Data Management Systems: Selection and Implementation

May 29, 2012
Presenters

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DOHVE: Design Options for Maternal, Infant, and Early Childhood Home Visiting Evaluation

- Working with US-DHHS to support the federal Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program

- DOHVE Technical Assistance (TA):
  - Evaluation
  - Continuous quality improvement (CQI)
  - Management Information Systems (MIS)
  - Benchmark data
DOHVE Evaluation and Performance TA Team

- James Bell Associates (JBA)
- MDRC
- Cincinnati Children’s Hospital Medical Center (CCHMC) and Every Child Succeeds (ECS)
Goals of Session

- Purpose of Data Collection System
- Considering Home Visiting Data Collection System in the Context of Other Data Systems
- Selecting or Developing a Data System for Home Visiting: Elements and Considerations
Beyond Software

State Process System:
Bringing it all together

Model System

New State System

Population Data

Site Data System

Federal Reporting

Sites: CQI, Reporting, Operations

State (self): CQI, Reporting, Monitoring

Funders

?????
Integrating Systems

HMV -> Model + Vendor -> Central Analysis System
HMV -> Vendor
HMV -> Larger State MIS
Many Paths…

- Process of selecting a product / vendor
- Implementing a customized system
Considerations for MIS Systems

- Home visiting model may have own system or use a commercial vendor
- Commercial vendor
- Build own system
- Change current system to accommodate home visiting program
- Customize standard platform

ALSO: centralized system that pulls data from other multiple systems in order to conduct analyses on integrated data.
Overarching Objectives

- Select an MIS system that meets all of your needs
- MIS system should be compatible with home visiting models
- MIS system should be user-friendly
- MIS system should produce tables and reports that allow you to monitor program, conduct CQI, and prepare required reports
System Elements

- Access
- Capacity
- Security
- User interface
- Support and training
- Customizability
- Reports
- Legacy data
- Integration or communicating with other data systems
- Ownership
- Cost
Access & Capacity

Everyone who needs to can access the data—home visitors, supervisors, program administration

Data can be accessed in real time

Data can be accessed 24/7

Everyone can use it at the same time if needed
Security

- Data system is HIPAA compliant
- Highest level of web security
- Dedicated servers
- Rules for roles and access
- Password protection
User Interface

- Easy to use and find variables
- Familiar elements of web pages
- Minimal typing
- Easy to fix

ASK FOR A TOUR OF THE SYSTEM TO DETERMINE USER INTERFACE
Support and Training

- Initial training
- On site, online, manuals
- Customer service and availability
Customizability

- New variables
- Expansion of existing variables
- Reports
Reports

- “Canned” reports
- Ability to create new canned reports
- Ability to build reports as needed
Legacy Data

- Migration of prior data into new system
- Issues arising from different variable definitions
- Archiving of data
Integration or Communicating with Other Data Systems

- Adding data bases
- Bridges to combine data bases for separate analysis
Ownership

- You should own the data or at least share ownership
- Review contract language carefully
Cost

- Staffing
- Set up
- Training
- Maintenance
- Customizing
- Adding new databases
- Integrating databases
- On site epidemiologist or systems analyst
Contact Information

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Data Systems 201

Tod Robertson, Statewide Home Visiting Network Coordinator
Hawaii State Department of Health
Planning

Request for Proposal (RFP) Committee

- Representatives from multiple disciplines
  - Information Technology
  - Administrative Services – (accounting)
  - Two Management Information System (MIS) Users (home visiting implementing agencies)
  - Data Management
  - Project Management
Planning

- Analyzed the current data management system
  - not designed for home visiting
  - evaluate the positives and negatives
- Developed a timeline
- Create an Access database as bridge until MIS purchased
- Conducted interviews with home visitors
- Contacted data system providers & viewed systems
- Off the shelf - pre-existing centralized Internet Management System (IMS)
RFP Development

- Section One - Introduction & Key Dates
- Section Two - Background & Scope of Work
  - Project Overview and History
  - **Scope of Work**
  - Hawaii Department of Health Responsibilities
  - Terms of Contract
- Section Three – Proposal Format & Content
- Section Four – Evaluation Criteria and Contractor Selection
- Section Five – Special Provisions
- Section Six – Attachments & Exhibits
RFP Development

