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### HepCare Europe:

**JA2015 - GPSD [705038]**

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<td>TOPIC:</td>
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Project abstract

HCV infects and affects a population in the EU who do not access care. The arrival of new curative HCV drugs are a great opportunity for those resourced to attend services and adhere to treatment, but this adherent population is the minority in the EU. If we aim to cure HCV in all risk groups we must take the treatment to the patient and vice-versa. The activities will support the development of national hepatitis strategies, screening and treatment guidelines, taking into account available treatment options. It will help to bridge primary, secondary care, and outreach in the community to facilitate access to and uptake of testing and treatment services particularly among key risk groups including drug users and homeless. It will also assess the potentially considerable economic impact of available treatment and testing strategies on health systems, which are under the responsibility of the EU Member States, with a view to inform decisions on balancing access to medicines with the financial sustainability of health systems. The HepCare project will contain six different components. HepCheck will aim at intensifying screening in the community HepLink will link primary and secondary care HepEd will educate and up-skill healthcare professionals in the treatment of Hepatitis CHepFriend will provide a peer advocate support programme for patients to help treatment outcomes HepCost will assess the economic impact of the project The coordinator will have overall responsibility for disseminating the project impact and liaising with decision makers. The project will take place in 4 member states: Ireland, the UK, Spain and Romania. The HepCare Project will build on work undertaken by the European Commission, the European Centre for Disease Control and Prevention, and the European Monitoring Centre for Drugs and Drug Addiction with the aim of reducing morbidity and mortality related to hepatitis C and reducing the socioeconomic impact of hepatitis in the EU/EEA.

Summary of context, overall objectives, strategic, relevance and contribution of the action

The EU Third Health Programme objectives include to “support EU Member States to improve access to hepatitis testing for those at risk and access to affordable high quality treatment with antivirals and to further specify appropriate prevention methods to prevent (re-)infections.” HepCare Europe is targeting difficult to access populations, to perform HCV diagnostic testing and identify potential HCV patients, at an early stage in disease progression, and determine the extent of disease progression in those that test positive. HepCare Europe assists primary care settings, through education and liaison nurse support for practices, in the subsequent treatment of patients with chronic hepatitis C infection. HepCare Europe is very much aligned with recently published document put forward by the European Centre for Disease Control and Prevention, and the European Monitoring Centre for Drugs and
Drug Addiction at the EU HCV Policy summit which plans to eliminate HCV by 2030, specifically by “developing and implementing hepatitis C elimination strategies serving as the basis for people-centred health system based strategies that emphasise tailored implementation at the local level”, “make the development of integrated care pathways a core component of hepatitis C elimination strategies” and “strengthen efforts to harmonise and improve the surveillance of hepatitis C across the EU”. Through incorporation of cost analysis at each step, HepCare Europe will evaluate the likely cost savings associated with these methods of treatment and care, and ensure that the planned model of screening and treatment impacts this population through significant decreases in morbidity and mortality, and reducing new transmissions, as well as demonstrating the significant economic impact and cost savings associated.

Hepcare Europe has now been in operation for two years of a three year grant cycle and has initiated a range of activities through the Work Packages as outlined in the original grant application.

WP HepCheck: opportunistic rapid HCV testing in populations at risk have been successfully conducted in Dublin in Prison populations, in London in the Homeless, in Seville in the drug treatment centres and with NGO's caring for such populations, and in Romania in night shelters and opiate substitution sites.

WP HepLink, partnering primary with secondary care, to ensure that HCV affected and infected populations will access care and treatment, has been successfully initiated in Dublin, London, and Seville, where primary care centres are dispensing opiated substitution therapy. This model does not apply to Bucharest as they have no OST dispensation in primary care, but nonetheless the clients identified in the projects in Bucharest are being linked into specialist services for care and treatment. Dublin was the first to pilot the HepLink project to establish a model of care, and to mentor the other sites based on ‘lessons learned’

WP Hepfriend, with London as lead, was initially started in London through UCL and the Hepatitis C Trust, and their model and training materials have been adapted at the other sites for training and planned scale up. To date London leads with successfully supporting HCV infected clients into care using the ‘buddy system’, Dublin is now training up staff and has started some pilots of ‘peer support’, and both Seville and Bucharest have early development of this work package with a small number of HCV peers trained, with planned expansion in year two.

