Colophon

Authors:
George Kalamitsis
Katerina Matsioula

Editors:
Danny Morris
Rebecca Johnson
Eberhard Schatz

Publisher Corresponding address:
Eberhard Schatz
CORRELATION network
c/o Foundation De REGENBOOG GROEP
Droogbak 1d
1013 GE Amsterdam
The Netherlands

www.correlation-net.org
www.hepatitis-c-initiative.eu

The Correlation Hepatitis C and Drug Use Initiative received an unrestricted grant by Gilead Ltd.
Hepatitis C
Testing in the Community

Content
The global strategy to eliminate hepatitis .......................... 5
The public health burden .................................................. 6
Hepatitis C, prevalence and at risk populations .................... 7
Access to hepatitis C testing and treatment ........................ 8
Hepatitis C cascade of care ................................................. 9
Hepatitis C treatment ......................................................... 10
Optimising testing and diagnostics: Rapid diagnostic tests .... 11
Hepatitis C community testing ............................................ 12
Principles of community testing ......................................... 13
Barriers to community testing ............................................ 14
Benefits of community testing ............................................ 15
The role of civil society ..................................................... 17
Community testing: case studies ........................................ 18
Conclusion ........................................................................ 23
References ........................................................................ 24
Glossary & terms ............................................................... 26

www.hcvcommunitytesting.info
The global strategy to eliminate hepatitis

Viral hepatitis is a major public health challenge, comparable to other major communicable diseases, including HIV, tuberculosis and malaria. The viral hepatitis pandemic takes a heavy toll on lives, communities and health systems. It is responsible for an estimated 1.4 million deaths per year from acute infection and hepatitis-related liver cancer and cirrhosis (1).

Despite the significant burden it places on communities across all global regions, until recently, hepatitis has been largely ignored as a health and development priority. In May 2016, in recognition of the growing global public health burden, the World Health Assembly endorsed the Global Health Sector Strategy (GHSS) on viral hepatitis 2016 – 2020, calling for specific actions to combat and eliminate viral hepatitis as a public health threat by 2030.

In order to achieve this strategic goal, the WHO Global hepatitis report 2017 (2) describes - for the first time - global and regional estimates on viral hepatitis, setting the baseline for tracking progress in implementing the new strategy. Data is presented along five strategic directions: strategic information, interventions, equity, financing and innovation. These are identified as the key pillars of the GHSS to facilitate monitoring of progress and to measure the impact of interventions on reducing new infections and saving lives between 2015 and 2030, in countries, regions and globally.

The report calls for a reorientation of hepatitis programmes and interventions towards a comprehensive public health approach that can reach populations most affected and provides guidance on a number of high-impact interventions and opportunities for their scaled-up implementation, supported by an appropriately trained workforce, adequate public funding for essential harm reduction services, provision of testing services in order to reach undiagnosed patients, access to optimal treatment for diagnosed patients and active involvement of affected communities including people who inject drugs (PWID).
The public health burden

Statistics from the report underline that viral hepatitis is a major public health challenge that requires an urgent response. The disease caused 1.34 million deaths in 2015, a number comparable to annual deaths caused by tuberculosis and higher than those caused by HIV and while mortality from HIV, tuberculosis, and malaria is now declining, mortality caused by viral hepatitis is on the rise (1). Hepatitis B (HBV) and HCV are responsible for approximately 96% of all hepatitis mortality (47% and 48% respectively). Viral hepatitis is also a growing cause of mortality among people living with HIV - about 2.9 million people living with HIV are co-infected with HCV.

Additionally, 1.75 million people newly acquire HCV annually, and unless they receive timely testing and treatment, these people are at risk of a slow progression to severe liver disease and death. Without the significant scaling up of testing and treatment, the number of deaths is predicted to continue to rise (2).

