

INTEGRATE JA: Innovation of disease specific tools into an integrated ICT combination prevention tool

Lella Cosmaro, Fondazione LILA Milano Bucharest, HepHIV Conference January 29, 2019

INTEGRATE • Objectives and partners

Overall objective: To increase integrated early diagnosis and linkage to prevention and care of HIV, viral hepatitis, TB and STIs in EU member states by 2020.

- 29 nominated partners from 15 EU countries (+ Serbia) (Public Health institutions (17), Hospitals (Infectious disease and research departments)
 (4), NGOs (7) and Universities (1))
- September 2017- September 2020
- Overall budget 2,4 mill Euro (80% EU)

www.integrateja.eu







Overall objective and work packages

Four Horizontal Work Packages

WP1

Coordination

WP2

Dissemination

WP3

Monitoring and Evaluation WP4

Policy development and sustainability

Four Core Work Packages

WP5

Integrating testing and linkage to care

WP6

Monitoring of HIV, STIs and viral hepatitis testing and linkage to care

WP7

Improving use of ICT tools and partner notification in combination prevention

WP8

Capacity building





WP7 Obj. 1: developing an integrated ICT combination prevention tool

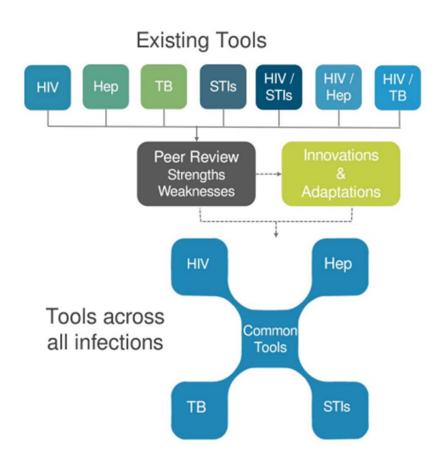
Objective:

To develop and pilot an Integrate ICT tool comprising different combination prevention programmes addressing all four disease areas: HIV, hepatitis, STIs, TB





Development of integrated tools



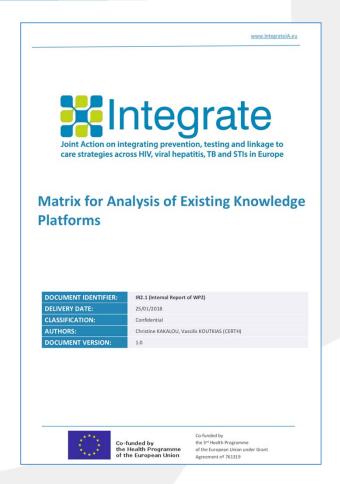
Existing tools for prevention, testing and linkage to care for HIV, viral hepatitis, TB and STIs will be evaluated, adapted, extended and implemented for one or more of the four diseases in selected pilot countries.





Knowledge Mapping Process Employed

- Mapping process of available tools and existing knowledge components (WP2 internal report)
- A comprehensive matrix of available tools (including tools developed/used at the national level) was compiled
- The candidate entries were then evaluated by the SC to meet certain quality criteria







Data sources used

- HEPCARE EUROPE
- HIV in HiE
- HIV-COBATEST
- Euro HIVEdat
- HA-REACT
- E-DETECT
- ESTICOM
- optTEST
- European Testing Week

- JA Quality Action
- Harm Reduction Platform
- TUBIDU
- UNAIDS
- WHO
- ECDC
- EMCDDA
- CHAFEA
- EATG





Desk Review – WP7 Obj 1 partners

CIPH, Croatia	ICT tools developed for public health staff in the delivery of STI, hepatitis and TB services
CRI, Italy	ICT tools targeted to migrants
FLIGHT, Croatia	ICT tools targeted to PUD
ISKORAK, Croatia	ICT tools targeted to MSM
LILA Milano, Italy	ICT tools around testing, partner notification, PrEP, documents already suggested for review
MFH, Malta	ICT tools developed for public health staff in the delivery of HIV services
SU, Hungary	ICT tools targeted to youth





Matrix Structure

- Review Code
- Source
- Name
- Description
- Use
- Type of Tool
- Availability
- Target Audience

