Potential Applications for Telemedicine in Research

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Benefits of a Telemedicine Research Portal

• Increase the geographical reach of clinical investigators
• Reduce costs of recruitment
• Increase number of participants
• Reduce travel burden for participants (most common barrier according to one study)
• Allow individuals unable to travel (for medical or economic reasons) the opportunity to participate in research
• Enhance safety by increased monitoring
Reducing Travel Burden For Participants

A positive value means the factor is associated with increased willingness to participate in research and a negative value means the factor is associated with a decreased willingness to participate. (Study in Alzheimer Disease patients)

Source: Karlawish J et al. Neurology. 2008; 71;1883
Comprehensive Telemedicine Research Portal Components

1. Research Participant Recruitment Tools
2. Conducting Research Remotely
3. Remote Patient Monitoring
4. Tools that Allow Remote Healthcare Providers to be Partners in Research
5. Integration with Existing Informatics Tools/Databases

REDCap
RPMS
1. Research Participant Recruitment Tools

- Education about trials
- Live communication with research coordinator (Q&A)
(1. cont’d) Portal Screen: Schedule a Session with Research Coordinator+ Informative Material about Study
(1. cont’d) Portal Screen: Live session with Research Coordinator
2. Conducting Research Remotely

- Getting consents
- Checking eligibility/screening
- Conducting surveys/questionnaires
- Data collection

+ REDCap Survey
(2. cont’d) Portal Screen: Consent Forms on a Tablet or Touch-screen
3. Remote Patient Monitoring

- Adverse events reporting
- Monitoring @ home by participants (e.g. BP, glucose)
- Real time monitoring devices
4. Tools that Allow Remote Healthcare Providers to be Partners in Research

• Discovery of clinical trials/studies
• Education
• Communication (with live audio/video)
• Data entry (REDCap)
(4. cont’d) Discovery of Clinical Studies
(4. cont’d) Portal Screen: Live session with Research Coordinator + Informative Material about Study + Data Entry
5. Use Existing Informatics Infrastructure

**SC LightRail**

**MUSC HERO**

**RPMS** (Funded by GO Grant # RC2LM010796)

**SCIPR PORTAL**

(SC Integrate platform for research)

**REDCap**

**BIP**