

HCV Screening and Linkage to Care among Hospitalized Patients in Georgia

4th Hepatitis C Technical Advisory Group (TAG) Meeting
Science Symposium
Nov 28-30, 2018

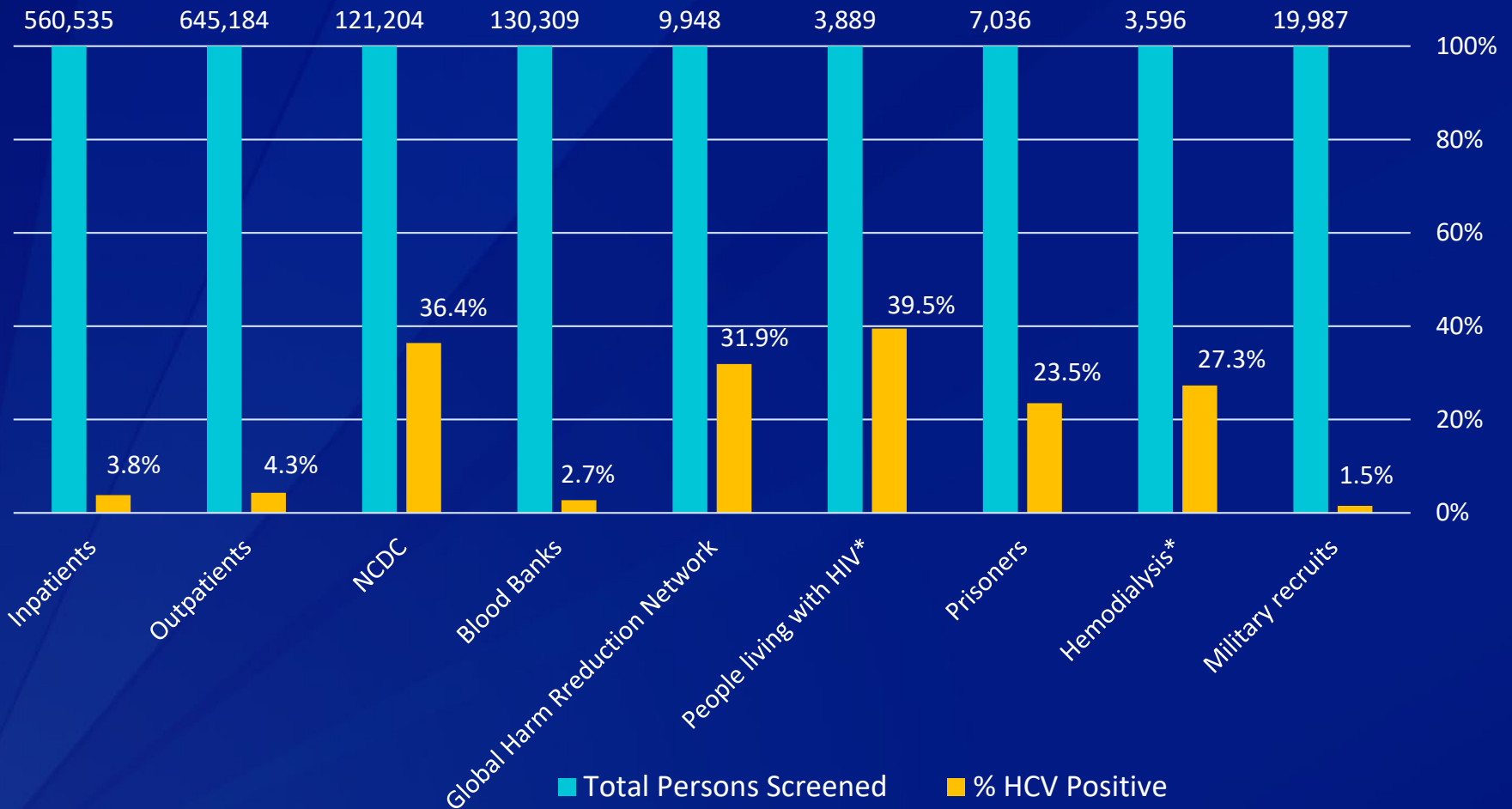
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Background



National HCV Screening among Selected Populations, Georgia, January 2015 – October 2018



* Data through July 1, 2018

National HCV Screening Programs

❑ January, 2015-April, 2017

- Screening data not transmitted in a uniform, standardized format (e.g. excel spreadsheets, hard copies)
- Confidentiality posed challenge in harm reduction sites

❑ May, 2017-present

- Separate screening database/registry established in May, 2017
- Compatible with other health management information system
- Historical data validated and imported into the registry

❑ Ministerial Order N01-45/6 (July 17, 2017)

- Requires all HCV screening providers to submit their screening data within 72 hours after the test is performed

Inpatient HCV Screening Program

- ❑ Information Systems provide opportunity to link screening data with treatment database through unique ID**
- ❑ Patients per month initiating treatment were decreasing**
- ❑ ~30,000 patients admitted in hospitals every month**
- ❑ Government plan to implement HCV screening program among all inpatients**

Inpatient HCV Screening Program

❑ **Government Decree N445 – September 16, 2016**

- Medical facilities mandated to provide and report the results of anti-HCV testing for all hospitalized patients via rapid and/or enzyme assay method.
- Exclusion of inpatients:
 - Registered in HCV Elimination Program
 - Documentation of completed antiviral treatment
 - Documentation of a HCV positive anti-HCV and/or RNA within last 6 months

❑ **Two HCV-related fields added**

- HCV screening done (yes/no)
- HCV screening result (positive/negative)

