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Hospital and Trauma Center

Recent cessation attempts and receipt of cessation services among a diverse primary care population: A mixed methods study

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- None

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Objectives

- Describe meaningful use for smoking cessation in primary care
- Present findings from a rapid cycle evaluation of tobacco cessation interventions using the electronic health record (EHR)
- Discuss tobacco metrics that could reduce health disparities

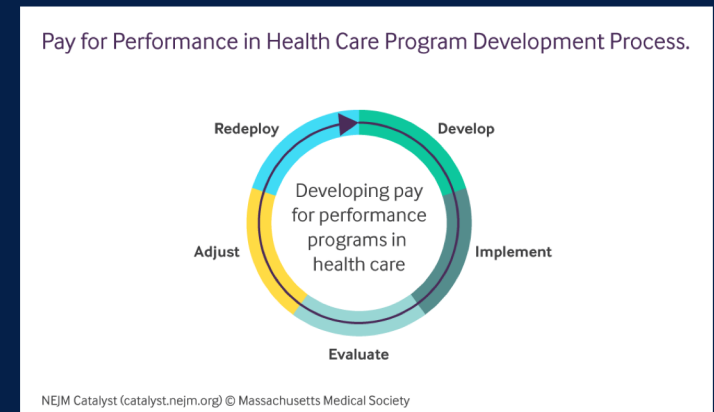
Tobacco-related health disparities

- Tobacco use is the leading preventable cause of death
- Tobacco-related burden is concentrated in low-income populations
- These populations seek primary care in safety net clinics



Pay-4-performance and tobacco cessation services

- “Meaningful use” – incentives to meet practice improvement targets
- For tobacco, screening and providing cessation interventions
 - Quitting is not a target
 - Difficult to achieve
- Incentive payments to health systems who meet targets



Prevalence of smoking in SFHN patients is 24%

- SFHN – 14 primary care clinics, hospitals, behavioral health clinics, and specialty care
- Several QI initiatives to increase delivery of cessation care
 - MEA training
 - Behavioral assistant training
 - Workflow so that all patients get some smoking cessation care



Used EHR and qualitative methods to evaluate cessation intervention

- Extracted EHR data between July 2016 and April 2107
- Examined receipt of cessation services
- Evaluated recent cessation attempts
- Conducted in-depth interviews and focus groups with patients and staff
 - Precede-Proceed model



Patient demographics

Variable	Site 1 (N=251)	Site 2 (N=923)	Site 3 (N=763)	Site 4 (N=1373)	Total (3310)
Age, M \pm SD	67.1 \pm 6.2	52.0 \pm 12.7	51.3 \pm 12.3	53.3 \pm 9.9	53.5 \pm 11.8
Sex, % female	26.3 %	32.6 %	44.8 %	31.3 %	34.4 %
Race/ Ethnicity					
White	41.4 %	24.3 %	6.9 %	39.8 %	28.0 %
African American	34.7 %	32.0 %	72.2 %	40.1 %	44.8 %
Hispanic or Latinx	8.4 %	27.5 %	12.6 %	12.4 %	16.3%
Asian	8.4 %	11.2 %	3.3 %	4.9 %	6.5 %
Other race/ ethnicity	4.4 %	3.1 %	3.8 %	2.2 %	3.0 %
Insurance type					
Medicare	33.5 %	20.2%	17.8 %	19.8 %	20.5 %
MEDI-CAL	61.0 %	59.7 %	67.1 %	70.9 %	66.2 %
Healthy Worker/ SF	1.2 %	13.5 %	6.7 %	3.6 %	6.9 %
Other	0.0 %	0.5 %	0.8 %	0.2 %	0.4 %
Uninsured	4.4 %	6.1 %	7.6 %	5.5 %	6.1 %
Depression	32.2 %	30.3 %	23.6 %	35.1 %	30.7 %

