

Evaluating the Programme for Integrated Child Health

Report 31st March 2017

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Acknowledgements: we would like to thank the PICH administrative team, project leads, mentors and trainees who supported this study.

Prepared for Health Education England

By UCL Medical School



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1. Executive summary

1.1 Background, aims and research questions

Improving child health depends on a rounded understanding of what constitutes good child health. Improving child health is not simply a matter of responding to clinical needs, but must involve the psychosocial dimension of care, and the ability to ensure not only that ill-health is treated, but that good health is maintained which includes attention to prevention. Delivering this holistic care depends on effective collaborative practices between hospital-based and community-based settings which have person-centred care as the driving force behind service design. Integration of child health services should offer an efficient approach which is better designed to improve child health, and a crucial aspect of this is effective communication between general practitioners and paediatricians. The Programme for Integrated Child Health (PICH) has been developed in anticipation of a continuing move towards integrating high quality holistic paediatric care and with the aim of preparing paediatric and general practice trainees for new ways of working in the delivery of child health in the community.

The aim of this evaluation was firstly to provide a synthesis of current research and perspectives about integrated care through a rapid review of the literature review. Then, subsequently to evaluate participants' and mentors' experiences of being involved in the PICH programme, to explore the following research questions:

1. How do course participants evaluate the PICH programme, in particular?
 - a) What are the participants' views about the structure of the programme?
 - b) What did the participants learn from the programme?
2. What are participants' views about integrated care and its impact on healthcare, in particular?
 - a) How do participants understand the concept of integrated care, its aims, and its importance?
 - b) What do participants say are the structural issues relevant to delivering integrated care?
3. How does the intraprofessional nature of the programme influence the participants?

1.2 Methodology

A rapid review of the literature was followed by a mixed methods empirical study in which 1:1 interviews and ethnographic observations were used to explore the experiences and perceptions of mentors, GPs and paediatric trainees involved in the programme.

1.2.1 Participant sampling framework and recruitment

The study population comprised trainees and mentors from Cohorts 1 and 2 of the PICH programme, which corresponded to the first and second years that the programme had run. All participants volunteered to take part in the study. The induction session from Cohort 3 was observed further research with that cohort was outside of the scope of this evaluation.

1.2.2 Data gathering

Three PICH programme sessions were observed and 23 one-to-one participant interviews took place. A semi-structured interview schedule guided all interviews and they were audio-recorded and subsequently transcribed verbatim by a professional stenographer.

1.2.3 Data analysis

Observation data and interview transcripts were subjected to thematic analysis. QSR NVivo 11© software was used to assist in the analysis and ensure inter-coder reliability. Data was analysed inductively from themes arising from the data but also deductively in response to the research questions.

1.2.4 Ethics

Ethical approval was granted by UCL Research ethics committee (Ref: 8949/001). Participants gave their consent verbally at the start of the interviews.

1.3 Results

1.3.1 Participants

Four teaching sessions were observed, three from cohort 2 and the induction session from cohort 3. One-to-one interviews were conducted with 23 participants.

1.3.2 Main findings

1.3.2.1 Programme evaluation

The PICH programme was perceived to be well run, worthwhile, and provided the desired benefits in terms of education and learning about how integrated care can be delivered. The observations and interviews both revealed the enthusiasm of participants, mentors and programme leads and this undoubtedly contributed to the supportive yet 'buzzing' atmosphere described by many of the course participants.

The induction session, the project website, the mentoring scheme, and the monthly seminars were all largely evaluated positively. There were some complications, for example, it was difficult for all trainees to attend all seminars due to busy work schedules. The induction was felt to be rather long and presentations, whilst of immense high quality, were perceived to be 'too good' and somewhat intimidating. Mentorship and support was appreciated by many of the trainees, both peers and mentors provided sources of influential advice. Some trainees felt that the mentoring was too open-ended and those who were unable to finalise their projects at the end of the year missed out on guidance. One critical component of the programme was the project. It caused both frustration and pleasure. Where barriers and delays were encountered, which derailed participants from submitting in a timely fashion, they often felt disappointment. However, many reflected later on the generic learning and the importance of the process. The projects gave participants a deep understanding of how using real data could influence traditional systems: an authentic problem-based approach. It also provided a sense of autonomy, enabling them to

craft something of personal and professional relevance, to innovate and shape their own clinical environment.

There was a widespread and positive perception of the style of learning delivered by the PICH programme. The aims of the project were clearly and spontaneously articulated in the interviews, demonstrating the success in delivering the PICH programme. Whilst participants did talk about learning clinical knowledge and skills in a speciality to which they would not necessarily have exposure, the vast majority of their talk was directed towards their own personal development: gaining confidence, independence, forming networks, tools for individual reflection and application. An important finding from the interviews, with both trainees and mentors, was that the course appeared to be successful in delivering tools for leadership too. Participants acquired skills to take forward integrated care initiatives; ready to enact change as 'leaders' of integrated care for the future.

1.3.2.2 Integrated care

Trainees and mentors on the PICH programme were all integrated care enthusiasts, having been involved in other educational initiatives, in particular the 'Learning Together' clinics or having prior interest in the area. The rationale for integrating care was well understood and articulated by participants. All participants perceived a drive towards integration as rational, since they specified the patient must always be at the centre of care and it is in the patient's interest that care is seamless, which integrated care enables. Moreover, there was a widespread feeling that integrated care is an idea whose time has come, not only because of the growing prominence of 'patient-centred care' as an ideal, but also given the need to increase efficiency in view of increasing economic pressures on healthcare. Participants were hopeful that integrated care was a driver for positive health systems change and believed that more integration was inevitable. However, they were mindful of significant barriers to implementation, including financial and territorial issues. Integrated care was reported to impact on patient care positively. Specific examples of overcoming current voids in the system were smoother referral processes and getting timely specialist advice. Integrated care was also felt to improve efficiency by preventing work from being duplicated. Integration was seen as an important concept centralizing the patient in systems-based re-organisation of health care which was likely to have tangible positive impacts for children and their families.

1.3.2.3 Integrated professions

One of the most influential aspects of the programme was the creation of a shared space for participants to talk about providing care by sharing stories. These narratives became fuller and more nuanced as the diversity of the participants increased. There were frequent stories about how responsibilities are shared within child health care and this provided the impetus for them to start thinking critically about how professional boundaries interlock and / or cross over between paediatrics and general practice. They talked about the vital role of effective communication in both the intra as well as interprofessional context, although the vast majority of the dialogue related to the latter. Communication was seen as a means of establishing effective relationships and reciprocally, building relationships resulted in improved communication and improved sharing of information. During the PICH programme participants' learnt about seeing the other side of things, others working environment, the burden of paediatric clinical work,

service pressures and affiliated health care networks which supported or undermined clinical practice. It was clear that their close perceived professional alignment – paediatricians and GP – was a natural one. However, alignment was not reported as universal. Certain specialities were not seen to align as similarly, which may be problematic for implementing future integrated care pathways. Participants gained a deeper understanding of the differences and similarities in each other’s clinical roles and how, crucially, they would now alter their own professional practice to take these into account. They became a more ‘blended professional’; one who adapts their own practice mindful of the others. This emergence of a blended professional raises the concept of professional identity, how they thought about themselves in their clinical capacity and how stepping out of traditional identities and thus roles aided the development of them as integrated professionals.

1.4 Conclusions

The PICH programme was highly evaluated by participants and mentors. The overall feeling was that of a generally well-run course, which was populated by enthusiastic mentors and trainees, and which led to significant learning for everyone involved. Fundamental to its success were two key ingredients. Firstly, the learning environment established at the seminars provided both support and challenge from peers and senior colleagues and secondly, the project which allowed participants to engage with data, work with authentic problems and innovate. Whilst there were logistic issues with attendance and some frustration about project completion participant’s reported developing clinical, professional and transferable skills including leadership.