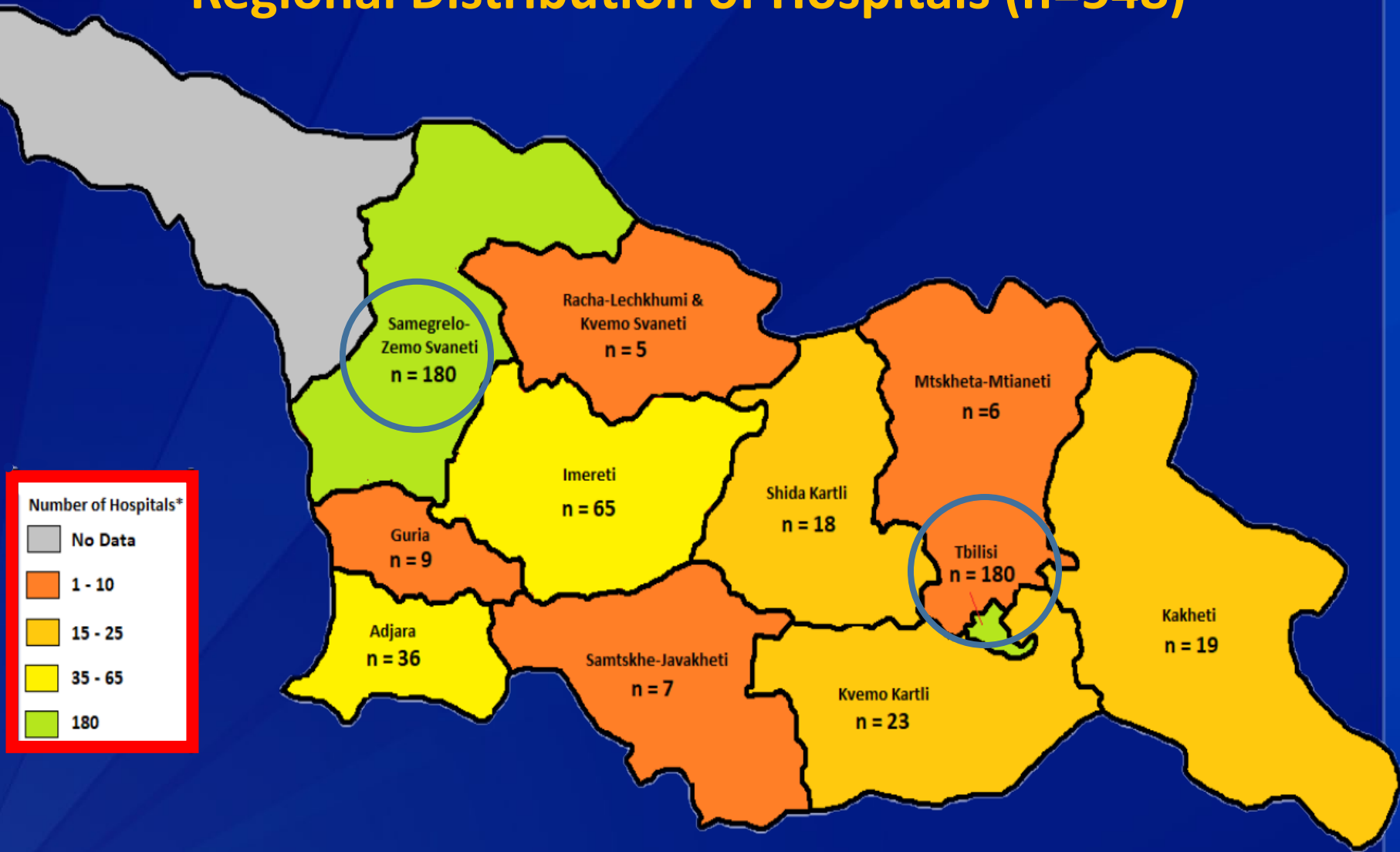
❑ **Program launched on November 1, 2016**

Inpatient HCV Screening Program

- ❑ **Government Resolution 169 – November 27, 2017**
 - HCV Core-antigen (CoreAg) test approved as an alternative to PCR for confirmation of active HCV infection

- ❑ **Government Resolution 118 – March 7, 2018**
 - All hospitals started using reflex CoreAg test for confirmation free of charge to patients (for those screened positive)

Regional Distribution of Hospitals (n=548)



Objectives

- ❑ To describe inpatient HCV screening rates in Georgia
- ❑ To estimate linkage to care rates among those screened positive as part of inpatient HCV screening program in Georgia
- ❑ To compare individuals who were linked and those not linked to HCV care in Georgia

Methods



❑ **Screening data from November, 2016 – July, 2018**

- E-health from November, 2016-May, 2017
- National Screening Registry (through linking with E-health) from June, 2017-February, 2018
- National screening registry (through direct data entry) from March, 2018-July, 2018

❑ **Linkage of screening data to treatment data through October, 2018**

Linkage to care

□ Definition 1 (Linked 1):

Individuals who were screened positive during hospitalization in healthcare setting and subsequently received confirmatory testing at one of the HCV care provider sites after hospital discharge.

□ Definition 2 (Linked 2):

Individuals who were screened positive during hospitalization in healthcare setting, confirmed with chronic infection by reflex CoreAg testing, and subsequently initiated treatment at one of the HCV care provider sites after hospital discharge.

