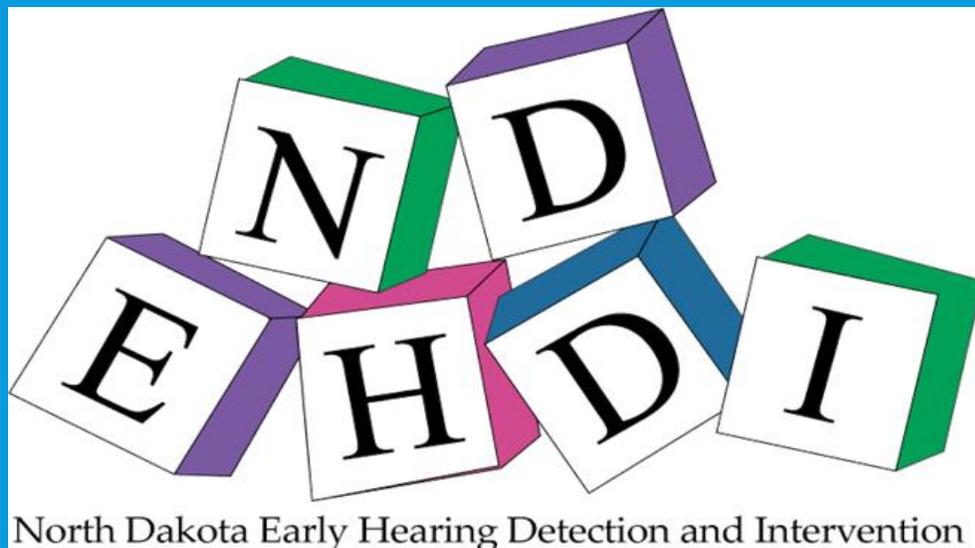




ND EHDI Quality Improvement Project



QI lead: Elizabeth Seeliger
Elizabeth.Seeliger@dhs.wisconsin.gov

QI Team:

Kim Hruby – ND EHDI Coordinator
Jerusha Olthoff – Project Director
Sue Routledge – Follow-up Coordinator
Julie Wetzel – Follow-up Coordinator
Mackensie Brandt - Audiologist

PROJECT AIM

- By August 2014, reduce “Reminder Letter” production time for EHDI staff by 50% and determine Reminder Letter effectiveness for reducing LTF.

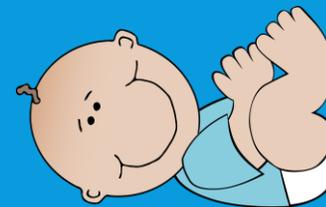
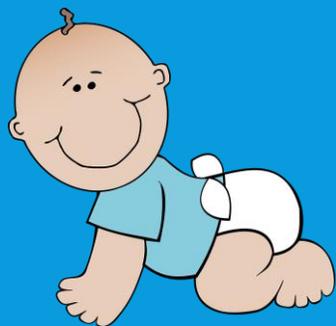
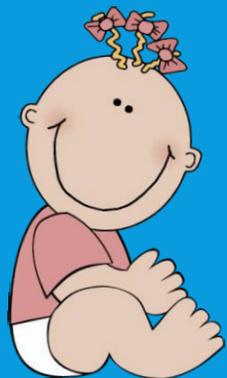
WHY? This aim became a consideration due to evolutionary program changes.

- *Historically, the production of Reminder Letters was the responsibility of a single Follow-up Coordinator. After ND EHDI implemented changes in Follow-up Coordinator roles from the stage of hearing care (e.g. “inpatient”, “outpatient”, “audiological” and “EI” follow-up status) to “lifetime of a child”, the responsibility of Reminder Letter production followed to each individual Coordinator.*
- *It became evident the letter production was time consuming*
- *Changes were needed if letters were to continue to be produced (especially due to recent reduction in staff numbers)*
- *The question then arose if the letters were effective to reduce LTF*
- *Internally: to save ND EHDI staff time/Externally: to promote program sustainability*



