

Baby's First Message: Next Steps and Lessons Learned after Achieving Statewide Implementation of an Electronic System

Amy Gaviglio Genetic Counselor/Follow-Up Supervisor

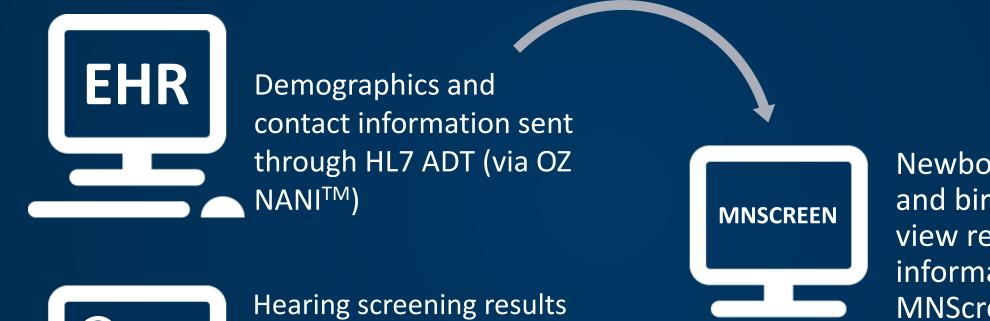
September 12, 2017



September 2014 to June 2017



Electronic Reporting



uploaded or streamed

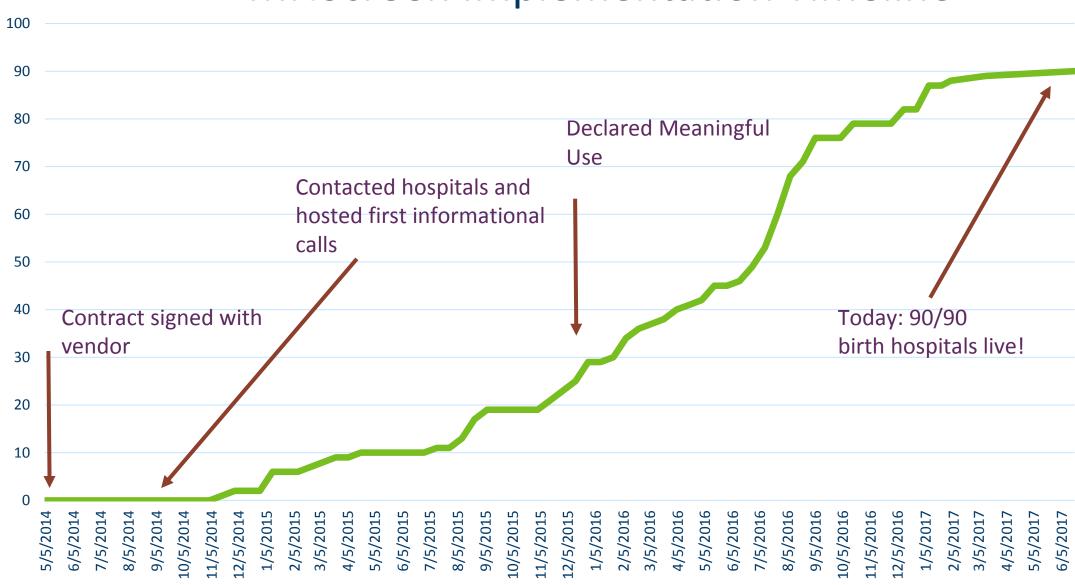
from screening device

(via OZ Telepathy

EHDI/CCHDTM)

Newborn Screening and birth hospital staff view reported information in MNScreen web portal

