HCV Screening Profile

November, 2019
Tbilisi, Georgia

MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE OCCUPIED TERRITORIES, LABOUR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

NCDC
NATIONAL CENTER FOR DISEASE CONTROL AND PUBLIC HEALTH

MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE OCCUPIED TERRITORIES, LABOUR, HEALTH AND SOCIAL AFFAIRS

144, Ak. Tsereteli Ave.
Tbilisi 0119, Georgia
Phone: 2 51 00 11 / 15 05

info@moh.gov.ge
www.moh.gov.ge
fb.com/mohgovge

NATIONAL CENTER FOR DISEASE CONTROL AND PUBLIC HEALTS

#99 Kakheti Highway,
Tbilisi 0198, Georgia
Phone: 116 001

ncdc@ncdc.ge
www.ncdc.ge
fb.com/ncdcgeorgia

HCV Screening Profile

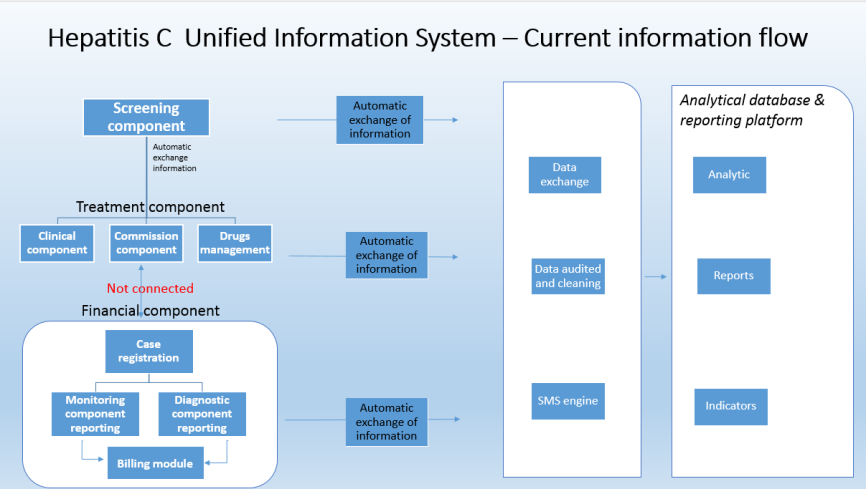
The Government of Georgia adopted HCV Elimination State Program in April 2015, under the strong support of the US CDC and other international partners, with the clear intention to eliminate hepatitis C in the country. The Program sets the regulations, outlines the responsibilities among the stakeholders and defines the major actions to be taken for Prevention, Diagnostics and Treatment of the disease.

Screening and active identification of HCV positive individuals in general population of Georgia is one of the major objectives of the HCV Elimination State Program. Since its entry into force, the screening component of the Program sets obligation of mandatory HCV screening for the following risk groups: blood donors, pregnant, HIV and TB patients, people with hemophilia, military service applicants and hospitalized patients from the end of 2016. Screening is free for all citizens of Georgia and voluntary for other groups of population. Confirmatory diagnostic tests for the individuals, who proved to be anti HCV-positive as a result of the screening, became free since December 1, 2017. Currently, voluntary screening can be conducted in more than 1350 healthcare facilities throughout the country.

Free HCV screening is also performed in the Public Service Halls of Georgia. In addition, PWID (People who inject drugs) are provided with harm reduction services and linkages to HCV treatment.

Electronic database – Hepatitis C informational system, is available for data recording and screening component of the HCV Elimination State Program. Up to 1330 service providers record the data in the system.

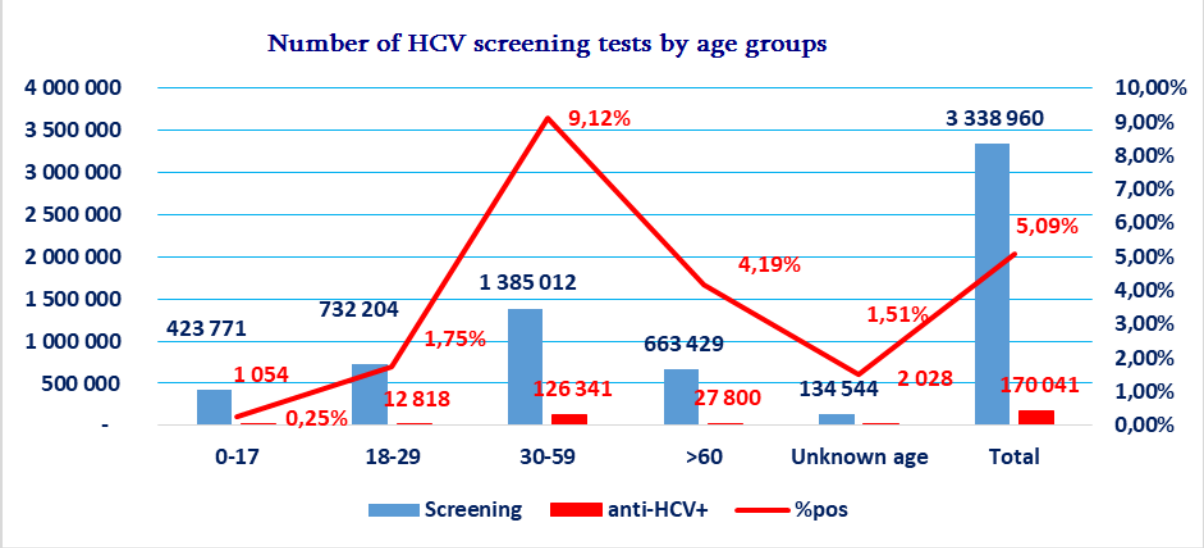
Components of the HCV electronic database are following HCV testing database – the screening module (operational since May 2017 and administered by the NCDC); HCV treatment database (with several consecutive systems operational from 2015) and analytical database (operational since May 2017). Also, the country implements the Laboratory Information Management System (LIMS) to rapidly identify and contain outbreaks and public health emergencies. The system is used as a logistical module for blood sample collection too. Screening system allows to record: Hepatitis C, HIV and TB screening results. The analytical database collects the relevant information for different stakeholders from different databases: screening system, treatment system, Birth Registry,Vital Registration System, Warehouse system etc.



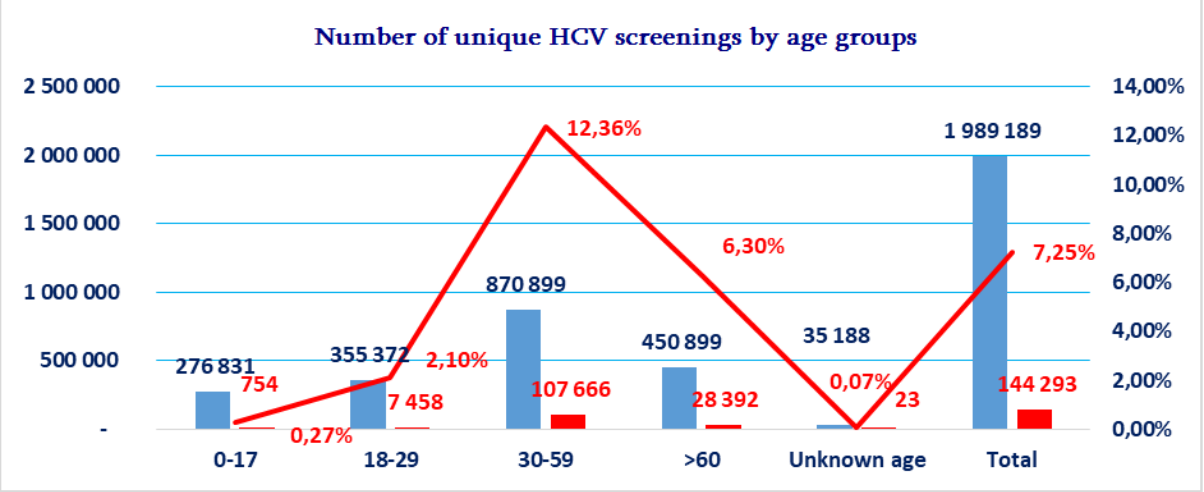
The system is constantly updated and the State Programs Department of the NCDC is responsible for processing and analysing the data of the screening, testing, linkage to care and reporting on weekly basis.

Following report of data analysis represents registered cases in Hepatitis C Screening Database by November 10, 2019, where the data are presented by sex, age groups, date, personal ID and 15 digit number, regional distribution, target groups, UHC program providers etc.

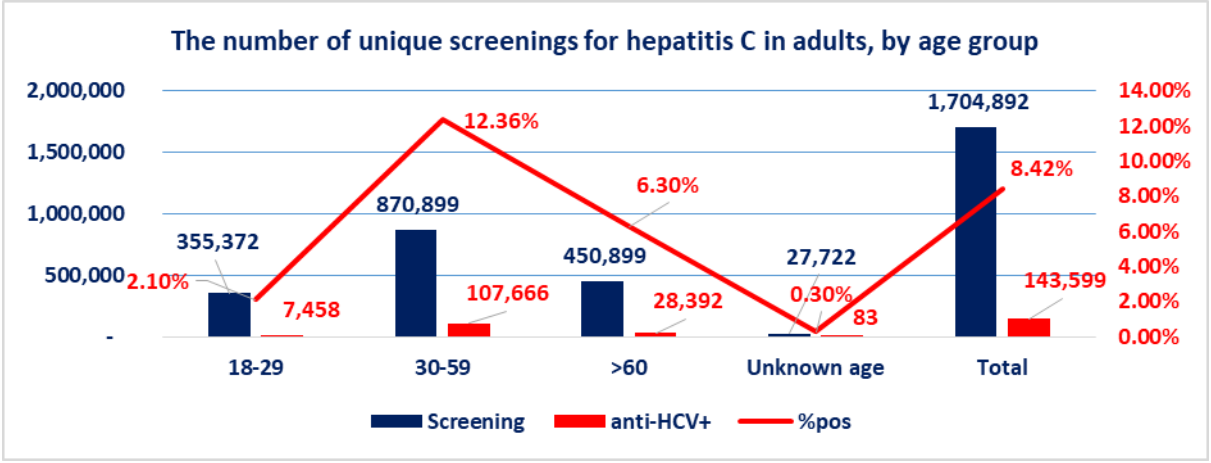
1. A total of 3,338,960 HCV screening cases are registered (from them 3,262,056 with personal ID number), out of which 170,041 (5.09%) are HCV-positive (from them 149,991 individuals (4.60%) with personal ID number)



2. The number of unique individuals registered in the electronic screening database is 1,989,189 (from them 1,912.749 are identified with unique ID), out of which 144.293 (7,25%) individuals are HCV-positive (from them 125,710 (6.57%) with unique ID)



3. HCV Screening of unique individuals in adult population: 1,704,892 unique adult individuals are screened (1, 628,452 individuals are identified with personal ID number), among them HCV positives are 143,539 - 8.4% (including cases identified with personal identification number – 125.016 (7.7%)

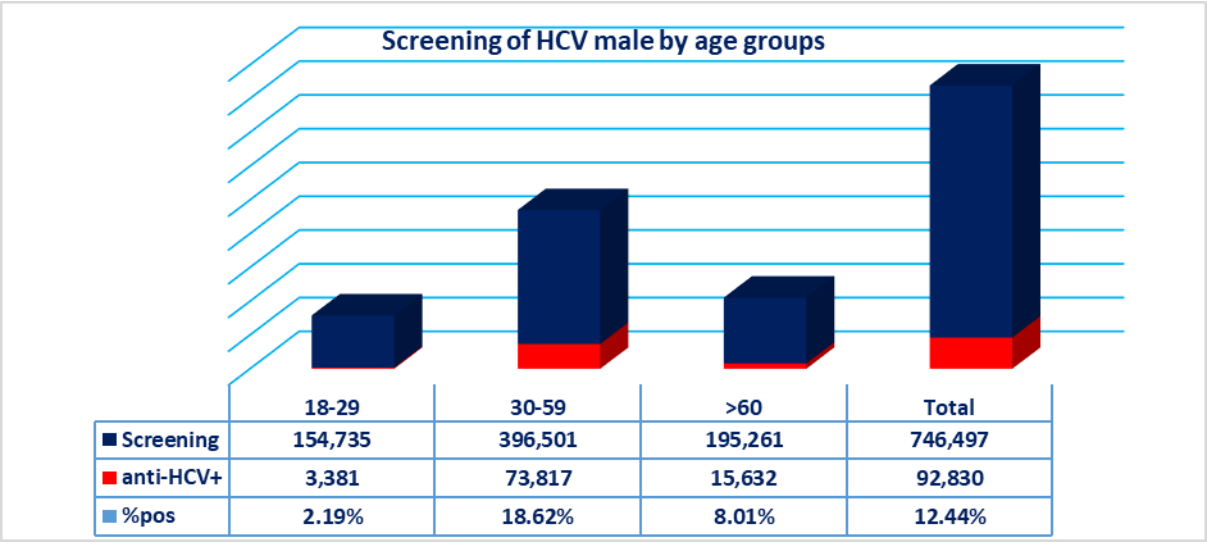


4. Coverage of unique adult individuals in Georgia, by HCV screening, identified by personal ID numbers (according to their legal registration address) according to data from the National Statistics Office:

