



# VIRTUAL RESEARCH: CONSIDERATIONS FOR SITE IMPLEMENTATION

Prepared for

SCORE

Date

October 21, 2020

- 02 INTRODUCTION TO VIRTUAL RESEARCH
- 08 ELECTRONIC INFORMED CONSENT
- 12 DIGITAL TECHNOLOGIES
- 18 Q&A

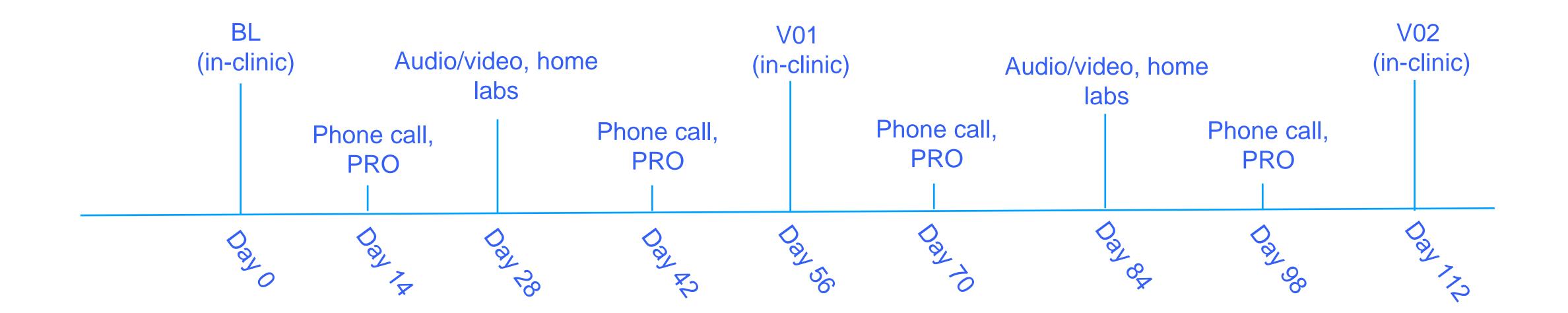


## What does "virtual research" mean?

The use of digital health technologies and social engagement platforms to conduct clinical trials.



Virtual research does not have to be an all-or-nothing approach. Hybrid Trials use a combination of both virtual and traditional (in-person) visits.



E. Baloga



## Virtual Components

Mobile nursing and phlebotomy

Central pharmacy

Telehealth visits

Online surveys and/or questionnaires

Local labs and imaging centers

Direct-to-home shipment of investigational product/device

Digital health technologies

Electronic Patient Reported Outcomes (ePROs)



## Transitioning from Traditional to Hybrid or Virtual

What data is vital?

What can be collected remotely?

Applicable Regulations

Select platform(s) & digital health technologies



### **HIPPA**

#### www.hhs.gov/hipaa

- Privacy Ruling
- Security Ruling
- Breach NotificationRuling

# 21 CFR PART 11

www.fda.gov/cfr

- Electronic Systems requirements
- ElectronicSystems validations

# FDA GUIDANCE

www.fda.gov/guidancedocuments

- Computerized systems used in clinical investigations
- Electronic informed consent in Clinical Investigations
- Electronic Source Data in Clinical Investigations
- Part 11, Electronic Records; Electronic Signatures

## **ESIGN ACT**

www.govinfo.gov/esignact

- Electronic
   Signatures legal
   validity
- NYS Electronic
   Signatures and
   Records Act

