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ORIGINAL ARTICLE

Telementoring with project ECHO: a pilot study in Europe

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ABSTRACT

The Extension of Community Healthcare Outcomes (ECHO) project is a novel educational intervention designed in New Mexico to transfer subspecialty knowledge about hepatitis C virus (HCV) to primary care providers, thereby increasing patient access to HCV care. The ECHO model has been shown to deliver educational benefits and to result in good treatment outcomes for HCV-infected individuals in the USA; however, this approach has not been assessed in a European setting.

We sought to evaluate the feasibility, acceptability and implementation of the ECHO model in Ireland using a pilot study. We present a descriptive review of recruitment, participation, retention and cost of the intervention as well as a qualitative review of the views of participants on the barriers, benefits and acceptability of the ECHO model.

In the original Project ECHO in New Mexico, geographical distance posed the greatest barrier to accessing HCV care. In Ireland, people who inject drugs (PWID) were identified by interviewees as the main group facing barriers to accessing specialist HCV care. State-employed doctors and nurses caring for large numbers of HCV-infected PWID in opiate substitution treatment centres and homeless hostels were successfully recruited to participate in the project. Self-employed general practitioners did not participate, due mainly to a lack of time and the absence of reimbursement for participation. Practitioners who participated in the pilot reported benefits to themselves and their patients and would like to continue to participate in similar multidisciplinary, multisite educational interventions in the future.

INTRODUCTION

Project ECHO (Extension for Community Healthcare Outcomes) is a method of telementoring healthcare professionals in underserved areas to improve the care of common, chronic, complex medical conditions. ECHO was developed at the University of New Mexico Health Sciences Center in Albuquerque, NM, USA.[1] Telementoring is not the same as telemedicine, which is traditionally defined as the use of audiovisual technology to provide medical care for individual patients at long distances.[2] By contrast, the American Telemedicine Association defines as telementoring the use of audio, video and other telecommunications and electronic information processing technologies to provide individual guidance or direction.[3] Telementoring provides a method of transferring specialist knowledge and experience to other providers. It requires (1) establishment of relationship between the mentor and mentee and knowledge of the skills and experience of both prior to the mentoring event, (2) a mentee who is capable of managing the patient's disease and (3) an educational framework through which both the mentor and mentee have worked to prepare for the mentoring experience.[4] The ECHO method uses audiovisual technology to connect a team of medical experts, based in a tertiary hospital (termed the hub) simultaneously with many healthcare professionals based in a number of community settings (termed the spokes). The method aims to enable community-based providers to provide advanced levels of care for their patients and potentially for patients of other providers in the community.[5]

In 2011, the team at New Mexico published a prospective cohort study demonstrating that, using the ECHO model, patients in rural areas and prisons could be treated for hepatitis C virus (HCV) as safely and effectively as by a multidisciplinary team at the University of New Mexico.[1] The ECHO concept has since been applied to other conditions (eg, chronic pain, palliative care, addiction, tuberculosis) in New Mexico and replicated in other states for these and other diseases. Recently, ECHO has been adopted in Uruguay, India and Northern Ireland.

HCV is a worldwide public health problem, with approximately 150 million individuals chronically infected. The majority of HCV-infected patients in Western Europe have acquired infection through injection drug use. Treating people who inject drugs (PWID) presents challenges in engaging and retaining patients.[6] Less than 5% of HCV-infected people in Ireland and the UK have been treated. Care delivery in locations closer to patients may enhance patient experiences and outcomes;[7] however, many community providers in Ireland have not received training in either in non-curative management of patients with HCV or in treating HCV with curative regimens

Project ECHO offers a method of enhancing the competency of community-based based physicians to deliver optimal care to patients with HCV infection in Ireland. Given the differences in healthcare delivery between the USA and Ireland, Project ECHO was assessed in an Irish context prior to implementation.

METHODS

Design of the intervention

The PROJECT ECHO Ireland HCV pilot consisted of video conferences of case-based discussions about patients with chronic hepatitis C. A hub and spoke model was used, in which the hub was St James's Hospital, a university teaching hospital which is a tertiary referral centre for hepatitis C, and the spokes were community-based facilities which are not currently offering direct-acting antiviral treatment for HCV. One of the spoke sites was the National Drug Treatment Centre. The faculty consisted of physicians and pharmacists based in the hub and an addiction psychiatrist based in the National Drug Treatment Centre. Learning partners based in the spokes were physicians and nurse practitioners.