- End Users
- Disease
- Link/Access to the Tool
- Countries (where tool is available)
- Contact Email, Contact Person
- Adaptable (Scale 0-5)
- Reproducible (Scale 0-5)
- Data Relevance (Scale 0-5)

A Review Code	Source	Name	Description	Use	Type of tool	Availability	Target Audience	End Users	Disease
HR1	David Stuart	Chemsex care plan	An online guide with videos to create a	Counseling, Harm Reduction	Online Resource	Public Online	MSM	MSM	
LtC1	Ryan Community	Know Your Health	App for teens emphasizing the	Testing - Linkage to care	Mobile application	Public Online	Youth	Youth	HIV
LtC2	HIV.gov	HIV Testing Sites & Care	The device is an API which stands for	Testing, Treatment, Linkage to	Mobile Application	Public Online	Key Populations	Key Populations	HIV
PN1	CheckOUT (via	CheckOut	PN portal accessible to clients of the	Partner Notification	Partner Notification Portal	Private Online	MSM, Public	Healthcare providers, Civil society	HIV, hepatitis
PN2	UK source	SXT	Uses ID numbers and an online platform	Partner Notification	Website, IDCS (interactive	Not currently in use,	MSM, Public	Healthcare providers, Civil society	HIV, hepatitis
PN3	SOAAIDS	Man to Man	Partner notification website	Partner Notification	Mobile application	Public Online	MSM, Public	Healthcare providers, Civil society	HIV, hepatitis
PN4		InSpot	Tool for informing partners about STIs	Partner Notification	Mobile Application	Public Online	Public	Public	HIV, STIS
PN5		So They Can Know	A website that allows users to view tips,	Partner Notification	Dedicated Website	Public Online	Public	Public	HIV, STIS
PN6	Melbourne	Let Them Know	Website with FAOs for partner	Partner Notification	Dedicated Website	Public Online	Public	Public	STIS
PN7	Buckley	Don't Spread It	Website that allows you to send	Partner Notification	Dedicated Website	Public Online	Public	Public	STIS
	Internet		A peer-to-peer, Web-based, STD						
PN8	Sexuality Information	InSPOTLA	partner notification system that uses electronic postcards (e-cards) to assist	Partner Notification	Online Resource	Public Online	MSM, Public	MSM, Public	STIs
	Services, non-		people in disclosing an STD diagnosis to						
PrEP1	PrEP in Europe	PrEP in Europe	Info on PrEP, how to take PrEP, where	Prevention	Online Resource	Public Online	MSM, Public	Healthcare providers, Civil society	HIV
PrEP2	Google	PrEP Locator	US national database of PrEP providers	Prevention	Online Resource	Public Online	MSM, Public	MSM	HIV
PrEP3	FB	PrEP Facts: Rethinking	PrEP discussions, debates, questions,	Prevention	Online Resource	Private Online	MSM, Public	MSM, Supporting Organisations,	HIV
PrEP4	FB	PrEP in Europe	PrEP news, webcasts, discussions,	Prevention	Online Resource	Private Online	MSM, Public	MSM, Supporting Organisations,	HIV
PRV1	Hornet	Hornet Health Starter Kit	Information on HIV prevention and	Combination Prevention	Online Resource	Public Online	MSM	MSM, public	HIV. hepatitis.
PRV2	56 Dean Street	56 Dean Street Let's Get	Tool for MSM to find what best works	Combination Prevention	Online Resource	Public Online	MSM	MSM	HIV
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WP7 Obj 1 ICT tools review process

- 115 ICT tools were collected during the desk review (Nov '17-Jan '18)
- The mapping matrix of 115 tools was cleaned, discussed, reviewed and reduced to 74 and subsequently 53 tools, which were numbered and ordered by topic (Prevention, HR, PrEP, Testing, PN, Linkage to Care)
- A review form was prepared and sent to Integrate SC and AB members in order for them to give a ranking to the selected tools
- 17 members took part to the review and the outcome of the process was a shortlist of "best rated ICT tools"





