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Exploring provision of Innovative Community Education Placements (ICEPs) for junior doctors in training

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Abstract

Objective

Medical education in community settings is an essential ingredient of doctors' training and a key factor in recruiting GPs. Health Education England report "Broadening the Foundation" recommends that 80% of junior doctors complete 4 month community placements during their Foundation programme. The objective of this study was therefore to explore how community based training of junior doctors might be expanded by identifying possible "innovative community education placements" (ICEPs) and examining opportunities and barriers to these developments.

Design

This was a qualitative study where semi-structured interviews were undertaken and themes were generated deductively from the research questions, and iteratively from transcripts.

Setting UK community health care

Participants

Stakeholders from UK Community health care providers

Results

Nine participants were interviewed; one group were experienced in delivering community-based undergraduate education, while the other worked in community settings that had not previously trained doctors. Themes identified were practicalities such as "finance & governance", "communication & interaction", "delivery of training" and "perceptions of community".

ICEPs were willing to train Foundation doctors. However concerns were raised that large numbers and inadequate resources could undermine the quality of educational opportunities, and even cause reputational damage. Organisation was seen as a challenge, which might be best met by placing some responsibility with trainees to manage their placements. ICEP providers agreed that defined service contribution by trainees was required to make placements sustainable, and enhance the learning opportunities. ICEPs stated the need for positive articulation of the learning value of placements to learners and stakeholders.

Conclusions

This study highlighted the opportunities to gain both specialist and generalist knowledge in ICEPs from diverse clinical teams and patients. We recommend in conclusion ways of dealing with some of the perceived barriers to training.

Keywords: Medical education, undergraduate medicine, primary health care, community medicine

Keywords (MesH)- education, medical; Ambulatory Care Facilities, Non Hospital; Physicians, Junior.

Article summary

Strengths of this study include

- eliciting novel findings from previously unheard informants in this field.
- recruiting from a wide range of non-traditional learning organisations among UK community health providers

Limitations include

- Possible responder bias based on sampling existing institutional contacts (although this list was snowballed to other informants)
- Relatively small numbers of participants, although the pool of potential informants is also small.

Background

In the UK Foundation doctors (junior doctors within 2 years of qualifying) have traditionally received almost all their early post qualification experience in hospitals. The recent report by UK NHS Health Education England (HEE), 'Broadening the Foundation Programme', has highlighted the need for medical trainees to gain a wider experience of community health care (1) and recommends that at least 80% of Foundation doctors should undertake a four month community or integrated placement from August 2015 rising rapidly to 100% in August 2017.

The proposed expansion of community-based placements has the pedagogic aims that curricula should refocus attention and encourage foundation doctors who are more knowledgeable about the range of settings for healthcare, understand how teams facilitate seamless patient care, work across interfaces, and develop a flexible approach to clinical provision. (1) There are also calls for all doctors to develop more generalist skills, to cope with rising co-morbidity amongst ageing populations (2) and that these skills should be developed in community placements. Persuading more junior doctors to become GPs has also risen up the UK political agenda in 2015. (3) However, general practice, the predominant sites for UK community-based education is at capacity. (4)

These policy changes will have considerable impact on community placements. The HEE report's authors have therefore urged educators to think more widely about educational settings and suggested the notion of innovative community-based placements.

Healthcare education has historically tended to focus on knowledge, particularly on 'science' content.(5) Most early postgraduate training of UK doctors still happens in hospital settings. There have however, been changes internationally over 20-30 years with more community based undergraduate medical education within medical schools. This change was to address students' educational needs (gaining a better understanding of disease, its prevalence and management), within the context of increased student numbers and reduced patient time spent in hospital settings.(6) These changes potentially broaden the types of knowledge valued by faculty and learners as relevant to both undergraduate and post graduate healthcare education.

Definitions of community-based placements vary and are often contested. The 'Broadening the Foundation Programme' report takes one particular view which describes community placements as:

> 'placements .. primarily based in a community setting. The learning outcomes will .. include the care of the total patient .. long-term conditions and the increasing role of community care.' (1)

Community-facing programmes are those based within an acute setting as opposed to community-based organisations which offer a mixture of community and community-facing care. Hays (7) offers "A pan-community approach includes all possible health care facilities as potential sites of teaching".

We defined "Innovative Community Education Placements" (ICEP) providers as those working in settings where education for healthcare professionals for and specifically postgraduate medical trainees is currently not a mainstream activity of these organisations.

We aimed to understand how training for junior doctors may be further extended in to the community by identifying potential placements in non-traditional or ICEPs; what could be learnt by Foundation doctors, how the learning would be supervised and by whom in community settings while exploring the barriers and facilitating factors for taking these trainees.

Methods

Interviews

We interviewed two groups of informants: those currently providing community-based teaching (established undergraduate medical education providers); and those that could provide teaching in ICEPs. These participants were identified through a web based survey and a snowballing approach to the research team's contacts.

We conducted semi-structured interviews. We developed an interview schedule which was informed by experience of the steering group in recruiting ICEPs and underpinned by the relevant literature.

Qualitative data analysis

We used a thematic analysis approach to the interview data analysis. Initial themes for coding were generated deductively from the research questions with further themes produced iteratively from within the transcripts with 2 researchers generating themes independently (NK and VC). An inter-rater coding agreement of over 85% was achieved. *NVivo 10* was used to manage and organise data. Three researchers (SP, NK and VC) held two data workshops to organise the coding themes into a coding framework. The results are illustrated with verbatim quotes.

Ethics

This study was reviewed as a service evaluation and received ethical approval from the UCL Joint Research Office.

Results

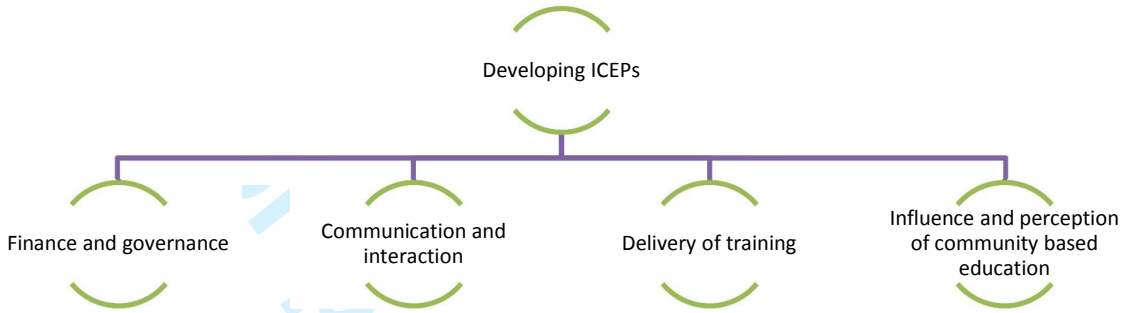
We conducted nine in-depth interviews with a range of stakeholders. Interviews were carried out face to face and over the phone, and lasted between 30 to 90 minutes.

Table 1: Description of interviewees

Identifier	Organisation type	Experience of community teaching	Learning type and work context
Participant 1	Undergraduate (UG) medical school and postgraduate GP training	Yes	Organisation of undergraduate and postgraduate (PG) GP training rotations (VTS)
Participant 2	UG medical school	Yes	Undergraduate and organisation of community placements
Participant 3	Postgraduate Deanery	Yes	PG trainees
Participant 4	UG medical school	Yes	UG
Participant 5	UG medical school	Yes	UG
Participant 6	Prison service	Limited	UG
Participant 7	Tertiary hospital	Yes	PG trainees
Participant 8	Community medical organisation	Limited	PG trainees
Participant 9	Community medical organisation- reproductive care	Limited	Specialist PG trainees

The coding framework which was developed involved four main categories (see Figure 1)

Figure 1: Coding framework for facilitative aspects and barriers for training in the community setting



Finance and governance

Interviewees highlighted finance and governance as key issues when taking on trainees in community settings. These included financial support for trainers, logistical and administrative support, indemnity, promoting safety, governance, time management, quality assurance and service specific logistical constraints.

Financial issues were seen as an obstacle to most interviewees, but not all.