WP HEPEd. Within this workpackage we have organised, at all four sites, a series of educational opportunities and ‘MasterClass’ events focused on training of healthcare providers, primarily, as part of year one milestones. WP HepCost. It was initially planned to undertake the first cost-effectiveness in Ireland by month 18. However, Bristol may do this partially in London and Ireland, because Bristol already have a lot of the nec
Methods and means

1. WP 1- Coordination

The overall coordination and management of the HepCare Europe project is the remit of Dr John Lambert, who is backed by Prof Walter Cullen. The main contact for the European Commission with our project is Ms Gordana Avramovic, who is identified as the ‘Project Manager’ for the work. Our project staff, located at the Mater Hospital Catherine Mcauley Educational and Research Centre, the teaching building for the UCD School of Medicine, is geographically together and work on a day to day basis to coordinate and manage this project.

The project manager, has direct contact with each of the clinical sites in Spain, Romania, and London, as well as the non-clinical site in Bristol UK. Each of these HepCare sites are linked to the Research Administrations of their respective institution, and it is the role of the Coordination and Management site to ensure that all aspects of the project, both technical and operational, are on target. We have set up a number of mechanisms to ensure compliance with this mandate.

The management group at UCD/Mater consists of the coordinator (Dr Lambert) and Prof Cullen and members of the Hepcare team, with similar structures set up at each clinical and non-clinical sites.

The Steering Committee set up in the first year consists of Dr Lambert and Prof Cullen with representatives from each lead of the respective Work Packages, to review progress of the project, and also to provide interim analysis and to troubleshoot issues that may arise over the conduct of the work of the project.

The Advisory Board set up in the first year consists of external members from a variety of disciplines from an international background, also representatives nominated from the European Commission, both scientific and community based, to ensure that appropriate oversight and advice is provided for the project. To maximise our ability to perform the work of the project, to align ourselves with local and national strategy in the EU and partner states, and to provide advice on appropriate dissemination of results upon the completion of the work and analysis of the results.

2. WP 2- Dissemination

The overarching aim of this WP is to maximise the dissemination of findings related to Hepcare Europe and impact on practice. Key to this work package are:
- To define a dissemination strategy
- HEPCARE brand development needs to be developed, e.g. a website logo to be incorporated on all posters presented at conferences and presentations etc;
- Social media, e.g. linkedin group and twitter updates with outputs from the group;
- Printed materials advertising HepCare and what it will do at each site;
- Information event at the each participating site to engage patients;
- Regular Have a symposia/conferences throughout the duration of the project
  – e.g. lay people, clinicians;
- Proactive engagement with the Irish Hepatitis C Outcomes Research Network (ICORN) of which Dr Lambert is a member and National organisations in Spain, Romania and the UK.
- Conference attendance;
- Manuscript publication

In parallel, internal dissemination, specifically the sharing of knowledge between consortium members, will be facilitated by annual meetings and quarterly conference calls.

EUROPEAN DISSEMINATION

The project aims to liaise with on-going actions funded under the EU Health and DPIP Programmes and collaborate with them to promote the visibility of HEPCARE.

1. Correlation and HEP C network (peer support, HCV training)
2. EU HEP SCREEN network (screening for viral hepatitis among migrants, health care workers training tool)
3. Scale up Harm reduction by WHO EURO (evaluation of barriers for HCV testing and care)
4. Bordernetwork network (guidance for the treatment of HIV and viral infections)
5. EURO HIV EDAT - community base testing strategies
6. OPTEST HIE – early testing in clinical settings, using indicator conditions, and identification of barriers for testing provision
7. HA REACT JA -

Work performed during the reportingperiod

INTRODUCTION

HepCare Europe is a three year EU funded project, that has multiple components, all of which must link up to guarantee that vulnerable populations access treatment. There is no one 'profile' of an HCV infected patient, and there is not one recipe that will guarantee successful treatment for all. Each clinical site that HepCare Europe has included (Dublin, London, Seville, and Bucharest) will need to adapt the Work packages from HepCare Europe and modify it to fit into the local situation. A critical first step is testing, as many do not know they are risk (HepCheck). And many who do know they are positive are not accessing care, as they have other priorities, or they have not been provided the opportunity of an appointment at the referral centre (HepLink). Ten years ago the treatment of hepatitis C consisted of toxic injections with interferon, administered for a period of 24 to 48 weeks. In order to get the treatments patients needed to get a liver biopsy. Many of these 'myths' of old treatment still exist in the community, and education of
the community, as well as education of the health care providers is essential (HepEd).

