



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

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A look back:

September 2014 to
June 2017



Electronic Reporting



Demographics and contact information sent through HL7 ADT (via OZ NANI™)



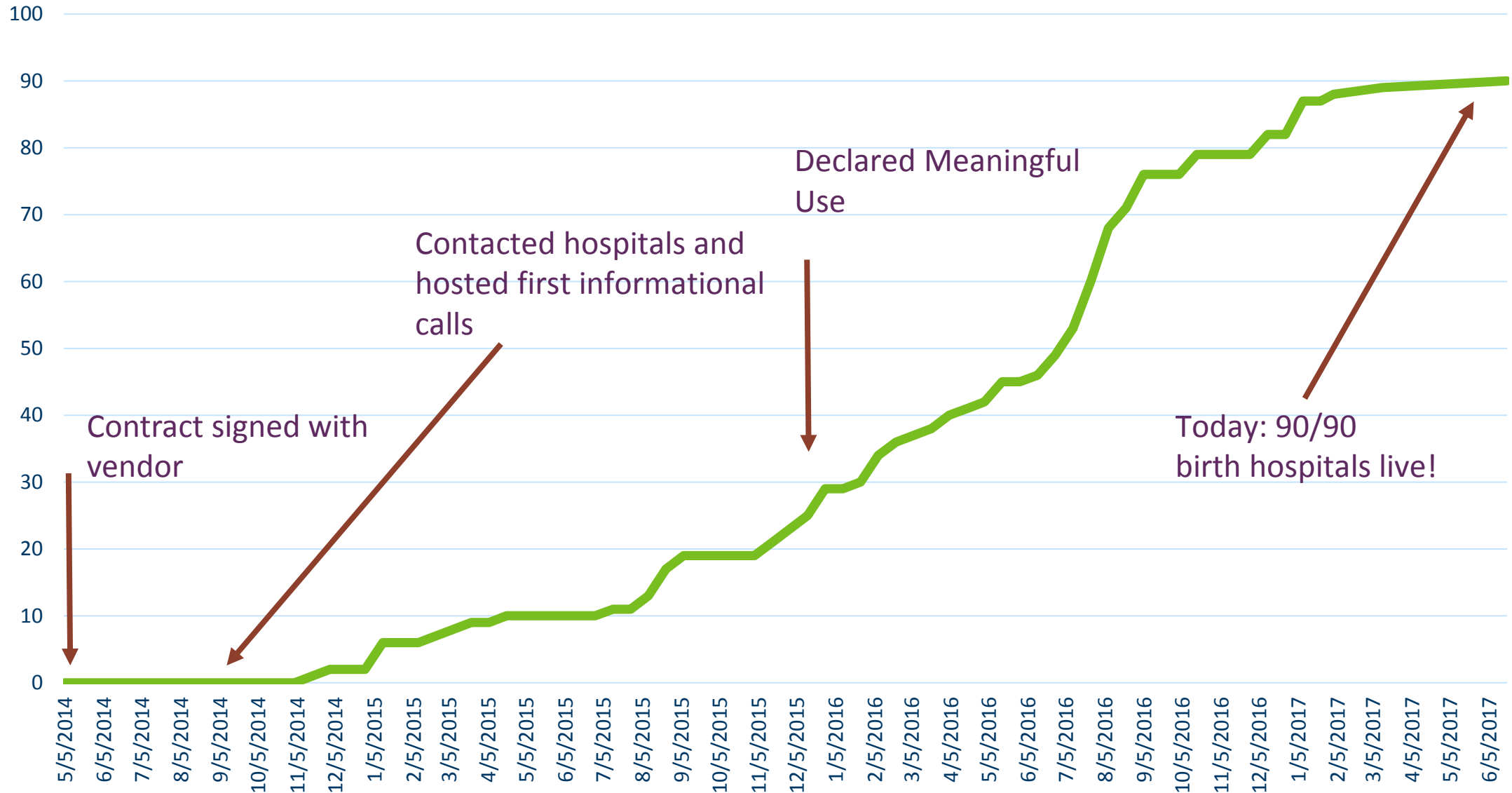
Newborn Screening and birth hospital staff view reported information in MNScreen web portal