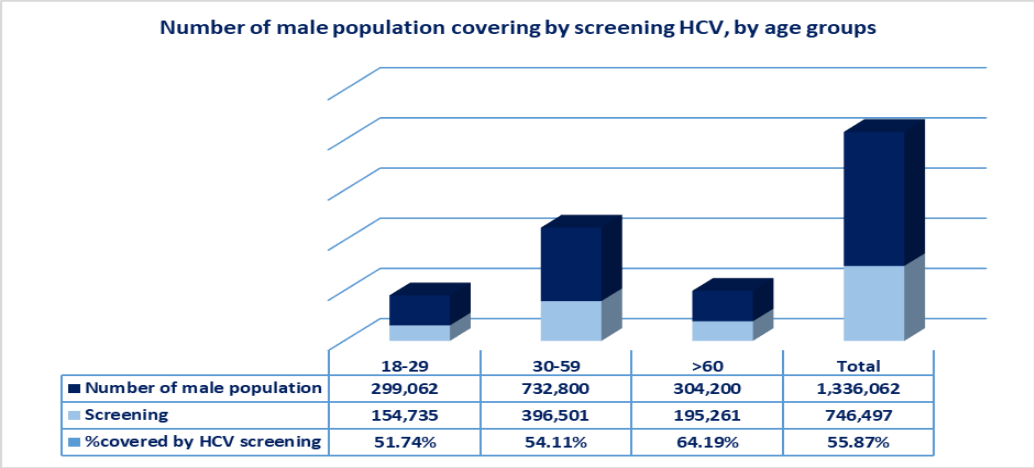
Region	Target (>18)	Screened	Number anti-HCV+ by survey 2015	anti-HCV+	Confirmatory test	Confirmatory test Pos.	Treatment started	% of unique screening	% of anti-HCV+	% Number of identified persons with positive antibodies	% of confirmatory test	% of persons started treatment
Adjara	265,543	162,380	20,179	10,358	8,644	6,987	5,767	61.2%	6.4%	51.3%	83.5%	82.5%
Guria	84,732	65,399		4,629	3,790	3,095	2,455	77.2%	7.1%		81.9%	79.3%
Tbilisi	888,494	375,137	74,626	39,285	32,459	26,419	22,535	42.2%	10.5%	52.6%	82.6%	85.3%
Imereti	388,692	230,485	29,155	18,416	13,624	10,978	7,962	59.3%	8.0%	63.2%	74.0%	72.5%
Kakheti	241,390	124,749	10,858	5,024	3,860	3,152	2,405	51.7%	4.0%	46.3%	76.8%	76.3%
Mtskh-Mt.	71,927	35,469		1,834	1,375	1,111	834	49.3%	5.2%		75.0%	75.1%
Racha	23,158	18,439		1,577	1,207	973	705	79.6%	8.6%		76.5%	72.5%
Samegrelo	245,916	173,325	26,810	15,716	11,754	9,950	7,273	70.5%	9.1%	58.6%	74.8%	73.1%
Samtskhe	119,467	46,219		1,347	988	782	590	38.7%	2.9%		73.3%	75.4%
Kv.Kartli	331,488	129,053	21,876	7,157	5,274	4,302	3,333	38.9%	5.5%	32.7%	73.7%	77.5%
Sh.Kartli	198,755	90,830	14,513	5,423	4,113	3,313	2,624	45.7%	6.0%	37.4%	75.8%	79.2%
IDPs from Abkhazia		83,708		10,207	8,082	6,788	5,313		12.2%		79.2%	78.3%
IDPs from South Ossetia		8,459		388	297	241	199		4.6%		76.5%	82.6%
Unknown		84,800		3,655	2,667	1,983	1,294		4.3%		73.0%	65.3%
Total	2,859,562	1,628,452	215,000	125,016	98,134	80,074	63,289	56.9%	7.7%	58.1%	78.5%	79.0%

Screening on 3 infections (Hepatitis C, HIV/AIDS, Tuberculosis) in primary healthcare has been increased dramatically in adult population due to the successful piloting of the integrated screening in Samegrelo-Zemo Svaneti region since April 1, 2018, and afterwards, followed by covering the rest of the country since 2019 (except Tbilisi, Shida Kartli, and Samtskhe-Javakheti). However, almost half of the adult population is concentrated beyond the screening regions and consequently, the individuals with anti-HCV positive. Thus, it is critical to involve actively the primary care into this process.

5. According to the National Statistics Office, 55.87% is the coverage of HCV screening cases with unique identification number in the male population and 12.44% is anti-HCV positive.

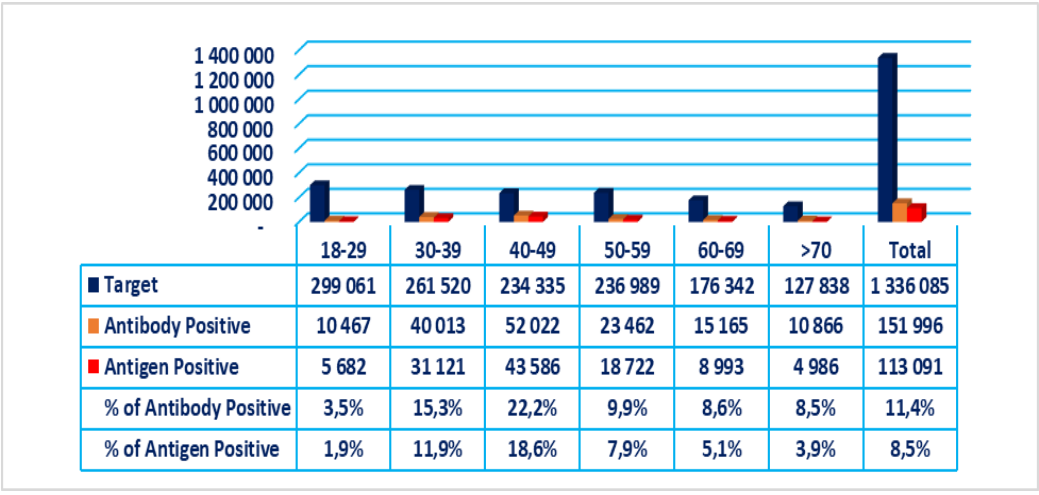


	18-29	30-59	>60	Total
Screening	154,735	396,501	195,261	746,497
anti-HCV+	3,381	73,817	15,632	92,830
%pos	2.19%	18.62%	8.01%	12.44%



	18-29	30-59	>60	Total
Number of male population	299,062	732,800	304,200	1,336,062
Screening	154,735	396,501	195,261	746,497
%covered by HCV screening	51.74%	54.11%	64.19%	55.87%

6. Prevalence of Hepatitis C in adult male population by age, according to the results of the population survey, 2015; Results of the Hepatitis C Screening, and main targets for the next two years:



	18-29	30-39	40-49	50-59	60-69	>70	Total
Target	299 061	261 520	234 335	236 989	176 342	127 838	1 336 085
Antibody Positive	10 467	40 013	52 022	23 462	15 165	10 866	151 996
Antigen Positive	5 682	31 121	43 586	18 722	8 993	4 986	113 091
% of Antibody Positive	3,5%	15,3%	22,2%	9,9%	8,6%	8,5%	11,4%
% of Antigen Positive	1,9%	11,9%	18,6%	7,9%	5,1%	3,9%	8,5%

Predictive numbers of antibody positive cases in adult male population to be identified until the end of 2020, based on the population survey data and screening data (current age):

Age	Number of male population	Number of Anti HCV+ by survey 2015	Age by present date		Target for 2019-2020		
			Screened	anti HCV+	Number of persons to be testing	Estimated number of antibodies in test subjects	Detection probable %
18-29	299 061	10 467	154 735	3 381	144 326	7 086	4,91%
30-39	261 520	40 013	146 037	16 892	115 483	23 121	20,02%
40-49	234 335	52 022	130 686	31 719	103 649	20 303	19,59%
50-59	236 989	23 462	119 778	25 206	117 211	0	0,00%
60-69	176 342	15 165	101 200	10 871	75 142	4 294	5,71%
70<	127 838	10 866	94 061	4 761	33 777	6 105	18,07%
Total	1 336 085	151 996	746 497	92 830	589 588	60 909	10,33%

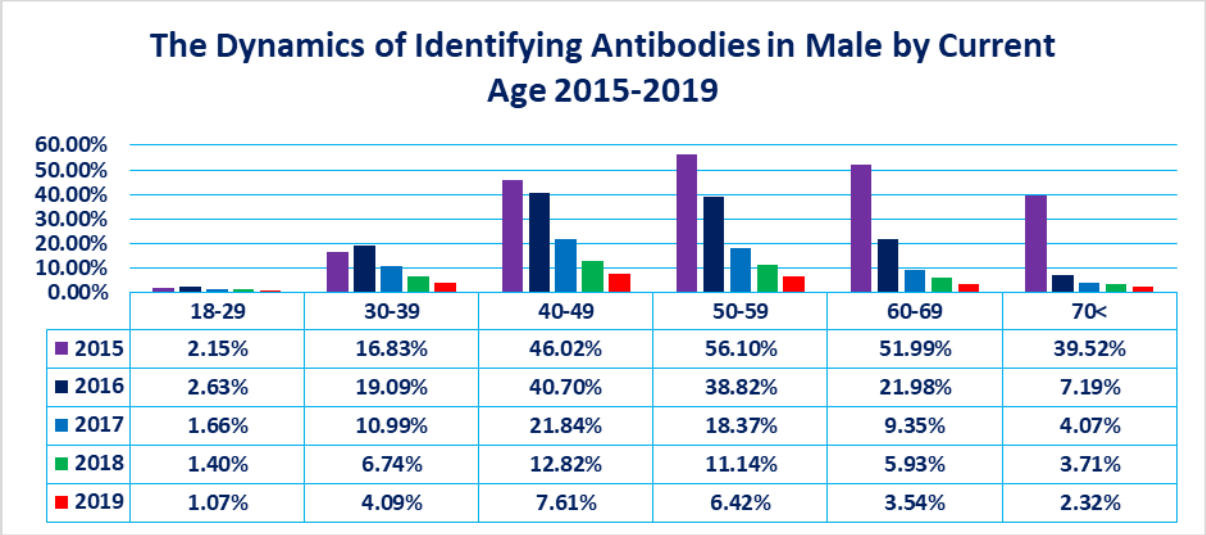
According to the population survey data of 2015 and abovementioned HCV positive screening cases detection rates dynamics in 2015-2018, there is an indication that the highest rate of infected male population moved from 30-49 years age group to the 35-55 years age group. Therefore, the focus of screening coverage should be on these cohorts, out of which 70% of anti-HCV positive screening cases should be revealed from the remaining quantity.

The further diagnostic studies and linkage to care status of the anti-HCV positive cases

Age	Confirmation / treatment status				Target for linkage			
	anti-HCV+	Confirmatory test	Confirmatory test Pos.	Treatment started	Confirmatory test	Treatment	% os confirmatory tests	% of treatment
18-29	3 369	2 265	1 784	1 323	1 104	461	32,8%	25,8%
30-39	16 829	13 204	11 067	8 781	3 625	2 286	21,5%	20,7%
40-49	31 640	26 229	22 075	18 511	5 411	3 564	17,1%	16,1%
50-59	25 138	20 872	17 569	14 417	4 266	3 152	17,0%	17,9%
60-69	10 837	8 609	6 965	5 306	2 228	1 659	20,6%	23,8%
>70	4 735	3 076	2 286	1 167	1 659	1 119	35,0%	49,0%
Total	92 548	74 255	1 746	49 505	18 293	12 241	19,8%	19,8%

18, 3 thousand of positive anti-HCV screened male beneficiaries are not still involved in further diagnostic studies, and 12, 2 thousand individuals with HCV RNA+ are not linked to treatment. Particularly in this regard, a big issue is raised among 40-60 year aged population.

