

Remote Monitoring in Clinical Trials

Mary Anne Hinkson, MBA
Vice President, Research Administration
MedStar Health Research Institute

Introduction and Agenda



Although the Food and Drug Administration (FDA) suggesting shifted to remote monitoring in 2013, the industry has been slow to adopt remote monitoring technology until the COVID-19 pandemic made traditional monitoring impossible.

AGENDA

- Evolution of Monitoring
- Source Documentation
- Remote Monitoring

FDA Guidance

JANUARY 1988

"Guidelines for the
Monitoring Clinical
Investigations"

Guidance for Industry

APRIL 2023

"A Risk-Based Approach to
Monitoring of Clinical
Investigations Questions and
Answers"

Guidance for Industry

AUGUST 2013

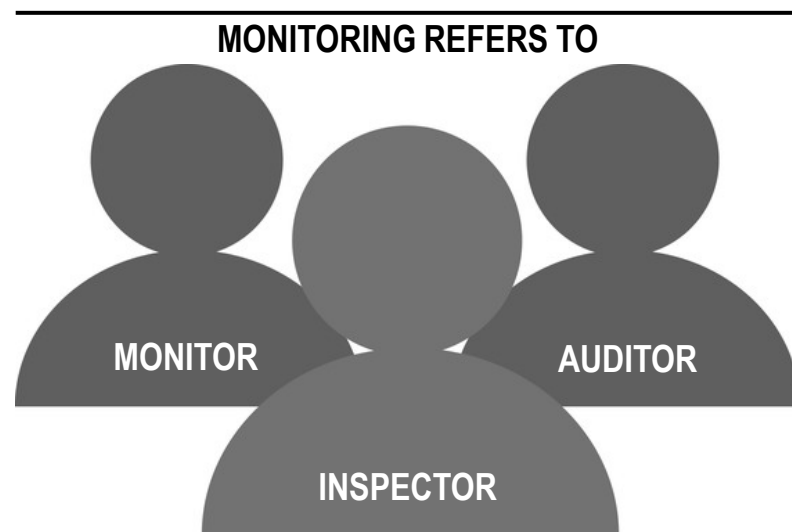
"Oversight of Clinical
Investigations —
A Risk-Based Approach to
Monitoring"