And many barriers, some patient focused, some healthcare focused, and some institutional and governmental, still exist. Each of these barriers differs by risk population and geographic location. Thus further work on supporting the value of these new HCV drugs need to be done, and the HepCare Europe work packages HepCheck, HepLink, HepEd, Hepfriend, HepCost with the project dissemination will work over the next two years on putting together this data, to support the continued expansion of treatment to vulnerable populations. Finally, there is no need to anymore take the patient to the hospital to evaluate and treat them. The new HCV drugs are safe and tolerable, and while in the past all HCV treatment had to be specialist lead at hospital centres, this is no longer the case. So HepCare Europe is developing a 'shared care' model of care to partner the specialists with the primary care takers. Only with such a partnership, will we be able to scale up treatment so that more will receive treatment. Ireland has signed up to 'HCV viral elimination by 2025', as have many of our partner countries. only by developing a 'scale up' model, that takes the treatment to the community, where vulnerable HCV populations are living (and not accessing hospital services); and partnering with community services in the community that are supporting such patients, will we succeed in reaching this target. The final component of the HepCare Europe project that is critically important is HepFriend. A peer educator in the community can mentor at least 10 HCV patients who need to go through the process of testing and assessment and treatment. Such a peer educator support model, which was been demonstrated to be successful in other disease areas, is now rolling out in Dublin, and will be replicated in the other clinical sites. Shared care partnerships, community support, advocacy, scale up, all are key concepts that will make HepCare Europe and its planned deliverables make a difference for vulnerable patients with HCV in the community, who are currently not in receipt of these new HCV drugs; and they will not have access to such drugs unless such advocacy continues and is shown in evidence based studies to be of merit.

During the first year of the project an additional partner and affiliated entity have been added to the consortium via an amendment request. The added partner is UCLH. The tasks given to UCL will be shared by UCLH. It was discovered at the kick off meeting that part of the personnel working on the project was actually linked to UCLH payroll. It was also discovered that although the coordinator Dr Lambert is a joint appointment with UCD his payroll comes out of the Mater Misericordiae University Hospital and therefore the Mater Hospital was added on the amendment request as an affiliated e
1- HepCheck
Site Numbers screened under WP 4 HEPCHECK
Dublin 618
Seville 490
London 461
Bucharest 510
TOTAL SCREENED TO DATE 2079
TOTAL PLANNED 2000

2- HepLink
Site Numbers recruited under WP 5 HEPLINK
Dublin 14 practices (135 patients)
Seville 4 5 practices (109 patients)
London 2 practices (35 patients)
Bucharest 9 sites (215 patients)
TOTAL RECRUITED TO DATE (29 practices) 485 patients
TOTAL PLANNED (24 practices), 240 patients

HepLink Dublin : At the end of reporting period two, 14 GP practices and 135 patients have been recruited to the study in Dublin. We have completed implementation of all aspects of the HepLink model of care to the 14 participating practices. Patient assessment is also complete and a high uptake by patients (102/135; 76%) of the community-based clinical assessment by the HepLink nurse was observed. Baseline data has been collected, analysed and disseminated. Follow-up data collection is almost complete.

3- HepEd
Site Nb Masterclasses/ HCP trained (health care professionals)
Dublin 5 (153 HCPs trained)
Seville 5 (40 HCPs trained)
London 2 (5 HCPs trained)
Bucharest 2 (1st in march 2017 with 80 HCPs trained; the 2nd one in June 2018 with 70 HCPs trained)
TOTAL TO DATE 13 masterclasses (344 HCP trained)
TOTAL PLANNED 4 (120 HCPs trained)

4-HepFriend
Site Nb of peers recruited
Dublin 12
Seville 6
London 8*
Bucharest 3
TOTAL TO DATE 29 peers recruited
TOTAL PLANNED At least 4

5- HepCost: not applicable at present

6- Shared learning: Learning has been shared via 10 steering committee meetings to date. Further proposals and projects have been discussed.

