Social risk measurement: leveraging existing data resources & looking for workflow fit
Every approach to social factor measurement faces limitations & challenges

Area level measures

Ecological fallacy

Underused

Z CODES

Variable recording Requires NLP

Notes

Variable recording Requires NLP

Surveys

Financial insecurity

Food insecurity

Gold standard surveys

Questionnaire

Vest et al. in review

doi: 10.1097/MLR.0000000000001418

uxpajournal.org/usability-of-electronic-medical-records/

Alternative approach leverage existing data

Clinical decision support systems informed by risk prediction models

LEVERAGE EXISTING DATA
- Demographics
- Behaviors
- Diagnoses
- Referral histories
- Information across health systems

No response bias
No selective screening
100% of patients can be modeled (assuming data present)

UNIVERSAL SCREENING

WORKFLOW FIT
- Automated process not dependent on providers, staff or patient
- Integrate into decision support system within EHR to support action

Consistent screening
Clear thresholds for decision making

RISK STRATIFICATION
Results risk prediction presented within EHR and workflow
Impact of risk prediction for referrals

65% increase in social work referrals when risk scoring went live at primary care clinics

48% increase in odds that referred patients will keep their appointments

$1.7M in savings due to 1,237 fewer ED visits in the intervention group
Barriers & Challenges

**Construct Validity & Temporality**
- Housing unstable ≠ homeless
- Income changes over time
- Social relationships hard to assess

**Lots of Noise & Activity**
- Lots of “buzz” lots of good intention
- Lots of companies offering solutions

**Ability to Act on Screening**
- What do you do with screening info?
- Responsibility to act if know?
- Capacity in organization or community?

**Return on Investment**
- Addressing SDoH & social factors avoid costs, but....
- Not the same as revenue generation
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