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## Components





# eConsent within REDCap

Digital method for collecting and storing informed consents

Uses e-Consent Framework and PDF Auto-Archiver



Compatible with multiple platforms - Computer, mobile phone, or tablet



eSignature flexibility – finger, stylus, or mouse

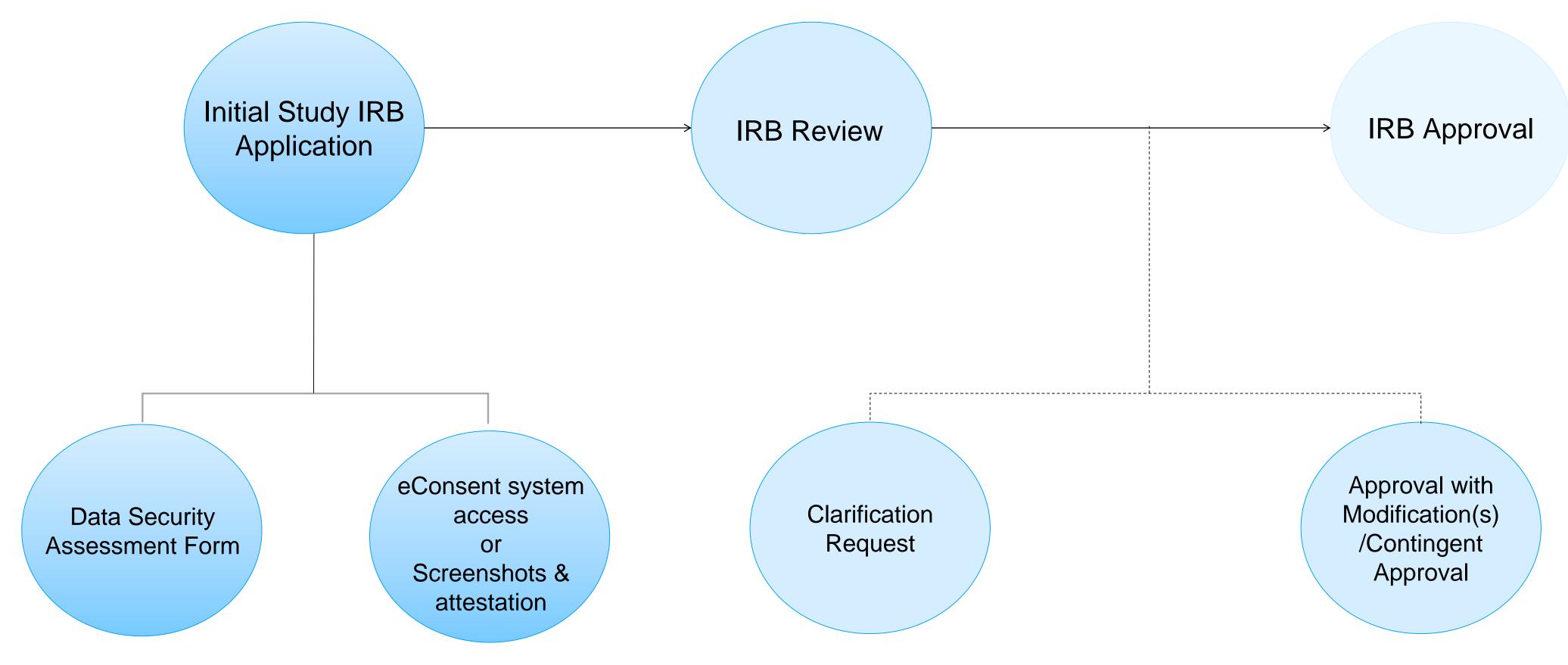


Provides copy of the signed form via downloadable pdf, and/or receipt via email with PDF attachment





## IRB Approval Process



S. Duquette

http://www.rochester.edu/ohsp/rsrb/

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# Digital Technology Options