Qualitative MEASUREMENT

- *Interviews (with ND EHDl staff and Follow-up Coordinators) – old method*
- *Letter Types/Versions updated (3 to 5 letter templates by end of PDSA)*
 - ✓ Letter versions increased from 3 to 5
 - ✓ Letter content updated
 - ✓ Multiple UAT site testing performed to assure inclusion of all outcomes with recommended follow-up
- *Web-based system "Care Paths" determined (9)*
- *Interviews (Follow-up Coordinators) – new method*



Quantitative MEASUREMENT

- Production time for letters
 - ✓ Numerator: Total number of letters produced
 - ✓ Denominator: Total time in minutes
- Production time for letters (Old Method vs. New Method)
 - ✓ Numerator: Number of minutes (New Method)
 - ✓ Denominator: Number of minutes (Old Method)
- Production times using new method with increased proficiency
 - ✓ Numerator: Number of minutes (New Method-proficiency improved)
 - ✓ Denominator: Number of minutes (New Method-initial)
- Letter Effectiveness Survey (parents)
 - ✓ Used OZ data to identify list of candidates for survey



OPERATIONAL DEFINITIONS

- **Care Path** – Refers to the assignment of a letter template to the appropriate outcome level using Care Status and Letter Topic
 - Care Status – hearing outcome or type of follow-up required (e.g. Bilateral Refer or Required-Pending)
 - Letter Topic – topic of letter assigned
- **User Acceptance Test site (UAT)** – Refers to a non-live System site available to mimic live-side system; used for testing of functionality of an application
- **Manual or Old Letter Method** – Refers to complete manual tracking via Excel, manual system searches and merging for letter production
- **New Letter Method** – Refers to letter production utilizing System functionalities

Strategies – PDSA #1

Identify Current Method

- ❑ **Baseline Data Collected (next slide)**
- ❑ **Interviewed Follow-up Coordinators**
 - Current process was manual & time consuming
 - *Prep work* (Calling hospitals and EI providers, reading case notes took a lot of time)
 - *Tracking* was difficult (NICU-delayed discharges, transfers; manually tracked who had/had not received a letter)
 - Automated web-based process not used to produce letters; did not work
- ❑ **Current letters - 3 letter versions** (birth screen missed, birth screen referred, audiology recommended)
 - Missing populations with manual searches (Moved out of State, Not Attended, Parental Report, Past due)
- ❑ **Current Letter Templates** – reformatting, revision, and addition letter would be of benefit

What was done:

- ❑ **WebEx training from System Support to identify automated letter functionalities**
 - Tracking possible
 - Identified current Care Paths were incorrect
 - Identified missing populations could be addressed with correct Care Paths and updated Letter Templates
- ❑ **Identified Letter Templates changes were needed (PDSA #2)**
 - Additional Letter Templates to cover all populations
 - Revisions in letter format and content
- ❑ **Identified Care Path changes were needed (PDSA #3)**
 - Currently determined by hearing stage outcome-not future level of testing recommended

MEASUREMENT – PDSA #1

Manual Letter Production Time (baseline data)

Follow-up Coordinator #1	Total # letters	Total # Facilities	Total time (minutes)	Average time per letter (in minutes)
log #1				
7/23/2014	12	1	150	12.50
7/23/2014	9	1	60	6.67
7/29/2014	8	1	120	15.00
log #2				
8/11/2014	4	2	30	7.5
8/13/2014	4	1	30	7.5
8/14/2014	unable to complete - system error			
Average Run Time = 9.8 minutes per letter				

- Provided Follow-up Coordinator with Tracking Log
- Track letter production time from beginning to end (including prep work, letter generation to completion of process)
- Logs returned
- Calculated average of runs

VERY TIME CONSUMING

data set 1

Strategies – PDSA #2

Development of New Reminder Letter Templates

Current Letters cover *outcomes* of 1) Birth Screen Missed, 2) Birth Screen Refer and 3) Audiology Recommended (need to include outcomes of Moved Out of State, Not Attended, Parental Report, Past Due and Not Indicated)