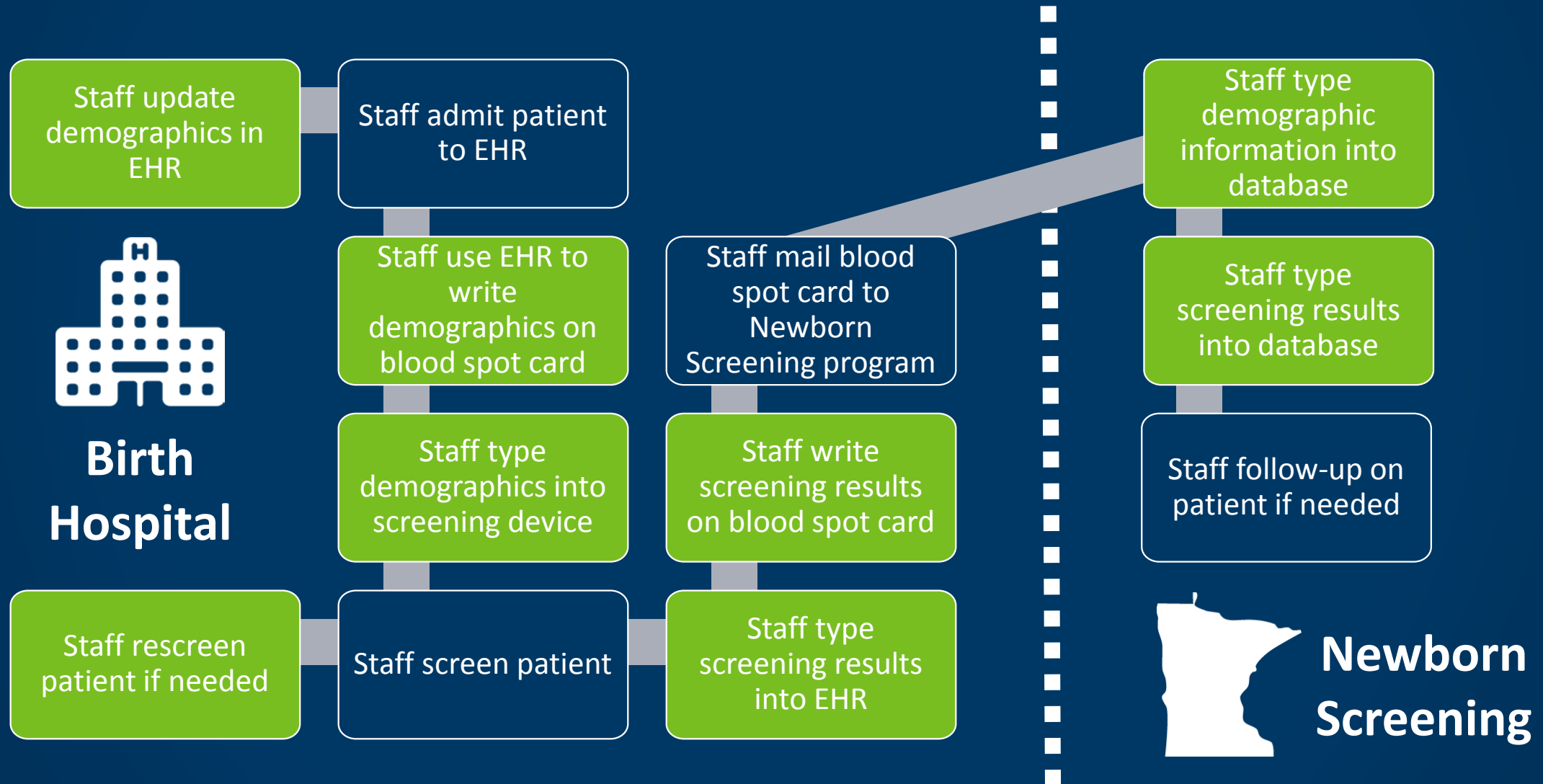
Hearing screening results uploaded or streamed from screening device (via OZ Telepathy EHDI/CCHD™)