Anti-HCV+

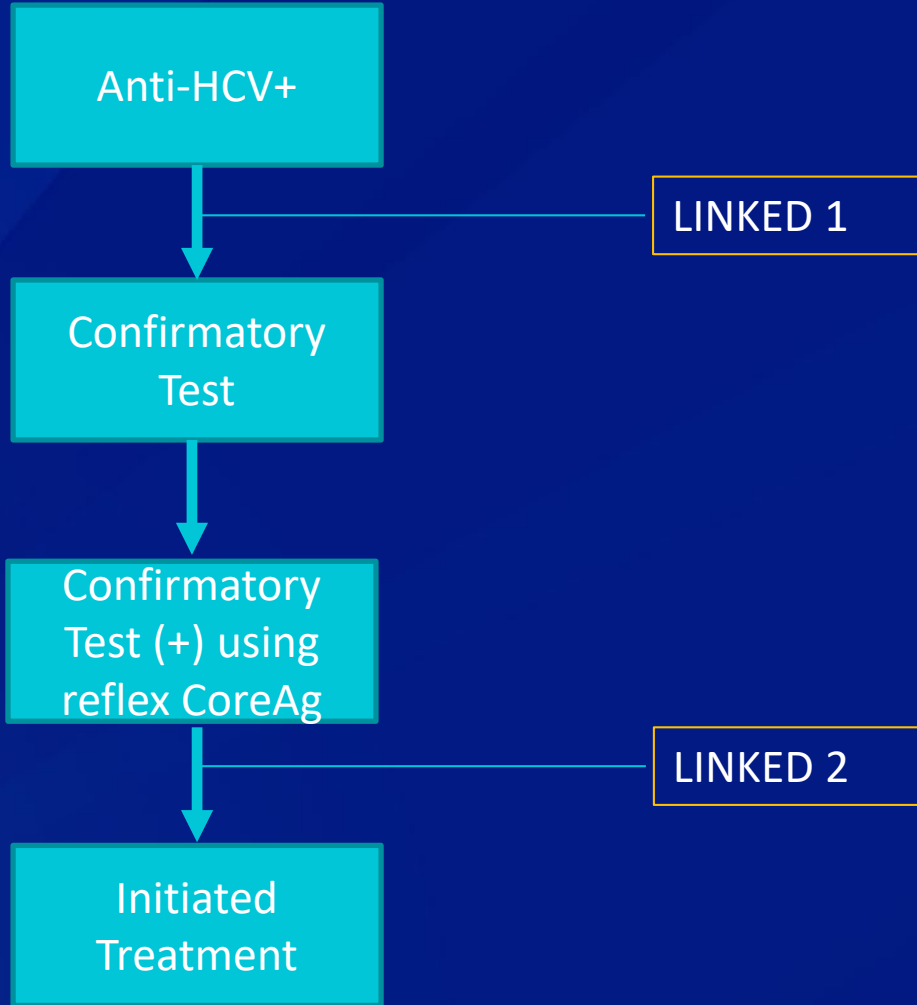
LINKED 1

Confirmatory
Test

Confirmatory
Test (+) using
reflex CoreAg

LINKED 2

Initiated
Treatment



Results



Number of Inpatients Screened and Anti-HCV+, November 2016 – July 2018

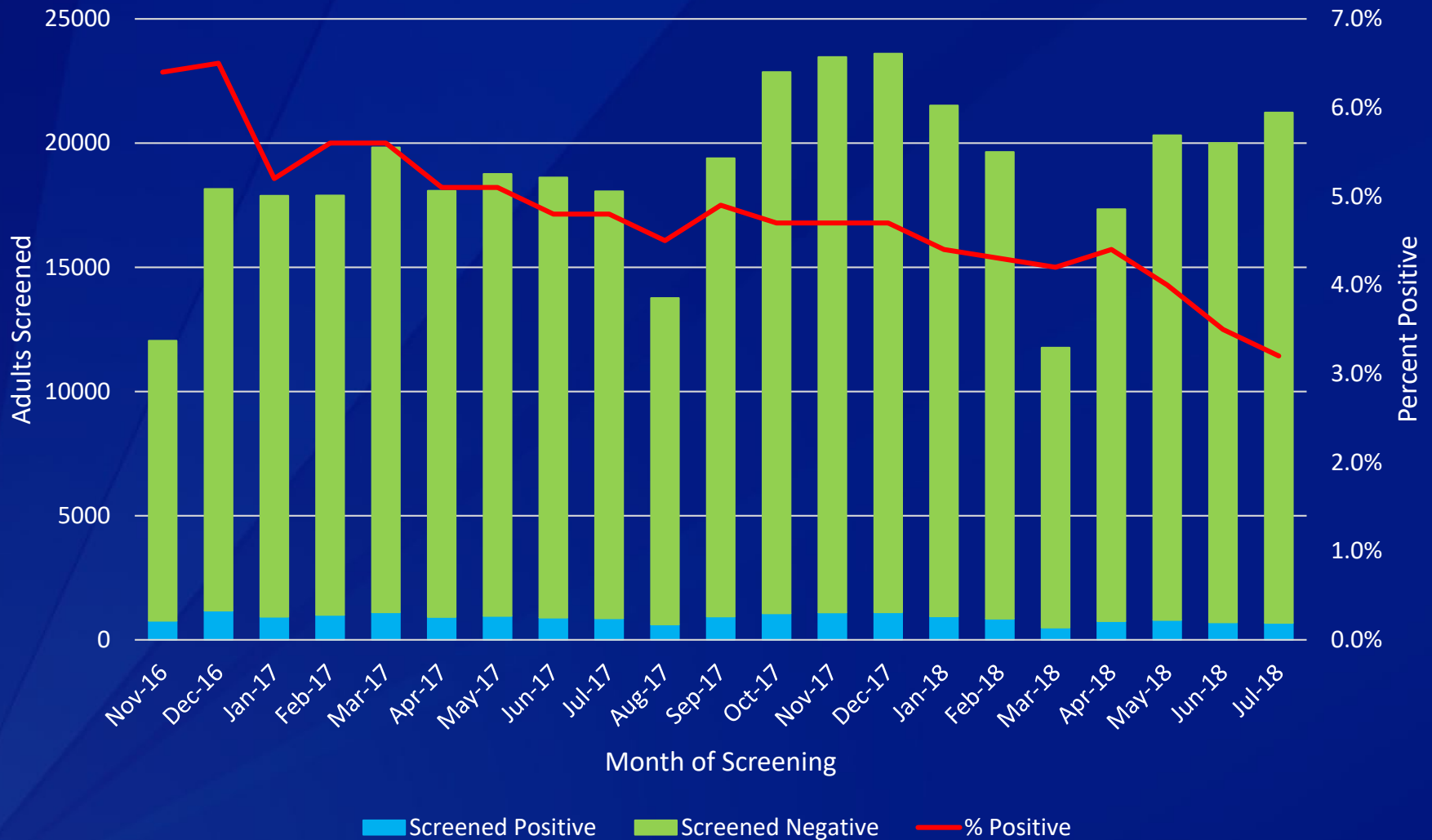
- ❑ Total inpatients screened: 498,957**
 - Anti-HCV+: 3.8%