7- Policy makers/stakeholders: Numerous meetings have been held with key people responsible for HCV policy in Dublin, Bucharest, London and Seville. Ireland: Nine stakeholder meetings were held to date with community and service user organisations as part of the development and implementation of the HepFriend model of peer support (i.e., 22nd, 23rd, 24th November 2016, 19th Jan 2017, 2nd Feb 2017, 6th Apr 2017, 30th Jun 2017, 13th Sep 2017, 7th Dec 2017) and 3-monthly meetings will be held going forward. UK: The London team have been collaborating with the North Central London Operational Delivery Network (ODN) and the South London ODN to develop an outreach model of HCV Care, and has met with the London Joint Working Group on Substance Use and Hepatitis C (LJWG). Romania: A multi-stakeholder meeting on viral hepatitis and HIV co-infection was organised in October 2017. Spain: Nine collaborative meetings were held with doctors and nurses working in drug addiction units and one meeting with NGOs working with homeless people to set up HepCheck; four meetings were held with doctors and nurses working in primary care centres to set up HepLink; and four meetings have been held with service users from a therapeutic community and a drug service to initiate HepFriend.

Key people responsible for regional and national HCV policy have been briefed on Hepcare at all sites. Ireland: There is ongoing sharing of Hepcare findings and progress with the Health Service Executive Ireland, the Programme Manager of the National Hepatitis C Treatment Programme, and a Hospital Group leadership team. Romania: Due to socio-political issues there were continuous transformations in the national hepatitis programmes and HCV key persons. However, key people from the "Matei Bals" National Institute for Infectious Diseases, Bucharest (Prof. Adrian Streinu-Cercel), the Hepatitis Commission for DAA at the National Insurance House (Prof. Ceausu Emanoil and Dr.Popescu Corneliu), and the President of the National Commission for Infectious Diseases from the Ministry of Health (Prof. Egidia Miftode and also Associate Prof. Irina Dumitru who is a member of the same Commission) have been briefed on the Hepcare Project. A written information was also sent to the Ministry of Health and the National ID Committee. UK: In London, there is ongoing engagement with the North Central London Oper

Achieved outcomes compared to the expected outcomes

1- Hepcheck has achieved full recruitment. The target recruitment sample
has been reached, but screening and inclusion in HepCheck is still ongoing as patients with active HCV infection detected within HepCheck are candidates for treatment and could be included in HepLink. The initial number estimated of anti-HCV positive patients has been reached and exceeded.

2- HepLink protocols have been developed and published. Healthcare professional education and patient assessment has been completed in Dublin and is ongoing in other sites. The target number of practices has been reached and the pre-planned sample size for HepLink has been accomplished. Inclusion of patients continues as the HepLink model of care has been adopted in the participating practices.

3- 344 HCPs have been trained attending 13 masterclasses. These exceeds initial expectations.

4- A Network of peers is established. This component is still in progress. The initial plan to recruit a small and conservative number of peers was reached and exceeded.

5- Cost effectiveness is still to be completed.

6- Share learning: Two proposals for further work have been developed and submitted with MSD and Gilead but not funded to date.

7- Policymakers/stakeholders: More than the planned 24 meetings with key people responsible for HCV policy have taken place. Hepcare Europe is cited in Irish HCV policy documentation.


9- HCPs awareness: 12 masterclasses and 1 launch. Leaflets have been distributed at those events and during conferences and meetings with key people responsible with policy. Website hits: 1600 page views. Tweeter: Tweets, 33; Followers: 54.