Video conferences were scheduled to occur fortnightly. iZoom was used to connect practitioners in the hub and spokes. A conference room with video conferencing facilities was used in the hub and in the National Drug Treatment Centre; other sites used a desktop computer to connect. Each session started with a didactic presentation of 5–10 min in duration. After this, the learning partners presented real de-identified patient cases. A case presentation template was used as an educational tool (see online Supplementary appendices 7 and 8). The learning partners retained all responsibility for treatment decisions. Discussion of the cases was directed to developing teaching points that benefit all participants in caring for their own patients with similar issues. Participants received no cost continuing medical education credits.

Study setting

Primary healthcare in Ireland is provided by general practitioners (GPs), who are independent contractors. Individuals with low income (approximately 30% of the population) have access to free GP care under the General Medical Scheme (GMS). GPs are reimbursed for care of GMS patients on an annual per capita basis. Public hospital visits are free of charge. Medication costs are capped at 180 €/month, with any excess being covered by the state. Individuals on the GMS scheme pay 50 cents per dispensed medication, with the state covering the remainder. Community providers at present are not permitted to treat HCV with curative agents, as treatment is restricted to specialist centres. Opiate substitution therapy (OST) in Ireland is delivered either through drug treatment centres (DTCs) or through certified GPs. At the end of December 2009, 8551 patients were engaged in OST, of whom 5352 were attending DTCs.

Site recruitment

Potential spoke sites were identified from over 250 participants at a meeting on the ECHO HCV telementoring model delivered by the Irish Hepatitis C Outcomes Research Network in October 2014. A lead individual in each site was approached in person by a study investigator.

STUDY MEASURES AND DATA ANALYSIS

Participant interviews

Participants were selected by purposive sampling, and initially approached by text messaging. All participants approached regarding interviews agreed. Interviews were undertaken by Clíona Ní Cheallaigh (CNC), the clinical co-ordinator of the pilot. Participants were aware of the role of CNC in Project ECHO. CNC had a prior established relationship with 3/10 interviewees. Semistructured interviews were carried out with 10 potential participants from eight sites at baseline and with 6 participants in the pilot programme at completion of the study intervention (questionnaires in online Supplementary appendices 1 and 2). Interviews were recorded using iRecorder, transcribed by a commercial entity and text coded and analysed by CNC using NVivo software. An inductive approach was used to identify dominant themes.[8] Participants gave feedback on the manuscript.

Additional process evaluation

Records were kept of case conferences identifying participants, didactic topics, cases discussed and outcomes of

discussions (see online Supplementary appendices 5 and 6).

Costing

Staff self-reported the time spent establishing and delivering the ECHO programme (see online Supplementary appendices 9).

Ethics

The study was given approval by the Research Ethics Committee of the School of Medicine, Trinity College, Dublin. Informed consent was sought from practitioner participants. Patients were not asked for consent prior to discussion of their cases. All patient cases were fully anonymised with an assigned site case number.

RESULTS

Site recruitment

Eleven sites were approached regarding participation in the pilot study. Five were GP-owned primary care practices, none of which participated. Barriers that these GP practices identified included the cost of HCV drug treatment and the view that resources could be better used in other ways (1/5), lack of reimbursement for GP time (2/5), competing priorities for time (4/5), preference for face-to-face meetings (1/5) and insufficient numbers of HCV-positive patients (1/5). The prevalence of HCV in patients attending these practices was estimated as ranging from 1% to 10%. One site offering support services to PWID was approached but did not participate due to a lack of suitable clinical staff (physicians or nurses) on site.

Four sites agreed to participate in the pilot programme as spoke sites: three DTCs and a homeless hostel (table 1). Two DTCs and the homeless hostel were located in Dublin, and all of these were within 30 min by public transport of St James's Hospital. One DTC was located in Waterford, a city approximately 3 hours by road from Dublin. The number of clients with chronic HCV infection ranged from 15% to 75% of the total number of clients attending each site.

Preparticipation interviews

Semistructured interviews of participants at baseline were used to examine the motivating factors for participating in Project ECHO in more detail. Narrative comments provided a broad overview of the attitudes among those interviewed which were subsequently stratified by dominant themes.

Barriers to participation

The time involved in preparing for and participating in the case conferences (2–3 hours per fortnight) was the most frequently reported barrier to participation. This was reported by the majority of self-employed GPs interviewed but not reported by other participants. This time commitment was seen as particularly challenging to practitioners who were already having difficulty meeting existing commitments.