- ❑ Total adult (≥ 18) inpatients screened: 394,208**
 - Anti-HCV+: 4.8%

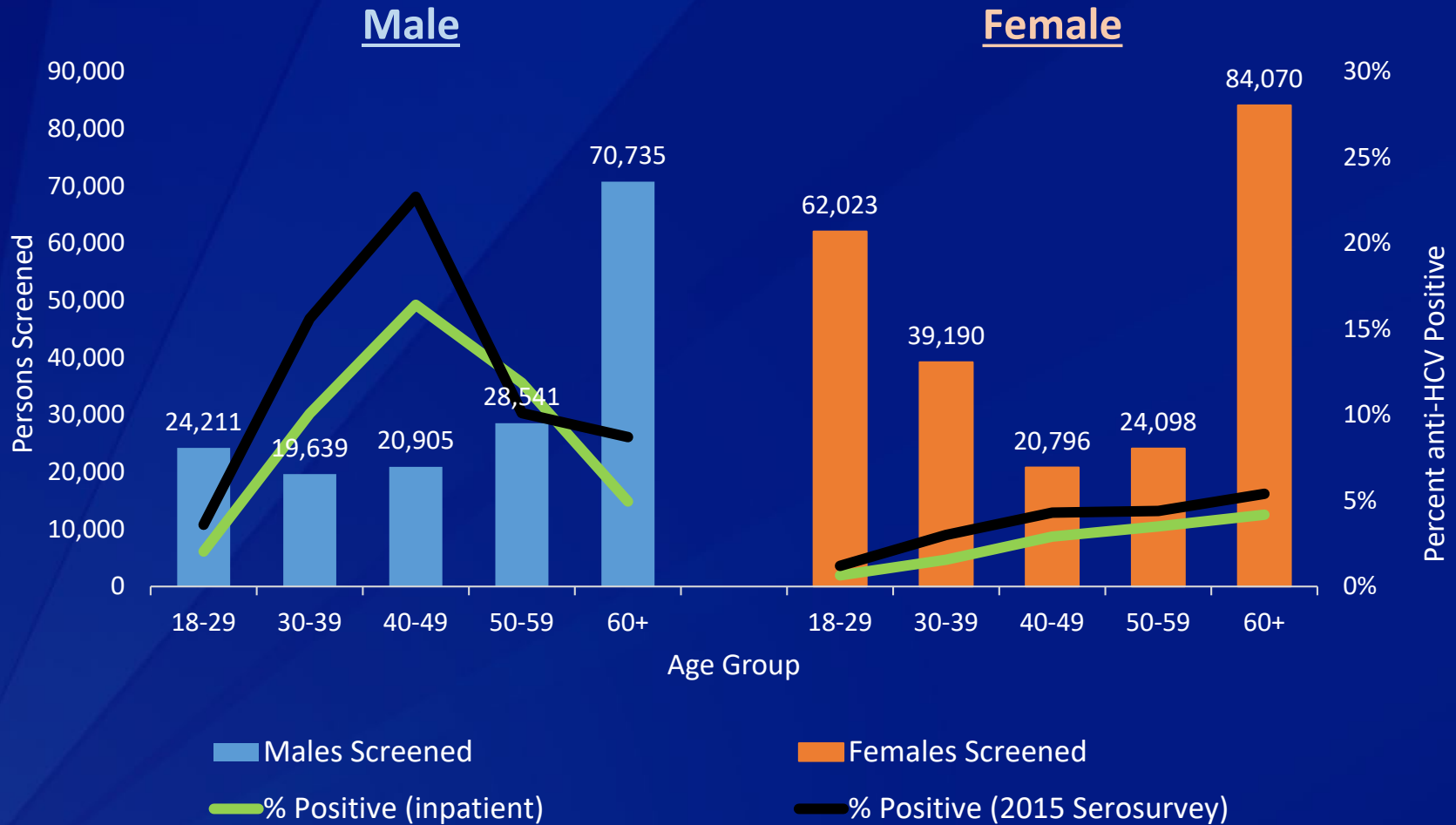
- ❑ Adult males inpatients screened: 164,031**
 - Anti-HCV+: 7.8%

- ❑ Adult females inpatients screened: 230,177**
 - Anti-HCV+: 2.6%

Number of Adult Inpatients Screened for HCV and Anti-HCV+ from November 2016 – July 2018



Inpatients Screened for HCV and Percent Anti-HCV Positive by Age Group, November 2016 – July 2018



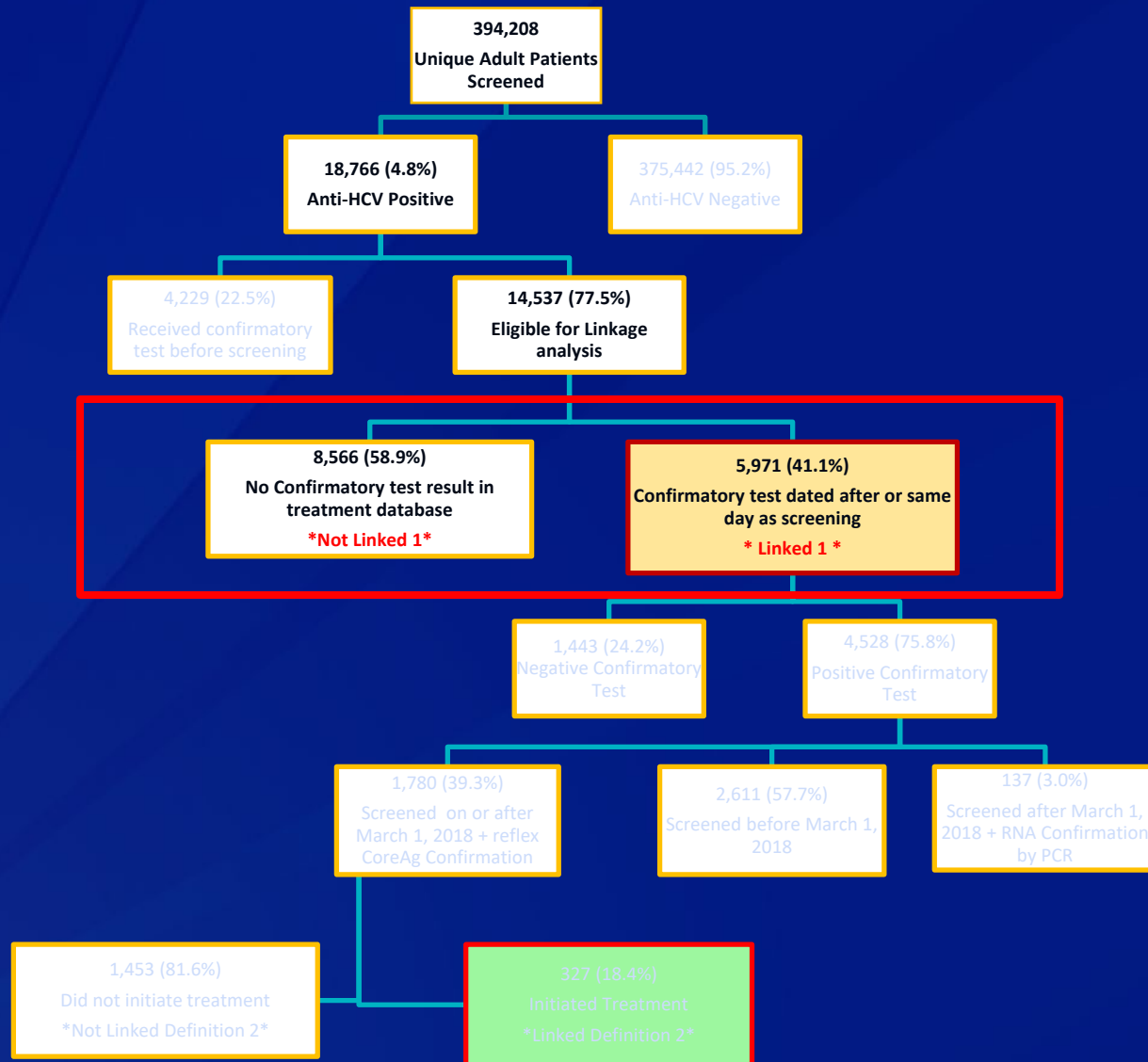
Inpatients Screened Multiple Times, November 2016 – July 2018