WP7 Obj 1 ICT tools review form

Prevention

Tool	1: Not relevant for adaptation, to be rejected definitely	2: Not easily adaptable, rather not include	3: Unsure if would be useful to adapt	4: Potential for adaptation, possibly include	5: Very adaptable, to be included definitely	Conflict of interest/ Not in my expertise
PRV1	0	0	0	0	0	
PRV2	0	0	0	0	0	
PRV3	0	0	0	0	0	0
PRV4	0	0	0	0	0	
PRV5	0	0	0	0	0	0
PRV6	Ō	Ō	Ō	Ō	Ō	Ō
PRV7	0	0	0	0	0	
PRV8	Ō	Ō	Ö	Ō	Ō	Ō
PRV9	0	0	0	0	0	
PRV10	0	0	0	0	0	0
PRV11	0	0	0	0	0	0
PRV12	0	0	0	0	0	0
PRV13	0	0	0	0	0	0
PRV14	0	0	0	0	0	0
PRV15	0	0	0	0	0	0
PRV16	0	0	0	0	0	
PRV17	0	0	0	0	0	
PRV18	0	0	0	0	0	
PRV19	0	0	0	0	0	
PRV20,TST,LtC	0	0	0	0	0	0
PRV21,TST,LtC	0	0	0	0	0	0
PRV22, TX	0	0	0	0	0	0
PRV23, TX	0	0	0	0	0	0
PRV24, TX			0	0		





WP7 Obj 1 ICT tools review outcome

Prevention

Tool	1: Not	2: Not	3: Unsure	4: Potential	5: Very	Conflict of
	relevant	easily	if would	for	adaptable,	interest/
	for	adaptable,	be useful	adaptation,	to be	Not in my
	adaptation,	rather not	to adapt	possibly	included	expertise
	to be	include		include	definitely	
	rejected					
	definitely					
PRV1 552	0	2 X	2	3	2XX	3
PRV2 555	0	0	0	4	7XXX	1
PRV3 555	1	0	0	2	8XXX	1
PRV4 553	0	2	3 X	2	2XX	3
PRV5 553	0	1	5 X	2	1XX	3
PRV6 553	С	4	1 X	4	XX	3
PRV7 150	X	3	3	3	X	3
PRV8 230	2	X	5 X	3	0	2
PRV9 444	1	2	3	2XXX	3	1
PRV10 3 5 3	0	1	5XX	2	3 X	1
PRV11	3	0	3	1	1	4
PRV12 3 5 2	0	1 X	3 X	3	3 X	2
PRV13 3 5 3	2	0	6XX	1	X	3
PRV14 2 2 3	0	5 XX	3 X	1	1	2
PRV15	1	3	3	3	0	2
PRV16 4 5 4	1	2	1	5 XX	1 X	2
PRV17 4 5 4	1	1	2	1XX	7 X	0
PRV18 1 2 2	1 X	1XX	4	3	3	Ô
PRV19 4 5 4	0	1	1	6XX	1 X	3
PRV20 4 3 4	0	1	5 X	3XX	1	2
PRV21 4 3 4	Ô	1	4 X	5 XX	1	1
PRV22 5 3 5	1	1	4 X	2	3 XX	1
PRV23 3 3 4	1	3	2XX	4 X	2	0
PRV24	1	1	1	6	1	2





ICT Tools Evaluation by CERTH

- Overview from a technical standpoint
- 3 criteria used: adaptability, reproducibility, data relevance

Harm Reduction (HR) Tools

HR1 - Chemsex Care Plan

Review Code	Name	Type of Tool	Access to Tool	Adaptable	Reproducible	Data Relevance
HR1	Chemsex Care Plan	http://www.davidstu art.org/care-plan	Website	5	5	5



- "Interactive" Website: "Create own care plan"
 - The user chooses a goal (abstinence, safer practices etc) and answers questions about his habits, lifestyle and perceived confidence in achieving his chosen goal
 - According to the answers, the user is lead to pages with extensive information on how to achieve the goal, Youtube videos of David Stuart discussing particular topics and related links to useful websites and apps (for example the