Guidance for Industry

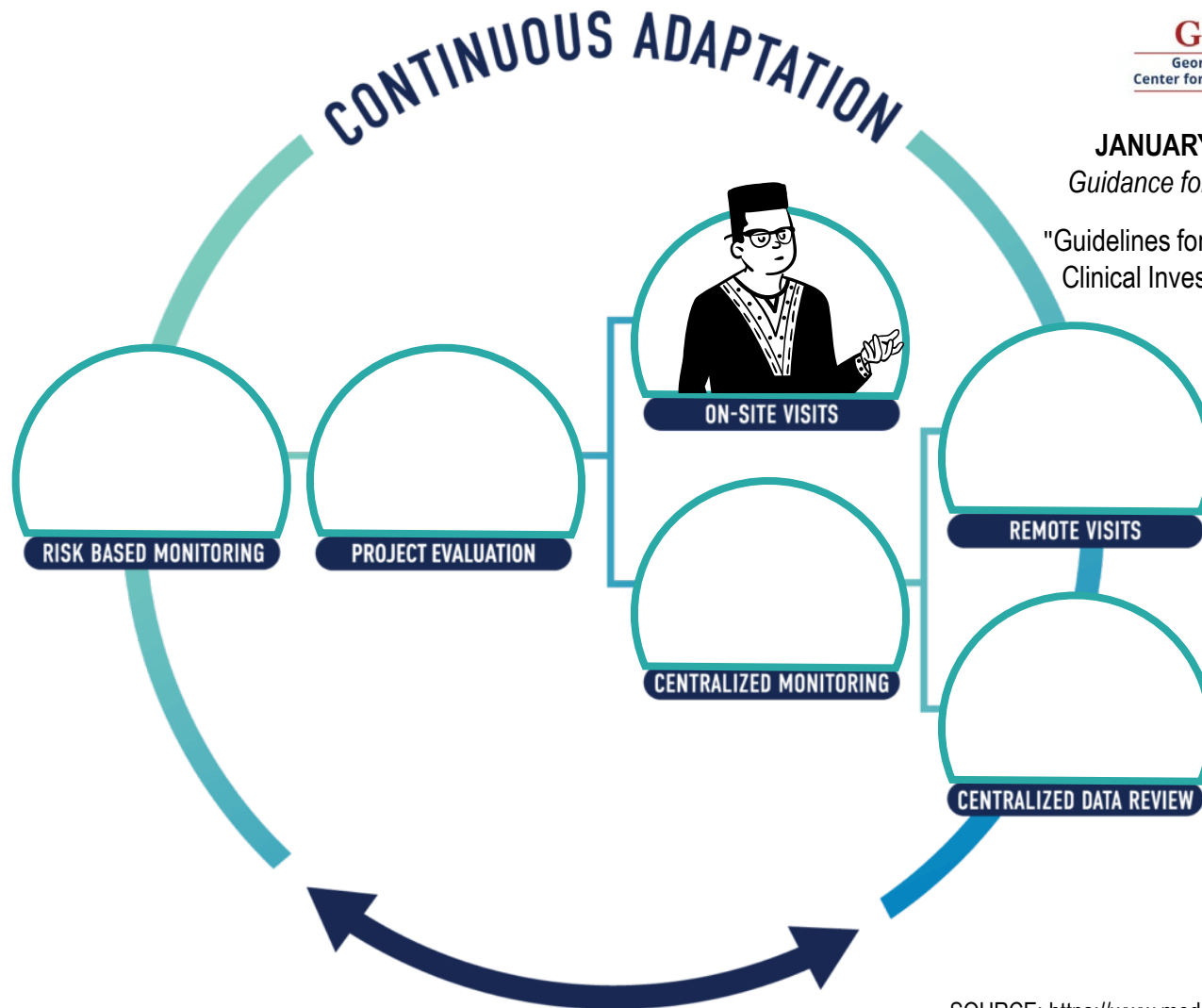
Quick Refresher: Monitoring

In the context of clinical trials monitoring refers to:

- Monitor where the study sponsor actively oversees the conduct of a clinical trial by regularly checking on study sites
- Auditor to conduct an independent reviews of data and procedure to ensure compliance
- Inspector from a regulatory agency to assess study practices