Participants were all enthusiastic adopters of the concept of integrated care. However, they were aware of the practical realities of implementation, often significant structural barriers, but considered integrated care to be an effective patient-centred model for health service development.

Alongside organisational systems participants learnt, through the PICH programme, the importance of the interpersonal. They articulated the value of understanding and adapting roles and identities to change professional behaviours and how to work as ‘integrated professionals’.

2. Introduction

2.1 About the programme

The Programme for Integrated Child Health (PICH) was launched in 2014 with the aim of preparing paediatric and general practice trainees for new ways of working in the delivery of child health in the community. The educational strategy consists of acquisitive and participative approaches to supporting learning: alongside formally taught sessions on integrated health care, trainees are encouraged to contribute to new ways of working through the conception and implementation of integrated care projects in their own clinical setting. Running through both of these approaches is an overt recognition of the value of peer-supported learning, as trainees work together to construct their understanding of both integrated care and their own identity as professionals within this context. Mentor is drawn from paediatrics and general practice also supported trainees. Whilst the concept of integration promoted within the PICH website is holistic, and is contrasted with mere integration 'between layers within the system' (PICH, 2017), it is important to state that this is a pilot project. The aim of which is to form 'strong links between paediatrics and primary care' (PICH, 2017), in order to develop better ways of caring by taking a patient-centric view of service design and delivery.

2.2 Learning objectives

As set out on the programme website, the learning objectives for the formally taught component are as follows:

By the end of the programme, participants will:

- Understand the concept of integrated care
- Have worked in an integrated care setting
- Be able to assess health care data sources
- Understand how to use data for service development and evaluation
- Understand the importance of patient experience
- Understand how to use patient experience and co-production to improve services
- Be able to work and learn across boundaries
- Be able to use reflection for personal development

2.3 Course structure and content

The year-long course runs alongside clinical attachments, and comprises three main components:

1. Launch event
2. Monthly evening seminars
3. Workplace-based service improvement project

Participants are expected to take a self-directed approach to their learning - alongside the formally taught components, trainees are responsible for identifying a senior clinician or manager to act as PICH Local Champion, meeting their mentor at least three times over the course of the programme, and completing a structured reflective portfolio. The learning is intended to be largely project-based, and trainees are expected to follow course guidance in order to complete relevant workplace-based projects.

The course content is organised according to five themes:

1. What is integrated care?
2. Patient experience and involvement
3. Data influencing change
4. Working clinically in an integrated way
5. Leadership of the development of integrated services

Each theme comprises several learning objectives, along with suggestions as to how trainees might address these through relevant project work and reflection.

Course sign-off requires the submission of a structured portfolio which encompasses project work, written reflections and records of mentoring meetings. Participants also attend a sign-off meeting with course directors.

2.4 About the report

The report has a standalone, executive summary already detailed in chapter one and a brief details of the PICH programme are included in chapter two in order to orientate readers that are unfamiliar with the PICH programme.

This section details the structure and overview of content in the remainder of the report. The report of the PICH programme evaluation comprises of a review of the literature to contextualise the research. We then briefly outline the methodological approach, which is interpretative and qualitative, and the methods namely observations of the PICH seminars and one-to-one interviews with participants on the programme. This chapter also includes the limitations inherent in the design and ethical permissions. This chapter is then followed by the results chapter where we present the findings of the seminar observations and interviews with participants who included trainees, mentors and programme leads. The final chapter summarises the findings and makes concluding remarks before listing some recommendations for programme development that the programme leads may wish to consider.

3. Literature review

3.1 What is integrated care?

The Nuffield Trust (2011) defines Integrated Care as follows:

'Integrated care' is a term that reflects a concern to improve patient experience and achieve greater efficiency and value from health delivery systems. The aim is to address fragmentation in patient services, and enable better coordinated and more continuous care, frequently for an ageing population which has increasing incidence of chronic disease.

The Trust (ibid) goes on to describe the need to integrate care effectively as *'a pressing policy concern'*. The Monitor report *'Enablers and Barriers to Integrated Care'* (2012) cites the inherent complexity of individual care needs, and the ineffectiveness of current arrangements to deal with such complexity, as a reason why the policies which govern how care is provided are in need of radical reconfiguration.

The justification for integrated care is simultaneously practical and theoretical. It is practical to the extent that resources are scarce, and there are inefficiencies in the system which, if removed, would improve provision by harmonising systems at the macro, meso, and micro levels of care delivery, and reducing those inefficiencies by so doing (Ham & Curry, 2011). It is theoretical insofar as the improvement of care is taken to be an ethical goal which *ought* to be pursued. Indeed, Goodwin et al writing for the King's Fund in 2012 made repeated claims that integrated care *should* be implemented, arguing that the harm caused by complex health problems underwrites the justification for a system that is sufficiently well designed that it can meet them.

The political, economic, and moral dimensions of this rationale are thus embedded in integrated care policy, design, and implementation, and enshrined in the rationale of the Health and Social Care Act (2012). The overarching goal of the Act is to make seamless the disjunction between the various clinical and non-clinical functions of healthcare, as doing so *'can reduce confusion, repetition, delay, duplication and gaps in service delivery, people getting lost in the system'*¹, and these are taken to be in need of reform for the practical and theoretical reasons given.

Although Integrated Care Pathways (ICPs) for specific conditions are not new and have been successful in certain cases (Cunningham et al, 2008; Allen et al, 2009), the need for a fully integrated care system has been largely inferred from failings and shortcomings of the prevailing arrangements, rather than from a wealth of pre-existing positive evidence. The May 2012 report by Monitor states that *'the existing literature surveys provide some evidence for benefits in terms of patient experience, limited evidence in terms of clinical quality and very little information on cost impacts'*. If these findings are reliable, further research is needed.

Nevertheless, as Goodwin et al (2011) report for The King's Fund, the need to develop integrated care systems has grown in recent decades in response to the challenges of an ageing population, and the

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concomitant increase in pressure on healthcare resources. There is a growing need to prevent hospital admission as far as possible, both to ensure that people can live healthy lives for longer (Kodner & Spreeuwenberg, 2002), and also to reduce clinical expenditure (Ham et al, 2011). Consequently, a reconfiguration of healthcare is required to connect – or ‘integrate’ – the clinical and social components of healthcare in a system within which these functions have been separated and discrete (Lloyd & Wait, 2005). The challenge, therefore, is how healthcare can be made seamless across these previously distinct domains (Grone & Garcia-Barbero, 2001).

Both general practice and paediatrics sit at the frontline of the need for integrated systems of care, since GPs are typically individuals’ first and primary point of contact with healthcare services, and a parent’s first point of call when their child becomes unwell. These are, therefore, both important foci for integrated care, as they are points at which medical and social care connect, and are the points at which care is managed after any acute phase has passed. As Ham & Walsh (2013) report for the King’s Fund:

The evidence of the benefits, in particular to the experience of service users and their families, seen when organisations and services work together, make a compelling case for care to be co-ordinated around the needs of people and populations. Developing integrated care means overcoming barriers between primary and secondary care, physical and mental health, and health and social care to provide the right care at the right time in the right place.

Despite this, however, little research has been done to evaluate integrated care in either general practice or paediatrics. Systems evaluation first requires systems to be in place, and since large scale integrated care models (as distinguished from narrower and more local integrated care pathways for specific conditions) have only been introduced relatively recently in the UK, the potential evidence base is limited at present (Billings & de Weger, 2015). Consequently, those results that do exist are more equivocal with respect to the effectiveness of integrated care, despite the policy rhetoric (Mangan & Ward, 2015).

