Electronic Data Collection Best Practices for Home Visiting

Healthy Start Regional Meeting

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Objectives

• Develop awareness of electronic data collection tools and strategies

• Consider issues related to adoption of electronic data collection tools

• Learn ways to use collected data effectively
Home Visiting in Tennessee

- State administered evidence based programs in 50/95 counties
  - 3 models (NFP, PAT, HFA)
- Care coordination program in all counties
Use of Technology in TN Home Visiting

- Data Collection/Entry: REDCap
  - Customized web based system
  - Mobile app for data entry when Wi-Fi not available *(available, not yet implemented)*

- Laptops/Tablets/iPads
  - Data collection/entry
  - Complement curriculums
  - Provide information to parents
  - Assist with online service/program enrollment
Old vs. Modern Data Collection and Entry

**The Old Way**
- Conduct home visit
- Complete paper form
- Enter data from form into a database

**The Modern Way**
- Data collection and entry in conjunction with home visit
Data Collection Tools

- Access databases or Excel spreadsheet
- Online survey tools
- **REDCap**
- Efforts to Outcomes (ETO)
- Datatude
- Penelope (HFA model)
- Others
Group Discussion

- What tools/system are you using for data collection/entry?

- What are the pros and cons of the system you are using?
Benefits of Electronic Data Collection Tools

• Cost and time savings
  – Avoids doing the work twice
  – WI: 18% reduction in completion time for ASQ, 24% reduction in cost*

• Reduces physical storage space
  – No hardcopy client files

• Improved data accuracy
  – Reduced data entry error
  – System can have built in data checks for invalid data

Things to Consider: E-Data Collection

- Copyrighted tools, if no web based scoring
  - Ex.: Brookes Publishing ASQ Online, additional cost
  - May prevent completely paperless system

- Staff resistance to paperless system

- Possible data entry duplication, if multiple systems needed
  - Funder (state) requirements vs. model requirements vs. agency requirements
    - Can systems communicate?
  - Issue exists whether paperless or not

- Transparent/two-way data collection system
  - Allowing data review and editing to improve data quality
Uses of Data

RAW DATA

REPORT
Uses of Data

• Highlight program results
  – Gauge program effectiveness
  – Maintain/obtain funding
  – Recruit families

• Drive CQI Initiatives
  – Continued program effectiveness
An Incomplete Feedback Loop
Why Use Technology in the Home Visit

- Videos and apps for parents/children
  - Mindfulness, DV Safety Plan, child development

- Show/link to services
  - Show and explain online information
    - [http://www.kidcentraltn.com](http://www.kidcentraltn.com)
  - Assist with online enrollment
    - [http://www.healthcare.gov](http://www.healthcare.gov)
    - Books from Birth

- Real time data collection/entry

- Reduce* use of paper collection tools

*Reduce, not eliminate use of paper forms
By 18 Months Old, My Child Will Likely...

Physical Development:
- Stand alone, sits down.
- Climb up and down things.
- Walk without help.
- Enjoy carrying small objects in each hand.
- Gesture or point to indicate wants.
- Like to push, pull and dump things.
- Like to poke, twist and squeeze.
- Pull off hat, socks and mittens.
- Turn pages in a book.
- Hold crayon and scribble, but with little control.
- Enjoy holding a spoon when eating, but experiences difficulty in getting spoon into mouth.
- Be able to stack two blocks.
- Enjoy flushing toilets and closing doors.
- Wave goodbye and claps hands.

Social & Emotional Development:
- Become upset when separated from parent.
- Begin to show a "temper" when unable to do something.
- Enjoy being held and read to.
- "Cling" to parent or caretaker in new situations.
- Need reassurance with fears.
- Play alone on floor with toys.
- Recognize himself in a mirror or in pictures.
- Imitate others, especially by coughing, sneezing or making animal sounds.
- Like an audience and applause.
Group Discussion

- How are you using technology to engage families?

- What feedback has your staff shared about using technology to engage families or for data collection in the home?
Barriers to Use of Technology in Home

- Wi-Fi availability
- Personal safety
- *It will interfere with the dynamics of the home visit*
Wisconsin findings on staff acceptance of using technology:

new technology. The one program director who wrote a negative response to the open-ended comment about the implementation referred to staff “becoming accustomed to the new technology” and their comfort with it, while the more positive and neutral program directors reported that staff had already adjusted to the use of computers on home visits. In follow-up discussions with one of the site directors, she shared her observation her newly hired home visitors had already been using computers in their previous jobs, educational settings and/or and personal lives. They embraced using computers on home visits and indicated they had the expectation they would be using a computer in home visiting and couldn’t imagine using a paper and pencil approach.

Things to Consider: Implementation

- Device
  - Cost
  - Mobile device compatibility (PC ↔ tablet/smartphone)
    - Mobile interface vs. pinch, zoom, scroll

- Security
  - Organization’s IT protocols
    - Does organization support a particular device?
    - Passcode lock
    - “Kill” function if lost

- Data protection and integrity

- Internet access
  - Must purchase data plan
    - Don’t depend on hotspots
  - Wi-Fi availability in rural areas

- Willingness to use
Group Discussion

- What other concerns/questions do you have when considering the use of technology?
Resources

- REDCap
  - http://project-redcap.org/

- Engaging Families with iPad Technology
  - University of Iowa webinar
  - https://www.youtube.com/watch?v=UJKbB8NNohk

- Nebraska Panhandle Uses iPads During MIECHV Home Visits
  - http://origin.library.constantcontact.com/download/get/file/1109942941555-154/1-Nebraska+Panhandle+Spotlight+FINAL.pdf
Resources

• Is there an App for that? Strengthening Family Engagement with Technology

• Using Portable Computers in Home Visits: Effects on Programs, Home Visitors and Caregivers
QUESTIONS?

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