

# Enhancing the New York State Early Hearing Detection and Intervention Information System (NY EHDI-IS) to Strengthen and Improve 1-3-6 EHDI Goals

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## BACKGROUND

New York Early Hearing Detection and Intervention (NY EHDI) Program is dedicated to the early identification of infants who are deaf or hard-of-hearing, so they can receive timely follow-up services that promote their language, literacy, cognitive, social, and emotional growth. The New York State Early Hearing Detection and Intervention Information System (NY EHDI-IS) was established to collect newborn hearing screening data, follow-up and diagnostic information, and referrals to early intervention. The system provides this information to providers and county health departments to ensure that all infants are screened by 1 month of age, receive appropriate follow-up by 3 months of age if they do not pass initial screening, and are referred to early intervention services by 6 months of age. While New York State consistently screens the majority of newborns, challenges persist in ensuring timely diagnostic evaluations, service linkage, incomplete or delayed data entry and inconsistent reporting formats. Addressing identified issues in the NY EHDI-IS will help strengthen data collection for the NY EHDI Program.

The NY EHDI-IS enhancement project has been designed by the NY EHDI Program in collaboration with the New York State Office of Information Technology Services team to improve data quality, streamline provider engagement, and analytical functionality. NY EHDI-IS is being enhanced through integration with key state-level data systems and is essential for tracking infants from birth through screening, diagnosis, and referral. The goal of the NY EHDI-IS enhancement project is to improve data collection and strengthen EHDI 1-3-6 goals of screening by 1 month of age, diagnosis by 3 months of age, and early intervention by 3 months of age across New York State.

## OBJECTIVES

- ❖ Identify core data components of the NY EHDI-IS.
- ❖ Explore ways through which the NY EHDI-IS enhancements are designed to improve system efficiency, functionality, data quality, data management, follow-up, and tracking.
- ❖ Highlights how the NY EHDI-IS enhancement may strengthen 1-3-6 EHDI goals in New York State.

## ACKNOWLEDGEMENT

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## METHODOLOGY

NY EHDI-IS enhancement project items includes:

- ❖ Enable child records merge in New York State Immunization Information System (NYSIIS): this process safeguards against data discrepancies and maintains the integrity of child health records following a merge event.
- ❖ Enable updates from New York City vital records (eVitals/EVERS): Modification was performed on newly developed batch process to fetch the updated records.
- ❖ Add new fields to eVitals/EVERS database: this involves expanding the existing eVitals/EVERS database tables to accommodate additional data elements and make corresponding modification to the database table and view. These new fields were updated into the NY EHDI Data Dictionary.
- ❖ Update NY EHDI-IS user interface and data entry fields: NY EHDI-IS User interface "Screen Updates" were updated based on feedback.