There is evidence from beyond the UK context relating to the effectiveness of integrated care. For example, studies of paediatric integrated care have been carried out in Brazil (Victora et al, 2011), Malawi (Chan et al, 2010), and Canada (O’Brien et al, 2013). These studies indicate that such systems can be effective. However, further investigation is needed within the UK to generate an evidence base for what does and does not work, and the circumstances in which the quality of integrated care can be maximised.

Bevan & Janus (2011) note this trend, reporting that integrated care has been relatively slow to embed in the UK and the United States, despite some recognition that it is an increasingly influential concept. Indeed, the concept is not new, since the Journal of Integrated Care is now in its 21st year. By contrast, there is evidence that in other European nations, for example Sweden (Ovretveit et al, 2010; Ahgren & Axelsson, 2011), Denmark (Rudkjøbing, 2012), and Norway (Romoren et al, 2011) have been relatively successful in developing whole-systems integrated care strategies since the turn of the millennium. Nevertheless, there has been recognition for the past two decades in the UK that integrated care strategies will be and are required in order to maximise the health and guarantee the safety of patients, given the attendant pressures on NHS resources. Initially conceived as ‘pathways’, by 1998 there were around 45 such integrated care systems for the management of a range of conditions across their acute, chronic, and rehabilitative phases (Campbell et al, 1998).

In this respect, although it has taken longer to develop in the UK, the concept of and rationale for integrated care has been well understood for some time. A review of integrated care within the UK since 2010 yields a range of policies and guidelines, interventions, and evaluations – although limited in number.

3.2 Rationale for integrated care

Godlee (2012), in an editorial for the British Medical Journal has pithily described systems of integrated care as ‘what we all want’, summarising the rationale behind such systems as follows:

Integrated care is one of those concepts that’s hard to argue against. Who among us would not want hospital staff to work closely with primary, community, and social care services, so that, when we turn up in the emergency department with a serious exacerbation of our chronic condition, the team there knows all about us? Better still, wouldn’t we all want the various teams to liaise closely so we don’t have to go to hospital at all? If, by integrated care, we mean seamless, high quality care, it’s obviously desirable.

The apparent self-evidence of a justification for integrated care, given the nature and scale of the pressures on UK healthcare resources is echoed in reports produced by the King’s Fund (2011):

Without integration, all aspects of care can suffer. Patients can get lost in the system, needed services fail to be delivered or are delayed or duplicated, the quality of the care experience declines, and the potential for cost-effectiveness diminishes (Kodner and Spreeuwenberg 2002). The challenge facing today’s health and social care system in England is its ability to offer high-value care in the face of a difficult financial and organisational environment. The task is especially daunting in the context of a population in which the burden of disease is growing and medical advances offer increasing opportunities to treat disease, but at a cost. The result, if nothing changes, will be significant unmet need and threats to the quality of care.

The UK consortium for integrated care, the National Collaboration for Integrated Care and Support (NCICS), mounts a similarly unambiguous argument for the importance of a realignment of healthcare resources along these lines:

...progress brings challenges. Our system of health and care is under more pressure than ever before. People may be living for longer, but often they are living with several complex conditions that need constant care and attention, conditions like diabetes, asthma or heart disease. And this is not only about older people – children born with complex conditions are now living to adulthood, while those with learning disabilities and other groups have lifelong needs. All these people need continuous care and support, and the right systems and resource to enable that.

These examples convey the prevailing tone in which the case for integrated care is made at the level of health policy, and it is arguments such as these which have driven the development of practice guidelines and pilot schemes for delivering it within different parts of the healthcare infrastructure. There is, however, a final and more profound reason for needing integrated which care can be inferred from changes in the structure of society that are reflected in changes within the health infrastructure.

It is arguable that earlier, even archaic, healthcare systems may be construed as having been 'well integrated'. Anthropological work, such as that of Young (1976), Worsley (1982), Bakx (1991) and others into 'folk', traditional, pre-western, and pre-scientific healthcare is instructive here. The role of the indigenous 'healer', or smaller group thereof (Foster, 1976; Kleinman & Sung, 1979; Fabrega, 1997), is the reverse case of modern attempts at integrated care, since the responsibility for whole person care is unified in one 'provider'. This is, of course, commensurate with a lack of biomedical knowledge, and for this reason care may be ineffective in certain important respects. Nevertheless, at a threshold of simplicity that it can be delivered by a single individual, it is possible to view such care as taking an integrated form.

This simplicity, however, is commensurate with the simplicity of the societies being served. Societies such as the UK are extremely complex. Biomedical understanding abounds, and is divided into specialisms, practised by experts in those fields (Blaxter, 1978; Young, 1983). Medical technology is also complicated, and in understanding ever more specifically the causes of diseases, generates an increasingly complex range of treatment possibilities. Not only this, but the population is highly diverse in all respects, with needs that differ dramatically. Providing care analogous to that of 'the healer' but with enhanced medical effectiveness is thus a considerable challenge. The cause of this challenge is increasing complexity across not only the healthcare system but also the social context in which it exists. Under this lens, the drive towards integrated care may be seen as an attempt to mitigate the negative anti-cohesive effects of these, perhaps ineluctable, socio-economic drivers.

3.3 Approaches to integrated care

Integrated Care Pathways (ICPs) for specific conditions are not new (Middleton et al, 2001), and both in the UK and beyond stretch back to around the mid-1990s (O'Brien et al, 2013; Morgan, 2011; Pettie et al, 2011; Morrow et al, 2009; Cunningham et al, 2008; Allen et al, 2009; Zander, 2002; Selwood, 2000; Kitchiner, 1996; Kitchiner & Bundred, 1996). ICPs may be summarised as '*structured multidisciplinary care plans which detail essential steps in the care of patients with a specific clinical problem*' (Campbell et al, 1998, p. 133). In a worldwide analysis of ICPs, Zander et al (2002, p. 101) write that they have '*truly swept the world*' in response to four primary forces:

- 1) *changes in national health care economics requiring more efficient use of the resources of time, manpower, and diagnostic and treatment methods*
- 2) *initiatives and regulations for quality improvement and best practice from the expanding body of evidence*
- 3) *the desire for automation of the health record*
- 4) *the search for better ways to involve patients and families as partners.*

As the precursors to full-system integrated care, ICPs for individual conditions are necessarily diverse and developed in a more or less organic way. The 2012 Monitor report states that the library of integrated care

pilot studies that have been sprung up in recent years is now relatively well known, listing successes including the Bolton Diabetes Network, Wales Chronic Care, the South East London Cancer Network, and others, as evidence for how integrated care can work. These have been employed in support of an argument for whole system integrated care, and these pilots may thus be viewed as antecedents of such larger scale delivery.

Moreover, Shaw et al (2011, p. 4) writing for the Nuffield Trust identify a growing recognition over the past thirty years that effective care is a complex system both vertically (i.e. in the sense of clinical hierarchies) and horizontally (i.e. in terms of different agencies or specialties responsible for different aspects of treatment), comprised of antecedent strands which have given rise to the eventual concept of 'integrated care'. These include coordinated working and care programmes in the 1980s, through inter-agency working and shared protocols in the 1990s, to patient-centred care and whole systems working in the 2000s.

As the authors suggests, therefore, larger and more ambitious integrated care systems developed at the level of entire Trusts or regions, with a view to using integration as a more general means of service delivery, are a more recent phenomenon. Deliberate whole-system integrated care in the UK began with 29 'vanguard' sites (Lacobucci, 2015), acting as a large, multi-site pilot study.

Some integrated schemes have been established within the third sector and driven by organisations therein. Community Integrated Care², for example, is a charity, which delivers support across the UK towards integrating health and social care functions. Other schemes have been driven by national government agencies at a local level. An example of a successful scheme is North West London Whole Systems Integrated Care³, which operates across the eight boroughs of North West London by integrating the functions of the Trusts, local authorities, and Clinical Commissioning Groups across this area⁴. Although evaluations of integrated care schemes in the UK are few in number (not least because such schemes are relatively new and limited in number), this scheme has been the subject of evaluation (Steeden, 2011) which provides some evidence of its success.

