S&E Webinar Series: Evaluating Health Systems Change

Tuesday, December 8, 2020
3:00 p.m. – 4:00 p.m.

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Agenda

- Introductions, Updates, & Session Housekeeping
- Speaker: Dr. Lucia Rojas-Smith
- Open Q&A Session
- Wrap-Up & Announcements
Evaluating Health Systems Change:
A Framework for Evaluating Complex System Change Through a Social Determinants of Health Lens
Lucia Rojas Smith DrPH
December 8, 2020
Acknowledgements

- Christine Bevc
- Amy Chepaitis
- Sara Jacobs
Presentation Overview

- Social determinants of health (SDoH) and health system change
- Implementation research framework for evaluating health systems change
- Evaluating tobacco cessation through implementation research and SDOH lens
Social Determinants of Health

The conditions in which people are born, grow, work, live, and age affect their health and well-being.¹
Why engage the health care sector?

- SDoH underlie 40% modifiable health outcomes; and
- SDoH is a driver of health care costs²

Role of Health Care in Addressing SDoH

- Screening for social needs in patient populations
- Connecting patients to services to promote healthy behaviors
- Connecting patients to social services and community resources
- Engaging with community partners
- Using community benefit monies for Community Health Needs Assessment
Unnecessary and costly healthcare utilization linked to SDoH

Screening for SDoH is becoming more widespread
  - 33% of hospitals and 8% practices report no screening

Evaluations lack common health and healthcare utilization outcomes to assess effectiveness

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Addressing SDOH through Implementation Science Methods
Implementation Science

- Translation and scaling of interventions to “real-world” settings
- Understand why and how interventions work (or don’t)
- Enables adoption and sustainability
- Well-suited for complex system interventions
  - Targets change at individual, organizational, system, community
  - Adapts and evolves across time
  - High-degree of contextual variability
- Facilitates attribution
2009 A unified framework for implementation research in health care

2014 Adapting CFIR for Complex System Interventions

2017 Applying adapted CFIR to a broad range of complex innovations in health care
Health System Change Evaluation

External Context

- **External pressure**
  - Marketing environment
  - Pricing density
  - Similar/reinforcing tobacco-free initiatives

- **Policy environment**
  - Taxes, sales restrictions
  - Tobacco free policies

- **Availability/adequacy of community resources**
  - Quit lines, cessation programs
  - Culturally appropriate, comprehensive

- **Prevalence of tobacco use**

- **Prevalence of social needs**
Evaluation Considerations

• How current/useful are public use data sets?
  - For tobacco prevalence
  - For SDoH

• What gaps can qualitative data fill in?

• Are you accounting for/recognizing unexpected events?
  - COVID-19
Internal Context

- Who, What, Where, When
- Readiness to launch/scale up
- Quality of planning and execution
- Staff skills, training, morale
- Changes to workflow
- Leadership
- Communication and teaming
- Data for decision-making
Evaluation Considerations: Internal Context

- How much detail and granularity to characterize who, what, when and where?

  - How adequate/accessible are the sources of data (EMR, screenings)
    - For sociodemographic characteristics
    - For tobacco use

- Who is most directly affected by the implementation or able to influence it?

- Which clinical decision tools, order sets, workflows, channels of communication are affected? Is the intervention compatible?

- Which competencies, attributes are most essential for execution?
Implementation Outcomes

- Reach
  - Intended population
  - Sufficient to make an impact

- Dose

- Fidelity

- Provider adoption

- Patient acceptance, satisfaction and engagement

- Social needs are addressed
Evaluation Considerations: Implementation Outcomes

- Who needs to be reached?
  - Age, gender, race, ethnicity, SES, co-morbidities

- How much dose (exposure) is necessary?
  - Screening fatigue

- What is the relative importance of intervention fidelity versus adaptation?

- What is feasible and sustainable?
  - Workflows, IT, Staffing
Implementation Outcomes

- Consider outcomes and indicators at different levels for the health systems change implemented

  • Healthcare facility
    - Proportion of units/departments that have adopted screening protocols and/or workflow changes that support screening (Scale up)

  • Providers
    - Proportion and type of providers who are using the intervention

  • Patients
    - Proportion screened for commercial tobacco use by SDoH and population characteristics (e.g., race/ethnicity, behavioral health, etc.)
Intervention Outcomes

**Short and Intermediate**
Screening, advice to quit, referrals
Use of evidence-based cessation services
Quit attempts

**Long-Term**
Health behaviors: Tobacco, diet, physical activity
Health maintenance: Chronic disease
Health status: Perceived & clinical outcomes
Health care utilization: Emergency, specialty & primary care
Health care costs: ROI and per patient spending
Evaluation Considerations: Intervention Outcomes

- Can you attribute changes to the intervention?
  - Randomized control groups
  - Matched comparison groups
  - Stepped wedge designs ideal for “real world” study settings

- Is lack of change due to Implementation failure or flawed intervention design?

- Timeframe required to detect outcomes

- ROI to whom?
  - Payers, health care system, the community
Lessons Learned for Health System Change

- Start simple
  - Break down complex interventions into smaller units of change

- Iterate - PDSA, CQI

- Focus on what you can measure well
  - NQF-tobacco control clinical quality measures
  - Quality existing registries, EMR, screening protocols
  - Decide what is good enough

- Establish the evaluation design before implementation
Future Developments
Health Equity and Disparities

- Systemic racism
  - Community-level
  - Institutional-level
- Differences in implementation and interventions outcomes by race/ethnicity, class, gender, sexual orientation, disability status
- Unintended consequences of identifying social risk
  - Bias in care
  - Deepening stigma and discrimination
- Changes in societal attitudes and beliefs regarding the role of social determinants in health
Other frameworks to check out

References


Thank you

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