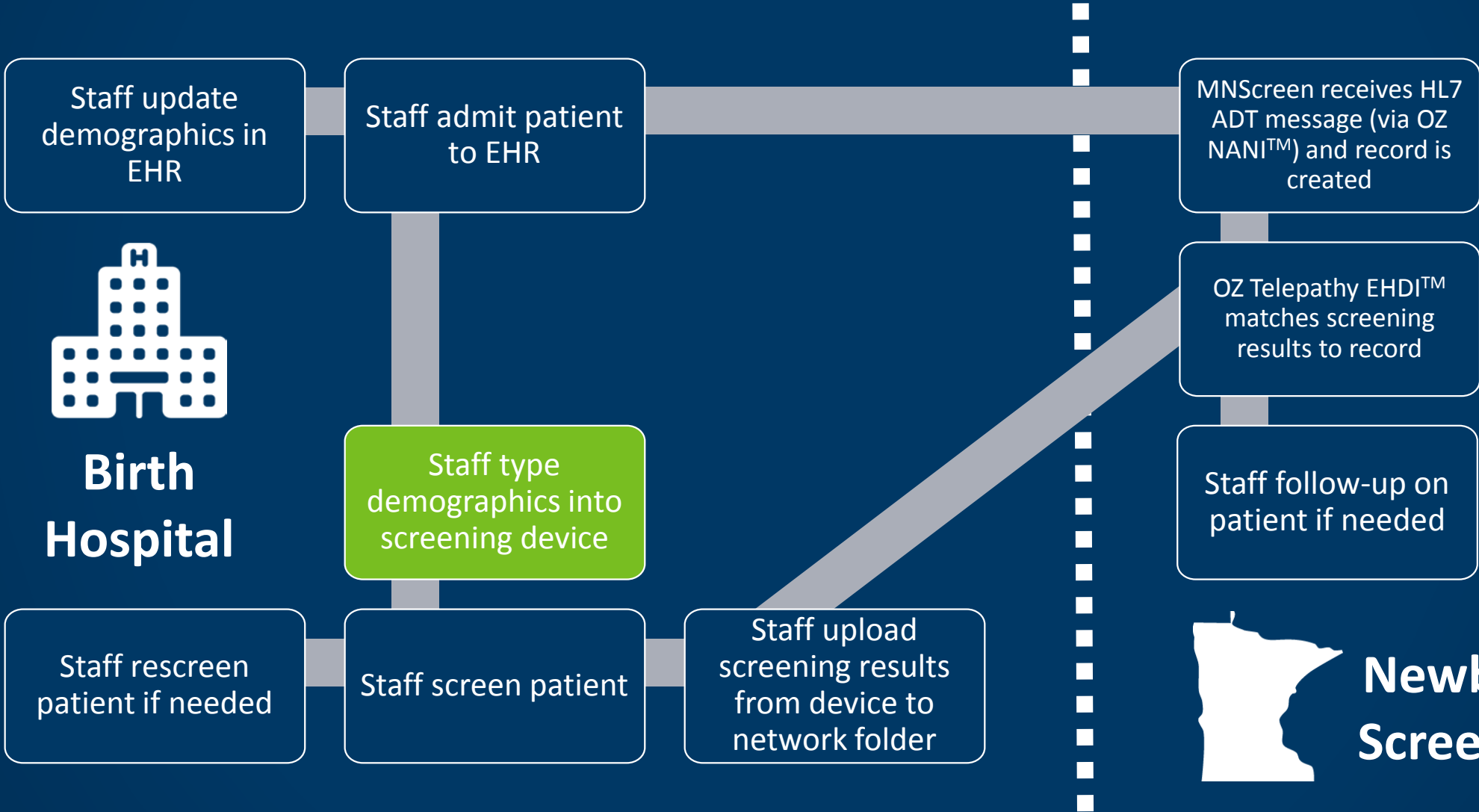
MNScreen Implementation Timeline



Paper Reporting



Electronic Reporting



Electronic Reporting

Challenges

- Stakeholder engagement
- Obtaining certain data elements and device connectivity issues
- Critical access hospitals and out-of-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

