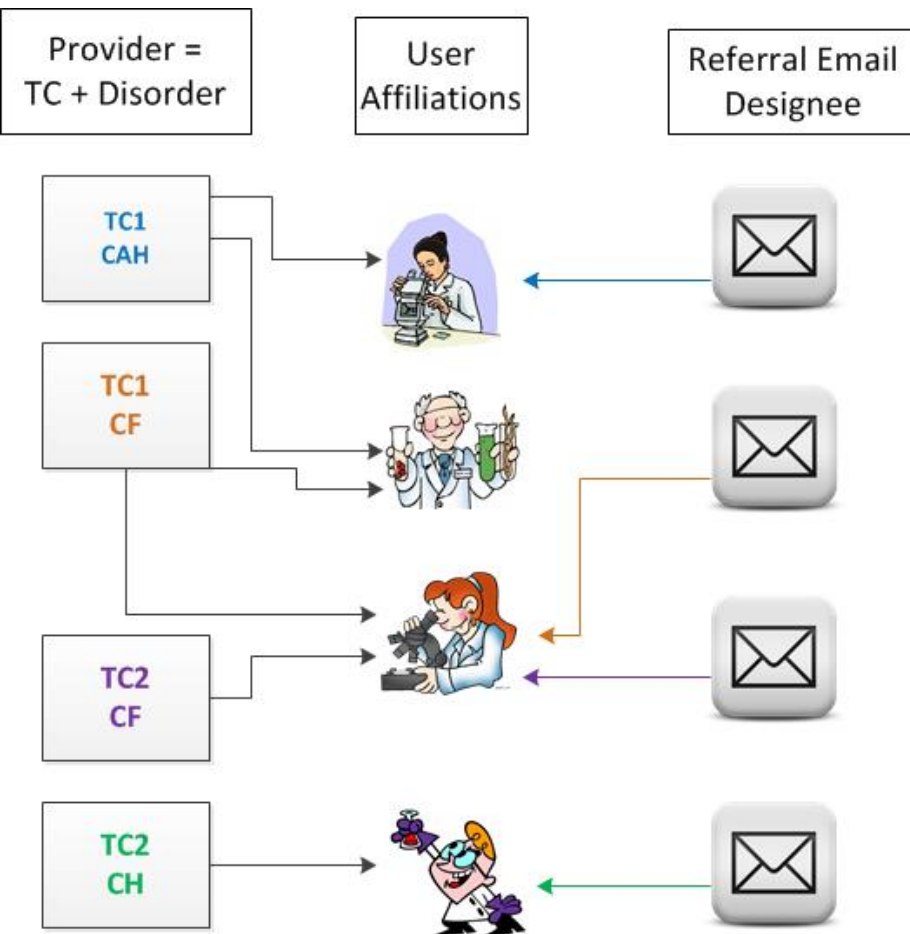
Healthcare practitioners, including physicians and surgeons, and healthcare facilities, including birthing centers and hospitals, are required to report final diagnoses of certain diseases in the newborn child to the Pennsylvania Department of Health, Bureau of Family Health, Division of Newborn Screening and Genetics, (see 35 P.S. §521.16; 28 Pa. Code §27.1; 28 Pa. Code §27.30; 28 Pa. Code §27.21a; and effective July 1, 2009 35 P.S. §623).

NEWBORN SCREENING & FOLLOW-UP PROGRAM

Pennsylvania Department of Health Bureau of Family Health | Division of Newborn Screening and Genetics
625 Forster Street, Seventh Floor East | Harrisburg, PA 17120
Phone: 717-783-8143

- Referral creation will send an automatic email to all affiliated designees
- “[Click here](#)” will open the iCMS login page

Defining Affiliations



- Treatment Center Name + Disorder
- Users are assigned to the Provider
- Referral email designees are configured to receive emails

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 Popup Blocker is turned off.
It's recommended to turn off header/footer for letter printing.

User Name

Password

Login

[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
- TC 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



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

Submit

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

Landing Page



Case Management

Only available to TC Administrators



User Administration



Pending Referrals



Final Diagnosis Needed



Completed Evaluations

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

Pending Referrals



Case Management



User Administration



Pending Referrals



Final Diagnosis Needed



Completed Evaluations

- Link to all new and pending referrals
- Records based on role and affiliation

Pending Referrals

Search Filter
Enter the required search criteria below.