> *"...anybody who's considering doing any kind of community placement… resource is really important ...money and the staff ...if you cut corners … it's untenable to be honest.*
>
> (Participant 2)

Extra funding was seen by some as essential to pay for trainers and administrative support while conversely, some organisations saw training as 'part of their role' and consequently not requiring extra financial support.

The interviewees felt that logistical/administrative issues were a considerable challenge and that having the structure and organisation was key to successful training programmes. Possible solutions included leaving the responsibility for organising the day to day attendance at placements with trainees (as seen with some UG placements), increasing their responsibility as learners and reducing administration. Examples of facilitative behaviours included trainees using tools such as websites to sign up for community sessions.

We had previously identified trainees' indemnity issues as a potential obstacle to ICEPs, however, most of the interviewees did not see this as an issue, as trainees were expected to be indemnified by their own organisation:

> *..'their [trainee] contract remains with the host trust [so] they're indemnified by the host trust. We will though need to be much more explicit about this and make sure this is properly tested'*
>
> (Participant 3)

This stance would suggest ICEPs see themselves as an "add on" to trainees' hospital programmes and not autonomous providers.

ICEPs were concerned about trainees working outside their established context. Safety of trainees was raised, with issues such as needle stick injury and patient-trainee safety, for example in homeless shelters. However, contrasting views were obtained from an informant in the prison settings which already had established safety procedures for all staff.

Identity and the teacher's agency to bring about change was raised:

> *"I can't suddenly say to my employers well I'm not going to do a clinic because I'm going to be sitting in with a junior doctor…I don't have the managerial say-so to say that"*
>
> (Participant 6)

suggesting high level managerial engagement will be required to facilitate ICEPs.

Communication and interactions

a. Establishing and maintaining contact with organisations

Establishing links and maintaining contact with community organisations was viewed as a facilitative factor, working best when the central organisation was able to establish and sustain a good relationship with tutors and supervisors, with emphasis on having a named contact in the community organisation, however, the transient nature of many educational administrator posts made this difficult.

b. Patient interactions and patient-centred values

Interviewees described the value of community placements in terms of fostering learner - patient interactions and patient-centred values; and learning about the 'real world'.

> *[Trainees] are able to make connections ... they are able to meet … the real person and hear their story and get past the easy stereotypes or ideas of passive receivers of services. … see(ing) … health issues in context.*

(Participant 2)

Trainees in this environment also developed professional competencies in learning to manage complexity, managing clinical conditions in combination with factors such as drug use.

> *(in) the prison...there is a huge potential for education and for experience for junior doctors working with a particularly disadvantaged group of people who have very severe health needs*

(Participant 6)

Facilitating trainee – patient interaction was perceived by some of the interviewees as a key purpose of learning in the community, gaining new perspectives on how to tailor care to complex patients; one described a 'co-production' community project:

> *[The trainee] took this young kid off to McDonald's and ...got them thinking creatively... asking them about their experience of sickle cell and what would make that better. Actually what came out … yeah the pain was terrible… far more of a problem to them was stigma …. The scales fall off their eyes, so they realise the gap between what they're (actually) providing … & they think they're providing.*

(Participant 7)

This reflected a strong orientation amongst interviewees that instilling patient-centred values and facilitating the interaction between trainees and patients are valuable aspects of community placements. Respondent also highlighted that developing "hard-nosed" clinical acumen from learning to manage challenging medical conditions was still at the heart of many potential community placements.

> *[Doctors] Don't often get the opportunity to have training within the NHS, because a lot of services have been outsourced to organisations like us*. (Participant 9)

Trainee-patient interactions also had a beneficial impact for patients as trainees often had more time with clients so the encounter had a more therapeutic value:

> *Patients like that chance to talk to a student about their care and their problems ... the student can spend an hour with them... And it makes them feel better and gets more information.'*

(Participant 1)

Difficulties sometimes arose when trainees worked with marginalised groups, emphasising the need for appropriate pre-placement training and trainee support:

> *Work(ing) with very socially stigmatised or disadvantaged groups…there is potential if medical students or trainee doctors going in there with poor attitudes or skills... for it to be not a positive experience. ..ideally they need to be supported… before they go in.'*

(Participant 2)

Delivery of learning and teaching

a. Supervision

Supervision was viewed as a critical component to making successful placements. Having a clinical supervisor in-situ, created a safe learning experience, and recognised the boundaries of trainee expertise.

> *Close and senior enough supervision is important. Because this is uncharted territory …. quite often … difficult for a foundation trainee to…able to contribute ...in these settings.*
>
> (Participant 7)

Training for community trainers elicited a range of views, an undergraduate teaching faculty interviewee described,

> *Sometimes [community staff] don't feel trained or able to teach medical students... a lot of support is often needed.*
>
> (Participant 4)

When we discussed the role of the clinical supervisors and trainers, and multidisciplinary staff taking on these roles; one interviewee described the legitimacy of multidisciplinary trainers:

> *Interviewer: Were the paramedics able to sign the students off for clinical skills?*
> *Respondent: No we didn't get involved in that because we thought that would be 1) unfair, and 2) probably legally problematic.'*
>
> (Participant 5)

There was variability of views about the clinical role of the community trainers and supervisors, with many informants feeling that although trainers might not always be able to sign off competencies if they were not a doctor, they could be legitimate supervisors of trainees – especially when they were the usual clinician in that context (e.g. Ambulance paramedic). While some valued the contextual knowledge of the professional, others favoured the tribal identity of the teacher:

> *[The supervisor should be] a qualified health professional who cares really… interested in their learning … if they (students) have got something to learn from them.*
>
> (Participant 1)

Contrasting with the view that supervisors should be exclusively doctors

> *No. It's a real definite no.. the nominated clinical supervisor I think should always be a doctor. …I think it carries more risk if you do it (supervision) in the community setting.*
>
> (Participant 3)

and so if a doctor is not present in the ICEP setting on a daily basis, as is often the case in many community health providers, this produces operational tensions for potential ICEPs.

Once community placements were set in place, it was viewed as important to maintain a support structure for clinical supervisors and trainers.

b. Models for organising ICEP placements

Participants discussed a range of models for teaching in community placements including project-based learning, blended learning (8) and 'hub and spoke' models.

> *Actually 4 months in an urgent care centre (UCC) is not a particularly good …experience. Split it – make it integrated … increasing the value of the programme… in an UCC... you see how you prevent people coming to hospital…in an acute medical unit you're seeing the people coming to hospital – I think is a good learning experience*
>
> *(Participant 3)*

Setting up new ICEPs requires time and commitment. Tensions were identified within existing organisational infrastructure between service delivery and teaching:

> *It would be impossible to properly mentor a junior doctor… it would be a great training experience for doctors, but I cannot imagine how we could get sufficient time …so that they weren't feeling completely out of their depth.*
>
> (Participant 6)

Experienced providers mentioned the importance of piloting and evaluating:

> *What I have learnt is that you have to test these things out. …it's been so helpful and we've adapted things as we've gone along because of our experiences.*
>
> *(Participant 7)*

c. Peer learning opportunities

Peer learning was viewed as a positive way to promote learning.

> *The students are always in pairs… I think a really good model because... they've got each other. But also it means they can experience the same situation and have different responses to it and come away and talk about that.*
>
> *(Participant 2)*

Emphasising the importance of debriefing sessions, allowing trainees to maximise learning through reflection on each different experience.

d. Learning agendas

It was felt important to consider the learning objectives at an early stage in order to help trainees make links between their learning and their community experiences,

> *It isn't just about filling their diary or the timetable. ... sometimes students will say.. when they're graduating 'I can see the link now, but you should have told us that at the time'.*
>
> *(Participant 4)*

Influence and perception of community-based education

a. Attitudes to community placements

Participants identified a need to change trainees' views about community placements with some perceiving community learning opportunities as supplementary rather than integral to their education. Others noted that community placements were essential to provide learning experiences that were not available in the mainstream NHS training

> *They get to observe...clinical care that they wouldn't otherwise see if they're …within the hospital. …they also learn something about the complexity of navigating the system, the importance of joined up working, the importance of good communication…*
>
> *(Participant 7)*

Seeing community placements as 'non-essential' was however seen as a barrier, especially if other healthcare professionals also devalued community programmes:

> *Understanding by all concerned that community placements are an integral part of the learning, not an add-on optional extra...students .. will understand it better if teachers .. reinforce it…if the consultant surgeon says 'oh why are you going to GP tomorrow?' … that devalues …our programme.*
>
> *(Participant 1)*

One of the interviewees expressed concerns about the value of the available knowledge in the community setting:

> *We [don't want to] put people into inappropriate training posts that they feel they're not learning. ..and we discover there's a lot of unhappy foundation doctors. And my worry …and they start saying to us 'Well what am I doing here?' … you pay me for 4 months to go and put up posters for a charity organisation and sit and dole out contraceptives... Is that really going to advance me into my speciality training?'*
>
> *(Participant 3)*

Placement organisers recognised the issues of fragmentation and a lack of clarity of learning aims. Supervision from someone with detailed knowledge of the learning objectives was noted to mitigate against the threat to coherency.