- ❑ 75,353 (19.1%) adults were screened >1 time in hospital settings (4.1% were anti-HCV+)**
- ❑ 3,763 patients had at least 1 positive and 1 negative screening test**
- ❑ 2,718 patients screened positive multiple times**

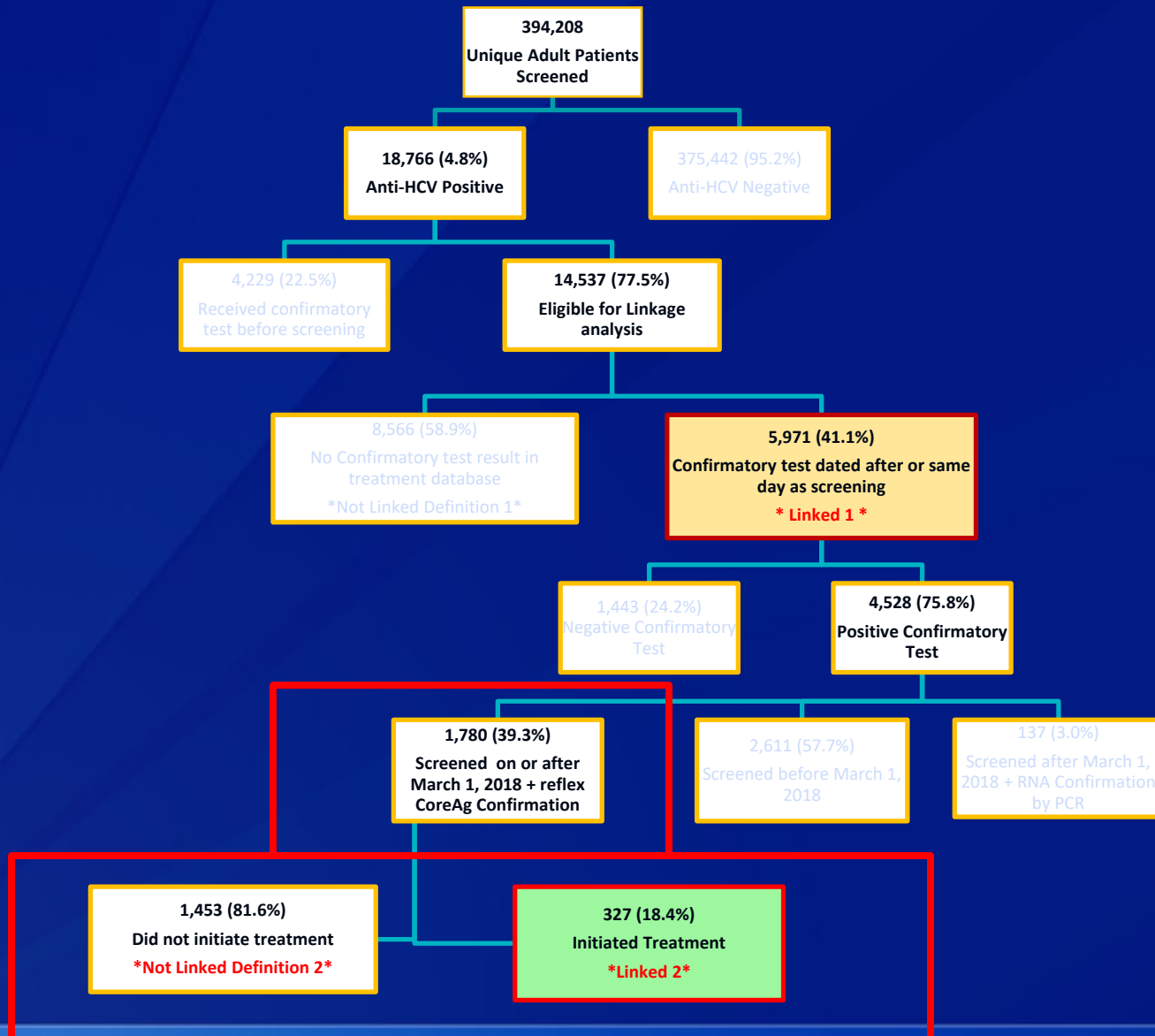
Inpatients Screened and Linkage to HCV Care