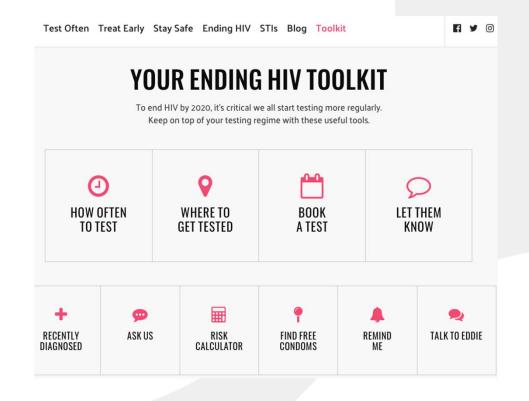




ICT Tools Shortlist

Seven tools were shortlisted:

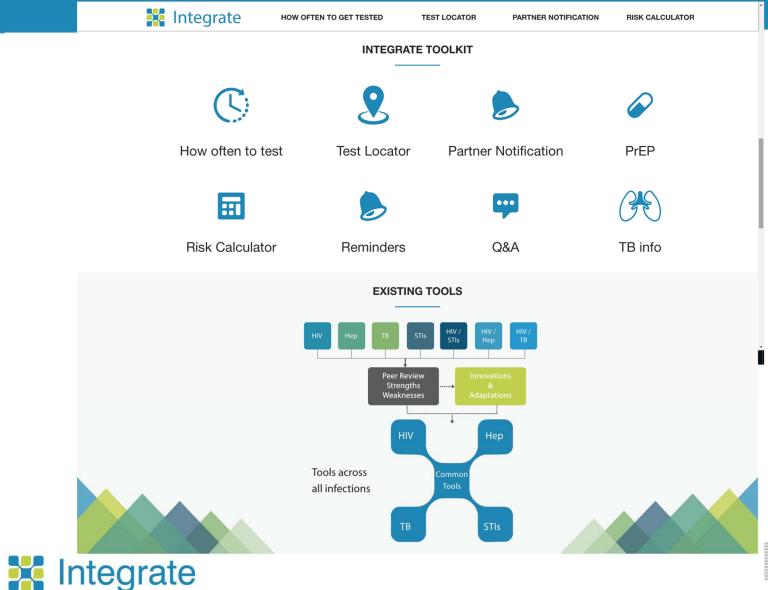
- PRV17 Your Ending HIV Toolkit
- HR1 Chemsex Care Plan
- PrEP1 PrEP in Europe
- PrEP2 PrEP Locator
- TST8 What's your number
- PN6 Let Them Know
- PN7 Don't Spread It







