Implementing an electronic system to screen and actively refer to community based agencies for food insecurity in primary care

Amy Smith, MD, MPH [1,2*], Leah Zallman, MD, MPH [1,2,3*], Kathy Betts, MPH [1], Lisa Brukilacchio, OTR/L, M.Ed. [1], Fiona McCaughan, MS, MBA, RN [1], Erin McAleer, MSW [4], Noreen Kelly, MSHS [4], David Elvin, MD[1,2**], Lisa Trumble, MBA [1**], *Amy Smith and Leah Zallman contributed equally, ** David Elvin and Lisa Trumble contributed equally

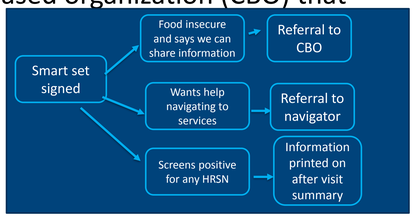
1-Cambridge Health Alliance, 2-Harvard Medical School, 3-Institute for Community Health, 4-Project Bread

Introduction

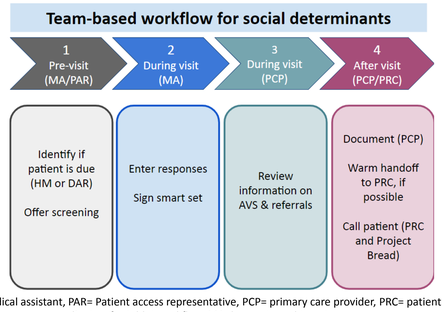
- Health related social needs (HRSN) such as food insecurity are prevalent in safety net healthcare settings
- Yet these settings lack feasible systematic ways to actively refer patients to community based agencies (e.g. refer to agencies that will reach out to patients).

Methods

- We implemented a systematic screening program for food insecurity, integrated into the electronic health record, that enables electronic active referral to a community based agency.
- Patients complete paper forms which are entered into the electronic record by clinic staff.
- If patients agree that we can share their contact information with a community based agency, our system automatically faxes a referral to a community based organization (CBO) that addresses food insecurity.



- We initially piloted on paper, then integrated into the electronic medical record and rolled it out to 16 primary care clinics of an integrated safety net health care system.
  - Team based approach
  - Currently rolling out electronic tablet



*MA=Medical assistant, PAR= Patient access representative, PCP= primary care provider, PRC= patient resource coordinator; for tablet workflow, MA does not need to enter responses

Summary

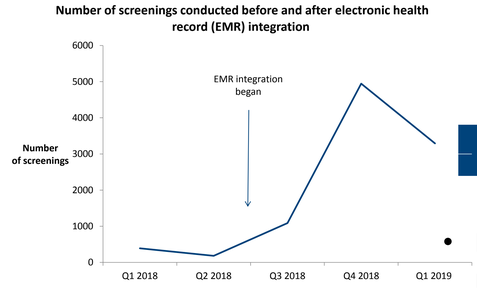
- **Screening for and addressing food insecurity is critical to health**
- **Screening for food insecurity and active referral to community based organizations (CBO) is feasible and acceptable to primary care staff**
- **Our system has resulted in over 11,000 screenings, 2,000 referrals to a CBO and over 500 food stamp screenings**

Measures of Success

- # individuals screened for food insecurity and referred to a community based agency
- % of patients reached by community based agency
- # supplemental nutrition assistance program (SNAP) screenings and community resource referrals provided(e.g., information provided on resource)
- Provider and staff feedback on burden and feasibility

Results to Date

- To date, we have screened over 11,000 patients for food insecurity (89% of whom were insured by Medicaid), of whom 27% screened positive for food insecurity (range of 16-42% across clinics)
- Our program has resulted in 2,314 referrals to a CBO
  - 1,418 (61%) were successfully reached by the CBO and offered SNAP screening
  - 632 (44%) were not already enrolled in SNAP, of whom 407 (64%) accepted screening.
  - 634 (45%) were already enrolled in SNAP, of whom 152 (24%) accepted screening to increase benefits.
  - CBO provided information to patients on 2,820 resources (average of 2 per person reached) for health related social needs such as food pantries and meal program and department of transitional assistance.



- Feedback from providers and staff indicate the program is well received and feasible in a busy primary care setting. (N=55 respondents to an anonymous survey)
  - 73% believed this program improves health
  - 92% were satisfied or neutral about the program
  - 75% reported entering the data was either quick or not too cumbersome

Discussion

- A program integrated into the electronic medical record that systematically screens for food insecurity and actively refers patients to a community based agency program is feasible in a safety net setting.
- Such programs can actively connect patients with community based agencies that address health related social needs.
- This innovation demonstrates that a screening and active referral system for community resources can be integrated into the electronic medical record in safety net healthcare settings.
- As safety net institutions increasingly address health related social needs, programs like this one can actively connect patients to resources that reach out to patients, thereby reducing the burden on patients to seek out community based agencies.

