Applying Strategies from Universal HIV Screening to Birth-Cohort HCV Screening:

Lessons Learned in an Urban Federally Qualified Health Center (FQHC) Network
Melissa Kraus Schwarz

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

• Industry-sponsored grant: a Gilead FOCUS grant supports a portion of my salary.
Learning Objectives

• Understand the application of the TEST model to expand HIV and HCV screening.
• Apply lessons learned from ACCESS’ testing expansion initiatives to their own projects.
• Identify barriers in HIV and HCV screening/treatment and strategies to overcome them.
• Discuss the use of data to inform quality improvement.
Presentation Overview

Presentation

- ACCESS background
- TEST Model
- HIV testing expansion
  - Implementation chronology
  - Lessons learned
- HCV testing expansion

Discussion

- Strategies to overcome barriers to testing expansion
- Using data for quality improvement
About ACCESS

- Network of 35 health centers serving Chicago and surrounding area
- Recognized Patient-Centered Medical Home offering comprehensive health care and wraparound services
- Serves predominantly low-income minority communities with high HIV prevalence
- Ryan White CARE Act-funded HIV services provider for more than 20 years
TEST Model

Systemic Policy Change

EHR Modifications

Training, Feedback, QI

Testing Integrated into Clinical Flows
Testing Integrated in Clinical Workflows

• This is the desired endpoint

• Maximize sustainability
  o Employ regular staff rather than dedicated testers
  o Adapt workflows to make testing routine
  o Minimize stigma

• Supported by EHR Modifications, Systemic Policy Change, and Training/Feedback/QI
EHR Modifications – Best Practice Advisories

HIV

• Alert provider to need for screening
  o Annual for ages 13-64
  o One time age 65+

• SmartSet to simplify ordering
  o Document consent
  o Order test/link diagnosis
  o Add testing information to After Visit Summary

HCV

• Alert provider to need for screening
  o One time for patients born 1945-1965
  o People who inject drugs (PWID)
Number of HIV Tested Ordered by Day by BPA Status

- 7-site Pilot/Pre-BPA
- Soft BPA
- Hard-Stop BPA
Number of HIV Tested Ordered by Day by BPA Status

- **Graph** shows the impact of “Hard Stop” BPA implemented to mark the expansion of universal HIV screening
  - Hard stop required clinicians to address BPA immediately
  - Very unpopular and in place for very short time
  - Replaced by “Soft” BPA that did not have to be addressed during encounter

- **Less disruptive** Hard Stop activated for World AIDS Day
  - Hard stop required to be addressed before closing encounter
  - Less disruptive

- **Hard Stop** activated intermittently to maintain awareness but impact diminishing
HCV Screening by Month by Birth Cohort

Birth Cohort BPA
Implemented Aug 2016

Non-Birth Cohort
Birth Cohort (Born 1945-1965)
HCV Screening by Month by Birth Cohort

- Graph shows impact of implementation of Birth Cohort BPA implemented August 2016
- Marked increase over a few months in number of patients born 1945-1965 screened for HCV
  - July 2016: 140
  - August 2016: 405
  - September 2016: 485
  - October 2016: 676
  - November 2016: 1,011
- Soft BPA caused a less dramatic increase in screening than the Hard Stop HIV BPA but less disruptive and no pushback from clinicians
Systemic Policy Change

• BPAs most powerful tool but not sufficient without systemic policy change and leadership support

• Leadership support for lengthy process of integrating testing and linkage to care
  o 2012 HIV pilot at 7 sites
  o Universal HIV testing expansion with Hard Stop BPA June 2015
  o HCV Birth Cohort BPA August 2016

• Modification to general consent to treatment to include HIV screening

• Regional Medical Directors track HIV testing rates by health center, and provider testing rates included in quality metrics
Training/Feedback/QI

• Initial training for providers on universal HIV screening
  o Recommended by CDC
  o Some providers uncomfortable discussing risk behaviors
  o Information on internal HIV treatment resources and procedures for linkage to care

• Information on HIV BPA

• Monthly feedback for Regional Medical Directors on HIV and STI testing numbers and rates

• Monthly review of HIV and HCV testing metrics by ACCESS’ Infectious Disease Quality Committee
HIV/HCV Testing Expansion Chronology

**AUGUST 2013 MILESTONE:**
Systemwide Epic rollout complete

**JUNE 2015 MILESTONE:**
Hard Stop HIV Testing BPA
Deploy Hard Stop HIV Screening BPA for patients age 13-64 not tested for HIV in the prior year or age 65+ never tested
Hard stop soon removed due to severe disruption to workflows; "soft" BPA remains in place

**AUGUST 2016 MILESTONE:**
Birth Cohort HCV BPA

**January 2012-June 2014**
7-SITE HIV PILOT
Assessment of existing HIV testing practices, linkage to care procedures and reporting capabilities
Identifying barriers to routine universal screening
Building Epic reports to capture HIV and STI testing data
Providing training to providers and staff to overcome barriers to screening and linkage to care
Produce communication materials for patients

**July 2014-October 2015**
**EXPANSION OF ROUTINE UNIVERSAL HIV SCREENING**
Education and outreach to providers and staff on rationale for universal testing and new procedures for documenting consent
Strengthening linkage to care processes
Promote 4th Generation HIV test as the preferred test and add it to system wide favorites list

