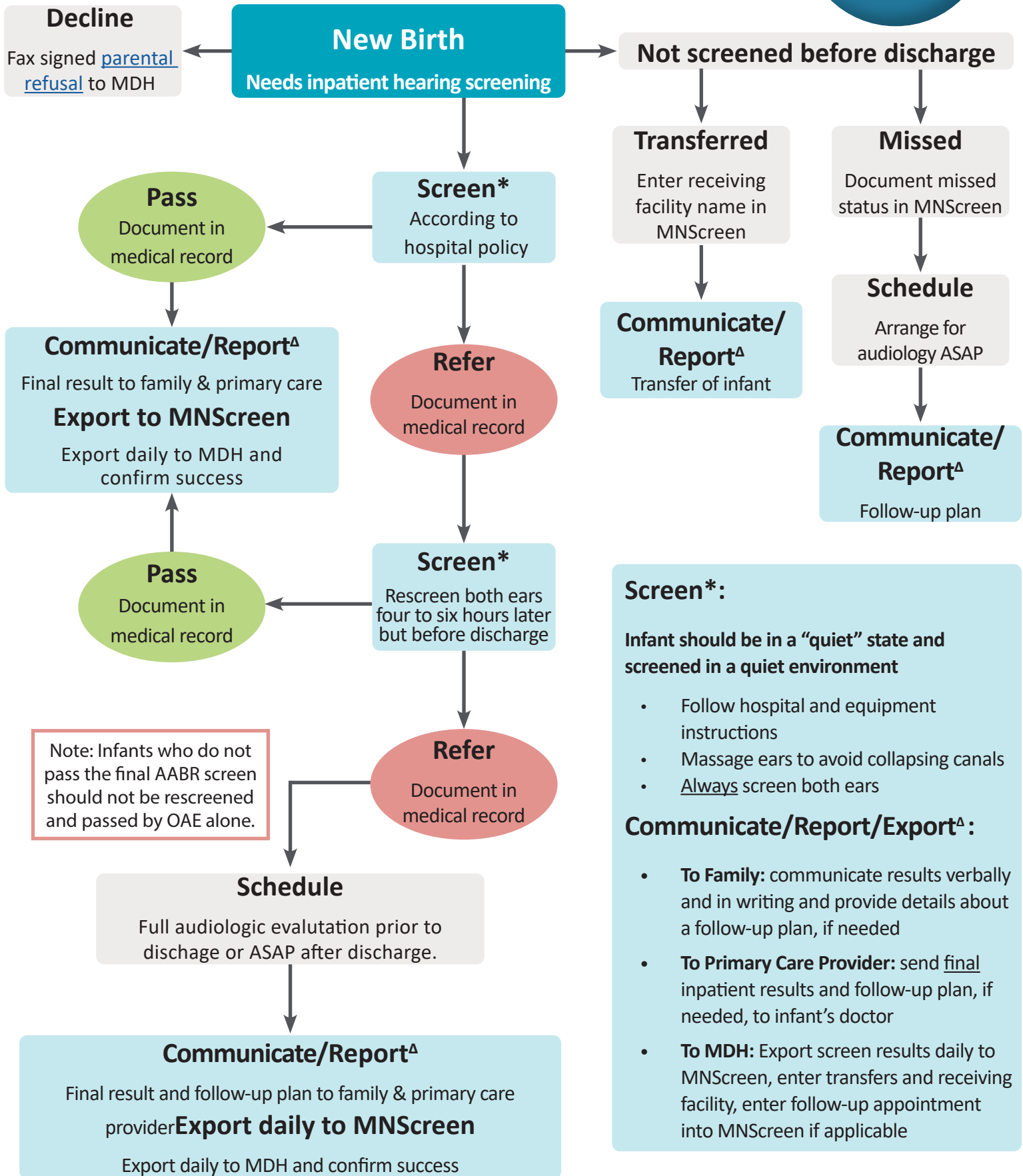


# Newborn Hearing Screening Flowchart

## NICU and Special Care Nursery

Minnesota Newborn Screening Program



### Screen\*:

Infant should be in a “quiet” state and screened in a quiet environment

- Follow hospital and equipment instructions
- Massage ears to avoid collapsing canals
- Always screen both ears