The epidemic caused by HCV affects all regions, with major differences between and within countries. In Europe (WHO European Region) the number of people with Hepatitis C is estimated to be 14 million with approximately, or around 2% of the population, with around 112 500 deaths each year, due to HCV related complications (3). HCV prevalence varies greatly across European countries, with levels between 0.4% and 2.9% being noted, although gaps in the data and variations in study methodology hinder efforts to make reliable comparisons. People who inject drugs (PWID) are identified as the key risk group for HCV infection in most European countries with other populations for concern including men who have sex with men (MSM), migrants and prisoners. (Lazarus et al).
Hepatitis C, prevalence and at risk populations

Hepatitis C is a liver disease, caused by the hepatitis C virus. It is a blood borne virus which causes both acute and chronic infection of the liver ranging in severity from a mild illness lasting a few weeks to a serious, lifelong illness with premature mortality (4). Approximately 15–45% of infected people spontaneously clear the virus without any treatment, within 6 months of infection. The remaining 55–85% of people will develop chronic HCV infection. For people with chronic HCV infection, the risk of developing liver cirrhosis is estimated to be between 15–30% within 20 years.

The majority of HCV transmission across the European region is among PWID, and is a result of sharing contaminated injected equipment. HCV infection prevalence among PWID is estimated to range from 14% to 84% (5), but infection is also common in other vulnerable populations and groups, such as men who have sex with men (4.2%), and sex workers (11%).

Other risk populations for HCV infection include recipients of unscreened blood products or invasive procedures in health-care facilities with inadequate infection control practices. HCV can also be transmitted sexually and can be passed from an infected mother to her baby; however, these modes of transmission are much less common (4).
Access to hepatitis C testing and treatment

The World Health Organisation recommends that HCV serology screening should be a priority for individuals who belong in key population groups, populations with high HCV prevalence or people who have a history of HCV risky behaviour, such as PWID (8).

“Testing for viral hepatitis is not only advantageous for people who are affected, but also benefits national healthcare systems, the economy and society. Detection and treatment at an early stage can reduce the spread of the virus and both the cost and duration of treatment, as well as increasing the chances of recovery. Indeed, most liver cancer cases could be prevented with appropriate management of viral hepatitis B and C” (22).

Early testing and diagnosis of hepatitis C infection is the gateway for access to both treatment and prevention on services (9). It is critical for effective treatment and care and crucial for an effective hepatitis C epidemic response. However, access to affordable hepatitis C testing is limited. Of the estimated 71 million people with chronic hepatitis C infection globally, only 14 million (20%) are aware of their infection, and of those, only 1.1 million (7.4%) have had access to treatment. Unless more people with HCV are diagnosed and treated, the morbidity and mortality attributable to HCV infection will continue to rise - approximately 400,000 persons die each year from HCV-related complications, which include cirrhosis, hepatocellular carcinoma (HCC) and liver failure (2). Estimates suggest that almost one in fifty adults in Europe have chronic hepatitis C and yet most people are unaware of their infection. (10)

Among the 36.7 million people worldwide living with HIV in 2015, 2.3 million had been infected with HCV. Liver diseases are a major cause of morbidity and mortality among those living with HIV and co-infected with viral hepatitis. These people should be diagnosed and provided with appropriate and effective treatment for both HIV and hepatitis as a priority (2).
**Hepatitis C cascade of care**

WHO defines the cascade of care as the continuum of services that people living with hepatitis C should receive as they go through various stages, from testing to diagnosis and to treatment to cure. Monitoring populations affected by HCV across stages of a cascade of care at a broader population level provides a measure of hepatitis C programming effectiveness and identifies gaps in services and access. (11)
In 2015, 7% (1.1 millions) of people diagnosed with chronic hepatitis C accessed treatment globally. As of 2015, a growing number of 5.5 million people with chronic HCV had ever received treatment, but the majority of these were treated with the older, less effective, interferon-based regimens. In particular, WHO reports that approximately half a million people were treated with DAAs. \(^2\) Available data shows that treatment uptake in Europe continues to be very low among PWID, for a variety of reasons. \(^1\) Treatment for PWID must take into consideration additional factors, such as social stigma, lack of access to housing, criminalization, and gender and language barriers. \(^3\) Historically, interventions used for treating HCV have focused on a more traditional medical model, and less on these additional factors.