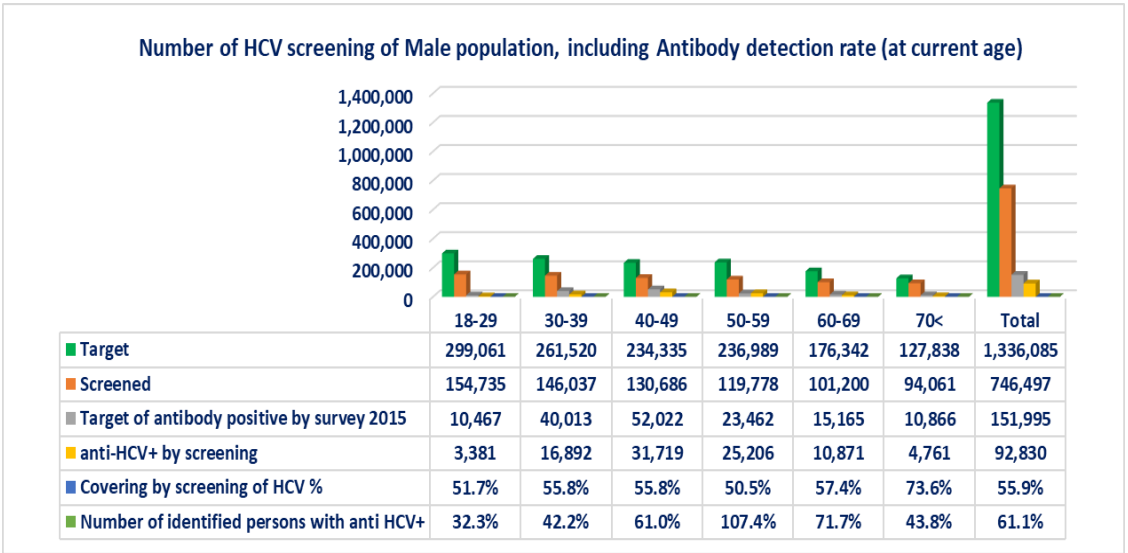
The dynamics of HCV positive screening rates in male population, 2015-2019 (current age):



	18-29	30-39	40-49	50-59	60-69	70<
2015	2.15%	16.83%	46.02%	56.10%	51.99%	39.52%
2016	2.63%	19.09%	40.70%	38.82%	21.98%	7.19%
2017	1.66%	10.99%	21.84%	18.37%	9.35%	4.07%
2018	1.40%	6.74%	12.82%	11.14%	5.93%	3.71%
2019	1.07%	4.09%	7.61%	6.42%	3.54%	2.32%

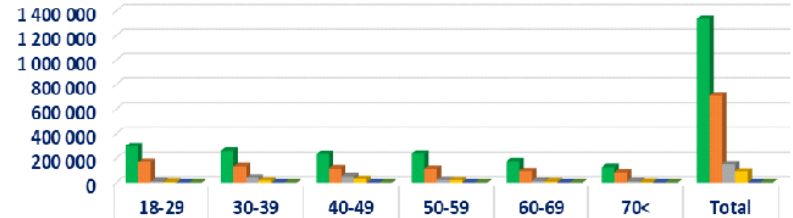
The detection rate of positive anti-HCV males was particularly high in the first two years after the launch of the Program since in 2015-2016 the screening was implemented by individuals who had known their status or were doubt due to risk-factors. Consequently, in terms of small number of screening the majority of addressees were the individuals of the above-mentioned category, and the screening rate was very high compared to the survey conducted in 2015, however, the rate was remained back to population framework after 2017 when the coverage was expanded and, positive HCV screening cases were saturated in a general number of screening cases.

The coverage of the male population, by age groups (current age and the age during the testing):



	18-29	30-39	40-49	50-59	60-69	70<	Total
Target	299,061	261,520	234,335	236,989	176,342	127,838	1,336,085
Screened	154,735	146,037	130,686	119,778	101,200	94,061	746,497
Target of antibody positive by survey 2015	10,467	40,013	52,022	23,462	15,165	10,866	151,995
anti-HCV+ by screening	3,381	16,892	31,719	25,206	10,871	4,761	92,830
Covering by screening of HCV %	51.7%	55.8%	55.8%	50.5%	57.4%	73.6%	55.9%
Number of identified persons with anti HCV+	32.3%	42.2%	61.0%	107.4%	71.7%	43.8%	61.1%

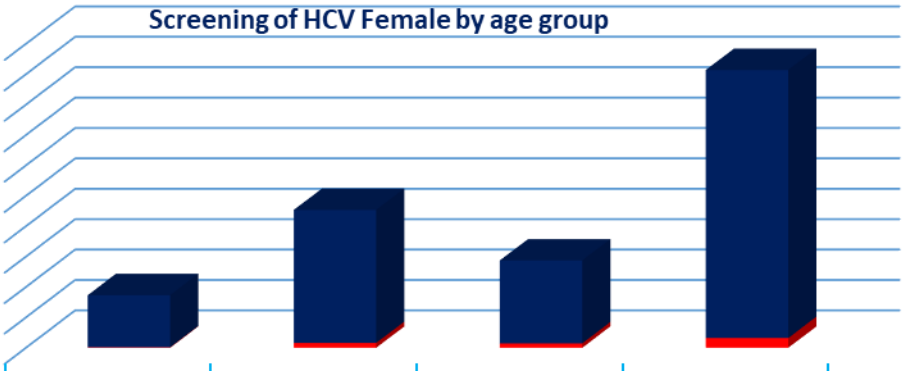
HCV screening of male population, including amtibody detection rate (by age groups)



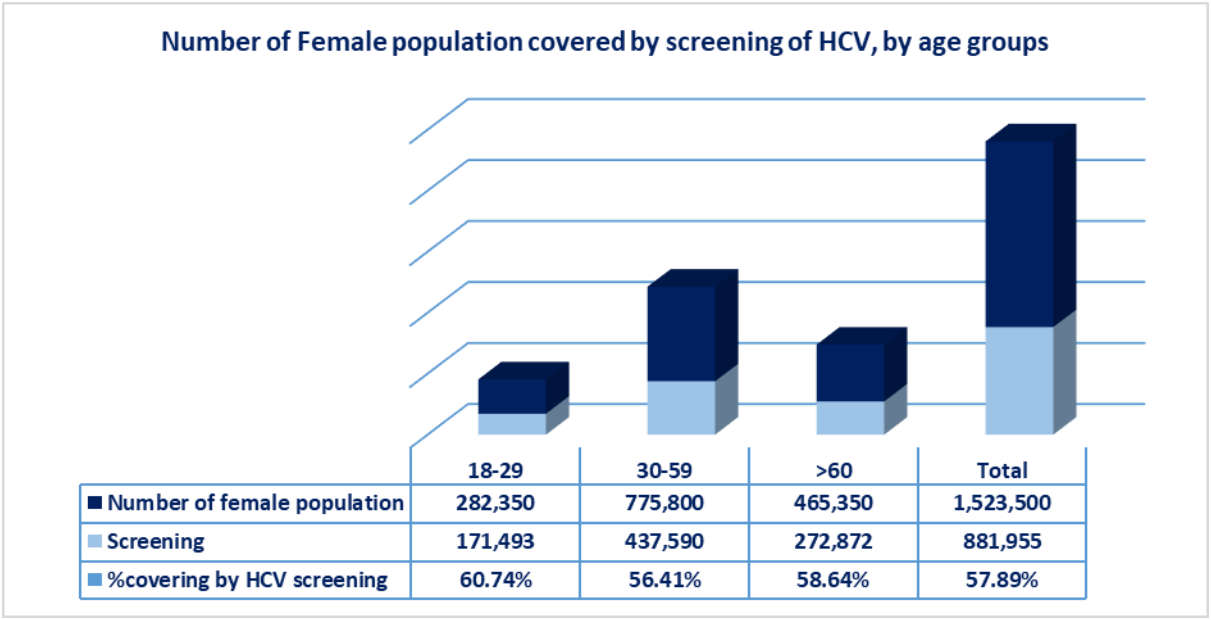
	18-29	30-39	40-49	50-59	60-69	70<	Total
Target	299 061	261 520	234 335	236 989	176 342	127 838	1 336 085
Screened	170 361	133 414	118 017	112 432	93 831	82 707	710 762
Target of antibody positive by survey 2015	10 467	40 013	52 022	23 462	15 165	10 866	151 995
anti-HCV+ by screening	5 659	20 332	30 802	22 251	8 510	3 969	91 523
Coverage by HCV screening	57,0%	51,0%	50,4%	47,4%	53,2%	64,7%	53,2%
Number of identified persons with anti HCV+	54,1%	50,8%	59,2%	94,8%	56,1%	36,5%	60,2%

As of November 10, 2019, the number of the adult male population (due to changes in age during the testing period) increased by 35,735 and out of them HCV positive screened cases by 1,307 ones.

7. According to the National Statistics Office, HCV screening coverage with unique IDs in the adult female population is 57.89%, and the rate of anti-HCV positive screening cases is 3.65%.

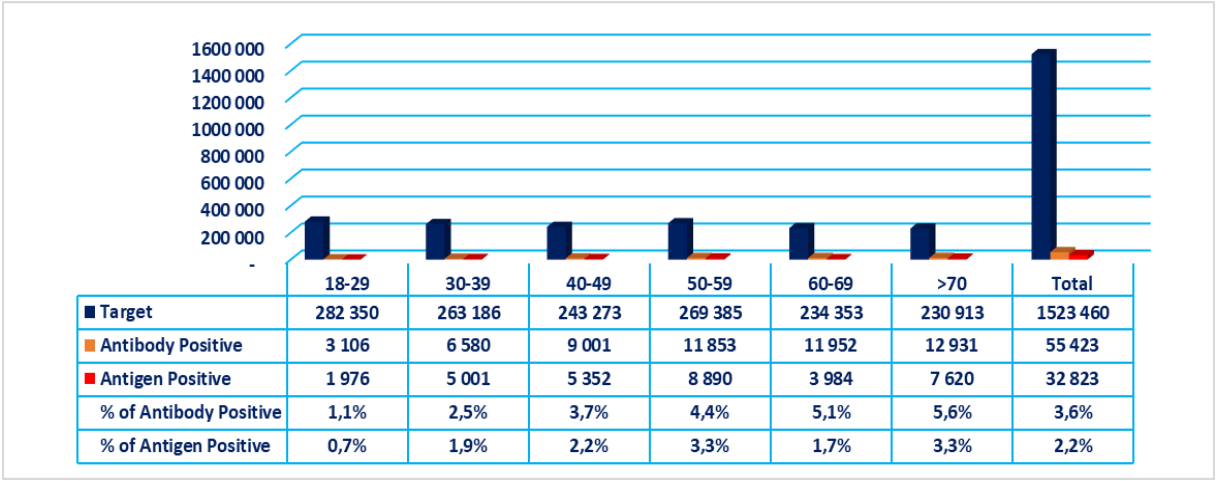


	18-29	30-59	>60	Tottal
Screening	171,493	437,590	272,872	881,955
anti-HCV+	1,607	16,077	14,502	32,186
%pos	0.94%	3.67%	5.31%	3.65%



	18-29	30-59	>60	Total
Number of female population	282,350	775,800	465,350	1,523,500
Screening	171,493	437,590	272,872	881,955
%covering by HCV screening	60.74%	56.41%	58.64%	57.89%

8. Prevalence of Hepatitis C in adult female population according to the population survey, 2015; Results of Hepatitis C screening and key targets for the next two years:



	18-29	30-39	40-49	50-59	60-69	>70	Total
Target	282 350	263 186	243 273	269 385	234 353	230 913	1523 460
Antibody Positive	3 106	6 580	9 001	11 853	11 952	12 931	55 423
Antigen Positive	1 976	5 001	5 352	8 890	3 984	7 620	32 823
% of Antibody Positive	1,1%	2,5%	3,7%	4,4%	5,1%	5,6%	3,6%
% of Antigen Positive	0,7%	1,9%	2,2%	3,3%	1,7%	3,3%	2,2%

Predictive numbers of antibody positive cases in adult female population to be identified until the end of 2020, based on the population survey data and screening data (current age):