> That's a lot of time…That's a lot of time to be honest.

> Now, I know for a fact that the doctors in x and x don't want to have anything to do with hepatitis. They don't even want to know about it. They've enough on their hands managing addictions.

Practitioners with a lower prevalence of untreated HCV in their patients were particularly likely to feel that the investment of time was not worthwhile for them. The lack of remuneration for the extra time required to participated in Project ECHO and for the additional practitioner time used in treating HCV was

Table 1 Profile of participant sites

Site	Location	Type of site	Number of clients (HCV infected%)	Staff on site	Methadone dispensed on site
1	Waterford	DTC	100 (15)	GP Nurse specialists Psychiatrists	N
2	Dublin	Hostel	80 (30)	GP Nurse	N
3	Dublin	DTC	500 (approximately 75)	GP Nurse specialists Pharmacists Counsellors Housing workers Psychiatrists	Y
4	Dublin	DTC	200 (75)	GP Nurse specialists Pharmacists Counsellors Housing workers	Y

DTC, drug treatment centres; GP, general practitioner; HCV, hepatitis C virus.

also identified as a barrier by four GP interviewees. Two GP interviewees reported concern that this model would result in additional work being transferred from hospitals to community providers without any additional resources.

> They [cannot] transfer chronic disease to general practice without transferring any money.

GP interviewees suggested two possible ways to overcome these barriers. One of these would be to fund GPs to participate in Project ECHO and/or to deliver HCV care.

> You could fund it through the methadone treatment protocol…for just prescribing methadone to a very stable patient, you get [X amount of money], for initiating methadone and being a bit more adventurous in your practice, you get X plus Y, and then for treating hepatitis on top of it all, you get X plus Y plus Z, something like that.

The other suggestion was to involve practitioners directly employed by the state (the national Health Service Executive or HSE).

> if you can get□HSE [state-employed practitioners] workers, it's great. I'm not saying they don't mind what they're doing per session, but like, you know, it's something interesting and it's during their working day.

Drivers to participation: need for increased knowledge in community providers

All interviewees who subsequently opted to participate in the pilot reported a large cohort of untreated HCV-infected clients who had not been assessed for cirrhosis or accessed treatment. These were identified as predominantly PWID who had difficulty accessing care through standard pathways, due to barriers discussed below.

> Five and ten years will make a huge difference and we'll have a lot of decompensated liver disease in the addiction service, an awful lot. And at the moment, there's quite a good cohort that could be treated in the community…

HCV management and treatment was identified as having lots of benefits to patients, including preventing complications of HCV such as cirrhosis, reducing onward transmission of infection and psychological benefits for patients and public health benefits due to reducing onward transmission.

> Putting [patients] on a very structured program, like HCV treatment, really does help them to focus on a positive goal or a positive outcome in life.
>
> And I think it's a public health piece that's been missing from the whole thing, you know?

Barriers to accessing the current model of hospital-based care

Participants highlighted the complexity of PWID who frequently have multiple psychosocial difficulties, and how this made it difficult for the patients to engage with specialist outpatient clinics.

> A lot of [PWID] have poor health literacy [and] a lot of them have ADHD, about 30% of drug addicts have it. They can't tolerate queuing and find diary management really difficult.
>
> 1 in 3 patients at [the National Drug Treatment Centre] were victims of sexual or physical violence growing up.
>
> Yes, the mental health issues are quite severe and they develop really quickly.
>
> And you put them to go on a bus for two and a half hours to travel down, who may be unwell medically, but also drug-wise.

Attitudes of hospital specialists towards PWID were also cited as a barrier to accessing specialist care.

> [Hospital-based specialists] had this list of things, why they were refusing or not allowing people to access treatment, and they were saying 'history of drug use, current drug use'.

Another barrier identified was negative patient perceptions regarding HCV.

> There is the fear of the test, there is the fear of the medication. It's all due to rumour, from past experience and there is the feeling that you have missed an appointment and you can't make another one.

Potential benefits to ECHO model

Potential benefits of using the ECHO model were explored. One of the main drivers that participants reported was that the ECHO collaborative model harnessed the experience of the primary care provider in managing PWID.