Dissemination and evaluation activities carried out so far and their major results

Conference presentations given to date:
DUBLIN

Month 0-12

Lambert J., Murphy C., Patel A., McKenna-Barry M., Crowley, D., Stewart S., Farrell J., Cullen W. Opportunistic Fibroscan® testing in a Dublin general practice (GP) managing opiate substitution therapy: The Hepcare study. EASL, 13-17 April 2016, Barcelona, Spain

Ni Cheallaig C., Lambert J., Murphy C., O’Carroll A., Farrell J., Patel A., McHugh, T., Avramovic G., Cullen W. The Dublin Hepcheck Study: Community based testing of HCV by point of care OraQuick® HCV saliva test in homeless populations. EASL, 13-17 April 2016, Barcelona, Spain

Lambert J., Avramovic G., McCombe G., Stewart S., Cullen W. Integrating Primary and Secondary Care to Optimise Hepatitis C Treatment: Implementation and Evaluation of a Multidisciplinary Educational Symposium. Infectious Diseases Society of Ireland (IDSI) Annual Scientific Meeting; 12-14 May 2016, Dublin, Ireland

Ni Cheallaig C., Lambert J., Murphy C., O’Carroll A., Farrell J., Patel A., Avramovic G., McCombe G., Cullen W. Community based testing of HCV by point of care OraQuick® HCV saliva test in homeless populations. Infectious Diseases Society of Ireland (IDSI) Annual Scientific Meeting; 12-14 May 2016, Dublin, Ireland

Crowley D., Murphy C., Farrell J., Stewart S., Keegan D., Lambert J., Cullen W. To evaluate the effectiveness of an opportunistic outreach fibroscanning service to a community based drug treatment clinic and general practice in Dublin. International Symposium on Hepatitis Care in Substance Users (INHSU); 7-9 September 2016, Oslo, Norway.


Lambert J. Seek and Treat and Hepcare Europe. Irish Street Medicine Symposium, 24th September 2016, Cork, Ireland


 Annual Symposium; 10-11 November 2016, York, UK.


McCombe G., Almaazmi B., Lambert J.S., Avramovic G., Murphy C., O’Connor M., Perry N., Cullen W. Integrating Primary and Secondary Care to Optimise Hepatitis C Treatment: Development and Evaluation of a Multidisciplinary Educational ‘Masterclass’ Series. Association of University Departments of General Practice in Ireland (AUDGPI) Annual Scientific Meeting, 9-10 March 2017, Limerick, Ireland

Swan D., O’Connor E., McCombe G., Murphy C., Lambert J.S., Avramovic G., Cullen W. HepLink Study: Bridging the gap in the treatment of Hepatitis C in general practice. Association of University Departments of General Practice in Ireland (AUDGPI) Annual Scientific Meeting, 9-10 March 2017, Limerick, Ireland

Lambert J.S. Working with marginal populations (I): the HEPCARE community project. EASL, 19-23 April 2017, Amsterdam, The Netherlands

Lambert J.S., Murphy C., O’Connor E., Menezes D., Cullen W., McHugh T., McCombe G., Avramovic G., O’Carroll A. HepCheck: Homeless, Hep C & Competing Priorities in Dublin. EASL, 19-23 April
Work package

Work Package 1: Coordination of HEPCARE EUROPE
Start month: 1
End month: 36
Work Package Leader: NUID UCD

Timeline:
Month 3- partner sites established and contracts signed. Establishment of a legal partner at the UCD Research administration to ensure compliance with all legal requirements of the contract and subcontracts
Month 3- Establish advisory board who will determine terms of reference for the oversight and targets and deliverables for the project
Month 3- Establish management group-Establishment of a once monthly meeting with Research administration team at UCD and the HepCare Europe management group to ensure compliance with financial management of the project.
Month 3- Development and completion of the work package plans at all four clinical and one non clinical site
Management group meets monthly to review progress of project
Month 6- Project submitted to local Research Ethics Committees at all sites.
Month 6 – Steering committee established and steering committee meeting organised.
Month 6 – Advisory Board meeting organised. Month 9 - Website established.
Month 12- Publication timeline is set and manuscript/poster submissions are reviewed.
Month 12- First Interim report
Month 18 - Project completion assessed. Contingency plan established regarding any issues arising.
Month 24- Second Interim Report.
Month 27- Training needs assessed and additional training provided.
Government/authorities and community groups in countries involved are informed of the study and its potential consequences in terms of policies and services looked at.
Month 33- Project completion assessed and contingency plans established.
Month 36- Final report produced. Final data analysed and published.

