





WHAT IS HEPCARE EUROPE?

- HEPCARE EUROPE is a €1.8M 3-year EU-supported project at 4 member state sites (Ireland, UK, Spain, Romania)
- Consortium members: UCD (Ireland); SAS (Spain); SVB (Romania); University of Bristol (UK); University College London (UK), University College London Hospital (UCLH)
- HCV highly prevalent among vulnerable populations. Many are unaware of their infection and few have received HCV treatment.
- Recent developments in treatment offer cure rates >95%.
- New system to improve the identification, evaluation and treatment of HCV in vulnerable populations (homeless, prisons, PWID)

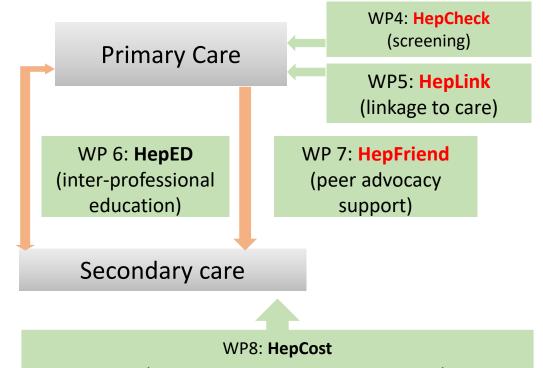


HEPCARE: A NEW HEPATITIS C CARE SERVICE MODEL ADAPTABLE, FLEXIBLE AND REPLICABLE

Revolves around the PRINCIPLES of

- Intensified Screening (HEPCHECK)
- Linkage to care (HEPLINK)
- Intensified patient support (HEPFRIEND)
- Education (HEPED)
- Cost analysis (HEPCOST)

FLEXIBILITY & ADAPTABILITY allowed its successful replication in 4 very different settings in the EU



WP 1 Coordination; WP 2 Dissemination; WP3 Evaluation





HEPCHECK INTENSIFIED SCREENING RESULTS

- ✓ One of the major barriers to effecting EU and WHO mandated HCV elimination by 2030 is under diagnosis.
- Community-based screening strategies have been identified as important components of HCV models of care.
- HepCheck (work package of HEPCARE) is a large-scale intensified screening initiative aimed at enhancing identification of HCV infection among vulnerable populations and linkage to care.







METHODS

Screening to high-risk populations through their point of contact in the community in:

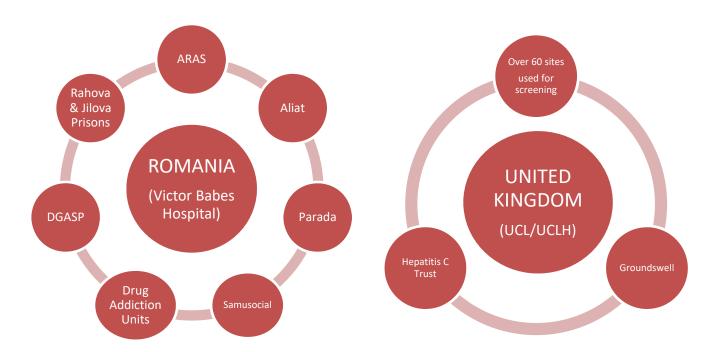
- community addiction centres
- homeless services
- prisons services.

Complex collaborative networks had to be established to enable screening in a variety of settings. The hospitals/universities in each country established those networks.

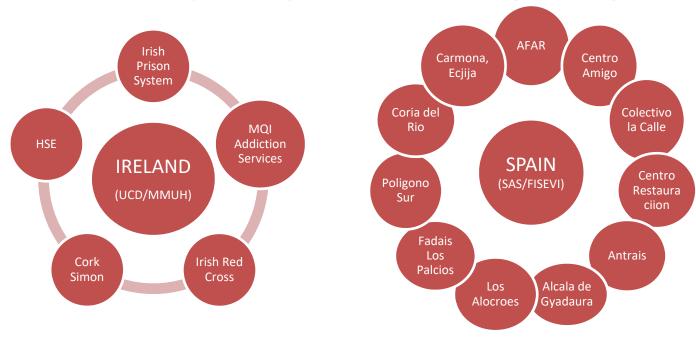
Multidisciplinary integrated care initiative.