> *Essentially I think what we've designed is something where we're linking up a trainee with somebody .. who has quite a lot of experience of integrated care … so I can call that a 'faculty' … and then a local champion, … who has an interest in supporting this.*
>
> *(Participant 7)*

b. Community advocates

Successful placements required community-based advocates who were motivated about teaching and exposing trainees to marginalised client populations

> *[The trainers are] "often ...working with quite socially excluded or disadvantaged individuals…I think therefore they are really keen to contribute to medical education... just because they can see that it's part of a whole".*
>
> *(Participant 2)*

c. Definition of generalist or specialist knowledge

There were a range of views on community training and whether available knowledge was generalist or specialist. One participant highlighted the specialist nature of community-based knowledge in family planning clinics and termination of pregnancies:

> *so if we want to have a workforce in the future we need to engage with providing training. ..to try to bring those trainees into our clinics and teaching them how to do procedures*
>
> (*Participant 9)*

More often, community placements were anticipated to provide generalist knowledge. Participants felt that community placements both championed and provided learning opportunities for generalist skills

> *You're training less people with a general approach while.. an ageing society where often patients do have problems in more than one speciality... I think a return to generalism is welcome... the lines between health care and social care are getting ever more difficult to draw. ..and I think students learn really well from that kind of experience... (Participant 1)*

d. Benefits of learning in the community

Interviewees described the additional learning opportunity in the community such as working with uncertainty and limited resources:

It's about learning how to work in an area that has restricted resources .. information.. time.. knowledge, .. certainty. I think they learn … to improvise, to be innovative in how they approach their work. Working very independently … you can learn confidence and skills.

(Participant 8)

Discussion

Summary of main findings

We conducted a qualitative interview study in order to explore the potential role of ICEPs for doctors on the Foundation programme. The study explored the barriers and facilitating factors for taking on trainees in these settings. The main themes included finance and governance, communication and interactions, the delivery of teaching, and the influence and perception of community.

Many participants highlighted the value of learning opportunities in the community, including gaining generalist skills, seeing health issues in context, and learning about patient-centred care. These reflect the aim of the 'Broadening' report in developing skills within the future NHS workforce.(1) Despite the perceived value of community placements, these interviews highlighted the institutional stigma inherent within medical education, and perceptions of community settings being less valued than acute hospital settings by medical trainees and some faculty. These issues need to be explored, addressed and communicated to trainees and faculty to try to change these perceptions.

Community experts indicated that the capacity to offer learning placements was dependent on the funding available, as without adequate funding there may be an impact on an organisation's ability to spend time developing and maintaining high quality placements; adequate funding will address many of the concerns about service-training tensions.

The sort of knowledge a trainee is expected to learn in the setting will have an impact on the success of ICEPs but this is dependent upon the services provided within that setting. The assumption that all community placements provide generalist knowledge might, however, be problematic in specialist services such as drug and alcohol clinics. While generalism might include features such as multi-morbidity, it could be regarded as a particular approach to patients such as patient centredness; the latter perhaps being a more generic feature of ICEPs.

Additionally organisational legitimacy may be an issue if community placements and supervisors are not empowered to assess and rate trainees, such as paramedics signing off a trainee's basic life support skills. This would have an impact on training capacity (if all work based assessments had to be done elsewhere) and credibility with trainees, if supervisors are of differing status.

Strengths & Limitations

This is to our knowledge the first study of key opinion makers in this field of potential community hosts for medical education. The results highlight the very real obstacles to delivery of the "Broadening the foundation" report. There are however limitations to our study; we conducted interviews with 9 respondents and caution is needed in interpreting the results. Our findings are subject to response bias, and are likely to over-represent the level of interest in hosting clinical trainees as the sample is a non-random sample of providers who may be more likely to respond positively than others, through their connections or associations with the research team.

Comparison with the existing literature

Many of the themes from this study have some are echoes in the literature including the Siggins-Miller (2012) literature review.(9) From the learner's perspective community placements can have substantial benefits such as fostering well rounded clinical competence and increasing student responsibility for patient care (10) although students may struggle to understand why they are not being taught or developing their skills in the acute hospital setting. From the patient and societal perspective, however, students may develop a deeper compassion and connection with patients. (11) From a health service perspective, students training in the community show a higher preparedness to work in teams.(11) These findings are echoed in our interviewees' responses about the value of community teaching and benefits to patients.

From the providers' perspective our findings echo concerns about the financial sustainability of these programmes, (10) particularly where there is a tension between teaching and service delivery. (12) Teaching is by necessity often opportunistic in community settings and structuring teaching is challenging, leading to concerns that the teacher's role is not always clearly defined. (10) Organising such learning activity is also administratively complex due to the distance between the centralised host educational institution and the community providers. Additionally, the smaller scale of community providers means that multiple placements often need to be organised to accommodate increasingly large cohorts of trainees.

Recommendations

Several recommendations for establishing successful community placements have emerged from our research. Piloting new programmes is essential to identify potential problems. Organisations should be encouraged to involve trainees in supporting service delivery (where appropriate). One possible solution for the administrative burden may through self-organisation of placements.

There is a need for champions of community-based teaching to motivate both trainees and supervisors about the value of community-based placements, which are often devalued compared to hospital placements. We recommend that in light of some of the prejudices about the useful learning opportunities available in the community (and also sometimes held by those in the community), discussions with experienced supervisors about the "real world" value of these skills occur. Trainees may need supported reflective space to consider the learning points from their placements.

Faculty development is required to maximise the supervisors' awareness of their trainees' needs and help them to develop appropriate teaching processes in these contexts. Associate trainer schemes have been successful in other parts of the UK and may provide a helpful model to enable more healthcare professionals take part in supervision. (13)

Implications for future research

An important gap in the knowledge regarding community placements in the UK is how learning takes place in non-traditional settings and ICEPs, in particular how teaching and training could benefit learners, supervisors and the community. (10) This has the potential to inform policy about the ideal desired length and mode of engagement in future community placements.

Declarations

a. Contributorship statement- All authors fulfil BMJ open's contributorship criteria.

b. Competing interests- None.

c. Funding- This project was funded by Health Education North Central and East London (HENCEL).

d. Data sharing statement - Transcripts and coding are available on request.

