Big Data Management

Security, Software & Computing

Shelley Vaughn, MPH
Lead Research Facilitator

Nicole Pescatore, MPH
Clinical Research Project Manager
Outline

• MPOG IRBs
• PHI / HIPAA Compliance
• MPOG Stats Server - Data Access & Security
• Data Storage
• High-Performance Computing
Institutional Review Board (IRB) Approvals
HIPAA Protected Health Information - Identifiers

- Name
- All geographical subdivisions smaller than a state
- All elements of dates (except year) related to individual
- Phone numbers
- Fax numbers
- Electronic mail addresses
- Social Security numbers
- Medical record numbers
- Health plan beneficiary numbers
- Account numbers
- Certificate/license numbers
- Vehicle identifiers and serial numbers
- Device identifiers and serial numbers
- Web Universal Resource Locators (URLs)
- Internal Protocol (IP) address numbers
- Biometric identifiers, including fingerprints
- Full face photographic images
- Any other unique identifying number
MPOG Statistical Server

YOTTABYTE RESEARCH CLOUD

ARC·TS
ADVANCED RESEARCH COMPUTING TECHNOLOGY SERVICES
UNIVERSITY OF MICHIGAN
Accessing MPOG Statistical Server

• Provide proof of IRB approval or exemption for research project
• Sign and return security affidavit
• Obtain a username and password from MPOG Central
Software Available on MPOG Statistical Server

- SAS
- R
- R Studio
- Microsoft SQL Server
- STAT/TRANSFER
- MATLAB
- Office
- IBM SPSS
- STATA
# Turbo Storage Volume

![Image of Turbo Storage Volume]

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Armis 2.0

• Fee-based high-performance computing cluster suitable for HIPAA regulated data
• Linux-based operating system
• Scheduled computational jobs
• Data stored on Turbo storage volume
Thank you!

• Please reach out with any questions.
  – MPOG Research - mpog-research@med.umich.edu
  – Shelley Vaughn – mhousey@med.umich.edu
  – Nicole Pescatore – nipescat@med.umich.edu