Future Opportunities

- Develop opportunities to close the loop on active referrals (e.g., confirm when patients connect with community based agencies)
  - Define and navigate high risk patients to agencies
- Develop workflows and systems for screening and referring patients outside of visits (e.g. through patient portal or telephone)
- Sustain continuous quality improvement framework

Immigrants Paid $29.3 Billion More in Private Insurance Premiums Than They Received in Benefits in 2014

Leah Zallman, MD, MPH[1,2,3], Steffie Woolhandler, MD, MPH[2,4], Sharon Touw, MPH[1], David Himmelstein, MD[2,4], Karen Finnegan, MPH[1]

1-Institute for Community Health, 2- Cambridge Health Alliance, 3-Harvard Medical School, 4-City University of New York at Hunter College

Introduction

- Critics claim that immigrants use more medical care than they pay for.
- Previous studies have indicated that immigrants sustain Medicare through higher payments than expenditures.
- **Our Research Question:** Do immigrants' private insurance contributions exceed insurers' payments for their care?

Methods

- Data were obtained from two nationally representative surveys:

Medical Expenditure Panel Survey (MEPS): Private insurers' expenditures Premiums paid by each enrollee

Current Population Survey (CPS): Employer contributions

- We imputed documentation status of immigrants using available variables such as citizenship, receipt of public benefits, time in United States, place of birth, and spouse's citizenship status.
- We calculated mean per capita contributions (individual and employer), expenditures, and net contributions (contributions-expenditures) for US-born, immigrants, and undocumented immigrants
  - We examined changes over time.
- We restricted our analyses to persons covered by non-exchange private insurance, since exchange plans differ from other private insurance in important ways, are unavailable to undocumented persons, and represent a distinct risk pool.
- Our analysis accounted for complex survey design.

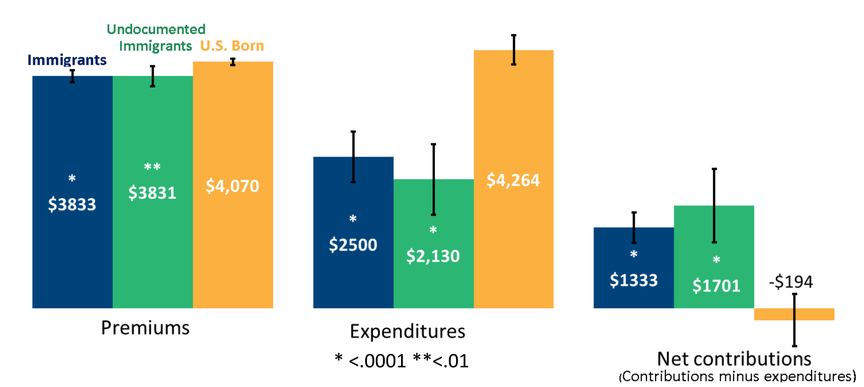
Summary

- **Immigrants contribute more to private insurance than their expenditures.**
- **This net contribution has been persistent over time.**
- **The net subsidy of immigrants offsets the negative net subsidy of U.S. born individuals.**

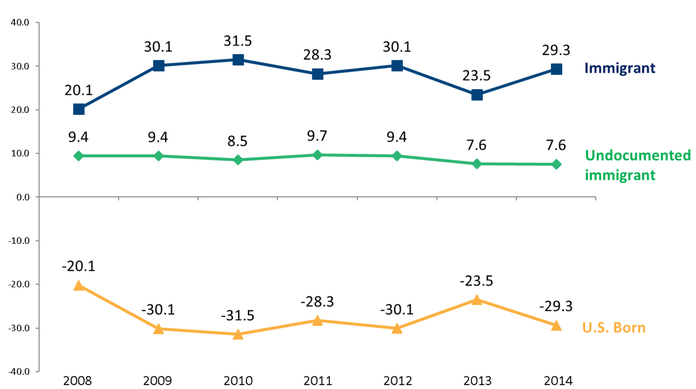
Results

- In 2014, immigrants were 14.6% of the population and undocumented immigrants accounted for 3.7%
  - 52% of immigrants and 59% of U.S. born individuals had private insurance
- In 2014, immigrants' premiums totaled $84.3 billion; private insurers' expenditures for their care totaled $55.0 billion
- Premiums for undocumented immigrants totaled $17.1 billion; insurers paid only $9.5 billion for their care.

Per capita premiums, adjusted expenditures and net contributions to private health insurance, 2014



Net contributions to private health insurance attributable to immigrants, undocumented immigrants and U.S. born persons, 2008-2014



Discussion

- Immigrants contributed far more in premiums for private coverage in 2014 than their insurers paid out for their care, with undocumented immigrants generating the largest per-enrollee surplus.
- The surplus generated by immigrants offset the deficit incurred by U.S. born individuals, and exceeded total insurance industry profits by about $15 billion in 2014.
- Immigrants made large net contributions ($20B to $32B) in every year between 2008 and 2014, with little change over time.
- Our findings contradict the assertion that people born in the U.S. underwrite the medical care of immigrants, particularly those that are undocumented.
- Despite immigrants' contributions, laws and regulations often limit their access to care.

Limitations

- We adapted the method for imputing documentation status of immigrants due to data availability; this may cause misclassification of documented immigrants as undocumented.
- About 6% of MEPS respondents indicated that their insurance plan covered individuals outside of the household, which may have have caused us to overestimate per-capita premium payments in those households.

Funding

This work was made possible with support from the California Health Care Foundation