Start Date 5/7/2017 ▼
End Date 8/5/2017 ▼

Filter Results

Pending Referrals - By Referral Date

Export to Excel

Items Overdue

Drag a column header here to group by that column

Select	Med Rec #	Newborn Id	Infant Last Name	Infant First Name	AKA Name	DOB	Gender	Birth Order	Mother Last Name	Mother First Name	DBS Submitter	Most recent FP DOC	Referral Date	Referral Type	Status Due Date	CHN
Select	9090	PA9090	BABY	BOY		01/17/2017	Male		MARY	JABNE	PA Department Of Health		05/08/2017	META - Metabolic	05/12/2017	

- Displays all referrals assigned to the TC and disorder, awaiting an update
- Defaults to referrals created in the past 90 days
- Overdue cases highlighted in yellow
- Use the filter options on the top to change the default settings

Pending Referrals

Export to Excel ☐ Items Overdue

Drag a column header here to group by that column

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

Filter on a specific value entered into the column

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

Click the Key to select other filter options

Select	Med Rec #	Newborn Id	Infant Last Name	Infant First Name	AKA Name	DOB	Gender	Birth Order	Mother Last Name	Mother First Name	DBS Submitter	Most recent FP DOC	Referral Date	Referral Type	Status Due Date	CHN
Select	9090	PA9090	BABY	BOY		01/17/2017	Male		MARY	JABNE	Health		05/08/2017	META - Metabolic	05/12/2017	

Available filter options for Gender:

- (All)
- Male
- Female

Available filter options for Referral Type:

- ✓ Begins with
- Contains
- Ends with
- Equals
- Doesn't equal
- Is less than
- Is less than or equal to
- Is greater than
- Is greater than or equal to

- 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



Pending Referrals

Search Filter

Enter the required search criteria below.

Start Date 5/7/2017

End Date 8/5/2017

Filter Results

Pending Referrals - By Referral Date

Export to Excel

Items Overdue

Drag a column header here to group by that column

Select	Med Rec #	Newborn Id	Infant Last Name	Infant First Name	AKA Name	DOB	Gender	Birth Order	Mother Last Name	Mother First Name	DGS Submitter	Most recent FP DOC	Referral Date	Referral Type	Status Due Date	OWN
Select	9090	PA9090	BABY	BOY		01/17/2017	Male		MARY	JABNE	PA Department Of Health		05/08/2017	META - Metabolic	05/12/2017	

- Click “Select” to complete or cancel a referral

Pending Referrals

Home Help Contact Us Search Logout Screen 1 of 1 < Prev Next >

Case Information

Newborn ID: PA9090 **Infant Name:** BABY, BOY **Gender:** Male

Case Status: Open **Mother's Name:** MARY, JABNE **Date of Birth:** 01/17/2017 @ 12:33

Birth Order: **Mother DOB:** **Birth Weight:** 3200 grams

Filter Paper #: PA9090 **Submitter Name:** **Results Released:** 01/17/2017

TPN: **Birth Facility:** **PCP:**

Transfused Date: **MRN #:** 9090 **PCP Phone:**

Gestation Age: **Collection Date:** **Hearing Date:**

Pulse Ox Date: **Pulse Ox Result:** **Reason:**

Edit Referral

* Referral Type: CAH - Endocrinology CAH

* Referred To: TC01ENDO

Albert Einstein Medical Center - ENDOTC
5501 Old York Road,
Philadelphia, PA 19141

* Referral Date: 8/5/2017

Notified:

DOH Comment:

Initial Contact made with: PCP

* Initial contact date:

* Assessment scheduled on day of initial contact:

Initial Assessment Conducted:

* Initial Assessment Scheduled:

* Name of the Person Completing Report:

* Date Report Completed:

Comments:

Referral Cancelled: ☐

* Referral Cancelled Reason:

Answer these questions only for CF.

* Were CFTR mutations detected on the newborn screening panel(s)?

