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Abstract

Title: Open Source Tools for the Collection of the National Children's Study (NCS) Operational Data Elements at the NCS Wisconsin Study Center

Names and Affiliations:

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Abstract

Introduction

NCS Wisconsin is one of 37 sites nationwide participating in the Vanguard Study of the National Children's Study. The Vanguard Study, a testing ground for the main study, is evaluating multiple procedural and operational scenarios in terms of feasibility, acceptability, and cost. The collection and submission of Operational Data Elements (ODEs) is a key component of this evaluation. Case Management and Protocol Workflow (CMPW) and Biological and Environmental Sample Tracking (BEST) applications comprise the centralized hub for ODE collection and operational support, while the Data Collection Application Suite (DCAS) application is the hub for instrument data collection. As part of the CMPW, Best, and REDCap Consortia, the NCS Wisconsin Study Center is collecting and submitting ODEs, in addition to instrument data, on a biweekly basis to the Vanguard Data Repository (VDR).

Strengths

Many MDES 2.0 ODEs are well-integrated into CMPW and BEST with an architecture design that allows for rapid expansion when additional ODEs are required.

For example:

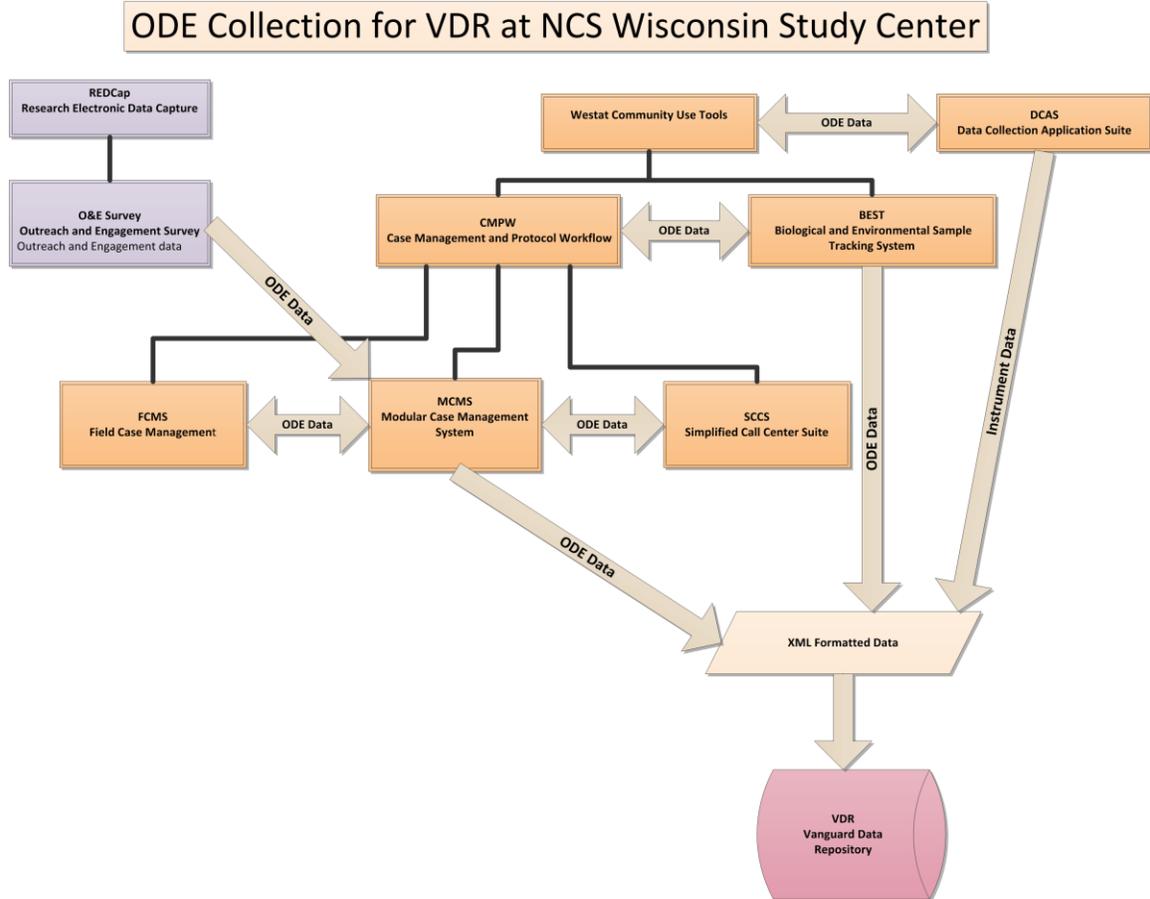
- New events in CMPW are auto-generated based on ODEs and the instrument results from the previous data collection events (e.g., permission to contact the father).
- ODEs are available in real-time reports to inform data collectors about items such as consent status, events to complete, and environmental sampling.
- ODEs are shared between applications, increasing efficiency and consistency of data collection.

Limitations and Future Work

- New ODE collection needs are being evaluated for incorporation into the appropriate application to match VDR expectations and the defined operational flow at the site.

- Application Programming Interface (API) support will be put in place for the easy import of ODE data that are collected in other software.

Tables, Graphs, Figures



Additional tables, graphs, and/or figures may be added to the poster.