Evolution of Monitoring



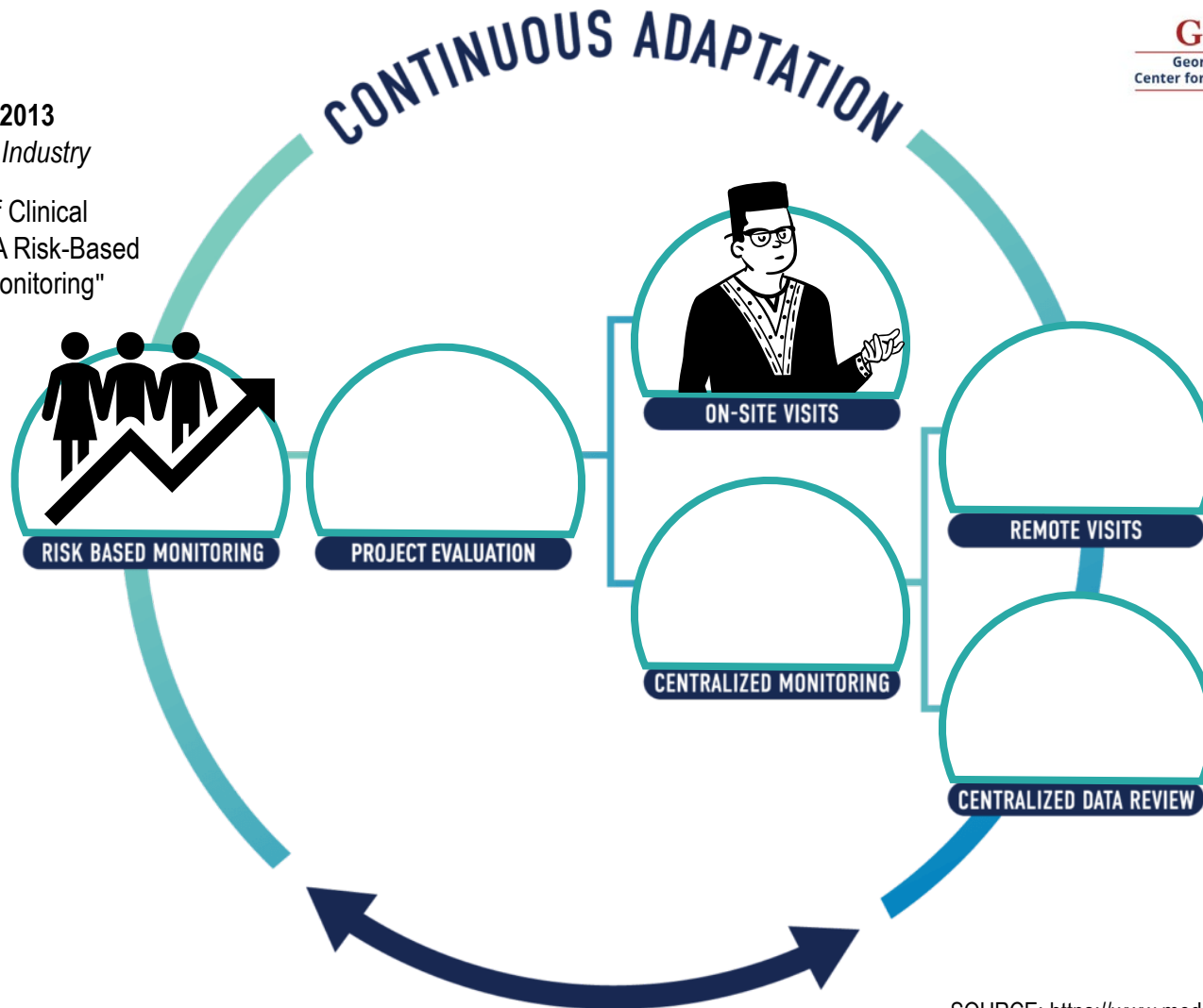
JANUARY 1988
Guidance for Industry

"Guidelines for Monitoring
Clinical Investigations"