- ❑ By completion of PDSA, develop and/or change letters to include *level of testing recommended (not outcome level)* with a Care Path designation
 - Letter 1: Outpatient Follow-up Required (Outpatient Appointment Pending or Not Scheduled)
 - Letter 2: Outpatient Follow-up Required (Outpatient Appointment Past Due or Not Attended)
 - Letter 3: Audiology Required (Audiology Pending or Not Scheduled)
 - Letter 4: Audiology Required (Audiology Pending or Not Attended)
 - Letter 5: Moved Out of State
- ❑ **Additional Updates/Changes**
 - Verbiage (general, added Tribal Tracking (EI), Facility Phone number included on import)
 - Footer added indicating letter version – easy identification of letter type/topic
 - “Generated Date” added to always reflect date letter printed (rather than rolling date)
 - Signature of appropriate Follow-up Coordinator added
 - Hearing outcome (result) prominently placed
- ❑ **Letters Reviewed**
 - NDCPD Staff, System Staff (assure hearing outcomes pulling appropriately), Audiologists, EHDI Staff)

Letter Templates Approved!!!

REMINDER LETTER TEMPLATES

VERSION 1

Outpatient Recommended
(pending appointment or not scheduled)



«DateGenerated»

«ContactTitle» «ContactFirstName» «ContactLastName»
«ContactAddress» «ContactAptOrSuite»
«ContactCity», «ContactState» «ContactZipCode»

RE: «PatientFirstName» «PatientLastName»

Dear «ContactTitle» «ContactLastName»,

Congratulations on your new arrival! We hope your family is doing well.

It has come to our attention a very important part of your newborn's routine care has not been completed. *Your child either missed having a hearing screen (ND = Not Done/Missed) or the results indicate your child did not pass the hearing screening (Refer = Did Not Pass).* In either case, it is very important that your child returns for a follow-up hearing screening as soon as possible. Complete hearing screening is crucial. Unidentified or late identified hearing loss can cause speech, language, or educational delays in your child's development.

Your child's hearing screen result:

Left Ear: «LastLeftEarOutcomes» / Right Ear: «LastRightEarOutcomes»

Please contact your child's birth hospital, «FacilityName», at «FacilityPhone» or your health care provider for information regarding the importance of this screening and to help schedule an appointment for your baby. It is important to keep your appointment. A Right Track or Tribal Early Childhood Tracking Provider may be contacting you. These providers are from free developmental programs available to all families with infants residing in North Dakota. They offer free hearing screening and can help answer questions regarding infant hearing and/or assist in making necessary follow-up appointments. Non-North Dakota residents may access state specific EHDI contact information at <http://www.infanthearing.org/states/index.html>.

Please keep this letter for your records and we recommend bringing it to your next well child visit. You can also obtain more information about newborn hearing screening by visiting the ND EHDI website at <http://www.ndcpd.org/ehdi> or by calling 1-800-233-1737.

Sincerely,

Ms. Sue Routledge
ND EHDI Follow-up/Data Coordinator
North Dakota Early Hearing Detection & Intervention Program
MSU/North Dakota Center for Persons with Disabilities ~1-800-233-1737

Version 1: 7/9/2014

VERSION 2

Outpatient Recommended
(past due or not attended)



«DateGenerated»

«ContactTitle» «ContactFirstName» «ContactLastName»
«ContactAddress» «ContactAptOrSuite»
«ContactCity», «ContactState» «ContactZipCode»

RE: «PatientFirstName» «PatientLastName»

Dear «ContactTitle» «ContactLastName»,

It has come to our attention a very important part of your newborn's routine care has not been completed. *Your child did not pass or missed the birth hearing screen prior to hospital discharge and the most recent scheduled appointment is now past due or was not attended.* It is very important that your child returns for a follow-up hearing screening as soon as possible. Complete hearing screening is crucial. Unidentified or late identified hearing loss can cause speech, language, or educational delays in your child's development.

Your child's hearing screen result:

Left Ear: «LastLeftEarOutcomes» / Right Ear: «LastRightEarOutcomes»

Please contact your child's birth hospital, «FacilityName», at «FacilityPhone» or your health care provider for information regarding the importance of this screening and to help reschedule an appointment for your baby.

It is important to reschedule and keep your appointment.

