Title:
Evolving With Technology to Communicate and Manage Multisite Research Studies

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Session Title:
The Evolution of CPR Training Using Technology, Multisite Studies, Industry, and Military Partners
Slot:
D 19: Sunday, 29 October 2017: 2:45 PM-4:00 PM
Scheduled Time:
3:25 PM

Keywords:
communication, multisite studies and technology

References:


Abstract Summary:
Emerging technologies can be very helpful for managing multisite studies. Researchers may be challenged to discover and evaluate these new technologies while simultaneously planning and implementing a study protocol. We have used several new technologies in our multisite studies over the past 8 years and will highlight “hits” and “misses”.
### Learning Activity:

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<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<td>1. Describe various technologies used for communication for multisite studies over time.</td>
<td>Study 1 - WIKIs 8 years ago...too new for some. One site coordinator refused to learn WIKI or even open it and could not cope. Data collection was complicated. Each student file had to be uploaded into a system after data collection. Various conference call platforms giving way to Blue Jeans, etc. Archived Voice over power points. Youtube starting to take off and become user friendly in the interim. Study 2 - archived Google Hangout on Air already disappeared but useful at the time. Now more You tube availability. REDCAP (<a href="https://projectredcap.org/">https://projectredcap.org/</a>) for demographics management. formula based excel spread sheets/scheduling programs for PPO group...schedule genie as needed. Video everything, all procedures and put them on Youtube as videos for playback as needed. Google Hangout On Air stopped by Google after year 1.5 of study. Only 1 video saved. REDCAP used for demographic data management. Whatsapp or other IM for future. Keep an eye to evolving technologies that can support this type of work. Seek technophiles for help with answers to study communication questions.</td>
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<td>2. Describe advantages and disadvantages of emerging technologies for use in multisite studies.</td>
<td>Advantages and disadvantages- Google Hangout allowed all to share the same information. But everyone has to have a google email address. Some confused with invitations to the Google Hangout on Air. Actual manikin software involved many clicks and training students. Sometimes management system down but not notified. Emailed and called for problems but that can be slow. An IM program or WhatsApp invented and would have been useful for real time questions.</td>
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Abstract Text:

Multisite studies are often required to gain the sample size required for generalizability of the study findings. However, with multisite studies come complex communication issues that are rarely discussed in the literature (Lasater et al., 2012). Over the past 8 years, we have experimented with a number of communication technologies as we conducted studies spanning 4 times zones and 20 sites. Some technologies have emerged and faded within even this short period of time; others have emerged during our current study time and show great promise. In this presentation, we will describe our experiences with various technologies for both multisite communication and data management including: the use of a Wiki 8 years ago to store documents and share information, Google HangOut on Air for meetings and archiving of those meetings for later viewing, YouTube which replaced Google HangOut on Air, Dropbox for ease of document sharing and de-identified data management, RedCap (https://projectredcap.org/) for demographic data management, and Excel spreadsheet with formulas for easy return date calculations for all of our study participants. We discovered WhatsApp, for Android or iPhones, after the study started and would recommend it to others who need real time ease and text communications in a contained program. WhatsApp is also adding visual phone capabilities soon. The cobbling together of various existing computer programs to build the CPR study platform provided occasional software challenges. Approaching students or our own teens and explaining our study needs for communication might have yielded other tools we still remain unaware of, at this time. We also appreciate and acknowledge that overlaying additional learning needs for new communication apps or technology, in addition to managing an already technology rich study may be overwhelming for some faculty. It is better to seek out and appoint site coordinators to such studies, who are willing to embrace technology.