SOURCE: <https://www.medpace.com/cro/clinical-monitoring/>

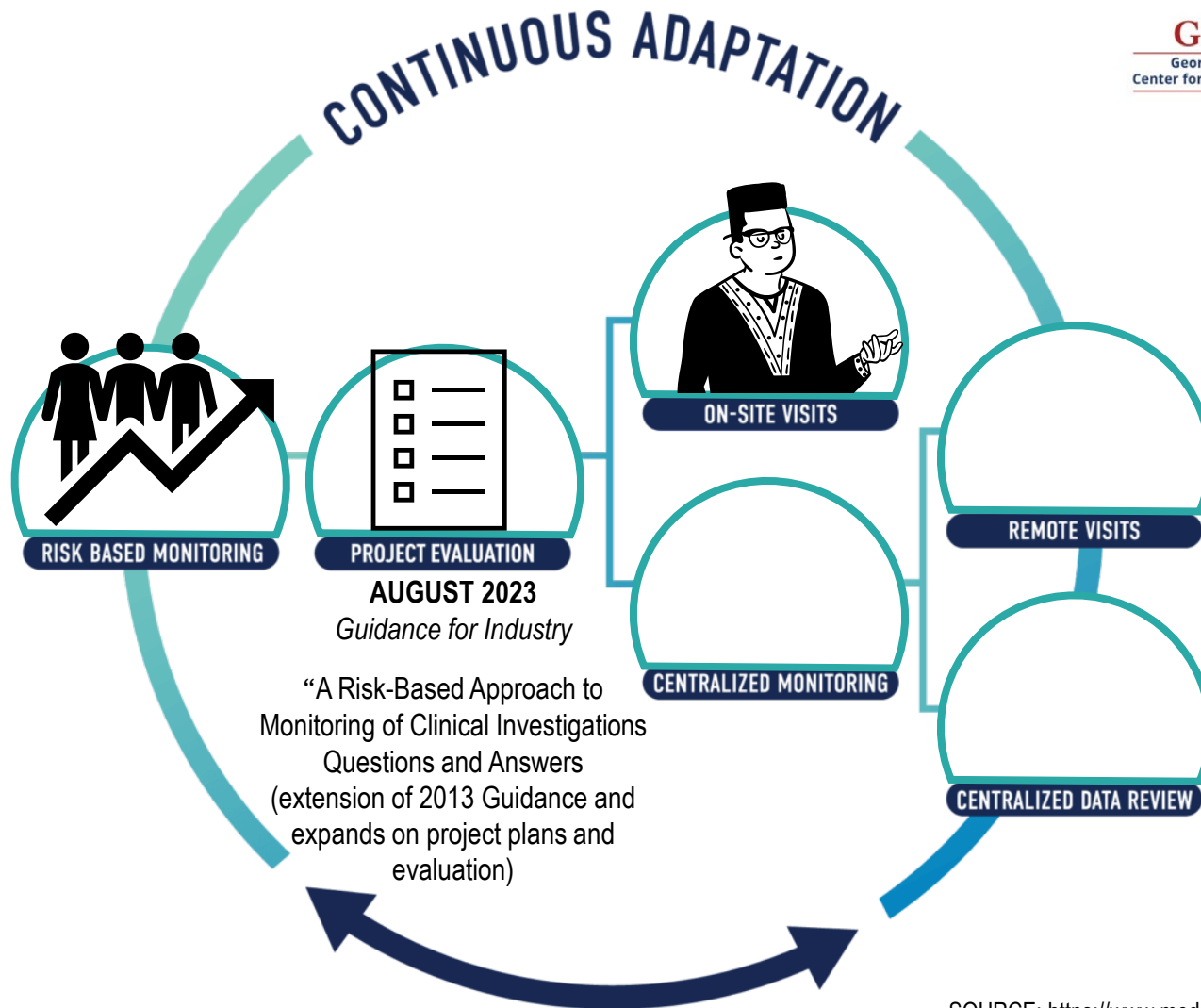
Evolution of Monitoring

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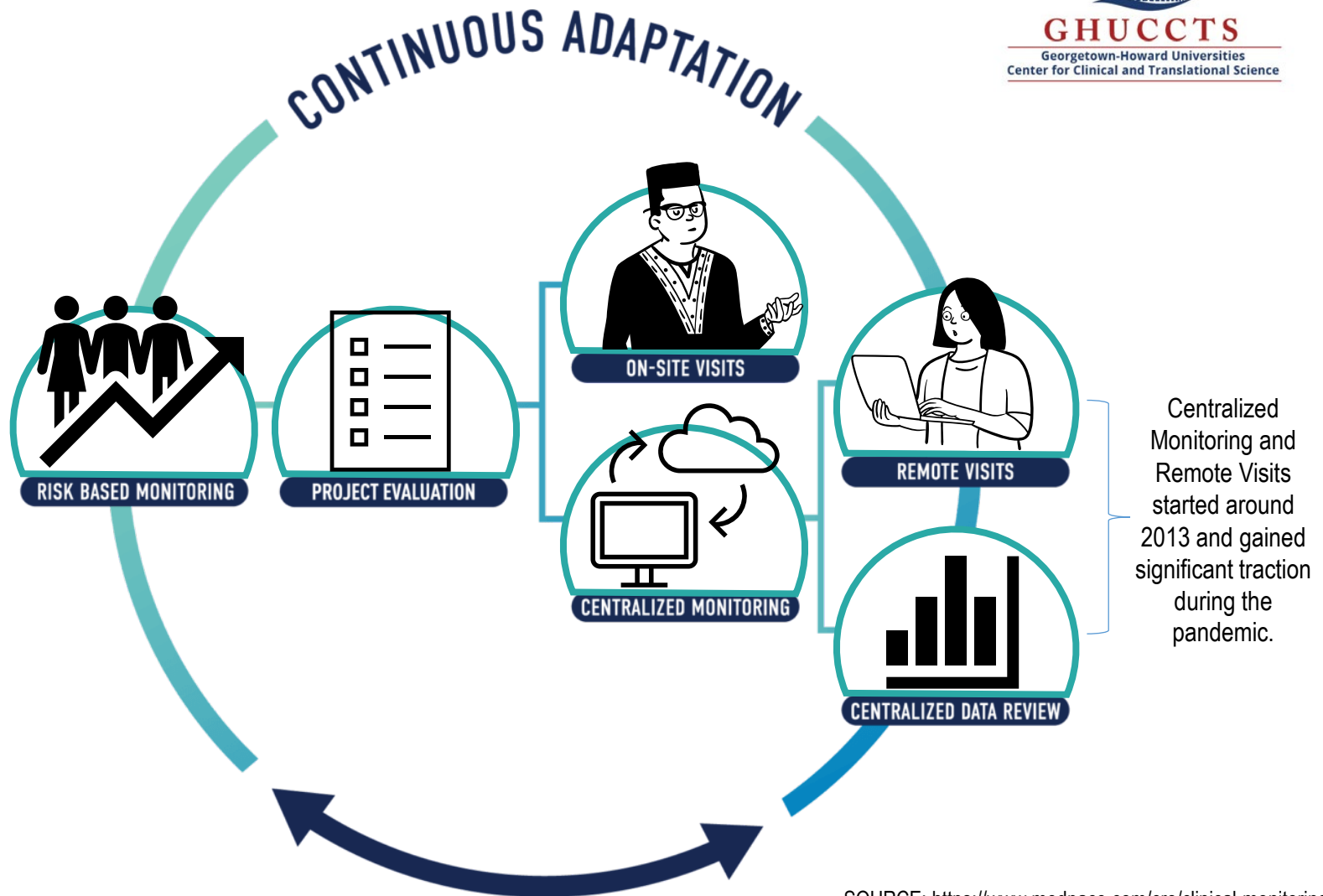
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Evolution of Monitoring



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Evolution of Monitoring

RISK-BASED MONITORING

Focus Proactive approach to ensuring the quality and integrity of a clinical trial by identifying and mitigating risks that could impact patient safety or data quality.

Process

- Risk Assessment: Identify potential risks throughout the study such as data errors, protocol deviations, or safety concerns.
- Resource Allocation: Resources and monitoring activities are allocated based on assessed risks and "not one-size-fits all" approach.
- Focus Area: Focuses on high-risk areas, such as critical endpoints, safety data, and processes affect data quality and patient safety.

Goal Ensures that monitoring activities are efficient and focused on the areas where they are most needed.



Centralized Monitoring

Remote Monitoring

On-Site Monitoring

Focus Data-driven approach that involves remote review of aggregated electronic data, including data analysis, to identify potential issues and trends.

Activities Analytical evaluation of study conduct across multiple clinical sites, carried out by personal at a central location.

Benefits

- Real –Time Data Analysis
- Efficiency
- Holistic View

Approach Integrated into a Risk-Based Monitoring strategy to improve data quality and patient safety.

Involves evaluation activities, such as review and verify study data and assess protocol adherence remotely, using technology instead of physical site visits.

Sponsor monitor reviews source documents remotely to ensure data accuracy, adherence to protocol, regulatory documents and GCPs.

• Cost-Effectiveness
• Efficiency

Can be combined with other monitoring forms, such as centralized monitoring, to create a comprehensive monitoring plan.

Monitoring where the sponsor monitor visits the clinical site to review and verify study data and assess protocol adherence.

