"Sourcing" Data for NAMCS

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Disclaimers

The following is neither an official presentation, nor necessarily represents the views of PAMF, PAMFRI, NCHS, or CDC

Overview

- The Setting: PAMF and PAMFRI

- Research Embedded in a Delivery System

- Identifying and Addressing Data Problems

- PAMF and NAMCS

- A Small Project

Palo Alto Medical Foundation (PAMF)

- Large (~1,000 MD) medical delivery system

- 30+ locations in 4 Northern California counties

- Grew from 3 long-standing medical groups

- PAMF owns the facilities, hires the staff, handles the "business" functions

- Physicians are employees of the independent Palo Alto Foundation Medical Group (PAFMG)

- Epic EHR has been in use since 2001

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Palo Alto Medical Foundation Research Institute (PAMFRI)

- A division of PAMF

- 60+ years of research, mostly in basic science

- But, we home to Anne Scitovsky's pathbreaking work on the cost of medical care (paper charts)

- Now, most of our research leverages the EHR

- From patient recruitment to purely observational studies relying on existing data

Intramural or "Embedded" Research

- The PAMF data we use are generated not for *research*, but for patient *care and operations*

- Economists often use "other people's data"

- PAMFRI's embedded location affords us access to data, administrators, and clinicians

- This leads to:
  - the observation of potential problems with the data,
  - and devising "fixes" or "appropriate context setting"

Examples of Data Problems and Solutions

- Some studies need BMI (Body Mass Index)
  - Weight is recorded far more routinely than height
  - We can search backward (and forward) for measures
  - But need to be attuned to errors and appropriately interpreting sudden changes, e.g., due to pregnancy
- Office visits reflect differing levels of intensity
  - Not just patient need, but scheduling patterns (15 vs. 20 minute blocks), MD time use in office vs. home, familiarity with the patients, etc.

External Validity

- Of about 750,000 different patients seen each year at PAMF
  - About 450,000 have a PAMF primary care physician
  - (i.e., 300,000 are seeing only our specialists)
  - Of those with PCPs, ~20% are in capitated plans
  - PAFMG MDs are compensated essentially on the basis of wRVUs, independent of the patient's payer
- Contracting, billing, and other "business" functions are handled by PAMF
- We account for these facts in our study designs

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PAMF Providers and NAMCS

- NAMCS is a highly valuable, well-designed survey

- Its roots, however, are in Dr. Welby's office

- This raises several questions:

  - Do Field Reps (FRs) and an embedded researcher get the same information from EHR charts?

  - Do "standard" information exchange protocols yield the same information?

  - Do MDs in large practices appropriately answer non-clinical questions, e.g., about practice setting, payer mix, service availability?

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Overview of a Small Project

- Randomly select 9 MDs from the Palo Alto Division
- Use the standard NAMCS FR processes, except…
  - Obtain consent to be observed by an ethnographer
- FR does the usual MD interview
  - Ethnographer looks for questions about which the MD seems unsure and observes how these are handled
- Usual FR abstracting of randomly chosen visits
- RI's Information Management Group (IMG):
  - Writes code to extract data meeting NAMCS specs
  - Uses HL7 CCD to extract data
- NCHS and PAMFRI compare FR, IMG, and CCD results
- PAMFRI reports on observations from the survey process

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Potential Implications

- Data collection for patient visits may be efficiently (and perhaps more accurately) done by CCD

- Savings in abstraction costs may allow larger samples to be drawn

- Instructions for acquiring practice-based information may need to be revised

Thank You!

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