Age	Number of Female population	Number of anti HCV+ by survey 2015	Age by present date		Target for 2019-2020		
			Screened	anti HCV+	Number of persons to be testing	Estimated number of antibodies in test subjects	Detection probable %
18-29	282 350	3 106	171493	1607	110 857	1 499	1,35%
30-39	263 186	6 580	170143	3774	93 043	2 806	3,02%
40-49	243 273	9 001	132228	5651	111 045	3 350	3,02%
50-59	269 385	11 853	135219	6652	134 166	5 201	3,88%
60-69	234 353	11 952	129476	6525	104 877	5 427	5,17%
>70	230 913	12 931	143396	7977	87 517	4 954	5,66%
Total	1 523 460	55 423	881 955	32 186	641 505	23 237	3,62%

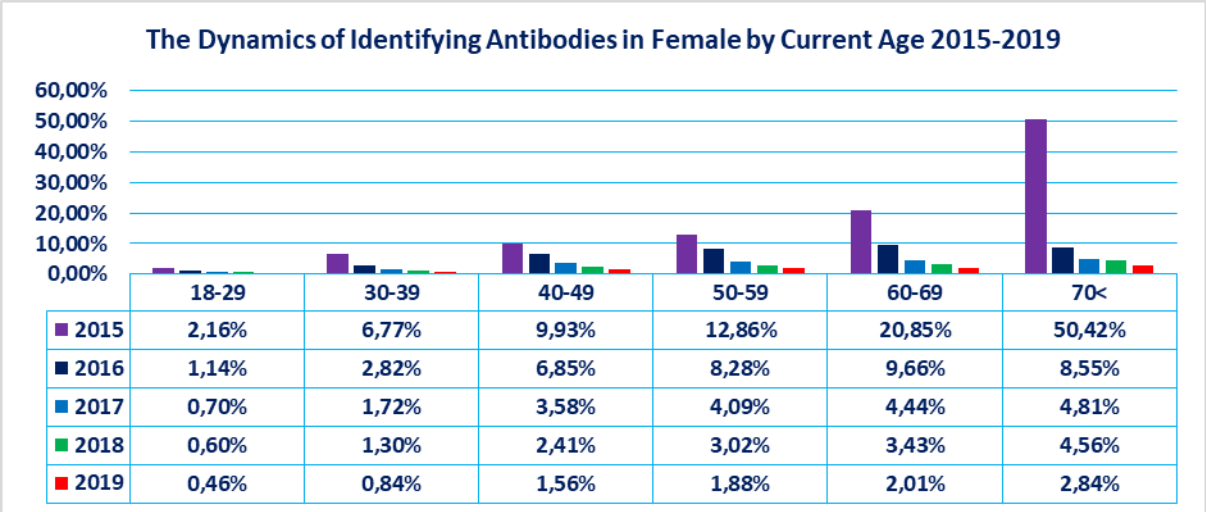
According to the population survey data of 2015 and abovementioned HCV positive screening cases detection rate dynamics in 2015-, there is an indication that the highest rates of HCV infected cases are still distributed in the 50+ age females. Therefore, the focus of screening coverage should be on this cohort, in which 46% of anti-HCV positive individuals should be detected from the remaining quantity.

Status of anti-HCV positive screened females to be involved into the further diagnostic studies and to be linked to care

Age	Confirmation / treatment status				Target for linkage			
	anti-HCV+	Confirmatory test	Confirmatory test Pos.	Treatment started	Confirmatory test	Treatment	% os confirmatory tests	% of treatment
18-29	1607	1 053	688	514	554	174	34,5%	25,3%
30-39	3774	2 809	2 075	1 667	965	408	25,6%	19,7%
40-49	5651	4 286	3 345	2 744	1 365	601	24,2%	18,0%
50-59	6652	5 160	4 051	3 387	1 492	664	22,4%	16,4%
60-69	6525	5 167	4 032	3 201	1 358	831	20,8%	20,6%
>70	7977	5 148	3 930	1 985	2 829	1 945	35,5%	49,5%
Total	32 186	23 623	18 121	13 498	8 563	4 623	26,6%	25,5%

8.6 thousand of anti-HCV positive individual females are not still involved into the further diagnostic studies, and 4.6 thousand individual females with HCV RNA+ are not linked to care. Particularly in this regard, a big issue is raised among 40-70 year aged population.

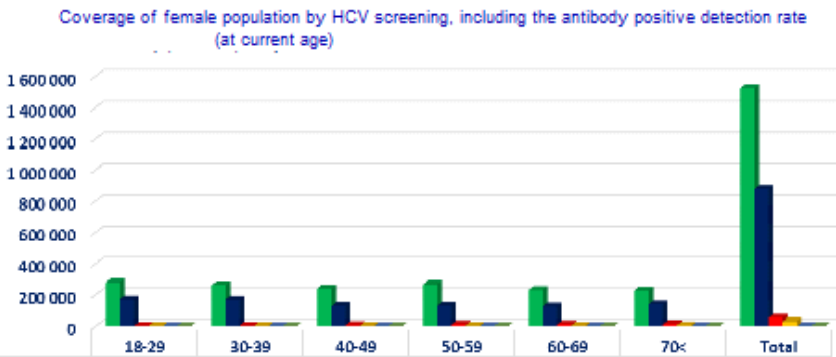
The dynamics of HCV positive screening rates in the female population, 2015-2019 (current age) :



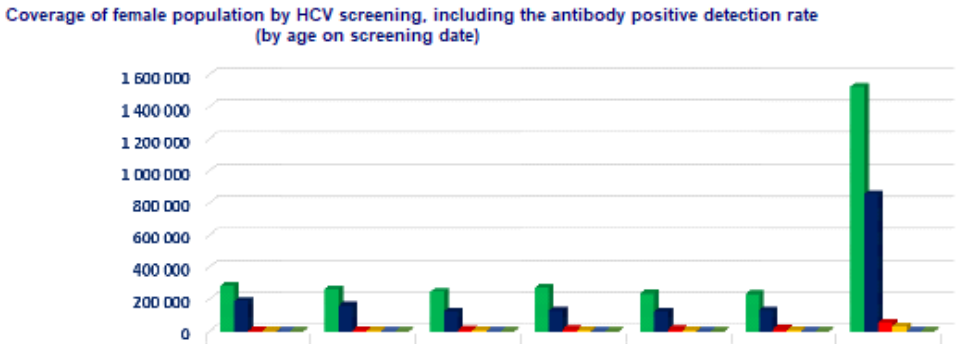
	18-29	30-39	40-49	50-59	60-69	70<
2015	2,16%	6,77%	9,93%	12,86%	20,85%	50,42%
2016	1,14%	2,82%	6,85%	8,28%	9,66%	8,55%
2017	0,70%	1,72%	3,58%	4,09%	4,44%	4,81%
2018	0,60%	1,30%	2,41%	3,02%	3,43%	4,56%
2019	0,46%	0,84%	1,56%	1,88%	2,01%	2,84%

The detection rate of positive anti-HCV females as well as in males was comparatively high in the first two years after the launch of the Program since in 2015-2016 the screening was implemented by individuals who had known their status or were doubt due to risk-factors. Consequently, in terms of small number of screening the majority of addressees were the individuals of the above-mentioned category, and the screening rate was very high compared to the survey conducted in 2015, however, the rate was remained back to population framework after 2017 when the coverage was expanded and, positive HCV screened cases were saturated in a general quantity.

The coverage of the female population, by age groups (current age and the age on screening date):



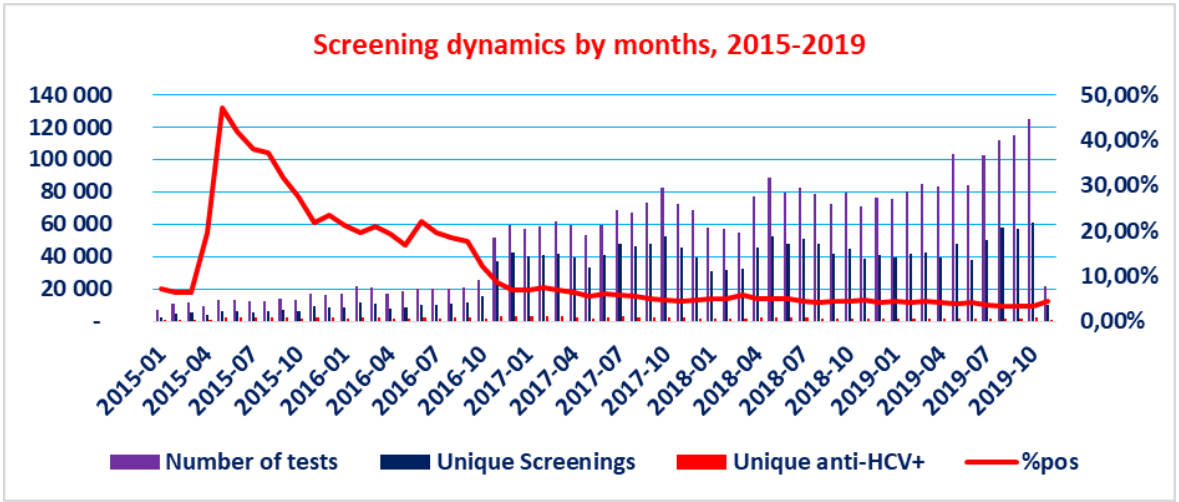
	18-29	30-39	40-49	50-59	60-69	70<	Total
Target	282 350	263 186	243 273	269 385	234 353	230 913	1 523 460
Screened	171 493	170 143	132 228	135 219	129 476	143 396	881 955
Target of antibody positive by survey 2015	3 106	6 580	9 001	11 853	11 952	12 931	55 423
anti-HCV+ by screening	1 607	3 774	5 651	6 652	6 525	7 977	32 186
coverage of HCV screening	60,7%	64,6%	54,4%	50,2%	55,2%	62,1%	57,9%
Number of identified persons with anti HCV+	51,7%	57,4%	62,8%	56,1%	54,6%	61,7%	58,1%

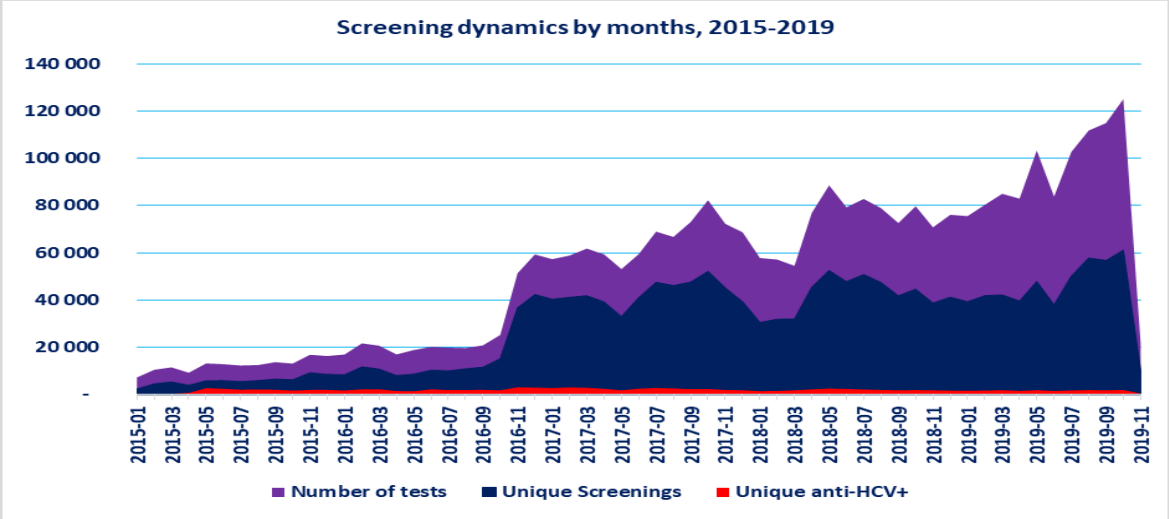


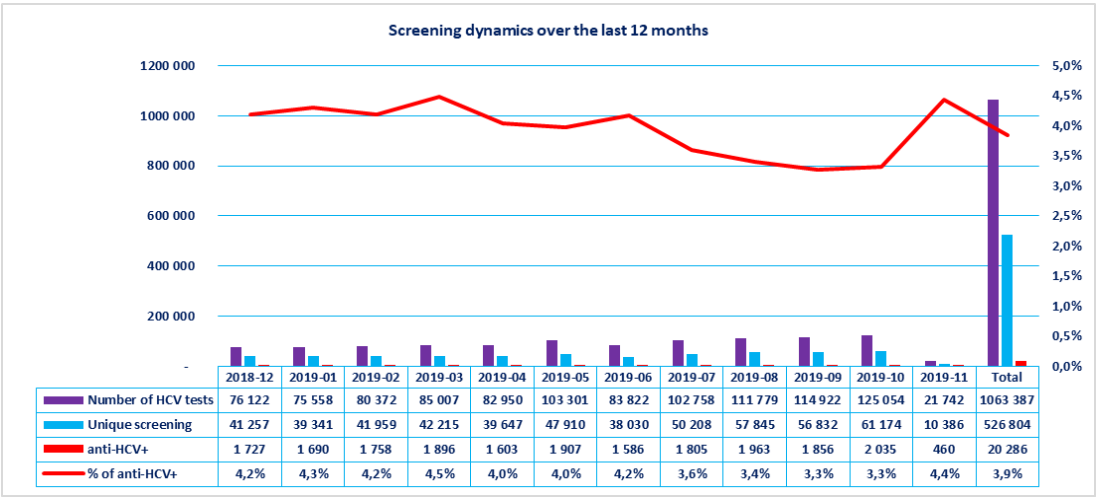
	18-29	30-39	40-49	50-59	60-69	70<	Total
Target	282 350	263 186	243 273	269 385	234 353	230 913	1 523 460
Screened	186 698	160 121	125 442	129 870	122 085	129 649	853 865
Target of antibody positive by survey 2015	3 106	6 580	9 001	11 853	11 952	12 931	55 423
anti-HCV+ by screening	2 117	4 193	5 848	6 436	6 098	7 121	31 813
coverage by HCV screening	66,1%	60,8%	51,6%	48,2%	52,1%	56,1%	56,0%
Number of identified persons with anti HCV+	68,2%	63,7%	65,0%	54,3%	51,0%	55,1%	57,4%