* Variants on allele 1:

* Variants on allele 2:

Edit Save Cancel

[Return to Referrals Grid](#)

- The referral opens in edit mode
- Red asterisks (*) indicate mandatory fields
- Blue asterisks (*) indicate conditionally mandatory fields

Pending Referrals

Home	Help	Contact Us	Search	Logoff	Screen 1 of 1 < Prev 1 Next >	
Case Information <ul style="list-style-type: none"> Demographics (C) Referrals Document Capture Dried Blood Spot <ul style="list-style-type: none"> Laboratory Results Lab Demographics CH Diagnostic Results 					<div> Newborn ID: PA9090 Infant Name: BABY, BOY Gender: Male Case Status: Open Mother's Name: MARY, JABNE Date of Birth: 01/17/2017 @ 12:33 Birth Order: Mother DOB: Birth Weight: 3200 grams Filter Paper #: PA9090 Submitter Name: Results Released: 01/17/2017 TPN: Birth Facility: PCP: Transfused Date: MRN #: 9090 PCP Phone: Gestation Age: Collection Date: Hearing Date: Pulse Ox Date: Pulse Ox Result: Reason: </div> <div> <input type="button" value="Cancel"/> <input type="button" value="Retry"/> </div>	
<input type="button" value="Edit Referral"/>						

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

Pending Referrals

Edit Referral

* Referral Type: CAH - Endocrinology CAH

* Referred To: TC01ENDO
Albert Einstein Medical Center - ENDOTC
5501 Old York Road,
Philadelphia, PA 19141

* Referral Date: 8/5/2017

Notified: []

DOH Comment: []

Initial Contact made with: PCP

* Initial contact date: []

* Assessment scheduled on day of initial contact: []

Initial Assessment Conducted: []

* Initial Assessment Scheduled: []

* Name of the Person Completing Report: []

* Date Report Completed: []

Comments: []

Referral Cancelled: []

* Referral Cancelled Reason: []

Answer these questions only for CF.

* Were CFTR mutations detected on the newborn screening panel(s)? []

* Variants on allele 1: []

* Variants on allele 2: []

Edit Save Cancel

- * Mandatory data for Save
- * Conditionally mandatory

- Option drop-down
- Calendar drop-down

- Click “Save” to update the referral
- Click “Cancel” to exit the record without updates
- “Comment” and other text fields have size limitations

Pending Referrals

Initial Assessment Scheduled : This field is required

Edit Referral

* Referral Type: CAH - Endocrinology CAH

* Referred To: TC01ENDO
Albert Einstein Medical Center - ENDOTC
5501 Old York Road,
Philadelphia, PA 19141

* Referral Date: 8/5/2017

Notified: []

DOH Comment: []

Initial Contact made with: PCP

* Initial contact date: 8/5/2017

* Assessment scheduled on day of initial contact: Yes

Initial Assessment Conducted: 8/5/2017

* Initial Assessment Scheduled: 8/5/2017

* Name of the Person Completing Report: Lisa

* Date Report Completed: 8/5/2017

Comments: []

Referral Cancelled: []

* Referral Cancelled Reason: []

Answer these questions only for CF.

* Were CFTR mutations detected on the newborn screening panel(s)? []

* Variants on allele 1: []

* Variants on allele 2: []

Buttons: Edit, **Save**, Cancel

- If mandatory data is missing or incorrect, error message(s) will display at the top of the screen when you click “Save”
- Fill in the required details correctly and click “Save” again

Note: The bottom of the form needs to be completed for Cystic Fibrosis referrals only.

Pending Referrals

Home Help Contact Us Search Logoff Screen 1 of 1 < Prev 1 Next >

Case Information

- Demographics (C)
- Referrals
- Document Capture
- Dried Blood Spot**
 - Laboratory Results
 - Lab Demographics
 - CAH Diagnostic Results

Newborn ID: PA9090 **Infant Name:** BABY, BOY **Gender:** Male

Case Status: Open **Mother's Name:** MARY, JABNE **Date of Birth:** 01/17/2017 @ 12:33