HEPCHECK NETWORKS



TYPES OF SERVICES USED FOR SCREENING

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	Ireland	UK	Romania	Spain	Total
Homeless	2	41	3	1	47
Addiction Service	1	17	3	8	29
Prison	1	0	2	0	3
Other	0	9	1	1	11
Total	4	67	9	10	90





SCREENING

Screening was offered to 2822 individuals and included

- a self-administered questionnaire
- HCV Ab and RNA testing
- liver fibrosis assessment and
- referral to specialist services

2079 (74%) were recruited to the study (cut off June 2018)







BASELINE CHARACTERISTICS BY SITE

	Ireland	UK	Romania	Spain	Overall
	(n=618)	(n=461)	(n=510)	(n=490)	(N=2079)
Age in years (median, IQR)	32 (27-39)	46 (39-52)	38 (32-49)	48 (41-53)	41 (32-50)
Gender n (%)					
Male	565 (91.4%)	363 (78.7%)	421 (82.6%)	434 (88.6%)	1783 (85.8%)
Female	53 (8.6%)	98 (21.3%)	89 (17.4%)	56 (11.4%)	296 (14.2%)
thnicity n (%)					
White	605 (97.9%)	355 (77.0%)	308 (60.4%)	487 (99.4%)	1755 (84.3%)
Roma	0 (0%)	0 (0%)	165 (32.4%)	0(0%)	165 (8.0%)
Other	13 (2.1%)	106 (23.0%)	37 (7.2%)	3(0.6%)	159 (7.6%)
lomelessness n (%)					
Homelessness ever	192 (31.1%)	363 (78.7%)	103(20.2%)	141 (28.8%)	799 (38.4%)
Rough Sleeping ever	151 (24.4%)	297 (64.4%)	96 (18.8%)	140 (28.6%)	684 (32.9%)
OU ever n (%)	249 (40.3%)	324 (70.3%)	205 (40.2%)	149 (30.4%)	927 (44.6%)
Prisoners	425 (68.7%)	0 (0%)	156 (30.6%)	0 (0%)	581 (27.9%)

PREVIOUS HCV TESTING



63% (n=1316) had been previously tested



Of those previously tested, 46% (n=607) received a positive Ab result



Of those reporting a positive HCV Ab result, 65 % (n= 393) received a positive HCV diagnosis. (RNA positive)



In total, of the 393 who reported receiving a positive HCV diagnosis in the past, 71%(n=279) reported having been lost of follow up.





HCV SCREENING RESULTS

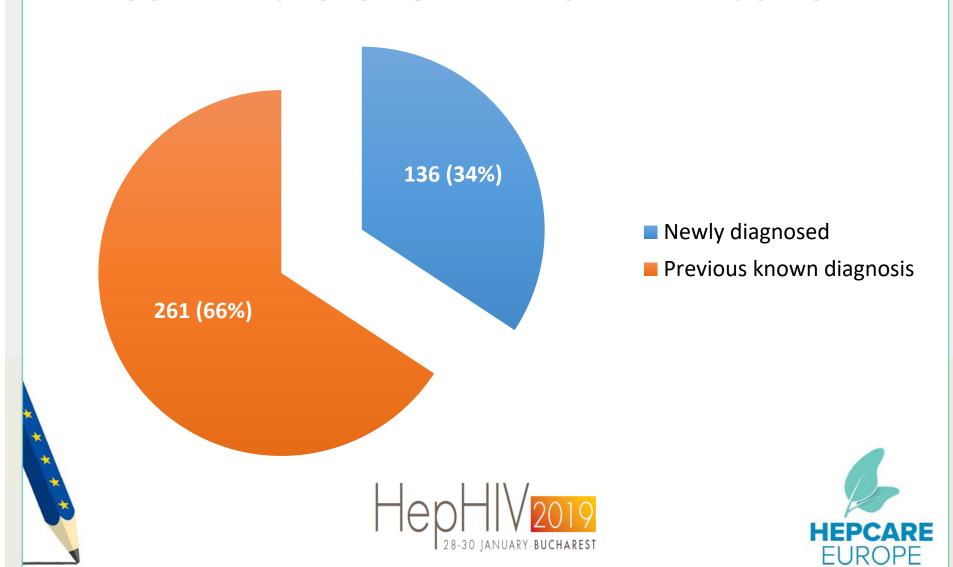
	Ireland	UK	Romania	Spain	Total
No. of individuals screened	618	461	510	490	2,079
Proportion of Ab positive cases	121 (20%)	266 (58%)	211 (41%)	171 (35%)	769 (37%)
No. of RNA Positive Results	62 (10%)	197 (43%)	47 (9.2%)	91 (19%)	397 (19%)
No. new cases HCV RNA positive	37 (6%)	19 (4%)	41 (8%)	39 (8%)	136 (7%)
No. of RNA positive cases among PWID*	49(20%)	179 (55%)	44(21%)	68(46%)	340 (37%)

