Good Data Practices Cyberseminar Series 4.0

Focusing on the interaction between research design and data decisions



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

Neil Jordan, PhD

Center of Innovation in Complex Chronic Healthcare (CINCCH)

Edward J. Hines, Jr. VA Hospital



February 23, 2017

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

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

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 methodsDescriptive statisticsContent 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 interviewsFocus groupsDirect observation	
Analytic method(s)	Mixed methodsTeam-based qualitative analysisDescriptive 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	ObservationalFacility Matching
Data source(s)	 VA administrative data HAIG survey MedSAS data
Analytic method(s)	 Logistic regression Descriptive statistics Moving average plots

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

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 <i>a priori</i> 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 <i>a priori</i> 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

- Community knowledge sharing
- ~1,200 VA data users
- Researchers, operations, data stewards, managers
- Subscribe by visiting

http://vaww.virec.research.va.gov/Support/H SRData-L.htm (VA Intranet)



HelpDesk

Individualized support



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

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

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

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

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

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

CDW: <u>https://vaww.cdw.va.gov/Pages/CDWHome.aspx</u> (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

Health Services Research & Development

VIReC Cyberseminar Archive HSR&D's archive for VIReC-hosted cyberseminars

NOTE: Intranet only seminars are available with VA network access from VIReC's Intranet Cyberseminar Archive » http://vaww.virec.research.va.gov/Cyberseminars/Intranet-Archive.htm

Search VIReC archive:

Filter by VIReC Series: VIReC Good Data Practices

 Filter by VIReC series
 Search by keyword
 Sort columns by clicking on the table headings.

VIReC

DATE	TITLE	VIReC SERIES	PRESENTERS
2015/09/24	Using REDCap: Data management in studies linking primary and secondary data	Good Data Practices	Deppen, Stephen
2015/09/22	Decisions, Decisions, Decisions: Selecting Methods and Tools for Data Analysis	Good Data Practices	Hynes, Denise
2015/09/17	Mind the Gap: Using administrative and claims data to answer your research question	Good Data Practices	Wagner, Todd
2015/09/15	Planning for Data: Early, Often and Ongoing	Good Data Practices	Krein, Sarah
2014/05/29	Reduce, Reuse, Recycle: Planning for Data Sharing	Good Data Practices	Kok, Linda
2014/05/22	Controlled Chaos: Tracking Decisions During an Evolving Analysis	Good Data Practices	Groeneveld, Peter
2014/05/15	<u>"The Living Protocol" – Managing Documentation</u> While Managing Data	Good Data Practices	Maciejewski, Matt
2014/05/08	The Best Laid Plans: Plan Well, Plan Early	Good Data Practices	Garvin, Jennifer
2013/09/13	Research Application.	Good Data Practices	Maciejewski, Matt
2013/09/11	Planning for Data Re-use	Good Data Practices	Kok, Linda
2013/09/10	Managing and Documenting Data Workflow	Good Data Practices	Hynes, Denise
2013/09/09	Early Data Planning for Research	Good Data Practices	Hynes, Denise

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

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

✓ filter

search

Contact information

Neil.Jordan@va.gov

neil-jordan@northwestern.edu



End