Birth Order: **Mother DOB:** **Birth Weight:** 3200 grams

Filter Paper #: PA9090 **Submitter Name:** **Results Released:** 01/17/2017

TPN: **Birth Facility:** **PCP:**

Transfused Date: **MRN #:** 9090 **PCP Phone:**

Gestation Age: **Collection Date:** **Hearing Date:**

Pulse Ox Date: **Pulse Ox Result:** **Reason:**

Referrals

Referral Date	Referral Type	Referred To	Phone #	Notified To	Completed By	Completed On	Status
08/05/2017	CAH - Endocrinology CAH	Albert Einstein Medical Center - ENDOTC	(215) 456-8706		TCA_CAH	08/05/2017	Completed

[Add Referral](#)

- Once saved, the screen is redirected back to the Referrals summary page
- The referral status will be updated to “Completed”
- The referral will be removed from the “Pending Referrals” grid and added to the “Final Diagnosis Needed” grid
- To view and edit a referral, click “Select” next to it

Cancel Pending Referral

Comments

Referral Cancelled ☒

* Referral Cancelled Reason

Answer these questions only for CF.

* Were CFTR mutations detected on the newborn screening panel(s)?

* Variants on allele 1:

* Variants on allele 2:

- Check the “Referral Cancelled” box
- Select a “Referral Cancelled Reason”
- Click “Save”

Pending Referrals - Exercise

- Login to the PA iCMS Training Site:
<https://www.nbs.train.pa.gov/toolbar/login.aspx>
 - See the Exercise sheet for your login and password

- Navigate to the “Pending Referrals” grid
 - Complete 2 Referrals
 - Cancel 1 Referral



Final Diagnosis Needed

Home Release Notes Contact Us Logout



Case Management



User Administration



Pending Referrals



Final Diagnosis Needed



Completed Evaluations

- Link to completed referrals for which a final diagnosis has not been entered yet

Final Diagnosis Needed

Search Filter

Enter the required search criteria below.

Start Date 8/4/2016

End Date 8/5/2017

Filter Results

Final Diagnosis Needed – By Referral Date

Export to Excel

Items Overdue

Drag a column header here to group by that column

Select	Med Rec #	Newborn Id	Infant Last Name	Infant First Name	AKA Name	DOB	Gender	Birth Order	Birth Hospital	Mother Last Name	Mother First Name	DBS Submitter	Most recent FP DOC	Referral Completion Date	Referral Type	DX Due Date	CHN	DX	Evaluation Status
Select	922	PA15	BAR			01/01/2016	Male		Harrisburg Hospital	BAI	KJ	Harrisburg Hospital	01/02/2016	1/5/2017	CAH - Endocrin... CAH		Angela Collins		In Progress
Select	H71	PA15	HOC			04/01/2016	Male		Chambersburg Hospital	HO	AL	Chambersburg Hospital	04/02/2016	4/27/2017	CAH - Endocrin... CAH				In Progress
Select	000	PA14	ABB			04/02/2015	Male		West Penn Hospital	ABE	KJ	West Penn Hospital	04/04/2015	7/18/2017	CAH - Endocrin... CAH				In Progress
Select	829	PA15	YUN			05/25/2017	Female	Not Multiple Birth	Moses Taylor Hospital	YUI	NJ	Moses Taylor Hospital	05/27/2017	8/1/2017	CAH - Endocrin... CAH		Nastassia Varabel	No disorder detected	In Progress

- Lists all completed referrals that are awaiting a final diagnosis
- Defaults to cases requiring a final diagnosis within the past 366 days
- Use the filter options on the top to change the default settings
- Click “Select” to view and edit a record

Final Diagnosis Needed

Edit CAH Diagnostic Results

* Diagnosis Date

* Diagnosis

If Other, please specify

Treatment Started

* Was diagnosis made prenatally?

* Was a confirmatory serum 17-OHP level obtained?

If yes, answer the following questions

* Was there a value at baseline?

* Was Serum 17-OHP level tested before initiation of treatment?

* Was there a result after ACTH stimulation?

* Was ACTH stimulation tested before initiation of treatment?