Authors' contribution

Ann Griffin PI and grant holder- oversaw delivery of the project involved in project design and project analysis and write up

Melvyn Jones- co applicant involved in project design and write up of the project, lead for article submission

Sophie Park co applicant, involved in project design, lead on qualitative analysis and project write up

Joe Rosenthal co applicant involved in project design and contributed to generating sampling frame and involved in write up

Nada Khan undertook qualitative interviews and qualitative analysis and involved in write up

Vasiliki Pyrkos undertook qualitative interviews and qualitative analysis and involved in write up

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SRQR checklist

S1	Title	Exploring provision of Innovative Community Education Placements (ICEPs) for junior doctors in training
S2	Abstract	Background Medical education in community settings is an essential ingredient of all doctors' training and a key factor in recruiting GPs. Health Education England has recommended in its "Broadening the Foundation" report, that 80% of all junior doctors complete a 4 month community placement as part of their Foundation programme. Objective The objective was to explore how community based training of junior doctors might be expanded by identifying possible "innovative community education placements" (ICEPs) and examining opportunities and barriers to these developments. Setting and participants Stakeholders in UK Community health care providers Two types of informants were sampled; one group were experienced in delivering community-based undergraduate education, while the other worked in community settings that had not previously trained doctors. Methods This was a qualitative study where semi-structured interviews were undertaken and themes were generated deductively from the research questions, and iteratively from transcripts. Results Nine participants from a range of bodies that could provide or organise placements were interviewed. Themes identified were practicalities such as "finance & governance", "communication & interaction", "delivery of training" and "perceptions of community". ICEPs were willing to train Foundation doctors. However concerns were raised that large numbers and inadequate resources could undermine the quality of educational

		opportunities, and even cause reputational damage. Organisation was also seen as a challenge, which might be best met by placing some responsibility with trainees to manage their placements. ICEP providers agreed that defined service contribution by trainees was required to make placements sustainable, and enhance the learning opportunities. ICEPs stated the need for positive articulation of the learning value of placements to learners and stakeholders. Conclusions This study highlighted the opportunities to gain both specialist and generalist knowledge in ICEPs from diverse clinical teams and patients. We recommend in conclusion ways of dealing with some of the perceived barriers to training.
S3	Problem formulation	The recent report by UK NHS Health Education England (HEE), 'Broadening the Foundation Programme', has highlighted the need for medical trainees to gain a wider experience of community health care and recommends that at least 80% of Foundation doctors should undertake a four month community or integrated placement from August 2015 rising rapidly to 100% in August 2017. These policy changes will have considerable impact on community placements. The HEE report's authors have therefore urged educators to think more widely about educational settings and suggested the notion of innovative community-based placements.
S4	Purpose or research question	We aimed to understand how training for junior doctors may be further extended in to the community by identifying potential placements in non-traditional or ICEPs; what could be learnt by Foundation doctors, how the learning would be supervised and by whom in community settings while exploring the barriers and facilitating factors for taking these trainees.
S5	Qualitative approach and research paradigm	Semi-structured interviews with a thematic analysis approach to the interview data analysis
S6	Researcher characteristics and reflexivity	PI: Ann Griffin, who works in the UCL Medical School Senior researchers: Dr Melvyn Jones, Dr Sophie Park and Dr Joe Rosenthal, all GPs who work in an academic unit of Primary Care at UCL.

		Interviewers: Dr Nada Khan and Dr Vasiliki Chrysikou. Dr Khan was a final year medical student and research assistant at UCL at the time of the interviews. Dr Chrysikou is a sociologist and qualitative researcher.
S7	Context	The context of this study was the recent Health Education England report described above. The interviewees were interviewed in their own environment, and were asked questions about their experiences with community based placements and thoughts on how to improve community placements in the future.
S8	Sampling strategy	We interviewed two groups of informants: those currently providing community-based teaching (established undergraduate medical education providers); and those that could provide teaching in ICEPs. These participants were identified through a web based survey and a snowballing approach to the research team's contacts.
S9	Ethical issues pertaining to research subjects	This study was reviewed as a service evaluation and received ethical approval from the UCL Joint Research Office. We did not identify any substantial ethical issues arising from conducting this research study.
S10	Data collection methods	Dr Nada Khan and Dr Vasiliki Chrysikou conducted one-to-one interviews with participants in the summer of 2014. Interviews were carried out face to face and over the phone, and lasted between 30 to 90 minutes.
S11	Data collection instruments and technologies	We developed an interview schedule which was informed by experience of the steering group in recruiting ICEPs and underpinned by the relevant literature. Interviews started with an open-ended question asking the participants to describe their previous experiences of taking park in ICEPs. Interviews were audio recorded using a digital recorder, and these digital files were transcribed by a 3rd party transcriber.
S12	Units of study	We conducted nine in-depth interviews with a range of stakeholders. The participants had a range of experience of community teaching, and worked for undergraduate medical schools, postgraduate deaneries, community medical organisations, a prison service and a tertiary hospital.
S13	Data processing	Interviews were audio recorded using a digital recorder, and these digital files were transcribed by a 3rd party transcriber.
S14	Data analysis	We used a thematic analysis approach to the interview data analysis. Initial themes for

		coding were generated deductively from the research questions with further themes produced iteratively from within the transcripts with 2 researchers generating themes independently (NK and VC). An inter-rater coding agreement of over 85% was achieved. NVivo 10 was used to manage and organise data. Three researchers (SP, NK and VC) held two data workshops to organise the coding themes into a coding framework. The results are illustrated with verbatim quotes.
S15	Techniques to enhance trustworthiness	We conducted an inter-rating coding to assess the concordance in generating themes arising from the data.
S16	Synthesis and interpretation	We developed a coding framework which involved four main categories for facilitative aspects and barriers for training in the community setting: finances and governance, communication and interaction, delivery of training, and the influence and perception of community based education.
S17	Links to empirical data	The paper includes quotations from research participants to illustrate the findings above.
S18	Integration with prior work, implications, transferability and contributions to the field	We conducted a qualitative interview study in order to explore the potential role of ICEPs for doctors on the Foundation programme. The study explored the barriers and facilitating factors for taking on trainees in these settings. The main themes included finance and governance, communication and interactions, the delivery of teaching, and the influence and perception of community. Themes from this study are linked to the literature including benefits of community placements, the financial sustainability of programmes, tensions between teaching and service delivery and the teacher's roles. These are described in detail in the discussion under the section 'Comparison with the existing literature'.
S19	Limitations	We conducted interviews with nine respondents and caution is needed in interpreting the results. Our findings are subject to response bias, and are likely to over-represent the level of interest in hosting clinical trainees as the sample is a non-random sample of providers who may be more likely to respond positively than others, through their connections or associations with the research team.
S20	Conflicts of interest	None.

S21	Funding	This project was funded by Health Education North Central and East London (HENCEL); an NHS Education organisation.

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Exploring provision of Innovative Community Education Placements (ICEPs) for junior doctors in training-a qualitative study

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Exploring provision of Innovative Community Education Placements (ICEPs) for junior doctors in training- a qualitative study

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Abstract

Objective

Medical education in community settings is an essential ingredient of doctors' training and a key factor in recruiting GPs. Health Education England's report "Broadening the Foundation" recommends foundation doctors complete 4 month community placements. While Foundation GP schemes exist; other community settings, are not yet used for postgraduate training. The objective of this study was to explore how community based training of junior doctors might be expanded into possible "innovative community education placements" (ICEPs), examining opportunities and barriers to these developments.

Design

A qualitative study where semi-structured interviews were undertaken and themes were generated deductively from the research questions, and iteratively from transcripts.

Setting UK community health care

Participants

Stakeholders from UK Community health care providers and undergraduate GP & community educators.

Results

Nine participants were interviewed; those experienced in delivering community-based undergraduate education, and others working in community settings that had not previously trained doctors. Themes identified were practicalities such as "finance & governance", "communication & interaction", "delivery of training" and "perceptions of community".

ICEPs were willing to train Foundation doctors. However concerns were raised that large numbers and inadequate resources could undermine the quality of educational opportunities, and even cause reputational damage. Organisation was seen as a challenge, which might be best met by placing some responsibility with trainees to manage their placements. ICEP providers agreed that defined service contribution by trainees was required to make placements sustainable, and enhance learning. ICEPs stated the need for positive articulation of the learning value of placements to learners and stakeholders.

Conclusions

This study highlighted the opportunities for foundation doctors to gain both specialist and generalist knowledge in ICEPs from diverse clinical teams and patients. We recommend in conclusion ways of dealing with some of the perceived barriers to training.

Article summary

Study strengths include

- novel findings from previously unheard informants in this field
- recruiting from a wide range of non-traditional learning organisations among UK community health providers.

Limitations include

- Possible responder bias based on sampling existing institutional contacts
- Relatively small numbers of participants, although undergraduate community educators can give insights from a larger numbers of organisations.