As of November 10, 2019, the number of the adult female population (due to changes in age during the testing period) increased by 28,090 and out of them HCV RNA+ cases by 373 ones.

9. The dynamics of screenings, confirmatory testing and treatment by months:



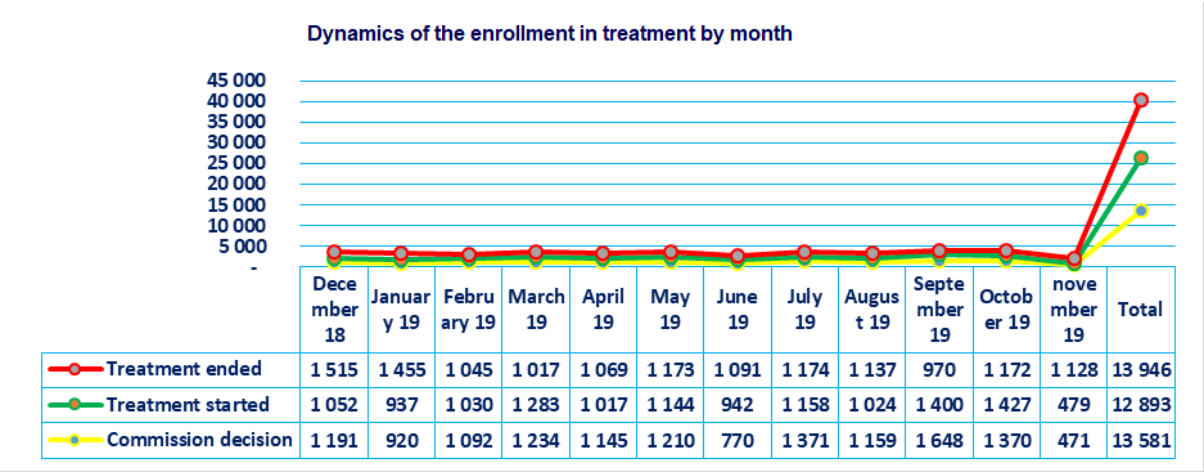




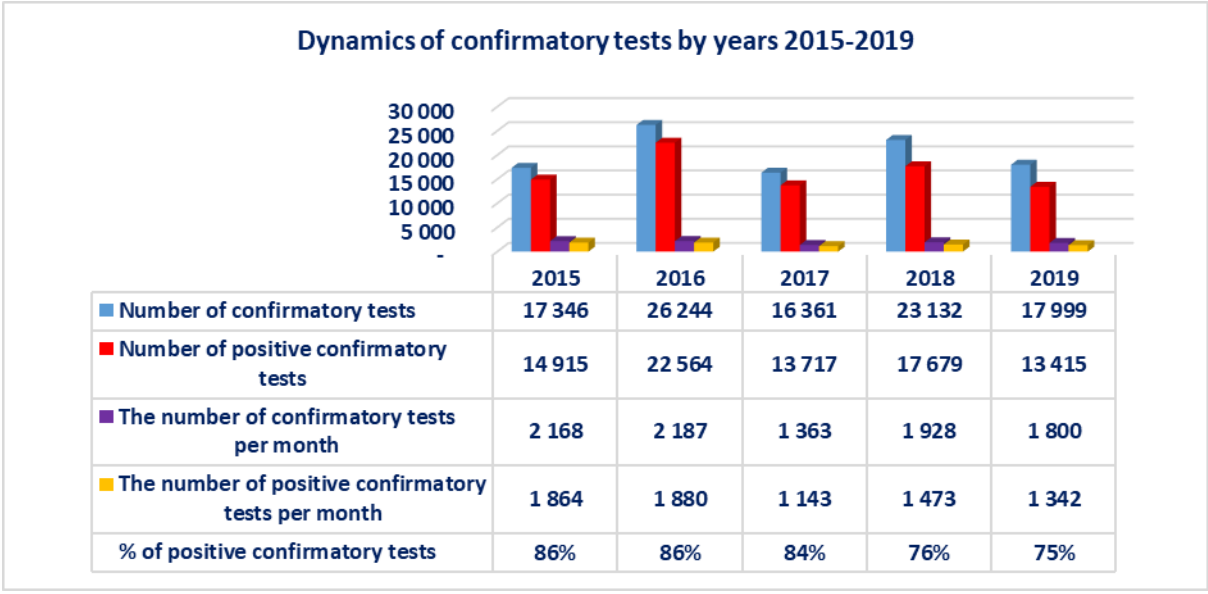
	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06	2019-07	2019-08	2019-09	2019-10	2019-11	Total
Number of HCV tests	76 122	75 558	80 372	85 007	82 950	103 301	83 822	102 758	111 779	114 922	125 054	21 742	1063 387
Unique screening	41 257	39 341	41 959	42 215	39 647	47 910	38 030	50 208	57 845	56 832	61 174	10 386	526 804
anti-HCV+	1 727	1 690	1 758	1 896	1 603	1 907	1 586	1 805	1 963	1 856	2 035	460	20 286
% of anti-HCV+	4,2%	4,3%	4,2%	4,5%	4,0%	4,0%	4,2%	3,6%	3,4%	3,3%	3,3%	4,4%	3,9%

The increased dynamics of screening has been driven due to several activities, which has been implemented since 2015, namely: introduction of mandatory HCV screening in pregnant from December 2015; determination of the obligations on HCV screening for all hospitalized patients based on changes in license agreement from November 2016; starting the screening in the largest pharmaceutical company network from June, 2017; also, involvement of medical students in promotion of screening activities; launching of the pilot project in primary healthcare settings in Samegrelo-Zemo Svaneti region from April 1, 2018; establishment of permanent screening corners in Public Service Halls from October, 2018; starting the integrated screening in Adjara Region from January, 2019; expansion of integrated screening in other regions of Georgia except 3 regions since July, 2019.

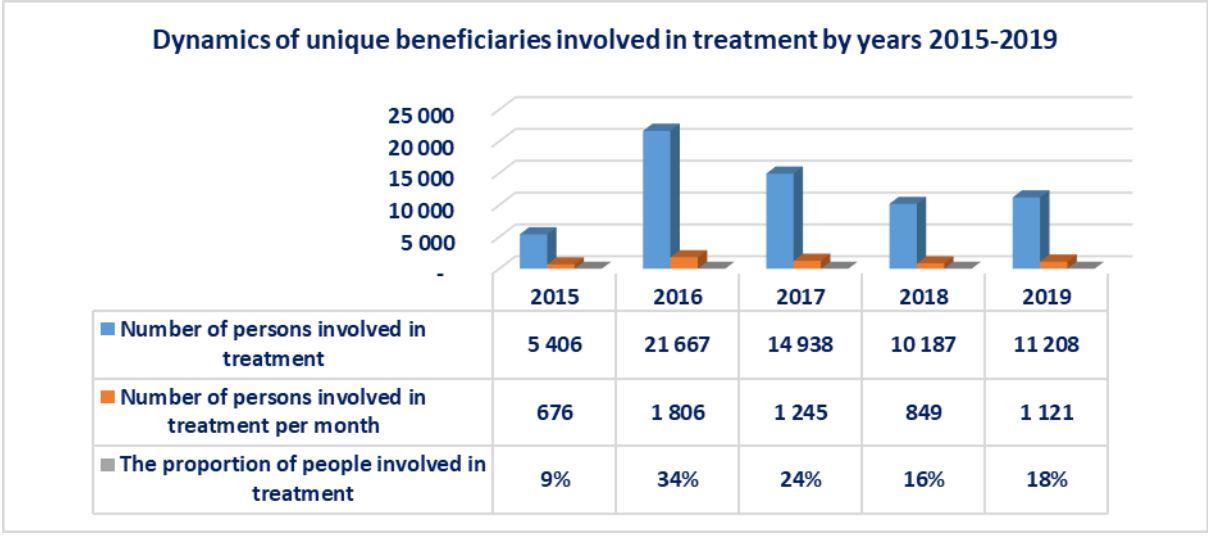
Analyzing the dynamics of the linkage to treatment provides the following conclusion that the elimination goal can be achieved through active screening, especially by integrating with primary healthcare.



	December 18	January 19	February 19	March 19	April 19	May 19	June 19	July 19	August 19	September 19	October 19	november 19	Total
Treatment ended	1 515	1 455	1 045	1 017	1 069	1 173	1 091	1 174	1 137	970	1 172	1 128	13 946
Treatment started	1 052	937	1 030	1 283	1 017	1 144	942	1 158	1 024	1 400	1 427	479	12 893
Commission decision	1 191	920	1 092	1 234	1 145	1 210	770	1 371	1 159	1 648	1 370	471	13 581



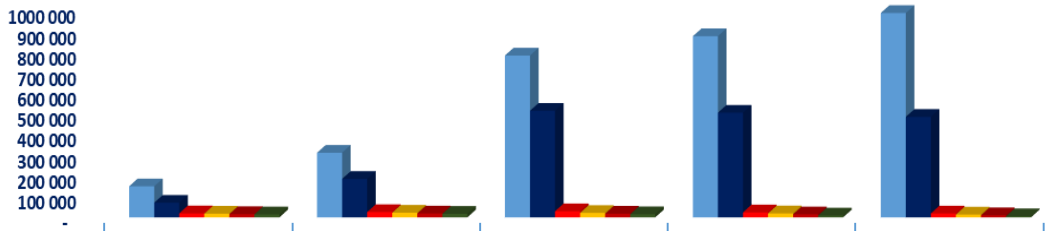
	2015	2016	2017	2018	2019
Number of confirmatory tests	17 346	26 244	16 361	23 132	17 999
Number of positive confirmatory tests	14 915	22 564	13 717	17 679	13 415
The number of confirmatory tests per month	2 168	2 187	1 363	1 928	1 800
The number of positive confirmatory tests per month	1 864	1 880	1 143	1 473	1 342
% of positive confirmatory tests	86%	86%	84%	76%	75%



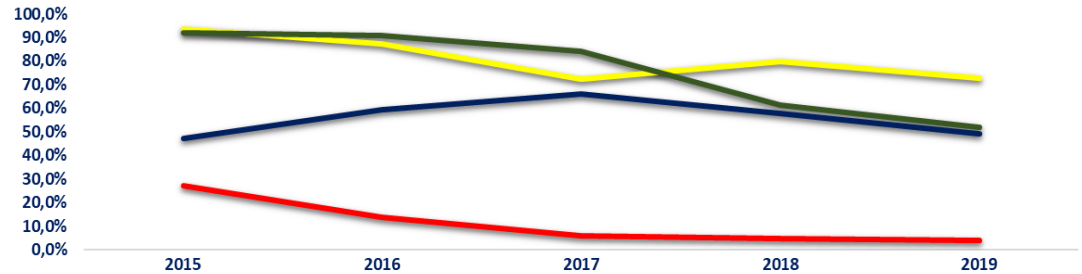
	2015	2016	2017	2018	2019
Number of persons involved in treatment	5 406	21 667	14 938	10 187	11 208
Number of persons involved in treatment per month	676	1 806	1 245	849	1 121
The proportion of people involved in treatment	9%	34%	24%	16%	18%

The above graphs show the positive dynamics of linkage to treatment during the last months (during the one year), that is due to the several factors: complete abolishment of co-payments on diagnostic studies and monitoring of treatment from August 2019; improvement on geographic access to treatment; centralizing the HCV RNA+ cases in hospitalized patients from March 2018. 8.1 thousand Individuals linked to treatment have been identified as a result of the implementation for this mechanism.