A Right Track or Tribal Early Childhood Tracking Provider may be contacting you. These providers are from free developmental programs available to all families with infants residing in North Dakota. They offer free hearing screening and can help answer questions regarding infant hearing and/or assist in making necessary follow-up appointments. Non-North Dakota residents may access state specific EHDI contact information at <http://www.infanthearing.org/states/index.html>.

Please keep this letter for your records and we recommend bringing it to your next well child visit. You can also obtain more information about newborn hearing screening by visiting the ND EHDI website at <http://www.ndcpd.org/ehdi> or by calling 1-800-233-1737.

Sincerely,

Ms. Sue Routledge
ND EHDI Follow-up/Data Coordinator
North Dakota Early Hearing Detection & Intervention Program
MSU/North Dakota Center for Persons with Disabilities ~1-800-233-1737

Version 2: 7/9/2014

REMINDER LETTER TEMPLATES

VERSION 3
Audiology Recommended
(pending appointment or not scheduled)



«DateGenerated»

«ContactTitle» «ContactFirstName» «ContactLastName»
«ContactAddress» «ContactAptOrSuite»
«ContactCity», «ContactState» «ContactZipCode»

RE: «PatientFirstName» «PatientLastName»

Dear «ContactTitle» «ContactLastName»,

Congratulations on your new arrival! We hope your family is doing well.

As part of your newborn's routine follow-up care, an outpatient hearing screen was completed. Your child's hearing screening results indicate further testing is needed by an *audiologist*. This testing should be completed as soon as possible. Unidentified or late identified hearing loss can cause speech, language, or educational delays in your child's development.

Your child's outpatient hearing screen result:
Left Ear: «LastLeftEarOutcome» / Right Ear: «LastRightEarOutcome»

It is highly recommended your child receive a follow-up audiological evaluation by three months of age. Enclosed you will find a list of pediatric audiologists in North Dakota. *Please obtain a referral from your child's primary care physician and contact a pediatric audiologist for further evaluation.* A Right Track or Tribal Early Childhood Tracking Provider may be contacting you. These providers are from free developmental programs available to all families with infants residing in North Dakota. They can help answer questions regarding infant hearing and/or assist in making necessary audiological follow-up appointments. Keep this letter for your records and bring it to your next well-child visit.

You may also obtain more information about newborn hearing screening by visiting the ND EHQDI website at <http://www.ndcpd.org/ehdi> or by calling 1-800-233-1737.

Sincerely,

Ms. Sue Routledge
ND EHQDI Follow-up/Data Coordinator
North Dakota Early Hearing Detection & Intervention Program
MSU/North Dakota Center for Persons with Disabilities ~1-800-233-1737

Version 3: 7/9/2014

VERSION 4
Audiology Recommended
(past due or not attended)



«DateGenerated»

«ContactTitle» «ContactFirstName» «ContactLastName»
«ContactAddress» «ContactAptOrSuite»
«ContactCity», «ContactState» «ContactZipCode»

RE: «PatientFirstName» «PatientLastName»

Dear «ContactTitle» «ContactLastName»,

As part of your newborn's routine follow-up care, an outpatient hearing screen was completed. Your child's hearing screening results indicate further testing is needed by an *audiologist*; however, it appears a *scheduled audiology appointment is now past due or was not attended*. This testing should be completed as soon as possible. Unidentified or late identified hearing loss can cause speech, language, or educational delays in your child's development.

Your child's outpatient hearing screen result:
Left Ear: «LastLeftEarOutcome» / Right Ear: «LastRightEarOutcome»

It is highly recommended your child receive a follow-up audiological evaluation by three months of age. Enclosed you will find a list of pediatric audiologists in North Dakota. *Please obtain a referral from your child's primary care physician and contact a pediatric audiologist to reschedule an appointment further evaluation.* A Right Track or Tribal Early Childhood Tracking Provider may be contacting you. These providers are from free developmental programs available to all families with infants residing in North Dakota. They can help answer questions regarding infant hearing and/or assist in making necessary audiological follow-up appointments. Keep this letter for your records and bring it to your next well-child visit.