- Diagnostic Results form opens in edit mode
- There is a separate form for each disorder type, and it matches the current workbook format
- Mandatory field indicators (* and *) and drop-downs function the same way as they do on the “Edit Referral” form

Final Diagnosis Needed

☐ Ambiguous genitalia with 46,XX karyotype
☐ Normal genitalia with 46,XX karyotype
☐ Other hormonal evidence of CAH

Comments

Created Date
01/05/2017

Created By
Daniel LaGonterie

Final Diagnosis ☐

Edit

Save

Cancel

- Enter additional information in “Comments”
- If it is the final diagnosis, check the box
- Click “Save” to update the Dx result
- Click “Cancel” to exit without saving changes
- If unable to save, scroll to the top of the screen for warnings and errors

Note: To cancel a diagnostic result, go to the “Edit Referral” screen and cancel it.

[Return to CAH Diagnostic Results Grid](#)

Final Diagnosis Needed

Home Contact Us Search Logoff Screen 1 of 3 < Prev 2 3 Next >

Case Information

- Demographics (C)
- Referrals
- Document Capture
- Dried Blood Spot**
- Laboratory Results
- Lab Demographics
- CAH Diagnostic Results

Newborn ID: Infant Name: KAI Gender: Female
Case Status: Closed Mother's Name: KAI Date of Birth:
Birth Order: Not Multiple Birth Mother DOB: 06/19/1984 Birth Weight: 435 grams
Filter Paper #: Submitter Name: Abington Memorial Hospital Results Released:
TPN: Birth Facility: Abington Memorial Hospital PCP: Good Samaritan Pediatrics
Transfused Date: 08/17/2016 MRN #: PCP Phone: (717) 272-7695
Gestation Age: 23 Collection Date: 08/17/2016 @ 09:00 Hearing Date: 08/09/2017
Pulse Ox Date: Pulse Ox Result: Not Performed Reason: Prenatal Dx

CAH Diagnostic Results

	Evaluation Status	Diagnosis Date	Referral Date	Diagnostic Provider	CAH Results	Created Date	Created By
Select	Completed	08/31/2017	08/31/2017	Pediatric Alliance Pediatric Endocrine/Diabetes- ENDOTC	Congenital Adrenal Hyperplasia	08/31/2017	Kim State Admin
Select	In Progress	08/31/2017	08/31/2017	Pediatric Alliance Pediatric Endocrine/Diabetes- ENDOTC	Congenital Adrenal Hyperplasia	08/31/2017	Kim State Admin

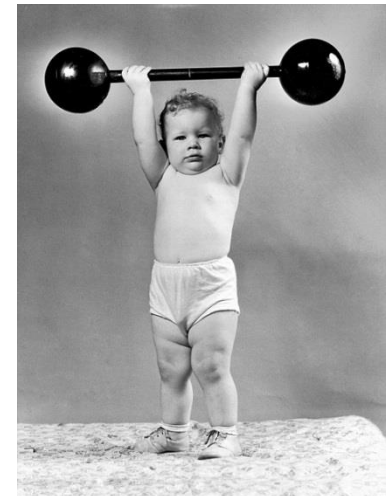
Cancel
Retry

- If “Final Diagnosis” was checked, the “Evaluation Status” will be updated to “Completed”, else it will stay as “In Progress”
- The record will be removed from the “Final Diagnosis Needed” grid and added to the “Completed Evaluations” grid
- To view and edit a record, click “Select” next to it

Final Diagnosis Needed - Exercise

- Go to the “Final Diagnosis Needed” grid
- Enter a confirmed diagnosis and make final for 2 cases
- Enter “No Disorder Detected” and make final for a case

Remember: To cancel a diagnostic result, you must go back to the “Edit Referral” screen and cancel it.



Completed Evaluations

Home Release Notes Contact Us Logout



Case Management



User Administration



Pending Referrals



Final Diagnosis Needed



Completed Evaluations

- Link to all completed cases

Completed Evaluations

Search Filter
Enter the required search criteria below.