Initial Proposal





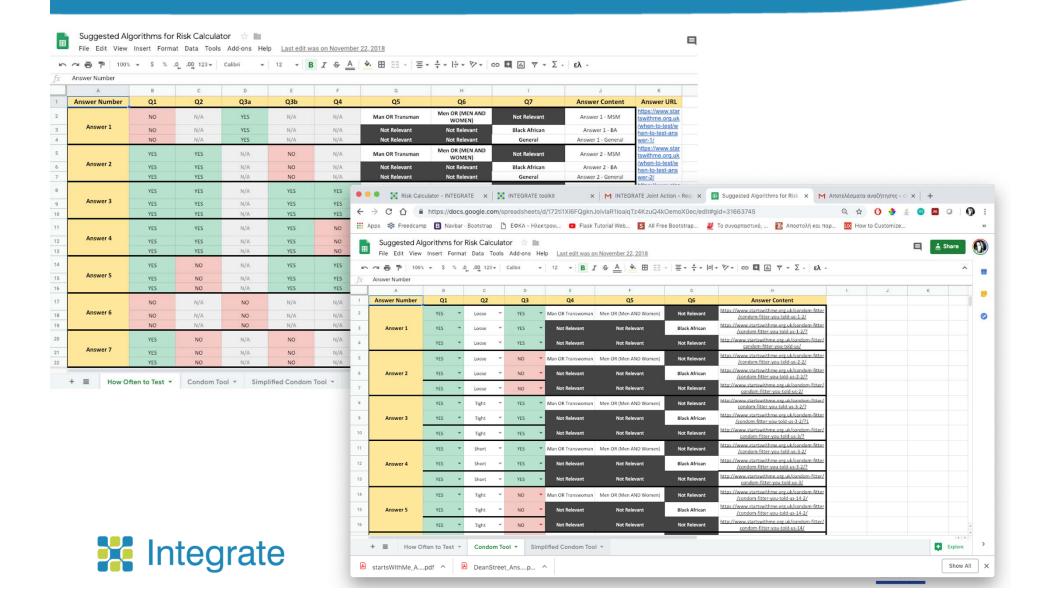
Toolkit Development - Progress

- ✓ Risk Calculator
- ✓ Facts about HIV/Hep/STIs (former Q&A section)
- ✓ TB info
- √ Testing/Treatment/Checkup Reminders
- PrEP Component
- ? Test Finder
- Partner Notification



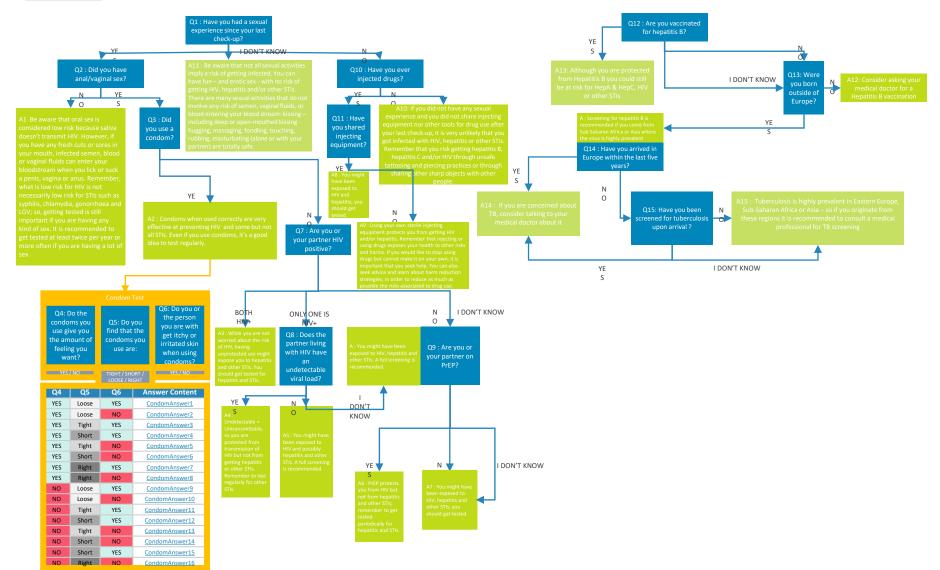


Risk Calculator Decision Tree – Suggested Algorithms









INTEGRATE Toolkit - Implementation

- Web application
- Components can be enabled/disabled per pilot country
- Simplified information & UI --> accessible to various target groups
- Proof of concept will adjust the "look & feel" of the application according to the target audience/country/pilot

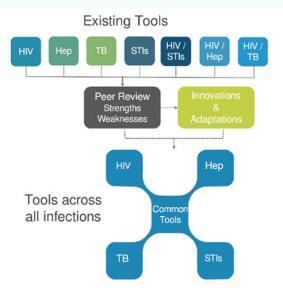




INTEGRATE Toolkit - Homepage



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info









INTEGRATE Toolkit – Risk Calculator



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info











INTEGRATE Toolkit – Risk Calculator Q1



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Have you ever had a sexual experience since your last check-up?





I don't know







INTEGRATE Toolkit – Link to condom test



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Condoms when used correctly are very effective at preventing HIV and some but not all STIs. Even if you use condoms, it's a good idea to test regularly.













INTEGRATE Toolkit – Condom Test



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Do the condoms you use give you the amount of feeling you want?











INTEGRATE Toolkit – Condom Test Answers



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

You have answered:

You told us:

- · You wanted to get more feeling from your condoms.
- · But they feel tight or don't cover the penis down to its base (so you probably need a bigger condom).

Our recommendation:

- You might feel a real difference if you try thinner, latex-free condoms. Thinner condoms should give you more feeling. Studies show they are no
 more likely to break than thicker ones (including during anal sex). Some condoms are available with ribbed, raised and shaped surfaces designed to
 increase sensation to both partners.
- · You might feel a real difference if you try bigger condoms.