You may also obtain more information about newborn hearing screening by visiting the ND EHQDI website at <http://www.ndcpd.org/ehdi> or by calling 1-800-233-1737.

Sincerely,

Ms. Sue Routledge
ND EHQDI Follow-up/Data Coordinator
North Dakota Early Hearing Detection & Intervention Program
MSU/North Dakota Center for Persons with Disabilities ~1-800-233-1737

Version 4: 7/9/2014

REMINDER LETTER TEMPLATES

VERSION 5
Moved Out of State
(pending appointment or not scheduled)



«DateGenerated»

«ContactTitle» «ContactFirstName» «ContactLastName»
«ContactAddress» «ContactAptOrSuite»
«ContactCity», «ContactState» «ContactZipCode»

RE: «PatientFirstName» «PatientLastName»

Dear «ContactTitle» «ContactLastName»,

Congratulations on your new arrival! We hope your family is doing well.

It has come to our attention a very important part of your newborn's routine care has not been completed. Your child's hearing screening results indicate further testing is necessary. *Your child either missed having a hearing screen (ND = Not Done/Missed) or the results indicate your child did not pass the hearing screening (Refer = Did Not Pass).* In either case, it is very important your child returns for a follow-up hearing test as soon as possible. Complete hearing care is crucial. Unidentified or late identified hearing loss can cause speech, language, or educational delays in your child's development.

Your child's hearing result:

Left Ear: «LastLeftEarOutcomes» / Right Ear: «LastRightEarOutcomes»

Please contact your child's birth hospital, «FacilityName», at «FacilityPhone» or your health care provider for information regarding the importance of complete hearing care and to help schedule an appointment for your baby. It is important to keep your appointment. As a Non-North Dakota resident, you may also access state specific EHDI contact information at <http://www.infanthearing.org/states/index.html> which can provide you with additional state specific information and hearing care providers in your home state.

Please keep this letter for your records and we recommend bringing it to your next well child visit. You can also obtain more information about newborn hearing screening by visiting the ND EHDI website at <http://www.ndcpd.org/ehdi> or by calling 1-800-233-1737.

Sincerely,

Ms. Sue Routledge
ND EHDI Follow-up/Data Coordinator
North Dakota Early Hearing Detection & Intervention Program
MSU/North Dakota Center for Persons with Disabilities ~1-800-233-1737

Version 5: 7.9.2014



*Great things
are not done by impulse
but by a series of small things brought
together*

- Vincent Van Gogh

Strategies – PDSA #3 (3.1)

Care Path Identification/Determination and Implementation with New Letter Templates

- ❑ Identified and Determined new Care Paths & assigned New Letter Templates to Care Paths
- ❑ Test Care Paths with assigned Letter Templates (on UAT site)
 - Assure proper Care Paths and Letter Templates function properly
 - Assure inclusion of all populations with follow-up recommended

Findings:

Step 1: Implement/Test new Care Paths & Letter Templates on UAT site for population coverage



Benefits: Most Care Paths and Letter Topics pulled appropriate populations



Problem: An Outpatient & Audiology outcome of “Not Attended” prompted generation of 2 letters (audiology recommended)

- **Solution:** Discussion with co-worker lead to decision this is an “unfixable-rare circumstance”; be watchful; generate both letters, send appropriate letter. Verified solution with System Support person.

Step 2: Generate letters using System Functionality



Benefits:

- Eliminates several manual tracking steps (e.g. No longer need to track who previously received a letter; able to track number of letters produced easily)
- Manual searches are no longer required to identify populations
- New method does not pull unnecessary letters (e.g. Birth Screen refer with Outpatient pass outcome)
- Reduced the number of letter versions from 3 to 2 letters



Problem: Moved Out of State outcome (for non-residents birthed in ND) not covered in Care Paths

NEXT STEP: (Adapt and) Identify a Care Path and create a Letter Template for Moved Out of State outcome 12

Strategies – PDSA #3 (3.2)