Start Date: 7/6/2017 End Date: 8/5/2017

Filter Results

Completed Evaluations - By Diagnosis Date

Export to Excel

Drag a column header here to group by that column

Select	Med Rec #	Newborn ID	Infant Last Name	Infant First Name	AKA Name	DOB	GENDER	Birth Order	Birth Hospital	Mother Last Name	Mother First Name	DBS Submitter	Most Recent FP#	Referral Completion Date	Referral Type	DX Due Date	DX Date	CHN	Evaluation Status	DX
Select	922	PA15	BAR			1/1/2016	Male		Harrisburg Hospital	BAR	K	Harrisburg Hospital	1/2/2016	1/5/2017	Endocrinology CAH	1/5/2017	8/5/2017	Angela Collins	Completed	No disorder detected

- Allows quick review of completed cases
- Lists only the records that have the “Final Diagnosis” checkbox marked
- By default displays records with a final diagnosis date in the past 30 days
- To view a record, click “Select” next to it

Tip: Filter on the “Dx” column to find confirmed diagnostic results.

Completed Evaluations - Exercise

- Go to the “Completed Evaluations” grid
- Filter the grid to find cases with confirmed diagnosis
- Select a case with confirmed diagnosis and edit the diagnostic result record by adding a note “Dx reviewed with family” and your name
- Save the Dx with the note



Case Management



Case Management



User Administration



Pending Referrals



Final Diagnosis Needed



Completed Evaluations

- 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"/> ▼
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"/> ▼

Search	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"/> x	Mother's DOB	<input type="text" value="v"/>
Infant Last Name	<input type="text"/>	Mother's Phone #	<input type="text"/>
From Date of Birth	<input type="text" value="v"/>	Birth Facility	<input type="text" value="..."/>
To Date of Birth	<input type="text" value="v"/>	Submitter's Name	<input type="text" value="..."/>
Gender	<input type="text" value="v"/>	Case Status	<input type="text" value="v"/>

Search	Reset
--------	-------

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="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<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	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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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

Case Management

Home	Contact Us	Search	Logoff	Screen 1 of 3 < Prev 1 2 3 Next >
Case Information <ul style="list-style-type: none"> Demographics (C) Referrals Document Capture Dried Blood Spot <ul style="list-style-type: none"> Laboratory Results Lab Demographics CAH Diagnostic Results 	<p>Newborn ID: Infant Name: KA Gender: Female</p> <p>Case Status: Closed Mother's Name: KA Date of Birth:</p> <p>Birth Order: Not Multiple Birth Mother DOB: 06/19/1984 Birth Weight: 435 grams</p> <p>Filter Paper #: Submitter Name: Abington Memorial Hospital Results Released:</p> <p>TPN: Birth Facility: Abington Memorial Hospital PCP: Good Samaritan Pediatrics</p> <p>Transfused Date: 08/17/2016 MRN #: PCP Phone: (717) 272-7695</p> <p>Gestation Age: 23 Collection Date: 08/17/2016 @ 09:00 Hearing Date: 08/09/2017</p> <p>Pulse Ox Date: Pulse Ox Result: Not Performed Reason: Prenatal Dx</p>			<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 Menu

Case Information
Demographics (C)
Referrals
Document Capture
Dried Blood Spot
Laboratory Results
Lab Demographics
Metabolic Diagnostic Results
Hemoglobin Diagnostic Results
Cystic Fibrosis Diagnostic Results
CH Diagnostic Results
CAH Diagnostic Results
SCID Diagnostic Results

- **Demographics** – current demographic data for the case
- **Referrals** – all referrals for the case
- **Document Capture** – lab reports and other case documents; .doc, .docx, .xls, .xlsx, .pdf, .jpg, .gif and .png files
- **Laboratory Results** – filter paper results
- **Lab Demographics** – demographics from the filter paper
- **Diagnostic Results** – diagnostic results for the case

Case Demographics

Patient Information

* Newborn ID PA9090
 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 3290
 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 JANE
 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 # 989/698-9989
 This is a new entry for Emergency contact info.
 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

Document Capture - Add

 **Document Capture**

Drag a column header here to group by that column

View Document	Comment	▼	Saved by	▼	Date Saved	▼	Select
	<input type="text"/>		<input type="text"/>		<input type="text"/>		
No data to display							

 Add New File  Delete Selected

- Click “Add New File”

Document Capture - Add

+ Add New Document

Description:

Select Image File: **Browse...**

[Return to "Document Capture Grid"](#)

- Click "Browse" to locate the file

+ Add New Document

Description:

Select Image File: **Browse...**

Upload

[Return to "Document Capture Grid"](#)

- Once selected, add a description and click "Upload"

Document Capture - Add

+ Add New Document

Description:	<input type="text" value="Parents Consent Form"/>
Select Image File:	<input type="text" value="20170179002_131464387618187972_xxx.pdf"/> <input type="button" value="Browse..."/>
<input type="button" value="Upload"/> <input type="button" value="Submit"/> <input type="button" value="Cancel"/>	


File has been uploaded successfully. Please click the 'Submit' button to store the file in the database so you can view it later.

