A Hand-held Application for Individual Family Service Plan (IFSP)

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Abstract
An Individualized Family Service Plan (IFSP) is a widely used service plan for children with disabilities in the community health. This project developed a hand-held computer application to collect IFSP data from children families. The tool provides user friendly interfaces in a Tablet PC, using E-tables.

Introduction
For each child receiving early intervention, an IFSP is developed by the IFSP team. The IFSP lists the specific types and level of services needed; where those services will be provided; and who or what agency will provide them. The IFSP will also contain goals and expected outcomes for each service, and a way to monitor the child's progress. Presently, IFSP data are typically stored in paper format. The hand-held computer application could collect data in a digital format, which can be retrieved easily for outcome measurement and other reporting purposes. The portable handheld application will allow the user to enter data using a keyboard or an electronic pen (as in using a pen and paper). In this project, an IFSP Tablet-PC application was designed and developed at the University of Wisconsin-Milwaukee.

Methods
User requirements were systematically analyzed by user interviews in the focus group meetings and an online survey. One of challenging issues for implementation of hand-held applications is user interface design in a small window. To shorten the curve of learning a new Tablet-PC application for IFSP, the electronic form is designed closely based on the paper format. The service providers are familiar with the interfaces and are more willing to accept and use them. Due the screen size, tabs are used for navigating through the forms. In addition, we also employed E-table for case selection. E-table uses the concept of focus and context where information that is in focus is shown completely and information out of focus is shown less depending on the distance from the focal point. The application is written in Java and the data is encoded in XML format.

Results
A prototype IFSP Tablet-PC application is successfully developed at UWM (see Figure1). The tool allows the service providers to quickly gather IFSP data from child families.

Figure 1. Screenshots of the ISFP application.

The digital IFSP data will be stored in the central database, which will allow quick access and sharing between the agency providing services. The outcomes of services can be measured based on the IFSP data.

Discussion
A pilot study in the early intervention programs at Milwaukee will be conducted to evaluate the effectiveness and efficiency of the new IFSP data collection tool. User acceptance of the IFSP Tablet-PC application will be systematically studied. Since the IFSP requires the signature from team members, it would be important to find out whether users prefer signing electronically rather than signing on papers.

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