Background

In the UK Foundation doctors (junior doctors within 2 years of qualifying) largely are trained in hospitals. The recent report by UK NHS Health Education England (HEE), 'Broadening the Foundation Programme', has highlighted the need for medical trainees to gain a wider experience of community health care (1) and recommends that at least 80% of Foundation programme (FP) doctors should undertake a four month community or integrated placement from August 2015 rising rapidly to 100% in August 2017.

The proposed expansion of community-based placements aims to refocus attention and develop foundation doctors who are more knowledgeable about the range of settings for healthcare, understand how teams facilitate seamless patient care, work across interfaces, and develop flexible approaches to clinical provision. (1) There are calls for all doctors to develop more generalist skills, to cope with rising co-morbidity amongst ageing populations (2). Persuading more entrants to General Practice has also risen up the UK political agenda in 2015. (3) However, general practice, the predominant sites for UK community-based education is at capacity. (4) The HEE report's authors urge educators to think more widely about educational settings and suggested innovative community-based placements.

Healthcare education has historically tended to focus on knowledge, particularly on 'science' content.(5) Most early postgraduate training of UK doctors still happens in hospital settings although FPs now offer a proportion of trainees a placement in general practice (18% of F1 and 42% of F2 posts).(1) However, more undergraduate medical education is now community based; a change to address students' educational needs (gaining a better understanding of disease, its prevalence and management), within the context of increased student numbers and shorter patient hospital stays.(6) These changes potentially broaden the types of knowledge valued by faculty and learners.

Definitions of community-based placements vary and are contested. The 'Broadening' report describes them as:

> 'primarily based in a community setting. The learning outcomes will .. include the care of the total patient .. long-term conditions and the increasing role of community care.' (1)

Community-facing programmes are those based within an acute setting which offer a mixture of community and community-facing care. Hays (7) offers "A pan-community approach includes all possible health care facilities as potential sites of teaching".

We defined “Innovative Community Education Placements” (ICEP) providers as those working in settings where education for healthcare professionals for and specifically postgraduate medical trainees is currently not a mainstream activity of these organisations.

We aimed to understand how training for junior doctors may be further extended in to the community with the objectives of understanding; what could be learnt by FP doctors, exploring how they might be supervised, while exploring the barriers and facilitating factors for taking these trainees.

Methods

Interviews

Post Graduate (PG) community-based placements are being proposed as hosts for foundation doctors, yet there is little existing experience of community-based PG training (outside of general practice). We therefore looked to draw on the experience of undergraduate GP educators – where placements already exist. We therefore conducted semi-structured interviews (see interview schedule appendix 1) with 2 groups of informants: those currently providing community-based teaching identified by the research team and the commissioners as potential key informants; and those that could provide teaching in ICEPs. These participants were identified through a widely disseminated web based survey of potential providers and a snowballing approach of the research team's contacts. Survey respondents were invited to be interviewed.

The interview schedule was developed and informed by experience of the steering group in recruiting ICEPs and underpinned by the relevant literature to explore what an ICEP provider might look like, by exploring UG experience and perceived barriers and positive factors for potential providers.

Qualitative data analysis

Semi-structured interviewing allows respondents to shape the interview process, treats them as experts, and is designed to uncover their own versions of the world while permitting researchers to reach a greater depth than survey-based methods.(8) These features were particularly important both when attempting to draw upon the expertise of key respondents on a specialised domain of knowledge, and also when attempting to explore novel areas. We used a *thematic analysis* approach to data analysis, which allowed for emerging themes, not on our original topic guide, and comparisons made between participant responses.(9) Initial themes for coding were generated deductively from the research questions with further themes produced iteratively from within the transcripts, with 2 researchers generating themes independently (NK and VC). An inter-rater coding agreement of over 85% was achieved. *NVivo 10* was used to manage and organise data. Three researchers (SP, NK and VC) held 2 data workshops to organise the coding framework. The results are illustrated with verbatim quotes.

Ethics

This study was reviewed as a service evaluation and received ethical approval from the UCL Joint Research Office.

Results

We received 45 respondents to the snowball survey (from a targeted initial sample of 126 organisations which do not provide placements to junior doctors). All respondents indicating a willingness to be interviewed, were included in this study, which generated nine in-depth interviews from a range of stakeholders. Interviews were carried out face to face and over the phone, lasting between 30 to 90 minutes (see table 1 about here) .

Table 1: Description of interviewees

	Organisation type	Currently (FP) training	Level of trainees (if any)	Placement experience
Participant 1	UG Community based teaching lead traditional metropolitan medical school (1)/ GP training (GPT) PG course organiser for acute trust	No	Medical students (MS) (all years)/ GPT	MS / GPT
Participant 2	MS (school 1) community placement organiser	No	MS (year 1&2)	GP, community services eg 3rd sector provider - Age UK, youth projects, drugs/ alcohol misuse services
Participant 3	Director of a FP school/ Deanery (linked to traditional metropolitan Medical School 3)	Yes	FP doctors	Private hospital & health providers, Urgent Care Centres, FP, community post in Acute trusts (community paediatrics), PG GP placements, 3rd sector providers e.g. MacMillan Nurses.
Participant 4	Community placement lead Metropolitan traditional medical school (3) Public health/health promotion lead	No	MS (all years)	Sickle cell organisation, prisons, Homeless charitable providers, mental health 3rd sector providers, local government sport centres (exercise on referral programmes), services (Royal Navy), asylum health provider (3rd sector), secure mental health provider, sexual health (genitourinary medicine, contraception), Local authority and public health.
Participant 5	Inter-professional education lead - medical (traditional medical school (4))/& University providing other health care students education eg Nursing, Paramedics	No	MS/ Nurses/ Paramedics	Pre- hospital care Ambulance services (inc Helicopter services)/probation services/schools
Participant 6	Prison doctor	No	None	Occasional GPT /MS

Participant 7	PG Training programme director paediatric role with Specialist Community service	No	Paediatrics Speciality Training (PST) doctors	Foundation docs GP and PST with specialist services e.g. community sickle cell services
Participant 8	GP out of hours provider (non NHS social enterprise) Non metropolitan location	No	GPT, some non-medical training eg paramedics / nurses	Potential for non GPT e.g. specialists/ FP docs in GP out of hour settings, patients homes, UCC, walk in clinics
Participant 9	Pregnancy advisory service (3rd sector)	No	Gynaecology trainees	Potential for FP/MS generic sexual health skills, & specific gynaecology/ surgical skills

The coding framework included 4 main categories (see Figure 1 about here)

Finance and governance

Interviewees highlighted finance and governance as key issues when taking on trainees. These included financial support for trainers, logistical and administrative support, indemnity, promoting safety, governance, time management, quality assurance and service specific logistical constraints.

Financial issues were seen as an obstacle to most interviewees, but not all.

> *"...anybody who's considering doing any kind of community placement… resource is really important ...money and the staff ...if you cut corners … it's untenable to be honest.*
>
> (Participant 2)

Extra funding was seen by some as essential to pay for trainers and administrative support while conversely, some organisations saw training as 'part of their role' and consequently not requiring extra financial support.

The interviewees felt that logistical/administrative issues were a considerable challenge and that having the appropriate structure and organisation was key to successful training programmes. Possible logistical solutions included leaving the responsibility for organising the day to day attendance at placements with trainees (as with some UG placements), increasing their responsibility as learners and reducing administration. Examples of facilitative behaviours included trainees using tools such as websites to sign up for community sessions.

We had previously identified trainees' indemnity issues as a potential obstacle to ICEPs, however, most of the interviewees did not see this as an issue, as trainees were expected to be indemnified by their own organisation:

> *..'their [trainee] contract remains with the host trust [so] they're indemnified by the host trust. We will ..need to be much more explicit about this and make sure this is properly tested'*
>
> (Participant 3)

This stance would suggest ICEPs see themselves as an "add on" to trainees' hospital programmes and not autonomous providers.

ICEPs were concerned about trainees working outside their established context. Safety of trainees was raised, with issues such as needle stick injury and patient-trainee safety, for example in

homeless shelters. However, contrasting views were obtained from an informant in the prison settings which already had established safety procedures for all staff.