HEPCARE

EUROPE

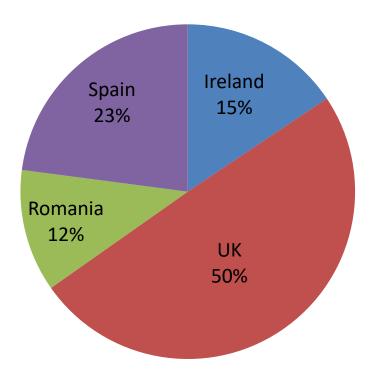
^{*} Calculated based on total number of PWID per site: Ireland-249; UK-323; Romania -205; Spain-149

NEW VS PREVIOUSLY KNOWN HCV RNA POSITIVE CASES FOR THE OVERALL COHORT



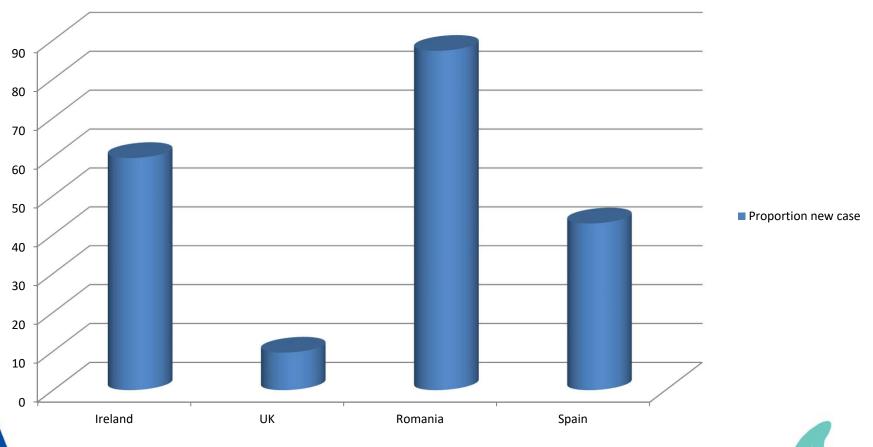
HCV RNA POSITIVE PATIENTS— PROPORTION BY COUNTRY

✓ Of those with active infection the highest proportion was in the UK with 50% (n= 197) of the overall cohort. Spain had the second largest proportion 23% (n=91), then Ireland with 15% (n=62) and lastly Romania with 12% (n=47)





HCV RNA POSITIVE- PROPORTION OF NEW CASES BY COUNTRY



Romania had the highest proportion of new identified cases of active infection with 87%, then Ireland (60%) then Spain (43%), whilst the UK had the lowest proportion of new cases.(10%)



RISK FACTORS FOR THOSE HCV RNA POSITIVE

HCV RNA Positive	N=397	%
Injected Ever	340	86%
Homeless Ever	230	58%
Tattoo	168	42%
Piercing	102	26%
Blood Transfusion	33	8%
STI Test	18	5%





LINKAGE TO CARE

	Ireland	UK	Romania	Spain	Total
Linked	45 (73%)	176 (89%)	37 (79%)	58 (64%)	316 (80%)
Not yet linked	17 (27%)	21 (11%)	10 (21%)	33 (36%)	81 (20%)





TREATMENT RESULTS PENDING/ LIMITATIONS

- HSE 6 months government imposed treatment freeze in Ireland caused delays
- Treatment restrictions in Romania have recently been removed
- Social issues in Romania were a limiting factor that benefitted greatly from the collaboration with NGOs





CONCLUSIONS

- HCV infection is common in vulnerable populations, in particular among PWID.
- Many are not yet diagnosed and many are previously diagnosed and "lost to follow-up".
- Screening initiatives such as HEPCHECK are needed to identify new cases.
- Flexibility was a key enabler when working with large amounts of community organisations.
- ★ The model was replicable across 4 EU countries and 90 different services and adapted to local healthcare systems and resources.
- The proportion of new cases varies greatly from country to country. Emphasis on diagnosis and retention needs tailoring accordingly.

CONCLUSIONS

- New testing strategies, including point of care antibody testing, and point of care PCR testing, identifying not just exposure, but actual active infection, are important developments.
- ✓ To be able to go to the patient, diagnose them in the community, give them a timely diagnosis, and immediately offer them treatment, eliminates the 'lost to follow-up' problem encountered historically in these patients.
- ✓ Viral elimination of HCV in the European Union will only be achieved by such innovative 'patient centred' approaches.





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