A similar scheme, Southwark and Lambeth Integrated Care⁵, has been established in south London and uses a similar approach in order to:

...design services that are joined up and easier for local people to navigate. To provide integrated care we will work as one system across health and social care, with one integrated budget...Whilst helping people lead healthier and happier lives, our purpose is also to stop the rising costs across the health and social care system.

Elsewhere in the UK, bodies such as the Health and Social Care Board of Northern Ireland (HSCNI) have been established as collaborations between devolved national and local government, Healthcare Trusts and the voluntary sector to integrate care in these regions as well.

2 <http://www.c-i-c.co.uk/about-us>

3 <http://integration.healthiorthwestlondon.nhs.uk/>

4 <http://integration.healthiorthwestlondon.nhs.uk/about-us/our-partners>

5 <http://slicare.org/who-is-slic>

Moving onto reviewing methods for how to *teach* integrated care approaches, however, the literature is more limited. Only six research papers report on the methods used to translate the theory of integrated care into an educational curriculum. Four of the papers report on integrated care training programmes in or across specific medical domains. Half of these were programmes which integrated primary care with secondary care for psychological rather than physical problems (Zoberi et al, 2008; Cubic, 2012; Hall et al, 2015). The other three report on less domain-specific programmes, focusing on integrated approaches to teaching medical ethics (Browne et al, 1995); complementary and alternative medicine (Owen and Lewith, 2004); and interprofessional education generally in training for doctors (Tresolini et al, 1995).

Although the teaching methods used in these programmes are not novel, the originality of the programmes consist in the principles of integrated care which underpin the design and content of the curriculum and teaching. Methods of teaching integrated care in these studies include: training by internal experts, training via sending trainees to external institutions with the relevant expertise, or developing in-house post-qualification training programmes (Hall et al, 2015); training via 'clerkship' where primary care trainees undergo an intensive integrated care education placement with a consultant psychologist (Zoberi et al, 2008); and in reverse via placement of psychologists in training with primary care doctors (Cubic et al, 2012); by medical students receiving lectures, presentations, and seminars with experts in healthcare ethics (Browne et al, 1995); complementary and alternative medicine (Owen and Lewith, 2004); and the medical curriculum in general (Tresolini et al, 1995).

What is significant, however, is not the teaching methods – none of these are untried, or unique to integrated care training. Rather, each of the programmes reported here is guided by the same set of key principles which underpin the integrated care approach, namely: the need to ensure that medical trainees receive a well-rounded and balanced education involving programmes where doctors from different specialisms and allied health professionals are learning together, and in which they are taught by doctors from different specialisms and allied health professionals so that each can understand each other's perspective and line of reasoning about the case. These studies advance a view that a full understanding of a patient's needs can only be achieved through adopting a holistic approach, formed by sharing the views of not only the patient's view, but also those of all the various specialist physicians whose input is relevant to determining the appropriate treatment or course of action.

Zoberi et al (2008) offer the most straightforward summary of this principle; namely, that integrated care education, whatever the methods by which it is delivered, embodies the adoption of a biopsychosocial approach towards treatment. This incorporates not only physical health issues but also the psychological difficulties, socially-orientated problems, spiritual beliefs, and so on, that come to bear on a patient's overall condition. As such, the findings here suggest that standard teaching methods are adequate for delivering integrated care, but to be effective they must be designed according to and embody the holistic principle which underpins the approach.

3.4 The role of interprofessional education

Effective interprofessional education (IPE) in care is becoming more challenging, and the need for it is becoming more acute. This is because healthcare needs are becoming more diverse and the healthcare system is becoming commensurately more complex for the reasons already outlined. Since, as Brock et al

(2013) report, medical errors and poor patient outcomes are associated with communication failures within the care setting, the need for effective IPE is increasingly important against this background of growing complexity.

In an analysis of the disciplines relevant to enabling IPE, Barr (2013) finds a diversity of theoretical perspectives to be implicated, including complexity theory; activity theory; organisational theory; the sociology of the professions; general systems theory; situated learning; practice theory; psychodynamic theory; identity theory; contact theory; and adult learning. Consistent with this diverse range, Thistlethwaite (2012, p. 59) reports on the Lancet Commission's findings of an earlier initiative to devise a shared vision for IPE, stating that:

The Commission refers to 'a slow burning crisis' caused by the 'mismatch of professional competencies to patient and population priorities because of fragmentary, outdated and static curricula producing ill equipped graduates' and uses the term 'professional silos', a metaphor frequently found in the interprofessional literature.

Given this pressing need, a growing literature – from both the UK and elsewhere – now exists of analyses and evaluations of IPE within healthcare systems. Indeed, it has at least two dedicated journals⁶; there is an international voluntary body for the promotion of interprofessional education⁷; the World Health Organisation has produced guidelines and recommendations for interprofessional education in healthcare⁸; and a literature search yields a significant body of research in healthcare evaluation.

IPE has been the subject of systematic review (Reeves et al, 2010; Thistlethwaite, 2012; Olson & Bialocerkowski, 2014; Cochrane Database, 2013), and the research identified so far may suggest strong evidence for the effectiveness of IPE. Surprisingly, however, the most recent Cochrane review (2013) of relevant research suggests that evidence for the effectiveness of IPE is equivocal. Indeed, Thannhauser et al (2010) write that much research into developing approaches that can reliably deliver effective IPE are theoretically under-developed. Similarly, Reeves et al (2010) find that although useful progress has been made in strengthening the evidence base for IPE, there is still more to do. Finally, the conventional separation of medical specialisms constituting 'chains of care' (Ahgren, 2010) can, as the author notes, lead to antagonism resulting from mutual misunderstanding or mistrust between the specialist silos involved.

Given the current lack of reliable evidence for what works, and why, there is therefore a need for further research in this area in order to gather more information about a) the effectiveness of IPE; and b) what aspects of IPE are effective, and what makes them effective in terms of the context in which it is delivered.

In order to advance the field of IPE research, we therefore propose a new theoretical perspective for framing relevant studies, employing a critical realist approach to the design and evaluation of IPE programmes.

6 <http://www.tandfonline.com/toc/ijic20/current> / <http://www.journals.elsevier.com/journal-of-interprofessional-education-and-practice/>

7 <http://caipe.org.uk/>

8 http://apps.who.int/iris/bitstream/10665/70185/1/WHO_HRH_HPN_10.3_eng.pdf?ua=1

4. Methodology

4.1 Our approach to the study

Our methodological approach was qualitative. Qualitative research permitted the exploration of issues central to the PICH evaluation and interpreting participants' experiences and views about the programme, integrated care and the professional attributes and behaviours needed to support the development of integrated care in practice. We used observations and interviews to understand how and what individuals learned from the programme, from and about each other, and how they understood professional roles in light of the delivery of integrated care.

4.2 Research Questions

The research was aimed at answering the following main research questions:

1. How do course participants evaluate the PICH programme, in particular?
 - a) What are the participants' views about the structure of the programme?
 - b) What did the participants' learn from the programme?
2. What are participants' views about integrated care and its impact on healthcare, in particular?
 - a) How do participants understand the concept of integrated care, its aims, and its importance?
 - b) What do participants say are the structural issues relevant to delivering integrated care?
3. How does the intraprofessional nature of the programme influence the participants?

In the following sections we outline the research methods used and give an account of the advantages and limitations of the study.

4.3 Research design

The study was a small scale London-based qualitative evaluation, which aimed to investigate the PICH programme and its impact in delivering the tools necessary for integrating child healthcare between paediatrics and general practice.

4.4 Research methods

To gain a rich and detailed insight into the PICH programme and the numerous perspectives thereon, we used two qualitative methods: observations and one-to-one interviews. Both of the methods were piloted in the early part of the study and adapted accordingly for the remainder of the study.

