Day 1 | October 1, 2024 – Introduction to DART & Health Services Research

9 am – 10 am	Welcome / Coffee Chat

Learning Objectives:
- Meet and greet of DART staff and fellow attendees
- Free coffee, sweets, and treats (&parking) !!

Intended Audience:
- Any who are interested in learning more about Sheps
- Research professionals with an interest in health services (etc.)

10 am – 11am	Introduction to the Data Analytics and Research Team (DART)

Presenter(s): Brian Cass, Erica Richman, Ashley Avis, Dan Angelelli

Learning Objectives:
- Learn about collaborative opportunities offered through DART team
- Understand data sources available to assist with research questions
- Be informed on skillsets, areas of expertise, and interests across DART

Intended Audience:
- Researchers interested in collaboration and support on emerging research questions in health services
- Early-career research professionals looking to build partnerships an established center with experienced members of the research community

11am – 12 pm	Deep Dive on Data Sources

Presenter(s): Dan Angelelli, Peter Newman-Matthews, Jessica Archibald

Learning Objectives:
- Understand data security standards at the Sheps Center
- Understand available data sources
- Understand use cases for data sources

Intended Audience:
- Members of research community (faculty, staff, graduate students) that are interested in using health data sources for research

12 pm – 1pm	Break for lunch

1pm – 2pm	Claims 101

Presenter(s): Jessica Archibald, Shweta Pathak

Learning Objectives:
- Understand basic structure of claims data
- Understand capabilities of claims data for research purposes
- Learn limitations of claims data for public health research

Intended Audience:
- Members of research community (faculty, staff, graduate students) that have research questions well-suited for claims-based secondary data
- Individuals interested in gaining knowledge of claims data

Day 1 Schedule Continued Below

Day 1 | continued | Introduction to DART & Health Services Research

2pm – 3pm	Basics in Grant Writing, Study Design, and Analysis Planning

Presenter(s): Erica Richman, Shweta Pathak
Learning Objectives:
- Understand strategies to use in grant writing
- Be informed on overall methods of study design
- Be educated on drafting an analysis plan to lead discussions during project kick-off and implementation

Intended Audience:
- Early career research looking to better understand tools and methods for health services research
- Graduate students looking to gain information about applied tools and methods

3pm – 4pm	Office Hours / Brainstorming Sessions with DART

Informal time to chat with some of our presenters, featuring expertise in the following areas:
- In Person:
    o Study Design / BCBSNC: Shweta Pathak
    o Medicaid Claims / Policy Evaluation: Jessica Archibald
    o Research Engagement: Erica Richman
- On Zoom:
    o AI / Bias: Ashley Avis
    o Transforming Data: Jake Hyman & Melissa Sandahl
    o Behavioral Health in Claims: Heather Copley

Intended Audience:
- Researchers hoping to get feedback on initial ideas / potential collaborations
- Individuals interested in hearing more in-depth about any topics

Day 2 | October 2, 2024 – Applied Data Science in Health Services Research

10 am – 11am	Parsing the Patient: NLP Applications for Clinical Documentation

Presenter(s): Nathaniel Hendrix
Learning Objectives:
- Have a high-level understanding of what NLP is
- Understand public health data sources that are well-suited to NLP
- Be educated on applications of NLP to public health research questions

Intended Audience:
- Public health researchers looking to incorporate new data sources into research
- Data scientists / statisticians in public health research with experience in other data analytical methods wanting to grow understanding of NLP and its applications

11am – 11:30 pm	Geospatial Health Data

Presenter(s): Jake Hyman; Heather Copley
Learning Objectives:
- Introduce examples of the data available through the US Census Bureau (and other sources)
- Demonstrate our ability to geographically map hospital locations using the Place of Service File
- Demonstrate how geographic data can be incorporated into our claims data (how accurately can we map providers/patient locations and hospitalizations).

Intended Audience:
- Public health researchers looking to incorporate geospatial data into research
- Public health researchers who have not yet considered incorporating geospatial components into their research

11:30am – 12pm	Transforming Claims Data

Presenter(s): Melissa Sandahl
Learning Objectives:
- Learn how to transform health care claims into patient visit summaries for use in Markov chains
- Be familiar with some of the limitations of building visit summaries

Intended Audience:
- Researchers new to working with health care claims or looking for new ways to use claims data
- Data scientists interested in how to prepare data for Markov chains

12 pm – 1pm	Break for lunch

1pm – 2pm	Bias in AI

Presenter(s): Ashley Avis
Learning Objectives:
- Attendees will leave knowing:
  - How bias is proliferated through AI
  - How we can structure projects and teams to identify and correct bias
  - Resources and tools for identifying and correcting bias

Intended Audience:
- Researchers interested in projects to build AI that could be introduced in a clinical or other public setting
- Data scientists and other practitioners who want to learn how to identify and correct bias

Day 2 Schedule Continued Below

Day 2 | Continued – Applied Data Science in Health Services Research

2pm – 3pm	Highlighting Current Projects with DART at Sheps

Presenter(s): Zhitong Yu, Shweta Pathak, Melissa Sandahl, Dan Angelelli, Erica Richman
- Learning Objectives:
- Understand in an applied sense how DART contributes to projects
- Be informed of how ongoing studies are making use of the secondary data sources are being used

Intended Audience:
- Research professionals interested in collaborating with DART and/or Sheps
- Anyone that gets excited by cool, interesting, impactful academic research!

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- Zoom:
    - Study Design / BCBSNC: Shweta Pathak
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    - NLP: Nathaniel Hendrix
    - Research Engagement: Erica Richman