European guidelines \(^4\) recommend that all patients with chronic liver disease due to HCV must be considered for therapy and that drug use should not exclude individuals from HCV treatment. However, although there has previously been some hesitancy to treat PWID, with concerns expressed over adherence, increased susceptibility to side effects, and the risk of reinfection, \(^5\) recent research evidence is showing that investments in HCV treatment, even for those who continue to inject drugs, is justified on public health grounds. \(^6\) Currently, there is no vaccine for hepatitis C and until relatively recently, the main treatment option for HCV infection was to use a combination of the antiviral drugs interferon and ribavirin. This can be effective, but these drugs are often poorly tolerated, have severe side effects and the duration of treatment is relatively long; both factors that are disadvantageous for encouraging uptake. However, since 2013, the field of HCV therapeutics has evolved rapidly with the introduction of a new class of drugs, called direct-acting antivirals (DAAs). These treatments have high cure rates and have a number of significant advantages: enabling regimens that can be administered orally, are of shorter duration (as short as eight weeks), far better tolerated and are associated with fewer serious adverse events than the previous interferon-containing regimens, and result in cure rates of over 95% for the majority of people who receive treatment. \(^7\)

These newer DAAs are also more suitable and safer for people with cirrhosis or advanced liver disease than earlier treatment options. However, the high financial cost of these new regimens remains a major barrier to HCV treatment access in many countries \(^2\) in addition to barriers already inherent in many health care systems. \(^7,16\)
Optimising testing and diagnostics: 
Rapid diagnostic tests

services and ensuring accurate and reliable diagnosis, clinical assessment and patient monitoring. Further, that simple technologies are required to ensure that testing services can reach remote areas and hard-to-reach populations (1).

Recent technological advances in diagnostic testing and the use of less-invasive techniques including dried blood spot testing (DBST) and other rapid diagnostic tests (RDTs) is becoming more established. These newer technologies are being increasingly used to overcome barriers to testing, improving access to affected communities through both healthcare and community outreach settings.

According to WHO, the testing method usually applied is via serological assay of Rapid Diagnostic Tests (RDTs) for HIV, HCV, HBV, TB or other blood borne diseases. Approved RDTs appear useful, especially in settings where laboratory-based testing services are unavailable or inaccessible (9).

EASL guidelines, also recommend that anti-HCV antibodies are the first line diagnostic test for HCV infection, highlighting that “rapid diagnostic tests using serum plasma, fingerstick whole blood or crevicular fluid (saliva) as matrices can be used instead of classical enzyme immunoassays to facilitate anti-HCV antibody screening and improve access to care”(14). The first line for HCV testing, through the detection of HCV antibodies, provides information as to whether an individual has a history of HCV infection (26).

There are notable benefits in the use of RDTs. They are widely preferred and more acceptable in some key populations, such as young PWID (27) and perceived by members of key target populations as useful, appropriate and feasible in a variety of settings (28).
Hepatitis C community testing

Community-based testing refers to an approach which uses settings within the community, which are representative of and used by affected and marginalized key populations, to provide targeted testing services (16). These settings can include: fixed venues, mobile testing units, outreach sites, peoples’ homes, and community-based organizations such as: churches, mosques, parks, homeless shelters, needle and syringe programmes, educational environments, and workplaces.

“Community-based testing can complement facility-based approaches, which may fail to reach certain high-risk populations, especially PWID, who are often marginalized because of stigma and discrimination or legal sanctions, as well as those in remote or rural areas, including pregnant women with limited access to facility-based testing” (9).

Access to community based testing, by non-judgmental personnel, at venues which offer flexible opening hours and appointments, has been shown to improve testing rates (13). ECDC states that such venues “may vary between countries, and between areas within countries, depending on the local epidemic, the healthcare delivery system and which services are used by populations most at risk” (19). Testing services may be offered in a variety of ways, to encourage uptake. These could include: regularly scheduled times and venues; moonlight testing (at night); one-off or special public events, such as music and theatre performances, agricultural fairs, holiday festivals and sporting events (9). Community testing may be provided by health workers, such as community health workers, lay providers, nurses, and non-physician clinicians who have received appropriate training (18). Both health-facility and community-based HIV testing services in Europe have been established since 2002 and are constantly expanding (15). The same barriers that have been encountered in ensuring linkage to HIV prevention, care and treatment services will need to be addressed now with regard to HCV. Outreach methods aimed at HIV prevention have been shown to be particularly effective in engaging with hard-to-reach PWID populations, and decreasing injection and sexual risk behaviours (9).
Principles of community testing

Testing services, including community-based testing services, should be governed by five principles, known as the 5C’s:

1. **Consent** – written or verbal - to voluntary testing, including the right to refuse
2. **Confidentiality** around the sharing of information with others
3. **Pre- and post-test counselling** (increasingly referred to as pre- and post-test discussion)
4. **Correct results** derived from high quality testing services.
5. **Connection**: “linkage to prevention and treatment services is critical and should be emphasized in all community-based testing services” including follow up. \(^{(16)}\)

These principles derive from a human-rights and public health-centred approach, prioritizing benefits to individuals (equality, availability and high quality of services) as well as the improvement of health outcomes for the population. Planning of services, according to ECDC, should guarantee services are suitably targeted and suit the needs of the target groups \(^{(19)}\).
Barriers to community testing

People with hepatitis C infection may come from vulnerable groups because of low socioeconomic status with poor access to appropriate health care, or because they belong to groups that are marginalized or stigmatized such as PWID, MSM, migrants, indigenous peoples or prisoners. The challenges of implementing hepatitis community testing are considered by WHO to be similar to those of implementing HIV community testing. These include lack of confidence in accessing prevention, treatment and health care services, as well as the potential stigmatization or lack of confidentiality that may occur due to being seen in community settings. There are also legal and regulatory barriers such as: laws criminalizing key population groups; lack of legal documentation of migrants; restrictions on rapid testing; restrictions on types of setting and personnel able to implement testing services; outdated testing guidelines; and referral barriers to NGOs.

In a recent ECDC study, member states indicated a number of important gaps in testing policies (including community testing) and testing guidance in settings where HBV/HCV testing is provided. A significant finding was that many member states have no policy covering the key risk groups such as PWID, sex workers, and men who have sex with men.

The World Health Organisation recognises that “technical, logical and financial challenges must be overcome for the expansion of HCV treatment services”.

- Policy must ensure that high HCV prevalence groups in both the general and target populations have access to testing, in order that more of those people who are undiagnosed can be identified. This requires increased investment in services.
- Diagnostic and clinical management capability, which is especially limited in low-income countries, needs to be improved. DAAs will eventually allow for simpler laboratory procedures, as effective combination therapy will negate the need for genotyping; DAAs are also safer, which will reduce the complexities of monitoring during treatment.
- HCV treatment will need to be expanded from current specialist providers into general practice and primary care settings, which means that suitable training and equipment will need to be provided.
Benefits of community testing

Community based testing is associated with benefits to both the general population, and target population groups \(^{(22)}\).

Some of the key benefits of community testing are:

- The ability to reach first-time testers, people who rarely use clinical services, and people within targeted key populations \(^{(16)}\);
- Increased testing scope and reach – to include previously undiagnosed individuals, as well as individuals at risk of co-morbid infection with HIV \(^{(2)}\);
- Increased testing uptake, via the use of varied settings and opening hours \(^{(19)}\). Increased testing uptake is known to increase the number of HCV diagnosed patients, referrals to a clinician, and attendance at medical appointments \(^{(8)}\);
- Earlier diagnosis and access to care, treatment and prevention, thus reducing the incidence of onward transmission and morbidity, which will have a significant public health impact \(^{(23)}\);
Key benefits of targeted testing:

- Voluntary testing encourages uptake within socially vulnerable groups. The confidential nature of the procedure also seems to encourage such groups to overcome barriers related to testing, and as such it is recommended by ECDC\(^\text{(19)}\).
- Enhancement of the hepatitis care continuum, by identifying undiagnosed individuals or by linking diagnosed individuals to care\(^\text{(24)}\).
- Cost – effectiveness. Recent WHO data indicates that targeted HCV testing of PWID, people in prisons or closed settings and HIV-infected MSM was shown to be cost-effective in all settings. “This was the case among PWID even when the studies assumed poor follow-up rates, limited access to therapy and a high risk of reinfection. The higher the treatment rates, the greater the population impact, and the more cost–effective HCV case- finding becomes. Among prisoners, targeting testing to those prisoners with a history of injection drug use further improved cost–effectiveness”\(^\text{(9)}\).