Image preview is not available for this type of document!


[Return to "Document Capture Grid"](#)



- File types supported: .doc, .docx, .xls, .xlsx, .pdf, .jpg, .gif and .png
- If system accepts the image type and description, you will be prompted to "Submit"

Document Capture - View

 **Document Capture**

Drag a column header here to group by that column

View Document	Comment	Saved by	Date Saved	Select
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	Parents Consent Form	TCA_CAH	08/05/2017	<input type="checkbox"/>

 Add New File  Delete Selected

- To view an existing document, click 

Laboratory Results

Select	Group	Disorder	Mnemonic	Comment	Status
Select	T4 and TSH	T4 (CH)	WNL	Within Normal Limits	Normal
Select	AA	AA	WNL	Within Normal Limits	Normal
Select	AA	MSUD	WNL	Within Normal Limits	Normal
Select	AA	PKU	WNL	Within Normal Limits	Normal
Select	Gal	GAL	WNL	Within Normal Limits	Normal
Select	Gal	GALBEU	WNL	Within Normal Limits	Normal
Select	CAH	CAH	WNL	Within Normal Limits	Normal
Select	Hgb	HGB	FA	Within Normal Limits	Normal
Select	BIO	BIO	WNL	Within Normal Limits	Normal
Select	CF	CF	WNL	Within Normal Limits	Normal
Select	SCID	SCID	WNL	Within Normal Limits	Normal
Select	AC	AC	WNL	Within Normal Limits	Normal

Select	Testcode	Testnam	Value
Select	00053	T4 CH	16.10

- “Select” the test to view the result values

Lab Demographics

Lab Demographics Screen

Child's Information

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

Submitter / Physician

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

Mother's / Guardian's Information

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

Mother's Medical History

Thyroid Disease
 Diabetes
 On Steroids
 Maternal Hepatitis NEG
 Other

- View only
- Populated from the filter paper

Case Management – Exercise

- Go to Case Management
 - Search for NB ID# PA160206680
- Search and Select a case
 - Use the left-hand side menu to review the case
 - Demographics
 - Lab Results
 - Lab Demographics
 - Document Capture
 - View Lab Report



Jon Whittle

User Administration



Case Management

Only available to TC Administrators



User Administration



Pending Referrals



Final Diagnosis Needed



Completed Evaluations

TC 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"/>		
Select	745	JSMITH	Joe Smith	LISA.HUDSON@NAT...	() -			Audit	Reset Password
Select	746	SGREEN	Sara Green	LISA.HUDSON@NAT...	() -			Audit	Reset Password
Select	680	TCU_CAH	TC User CAH Test Staging	DONI.ANTONELLI@N...	() -	7/27/2017 3:25:07 AM		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
Select	680	TCU_CAH	TC User CAH Test Staging	DONI.ANTONELLI@N...	() -	7/27/2017 3:25:07 AM		Audit	Reset Password

- Click “Add New User”

Add Users

< Prior Next >

User ID	Roles	Affiliations	User Information
* User Name	<input type="text" value="JSMITH"/>		
* Full Name	<input type="text" value="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
- 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 ☒ Treatment Center User - CAH

Save Cancel

- Select the user's role, which should be limited to:
 - “Treatment Center User” + Disorder
- Note that TC Admins can only create TC users with the same disorder

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	TC06ENDO	The Childrens Hospital of Philadelphia - ENDOTC

Save Cancel

- Select the user's affiliations
- TC 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