Month 6,12- Coordination with the WP leaders to ensure all necessary training is provided consistently at each site, and all study materials are consistent from site to site

Month 4, 8, 12, 16, 20, 24, 28, 32- To establish quarterly reviews with the non clinical site U of Bristol to ensure they are provided with summary data from each WP to provide appropriate clinical analysis and modelled analysis of the HepCare Europe study
Work Package 2: Dissemination
Start month: 1
End month: 36
Work Package Leader: NUID UCD

2.1. Host meetings annually to facilitate presentation / discussion of findings (Month 36)
2.2. Host teleconference each quarter to facilitate presentation / discussion of findings (Month 36)
2.3. Identify key agency / person responsible for national HCV policy in each site (e.g. in Ireland - HSE, Irish Hepatitis C Outcomes Research Network, etc) (Month 3)
2.4. Identify key person responsible for HCV policy at EU level (e.g. EASL, Public Policy Association, EATG, etc) (Month 3)
2.5. Brief key person responsible for national HCV policy in each site on the Hepcare Programme aims, objectives (Month 3)
2.6. Invite key persons to attend plenary meeting of consortium (Month 3)
2.7. Identify key questions which the key person would like the consortium to answer in this or future projects (Month 6)
2.8. Identify healthcare professionals and service users with an interest in HCV policy at each site (Month 6)
2.9. Invite 4-8 healthcare professionals and service users to join Stakeholder Advisory Group at each site (Month 6)
2.10. Host at least annual meetings of Stakeholder Advisory Group and Work Package leaders / Consortium members at each site (Month 3)
2.11. Submit at least 10 scientific manuscripts to peer reviewed journals (Month 36)
2.12. Present at least 20 papers at national and international conferences (Month 36)
2.13. Develop proposals for future collaborative research by consortium members (Month 36)
2.14. Create website (Month 3)
2.15. Establish social media footprint (twitter, facebook, linkedin) (Month 3)
2.16. Develop printed leaflets for distribution at each site (Month 6)
2.17. Host a series of at least 3 public meetings to raise awareness at each site (Month 3, 6, 12)
2.18 Partnering with other agencies and projects managing such populations, to maximise educational messages not just about HCV but also other viral infections (HBV, HIV) and other co-morbidities (ie TB) (Correlation and HEP C network (peer support, HCV training)); EU HEP SCREEN network (screening for viral hepatitis among migrants, health care workers training tool); Scale up Harm reduction by WHO EURO (evaluation of barriers for HCV testing and care); Bordernetwork network (guidance for the treatment of HIV and viral infections); EURO HIV EDAT - community base testing strategies; OPTEST HIE – early testing in clinical settings,
using indicator conditions, and identification of barriers for testing provision; HA REACT JA - early testing and provision of integrated HIV, HCV, TB treatment and harm reduction for PWID.

Work Package 3: Evaluation
Start month: 1
End month: 36
Work Package Leader: NUID UCD

3.1.1. Establish steering group (month 3)
3.1.2. Steering group reviews report by each work package leader at six monthly intervals
3.1.3. Steering group provide feedback to each work package leader at six monthly intervals
3.2.1. Agree terms of reference of external evaluation (month 9)
3.2.2. Tender for external evaluation of Hepcare Europe programme by an approved external agency (month 12)
3.2.3. Collaborate with external agency in their conduct of external evaluation (month 24)
3.2.4. Share findings of external evaluation with: consortium members and funding agency (month 30)
3.2.5. Address findings of external evaluation in final 6 months of project (month 36)

Work Package 4: HEPCHECK
Start month: 1
End month: 36
Work Package Leader: NUID UCD

4.1 Each site to be trained in the performance of POCT and running of controls
Completed by month 6
4.2 Each site to identify which vulnerable population to target (homeless, incarcerated etc) Identified by month 3
4.3 Interview performed on all tested HCV positive 6 to 18 month (includes assessment of co-morbidities:TB, Alcohol and drug use)
4.4 Monitoring success in linkage to care 6 to 24 months

Work Package 5: HEPLINK
240 patients will participate in the study of Integrated care from 24 GP practices.