## **Smartphone Applications**

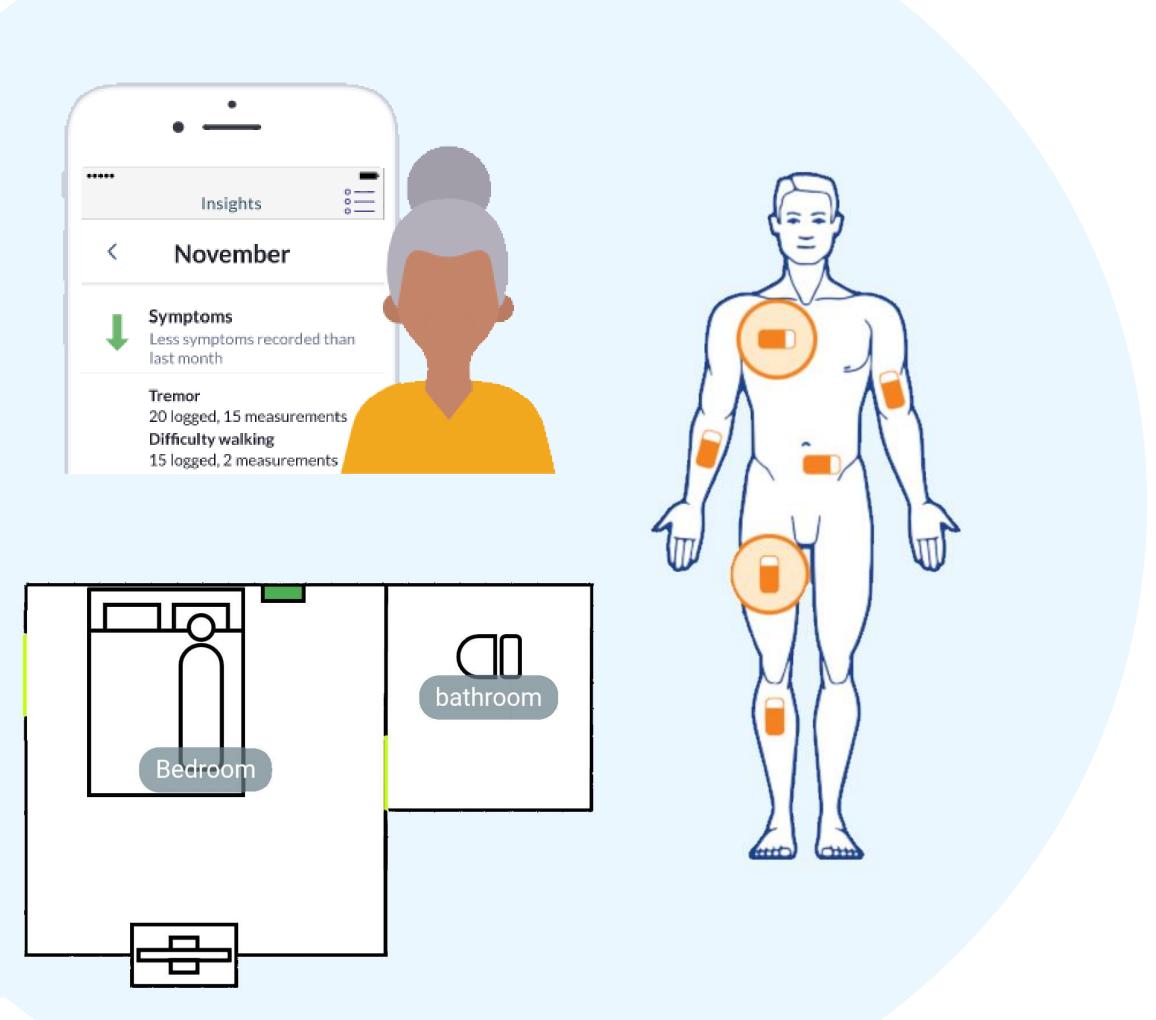


Wearables



**Passive Devices** 

S. Jensen-Roberts





# Platform Options



## **Smartphone Applications**



Wearables



**Passive Devices** 

S. Jensen-Roberts

#### **Features and Capabilities**

- Accelerometer
- Step Counter (Passive)
- Gyroscope
- Heart Rate

Pros	Cons
<ul><li>Directed Activities</li><li>Accessibility</li><li>Ease of use</li><li>Real-time data</li></ul>	<ul> <li>Compliance</li> <li>Technical Support Needed</li> </ul>



# Platform Options



### **Smartphone Applications**



#### Wearables



**Passive Devices** 

S. Jensen-Roberts

### **Features and Capabilities**

- Accelerometer
- EKG
- Temperature

- Blood Monitoring
- Gait and Posture
- Motion Detection

#### Pros

- Activity Completion
- Activity Levels
- Sleep Data
- Real-time data
- Vital Signs

#### Cons

- Compliance
- Comfortability
- Remembering to apply and recharge if needed
- Difficulty of Application



# Platform Options



### **Smartphone Applications**



#### Wearables



#### **Passive Devices**

S. Jensen-Roberts

#### **Features and Capabilities**

- Radio Waves
- Activity Levels

- Sleep
- Vital Signs

#### **Pros**

- Movement Patterns Captured
- Data on Habits
- Sleep Data
- Real-time Data
- Respiration Data

#### Cons

- Confounding Variables
- Privacy Concerns
- Technical Support Needed
- Geographically Limiting



# Important Considerations



## **Smartphone Applications**



Wearables



**Passive Devices** 

S. Jensen-Roberts

- Instructions on Use
- Distribution of Devices
- Access to Wi-Fi, Phone, Internet
- Study Population Experience with Technology
- Data Privacy
- Inclusion/Exclusion Criteria
- Adjust Device Use to Ailments/Limitations of Study Population
- Troubleshooting help on hand
- Compliance Monitoring



# PRO Surveys, Video Platforms



## Patient Report Outcome (PRO) Surveys

- REDCap
- Trial Master 5.0
- Medidata Rave
- Google Forms
- Survey Monkey



## **Video Platform Options**

- Zoom for Healthcare
- GoToMeeting
- Microsoft Teams
- Many others, with more capabilities

#### S. Jensen-Roberts

#### **Important Considerations**

- All HIPAA compliant
- REDCap is 21 CFR Part 11 Ready
- Trial Master 5.0 and Medidata Rave are 21 CFR Part 11 compliant

#### **Video Platform Options**

When selecting the platform, seek out a vendor is both HIPAA compliant and one that is intending to enter into a HIPAA business associate agreement (BAA). A list of these can be found on HHS.gov

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# Questions?