INTEGRATE Toolkit – Risk Calculator



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Are you or your partner HIV positive?



One of us is HIV+



I don't know







INTEGRATE Toolkit – Risk Calculator



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

You might have been exposed to HIV and possibly hepatitis and other STIs. A full screening is recommended.











INTEGRATE Toolkit - Risk Calculator



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Have you shared injecting equipment?











INTEGRATE Toolkit – Risk Calculator & Harm Reduction



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Using your own sterile injecting equipment protects you from getting HIV and/or hepatitis. Remember that injecting or using drugs exposes your health to other risks and harms. If you would like to stop using drugs but cannot make it on your own, it is important that you seek help. You can also seek advice and learn about harm reduction strategies, in order to reduce as much as possible the risks associated to drug use.











INTEGRATE Toolkit - Risk Calculator & Harm Reduction



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

If you did not have any sexual experience and you did not share injecting equipment nor other tools for drug use after your last check-up, it is very unlikely that you got infected with HIV, hepatitis or other STIs. Remember that you risk getting hepatitis B, hepatitis C and/or HIV through unsafe tattooing and piercing practices or through sharing other sharp objects with other people.













Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Are you vaccinated for hepatitis B?





I don't know









Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Were you born outside of Europe?













Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Screening for hepatitis B is recommended if you come from Sub-Saharan Africa or Asia where the virus is highly prevalent.

Have you arrived in Europe within the last five years?













Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Have you been screened for tuberculosis upon arrival?





I don't know









Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Tuberculosis is highly prevalent in Eastern Europe, Sub-Saharan Africa or Asia – so if you originate from these regions it is recommended to consult a medical professional for TB screening.











INTEGRATE Toolkit – Facts about HIV



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Facts about HIV, Hepatitis and STIs

The contents of the STI Fact Sheets have been extracted from the "All topics; A to Z" section of the ECDC website - https://ecdc.europa.eu/en/all-topics - whose copyright is owned by the European Centre for Disease Prevention and Control (ECDC).

HIV/AIDS

Hepatitis A

Hepatitis B

Hepatitis C

Chlamydia

Gonorrhoea

Syphilis

Lymphogranuloma Venereum

The human immunodeficiency virus (HIV) remains one of the most important communicable diseases in Europe. It is an infection associated with serious disease, persistently high costs of treatment and care, significant number of deaths and shortened life expectancy. HIV is a virus which attacks the immune system and causes a lifelong severe illness with a long incubation period.

Transmission

HIV infection is spread by sexual contact with an infected person, by sharing needles or syringes (primarily for drug injection) with someone who is infected, or, less commonly (and now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth or through breast-feeding. The end-stage of the infection, acquired immunodeficiency syndrome (AIDS), results from the destruction of the immune system. AIDS is defined by the presence of one or more "opportunistic" illnesses (other illnesses due to decreased immunity).

Treatment

Effective combination therapies, introduced in the mid-1990s and widely used in industrialized countries, have had a profound effect on the course of HIV infection, improving the quality of life and delaying the onset of AIDS and death in HIV-infected individuals. However, intolerance to side effects and appearance of resistant strains remain causes for concern.

Note: The information contained in these fact sheets is intended for the purpose of general information and should not be used as a substitute for the individual expertise and judgement of healthcare professionals.







INTEGRATE Toolkit – Facts about HepC



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Facts about HIV, Hepatitis and STIs

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HIV/AIDS Hepatitis A Hepatitis B Hepatitis C Chlamydia Gonorrhoea Syphilis Lymphogranuloma Venereum