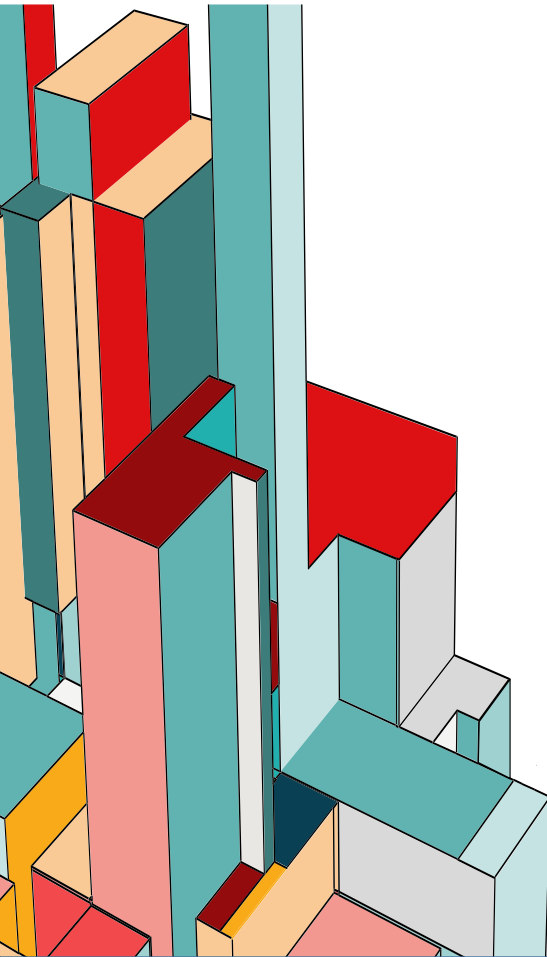
Sponsor monitor reviews source documents on-site to ensure data accuracy, adherence to protocol, regulatory documents and GCPs.

• Personalized Evaluation
• Direct Interaction

Can be combined with other monitoring forms, such as centralized monitoring, to create a comprehensive monitoring plan.

Source Documentation

Before we take an in-depth look at remote monitoring...



DEFINITION

Source Documentation is the first documentation of the primary data point(s) for a study participant. For example, where the blood pressure measured during a particular study visit was first recorded.

PURPOSE

The primary purpose of Source Documentation is to ensure the accuracy, validity, and reliability of data and to allow for the reconstruction of how a study or activity unfolded.

CONTENT

Source Documents can include various types of records, such as hospital records, clinic charts, lab results, subject diaries, pharmacy dispensing records, assessment measures, and informed consent forms.

IMPORTANCE

Source Documentation ensure 1) accuracy and integrity of data, 2) reconstruction of events, 3) protection of research participants, and 4) transparency and accountability.

DISTINCTION FROM CASE REPORT FORMS (CRFs)

Source Documents are the original records, while CRFs are standardized forms used to collect and summarize data from the Source Documents.

TYPES OF SOURCE DOCUMENTS

Source Documents include patient records, medication logs, stipend payments, study protocols, observation records and interview notes.

GOOD CLINICAL PRACTICE (GCP)

ICH GCP emphasize the importance of proper source documentation in clinical trials, and provide specific requirements for content, organization, and maintenance of Source Documents.