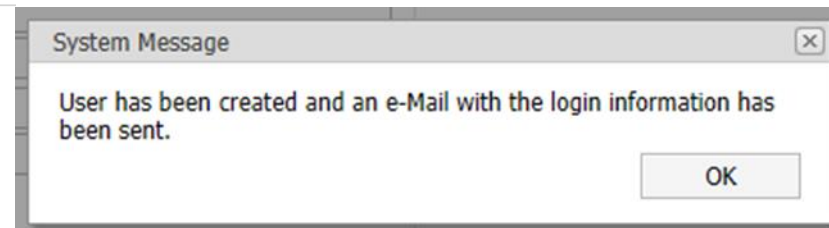
* Zip Code 19019 x

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

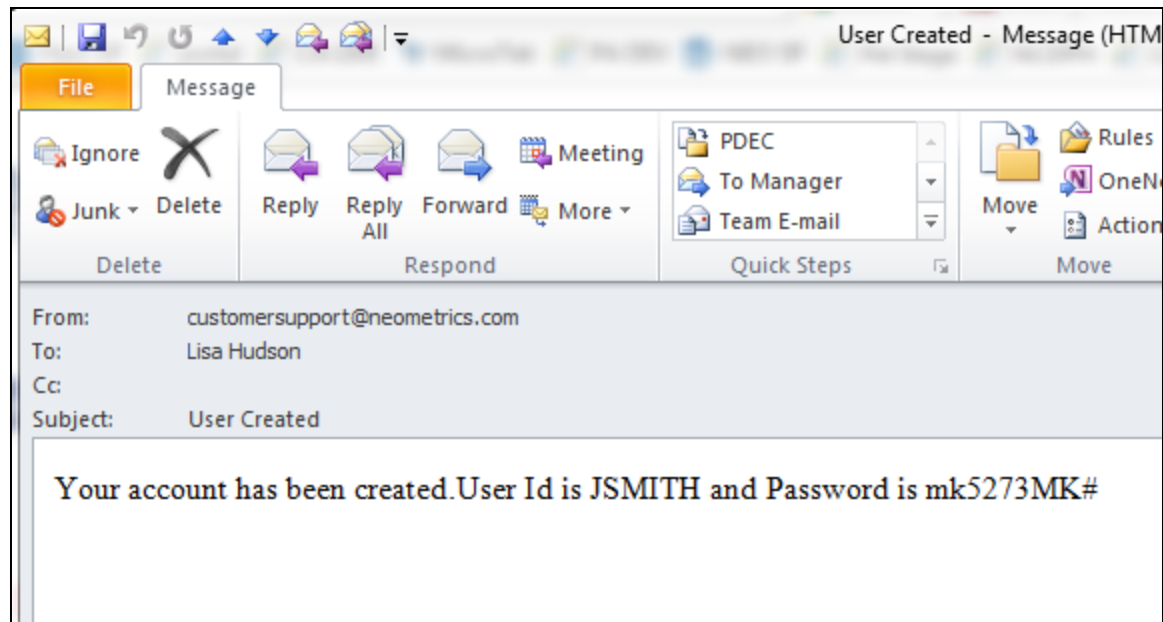
* Zip Code 19019 x

Active ☒

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 TC Administrator will need to reset the password for them
- Email is sent from customersupport@neometrics.com

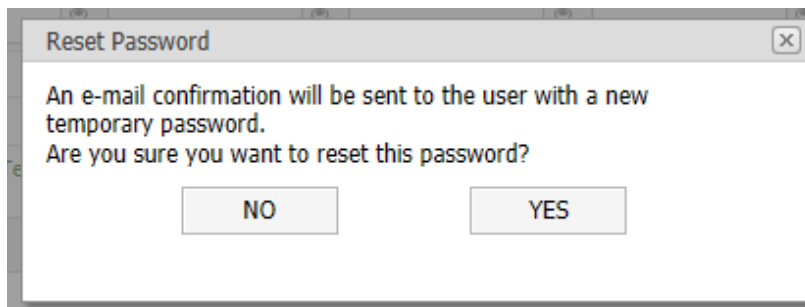
Reset Password

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
	<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

- 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



TC Responsibilities

Following the PA iCMS TC 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 TC Training Support WebEx for a total of 6 weeks

Go-Live

- Begin updating all referrals and diagnostic results directly in iCMS

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.