MNScreen Implementation Timeline

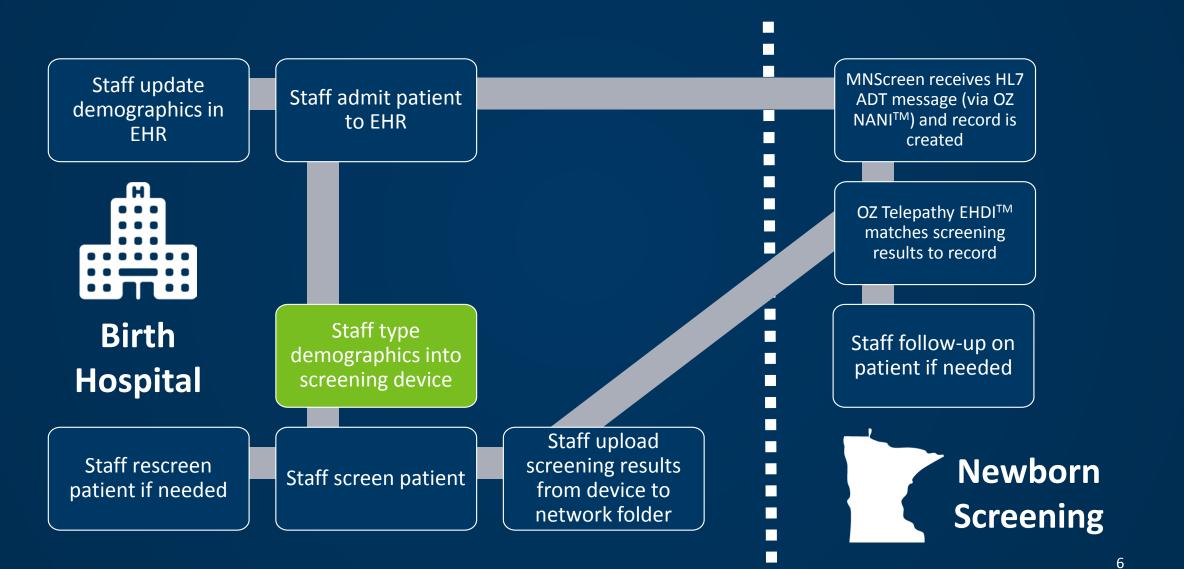




Paper Reporting

Staff type Staff update Staff admit patient demographic demographics in to EHR information into **EHR** database Staff mail blood Staff use EHR to Staff type write spot card to screening results demographics on Newborn into database blood spot card Screening program П Birth Staff type Staff write Staff follow-up on demographics into screening results П patient if needed Hospital screening device on blood spot card П Staff type Staff rescreen Newborn П Staff screen patient screening results patient if needed into EHR Screening

Electronic Reporting



Electronic Reporting

Challenges

- Stakeholder engagement
- Obtaining certain data elements and device connectivity issues
- Critical access hospitals and outof-hospital birth population
- Staff time, end user training, ongoing training, and maintenance

Successes

- All birth hospitals onboarded as of June 2017
- MNScreen declared as a specialized registry for Meaningful Use
- Timely and accurate reporting
- Integration of clinical decision support

Lessons Learned

- Always be ready for the unexpected...
 - Utilize project management tools and techniques and keep a problem log
- Each facility is different.
- Electronic Reporting Removes Some Issues, and Creates Others:
 - Post-production monitoring necessary when project involves workflow changes
 - Still see:
 - Serial screening
 - Algorithm adherence
 - Mis-entry into EMR

Looking forward:

2017 and beyond



What's next?



Send hearing & CCHD screening results to hospitals' EHRs for auto charting



Electronic reporting of outpatient hearing screening results and diagnostic assessments



Send demographic information to laboratory information system for newborn blood spot screening

NewSteps 360 Grant

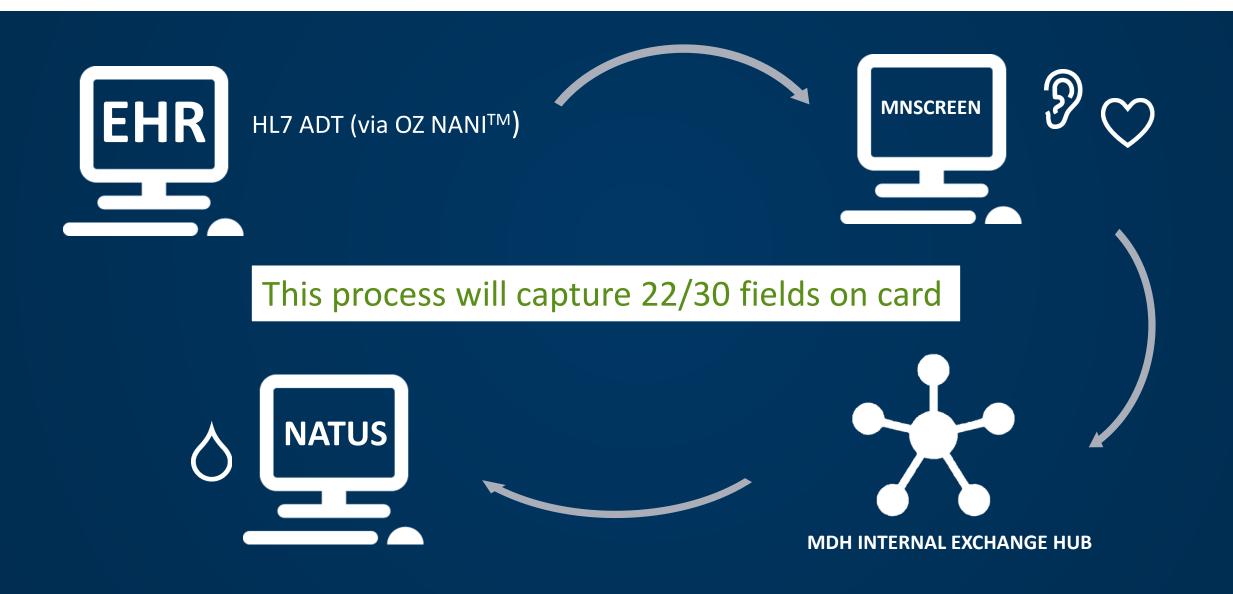


Electronic Lab Ordering and Reporting via HL7 through Exchange Hub

Need versus Nice to Have

- Currently have 37 fields on Newborn Screening Card
- Program analyzed data quality and use of each field and decided to remove in order to simplify the order message:
 - Birth Defects: Y/N
 - Deceased Siblings: Y/N and Cause of Death:
 - Maternal Pregnancy Complications (AFLP/HELLP): Y/N
 - Family Hx of Disorder on Screening Panel: Y/N
 - Antibiotics: Y/N
 - Collected By
 - Breast vs. Milk vs. Soy formula (retained TPN (Y/N) only)

Utilizing the Existing Connection





What about the remaining 8 fields?