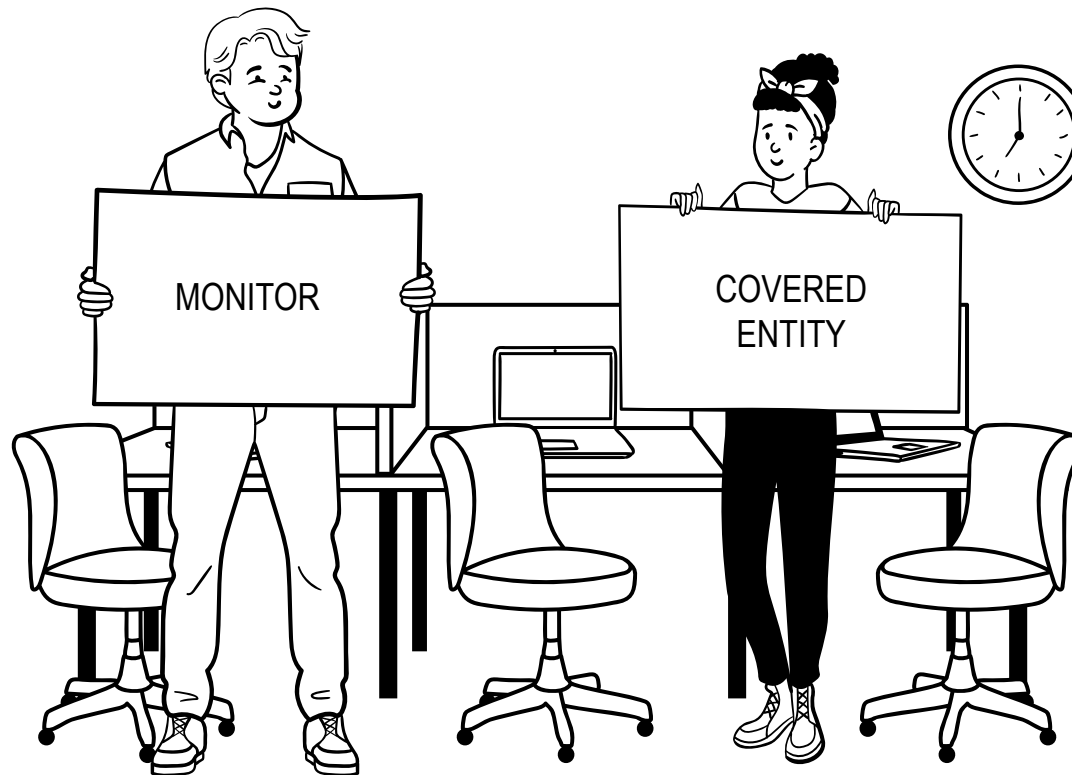
Remote Monitoring

To ensure confidentiality, monitor/auditor/inspector must identify a private location or room in which sponsor representative will complete remote monitoring. Remote monitoring/auditing/inspection should never take place in a public space or open-plan office setting. Do you agree?



Remote Monitoring

Monitors/auditors/inspectors have a right and obligation to review source documents, including paper and electronic records (21 CFR 312.56 and 814.46). As a covered entity, like MedStar Health, has a right and obligation to control access to the records. Is this true?



Remote Monitoring

In prep for a remote monitoring visit, the research coordinator is printing paper versions of the EHR and will upload the documents to a HIPAA compliant cloud-based file storage platform, such as BOX, with read access only for the sponsor monitor to review. Is something missing?



Remote Monitoring



A paper record print out of print screen of electronic data in the electronic health record is considered a shadow chart that is kept separately from the primary custodial record and should not be used as original source documentation. If a print out or print screen is used, copies must be certified as identical to original source documents following institutional policy.

C O P Y
*Certified true copy of
the Original*

Remote Monitoring

“Shadow Charts” are printed versions of EHR records, emails, faxes and act to assemble a record that is fragmented and retained separately from the primary custodial record and

SHOULD NOT BE USED

Shadow Charts



MedConnect



Outside Medical Record



Shadow Chart



Subject Record



Monitor



Monitor



Remote Monitoring



What is the FDA accepted definition of certified copies?

A certified copy is a copy of original information that has been verified, as indicated by a dated signature, as an exact copy having all of the same attributes and information as the original (*from 2013*).

What are the current regulations regarding the “verified process” of certified copies?

You can define your own process of certifying copies by defining clear SOPs. By having clear SOPs, you can use a certified copy instead of an original. Certification should be done by the person who made the copy, by signing or initialing and dating the copy to show that it meets the requirements of a certified copy (*from 2016*).



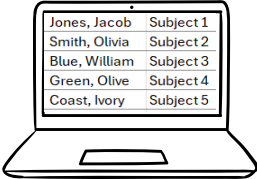
What is our Process?