4.4.1 Observations

Observation of the formally taught PICH programme allowed researchers to gain an insight into the ways in which the PICH team attempted to support trainees' learning about integrated care. The observations were used to collect data according to the following categories:

- Demographics, i.e. the time, time, place and people present at the learning seminar; the composition of the group present, as not all trainees and mentors attended each seminar;
- The topic for the session;
- The project(s) presented by trainees for discussion by the group;
- If present, any guest speaker and the purpose and content of their presentation;
- Interactions between trainees, and between trainees and mentors;
- The delivery of integrated care teaching and aspects of learning highlighted therein.

The observations also provided a means of recruiting participants for interview.

4.4.2 Interviews

Semi-structured interview schedules (see Annex 1) allowed the research team to explore the lines of the enquiry and the concepts deemed important to the study whilst allowing sufficient flexibility to allow respondents to contribute flexibly about their experience of the PICH programme.

4.4.3 The study population

The study population comprised of trainees and mentors from Cohorts 1 and 2 of the PICH programme, which corresponded to the first and second years that the programme had run. The induction session from Cohort 3 was observed but it was outside of the scope of this evaluation to conduct further research with them. Cohorts 1 and 2 differed with respect to the trainee group. In its first year the PICH programme was run solely with paediatricians and was expanded to include GP trainees in the second year. However, mentors for both cohorts were drawn from paediatrics and general practice. The timing of the research, which was commissioned between the first and second cohorts, meant that whilst interviews could be conducted with participants from both cohorts, observations could only be conducted with the second cohort (and the induction from Cohort 3).

4.4.4 Recruitment of participants

An email was sent to all mentors and trainees from Cohorts 1 and 2, via the PICH programme administrative team. This email explained the study and provided a participant information sheet, and asked respondents to opt out by a specific date if they did not wish to take part in the study. Once this date had passed, contact details of the trainees and mentors were passed to UCL by the PICH programme administrative team. We aimed to recruit an even breakdown of trainees and mentors from both paediatrics and general practice, and of trainees from Cohorts 1 and 2. We sent two reminder invitations to those who had not responded to the initial request to take part in interviews.

Course participants who had consented to participate took part in one-to-one semi-structured interviews. Interviews were conducted in this manner for privacy and to encourage the sharing of unique experiences (Byrne, 2012) but equally so they could be timed to best suit participant's availability. Interviews were conducted either in person or by telephone, according to the interviewee's preferences. Interviews were audio recorded for accuracy and transcribed professionally.

4.5 Data analysis

Observation data and interview transcripts were subjected to thematic analysis.

4.5.2 Analysing observation data

After the initial data collection, a secondary analysis was carried out wherein the data was organised according to common and recurring themes so that any patterns could be identified and compared against each other.

4.5.1 Analysing interview data

A coding scheme was developed inductively - with meaning flowing from the data - as well as deductively - to answer the questions posed by the research (Miles and Huberman, 2002). The orientating concepts of Whitchurch's (2009) blended professionals and the principles of critical realist analysis guided the data analysis. An iterative approach, sensitised by theory, informed the categorisation and coding of the interview transcripts.

The interviews were independently coded by four team members (AG, CC, AA & AM) using QSR NVIVO 11©. An initial coding scheme was developed based on analysing five transcripts. Each of the four team members coded the same five transcripts, and the comparison and discussion about these was used to devise the first iteration of the coding framework. Thereafter, the remaining 14 transcripts were distributed between three of the team members for coding. Once this second round of coding had been done, we re-convened to compare our analyses and carry out inter-coder reliability tests. These were used to devise the final iteration of the coding framework, during which time some codes were re-named, some were merged, and some were deleted. Any remaining discrepancies were discussed until a resolution was agreed to arrive at a final version that we used as the basis for producing our results.

4.6 Limitations

The potential limitations of the methodological approaches taken in this evaluation include concerns typically raised about qualitative research, which typically centre on the subjective nature of the enquiry. This evaluation mitigated against these concerns in a number of ways:

- It used a well-defined methodology and conceptualisation to shape the study design, data gathering, and data analysis.
- Two qualitative methods were used and triangulated with relevant background theory.
- Throughout the analysis stage the research team met repeatedly and worked closely in ensuring the development of a shared understanding of the meaning of the data.
- A qualitative data analysis software package (NVivo 11) was used and inter-rater reliability of the initial thematic analysis was found to be 90% or above.

4.7 Ethics

The project was presented to the UCL Joint Research Office 8949/001 (Appendix 2) and given ethics clearance by Chair's Action. All participants were given the opportunity to opt out of the study prior to interview. Participants volunteered to take part and actively consented, it was made clear that if they chose not to participate, it would involve no penalty or loss of benefits to which they were otherwise entitled. All materials were anonymised and are held confidentially in compliance with the Data Protection Act 1998.

5. Results

In this section we present the main findings from the observations and the thematic analysis of interviews with trainees and mentors. As a reminder here are the research questions this study addressed:

1. How do course participants evaluate the PICH programme, in particular?
 - a) What are the participants' views about the structure of the programme?
 - b) What did the participants' learn from the programme?
2. What are participants' views about integrated care and its impact on healthcare, in particular?
 - a) How do participants understand the concept of integrated care, its aims, and its importance?
 - b) What do participants say are the structural issues relevant to delivering integrated care?
3. How does the intraprofessional nature of the programme influence the participants?

5.1 Observations

Teaching sessions were observed on four occasions. Three observations took place of the monthly seminars between April and July 2016 for cohort two, and one at the induction day for cohort 3.

5.1.1 Format

The format of the three learning seminars followed a similar pattern. Each ran from 6.30-8.30pm on a weekday evening at University of London premises and was attended by trainees and a core group of mentors. 20 to 30 people typically attended each session.. Seminars began with informal group discussions between trainees and mentors. Trainees were able to speak not only to their own mentors, but to other participants as well. The discussions lasted for around 30-45 minutes, and were followed by a presentation either from one or two of the trainees about their project, or by an invited speaker giving a talk that was relevant to integrating child health care. This portion lasted for one hour, after which there was a break for food and refreshments and informal discussion. During the final 30 minutes the group reconvened and there was a rounding up and summary session from the mentors leading the seminar, reflecting on what had been learnt during the session, with contributions from the trainees.

The final observation, at the induction day for cohort 3 was slightly different. The purpose of the induction day was to welcome new trainees joining PICH, giving them a variety of introductions to integrated child care in general and PICH in particular. The session included presentations from PICH mentors and leaders, presentations from invited speakers, and from trainees from the previous two cohorts. A two-hour portion of the day was observed in the afternoon.

5.1.2 Group discussions

These informal discussions took place between around five or six trainees and one or two mentors, all seated together at tables. This provided an opportunity for trainees to discuss their projects with each other, and either their own mentor or another. Enthusiasm and openness characterised these discussions, with both trainees and mentors displaying interest in each other's point of view, and with all being willing to offer advice and suggestions.

5.1.3 Trainee presentations

Typically there were one or two presentations per session, as each time a trainee gave a talk of around 20-25 minutes about their project, followed by around 30-40 minutes of questions from the seminar leader, other mentors, and contributions from other trainees. Again, enthusiasm, openness, and willingness to learn characterised this section of the evening. The trainees seemed keen to learn from the experience, and the questions asked by the seminar leader were probing and pertinent. In asking the questions there was often a movement back and forth. Between both precise and detailed questioning of how the trainees went about facilitating integrated care and what the reasons were for their decisions, and supportive and reinforcing commentary on their responses.