Target populations seem to have a positive view of HCV community testing\(^\text{(29)}\). The findings indicate that the acceptability of community testing was almost universal in high risk populations (from a sample surveyed at homeless shelters, drug rehabilitation centres, and a women’s drop-in centre) and remained high even if participants would be unable to receive treatment. The outcome of the research is clear: despite heterogeneity regarding access to healthcare and treatment, high-risk communities want to know their HCV status.

*People with chronic hepatitis C will engage in hepatitis C-specific care when offered community-based rapid screening and diagnosis, and patient navigation services across the continuum of care. The program shows that its chief strengths—its rootedness in the community and its comprehensive nature—result in high rates of screening, diagnosis, linkage to care and engagement in care, and show promising rates of treatment initiation.*\(^\text{(30)}\)
The role of civil society

From extensive experience delivering community-based HIV services, ECDC acknowledges the importance of cooperation with civil society organisations in order to achieve high rates of testing within targeted HCV high-risk population groups (19).

Community testing services, prevention and treatment strategies, in combination with harm reduction services (including prisons), are considered to have an important role in eliminating HCV:

“Communities and community representatives must participate in formulating and implementing hepatitis C prevention, testing and strategies for affordable treatment because these stakeholders have unique knowledge about what will be accessible, acceptable and effective. Without their close ongoing involvement, the effort to eliminate hepatitis C is likely to fail.” (20)

Collaboration between civil society organizations and stakeholders is also crucial in order to provide “best practice examples and guidelines serving as the basis for people-centred health system-based strategies that emphasize tailored implementation at the local level” (21).
Community testing: case studies

Case study examples of organisations contributing to community based testing and applying optimal testing services (including HIV, HCV, HBV, STI testing implemented by lay providers; education; information; counselling; treatment and care; harm reduction; sexual and reproductive health; social, psychological, legal and peer-led outreach and support; training; and advocacy):

1. **Greece, Athens and Thessaloniki Checkpoint** - [http://mycheckpoint.gr](http://mycheckpoint.gr)

Checkpoint is an initiative of Positive Voice (the People Living with HIV Association of Greece). It operates in collaboration with the AIDS Healthcare Foundation, Prometheus (Hellenic Liver Patients Association) and Hellenic Centre for Disease Control and Prevention.

Checkpoint is a non-clinical, community-based, HIV, hepatitis B and C prevention and testing centre, serving populations at high risk for HIV infection, such as men who have sex with men. Services include rapid testing for HIV and other STIs, as well as peer counselling and linkage to care, in specialist units where necessary. Furthermore, Checkpoint advocates for risk-reduction strategies by providing information on safer sex practice. Their counselling service aims to stimulate discussion between the counsellor and client to reduce or eliminate the effects of HIV-related stigma. It further aims to change peoples’ stance towards rapid HIV, hepatitis B and C testing, promoting it as an effective and accurate testing alternative to laboratory-based testing.

From November 2012 to September 2017, 51121 people received free RDT HIV testing, of which 813 were found to have a reactive (positive) test result. When offered a choice of testing method, 98% opted for RDT.

In the same time period, 11321 people were tested for hepatitis C and 10482 people were tested for hepatitis B, with 712 and 167 confirmed positive cases, respectively.
Ukraine, “Alliance for Public Health” -
www.aph.org.ua

The international charitable foundation Alliance for Public Health is a leading NGO which makes a significant impact on the epidemics of HIV/AIDS, tuberculosis, viral hepatitis, and other dangerous diseases in Ukraine. The Alliance works in collaboration with key state partners and civil society organizations, providing financial and technical support to programmes covering over 300,000 members of the most vulnerable populations in Ukraine - which is the highest level of coverage in Europe. Alliance for Public Health is the official co-implementer of the National Targeted Social Program to Fight HIV/AIDS from 2014-2018.

- HIV Testing: Over the past ten years, 1.3 million rapid HIV tests have been conducted, with 55,630 positive results detected. Assisted self-testing for HIV has increased the number of identified cases: in 2016 the number of tests taken was increased by 250% (to 228,365, of which 3,729 were positive). The percentage of HIV detection in new clients who had not received prevention services before, was 16 times higher than the percentage of regular clients of prevention.