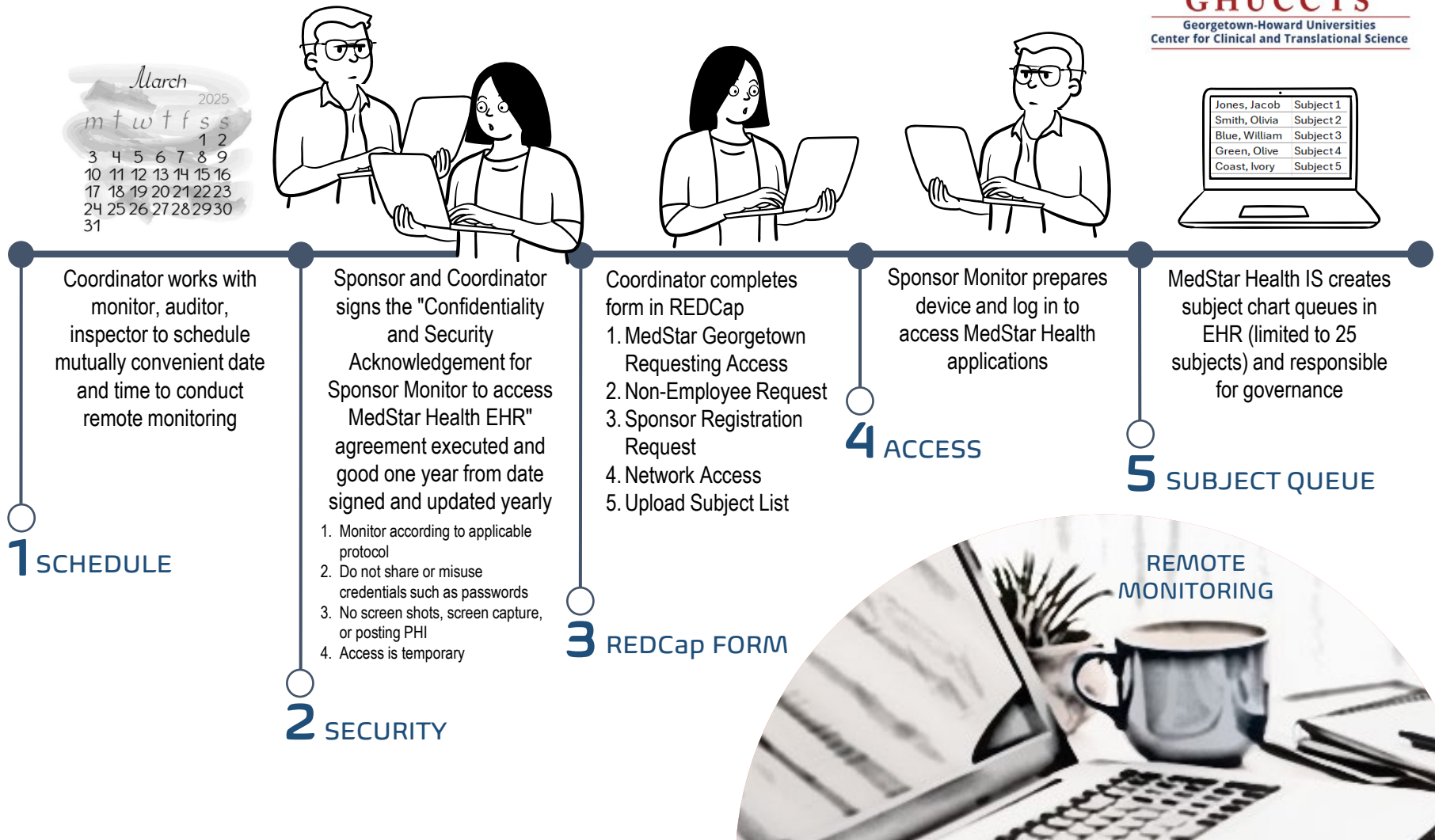
MedStar and Georgetown have shared policies and procedures

- MG.O-004.08 Sponsor Monitoring Visit
- MG.O-004.09 Requesting Restricted Access to MedStar Health Network for Research Monitoring
- MG.O-004.10 Source Documentation

What is our Process?



Jones, Jacob	Subject 1
Smith, Olivia	Subject 2
Blue, William	Subject 3
Green, Olive	Subject 4
Coast, Ivory	Subject 5



Remote Monitoring



**Implemented March 23, 2020
and as of
March 17, 2025**

5,270 Requests to Monitor

Average of 20 Subjects Per Request

$5,270 (20) = 105,400$ Records Reviewed

QUESTIONS



Mary Anne Hinkson, MBA
Vice President, Research Administration

MedStar Health Research Institute
(717) 891-7958: TELEPHONE
maryanne.hinkson@medstar.net: EMAIL