Data to Support Health Equity: The Missing Link(s)

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SCHOOL OF MEDICINE

Disclosures

- Grant funding related to alternative payment models from the NHLBI, NIA, and Commonwealth Fund
- Prior employment (9/2014-9/2016) followed by contract work (through 3/2019) with the Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services
- Serve on Health Policy Advisory Council for Centene Corporation (St. Louis, MO)

Why is this so hard?

- Health and personal data on which we rely for PCOR are typically collected for a reason
- But PCOR is not usually that reason
  - When it is the reason, the sample is often small

- →Policymakers and researchers are left to be secondary users of data collected for clinical care or (more often) payment

Where we should center vs where we do center

Hospital

Insurer

EMR

Government

Academia

Patient?

Equity-relevant data live in many places

Hospital

- EMR modules
- Social work and care coordination assessments
- PT/OT assessments
- SDOH Z-codes

EMR

Insurer

- Dual Enrollment
- Supplemental Security Income
- Original Medicare Coverage for Disability
- Race/Ethnicity

Government

- Proportion living in poverty
- Average income
- Race/ethnicity distribution

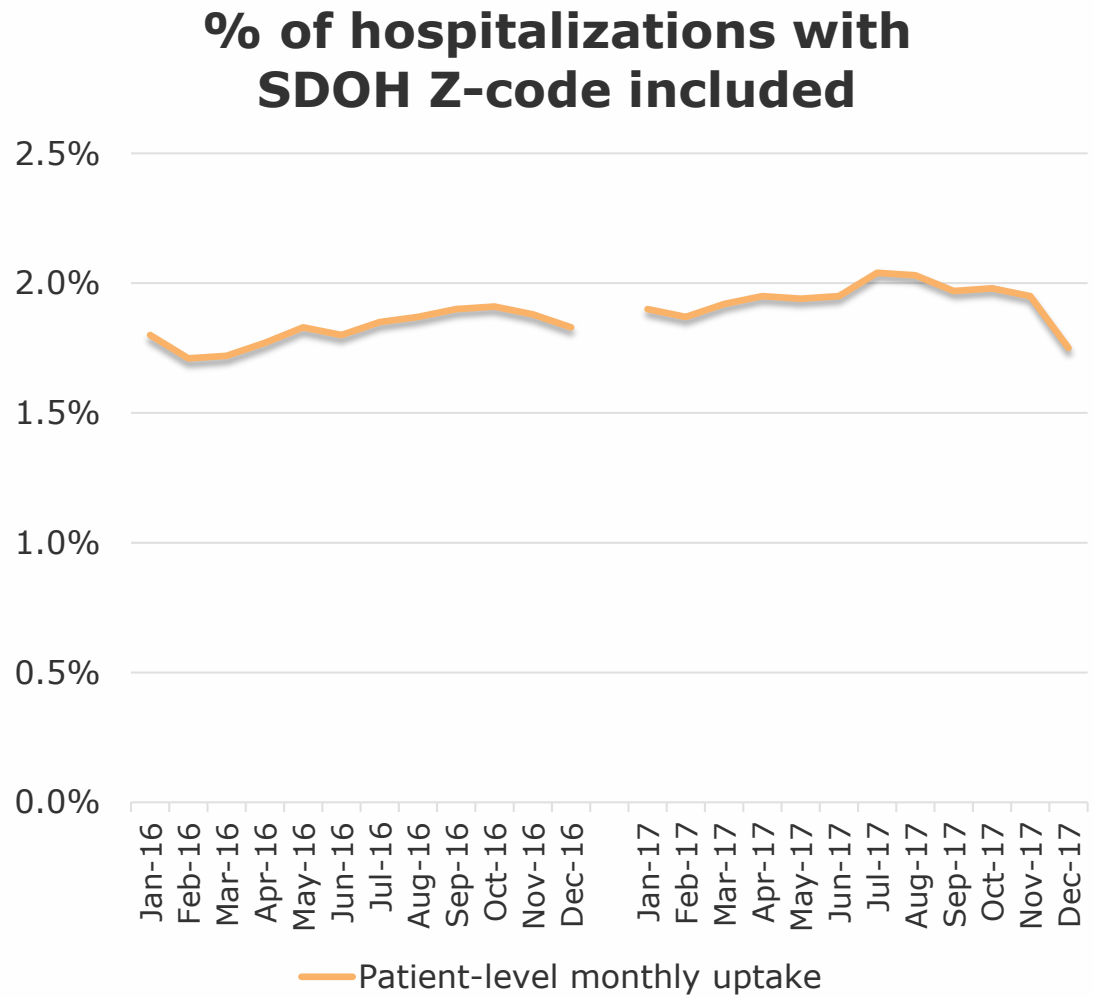
Academia

- Area Deprivation Index
- Social Vulnerability Index
- 2-1-1 Call Data

Patient?