**November 2015-January 2018**
**HCV TESTING AND LINKAGE TO CARE EXPANSION**
Continue monitoring HIV testing rates
BPA modifications to simplify consent and reduce required number of clicks for HIV testing
Education and outreach to providers on recommended HCV screening for 1945-1965 birth cohort

**January-December 2017**
Experiment with sporadic implementation of Hard Stop HIV BPA
Refinements to HCV Birth Cohort BPA - quantitative RNA reflex testing
Establishment of Hepatitis C workgroup to develop and refine workflows
Collaboration with onsite Walgreens pharmacists to assist in completing prior authorization paperwork for HCV treatment
Partnership with CORE Center to reserve appointment block for Fibroscans for ACCESS patients
Modifications to reports to facilitate HIV and HCV linkage to care workflows and track HCV patients through diagnosis, staging, treatment and cure
Primary care providers trained through Project ECHO to treat HCV

ACCESS COMMUNITY HEALTH NETWORK
TRANSFORMING COMMUNITY HEALTH CARE
Lessons Learned from HIV Testing Expansion

• EHR modifications are a powerful tool to encourage routine screening
• Gain provider support to communicate the importance of testing within the context of primary care
• Changing testing rates at a population level takes sustained effort and attention over time
• Incorporate monitoring of testing rates into ongoing clinical quality measurement and improvement processes
• Assess and address barriers to testing and linkage to care and provide ongoing training and resources to address those barriers
Increasing Screening Rates a Long-Term Process

Patients Age 13+ by HIV Screening History

- Ever Tested, 70%
- "Up to Date" Annual Screening 13-64, Once 65+, 51%

JAN 2016 - FEB 2019
Increasing Screening Rates a Long-Term Process

Birth Cohort Patients by HCV Screening History

4,847 Screened Birth Cohort Patients Seen Feb 2019 (71%)
Increasing Screening Rates a Long-Term Process

Patients Age 13+ by HIV Screening History

- Upward trend lines for percent ever tested for HIV and percent “Up to Date” with recommended annual screening for ages 13-64 and onetime screening for age 65+
  - Ever Tested: 48% in January 2016 to 70% in February 2019
  - Up to Date: 38% in January 2016 to 51% in February 2019

Birth Cohort Patients by HCV Screening History

- Upward trend in percent of Birth Cohort ever tested for HCV
  - Started at 19% for birth cohort patients seen in January 2016
  - Reached 71% (4,847) for birth cohort patients seen in February 2019
HCV Linkage Rates by Pilot Site

Linkage Navigation
Initial 2 Pilot Sites

Non-Pilot Sites

Linkage Navigation
Pilot Expansion
3 More Sites
February 2018

Jan-16 | Jan-17 | Jan-18 | Jan-19

0% 20% 40% 60% 80% 100%
HCV Linkage Rates by Pilot Site

• At two initial pilot sites for linkage navigation 141 of 166 (85%) HCV RNA+ patients linked to care January 2016-February 2019

• At remaining sites 347 of 580 (60%) HCV RNA+ patients linked to care January 2016-February 2019

• Linkage Navigation expanded to 3 more sites in February 2018, linking 21 of 32 (66%) HCV RNA+ patients, about the same as the 64% linked at non-pilot sites during that time

• Overall upward trends for linking HCV RNA+ patients to appointment to initiate staging

• Linkage rates highest at two initial pilot sites with Linkage Navigators

• Linkage Navigators’ reach expanded to 3 more sites in 2018

• Linkage rates declined overall in 2018
HCV Linkage by Provider Type

- Not Linked
- Specialist
- Primary Care
HCV Linkage by Provider Type

• Shows counts of patients testing HCV RNA+ each month who eventually linked with a primary care provider or specialist to initiate HCV staging for treatment

• Substantial fluctuation from month to month

• A number of PCPs completed Project ECHO HCV Treatment Training in 2017, and an increasing number of patients linked with PCP in 2017; that number decreased in 2018 as some trained providers left the organization

• Total **705** HCV RNA+ patients, January 2016 – February 2019
  - 305 Specialist (avg 8.0/month)
  - 148 to PCP (avg 5.1/month)
  - 252 Remained unlinked (avg 6.8/month)
Screening, Diagnosis, and Treatment
Stepwise Cascade Percentages and Counts

**Total Percentages**
2016-February 2019

- 100% HCV Ab+
- 83% HCV RNA Tested
- 66% HCV RNA+
- 64% Linked to Care
- 34% VL Zero After Linkage

**Total Counts**
2016-February 2019

- 1,279 HCV Ab+
- 1,067 HCV RNA Tested
- 706 HCV RNA+
- 453 Linked to Care
- 154 VL Zero After Linkage

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Screening, Diagnosis and Treatment

- Two sets of graphs showing overall and year-by-year numbers and percentages for the cascade through screening, diagnosis, and treatment.

- Totals: **1,279** HCV Ab+, 1067 (83%) completed RNA test, of whom 706 (66%) were HCV RNA+. Of the RNA+ 453 (64%) linked to care, completing an appointment with an specifically trained PCP or Infectious Disease specialist to initiate staging for HCV. Of those positive, 154 (34% of linked) had one or more subsequent negative HCV RNA tests.

- All numbers lowered in 2018 and in previous years reflecting progress in screening the birth cohort.
Discussion

• What are the barriers your organization faces in expanding HIV or HCV screening?
• What strategies can you think of to address them?
• What data do you feel are most valuable for monitoring your HIV or HCV testing efforts?
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