5.1.4 Invited presentations

As well as presentations from the trainees about their projects, some of the sessions featured invited speakers with expertise in different areas of healthcare relevant to delivering integrated care. The second presentation that we attended featured a presentation from an invited speaker, whose contribution was enthusiastically received by the trainees. The speaker led the trainees through an interactive session designed to give insight into the 'patient journey', using this to elucidate the importance of integrated care from the perspective of the patient. At the end of the session, the speaker gave a short summary, reiterating the key principles of the importance of a seamless and integrated transition for patients, drawing on the contributions made by the group. In keeping with the overall tone of the programme, the atmosphere was informal and collaborative, creating an environment in which everyone felt able to contribute freely.

5.1.5 Concluding the sessions

At the end of each session, the PICH programme leaders finished with a rounding up and summary of the preceding two hours. In doing this they synthesised the various components – group discussions, project presentations and questions, and the invited speaker's presentation if there was one – and drew out particular aspects that were relevant to the goals of the PICH programme. This closing part of the session enabled the leaders and other mentors to reiterate the principles that PICH was trying to embed in the trainees' working practices; to provide support and encouragement for the trainees as they progressed through the year, and to provide information about the next session.

5.1.6 Intraprofessional learning and teaching

Many of the questions asked of the trainees by the seminar leaders during their question and answer sessions related to what the trainees learnt from talking together including the discussions about their projects. The discussions promoted trainees' reflections about what they learnt from the other clinical specialty, and how this enabled them to develop new and better ways of delivering care for their patients. In each of the three seminars attended, the programme leaders were paediatricians and as such were able

to offer significant advice from this perspective, rather than from that of a GP. Nevertheless, the questions and discussions were focused toward eliciting what the trainees learnt from working with their counterpart, irrespective of whether they were a GP or a paediatrician themselves.

5.1.7 Communication of PICH's values

A noticeable theme of the evening sessions related to the communication of PICH's values by the seminar leaders and other mentors. For example, a message communicated repeatedly was that integrated care, its rationale and its principles, is 'the future' of healthcare; for child health in particular. The seminar leaders displayed an enthusiasm for integrated care in terms of its capacity to improve care and deliver it more efficiently. There was an emphasis on integrated care skills as being those which identify and help to break down barriers in the healthcare infrastructure that obstruct the best possible care. The seminar leaders and mentors communicated to the trainees the belief that being involved with PICH would enable them to be at the vanguard of a system-wide reorientation of healthcare towards delivering it in an integrated way. This was notable at the three learning seminars and at the induction day.

5.2 Interviews

5.2.1 Participants

Interviews were conducted with 23 PICH programme participants. The breakdown participant demographics (trainee/mentor; GP/paediatrician; cohort 1/cohort 2) are detailed in the table below.

| Participant No. | Trainee (T)/mentor(M) | Medical specialism General practice (GP)/ Paediatrician (P) | Cohort number 1 = 1 st year 2 = 2 nd year | Identifying number |
|-----------------|-----------------------|---|---|--------------------|
| 1 | Trainee | GP | Cohort 2 | P1TGP2* |
| 2 | Mentor | GP | | P2MGP |
| 3 | Trainee | Paediatrician | Cohort 1 | P3TP1 |
| 4 | Trainee | Paediatrician | Cohort 2 | P4TP2 |
| 5 | Mentor | Paediatrician | | P5MP |
| 6 | Trainee | Paediatrician | Cohort 2 | P6TP2 |
| 7 | Mentor | Paediatrician | | P7MP |
| 8 | Mentor | Paediatrician | | P8MP |
| 9 | Trainee | Paediatrician | Cohort 2 | P9TP2 |
| 10 | Trainee | Paediatrician | Cohort 1 | P10TP1 |
| 11 | Mentor | Paediatrician | | P11MP |
| 12 | Trainee | Paediatrician | Cohort 2 | P12TP2 |
| 13 | Trainee | Paediatrician | Cohort 2 | P13TP2 |
| 14 | Mentor | GP | | P14MGP |
| 15 | Trainee | GP | Cohort 2 | P15TGP2 |
| 16 | Mentor | Paediatrician | | P16MP |
| 17 | Trainee | Paediatrician | Cohort 2 | P17TP2 |
| 18 | Mentor | Paediatrician | | P18MP |
| 19 | Trainee | GP | Cohort 2 | P19TGP2 |
| 20 | Trainee | Paediatrician | Cohort 1 | P20TP1 |
| 21 | Trainee | Paediatrician | Cohort 1 | P21TP2 |
| 22 | Trainee | Paediatrician | Cohort 2 | P22TP2 |
| 23 | Trainee | Paediatrician | Cohort 2 | P23TP2 |

Table 1: Participants demographics

**(participant identifier P1TGP2 = participant 1/trainee/General Practitioner/cohort 2)*

Eight interviewees were mentors and 17 were trainees. Eighteen of the participants were paediatricians and five were from general practice. Four trainees were from the first cohort and 11 from the second cohort.

Interviews were conducted between August 2016 and January 2017, the average length of the interviews was 30 minutes but this ranged between 14 minutes to 46 minutes.

5.2.2 Interview analysis

Three overarching themes were identified through data analysis. Data which related to research question one, which explored participants' views about the structure of the PICH programme and their learning on the programme, is addressed under the overarching theme 'programme evaluation'. Overarching theme two explores participants' views about integrated care including their motivation to join the PICH programme and previous experience of integrated care. Further, this theme encompassed participants' and mentors' perceptions of the barriers to, and enablers of, the delivery of integrated care in practice. The third overarching theme 'integrated professions' answers research question three, examining personal and relational aspects of professionalism and how through sharing stories and educational spaces individuals refigure their professional identity in ways that promote integrated working practices.

Each of these three themes are illustrated in figure 1 "data analysis themes and sub themes" and will be discussed in more depth in the remaining section of this chapter.