> It would also allow for a better rapport for the clients to engage with their healthcare needs because they have such mistrust in the hospital and medical services.
>
> The practice, the receptionist, they know where they all are. They know their brothers, their aunts, their uncles. So if you can't find them, you can find somebody who can find them.
>
> We are linked in with people who do community based relapse prevention program and that is a priority here.
>
> We've senior psychiatrists here and they can gather history and mental status on [the patients] prior to treatment. They give a good therapeutic relationship, the whole lot.
>
> If you have them on a regular treatment, for example methadone […] it means they will come back to you. The problem is that if they default [from hospital] they don't know how to get another appointment.

Table 2 Topics of case-related questions brought by conference participants

Topic	Number of cases
Referral pathways	8
Staging of liver disease	7
Management of early-stage chronic liver disease	1
Management of compensated cirrhosis	1
Management of decompensated cirrhosis	5
Management of addiction	4
Management of treatment complications	2
Management of psychiatric illness	1
Suitability for DAAs	5
Advice regarding associated medical conditions	2

A number of cases addressed multiple issues.

> But we have to change the way we deliver care to facilitate the drug user, rather than just write them off and say "Look, they're not going to go. They've been given five appointments, they've missed them all, ergo, they're not going to be treated". If you bring the treatment to the patient, it's been proven for HIV care, it's been proven for TB care, there's no reason why it can't work for Hep C.

Access to specialist input from secondary care providers through Project ECHO was a key driver to participation.

> It would provide pretty quick access for patients and a good outcome

The educational component of Project ECHO was also seen as valuable.

> I suppose it'd be exciting work, you know, you'd be saving lives and it would add another dimension to the work, it would make the care of the drug user much more holistic, do you know? It's a nice skill to have.

> Well, I suppose upskilling me because I'm alone and I don't know what I'm talking about and I'm looking at LFTs and I'm wondering what has caused these abnormalities… What does this really mean? Do I need to send them in?

Additional benefits of ECHO to participants included becoming involved in a network.

> GPs [and] nurses, [we're] quite isolated…We're stuck to manage it on our own without the expertise or the resources within a harm reduction capacity. So it's very difficult and people are getting sicker and sicker and sicker and sicker.

A particular feature of ECHO is that the spoke sites are also able to contribute their knowledge and expertise to the group, and this was also seen as an attractive element.

> Maybe [we can] alleviate some of the fears and concerns that [hospital-based staff0 have in treating those type of patients [PWID].

> Everyone's valued in their own right. In their own area.

The video conferencing aspect facilitating distance learning was felt to be suitable. CME credit was also an added incentive. Overall, participants felt that training community providers in HCV management using the ECHO model would generate good outcomes.

The intervention

The pilot took place from 27 March to 2 October 2015. Ten case conferences were held during that time. Case conferences were scheduled to occur fortnightly, and were postponed to an interval of 1 month from the previous conference on three occasions (twice due to national holidays, and on one occasion due to a lack of cases for discussion). Between four and nine hub participants attended each conference, while two to four spoke sites participated in each conference, with a total of 4–10 spoke participants per conference. Over the duration of the pilot, nine hub participants and 15 spoke participants participated in case conferences. The hub participants included one consultant hepatologist, one consultant infectious disease physician, two pharmacists and two specialist registrars. Spoke participants included five GPs, four nurse practitioners, one addiction psychiatrist (who acted as faculty) and five diverse attendees including medical and nursing students.

Each case conference commenced with a short, educational, didactic presentation. Topics covered included epidemiology of HCV infection, assessment of HCV infection severity, screening for HCV infection, treatment options for HCV infection 2015, staging and assessment of cirrhosis, management of ascites, drug–drug interactions and their management in an outpatient clinic, and novel psychoactive substances. A hub participant delivered the majority (8/10) of the didactic presentations, with the remainder delivered by a spoke participant.

The number of cases discussed per conference ranged from none to 4, with a median of three cases per conference. The number of cases discussed in total throughout the pilot was n=23. Action points were generated from 20/23 case discussions. The case-related topics were diverse in nature but referral pathways, management of decompensated cirrhosis and patient

Table 3 Self-reported time for programme set-up activities

	Liaison with spoke sites	Completion of forms, clinic conference script etc.	IT set-up
Administrator, technical support (hours)	20	20	10
Clinicians/pharmacists (hours)	30	100	N/A

IT, information technology.

Table 4 Self-reported time for ongoing programme activities

	Liaison with spoke sites	Collation of forms, documentation of summaries, etc	Review of cases prior to conference	Case conference
Administrator, technical support (hours)	4	1	–	2
Clinicians/pharmacists (hours)	–	2	2	4

suitability for Direct-acting antiviral (DAA) therapies were among the most common topics (table 2).