Inpatients Screened and Linkage to HCV Care



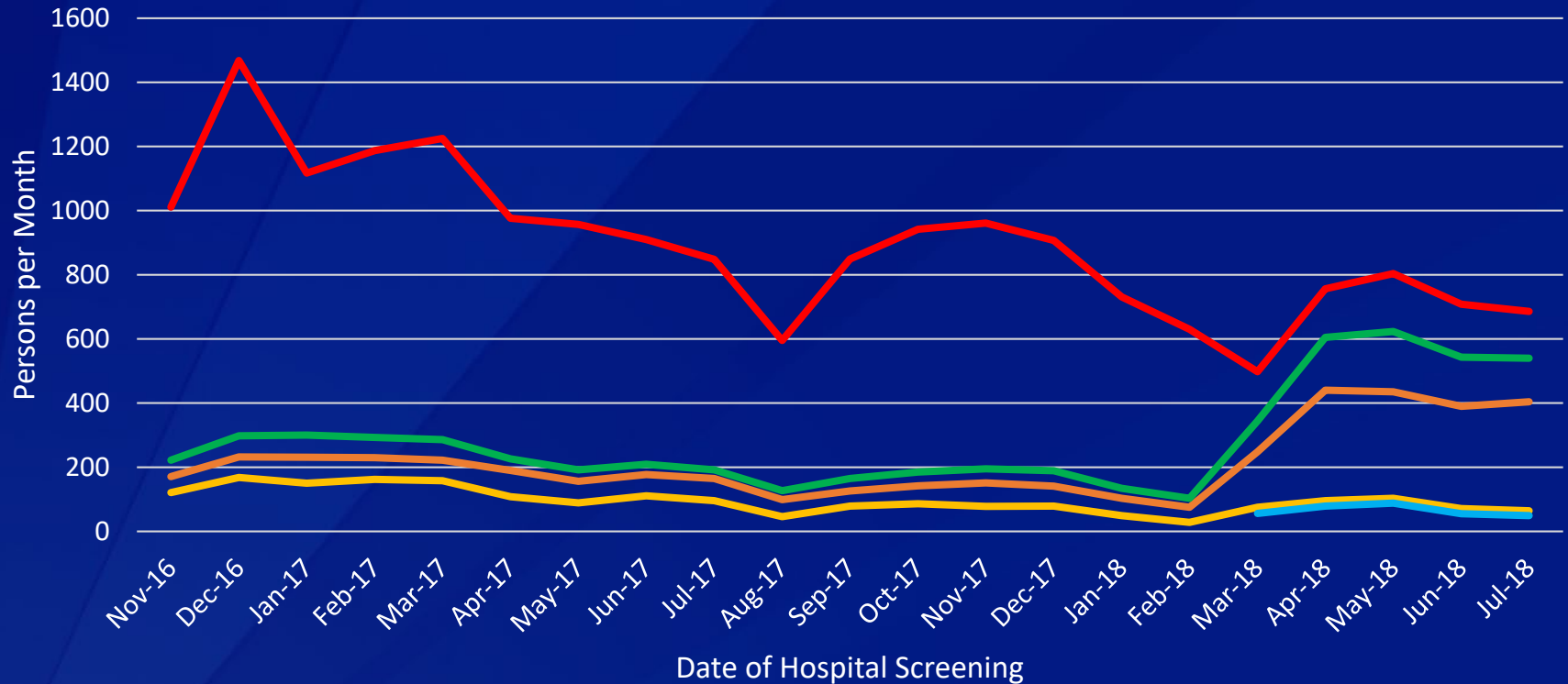
Inpatients Screened and Linkage to HCV Care



Inpatients Linked to Care, November 2016 – July 2018

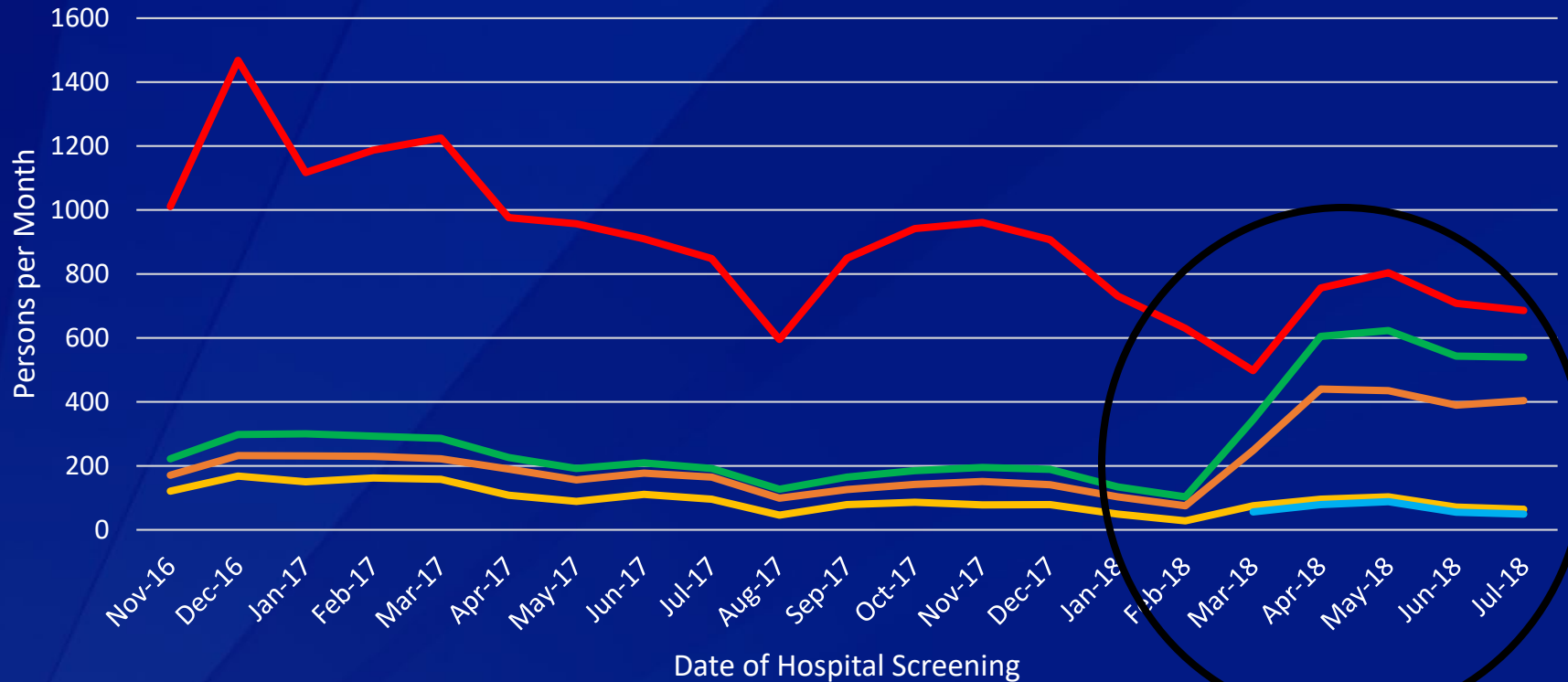
	Definition 1: Received Confirmatory Test after Screening (Nov, 2016-July, 2018)			Definition 2: Initiated Treatment after Positive Reflex CoreAg Confirmatory Test (March, 2018-July, 2018)		
	Linked (n=5,971)	Not Linked (n=8,566)	P-value	Linked (n=327)	Not Linked (n=1,453)	P-value
Sex						
Male	3,919 (42.0)	5,417 (58.0)	.003	180 (15.4)	989 (84.6)	<.0001
Female	2,052 (39.4)	3,149 (60.6)		147 (24.1)	464 (75.9)	
Age Group						
18 – 29	286 (38.2)	463 (61.8)	<.0001	10 (20.0)	40 (80.0)	.307
30 – 39	819 (43.0)	1,088 (57.1)		39 (17.4)	185 (82.6)	
40 – 49	1,247 (45.7)	1,481 (54.3)		79 (20.7)	303 (79.3)	
50 – 59	1,329 (44.3)	1,668 (55.7)		77 (20.5)	299 (79.5)	
60 +	2,290 (37.2)	3,866 (62.8)		122 (16.3)	626 (83.7)	
Region of Hospital						
Adjara	469 (45.4)	565 (54.6)	<.0001	37 (19.7)	151 (80.3)	.0006
Guria	83 (43.5)	108 (56.5)		8 (21.1)	30 (79.0)	
Imereti	1,045 (39.6)	1,596 (60.4)		44 (13.3)	288 (86.8)	
Kakheti	151 (47.0)	170 (53.0)		7 (10.6)	59 (89.4)	
Kvemo Kartli	177 (46.2)	206 (53.8)		13 (21.3)	48 (78.7)	
Mtskheta-Mtianeti	43 (35.3)	79 (64.8)		1 (9.1)	10 (90.9)	
Racha-Lechkhumi/Kvemo Svaneti	7 (77.8)	2 (22.2)		0	5 (100.0)	
Samegrelo-Zemo Svaneti	300 (48.5)	319 (51.5)		20 (13.2)	132 (86.8)	
Samtskhe-Javakheti	44 (38.6)	70 (61.4)		3 (14.3)	18 (85.7)	
Shida Kartli	160 (49.7)	162 (50.3)		26 (36.1)	46 (63.9)	
Tbilisi	2,959 (39.7)	4,488 (60.3)		168 (20.1)	666 (79.9)	
Missing	533 (40.0)	801 (60.0)		0	0	