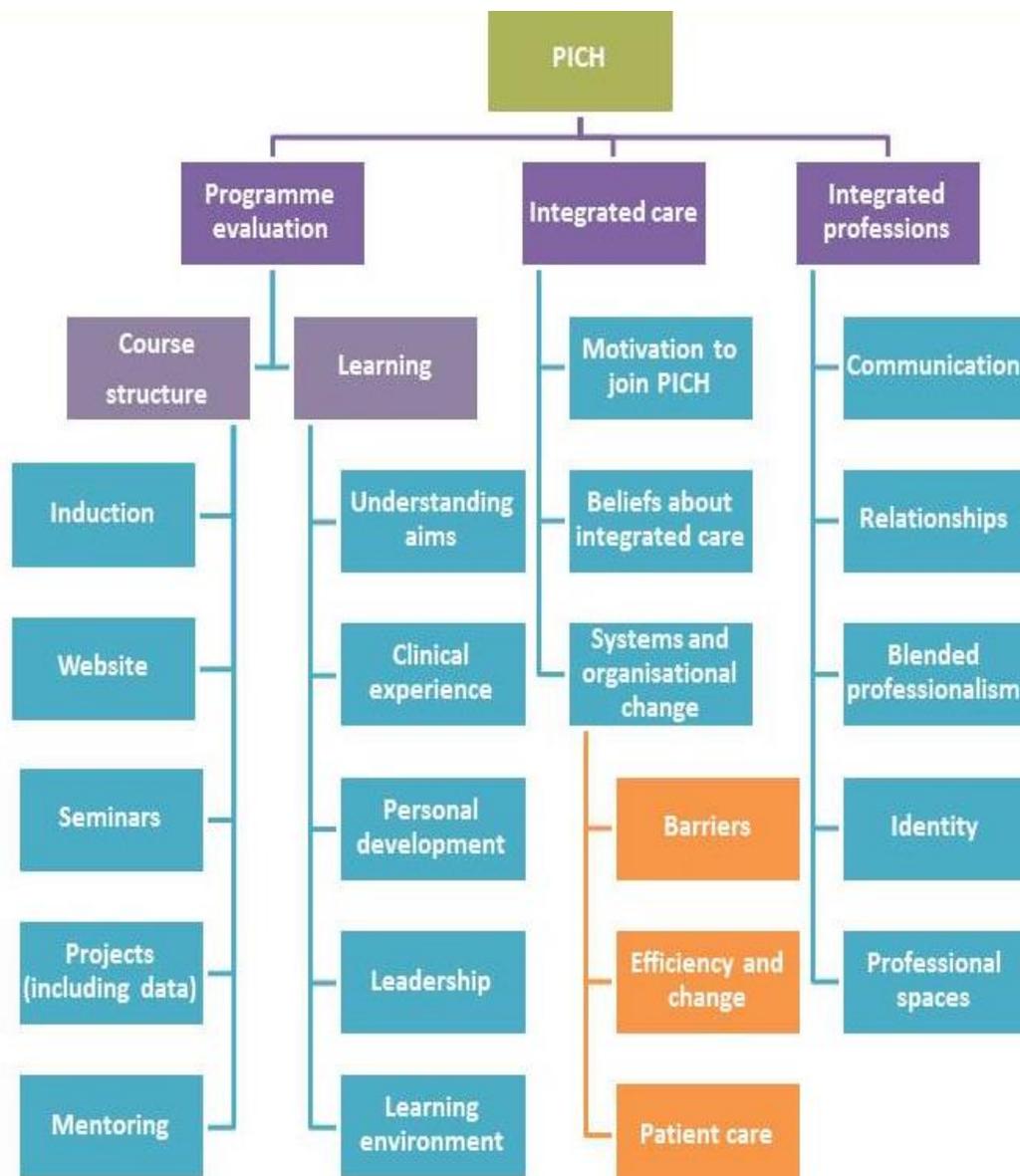


Figure 1: Data analysis themes and subthemes

5.2.2.1 Programme evaluation

The first overarching theme comprised two main sub-themes: firstly, participants' perceptions of the structure of the programme; and secondly, participants' perceptions of the learning that was facilitated by the programme. Notionally therefore, the first sub-theme is concerned with curriculum, and the second is about pedagogy. However, the integrated nature of these concepts – both impact on learning – meant that participants' perceptions of the programme at times bridged both sub-themes. Thus, 'learning' is writ large throughout the overarching programme evaluation theme.

5.2.2.1.1 Course structure

The following section, 'course structure,' begins with an exposition of participants' and mentors' views about the programme's key components: the induction session, the PICH website, the seminars, the projects and the mentoring system. Each of these aspects are considered under their own sub-sub-themes.

5.2.2.1.1.i Induction

A key component of the formalised PICH programme was the induction session, where the new cohort is introduced to the programme. The induction days were generally viewed positively, with all of the trainees finding them useful to varying degrees. In particular, the second cohort of trainees appeared to derive the greatest benefit, as 'graduates' of the first cohort were invited back to give presentations about what the programme entailed:

...the induction was really good, it was very clear. So we had some really good presentations from people from last year presenting their projects and how they'd gone about it, the problems they'd had, and sort of how to overcome that, and then they gave us some really good advice over the course of the year

P6TP2

Indeed, the strength of the second cohort induction day was praised highly by one of the primary organisers of PICH, who stated that:

...the second launch event fizzed and the fact that the mere act of putting the GPs and the paediatricians in the same room created such a lot of learning and that for me was a great surprise.

P5MP

A cohort one trainee who returned to assist in the induction day for cohort two also reflected positively on the quality of the induction but remarked that 'high profile projects' could be daunting for newcomers. Related to this was the idea that inductions provided large amounts of information, sometimes repeated, and it was reported by some that the session would have been more effective if condensed:

...it was quite a lot, they had to try to fit in quite a lot ... yeah. It was good but it was a bit long.

P13TP2

5.2.2.1.1.ii Website

The PICH website was developed in-house and designed to be a portal for all of the information that the trainees would need over the course of the year. It was, on the whole, evaluated positively. Typically, the trainees found it ‘...easy to navigate, simple straightforward, had the information I wanted’ (P14MGP). There was some evidence to suggest that the website had undergone improvement between the first and second cohorts:

The website I think had teething problems, but I was the first cohort...Because we didn't have all the presentations there...that wasn't easy, but I think that's improved though for people that followed it.

P20TP1

Maintaining an updated website was reported as valuable to trainees as they could compensate for missing sessions by referring to the web material. Course organisers shared the same view that the website formed a library of resources but also served as a place for communicating broader issues about the programme and with additional resource could be reflect better the wealth of ideas generated by the seminars:

The website...has been a helpful sort of library of information, a go to place for looking things up and reminding oneself of what the different themes are or what the...or getting forms, working out what dates to pitch the evening seminars are, that sort of thing, so it's quite a good reference... I think there is definitely again room for improvement. If we spent a bit of money we can make it a little bit neater and I think if we had more time we would keep it a little bit more up to date and put more examples on it of case studies or top tips from the community, the PICH community, because there are things that come up every PICH evening that are fabulous.

P5MP

5.2.2.1.1.iii Seminars

The monthly seminars were reported to be one of the most important parts of the PICH programme, since these provided regular opportunities for trainees to seek feedback and advice on their projects from mentors and peers, to present their ongoing work, to share knowledge, and to hear presentations from invited speakers about different aspects of integrated child health. The content of these seminars was typically evaluated very positively by trainees from both cohorts in terms of the opportunity for learning that they presented. Mentors equally valued the seminars:

I think the evening meetings works brilliantly well in hearing experiences from trainees ... the way they've split it so that the mentors and mentees can meet and talk in small groups, but then here a more formal presentation, so it's very well formatted and incredibly valuable I think for people like myself to then take the extra time to go – it's valuable for us I think.

P16MP

There were some criticisms, however. Seminars were difficult to attend:

I don't think it's the downfall of the PICH Project. I think it's more to do with the fact our day jobs allowing us to do more. I mean, I, in the last four months I've been doing a job where it's not... I can't get study leave to go and do the clinics.

P23TP2

One trainee, for example, was notably unhappy with the content and structure, and did not feel that the seminars were worthwhile, given that they were also felt to be an imposition on free time after work in evenings:

...it felt sometimes a little bit ill structured. I think it wasn't obvious from the beginning what the purpose of that was, and what we were supposed to get out of it...And then the sort of lectures were quite interesting usually, but...I remember going to a couple where there was no structure and it was just right, okay we've come all the way here and there's not much...it was a bit of a waste of time I think sometimes...I also think that having them in the evenings is horrendous.

P13TP2

Although the timing of the seminars in the evenings was an issue that was raised reasonably frequently, the criticism was not unanimous. Moreover, for those trainees who found the seminars to be useful, there were several respects in which they were valuable for learning from others, broadening their knowledge, and forming new working relationships:

Getting to the venue is not a problem because it's quite easily accessible. ..And it starts at half 6, so you can finish work and then get there on time. And the evening seminars are actually quite a mix and each topic has been different from the other. ..And the speakers have been quite varied and quite experienced in their field as well. And we do have a kind of a catch up before the meeting starts, so with the mentors ... and we usually listen to what the other trainees are doing. In that way we kind of exchange ideas and you know if somebody is actually at a stage where they can't think about how to progress, a particular point – it's nice to hear what suggestions other people offer and to learn from each other...And it was a good place for networking...I think I've learnt quite a few new concepts as I've gone along.

P4TP2

5.2.2.1.1.iv Projects (including data)

Another central component of the PICH programme was the trainees' individual projects. The projects were found to be positively evaluated throughout both cohorts; a typical response was voiced by this trainee, who found that the project gave them access to resources which they did not know how to access previously:

I suppose the thing that's had the most impact on me is being able to access data, like national data, and being able to look at it in more detail knowing where to go to get information and statistics for each CCG. That's been something really influential for me personally.