Resource utilisation

Hub participant time invested in establishing the programme/set-up and administration of the weekly programme were measured using self-reporting. Time required for developing the research protocol for the pilot and process evaluation of the programme are not included. Time dedicated by staff for programme set-up activities is provided in table 3, and time dedicated for the ongoing programme activities is provided in table 4.

Spoke participants reported an average of 1 hour of preparation per case conference, in addition to the 1 hour of attendance at the case conference. Non-staff costs included a payment to Project ECHO in New Mexico. Use of the video conferencing facility at the hub site was given free of charge.

Retention

Three of the four participating sites continued participation until completion of the pilot. One drug treatment centre expressed interest initially and presented one case, but did not continue to attend the case conferences. This participant was outside the hub catchment area, and felt it would be more appropriate for their service to engage with their local specialists.

Participant interviews at completion of pilot

Six participants were interviewed at completion of the pilot to explore their experiences of participation, and to determine their perceived benefits to participation in Project ECHO. The interviews were topic guided. Narrative comments derived from these interviews were stratified into key themes

Benefits to participants

Participants reported that participation in the Project ECHO pilot had increased their ability to manage HCV infection.

> Having the multidisciplinary teams attend the sessions has meant that… the level of awareness has been raised in relation to Hep C, the level of knowledge that people have, accurate knowledge, …how comfortable they are in imparting that knowledge … has hugely improved and [ECHO], has really enhanced the culture within the organisation of making sure that, everybody, is aware of the importance of Hep C treatment and access to it.

> [There is a dramatic increase] in the competency that staff have afterwards. They may have the knowledge [beforehand], but having very focused cases to present [improves] their skills and their competency in terms of the range and the extent of the information that they provide and understand and take into account. You can see their confidence growing as well.

Benefits to patients

Participants reported that clients attending their centre had benefited from the Project ECHO pilot.

> Now, (access to specialist clinics] has improved. [The local specialist] has actually taken back some people that he discharged. He's also seen a couple of new people.

> Now we know what acute issues to keep an eye out for, how to identify them early and manage them, who to contact if we need to.

Barriers to HCV treatment

Participants were also asked about what barriers remained despite participation in ECHO. Problems identified included difficulty getting GPs to change prescriptions if the clients' GP was not linked with the spoke site, difficulty accessing radiological investigations and concerns regarding linking patients in with services other than those in the patients catchment area. At present, direct-acting antivirals can only be accessed through hospital specialist clinics.

Dissemination of knowledge

All participants stated that they had discussed knowledge that they had acquired through participation in ECHO with other colleagues.

> When the sessions had finished, people tended to stay on and have a further discussion amongst themselves and share their own kind of additional experiences on different things.

Network

The network created by participation in the Project ECHO pilot was highly valued by participants.

> Even just being part of the sessions and seeing that there is an opportunity to link people in is definitely heartening. [Practitioners] don't feel so isolated out in the community.

Future directions

Other areas participants would like covered in an ECHO programme included sexual health, addiction, mental health (included that related to personality disorders and deliberate self-harm) and medication-related issues. Other practitioners that participants felt would be beneficial to include in further programmes included outreach workers, social workers and clinical psychologists.

DISCUSSION

The ECHO model uses telementoring incorporating collaborative learning, coaching and mentoring with specialists and with peers to transfer subspecialty knowledge to community care providers.[9] We carried out a pilot programme to assess feasibility of recruitment, implementation and retention of participants to an ECHO HCV management programme in Ireland.

Recruitment was feasible among practitioners working in state-funded organisations caring for populations with high prevalence of injecting drug use and liver disease (drug treatment centres and homeless hostels). Drivers to participation were centred around increasing access of patients to specialist opinion, and to improving participant expertise. Participants identified PWID as the main group of HCV-infected individuals who face barriers in accessing specialist care in hospital settings, and felt that HCV-infected PWID would benefit from an increased ability of community providers to manage their care. Interestingly, two of the four participating spoke sites are in close geographical proximity to the hospital, illustrating that barriers other than geographic distance preclude PWID from accessing care. Professional satisfaction in learning new skills, engagement in a network and continuing medical education (CME) credits were additional drivers for participation. The collaborative element of Project ECHO was seen as particularly attractive.