**Scope of Work**

- Billing requirements (service detail and dollar amount)
- Collected Early Identification (EID) information requirements
- Home Visiting information requirements
- Supervision
- Family Service Plan
- Healthy Families America (HFA) accreditation requirements
- Maternal Infant Early Childhood Home Visiting benchmarks report
RFP Development

Scope of Work

- Conversion requirements
- Reporting requirements
- Data Entry Manuals
- System requirements
- Customer Support
- Data Management
- Security Management
- Systems Administration
- Optional elements
Attachments & Exhibits

Attachments

- Data Dictionary
- Report Examples
  - Screening/Assessment reports
  - Billing report (service detail and dollar amounts)
  - Enrollment report
  - Referral report
  - Retention report

Pre-proposal Informational Conference

- Frequently Asked Questions
- Addendum to RFP
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Why build a data system?

- Infrastructure development
- Local program data collection inadequate
- Case management, program monitoring, reporting and accountability
- Data to support continuous quality improvement
- OHV local and cross-site evaluation
Vendor Selection

Experience with Utah Department of Health Programs

- Developed the BTOTS system that serves the Part C Early Intervention Program
- Built CHARM

Used Open Source software

Sole Source Contract
Building the Database

- Engaged multiple partners from the beginning
  - Vendor staff
  - Home Visitors
  - OHV staff

- Frequent follow-up with Vendor

- Open Dialogue to address issues or barriers immediately
Maintaining the Database

- Open Dialogue to address issues or barriers immediately
  - Home visitors must report glitches ASAP
  - OHV staff must prioritize “fixes”
  - Vendor must be responsive

- Provide detailed expectations to vendor as needs change
  - Accommodating PAT and MIECHV benchmarks
Database Modifications

- Adding benchmarks to the database
- New reporting capabilities
- Making sure the definitions are understood for the specific data being collected and reported
- Have a plan for database training
Lessons Learned

- Early buy-in important
- Engage all parties from the beginning
- Make it as intuitive as possible
- Recognize it is a time consuming process
- Continual feedback loop between all parties
Database Demo

Welcome to the OHV Case Management System

Promoting a coordinated service continuum of research-informed home visiting that supports healthy child development and ensures the safety of young children and their family members.
Database Demo - Percent referrals screened

Site 1

Site 2

Site 3

HFA Standard
Database Demo – Reporting Example

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Percent home visits completed
Database Demo – MIECHV Example

Benchmark 1
Improved Maternal and Newborn Health
Construct: Prenatal Care

Enrolled children with a medical provider
Office of Home Visiting

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<td>Robyn Lipkowitz</td>
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<tr>
<td>Rodney Hopkins</td>
<td>Internal Evaluator</td>
<td><a href="mailto:rodneyhopkins@utah.gov">rodneyhopkins@utah.gov</a></td>
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Questions and Comments
DOHVE Webinars & TA Calls

- Building a Culture of Quality in Home Visiting
- Designing and Using an Effective Data Management System: Components and Considerations
- Selecting an MIS: Experiences from the Field
- Measuring Benchmarks: Indicators and Tools
- DOHVE Compendium & Benchmark Measurement: School Readiness & Achievement
- Evaluations of Promising Programs
- Developing your Evaluation Plan
- Addressing Benchmark Two- Child Maltreatment Data
Other Resources

- DOHVE Compendium of Measurement Tools for MIECHV Grantees
- Benchmark Constructs Crosswalk to the Compendium of Measures
- Model Developer Crosswalk to Benchmarks
- DOHVE Measurement Brief: Selecting Data Collection Measures for MIECHV Benchmarks
- DOHVE CQI Brief
- CQI Checklist: Next Steps for Action Brief
- Benchmark Technical Assistance Brief
- Single Case Design Brief
- Referral and Coordination Tracking Tool
- Home Visit Observation Tool (coming soon)

All technical assistance tools and resources are available at: http://www.mdrc.org/project_12_104.html