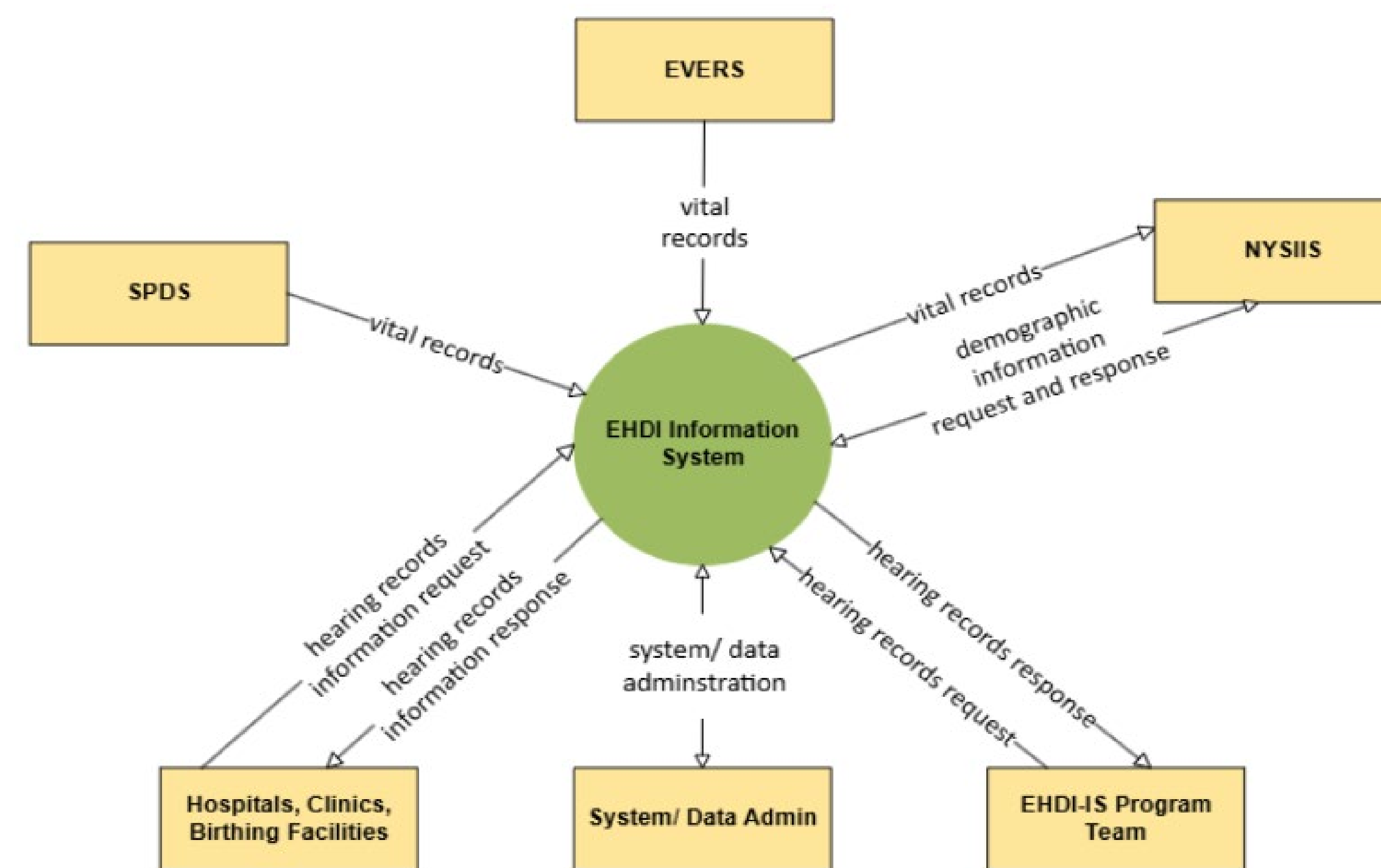


Figure 1: NY EHDI-IS context diagram illustrating EHDII-IS interactions with external entities such as Users, other systems, and data stores.

Figure 1 shows NY EHDI-IS data flows illustrating how newborn hearing screening data is transmitted from vital records, birth facilities, and providers to the NY EHDI-IS. The diagram identifies all reporting sources such as birthing hospitals, outpatient audiologists, primary care providers, and linked databases including NYSIIS, eVitals/EVERS and New York State vital records (SPDS). The flow structure was used to map data entry points, locate gaps in reporting, and assess where infants may become lost to follow-up or documentation.

## RESULTS

- ❖ The NY EHDI-IS enhancement project was completed in 2025.
- ❖ Implementation of NY EHDI-IS data entry updates requires users to report all hearing screening, diagnosis and referrals made to early intervention information in NY EHDI-IS which may improve documentation and enhance 1-3-6 EHDI goals. Some data entry updates are shown in Figure 2.