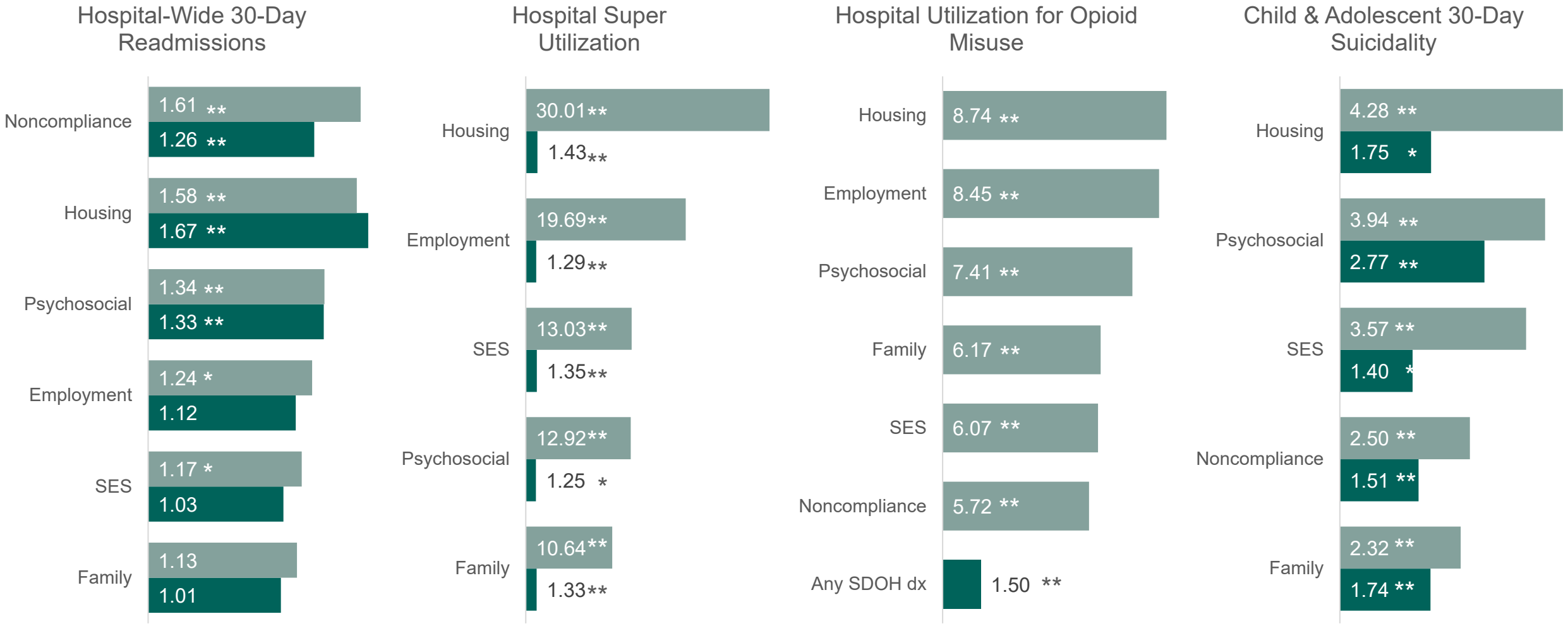
SDOH Z-codes

- Widely available and detailed, but inconsistently used
- 101 ICD-10 Diagnosis Codes:
  - 22 Employment (e.g. Z560 Unemployment, unspecified; Z562 Threat of job loss)
  - 35 Family (e.g. Z6221 Child in welfare custody; Z6222 Institutional upbringing)
  - 4 Housing (e.g. Z590 Homelessness; Z591 Inadequate housing)
  - 6 Psychosocial (e.g. Z639 Problem related to primary support group, unspecified)
  - 26 Socioeconomic (e.g. Z595 Extreme poverty; Z550 Illiteracy and low-level literacy)
  - 8 Noncompliance (e.g. Z91120 Patient's intentional underdosing of medication due to financial hardship)



