Good Data Practices
Cyberseminar Series 4.0

Focusing on the interaction between research design and data decisions

VIReC
RESEARCHERS' GUIDE TO VA DATA

Poll #1 Participation in 2017 sessions

- Not including today's session, how many of the previous 3 sessions in this year's Good Data Practices series did you attend?

  - None

  - 1

  - 2

  - 3

Good Data Practices Cyberseminar

Capstone Discussion: *Focusing on the interaction between research design and data decisions*

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Center of Innovation in Complex Chronic Healthcare (CINCCH)

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February 23, 2017

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Learning objectives of the Good Data Practices 4.0 series

Series participants will

- Understand how previous research results and conceptual/decision models influence the development of the research question

- Learn how a research question can influence the choice of study design

- Understand ways in which research questions and study designs can affect decisions about data

- Become aware of potential data management and analysis challenges and ways they might be addressed

- Become familiar with potential limitations in VA data sources and examples of ways to address them

Today's Panel

- Sara J. Knight

- Heather Schacht Reisinger

- Mary S. Vaughan Sarrazin

- Amy M.J. O'Shea

Agenda

- Brief summary of key elements of each presentation
    1. Research question
    2. Study design features
    3. Data source(s)
    4. Analytic method(s)
- Challenges & audience questions
    1. Design
    2. Data
    3. Methods
    4. Other

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Key elements of the presentations: Sara Knight

Research question	Integrating genomic information into colorectal cancer care
Study design features	• Retrospective cohort (patient) • Qualitative data collection from health professionals
Data source(s)	• VA administrative • Cancer registry, • EHR • AMA Physician Masterfile • Key informant interviews
Analytic method(s)	Mixed methods • Descriptive statistics • Content analysis

Key elements of the presentations: Heather Reisinger

Research question	Identifying an optimal hand hygiene bundle for VHA implementation
Study design features	• Cluster RCT • Qualitative data collection from HH-involved staff • Summative evaluation
Data source(s)	• Key informant interviews • Focus groups • Direct observation
Analytic method(s)	Mixed methods • Team-based qualitative analysis • Descriptive statistics

Key elements of the presentations:
Mary Vaughan Sarrazin and Amy O'Shea

Research question	Effect of Telemedicine ICU Monitoring on Utilization, Outcomes
Study design features	• Observational • Facility Matching
Data source(s)	• VA administrative data • HAIG survey • MedSAS data
Analytic method(s)	• Logistic regression • Descriptive statistics • Moving average plots

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Design Challenges

Knight	When pilot data provide the basis for a larger study where a quantitative study will inform a qualitative study, revisions may be needed in the *a priori* plan for linkage between the two approaches.
Reisinger	• The more sites you add, the more challenges you'll overcome. • Plan time for randomization analysis. • Plan some flexible time into your study design.
Vaughan Sarrazin & O'Shea	Strategy for matching facilities

Data Challenges

Knight	Early development of *a priori* plan for data integration can reduce data complexity and accelerate analyses and dissemination. However, need for many data sources to study uncommon events requires highly skilled data management, and can still result in complex analytic data sets.
Reisinger	• Constraints on data collection impact study design and methods. • Data collection is also a staffing issue.
Vaughan Sarrazin & O'Shea	• Which VA administrative data source to choose • Clinical Note Template data not designed for research • Multiple ways to construct key variables

Methods Challenges

Knight	Algorithm used in earlier study may not work in new data environment
Reisinger	• Real data reveal false assumptions, i.e., positive impact of opportunity to add a biostatistician with experience in cluster trials • Reduced number of clusters
Vaughan Sarrazin & O'Shea	Accounting for utilization trends over time

Other Challenges

1. Describe one thing that affected how you conducted your study.

2. Is there one thing you would do differently next time?

Resources

VIReC options for specific questions

HSRData Listserv	HelpDesk

HSRData Listserv

- Community knowledge sharing

- ~1,200 VA data users

- Researchers, operations, data stewards, managers

- Subscribe by visiting http://vaww.virec.research.va.gov/Support/HSRData-L.htm (VA Intranet)

HelpDesk

- Individualized support

virec@va.gov

(708) 202-2413

Quick links for VA data resources

Quick Guide: Resources for Using VA Data
http://vaww.virec.research.va.gov/Toolkit/QG-Resources-for-Using-VA-Data.pdf (VA Intranet)

VIReC: http://vaww.virec.research.va.gov/Index.htm (VA Intranet)

VIReC Cyberseminars: http://www.virec.research.va.gov/Resources/Cyberseminars.asp

VHA Data Portal: http://vaww.vhadataportal.med.va.gov/Home.aspx (VA Intranet)

VINCI: http://vaww.vinci.med.va.gov/vincicentral/ (VA Intranet)

Health Economics Resource Center (HERC): http://vaww.herc.research.va.gov (VA Intranet)

CDW: https://vaww.cdw.va.gov/Pages/CDWHome.aspx (VA Intranet)

Archived cyberseminar: What can the HSR&D Resource Centers do for you?
http://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=101

Previous Good Data Practices cyberseminar series archived on HSR&D website

http://www.hsrd.research.va.gov/cyberseminars/catalog-archive-virec.cfm?

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