10. Status of inclusion in further confirmatory diagnostic and treatment of persons with hepatitis C identified by screening, by years as anti HCV positives (2015-2019):

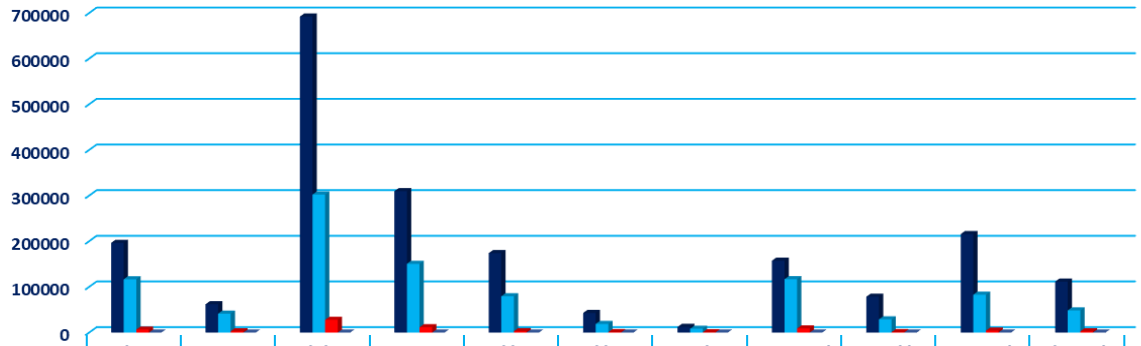


	2015	2016	2017	2018	2019
Number of HCV tests	149 856	312 179	782 053	875 320	987 265
Unique screening	70 563	185 479	515 137	505 539	485 547
anti-HCV+	19 057	25 608	29 700	23 749	18 559
Confirmatory test	17 829	22 322	21 413	18 912	13 519
Pos. Confirmatory test	15 503	18 558	17 718	14 532	10 173
Treatment started	14 256	16 832	14 877	8 900	5 280



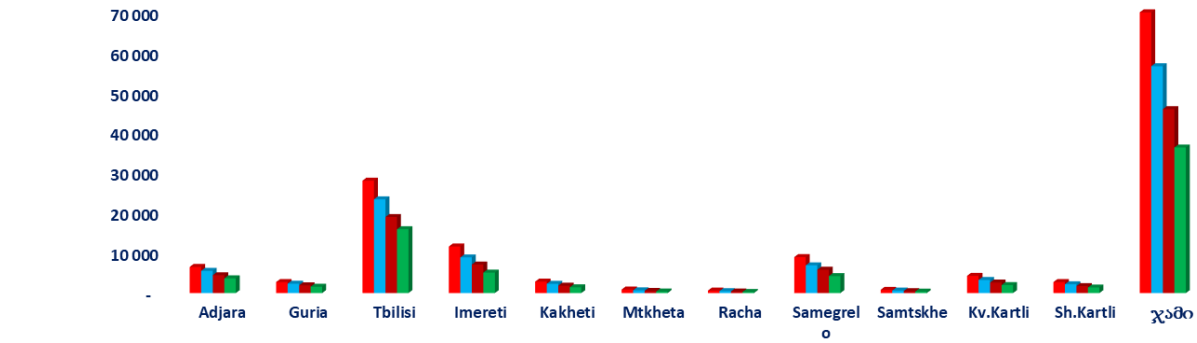
	2015	2016	2017	2018	2019
% of unique screening	47,1%	59,4%	65,9%	57,8%	49,2%
% of anti-HCV+	27,0%	13,8%	5,8%	4,7%	3,8%
% of confirmatory test	93,6%	87,2%	72,1%	79,6%	72,8%
% of persons started treatment	92,0%	90,7%	84,0%	61,2%	51,9%

11. Screening status of beneficiaries of 18 years and over, by November 10, registered in the planned outpatient service provider clinics of the Universal Healthcare Program:



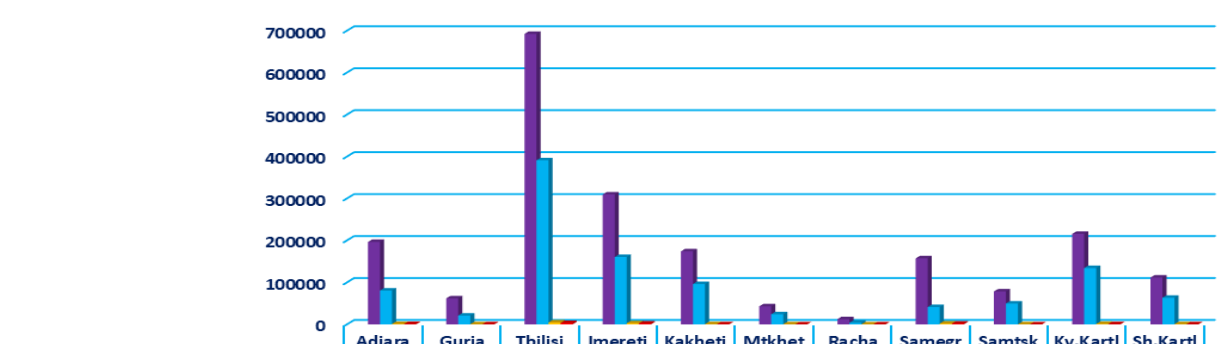
	Adjara	Guria	Tbilisi	Imereti	Kakheti	Mtkheta	Racha	Samegrelo	Samtskhe	Kv.Kartli	Sh.Kartli
Number of Providers	19	7	130	38	20	9	4	33	9	32	17
Target	196 421	62 009	692 174	309 653	174 044	42 904	12 380	157 401	78 561	215 725	111 620
Screened	116 559	41 422	302 297	150 482	79 461	18 920	8 377	116 814	28 975	82 873	48 398
anti-HCV+	6 511	2 727	27 963	11 588	2 850	879	620	8 945	795	4 277	2 727
%Covering	59%	67%	44%	49%	46%	44%	68%	74%	37%	38%	43%
%anti-HCV+	6%	7%	9%	8%	4%	5%	7%	8%	3%	5%	6%

Share of individuals registered in the planned outpatient service provider clinics of the Universal Healthcare Program, screened, confirmed with confirmatory testing and enrolled in the treatment.



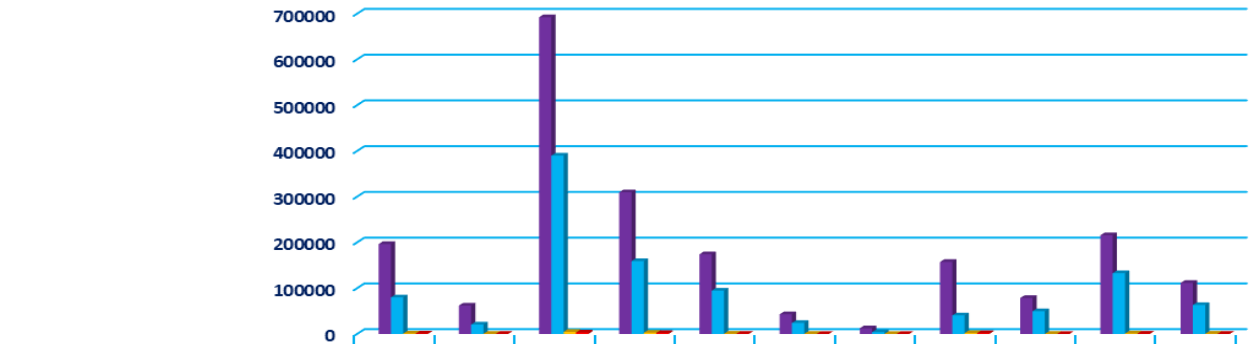
	Adjara	Guria	Tbilisi	Imereti	Kakheti	Mtkheta	Racha	Samegrelo	Samtskhe	Kv.Kartli	Sh.Kartli	ჯამი
anti-Hcv+	6 511	2 727	27 963	11 588	2 850	879	620	8 945	795	4 277	2 727	69 882
Confirmed	5 520	2 337	23 323	8 877	2 294	676	486	6 904	613	3 259	2 180	56 469
Conf. pos. tests	4 429	1 915	18 927	7 108	1 838	524	395	5 805	478	2 620	1 734	45 773
Started treatment	3 659	1 579	15 886	5 087	1 425	386	264	4 221	363	1 988	1 379	36 237
%Coever by conf.test	85%	86%	83%	77%	80%	77%	78%	77%	77%	76%	80%	81%
%Involved treatment	83%	82%	84%	72%	78%	74%	67%	73%	76%	76%	80%	79%

Number of people to be screened under the U-Healthcare Program, HCV positive persons to be confirmed and HCV confirmed positive screening cases to be enrolled in the treatment:



	Adjara	Guria	Tbilisi	Imereti	Kakheti	Mtkheta	Racha	Samegrelo	Samtskhe	Kv.Kartli	Sh.Kartli
Number of Providers	19	7	130	38	20	9	4	33	9	32	17
Target	196 421	62 009	692 174	309 653	174 044	42 904	12 380	157 401	78 561	215 725	111 620
Number of persons to be testing	80 513	21 016	391 142	160 542	96 199	24 128	4 123	41 284	49 674	134 355	63 414
Number of persons to be conf. testing	1 000	390	4 626	2 698	553	201	135	2 033	182	1 006	554
Number of persons to be treat	774	350	3 050	2 038	413	138	132	1 585	114	634	350

Share of individuals registered in the planned outpatient service provider clinics of the Universal Healthcare Program, to be screened, to be confirmed with confirmatory testing and to be enrolled in the treatment, relatively to their whole target population:



	Adjara	Guria	Tbilisi	Imereti	Kakheti	Mtkheta	Racha	Samegrelo	Samtskhe	Kv.Kartli	Sh.Kartli
Number of Providers	19	7	130	38	20	9	4	33	9	32	17
Target	196 421	62 009	692 174	309 653	174 044	42 904	12 380	157 401	78 561	215 725	111 620
Number of persons to be testing	79 862	20 587	389 877	159 171	94 583	23 984	4 003	40 587	49 586	132 852	63 222
Number of persons to be conf. testing	991	390	4 640	2 711	556	203	134	2 041	182	1 018	547
Number of persons to be treat	770	336	3 041	2 021	413	138	131	1 584	115	632	355

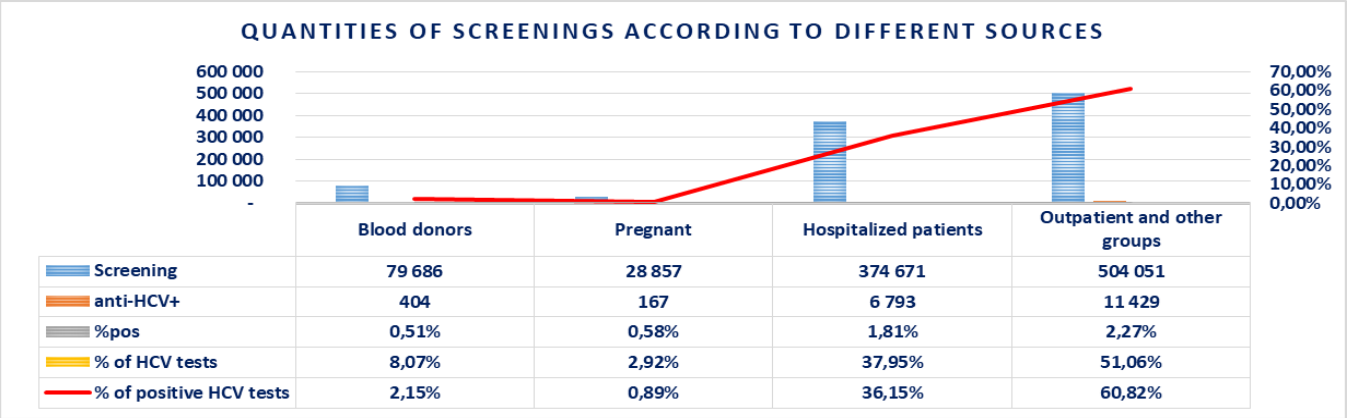
The above-mentioned data indicate to the reserves having for screening activation through the planned ambulatory health providers of U-Healthcare Program, in which 87% is unscreened adult population.