Hepatitis C is a liver disease caused by infection with the hepatitis C virus (HCV). HCV can cause both acute and chronic hepatitis infection, ranging in severity from a mild illness that lasts only a few weeks to a serious, lifelong illness resulting in cirrhosis and liver cancer. The virus is mainly acquired by contact through broken skin with infectious blood. In Europe, the main route of HCV transmission is via injecting drug use as a result of sharing contaminated needles. More rarely, the virus can be transmitted sexually, in healthcare settings due to inadequate infection control practices or perinatally from an infected mother to the baby. Most people with acute HCV infection do not have any symptoms. Those who develop chronic infection are often asymptomatic until decades after infection when symptoms develop secondary to serious liver damage. Around 30% of people with chronic hepatitis C suffer from liver damage and a small number of those develop cancer. Hepatitis C is considered to be one of the leading causes of liver cancer and liver transplants in Europe. HCV is a virus that is acquired through the blood. About a fifth of the people who get the virus (called "acute hepatitis C infection") clear it from their bodies without needing treatment, and sometimes without getting any symptoms. If the infection lasts for longer than six months it is called "chronic hepatitis C infection" and treatment may be needed.

Symptoms

Most people with acute hepatitis C infection do not have any symptoms. Those who do can experience fatigue and jaundice (a yellowing of the skin and eye-balls). People who develop chronic hepatitis C also may never have any symptoms. Others may have no symptoms for many years. Those who develop symptoms tend to suffer general conditions like fatigue, nausea and abdominal discomfort. Around 30% of people with chronic hepatitis C develop liver damage (called cirrhosis) and a small number of those go on to get cancer.

Transmission

Hepatitis C is passed on through infected blood. Most people in Europe who get hepatitis C are injecting drug users who have caught the infection by sharing contaminated needles. Hepatitis C can also be passed on by tattooing, body piercing and acupuncture, if these are done in unsterile conditions. Pregnant women with hepatitis C may pass the infection on to their babies. In the past, blood transfusions could be a way of catching hepatitis C. Now, all blood donors should be screened and all blood products tested to stop this from happening. People on renal dialysis may be at higher risk.

People most at risk





INTEGRATE Toolkit – TB info



Home Risk Calculator Facts about HIV/Hepatitis/STIs TB Info

Tuberculosis

The Tuberculosis Fact Sheet has been published in the "All topics; A to Z" section of the ECDC website - https://ecdc.europa.eu/en/all-topics - whose copyright is owned by the European Centre for Disease Prevention and Control (ECDC).



A quarter of the world's population has been infected by TB, but is not ill with the disease – this is called a latent TB infection (LTBI). Every 7th person in the WHO European Region is infected with LTBI.

Up to 10% of people with LTBI will develop TB disease at some time in their lives.

Each day 1000 people fall sick with TB in the WHO European Region 18 withere per 18/1/00 peopletion 11-10-20 21-1-20 21-1-20

TB is a major cause of death among people living with HIV

This deadly combination is increasing in the WHO European Region. The percentage of TB patients infected with HIV tripled over the last decade.









Partner Notification

- Anonymous (no IPs stored)
- Notify via e-mail & SMS
- Can add multiple partners at once
- No mention to specific STIs, just recommend full STI screening
- Controlled access to the service (via a unique code given by the piloting partners) Should offer contacts per country for counseling
- Need to eliminate risk of misuse/abuse of service
- GDPR issues
- How do we ensure the privacy of the recipient when he/she receives the notification?





Integrate ICT Tool – Next steps

- Finalize the tool
- Conduct a testing phase
- Pilot it in 3 countries: Croatia, Italy and Lithuania
- Evaluate the outcomes and effectiveness of the pilot phase
- Report pilot results
- Ensure sustainability and regular update of the Integrate ICT tool





Regional workshops and F2F meetings

Date & venue	Topic
April '19 – (TBC)	National Stakeholders meeting
Zagreb, Croatia	
May '19 – (TBC)	National Stakeholders meeting
Athens, Greece	
June '19 – (TBC)	National Stakeholders meeting
Vilnius, Lithuania	
17-19 June 2019	Regional workshop on testing in community and
Warsaw, Poland	in healthcare settings
November '19	Regional workshop on self-testing and linkage
(TBC) Italy	to care, ICT-based combination prevention
May 2020 (TBC)	Regional workshop on monitoring of linkage to
Tallinn, Estonia	care, integration of data from testing sites into
	national surveillance

Thank you!

Any questions?

This presentation arises from the Joint Action INTEGRATE which has received funding from the European Union, in the framework of the 3rd Health Programme (2014-2020).

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