### Communicate/Report/Export^A:

- **To Family:** communicate results verbally and in writing and provide details about a follow-up plan, if needed
- **To Primary Care Provider:** send final inpatient results and follow-up plan, if needed, to infant’s doctor
- **To MDH:** Export screen results daily to MNScreen, enter transfers and receiving facility, enter follow-up appointment into MNScreen if applicable

# Myths vs Clinical Facts of Newborn Hearing Screening and Early Diagnosis

**MYTH:** Hearing loss does not occur very often.

**FACT:** Hearing loss affects about one to three per 1000 births, and is considered to be one of the most common congenital findings.

**MYTH:** There is no rush to identify hearing loss.

**FACT:** Infants identified with hearing loss before 3 months of age can begin early intervention and avoid speech and language delays; those with late diagnosis and intervention may never catch up.

**MYTH:** It is OK to combine results from different screening tests to equal a passing result.

**FACT:** Combining results from different test sessions is NOT recommended and may miss identifying hearing loss.

**MYTH:** Parents can test a child's hearing by making loud noises near the child.

**FACT:** Some babies with hearing loss can still startle to loud noises or respond to some softer sounds, but may not be able to hear all the sounds important for speech. Thorough hearing testing is needed to find all types/levels of hearing loss that can affect speech/language development.

**MYTH:** There are too many referrals from hospitals.

**FACT:** The REFER rate at hospital discharge in Minnesota is ~7%. After the first outpatient rescreen, only about 2% of all newborns require diagnostic ABR.

**MYTH:** Abnormal otoacoustic emissions (OAEs) along with a flat tympanogram (normal volume) confirms a conductive hearing loss.

**FACT:** Diagnostic ABR including bone conduction testing is needed in combination with OAEs and tympanograms for a complete diagnosis of type and degree of hearing loss in each ear, and to rule out underlying sensorineural hearing loss.

**MYTH:** Infants who need diagnostic testing with an audiologist must be sedated.

**FACT:** Younger infants (ideally between 4 to 8 weeks of age) can typically be tested without need for sedation.

**MYTH:** Repeated outpatient rescreening is more cost-effective than referring for diagnostic ABR.

**FACT:** Repeated rescreens often cause infants to become lost to follow-up. Those who continue with multiple screens often still require diagnostic ABR—which may require sedation—at a significant cost increase.

**MYTH:** It is not as important to complete diagnostic testing by 3 months of age for infants with a REFER result in just one ear.

**FACT:** Prompt diagnosis/intervention of unilateral permanent hearing loss is best practice. This can also lead to more proactive management of middle ear issues that may impact hearing in the better ear.



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\*translators available

# Newborn Hearing Screening Flowchart for NICU and Special Care Nursery

## Outline of Newborn Hearing Screening Protocol

### Parent(s)/guardian(s) decline newborn hearing screening:

- Fax signed [Parental Refusal or Delay of Newborn Screening](#) to MDH

### Newborn was not screened before discharge:

- The newborn is transferred before newborn hearing screening is completed:
  - Enter receiving facility's name in MNScreen.
  - Report infant transfer to family, primary care provider, and to MDH.
- The newborn hearing screening is missed:
  - Document missed status in MNScreen.
  - Schedule newborn hearing screen with Audiologist ASAP.
  - Communicate follow-up plan with family, primary care provider, and MDH.

### Newborn receives a passing result on initial newborn hearing screening:

- Document results in medical record.
- Communicate final result to family and primary care provider.
- Export results to MNScreen.

### Newborn receives a refer result on initial hearing screen:

- Document results in medical record.
- Rescreen **both** ears four to six hours later but **before** discharge.

### Newborn receives a refer result on hearing rescreen:

- Document results in medical record.
- Schedule full audiologic evaluation prior to discharge or ASAP after discharge.
- Communicate final results and follow-up plan to family and primary care provider.
- Export results to MNScreen.

### Newborn receives a passing result on hearing rescreen:

- Document results in medical record.
- Communicate final results and follow-up plan to family and primary care provider.
- Export results to MNScreen.

## Note

Infants who do not pass the final AABR screen should not be rescreened and passed by OAE alone.