12. From January 1 to November 10, 2019, a total of 987,265 screening cases were registered in the system. From them 18,793 were positive (1.90% from screened cases). Including 485,547 new screening cases with unique IDs, out of which 18,559 were positive cases (3.82%). Therefore, about 51% of screening cases in 2019 were already screened at least once before.

13. Over the last week, from November 3 to 10, 2019, 17.620 screening cases are registered in the system, out of which 388 were positive (2.2% from the screened cases);

14. The structure of the screening cases for the period of 1st of January to 10nd of November 2019 is as follows:

More than 50% (61% positive screened cases) are ambulatory screenings out of total quantity of screening and is associated with the nationwide expansion of the integrated screening program:



	Blood donors	Pregnant	Hospitalized patients	Outpatient and other groups
Screening	79 686	28 857	374 671	504 051
anti-HCV+	404	167	6 793	11 429
%pos	0,51%	0,58%	1,81%	2,27%
% of HCV tests	8,07%	2,92%	37,95%	51,06%
% of positive HCV tests	2,15%	0,89%	36,15%	60,82%

15. The screening cases were registered by 1,497 users of 1,352 provider from January 1 to November 10, 2019.

16. The stock of tests available for outpatient screenings for November 10, 2019 is following:

16.1. 261,975 tests in the NCDC's warehouse.

16.2. In medical institutions – 315.731 tests (report not submitted)-; The total number of tests is 577.7 thousand units.

17. 26,306 cases of blood collected by 340 institutions in 61 districts have been registered in the electronic database after centralization of study and sample transportation of HCV positive screening cases in hospitalized patients since March 1, 2018. Out of which 25,271 samples (96.1%) were transported, 24,949 (98.7%) samples were confirmatory tested, out of 17,841 (71.5% HCV RNA+ individuals 8,118 (45%) were linked to treatment. Over 80% of centralized studies is concentrated on medical facilities in 4 regions (Tbilisi, Imereti, Samegrelo, Adjara):

Region	Number of messages	Defective specimens	Transported	Number of Confirmatory tests	Number of Pos, Confirmatory tests	Number of involved in treatment	% of samples in their total number	% of Transported	% of Defective specimens	% of confirmatory tests	% of pos.confirmatory tests	% of involved in treatment
Tbilisi	10 505	223	10 137	9 961	6 673	3 043	39,9%	96,5%	2,1%	98,3%	67,0%	45,6%
Imereti	4 690	195	4 439	4 368	3 079	1 022	17,8%	94,6%	4,2%	98,4%	70,5%	33,2%
Samegrelo-Zemo Svaneti	3 795	40	3 710	3 696	2 975	1 531	14,4%	97,8%	1,1%	99,6%	80,5%	51,5%
Adjara	2 636	52	2 569	2 543	1 805	951	10,0%	97,5%	2,0%	99,0%	71,0%	52,7%
Guria	724	11	709	702	534	283	2,8%	97,9%	1,5%	99,0%	76,1%	53,0%
Racha Lechkhum Kvemo Svanet	211	7	203	202	153	57	0,8%	96,2%	3,3%	99,5%	75,7%	37,3%
Shida kartli	1 201	11	1 175	1 174	835	434	4,6%	97,8%	0,9%	99,9%	71,1%	52,0%
Kvemo Kartli	1 012	41	956	937	757	336	3,8%	94,5%	4,1%	98,0%	80,8%	44,4%
Kakheti	1 018	57	923	920	727	344	3,9%	90,7%	5,6%	99,7%	79,0%	47,3%
Samtskhe=Javakheti	224	18	205	202	147	67	0,9%	91,5%	8,0%	98,5%	72,8%	45,6%
Mtskheta-Mtianeti	274	22	237	237	150	47	1,0%	86,5%	8,0%	100,0%	63,3%	31,3%
Unknown	16	4	8	7	6	3	0,1%	50,0%	25,0%	87,5%	85,7%	50,0%
Total	26 306	677	25 271	24 949	17 841	8 118		96,1%	2,6%	98,7%	71,5%	45,5%

In total, the project has a positive result, as screening and confirmatory testing are implemented by a single window principle, however, its disadvantages are the relatively low rate of (only 45.5%) linkage to the further treatment of individuals of HCV RNA+. This can be explained by the low awareness and motivation of the citizens, however, in recent months the number of individuals linked to treatment has increased by 5% and it is a result of the abolition of the co-payment on diagnostic studies and monitoring of treatment and also, the direct communication with citizens by the Center's regional branches.

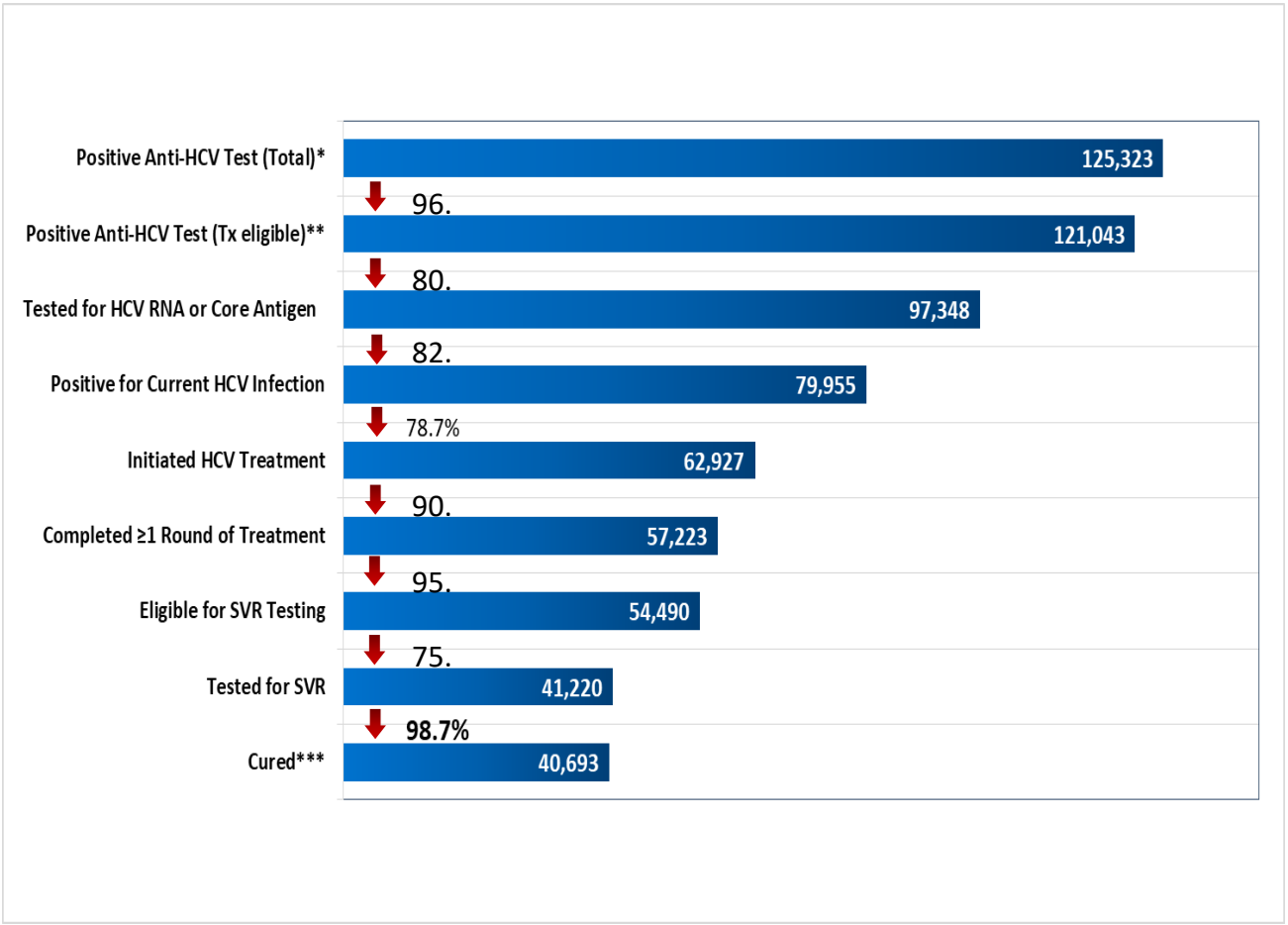
18. In order to increase geographical access on HCV screening, permanent corners were arranged in 12 Public Service Halls from October, 2018 (Tbilisi, Kutaisi, Batumi, Zugdidi, Poti, Ozurgeti, Gori, Akhaltsikhe, Rustavi, Marneuli, Telavi, Gurjaani), and 80,960 people have been screened, including 2,056 people (2.5%) HCV RNA+ during the last year.

Region	Number of HCV screening	anti-HCV+	%	Number of HCV screening	anti-HCV+	%	Number of HCV screening	anti-HCV+	%	Number of HCV screening	anti-HCV+	%
	Total			2018			2019			3-10 November		
Tbilisi	19 290	642	3,3%	7 796	267	3,4%	11 494	375	3,3%	171	11	5,2%
Kutaisi	5 198	198	3,8%	1 278	61	4,8%	3 920	137	3,5%	69	3	3,0%
Batumi	6 181	185	3,0%	1 554	43	2,8%	4 627	142	3,1%	129	5	3,1%
Poti	3 953	122	3,1%	1 096	39	3,6%	2 857	83	2,9%	52	1	1,8%
Gurjaani	2 675	53	2,0%	835	16	1,9%	1 840	37	2,0%	20	1	0,0%
Rustavi	11 691	283	2,4%	2 526	78	3,1%	9 165	205	2,2%	293	7	0,8%
Zugdidi	6 441	170	2,6%	1 493	36	2,4%	4 948	134	2,7%	75	-	6,4%
Akhaltshikhe	3 199	22	0,7%	981	7	0,7%	2 218	15	0,7%	32	-	0,0%
Gori	8 878	142	1,6%	1 968	30	1,5%	6 910	112	1,6%	99	1	2,2%
Mameuli	7 937	113	1,4%	1 224	22	1,8%	6 713	91	1,4%	113	-	0,6%
Ozurgeti	2 764	80	2,9%	692	19	2,7%	2 072	61	2,9%	27	1	5,7%
Telavi	2 753	46	1,7%	903	20	2,2%	1 850	26	1,4%	25	1	6,5%
Total	80 960	2 056	2,5%	22 346	638	2,9%	58 614	1 418	2,4%	1 105	31	2,9%

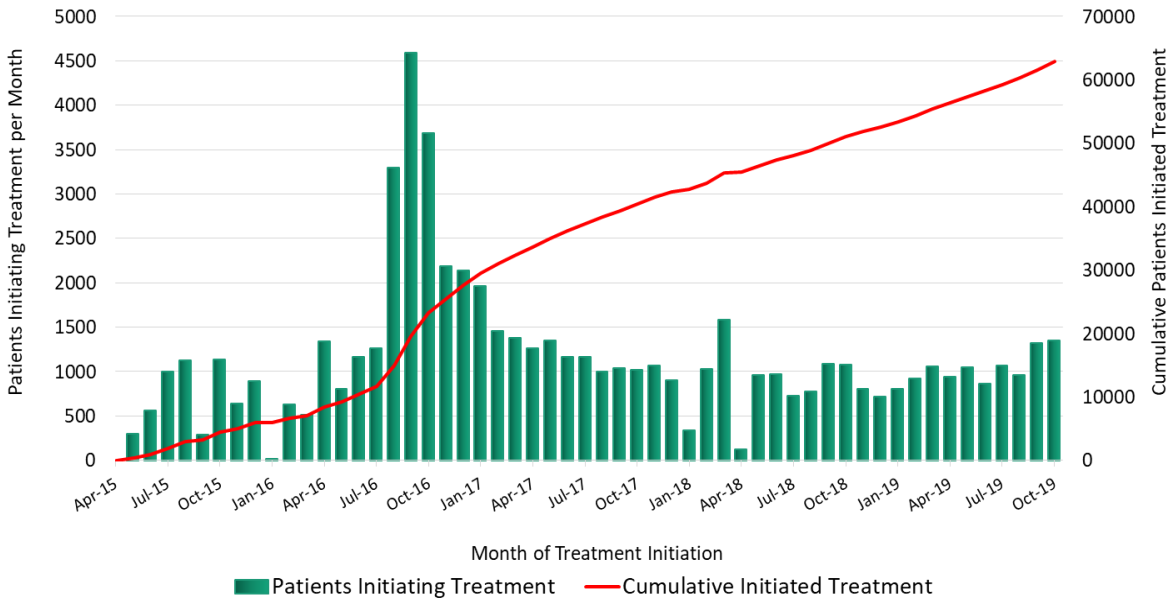
As of November 10, 2019, out of the 2,056 HCV RNA+ beneficiaries, screened in the Public Service Halls, 1,388 (67.5%) underwent the subsequent confirmatory testing, out of which 1,100 (79.3%) individuals were prooved to having active infection, and out of them 770 (70,0%) were enrolled into the treatment.