Identify a Care Path and create a Letter Template for Moved Out of State outcome

- ❑ Identified a Care Path utilizing the Hearing Outcome = Moved Out of State
- ❑ Created a “generic” Moved Out of State Letter Template (functions for recommended outpatient screening or audiological follow-up)
- ❑ Test Care Path with assigned Letter Template for proper function (on UAT site)

Findings:

Implement/Test new Care Paths & Letter Templates on UAT site

👍 *Benefit: Care Path and Letter Topic pulled appropriately for non-resident population*

👍 *Benefit: Letters produced covered non-resident population at all outcomes with recommended follow-up*

Note: At this point, reminder letter generation includes 3 Letter Templates



NEXT STEP: (Adopt and) Pilot new Reminder Letter Method at one hospital

Strategies – PDSA #4 (4.1)

Pilot New Reminder Letter Method (one hospital)

- ❑ Identify one hospital to pilot
- ❑ Implement New Method at identified hospital on live System side

Findings:

Reminder Letter generated using New Method (1 hospital) and Old Method (3 hospitals)

👍 **Benefit: New Letter Method worked!**

- 👎 **Problem:** Both methods were time consuming... but for different reasons:
- **New Method** – unfamiliar; double checking to make sure appropriate letters generated took time
 - **Old Method** – prep work, manual searches to assure appropriate population letter generation occurred



NEXT STEP: (Adopt and) Spread to additional facilities on live System side

Strategies – PDSA #4 (4.2)

Pilot New Reminder Letter Method (additional 3 hospital sites)

- Identify three additional hospital sites
- Implement New Method at identified hospitals on System live side

Findings:

Implement/Test Care Paths & Letter Templates on live System side at 3 additional hospitals

 **Benefit: New Letter Method worked!**

 **Problem:** Current Care Paths prompt generation of a second letter of the same topic between an ***unscheduled follow-up appointment and the documentation of a follow-up appointment***. (outcome update from “required” and “pending”)“

- Problem was not identified at previous facility (previous facility does not enter follow-up appointment date/time)
- **Solution:** Reviewed; Decision = “not fixable”; However, easily identifiable. Second letter can be queued and not sent.

 **Problem:** System prompts generation of a second letter of same letter topic for ***pending appointments and past due appointments*** (for both outpatient and audiological appointments)

- Solution: Review indicates need for two additional Letter Templates and Cath Paths to notify parents of a missed scheduled appointment with recommendation to reschedule to assure complete hearing care.

NEXT STEP: (Adapt) Pilot New Reminder Letter Method after Past Due Paths/Letters determined and implemented

Strategies – PDSA #4 (4-3)

Pilot New Reminder Letter Method (after Past Due Care Paths/Letters Implemented)

- ❑ Determined new Care Paths & Created New Letter Templates for Past Due Appointments
- ❑ Test and Implement new Care Paths/Letter Templates

Findings:

New Care Paths and Past Due Letter Templates tested on UAT site

👍 **Benefit: New Past Due Care Paths and Letter Templates worked!**

Note: At this time, all Letter Templates were updated to include:

- a "Generated Date" (rather than rolling date)
- a "Footer" (indicating "letter version")

New Care Paths and Past Due Letter Templates tested on live System

👍 **Benefit: New Past Due Care Paths and Letter Templates worked!**

Note: At this point, reminder letter generation includes 5 Letter Templates

- Version 1: Outpatient appointment recommended (appt required-not scheduled/pending)
- Version 2: Outpatient appointment past due/not attended
- Version 3: Audiology appointment recommended (appt required-not scheduled/pending)
- Version 4: Audiology appointment past due/not attended
- Version 5: Moved Out of State with recommended outpatient follow-up

NEXT STEPS: (Adopt and)

- Begin writing a *Reminder Letter Training Manual*
- Continue collecting data to determining *Reminder Letter Efficiency*
- Begin a *Reminder Letter Effectiveness Survey*



Strategies – PDSA #5

Develop Reminder Letter Manual & Offer Training to Follow-up Coordinators

- ❑ Develop Reminder Letter Training Manual
- ❑ Provided Training to Follow-up Coordinators

Findings:

Reminder Letter Training Manual completed and Follow-up Coordinators Trained

 **Benefits:**

- *Training Manual was found useful and a good resource guide*
- *New Reminder Letter Method was implemented at remaining birthing facilities utilizing ND EHDI letters*
- *Reviews from Follow-up Coordinators indicated:*
 - ✓ Process is faster...much quicker to just push a letters button
 - ✓ Less manual tracking and prep work...great to see at a glance if a letter needs to be sent
 - ✓ Efficient...process for generating letters is more efficient
 - ✓ “New Letters are great!” Love that they are customized for each hospital and include hearing results, name and phone number for the facility for follow-up and our signature

NEXT STEPS: (Adopt and)

- Determine *Reminder Letter Efficiency*
- Determine *Reminder Letter Effectiveness Survey*

Strategies – PDSA #6

Reminder Letter Production Time/Efficiency

- ❑ Collect and compare production times between Old Method and New Method
- ❑ Compare New Method production times at initial implementation to later (seasoned) production times

Findings:

Baseline Data Production Time- Old (Manual) Method

 Problem: Time consuming - **Average Run Time = 9.8 minutes per letter**

Manual vs. New Method Letter Production Time

- ✓  Follow-up Coordinator #1:
 - 9.8 minutes per letter (old method, data set 1) to 5.45 minutes per letter (new method, data set 2) = 44%
- ✓ Follow-up Coordinator #2:
 - 9.8 minutes per letter (old method, data set 1) to 4.0 minutes per letter (new method, data set 2) = 59%

New Method increased efficiency between 44-59%

New Method (initial; July-Aug 2014) vs. New Method (seasoned; Jan-Feb 2015) Letter Production Time

- ✓  Follow-up Coordinator #2 Initial Average Run Time = 4.17 minutes/letter
- ✓ Follow-up Coordinator #2 Seasoned Average Run Time = 2.5 minutes/letter

Proficiency with New Method increased efficiency by another 40%

NEXT STEPS: (Adopt and)

- Determine *Reminder Letter Effectiveness - Survey*

MEASUREMENT – PDSA #6

Manual vs. New Method of Letter Production Time

Follow-up Coordinator #1	Total # letters	Total # Facilities	Total time (minutes)	Average time per letter (in minutes)
log #3				
2/9/2015	22	2	120	5.45
5.45 minutes per letter				

data set 2

New Method increased efficiency between 44-59%

- ☐ Follow-up Coordinator #1:
 - 9.8 minutes per letter (old method, data set 1) to 5.45 minutes per letter (new method, data set 2) = 44%
- ☐ Follow-up Coordinator #2:
 - 9.8 minutes per letter (old method, data set 1) to 4.0 minutes per letter (new method, data set 2) = 59%

Follow-up Coordinator #2	Total # letters	Total # Facilities	Total time (minutes)	Average time per letter (minutes)
7/23/2014	9	3	42	4.67
7/25/2014	16	4	63	3.94
7/29/2014	24	3	81	3.38
7/31/2014	8	3	31	3.88
8/4/2014	11	4	49	4.45
8/11/2014	8	2	39	4.88
8/12/2014	6	1	19	3.16
8/12/2014	2	1	7	3.5
Average Run Time = 4.0 minutes per letter				

data set 3

MEASUREMENT – PDSA #6

New Method - Increased efficiency with proficiency

(New Method July-Aug 2014)

Follow-up Coordinator #2	Total # letters	Total # Facilities	Total time (minutes)	Average time per letter (minutes)
log #1				
7/23/2014	9	3	42	4.67
7/25/2014	16	4	63	3.94
7/29/2014	24	3	81	3.38
7/31/2014	8	3	31	3.88
				3.96
log #2				
8/4/2014	11	4	49	4.45
8/11/2014	8	2	39	4.88
8/12/2014	6	1	19	3.16
8/12/2014	2	1	7	3.5
8/21/2014	13	2	41	3.15
8/21/2014	1	1	8	8
8/21/2014	8	1	28	3.51
				4.38
Average Run Time = 4.17 minutes per letter				

(New Method Jan-Feb 2015)

Follow-up Coordinator #2	Total # letters	Total # Facilities	Total time (minutes)	Average time per letter (minutes)
log #1				
1/21/2015	5	1	12	2.41
1/21/2015	4	1	10	2.53
1/29/2015	20	1	44	2.23
1/29/2015	4	1	10	2.51
log #2				
2/4/2015	7	1	18	2.62
2/4/2015	5	1	12	2.43
2/4/2015	7	1	18	2.64
2/6/2015	6	1	16	2.67
2/9/2015	6	2	15	2.50
				2.57
Average Run Time = 2.50 minutes per letter				



Proficiency with New Method increased efficiency by another 40% !!