- **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

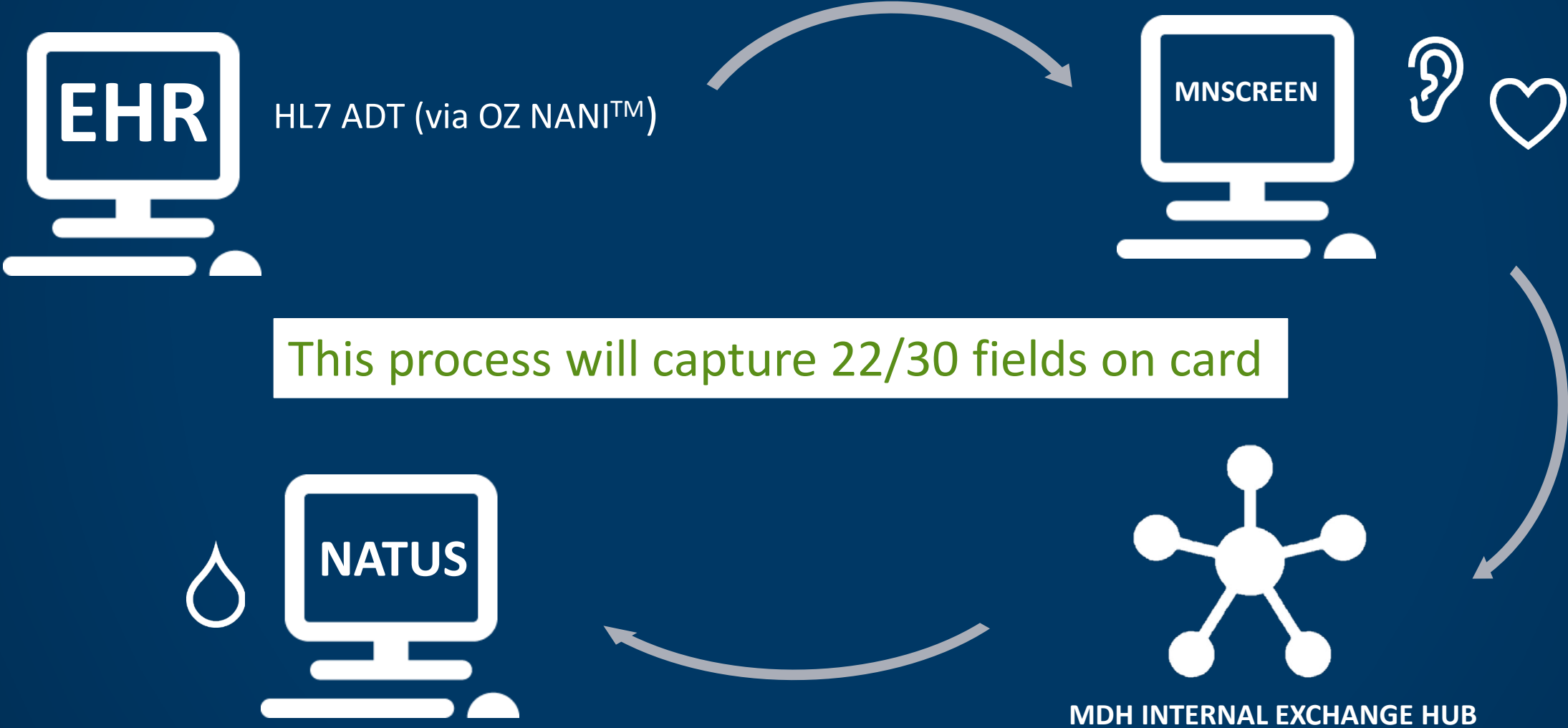


Electronic Lab Ordering and Reporting via HL7 through Exchange Hub

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?



HL7 ORM

- 1) Currently constraining HL7 Version 2.5.1 Implementation Guide: Laboratory Orders (LOI) from EHR
- 2) AOE's will be used to obtain fields not readily accessible in EHR:
 - TPN (Y/N)
 - Transfusion (Y/N)
 - Primary Physician/Clinic



ics from
OZ NANI ADT in
holding table



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Thank you: **Kaitlin Houlihan,**
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