5.1.1. Complete the ‘Heplink’ pilot project (Month 6)
5.1.2. Evaluate the ‘Heplink’ pilot project (Month 6)
5.1.3. Develop the ‘Heplink’ pilot project in consultation with WP 5 collaborating partners (Month 9)

5.2.1. Define the integrated model of HCV care (Month 9)
5.2.2. Obtain ethics approval (Month 9)
5.2.3. Train the team involved in delivering its key elements (i.e. health professionals education, nurse liaison, enhanced access to specialist assessment, e.g. Transient Elastography) (Month 12)
5.2.4. Recruit 24 practices / clinical sites (Month 12)
5.2.5. Consent 240 patients to participate from the 24 practices (i.e. permission for baseline data collection, follow up data collection, +/- complete interview, +/- longitudinal follow up). (Month 14)
5.2.6. Deliver education to health professionals (Month 14)
5.2.7. Deliver nurse specialist liaison (Month 14)
5.2.8. Deliver enhanced specialist assessment to 24 practices (Month 14)

5.3.1. Collect baseline data (Month 14)
5.3.2. Analyse / disseminate baseline data (Month 18)
5.3.3. Collect follow up data (Month 24)

Work Package 6: HEPED

6.1 Establish a working group of all key partners at four clinical sites to develop health care focused educational materials (manuals, computer friendly, e-learning) targeting health professionals and patients.

6.2 Identify community based representation of key NGO and patient centred organisations working with key target patient populations

6.3 Develop an questionnaire to be administered pre and post participation in Health Care Focused ‘HCV Masterclass’ to assess impact on Health Care Professionals.

6.4 Establish direct communication lines and shared tasks with the EU funded TB consortium (Professor Ibrahim Abubakar, UCL London E-DETECT TB project, 3rd Health Programme proposal no 709624)) to maximise educational messages and to share resources
6.5 Completion of 2 ‘HCV Masterclass’ sessions at each of 4 clinical sites by month 18 of project. Masterclasses are aimed at Health Care Professionals.

6.6 Completed analysis of health care provider questionnaire (24 months)

6.7 Publication of results of educational intervention (36 months)

6.8 Collaborate with HA REACT JA - early testing and provision of integrated HIV, HCV, TB treatment and harm reduction for PWID

Work Package 7: HEPFRIEND
Start month: 1
End month: 36
Work Package Leader: UCL

7.1.1. Recruit and provide Hep C training to peers with an experience of Hep C/homelessness/drug and alcohol misuse (Month 6)
7.1.2. Select peers to provide Hep C testing, working alongside the clinical team (Month 6)
7.1.3. Identify and recruit, through peers, previous patients who have tested positive (Month 6)
7.1.4. Train the clinical team to provide testing and pre-treatment assessments (including liver staging using Fibroscan) (Month 6)
7.1.5. Ethical approval for interventions (Month 6)
7.1.6. Testing schedule and referral pathway mapping (Month 6)
7.1.7. Train peers to carry out pre-treatment assessments, including Fibroscan, alongside the clinical team (Month 12)

7.2.1. Develop a peer role in a community based integrated model of HCV care informed by phase 1 of Heplink (Work Package 5) (Month 12)
7.2.2. Validate integrated model of care with local Hep C partners and services (Month 12)
7.2.3. Provide community based Hep C treatment using peer support to recruited patients (Month 18)

7.3.1. Train peers in identification of risk factors for other infectious diseases (i.e. active Tuberculosis) (Month 12)
7.3.2. Linkage of care using peers with other homeless health services (e.g. Mobile Health Unit of Find & Treat TB service, London & E-DETECT, Bucharest) (Month 18)

7.4.1. Identification of those with risk factors for Hep C for who test negative (Month 18)
7.4.2. Train peers to promote engagement with harm minimisation services including opiate substitution therapies and needle exchange services (Month 24)
7.4.3. Integrate intervention into Hep C Trust peer training programme (Month 30)
7.5.1. Develop Hep C database to standardise data collection across sites (Month 6)
7.5.2. Liaise with local stakeholders to agree on shared care pathway (Month 12)
7.5.3. Interim baseline data analysis (Month 18)
7.5.4. Analysis of treatment outcomes and follow up data (Month 24)
7.5.5. Qualitative study on acceptability of community care pathway / experiences of patients unable to access treatment (Month 30)

<table>
<thead>
<tr>
<th>Work Package 8: HEPCOST</th>
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<tbody>
<tr>
<td>Start month: 1</td>
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<tr>
<td>End month: 36</td>
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<tr>
<td>Work Package Leader: UNIVBRIS</td>
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</tbody>
</table>