Hospital Inpatient Screening and Linkage to Care, November 2016 – July 2018



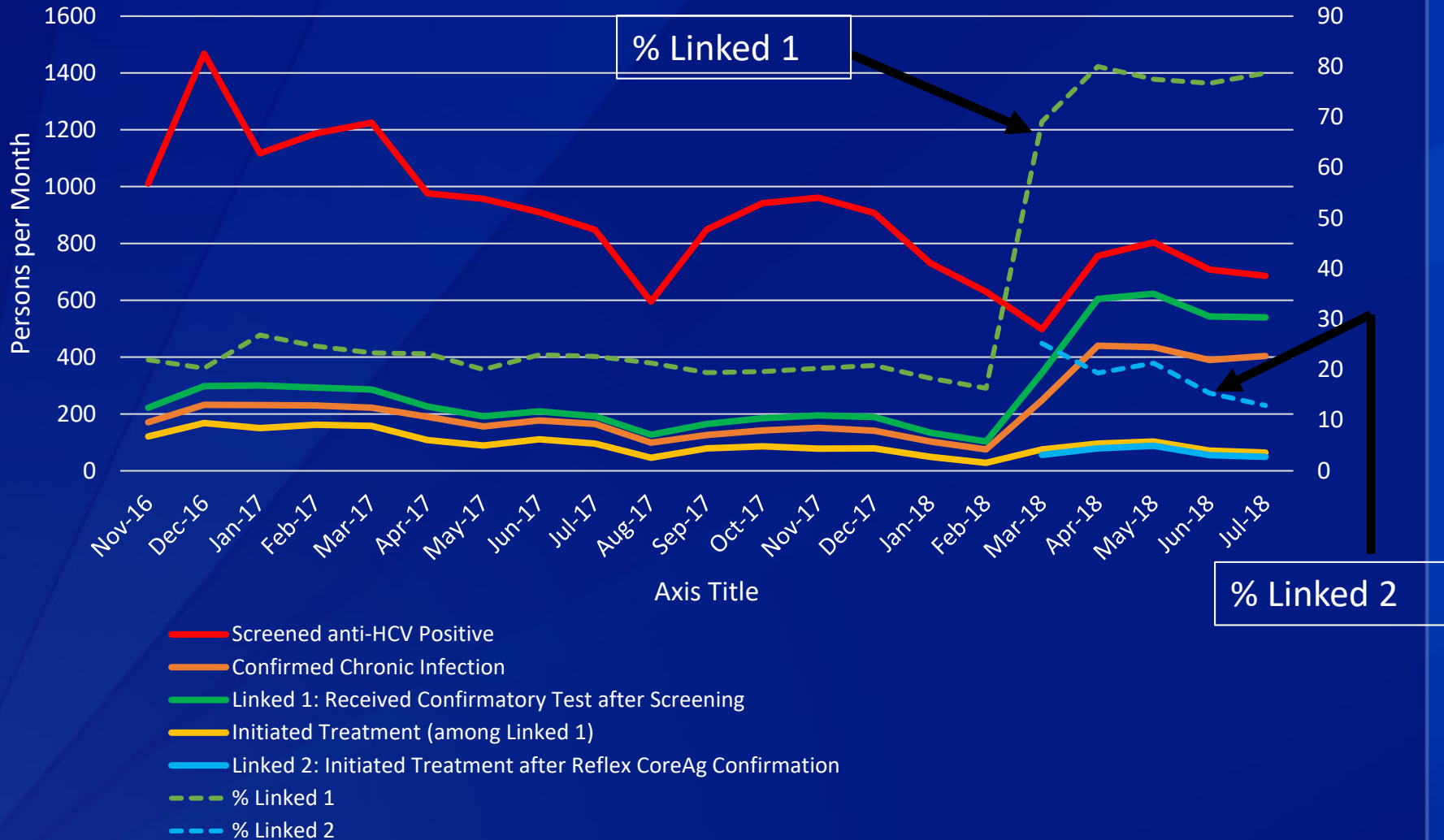
- Screened anti-HCV Positive
- Confirmed Chronic Infection
- Linked 1: Received Confirmatory Test after Screening
- Initiated Treatment (among Linked 1)
- Linked 2: Initiated Treatment after Reflex CoreAg Confirmation