Recent cessation attempts and receipt of cessation services

Variable	Site 1 (N=251)	Site 2 (N=923)	Site 3 (N=763)	Site 4 (N=1373)	Total (3310)
Recent smoking cessation attempt	12.7 %	29.4 %	16.9 %	11.1 %	17.6 %
Medical assistant counseling	99.6 %	97.2 %	94.6 %	91.2 %	94.3%
Any provider counseling	94.8 %	86.2 %	88.7 %	79.5 %	84.7 %
Behavioral assistant counseling	21.9 %	1.7 %	5.8 %	3.9 %	5.1 %
Any cessation counseling	99.6 %	97.5 %	96.6 %	93.2 %	95.6 %
Prescribed NRT medication	25.5 %	25.8 %	26.2 %	18.1 %	22.7 %
Prescribed non-NRT smoking cessation medications	5.2 %	10.2 %	4.8 %	6.7 %	7.1 %

EHR analysis

- Three visits per patient
- Looked at relapse rates
 - 33.8% who made a quit attempt during the 2nd visit relapsed to smoking in the third visit
- Receipt of counseling was associated with higher odds of a quit attempt

Barriers to and facilitators of providing cessation care

Theme	Sub-themes
Patient-level	
Predisposing factors	Barriers to access to treatment
	Challenges with substance use and mental illness
Enabling factors	Access to treatment
Provider-level	
Predisposing factors	Competing priorities
	Job descriptions and ownership for counseling
Reinforcing factors	Training for staff to provide cessation counseling
	Ongoing quality improvement
Enabling factors	Cessation leadership
	Better communication among clients and staff

Patient-level predisposing factors

- Barriers to access to treatment

“I get [medications]. I’ve gotten it every time. I’ve done it through Kaiser and through San Francisco General as well, and ***I’ve always gotten it but it’s been kind of like a hassle*** – wait for this, you gotta get your insurance for that. I mean, I would quit but- no, I’d just fall right off the wagon.” (Patient Focus Group)

Provider-level predisposing factors

- Job description and ownership for counseling

“I think everyone has to be involved, that comes in contact with the patient. It has to be the MEA, it has to be the nurse, and it has to be the doctor, because sometimes they come for nurse visits, and the nurse visits just want to do the wound care or they just want to do the refill.” (Medical Assistant Staff Interview)

Summary of results

- 17.6% recent cessation attempt
 - Unassisted quit attempts ~ 4%
 - Cessation clinical trials ~ 30%-40%
- Receipt of services associated with recent cessation attempts
- Disparities in cessation attempt by clinic
 - Clinics serving homeless and Black/AA patients could benefit from targeted interventions
- Low rates of medication utilization

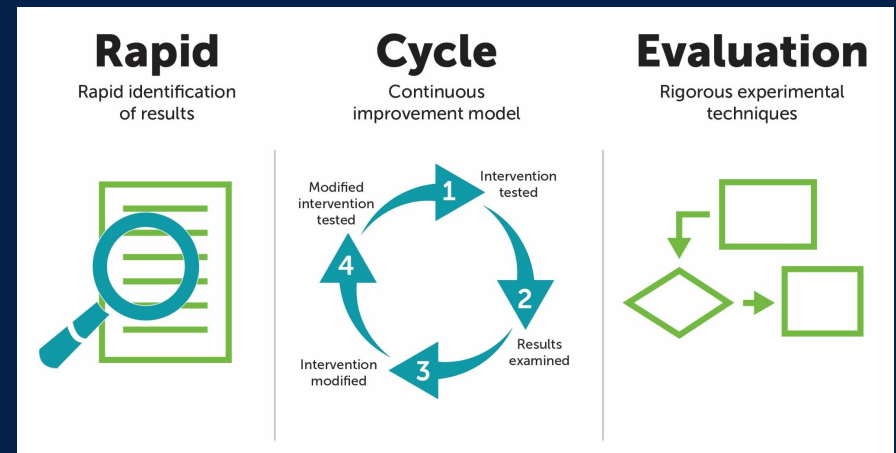
Limitations

- Data quality
- Patient self-report for tobacco status
- Analysis only had people without missing data
- Qualitative data are not generalizable



Implications – Cessation services vs. cessation outcomes

- Recent cessation attempts is not an indicator of successful quitting
 - Over 50% relapse within the 1st month of a quit attempt
 - Rapid cycle evaluation of tobacco cessation interventions
- Increasing access to services = increased quit attempts
 - Early marker of successful quitting



Implications – Next steps

- Tobacco registry for Epic
- Rapid cycle evaluation of interventions
- Relapse rates over time
- Examine other impact outcomes
 - Quit ratio – former/ever smoker; successful quit rates
 - Health care utilization