Recruitment of self-employed GPs was not successful. Barriers centred around lack of remuneration for participant time, and the opportunity costs incurred by giving time to participation. Due to the nature of provision of primary care in Ireland, in which GPs are self-employed and are renumerated for GMS patients by an annual, rather than per visit payment, GPs would not have received any additional renumeration for participation in Project ECHO or for the additional visits required for HCV management by the GP rather than by hospital specialists. Interviewees suggested that schemes to ensure reimbursement for self-employed clinician time may facilitate their participation. Clinicians employed on a sessional basis by the HSE did not report time as a barrier and were likely to agree to participate.

Our pilot study showed that implementation of a ECHO model-based programme in Ireland was achievable. We completed a 6-month pilot as planned, with only three case conferences rescheduled. Didactic and case-based methods stimulated discussion of a large number of topics. Twenty-three patient cases were discussed, and action points were generated from 20/23 cases. Three of four centres continued participating until completion of the pilot. On completion of the pilot, participants reported benefits to themselves in terms of knowledge and confidence and, particularly, in the creation of a network which provided practical and psychological support to practitioners working in challenging patient groups. Participants reported dissemination of their knowledge to colleagues who were not participating in the programme. Hub participants reported benefitting from increased awareness of the complexity of patients in the community and of the fragmented nature of service delivery. All participants reported that they would like to continue to participate in ECHO-based learning programmes, and suggested a wide range of additional diseases which would be amenable to the model.

The scope of our pilot study did not include a cost-effectiveness analysis. The main cost in our programme was participant time. Most of the time used in the pilot was in the set-up of the programme. Once all sites had been recruited, documents and standard operating procedures generated and information technology established, the running costs of the programme were limited to six administrator hours and two clinician hours per hub clinician, and 2 hours per community practitioner attending the conferences.

A small number of studies of multidisciplinary case management using telecommunications technology have been undertaken in cancer management. These programmes, similar to Project ECHO, aimed to create a virtual community of care similar to that hitherto limited to academic centres and focused on clinicians practising in remote locations. These programmes were found to be feasible, but did not undergo rigorous assessment of cost-effectiveness.[10–12]

The majority of patient cases discussed in the ECHO HCV management pilot had more than one chronic medical condition, in addition to addiction, psychiatric and social comorbidities. Hub and spoke participants reported that the multidisciplinary, multisite approach of the ECHO model proved particularly suitable for these patients. The best use of Project ECHO in Ireland may be to address such multimorbid patients needs. PWID have significant unmet needs for integrated specialist care. We envisage developing a model of ECHO Complex Care focused around the needs of PWID and other marginalised groups in Ireland which would create a network including hospital-based specialists, community-based GPs, OST centre-based addiction psychiatrists, and nurse specialists and key workers in a number of rehabilitation, respite and support facilities catering for PWID. Recruitment of self-employed GPs may require a method of reimbursement for their time, and the design of the programme will need to recognise the opportunity cost entailed in participation.

CONCLUSION

This study highlighted a significant unmet need in PWID for specialist HCV care which participants felt would be best addressed by engaging community care providers in delivering this care. We demonstrated that an ECHO-based model meets this need in Ireland, and delivers its aims of training and supporting community-based care providers using distance learning to deliver care traditionally delivered by specialists in hospital settings. Remuneration for time may be required to encourage participation by self-employed GPs.

As a result of the Project ECHO HCV pilot, these previously excluded patients had the 'best of both worlds': individualised care provided by familiar, local practitioners in community-based centres and access to current best practice from multiple medical specialties in academic medical centres. In addition, the Project ECHO HCV pilot created a network of practitioners with a commitment to, and expertise in various aspects of providing care to a challenging group of patients, thereby supporting practitioners and facilitating knowledge exchange. We plan to harness our experience and create an ECHO Complex Care Network to address the medical, psychological and social needs of PWID in Ireland.

Contributors CNC designed data collection tools, implemented the programme, monitored data collection, designed the data analysis plan, cleaned and analysed the data and drafted and revised the paper. She is guarantor. AOL initiated the collaborative project, designed data collection tools, monitored data collection for the whole trial, designed the data analysis plan and revised the paper. SK, AS, SH, EK, LR, JS and JM contributed to study design and revised the paper. SA is the originator of the concept underlying the project and contributed to data analysis and revised the paper. CB and SN initiated the collaborative project,implemented the programme, supervised data collection and analysis, and revised the paper.

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Competing interests None declared.

Ethics approval Ethics Committee of the Trinity College School of Medicine.

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Data sharing statement Transcripts of participant interviews are available on request from the corresponding author.

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