- Hepatitis C testing: since 2012, Alliance for Public Health has conducted over 119,000 tests amongst members of key affected populations (prioritising PWID), and during the five years of all-Ukrainian campaigns, over 13,500 people were tested (general population), with the percentage of positive results ranging from 8% to 12%. On World Hepatitis Day 2016, nationwide HCV testing was conducted jointly with partner NGOs in all regions of Ukraine. This resulted in 3,844 random members of public being tested, with 324 (8.5%) RDTs returning a positive result.
Portugal, GAT (Treatment Activist Group) -
www.gatportugal.org

In May 2015, GAT (Treatment Activist Group) was established in Portugal. It is a screening network for HIV, viral hepatitis, and syphilis, which is based in community settings that are dedicated to at-risk populations (sex workers, people who use drugs, migrants, and MSM). The project aims to increase early detection and to provide linkage to health services, as well as to dynamically monitor the frequency of disease and its predictors.

The network currently includes 21 NGOs and more than 25 fixed centres and mobile sites. The network implements an ongoing study, which is conducted at 25 community-based settings that offer screening for HIV, viral hepatitis and syphilis. Data is collected anonymously and each participant has a unique identifier code allowing data linkage during follow up.

Between October 2015 and December 2016, there were 9731 contacts with eligible persons, resulting in 9049 (93.0%) baseline or follow-up questionnaires, and 683 (7.0%) refusal questionnaires. During this period 8649 persons were enrolled in the cohort: 48.8% were men, 44.7% women and 0.5% transgender. 316 participants had at least one follow-up evaluation.

At baseline, 8442 (97.6%) individuals undertook an HIV test, of which 94 (1.1%) were reactive; 6156 (71.2%) had an HCV test, with 192 (3.1%) having a reactive result; 5765 (66.7%) had an HBV test and 124 (2.2%) were HBs antigen-positive; finally, 6721 (77.7%) had a syphilis test, of which 151 (2.3%) had a reactive result.

Centre for Sexual Health in Sofia, Bulgaria, is a community-based facility, providing testing services for viral hepatitis B, hepatitis C and HIV. The centre began operating in 2004, under the organization Health without Borders, and offered HIV testing services. In 2016, the centre collaborated with HepActive association, in order to include hepatitis B and C testing services.

To date, the facility is the only community-based setting in Bulgaria to offer free and anonymous rapid testing services for HIV and viral hepatitis B and C. The setting also provides pre- and post-test counselling, as well as links to appropriate care.

- HIV testing: approximately 2500 individuals are tested for HIV every year, and approximately 40 cases are positive. All recipients of a positive test are linked to care continuum services. It is noted that in Bulgaria, health insurance is not needed for people who live with HIV, and that patients generally encounter good treatment conditions.

- HCV testing: since 2016 approximately 2500 individuals have been tested, resulting in approximately 35 positive tests. In contrast with HIV, it is necessary to have health insurance in order to have access to HCV treatment in Bulgaria; as a result, nearly 30% of the people who contract HCV are not linked to care.

- HBV testing: it is provided occasionally during campaigns. Since 2016, approximately 700 people have been tested, of whom 10 positive cases were linked to care.
The Hepatitis C Trust states that “accessing hepatitis C testing can be difficult for many of those more likely to have been at risk. Often the service offering testing is far away, or people are frightened of having blood taken, or they simply don’t know they’re at risk. These are important reasons why most people with hepatitis C in the UK today are still undiagnosed”.

The Hepatitis C Trust’s outreach and testing van is designed to overcome some of these barriers to diagnosis. They target the most at risk populations in an area where testing’s not yet easily available, and they go to them, offering clear information and advice from trained staff as well as on the spot rapid antibody testing.

The outreach testing van was launched in November 2011, and between then and November 2014, more than 225 testing and awareness events were held, engaging over 4000 people, of whom 2000 were tested in the van. Consistently 10% of tests identified hepatitis C antibodies. Before the van’s arrival at any venue, the Trust worked with local services to publicise the visit, to ensure they made the most of their time there, and that the right facilities and onward referral steps were in place.

“Sometimes what’s needed most is information and we often attend events to raise awareness and help educate people about hepatitis C.”
Conclusion

Hepatitis C community based testing is expanding in Europe and is associated with high client satisfaction and acceptability. The benefits deriving from this testing strategy are significant in reducing the increasing morbidity and mortality associated with chronic hepatitis C infection.

