“Sourcing” Data for NAMCS

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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
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
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?
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
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!