Hospital Inpatient Screening and Linkage to Care, November 2016 – July 2018



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Hospital Inpatient Screening and Linkage to Care, November 2016 – July 2018



Summary

- ❑ Overall anti-HCV+ among inpatient adults is 5%
- ❑ Age and sex distribution of individuals screened correlate with seroprevalence survey
- ❑ Linkage to HCV care rates vary depending upon how “linkage” is defined
- ❑ Linked and those not linked to care vary by regions

Limitations

❑ Screening Registry

- Does not allow for collection of data regarding testing eligibility
- No information on patient refusal

❑ No information available on type of rapid test used by the facilities

❑ No information available on post HCV testing counselling

- Post HCV counselling started August, 2018

Conclusions

- ❑ Definition of “linkage to HCV care” needs to be standardized
- ❑ How “linkage to HCV care” is defined has significant impact on correctly documenting program progress
- ❑ Targeted screening (men aged 30-59) may be more efficient/effective
- ❑ Importance of Information Systems that allow to estimate linkage to care rates
- ❑ Need of innovative interventions to ensure initiation of treatment

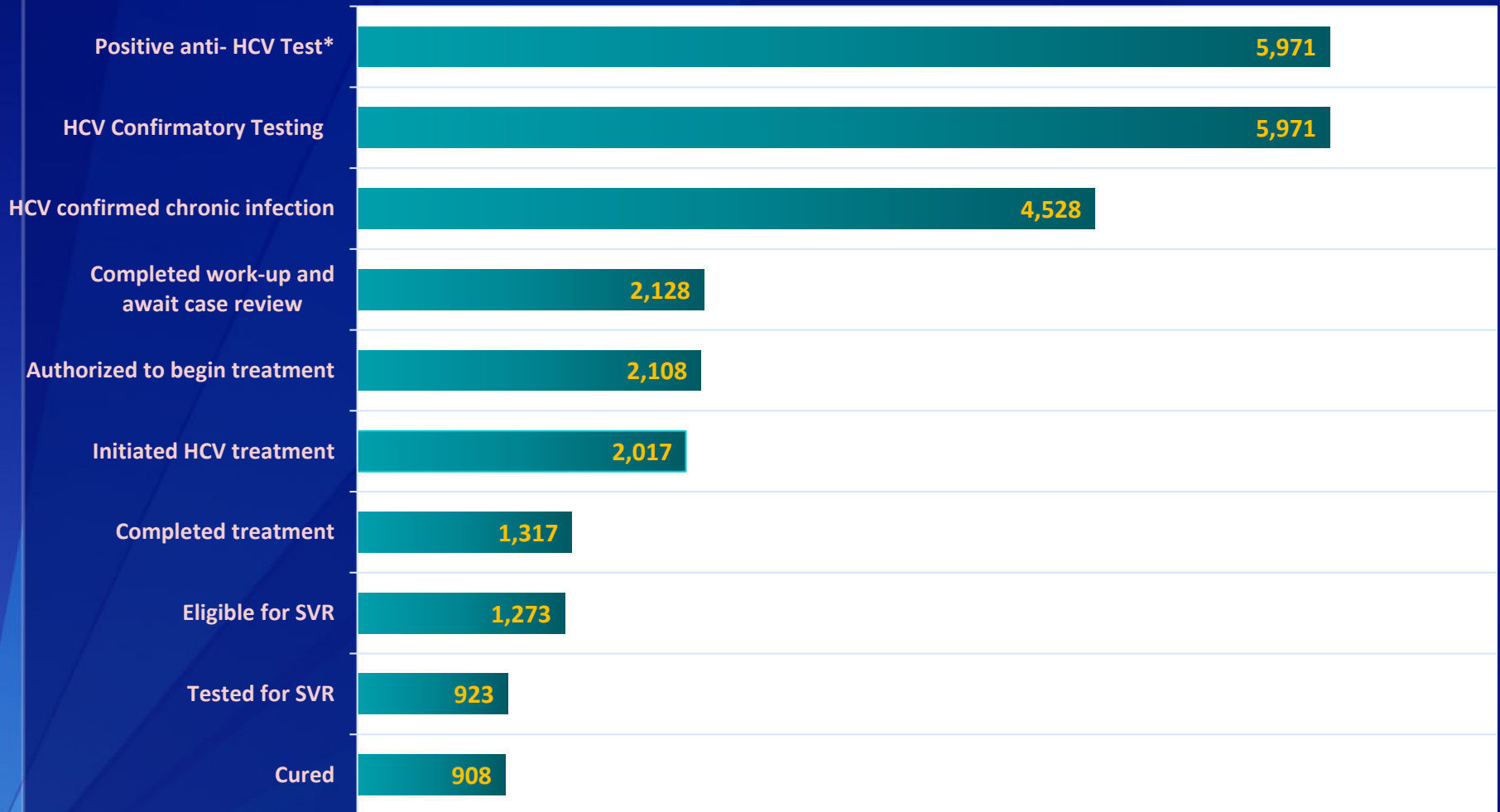
Next steps

- ❑ **Analyze data of screening, anti-HCV+, and linkage to HCV care by facility to assess gaps, learn best practices, and devise corrective actions**
- ❑ **Analyze data of other screening programs (e.g., HR, HIV) and linkage to HCV care and assess gaps**
- ❑ **Decrease barriers to linkage (recent survey presented earlier)**
- ❑ **Use data/findings of innovative screening and linkage to care pilot projects (presented earlier)**



- EXTRA SLIDES-

Care Cascade among Hospital Patients Linked to Care – Definition 1 – through October 31, 2018



Care Cascade among Hospital Patients Linked to Care – Definition 2 – through October 31, 2018