Identity and the teacher's agency to bring about change was raised:

> *"I can't suddenly say to my employers well I'm not going to do a clinic because I'm going to be sitting in with a junior doctor…I don't have the managerial say-so to say that"*
>
> (Participant 6)

suggesting high level managerial engagement will be required to facilitate ICEPs.

Communication and interactions

a. Establishing and maintaining contact with organisations

Establishing links and maintaining contact with community organisations was viewed as a facilitative factor, working best when the central organisation was able to establish and sustain a good relationship with tutors and supervisors, with emphasis on having a named contacts, however, the transient nature of many educational administrator posts made this difficult.

b. Patient interactions and patient-centred values

Interviewees described the value of community placements in terms of fostering learner - patient interactions and patient-centred values; and learning about the 'real world'.

> *[Trainees] are able to make connections ... they are able to meet … the real person and hear their story and get past the easy stereotypes or ideas of passive receivers of services. … see(ing) … health issues in context.*
>
> (Participant 2)

Trainees in this environment also developed professional competencies in learning to manage complexity, managing clinical conditions in combination with factors such as drug use.

> *(in) the prison...there is a huge potential for education and for experience for junior doctors working with a particularly disadvantaged group of people who have very severe health needs*
>
> (Participant 6)

Facilitating trainee – patient interaction was perceived by some of the interviewees as a key purpose of learning in the community, gaining new perspectives on how to tailor care to complex patients; one described a 'co-production' community project:

> *[The trainee] took this young kid off to McDonald's and ...got them thinking creatively... asking them about their experience of sickle cell and what would make that better. Actually what came out … yeah the pain was terrible… far more of a problem to them was stigma ….*

The scales fall off their eyes, so they realise the gap between what they're (actually) providing … & they think they're providing.

(Participant 7)

This reflected a strong orientation amongst interviewees that instilling patient-centred values and facilitating the interaction between trainees and patients are valuable aspects of community placements. Respondents also highlighted that developing "hard-nosed" clinical acumen from learning to manage challenging medical conditions was still at the heart of many potential community placements.

[Doctors] Don't often get the opportunity to have training within the NHS, because a lot of services have been outsourced to organisations like us. (Participant 9)

Trainee-patient interactions also had a beneficial impact for patients as trainees often had more time with clients so the encounter had a more therapeutic value:

Patients like that chance to talk to a student about their care and their problems ... the student can spend an hour with them... And it makes them feel better and gets more information.'

(Participant 1)

Difficulties sometimes arose when trainees worked with marginalised groups, emphasising the need for appropriate pre-placement training and trainee support:

Work(ing) with very socially stigmatised or disadvantaged groups…there is potential if medical students or trainee doctors going in there with poor attitudes or skills... for it to be not a positive experience. ..ideally they need to be supported… before they go in.'

(Participant 2)

Delivery of learning and teaching

a. Supervision

Supervision was viewed as a critical component to making successful placements. Having a clinical supervisor in-situ, created a safe learning experience, and recognised the boundaries of trainee expertise.

Close and senior enough supervision is important. Because this is uncharted territory …. quite often … difficult for a foundation trainee to…able to contribute ...in these settings.

(Participant 7)

Training for community trainers elicited a range of views, an UG teaching faculty interviewee described,

Sometimes [community staff] don't feel trained or able to teach medical students... a lot of support is often needed.

(Participant 4)

When we discussed the role of the clinical supervisors and trainers, and multidisciplinary staff taking on these roles; one interviewee described the legitimacy of multidisciplinary trainers:

Interviewer: Were the paramedics able to sign the students off for clinical skills?
Respondent: No we didn't get involved in that because we thought that would be 1) unfair, and 2) probably legally problematic.'

(Participant 5)

There was variability of views about the clinical role of the community trainers and supervisors, with many informants feeling that although trainers might not always be able to sign off competencies if they were not a doctor, they could be legitimate supervisors of trainees – especially when they were the usual clinician in that context (e.g. Ambulance paramedic). While some valued the contextual knowledge of the professional, others favoured the tribal identity of the teacher:

[The supervisor should be] a qualified health professional who cares really… interested in their learning … if they (students) have got something to learn from them.

(Participant 1)

Contrasting with the view that supervisors should be exclusively doctors

No. It's a real definite no.. the nominated clinical supervisor I think should always be a doctor. …I think it carries more risk if you do it (supervision) in the community setting.

(Participant 3)

and so if a doctor is not present in the ICEP setting on a daily basis, as is often the case in many community health providers, this will produce operational tensions for potential ICEPs and trainees.

Once community placements were set in place, it was viewed as important to maintain a support structure for clinical supervisors and trainers.

b. Models for organising ICEP placements

Participants discussed a range of models for teaching in community placements including project-based learning, blended learning (10) and 'hub and spoke' models.

Actually 4 months in an urgent care centre (UCC) is not a particularly good …experience. Split it – make it integrated … increasing the value of the programme… in an UCC... you see how you prevent people coming to hospital…in an acute medical unit you're seeing the people coming to hospital – I think is a good learning experience

(Participant 3)

Setting up new ICEPs requires time and commitment. Tensions were identified within existing organisational infrastructure between service delivery and teaching:

> *It would be impossible to properly mentor a junior doctor… it would be a great training experience for doctors, but I cannot imagine how we could get sufficient time …so that they weren't feeling completely out of their depth.*
>
> (Participant 6)

Experienced providers mentioned the importance of piloting and evaluating:

> *What I have learnt is that you have to test these things out. …it's been so helpful and we've adapted things as we've gone along because of our experiences.*
>
> *(Participant 7)*

c. Peer learning opportunities

Peer learning was viewed as a positive way to promote learning.

> *The students are always in pairs… I think a really good model because... they've got each other. But also it means they can experience the same situation and have different responses to it and come away and talk about that.*
>
> *(Participant 2)*

Emphasising the importance of debriefing sessions, allowing trainees to maximise learning through reflection on each different experience.

d. Learning agendas

It was felt important to consider the learning objectives at an early stage in order to help trainees make links between their learning and their community experiences,

> *It isn't just about filling their diary or the timetable. ... sometimes students will say.. when they're graduating 'I can see the link now, but you should have told us that at the time'.*
>
> *(Participant 4)*

Influence and perception of community-based education

a. Attitudes to community placements

Participants identified a need to change trainees' views about community placements with some perceiving community learning opportunities as supplementary rather than integral to their education. Others noted that community placements were essential to provide learning experiences that were not available in the mainstream NHS training

They get to observe...clinical care that they wouldn't otherwise see if they're …within the hospital. …they also learn something about the complexity of navigating the system, the importance of joined up working, the importance of good communication…

(Participant 7)

Seeing community placements as 'non-essential' was however seen as a barrier, especially if other healthcare professionals also devalued community programmes:

Understanding by all concerned that community placements are an integral part of the learning, not an add-on optional extra...students .. will understand it better if teachers .. reinforce it…if the consultant surgeon says 'oh why are you going to GP tomorrow?' … that devalues …our programme.

(Participant 1)

One of the interviewees expressed concerns about the value of the available knowledge in the community setting:

We [don't want to] put people into inappropriate training posts that they feel they're not learning. ..and we discover there's a lot of unhappy foundation doctors. And my worry …and they start saying to us 'Well what am I doing here?' … you pay me for 4 months to go and put up posters for a charity organisation and sit and dole out contraceptives... Is that really going to advance me into my speciality training?'

(Participant 3)

Placement organisers recognised the issues of fragmentation and a lack of clarity of learning aims. Supervision from someone with detailed knowledge of the learning objectives was noted to mitigate against the threat to coherency.

Essentially I think what we've designed is something where we're linking up a trainee with somebody .. who has quite a lot of experience of integrated care … so I can call that a 'faculty' … and then a local champion, … who has an interest in supporting this.

(Participant 7)

b. Community advocates

Successful placements required community-based advocates who were motivated about teaching and exposing trainees to marginalised client populations

[The trainers are] "often ...working with quite socially excluded or disadvantaged individuals…I think therefore they are really keen to contribute to medical education... just because they can see that it's part of a whole".

