



IHE Work Item Proposal (Short)

1. Proposed Work Item: XDW-EHDI

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Domain: PCC

2. The Problem

To facilitate the standardization and integration of health data between clinical care and public health, new capabilities for processing the information in the context of the clinical and public health workflows are needed to create robust overarching health information exchange which enables improved health outcomes on a personal and national scale.

This IHE Integration Profile will enable execution of a common workflow and data generation for public health reporting and information exchanges between clinical and program-specific public health information systems. The focus will be the workflow associated with early hearing detection and intervention (EHDI). The workflow includes newborn hearing screening at the birthing facility that facilitates generation and management of the care plans on hearing monitoring throughout the routine well child care as well as special care for children with or at risk for hearing-loss.

3. Key Use Case

The use case addresses the workflow and data flow supporting the newborn hearing screening and short-term care plan guidance (for up to 3 years of age). This includes the following steps:

1. Newborn screening at the birthing facility using devices with a current approved physiologic measures of auditory function
2. Computation of the hearing screening outcomes report
3. Generation of the early hearing care plan (EHCP)
4. Provision of the EHCP recommendations to pediatricians to guide hearing care
5. Quality assessment on the hearing screening and short-term care follow-up.

Please note that we may include in this profile further workflow steps related to the special care for children with the confirmed hearing loss. This may include referrals for specialists (Cochlear implants; special education and other).

4. Standards & Systems

The XDW-EHDI profile will utilize the XDW profile framework to specify the needed information flow. It will also draw upon PCD-01 profile which describes the creation and transmission of messages from medical devices to generate results of hearing screenings. The profile will also use various ITI integration profiles to support CDA-based data exchanges on hearing screening outcomes, EHCP and quality measures used in the provision of well child care as well as care for children with hearing-loss. Lastly, the profile will use QRPH profiles that specify content for EHDI data exchanges such as QME-EHDI and EHCP.

5. Discussion

ITI Committee is the developer of the XDW profile for specifying document-based workflow automation. The PCC Committee has prior experience in the development of profiles addressing specific use cases where the XDW framework has been applied. The expertise of the PCC's technical committee and the opportunity to collaborate with other implementers of the XDW profiles will provide the needed expertise to support this profile's development.

The following diagram (page 3) shows the basic workflow which will be specified for newborn hearing screening using the XDW framework. Please note that quality assessments will be performed at each step in the workflow.

Figure 1 – Early Hearing Detection and Intervention Workflow Steps