8.1. Develop Economic model developed to estimate the cost-effectiveness of each intervention (month 12)
8.2. Review literature to parameterise non-context specific aspects of the model
8.3. Collate data for undertaking cost-effectiveness analysis for Ireland (month 18)
8.4. Write paper on the cost-effectiveness of interventions for Ireland (month 24)
8.5. Collate data for adapting cost-effectiveness analyses for 3 other EU settings (month 24)
8.6. Paper on how the cost-effectiveness of interventions may vary in other EU settings (month 34)
8.7. Presentation of findings to country experts and policymakers (Month 22 and 32)
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MD.4 Layman version of the final report
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/11/2019
This is a short version (10 pages) of the final report, written for the interested public as a target group.

MD.2 Final Report
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/11/2019
Final report- 36 months

HepCheck 1: POCT report
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/05/2018
Report on the value of POCT for HCV in the community setting, results of training of staff, feasibility, accuracy of POCT (detection of false positives in these settings) (24 months)

HepCheck 2: Testing report
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/05/2018
Report of results of testing of at least 2000 patients in such settings from the four sites to identify the burden of HCV disease in these populations.

HepCheck 3: LTFU report
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/06/2019
Identify reasons for lost to follow up in these cohorts - comment from the evaluators was given that the qualitative interviews should be given enough time.
Hepcheck 5: Treatment outcomes
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/09/2019
The treatment outcomes report will include the whole HepCheck cascade of care. Due to treatment limitations in Romania many patients could not receive treatment. In Dublin there was a treatment freeze for 6 months imposed by the Irish government. Those limitations were removed in Ireland but caused delays and in January 2019 patients are getting access to treatment in Romania. In order take a look at treatment outcomes the deadline for this deliverable was extended to month 40.

HepCheck 4: system assessment
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/10/2019
The evaluation points at cross learning and cross site collective impact and site specific elements. It has also requested to take a look at the overall system of care/model. This deliverable will produce a comparison between sites and take a look at the system implementation as a whole and its outcomes. A literature review of other systems will be conducted for comparison. Models suggested by the external evaluators were HEPCAT, HEPCATT, EPITOPE and the work done by the Correlation Network.

Eval 2: External
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/06/2019
External Evaluation Report

HepLink 2: Assessment
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/05/2018
Report on Heplink - feasibility, acceptability and likely efficacy of this model of care (Month 24)
Cost effectiveness Ireland
UNIVBRIS
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/05/2018
Deliverable 1 (Month 24) Paper on cost-effectiveness of each intervention for Ireland

Cost effectiveness 4 EU settings
UNIVBRIS
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/10/2019
Deliverable 2 (Month 34) Paper comparing the cost-effectiveness of the different interventions in the 4 EU settings, and the key determinants affecting the cost-effectiveness of each intervention.

HepFriend model report
UCL
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/07/2019
Report on Hepfriend interventions to determine the feasibility, acceptability and sustainability of model (Month 30)

HepFriend qualitative report
UCL
HepCare Europe: (HEPCARE EUROPE)
Expected on: 01/06/2019
Qualitative report on acceptability of peer facilitated care and of experiences of those ineligible for treatment (Month 30) The interviews are done with the HepCheck qualitative interviews and will follow the same timeline

Interim report 24 months
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 07/12/2018
Interim report 24 months

Eval 1: Internal
HepLink 1: Training manual HCP
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 07/12/2018
Training manual for Health Care professionals

video HepEd
SVB
HepCare Europe: (HEPCARE EUROPE)
Published on: 18/05/2018
Release of a ‘Masterclass’ video that can be used on site (12 months)

Publication- Hepcare model article
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 19/03/2018
Publication submitted.

MD.1 Interim report-
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 19/03/2018
Interim report at 12 months

Social Media Channels active
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 19/03/2018
Social Media channels active
MD.3 Leaflet
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 30/01/2018
A leaflet to promote the project is produced.

Website active
NUID UCD
HepCare Europe: (HEPCARE EUROPE)
Published on: 30/01/2018
Website active

HepEd educational material
SVB
HepCare Europe: (HEPCARE EUROPE)
Published on: 30/01/2018
Development of Patient Friendly educational and training materials that are target population specific (12 months)