## RESULTS CONTINUED

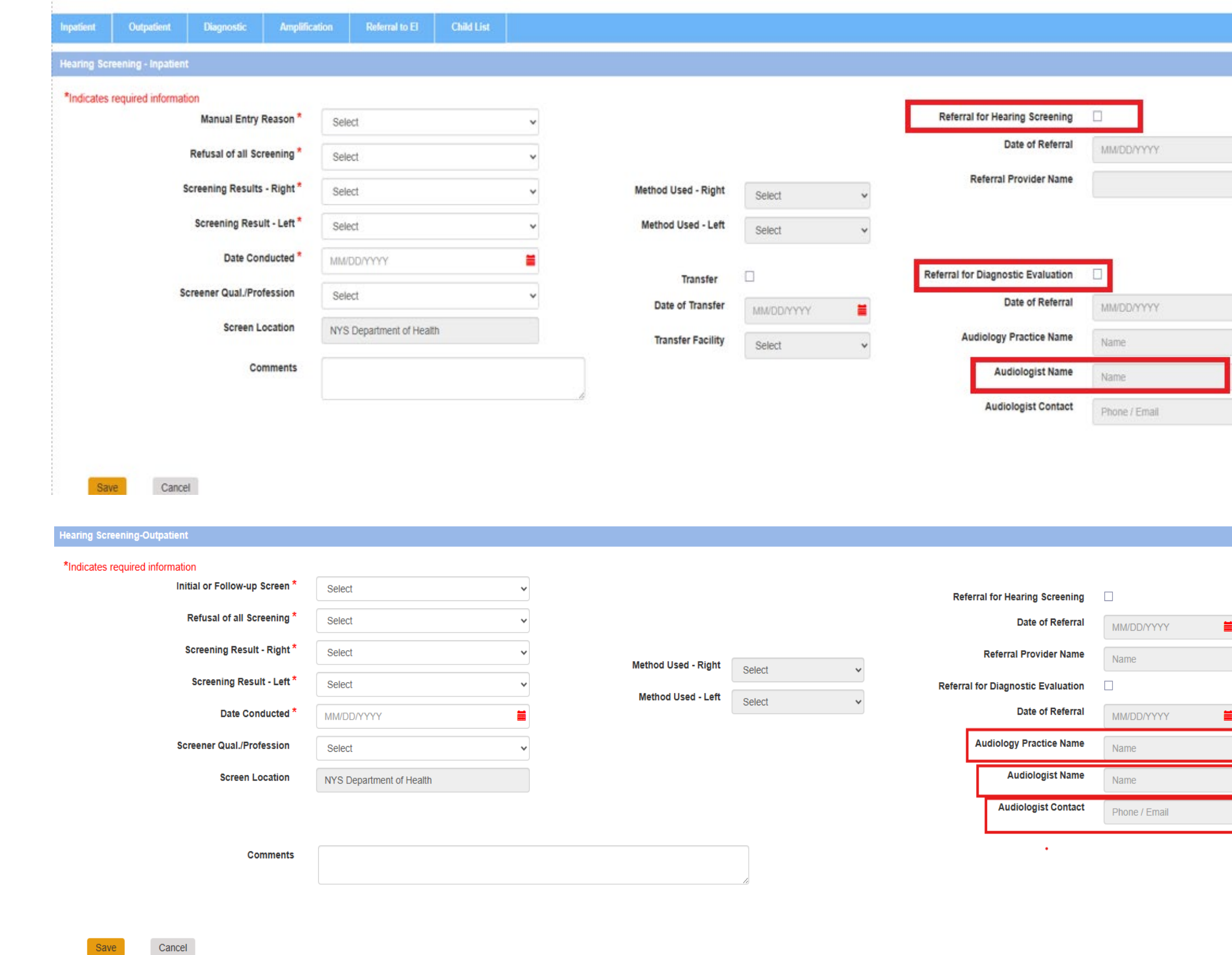


Figure 2 : Screenshots of data entry updates made in NY EHDI-IS indicated in red rectangles.

## DISCUSSION & CONCLUSION

- ❖ Enhancing the NY EHDI-IS reduces data gaps that hindered timely follow-up.
- ❖ Data entry updates function to add, correct, and finalize infant hearing screening information in the EHDII-IS.
- ❖ Improving NY EHDI-IS supports early identification of hearing loss, optimizes family-centered care, and improves long-term developmental outcomes for New York infants.
- ❖ Enhancing the NY EHDI-IS improves timeliness, accuracy, and coordination across all stages of the EHDI continuum. These improvements reduce loss to follow-up and documentation, ensure infants progress through screening, diagnosis, and intervention without delay, and ultimately increase statewide achievement of the 1-3-6 goals.
- ❖ User guide utilization help to improve data quality and completeness.

## FUTURE DIRECTIONS

- ❖ Automate data reports to improve timeliness follow-up for infant at risk.
- ❖ The NY EHDI Program continues to provide training and technical assistance.
- ❖ The NY EHDI Program continues to strengthen diagnostic reporting and follow-up tracking using data-driven strategies.