19. The Ministry of Defense screened 21,295 military personnel in 2018-2019, out of which 286 (1.34%) were positive, from which 123 were treated before the screening was performed, and 129 were confirmed, from which 108 were newly confirmed cases, out of which 89 were enrolled in the treatment.

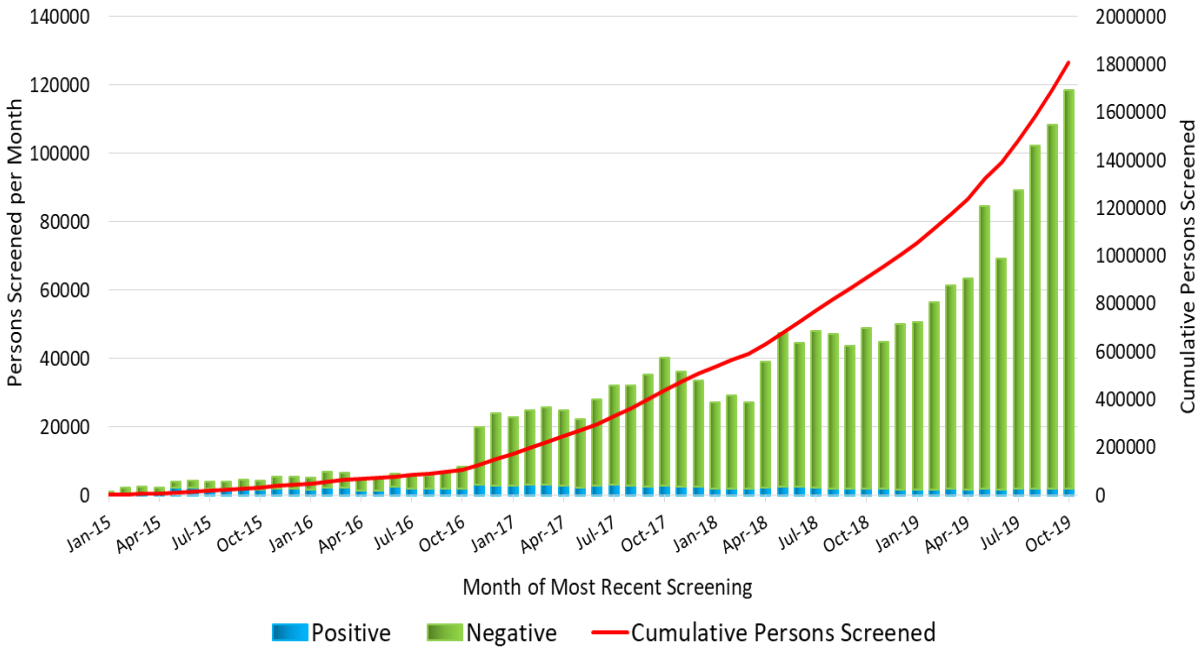
20. Screening and treatment cascade by October 31, 2019 (processed by CDC):



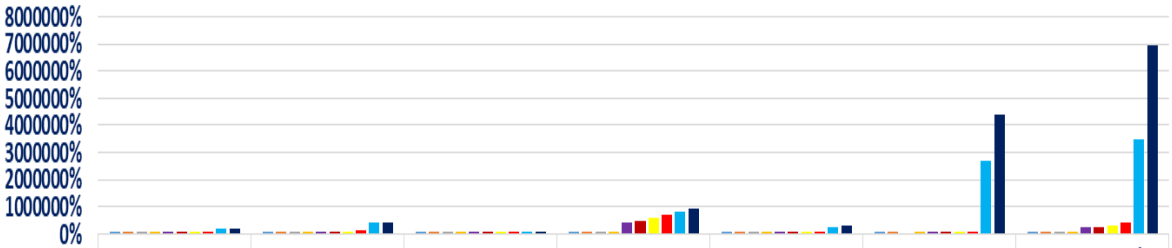
Patients initiating treatment, Georgia HCV elimination program, April 2015 – October 2019



Persons* Screened per Month, Georgia HCV elimination program, January 2015 – October 2019



21. In Samegrelo-Zemo Svaneti region, the successful project in primary healthcare, funded by the local authorities, international donor organization (Global Fund project) and the state budget (HCV State Program) started in April 1, 2018 and was expanded in 2019 covering whole country except 3 regions (Tbilisi, Shida Kartli, Samtskhe-Javakheti). 305,643 adults (including HCV positive 3,565 - 1.2%) have been screened on HCV from January 1, 2019 until today by trained primary healthcare centers (training funded by global fund) on 3 infections, and in which local authorities pay 1.75 Gel per screening as an incentive to the primary health care and public health centers.



	TB patients	AIDS patients	Hemophilic patients	Drug users	Dialysis patients	Nursing staff	Veterans and their family members
% of started treatment	52%	91%	76%	84%	19%	81%	84%
% of confirmatory tests	85%	62%	69%	86%	75%	42%	82%
% of anti-HCV pos.	17%	36%	37%	86%	23%	3%	12%
Covering %	94%	98%	99%	87%	89%	61%	51%
Started treatment	119	749	55	4 141	70	195	2 320
Number of positive confirmatory tests	228	821	72	4 925	368	240	2 751
Number of confirmatory tests	282	887	97	5 857	466	320	3 376
anti-HCV+	331	1 439	141	6 799	622	762	4 093
Screened	1 985	4 008	385	7 943	2 657	26 885	35 047
Target	2 122	4 090	389	9 080	2 979	43 859	69 254

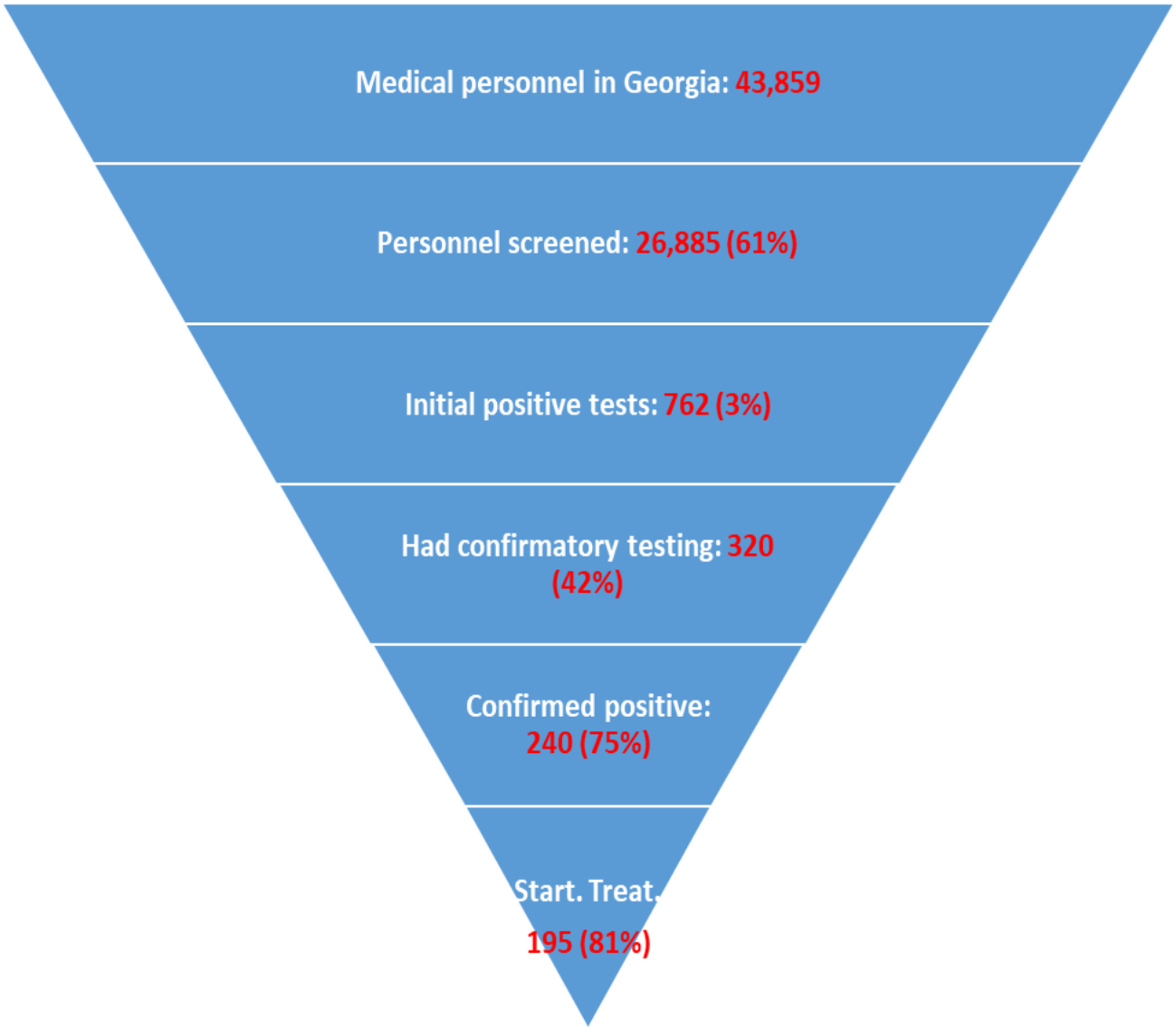
22. HCV Screening status of persons involved in different state programs:

Among the beneficiaries of the some public health state programs including the war veterans, whose nature of disease and treatment regimes (the same transmission way, frequent transfusion of blood and blood products, other doubtful behavior) provide a high potence of existance of HCV co-infection; HCV microelimination activities are being held due to simplified coverage by Program services in comparison with other population. In addition, their health condition requires a timely linkage to treatment.

Within the Program, 90% of state programs beneficiaries have been screened, among which the positive cases according to separate groups varies from 12 % to 86 %.

	TB Patients	HIV Infected Individuals	Hemophilia Patients	OST Program Beneficiaries	Dialysis Patients	War Veterans and Their Family Members
Target Population	2 122	4 090	389	9 080	2 979	69 254
Screenings	1 985	4 008	385	7 943	2 657	35 047
Screening Coverage %	94%	98%	99%	87%	89%	51%
Of Those Positive	331	1 439	141	6 799	622	4093
Finding Screening Positives %	17%	36%	37%	86%	23%	12%
Confirmed	282	887	97	5 857	466	3 376
Coverage by conf.test%	85%	62%	69%	86%	75%	82%
Confirmatory Pos.	228	821	72	4 925	368	2751
Started treatment	119	749	55	4 141	70	2320
Coverage by treatment %	52%	91%	76%	84%	19%	84%

According to the amendments of the Ministerial Order, №01-38/б, dated on September 7, 2015 on “Approval of Regulations on Surveillance, Prevention add Control of Nosocomial Infections”, the microelimination activities have started in medical personnel. Namely, in compliance with the Order, the medical personnel must be screened on HBV and HCV. In addition, the medical facility is obliged to keep the confidentiality on screening data and employed positions. In case an infected employee is involved into the diagnostic and treatemnt services through the HCV Elimination Program, an employer will be obliged to provide a special working process and his / her linkage to treatment without interruption of working process.


Medical personnel in Georgia: 43,859
Personnel screened: 26,885 (61%)
Initial positive tests: 762 (3%)
Had confirmatory testing: 320 (42%)
Confirmed positive: 240 (75%)
Start. Treat.
195 (81%)