Electronic Medical Record Modifications to Support Integrated Routine HCV and HIV Screening and Linkage to Care in Five Community Health Centers in Philadelphia, PA Catelyn Coyle MPH MEd¹, Grace Lee MEng¹, Helena Kwakwa MD MPH² D. NURSING CENTERS CONSORTIU ¹National Nursing Centers Consortium, ²Philadelphia Department of Public Health



ISSUE

- EMRs have the capacity to simplify and automate portions of testing and linkage to care in health centers
- November 2013- NNCC integrated dual routine HCV and HIV testing in a network of federally qualified health centers in Philadelphia, PA. As part of the model, there were multiple modifications to the shared EMR
- Goals of the modifications were to increase adoption across testing sites, decrease missed opportunities and improve patient care

METHODS

- Testing model: Medical assistant initiated laboratory-based reflexive testing
- Testing eligibility:

1) HCV: ≥18 years old without previous HCV diagnosis & subsequent risk-based testing due to changes in drug use, housing, tattoos/piercings

2) HIV: annual testing on patients \geq 13 years old, without HIV diagnosis or test within last 12 months & more frequent testing based on reported risk factor or opt-in

Linkage to Care Coordinator: facilitates transition and retention for positive patients through the continuums of care

Identification of eligible patients

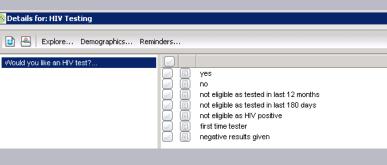
Testing

Reminders - Cathy Test						
Patient: Remind:	Test, Cathy Always	Priority: Date Completed:	Medium			
Entered By:	Manager, System	Completed By:				
Subject: Screen for He	epatitis C (patient qualifies based on birth year)					
Note:						

the next day Subject

Obtaining test

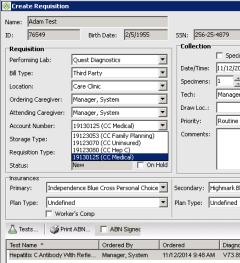
Documentation



laboratory order



laboratory



Disclosure: Catelyn Coyle is a medical advisory member of Gilead Sciences Inc., for which she received honoraria and travel compensation from Gilead Sciences Inc. Funders: Department of Viral Hepatitis-Centers of Disease Control and Prevention; Gilead Sciences FOCUS Program

1) One-time report to identify patients born 1945-1965 eligible for HCV testing

2) Daily query to identify patients eligible for HCV and HIV testing with appointments

 Date/Time v
 Entered By
 Completed By
 Completed Date

 5/11/2015 9:43 PM
 Manager, System
 2/8/2015 6:17 AM
 Manager, System

- 1) MA enter patient's response to HIV test offer, as per Pennsylvania law
- 2) HIV and HCV folder to prepopulate
- 3) Grant funded account for HCV and HIV tests performed on uninsured patients created with commercial

Gender: Male	
timen Not Collected	
2014 🔽 9:49 AM 📑	
Fasting	
er, System 💌	
v	
Blue Shield PA	
_	
nosis Limited Container	Results Reported
39	

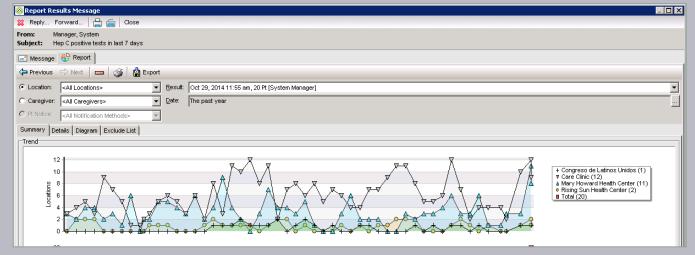
EMR MODIFICATIONS

Documenting results

- Test results
 - 1) Commercial laboratories interface with EMR. Results automatically uploaded into patient's chart and abnormal results are highlighted in red
 - HIV-1/2 Antigen and Antibodies, Fou... Reviewed Collect: 11/11/2013 12:39 PM Hepatitis C Antibody With Reflex to ... Reviewed Collect: 11/11/2013 12:38 PM HCV RNA, QUANTITATIVE REAL TIM... Reviewed Collect: 11/11/2013 12:38 PM
 - 2) Automatic reminder generated based on detectable HCV-RNA values identifies patients eligible for intensive linkage services

Quality control and tracking

1) Weekly reports show numbers of patients tested to monitor project progress and names of patients testing positive to track through cascade of care



1) Flow sheet : identify patients needing confirmatory testing; HCV treatment pre-authorization process; and clinical outcomes if HCV and/or HIV treated at two test and treat sites

Result Summaries							😒 📝	ړ 🗞 🛃	Ø			
Options	Flip Dates 🛛 🔥											
<u>T</u> emplate:	Template: Hep C & HIV Screening											
<u>D</u> ates:	Dates: All past dates Display: Date											
Spreadsh	Spreadsheet Graph											
	8/1/2013	7/18/2013	7/11/2013	6/20/2013	4/29/2013	3/8/201	3 3/4/201	3 2/14/2	013			
Hepatit C Antiboo												
Hepatit C RNA	is HCV Not Detected		HCV Not Detected	<15				834260				
Hepatit C Genoty								1a				

Rising Sun Health Center Rising Sun Health Center



- **Quality control and tracking** (continued) 1) Templates to collect discrete data
- variables and reporting to funders tails for: Hepatitis C screening follow up

😰 🐣 🛛 Explore... Demographics... Reminders Results Provided. Date Results Provided ist Test Counseling (HCV Ab positive or High Risk Ab negative Post Test Counseling (HCV RNA positive). ate Post Test Counseling done

For patients tested elsewhere only) HCV RNA Lab Tvi (For patients tested elsewhere only) HCV RNA Test Dati



lcohol, risk reduction and medical education no counseling, other reason

2) Project evaluation, dissemination through customized data extraction

RESULTS

- September 2013-February 2015:
- 4,893 HCV and 8,809 HIV tests were performed, up from 2,168 HCV and 4,723 HIV tests performed at baseline, 3/1/2012-8/31/2013
- 601 (12.3%) patients had positive HCVantibody tests, 584 (95.6%) had HCV-RNA test, 406 (69.5%) were found to have current infection (overall prevalence=8.3%),231 (56.9%) were seen for HCV care
- 68 (0.8%) patients were HIV-positive and 60 (83.3%) linked to care

CONCLUSION

- EMR modifications can promote integrated testing and linkage to care, which have beneficial individual and public health implications
- EMR modifications efficiently identified eligible patients, facilitated reimbursement and helped track patients through the continuums of care