(Participant 2)

c. Definition of generalist or specialist knowledge

There were a range of views on community training and whether available knowledge was generalist or specialist. One participant highlighted the specialist nature of community-based knowledge in family planning clinics and termination of pregnancies:

> *so if we want to have a workforce in the future we need to engage with providing training. ..to try to bring those trainees into our clinics and teaching them how to do procedures*
>
> (*Participant 9)*

More often, community placements were anticipated to provide generalist knowledge. Participants felt that community placements both championed and provided learning opportunities for generalist skills

> *You're training less people with a general approach while.. an ageing society where often patients do have problems in more than one speciality... I think a return to generalism is welcome... the lines between health care and social care are getting ever more difficult to draw. ..and I think students learn really well from that kind of experience... (Participant 1)*

d. Benefits of learning in the community

Interviewees described the additional learning opportunity in the community such as working with uncertainty and limited resources:

> *It's about learning how to work in an area that has restricted resources .. information.. time.. knowledge, .. certainty. I think they learn … to improvise, to be innovative in how they approach their work. Working very independently … you can learn confidence and skills.*
>
> *(Participant 8)*

Discussion

Summary of main findings

The study explored the barriers and facilitating factors for taking on trainees in innovative settings. The main themes included finance and governance, communication and interactions, the delivery of teaching, and the influence and perception of community.

Many participants highlighted the value of learning opportunities in the community that reflected the aims of the 'Broadening' report, including gaining generalist skills, seeing health issues in context, and learning about patient-centred care.(1). Despite the anticipated value of community placements, these interviews highlighted the institutional stigma inherent within medical education, and perceptions of community settings being less valued than acute hospital settings by medical

trainees and some faculty. These issues need to be explored, addressed and communicated to trainees and faculty to try to change these perceptions.

Community experts indicated that the capacity to offer learning placements was dependent on the funding available, without which there may be an impact on an organisation's ability to spend time developing and maintaining high quality placements; adequate funding will address many of the concerns about service-training tensions.

The sort of knowledge a trainee is expected to learn in the setting will have an impact on the success of ICEPs but this is dependent upon the services provided within that setting. The assumption that all community placements provide generalist knowledge might, however, be problematic in specialist services such as drug and alcohol clinics. While generalism might include features such as multi-morbidity, it could be regarded as a particular approach to patients such as patient centredness; the latter perhaps being a more generic feature of ICEPs. Additionally organisational legitimacy may be an issue if community placements and supervisors are not empowered to assess and rate trainees, such as paramedics signing off a trainee's basic life support skills. This would have an impact on training capacity (if all work based assessments had to be done elsewhere) and credibility with trainees, if supervisors are of differing status.

Strengths & Limitations

This is to our knowledge the first study of key opinion makers in this field of potential community hosts for medical education. The results highlight the very real obstacles to delivery of the "Broadening the foundation" report. There are however limitations to our study; we conducted interviews with 9 respondents so caution is needed in interpreting the results. The aim of this study was not however to provide data saturation (11), but to present a broad range of views (12) derived from key informants both within community placement organisations as well as organisations which were not involved in this provision. Each informant should be regarded as representing a range of views from their organisation or for UG educators, as a proxy for a wide range of ICEPs, and not just as an individual.

Our findings are subject to response bias, and are likely to over-represent the level of interest in hosting clinical trainees as the sample is a non-random sample of providers who may be more likely to respond positively than others, through their connections or associations with the research team.

Comparison with the existing literature

Many of the themes from this study have some echoes in the literature including the Siggins-Miller literature review.(13) From the learner's perspective community placements can have substantial benefits such as fostering well rounded clinical competence and increasing student responsibility for patient care (14) although students may struggle to understand why they are not being taught or developing their skills in the acute hospital setting. From the patient and societal perspective, however, students may develop a deeper compassion and connection with patients. (15) From a health service perspective, students training in the community show a higher preparedness to work in teams.(15) These findings are echoed in our interviewees' responses about the value of community teaching and benefits to patients.

From the providers' perspective our findings echo concerns about the financial sustainability of these programmes, (14) particularly where there is a tension between teaching and service delivery. (16) Teaching is by necessity often opportunistic in community settings and structuring teaching is challenging, leading to concerns that the teacher's role is not always clearly defined. (14) Organising such learning activity is also administratively complex due to the distance between the centralised host educational institution and the community providers. Additionally, the smaller scale of community providers means that multiple placements often need to be organised to accommodate increasingly large cohorts of trainees.

Recommendations

Several recommendations emerge from our research.

- Piloting new programmes is essential to identify potential problems.
- Organisations should involve trainees in supporting service delivery (where appropriate).
- Self-organisation of placements may reduce administrative burden.
- Community-based teaching champions are needed
- trainee discussions with experienced supervisors about the "real world" value of community acquired skills should occur
- Faculty development is required to maximise the supervisors' awareness of their trainees' needs and help them to develop appropriate teaching processes.

Associate trainer schemes have been successful in other parts of the UK and may provide a helpful model to enable more healthcare professionals take part in supervision. (17)

Implications for future research

- How does learning takes place in non-traditional settings and ICEPs,
- How does training benefit learners, supervisors and the community. (14)
- What is the ideal length / mode of community placements.

Declarations

a. All authors fulfil contributorship criteria.

b. Competing interests- None.

c. This project was funded by Health Education North Central and East London (HENCEL).

d. Data sharing statement - No additional data available.

Authors' contribution

Ann Griffin - PI / grant holder- oversaw delivery of the project involved in project design, analysis & write up.

Melvyn Jones- co applicant, involved in project design and write up of the project, lead for article submission.

Sophie Park- co applicant, involved in project design, lead on qualitative analysis & project write up.

Joe Rosenthal - co applicant, involved in project design and contributed to generating sampling frame & involved in write up.

Nada Khan -undertook qualitative interviews & analysis and was involved in the write up.

Vasiliki Chrysikou undertook qualitative interviews & analysis and was involved in the write up.

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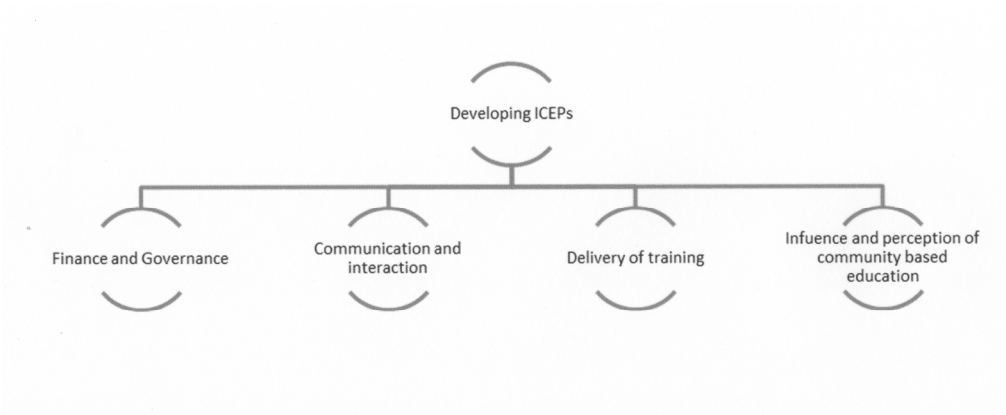

Figure 1: Coding framework for facilitative aspects and barriers for training in community settings
500x204mm (300 x 300 DPI)

Appendix 1

Innovative Community Education Project
Interview topic guide
(Participants possessing experience and/or expertise in arranging community-based placements)

Context / introduction:

- Consent and record interview
- Check timing
- We are coming to talk to you about training. We understand that at present you are involved in training and would like to hear about your training experiences

Opener: tell us about:
a) your experiences of being involved in training

Organisation as a training setting:

1. What are the different kinds of community placements that you have tried organising before for medical students and/or doctors?

2. Based on your experience of organising community placements could you tell me what you have found worked? (Prompt: What were the factors that facilitated organising community placements?)

3. What do you perceive as the challenges /barriers to organising community placements? What has not worked?

4. (If they have not mentioned any of the following: legal issues and indemnity, contractual requirements and payments, governance and resource issues, issues relating to doctors being supervised by a different type of professional): What about difficulties associated with (any of the previously mentioned issues).