Truong et al, JGIM 2020

Predictive Characteristics of ICD-10 SDOH Z-Codes: Odds Ratios for Selected Outcomes



Courtesy of Mat Reidhead, Missouri Hospital Association

Available at http://bit.ly/PolicyBriefSDOH

This siloing hampers our ability to answer crucial policy questions

Impact of Medicaid expansion on equity in hospitalizations for complex cancer surgery

- National Medicaid data (not up to date, doesn't include uninsured so we don't have a baseline)
- National Inpatient Sample (2 year lag at least, doesn't include state or hospital information so don't know who expanded)
- Medicare data (less lag, has geographic info, but no young Medicaid patients or uninsured)
- State all-payer claims databases (not widely available, not standardized, usually don't include uninsured)
- Local hospital data (not widely available, not generalizable, no easy comparison group)
- VA? Kaiser? (wrong patients)
- None have reliable information on SDOH

Hospital

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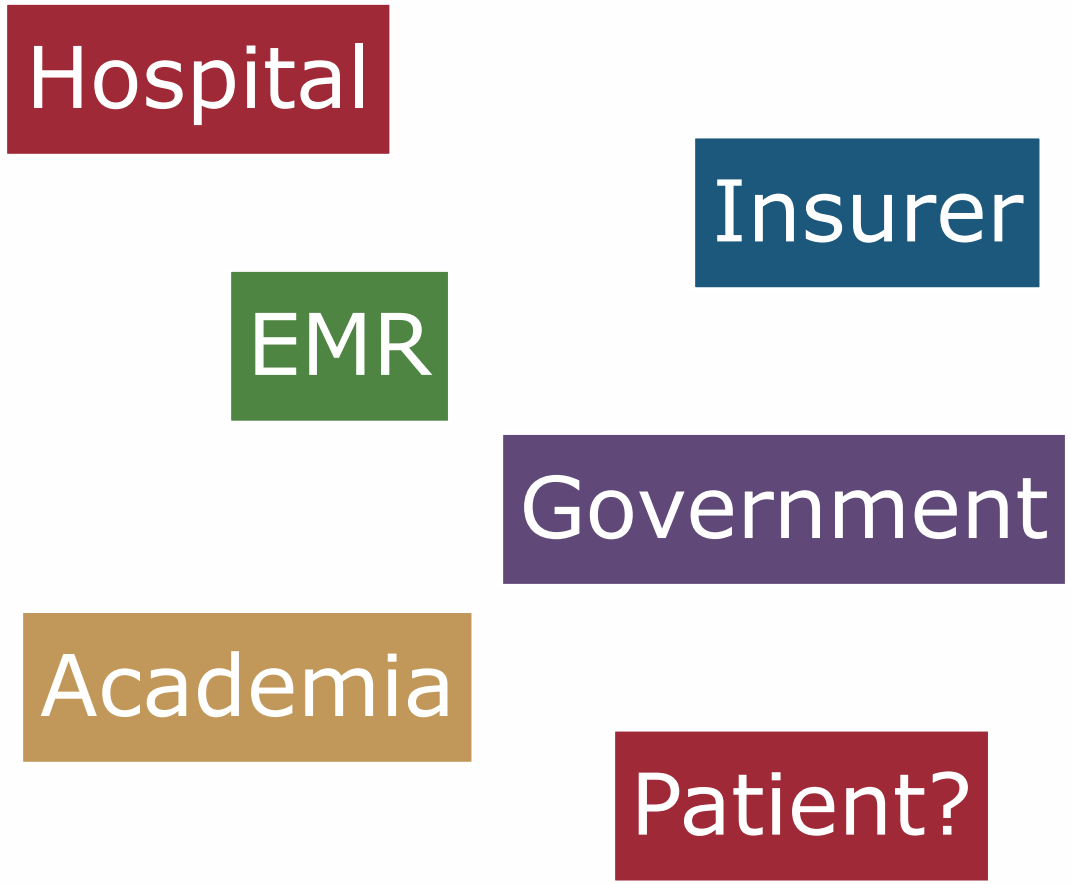
Patient?