It is proven that community based testing for HCV; enhances access to health care and treatment- especially for high risk groups; reaches undiagnosed individuals and first -time testers; increases the extent of testing; improves the identification of target groups; facilitates testing and treatment uptake; restrains morbidity and onward transmission of the disease.

The benefits of community testing, combined with cost-effectiveness of the methods, underline its efficacy. The expansion of community based hepatitis C testing across the European region is essential in order to underpin the WHA GHSS strategic aim to eliminate viral hepatitis by 2030.
References

1. World Health Organisation, 2016, Global Health Sector Strategy on Viral Hepatitis 2016-2021
2. World Health Organization, 2017, Global hepatitis report
6. EMCDDA, 2016 Hepatitis C among drug users in Europe, Epidemiology, treatment and prevention
7. World Health Organization 2016, GUIDELINES FOR THE SCREENING, CARE AND TREATMENT OF PERSONS WITH CHRONIC HEPATITIS C INFECTION
11. Dr. Naveed Z Janjua (2017)
12. EMCDDA 2015, PERSPECTIVES ON DRUGS, Hepatitis C
13. World Health Organization (Regional Office Europe), 2012, Social contexts of access to treatment and care for HIV, hepatitis C and tuberculosis among people who inject drugs in European cities
14. European Association for the Study of the Liver EASL, 2016 Recommendations on Treatment of Hepatitis C, SUMMARY
16. World Health Organization, 2016, Global report on access to hepatitis C treatment: focus on overcoming barriers
17. World Health Organization, 2017, GUIDELINES ON HEPATITIS B AND C TESTING
24. World Health Organization (WHO) 2015, CONSOLIDATED GUIDELINES ON HIV TESTING SERVICES 5Cs: CONSENT, CONFIDENTIALITY, COUNSELLING, CORRECT RESULTS AND CONNECTION
26. ECDC TECHNICAL REPORT, 2012, Novel approaches to testing for sexually transmitted infections, including HIV and hepatitis B and C in Europe
27. ECDC TECHNICAL REPORT, 2017 Hepatitis B and C testing activities, needs, and priorities in the EU/EEA
31. Correlation Hepatitis C Initiative (Hepatitis C Community Summit), 2017, Declaration on the importance of civil society involvement to eliminate hepatitis C
32. Hepatitis B and C Public Policy Association, 2016, Manifesto Hepatitis C elimination in Europe
Glossary & terms

**AASLD:** American Association for the Study of Liver Diseases

**CDC:** Centers for Disease Control and Prevention

**DAA’s:** Direct Acting Antivirals

**ECDC:** European Centre for Disease Prevention and Control

**EMCDDA:** European Monitoring Centre for Drugs and Drug Addiction

**HBV:** hepatitis B virus

**HCV:** hepatitis C virus

**HIV:** human immunodeficiency virus

**IDSA:** Infectious Diseases Society of America

**RDTs:** rapid diagnostic tests

**TB:** Tuberculosis

**WHO:** World Health Organization
**Community health workers**: health workers who have received standardized and nationally endorsed training outside the nursing, midwifery or medical curricula. (WHO DEFINITION)

**Lay provider** is any person who performs functions related to health-care delivery and has been trained to deliver specific services but has not received a formal professional or paraprofessional certificate or tertiary degree. (WHO DEFINITION)

**Non-physician clinicians** are professional health workers capable of many of the diagnostic and clinical functions of a physician but who are not trained as physicians. These types of health workers are often known as health officers, clinical officers, physician assistants, nurse practitioners or nurse clinicians and are an important cadre for HIV care and treatment in some countries. (WHO DEFINITION)

**Rapid diagnostic test (RDT)**: Immunoassays that detect antibodies or antigens and can give a result in less than 30 minutes. Most RDTs can be performed with capillary whole blood collected by finger-stick sampling. (WHO DEFINITION)

**Serological assays**: assays that detect the presence of either antigens or antibodies, typically in serum or plasma but also in capillary/venous whole blood and oral fluid. These include rapid diagnostic tests (RDTs), and laboratory-based immunoassays, e.g. enzyme immunoassays (EIAs), chemiluminescence immunoassays (CLIA s), and electro-chemiluminescence immunoassays (ECLs). (WHO DEFINITION)