5. In what ways do you envisage can such problems be overcome? What support do you think organizations would like to receive in order to be able to deal with such issues?

Roles:

6. In your organisation, how do you call /refer to patients or clients?

7. In your organisation, what sorts of interactions (clinical /other) do you have with patients / and or clients?

8. Do you think that your patient / client would accept / value interactions with trainees? Yes - why? No - why?

9. How do you perceive the role **of the medical trainee**? (in your organisation?)

10. What do you see as the benefits (potential advantages) and challenges (disadvantages) of this role (medical trainee) within your workplace setting?

11. How do you perceive the **role of the clinician (practitioner?)** in your setting? How do you think this might differ between your organisation and others that do not currently take trainees?

12. Do you perceive teaching as a core feature of clinicians' (practitioner?) roles?

Governance, supervision and finance:

13. How do you think governance issues in community work settings might facilitate or obstruct trainees participating in the learning setting?

14. Are there any funding issues which limit, or facilitate your involvement in training?

Involvement in community placement education

15. What do you think are the essential elements of a community placement?

16. What knowledge do you think is available for learning in a community work setting? Why do you think this is relevant/important (or not relevant/not important) to medical trainees?

17. What do you think are the unique elements of learning available in community settings (e.g. the nature of the patient population; interactions with patients; opportunities for participation in practice; available teaching)? How do you think learning in the community differs from other contexts for trainees' learning?

18. What do you think are the distinctions between 'traditional' community contexts (e.g. general practice) for learning and more 'innovative' settings for community placements? (Prompt: what do you perceive are the defining features of each?).

19. Do you feel that traditional and innovative placements offer generalist or specialist knowledge for learners?

20. How do you understand the concepts of generalist or specialist knowledge for learners?

Close:

21. Is there something else you would have liked me to ask or you find is relevant to talk about?

SRQR checklist

S1	Title	Exploring provision of Innovative Community Education Placements (ICEPs) for junior doctors in training
S2	Abstract	Background Medical education in community settings is an essential ingredient of all doctors' training and a key factor in recruiting GPs. Health Education England has recommended in its "Broadening the Foundation" report, that 80% of all junior doctors complete a 4 month community placement as part of their Foundation programme. Objective The objective was to explore how community based training of junior doctors might be expanded by identifying possible "innovative community education placements" (ICEPs) and examining opportunities and barriers to these developments. Setting and participants Stakeholders in UK Community health care providers Two types of informants were sampled; one group were experienced in delivering community-based undergraduate education, while the other worked in community settings that had not previously trained doctors. Methods This was a qualitative study where semi-structured interviews were undertaken and themes were generated deductively from the research questions, and iteratively from transcripts. Results Nine participants from a range of bodies that could provide or organise placements were interviewed. Themes identified were practicalities such as "finance & governance", "communication & interaction", "delivery of training" and "perceptions of community". ICEPs were willing to train Foundation doctors. However concerns were raised that large numbers and inadequate resources could undermine the quality of educational

		opportunities, and even cause reputational damage. Organisation was also seen as a challenge, which might be best met by placing some responsibility with trainees to manage their placements. ICEP providers agreed that defined service contribution by trainees was required to make placements sustainable, and enhance the learning opportunities. ICEPs stated the need for positive articulation of the learning value of placements to learners and stakeholders. Conclusions This study highlighted the opportunities to gain both specialist and generalist knowledge in ICEPs from diverse clinical teams and patients. We recommend in conclusion ways of dealing with some of the perceived barriers to training.
S3	Problem formulation	The recent report by UK NHS Health Education England (HEE), 'Broadening the Foundation Programme', has highlighted the need for medical trainees to gain a wider experience of community health care and recommends that at least 80% of Foundation doctors should undertake a four month community or integrated placement from August 2015 rising rapidly to 100% in August 2017. These policy changes will have considerable impact on community placements. The HEE report's authors have therefore urged educators to think more widely about educational settings and suggested the notion of innovative community-based placements.
S4	Purpose or research question	We aimed to understand how training for junior doctors may be further extended in to the community by identifying potential placements in non-traditional or ICEPs; what could be learnt by Foundation doctors, how the learning would be supervised and by whom in community settings while exploring the barriers and facilitating factors for taking these trainees.
S5	Qualitative approach and research paradigm	Semi-structured interviews with a thematic analysis approach to the interview data analysis
S6	Researcher characteristics and reflexivity	PI: Ann Griffin, who works in the UCL Medical School Senior researchers: Dr Melvyn Jones, Dr Sophie Park and Dr Joe Rosenthal, all GPs who work in an academic unit of Primary Care at UCL.

		Interviewers: Dr Nada Khan and Dr Vasiliki Chrysikou. Dr Khan was a final year medical student and research assistant at UCL at the time of the interviews. Dr Chrysikou is a sociologist and qualitative researcher.
S7	Context	The context of this study was the recent Health Education England report described above. The interviewees were interviewed in their own environment, and were asked questions about their experiences with community based placements and thoughts on how to improve community placements in the future.
S8	Sampling strategy	We interviewed two groups of informants: those currently providing community-based teaching (established undergraduate medical education providers); and those that could provide teaching in ICEPs. These participants were identified through a web based survey and a snowballing approach to the research team's contacts.
S9	Ethical issues pertaining to research subjects	This study was reviewed as a service evaluation and received ethical approval from the UCL Joint Research Office. We did not identify any substantial ethical issues arising from conducting this research study.
S10	Data collection methods	Dr Nada Khan and Dr Vasiliki Chrysikou conducted one-to-one interviews with participants in the summer of 2014. Interviews were carried out face to face and over the phone, and lasted between 30 to 90 minutes.
S11	Data collection instruments and technologies	We developed an interview schedule which was informed by experience of the steering group in recruiting ICEPs and underpinned by the relevant literature. Interviews started with an open-ended question asking the participants to describe their previous experiences of taking park in ICEPs. Interviews were audio recorded using a digital recorder, and these digital files were transcribed by a 3rd party transcriber.
S12	Units of study	We conducted nine in-depth interviews with a range of stakeholders. The participants had a range of experience of community teaching, and worked for undergraduate medical schools, postgraduate deaneries, community medical organisations, a prison service and a tertiary hospital.
S13	Data processing	Interviews were audio recorded using a digital recorder, and these digital files were transcribed by a 3rd party transcriber.
S14	Data analysis	We used a thematic analysis approach to the interview data analysis. Initial themes for

		coding were generated deductively from the research questions with further themes produced iteratively from within the transcripts with 2 researchers generating themes independently (NK and VC). An inter-rater coding agreement of over 85% was achieved. NVivo 10 was used to manage and organise data. Three researchers (SP, NK and VC) held two data workshops to organise the coding themes into a coding framework. The results are illustrated with verbatim quotes.
S15	Techniques to enhance trustworthiness	We conducted an inter-rating coding to assess the concordance in generating themes arising from the data.
S16	Synthesis and interpretation	We developed a coding framework which involved four main categories for facilitative aspects and barriers for training in the community setting: finances and governance, communication and interaction, delivery of training, and the influence and perception of community based education.
S17	Links to empirical data	The paper includes quotations from research participants to illustrate the findings above.
S18	Integration with prior work, implications, transferability and contributions to the field	We conducted a qualitative interview study in order to explore the potential role of ICEPs for doctors on the Foundation programme. The study explored the barriers and facilitating factors for taking on trainees in these settings. The main themes included finance and governance, communication and interactions, the delivery of teaching, and the influence and perception of community. Themes from this study are linked to the literature including benefits of community placements, the financial sustainability of programmes, tensions between teaching and service delivery and the teacher's roles. These are described in detail in the discussion under the section 'Comparison with the existing literature'.
S19	Limitations	We conducted interviews with nine respondents and caution is needed in interpreting the results. Our findings are subject to response bias, and are likely to over-represent the level of interest in hosting clinical trainees as the sample is a non-random sample of providers who may be more likely to respond positively than others, through their connections or associations with the research team.
S20	Conflicts of interest	None.

S21	Funding	This project was funded by Health Education North Central and East London (HENCEL); an NHS Education organisation.