This siloing hampers our ability to answer crucial policy questions

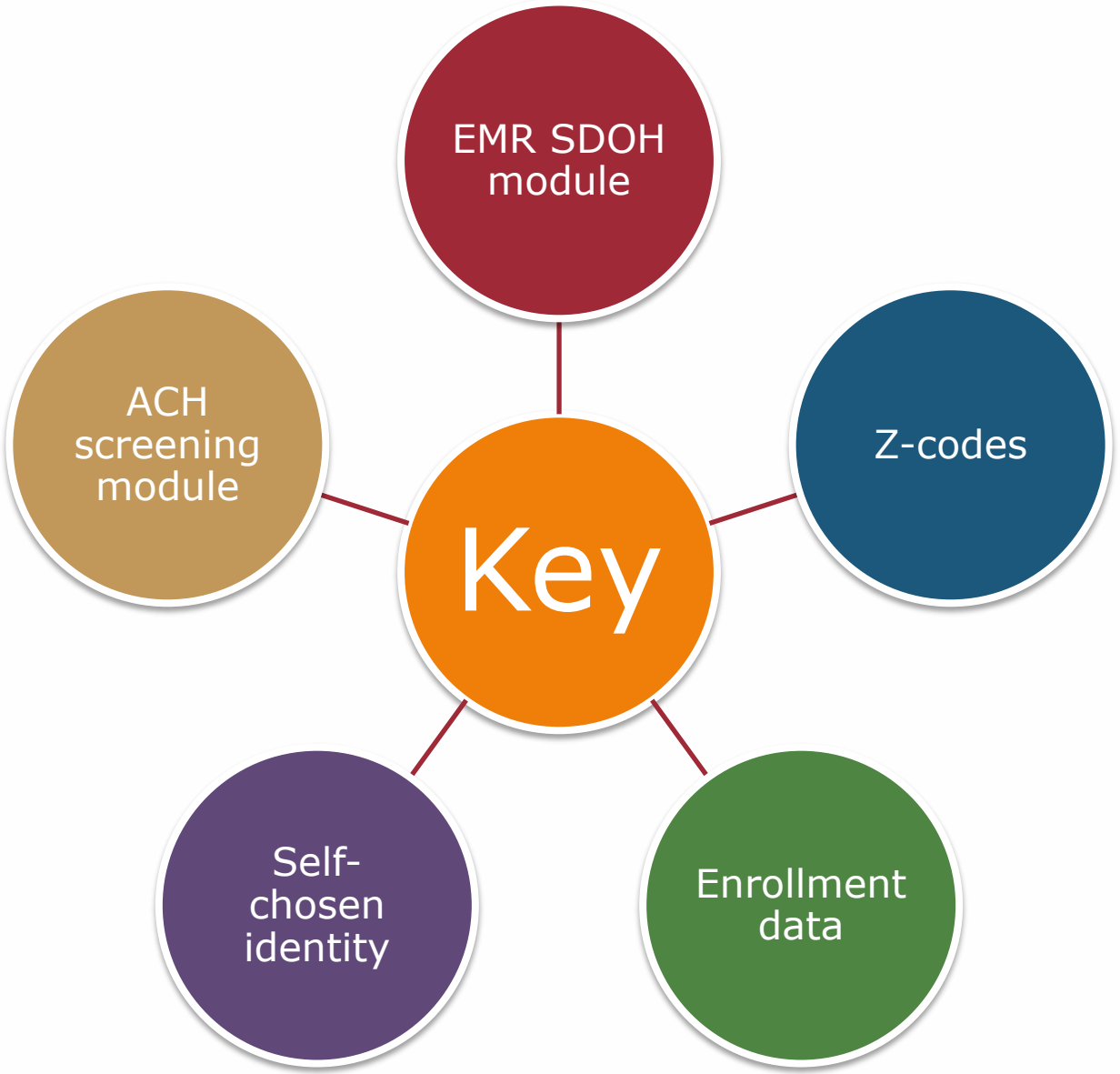


Impact of HVBP on equity in post-hospitalization functional status

- National Medicare data (updated! But no functional status data, blunt race/ethnicity data)
- Medicare SNF data (1-2 year lag, only includes FFS patients in SNFs)
- Medicare HHA / LTC / IRF data (same, plus not necessarily comparable across settings)
- Medicare outpatient data (no patient-reported outcomes)
- Medicare Current Beneficiary Survey (small sample of patients, not useful for small subgroups including racial / ethnic minoritized groups)

Potential Solutions

- Re-identify national datasets
  - Even minor identifiers could make an enormous difference
  - Enhance security and privacy as needed
- Create mappings and linkages across data sources
  - Total standardization may not be feasible (or desirable) but comparability should be
- Incentivize the collection of SDOH Z-codes and data on functional status through payment policy
- Improve speed and access: crucial for policy decisions and research



Thank you!

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