Strategies – PDSA #7

Reminder Letter Effectiveness

- ❑ Identify an audiologist(s) willing to administer a parental survey
- ❑ Develop Survey
 - Collaboratively worked with audiologist to create the survey
- ❑ Determine a list of candidates
 - 14 Candidates identified – ND EHDI had sent each candidate one of five Reminder Letters
 - Audiologists were asked to survey 5-10 candidates
- ❑ Collect data

Findings:

Surveys were offered to 7 Candidates

- 6 of 7 Families chose to complete the survey
- Outcome:
 - 👍 Q1) Was Reminder letter received? *6 of 6 families had received the letter*
 - 👍 Q2) Was the letter a helpful reminder to attend a follow-up appointment? *6 of 6 families indicated "yes"*

Reminder letters are "Effective"

Additional information:

- 6 of 6 candidates had follow-up appointments schedule by the hospital prior to discharge
- 5 of 6 appointment were documented in the System



MEASUREMENT – PDSA #7

ND Early Hearing Detection & Intervention



Hearing Rescreen Questionnaire

Hospital Name



Did you receive a letter from the ND EHCI (North Dakota Early Hearing Detection and Intervention) Program reminding you to return for a recommended hearing rescreen?

yes no

If so, was the letter a helpful reminder to attend today's appointment?.....
 Do you have any suggestions to make the letter more helpful?

yes no

The ND EHCI program and your audiologist are working together to improve and promote complete infant hearing health care. Our goal with this survey to is learn what may help encourage families to bring their infants back for their newborn hearing rescreen.

We thank you for your time and assistance with this process.

Sincerely,
 The ND EHCI team and your audiologist

6.13.2014

ND Early Hearing Detection & Intervention



Hearing Rescreen Questionnaire

Hospital Name



Did you receive a letter from the ND EHCI (North Dakota Early Hearing Detection and Intervention) Program reminding you to return for a recommended hearing rescreen?

yes no

If so, was the letter a helpful reminder to attend today's appointment?.....
 Do you have any suggestions to make the letter more helpful?

yes no

What was the reason(s) you brought your child in for today's hearing screen?

1. This appointment was scheduled by the hospital before discharge.....
2. The hospital nursery staff recommended a hearing rescreen.....
3. My child's doctor told me to have his/her hearing re-tested.....
4. Another reason? (please explain)

yes no

The ND EHCI program and your audiologist are working together to improve and promote complete infant hearing health care. Our goal with this survey to is learn what may help encourage families to bring their infants back for their newborn hearing rescreen. We thank you for your time and assistance with this process.

Sincerely,
 The ND EHCI team and your audiologist

7/23/2014



LESSONS LEARNED & NEXT STEPS

Lessons Learned:

- ❖ Not everything works as expected the first time!
- ❖ It may never be perfect but can be better-adaptable
- ❖ It is always good to review what and how other team members do things
 - Simplify processes, increase efficiency & effectiveness

Next Steps:

- ❖ Parental survey could be spread to additional facilities to see if effective elsewhere
- ❖ Hospitals can be offered to generate Reminder Letters to increase program sustainability
- ❖ Add additional letters to break out missed and referred or additional outcomes
- ❖ Future PDSA cycle(s); addition of promo items to letters (see if increases response/decreases LTF)
 - Promo material (pens, pizza cutters)
 - Statewide Audiology Contact List
 - Risk Factor Reminder Card
 - Brochures



DOVE Chocolate Quote:

Success is the sum of many small efforts.

QUESTIONS??