P1TGP2

Participants talked about the 'power of data...to back up new ideas and suggestions' (P17TP2) and how the

projects made them think, organise their thoughts and structure their approach:

It's made us do a quality improvement project that I think its relevant and helps. And though we haven't finished it so I can't prove it yet, but I think it's really good and it's something that I've learnt how to organise it and think around stuff ... and also in breaking projects down. So I think when you go to these inspiring kind of events you often have big ideas and you brainstorm and you want to change the world a little bit, but actually you have to really refine it. And I think like editing is one of the biggest things I've learnt – breaking it down into what can you do, you know what's actually manageable. And I think you know we had you know wild and wonderful ideas in the beginning, and actually with a bit of research and stuff you realise that's not what people want anyway. So I think I've learnt on all aspects of it, so in the thinking about things, in actually finding out from people you want to help actually what they want, to then implementing something and seeing how it works. I think at every stage I've kind of learnt how to do it better.

P19TGP2

What criticisms there were appeared to relate mostly to misunderstandings about what the projects were meant to achieve in terms of tangible, completed outputs at the end of the year. Those trainees that voiced unhappiness about their projects often felt disillusioned about what they had achieved or how it could be useful. For example:

I just think there's a very big expectation from this PICH project, and I've finished it and I'm not really sure...what was the point of my whole project. I mean I've learnt a lot and that's great and that's wonderful, I've learnt great amounts, but I've now got a project I don't really know what I'm supposed to do with it, you know.

P13TP2

By contrast, other trainees found that their learning had been valuable even in the absence of a clear and readily quantifiable end result. For example, this trainee suggested that the process of being immersed in the practice of facilitating integrated care provided the most important learning experience for them:

...even if the projects don't always turn out as extensive as some of the people engaged in the work think at the beginning, I think people reflecting on what they've learnt find that invaluable, because there's nothing as powerful as a learning experience as doing it yourself.

P18MP

This approach was reflected in the mentors' accounts of the purposes of the trainees' projects. There was a strong emphasis on the educational value of the projects being in the practical attempts at implementation and the development of problem-solving skills, rather than the production of a completed piece of work in the conventional sense. This mentor summarised the value of the projects as follows:

When they're doing a project...they very quickly come up against you know obstacles, which is the reality of working in the NHS. And so rather than ending up with a sort of half-finished project, you know the obstacles should be the object of study, if you see what I mean, because that is in fact what you get in real life. If you have the skills to overcome them, you're going to be very effective.

P7MP

This perspective highlights the importance of mentors' experience in identifying learning opportunities and

considering the challenges that trainees are likely to encounter when undertaking practice-based projects. The mentoring system comprises the final theme within the overarching course structure theme.

5.2.2.1.1.v Mentoring

The mentoring system was reported to be arranged in such a way that each trainee was attached to a senior GP or paediatrician with expertise in integrated care. Their stated role was to provide general assistance and support, and also to assist with trainees' personal projects over the course of the year. On the whole, trainees from both cohorts found the mentoring extremely rewarding, with P12TP2 describing it as '*a real highlight of the year*'. Where mentoring was geographically straightforward there were few complaints about the process. However, where the location of trainees and mentors sometimes made it difficult for them to meet, this sometimes compromised the value that trainees could derive from it:

A minor thing for me was just having a mentor that was closer...we were paired at the start with a paediatrician and a GP, but my paediatrician, she was in a completely different hospital, I can't remember where, but nowhere near me... I think they did that generally to encourage integration between the two of you and to work on stuff together - well obviously that didn't work for us because all three of us are in different areas. So I don't know if that works.

P19TGP2

However, geographical issues were not perceived to seriously limit the value of the mentoring system in every case. For many trainees, it was an acceptable limitation when balanced against the expertise to be drawn on from the mentor:

I think it was probably very good for me...you know they're all quite inspiring high powered people, which is a bit intimidating to begin with. And I didn't see her that often, but I do feel that when I did see her she usually had something you know...something that really kind of started to nudge me in the right direction. I mean I felt like the majority of the project was pretty much completely my own ideas, and I had to do it all on my own I think compared to some of the others...I got the impression that some of the other projects were very much the supervisor's projects, that people were you know basically having a lot of direction in doing. Whereas I think I probably learnt quite a lot from my supervisor inasmuch as she always gave me ideas and things that I should be thinking about, but then I was left to quite freely move the thing along. Whether or not that meant I had a better project or lesser project I don't know, but it was probably how it was meant to be.

P21TP2

Where criticisms were raised about the mentoring they were primarily about lack of access to them after the course had finished and this was particularly noticeable for those trainees who were not able to complete their projects during the PICH year. The mentors' view of the purpose of the system was ambitious but straightforward, in that they wanted to provide trainees with new skills, but also identify individuals who can be '*standard bearers*' for integrated care in future, beyond the life of PICH:

...what we're trying to do is twofold, is to equip these people with some skills to do it and some skills to change things where they are, but what we also really want is within each group to try and inspire a few...three or four each time who are really

going to go on and lead on this in the future, so not only just do their own little bit, but also really take the kind of baton forward for integrated child health.

P8MP

The mentors held a distinctly positive view of the trainees, with few exceptions. Moreover, even when mentoring was perceived by mentors to be onerous to some degree, they nevertheless often found that they learned from the experience:

...every time I take on a new mentee I do it with a slight amount of heart sink about how I'm going to fit it in. And every time I go and have a discussion with one of them I come away inspired and have learnt something, and remind myself that giving up an hour or two here and there is always worth more in return than it feels like. And yes it's difficult to schedule and all of that, but it's always worth it.

P18MP

5.2.2.1.2 Learning

This section forms the second important aspect of the programme evaluation, which is centred on what trainees and mentors learnt from the PICH programme that was of particular value to them. This theme encompasses the participants' understanding of the aims of the programme, the learning that was related to clinical experience, and the development of leadership skills. Interestingly, the most dominant aspect of participants' learning was found to be in a separate domain that we characterised as 'personal development'. The 'leadership' sub-sub-theme also encompassed the notion of the journey – the learning that took place over the course of the programme and that participants envisaged being used in their future careers. Finally, in this theme we highlight the aspects of the learning environment that contributed to the success of the programme.

5.2.2.2.1.i Understanding of aims

The majority of the trainees demonstrated a clear understanding of the aims of the PICH programme, and articulated them to varying degrees of completeness. Overall, the trainees felt that the aims of PICH had been well explained to them and reinforced as they progressed through the year, which helped them to maintain their direction. Several trainees gave very comprehensive accounts of the aims of the PICH programme that, crucially, articulated how the aims related to improving health care for children.

I think the aims are looking at how we can integrate child health through primary, secondary and tertiary care, looking at how we can use data to drive change, how we can use ... there was one that was also really good...how we can use patient experience and involvement, looking at service improvement.

P9TP2

5.2.2.1.2.ii Clinical experience

The PICH program was described by a mentor as a means of reinforcing clinical skills and developing them in a new direction. Trainees frequently reported that they acquired clinical knowledge and that projects were often an activity that promoted learning, for example:

... I've learnt more specifically about...asthma management, you know and how to do it well really. So I've been taught by the respiratory lead, I've been taught by the respiratory nurses. So in terms of my clinical skills, I think they've improved hugely in terms of managing asthma in paediatrics.

P1TGP2

Mentors also reflected on how PICH has been beneficial in terms of their own clinical learning. In particular several remarked that the process of teaching clinical skills improved their own understanding of what they were delivering, and this process therefore helped them to learn:

...one of the things I really like about it is you get stuck in your job and as much as I think, you know, I'm a brilliant clinician and I like to think that I think about everything in a really holistic way all the time, every month someone says something or presents something and you just kind of think God yeah, you know you kind of get lazy in the way you do things or you think, God I didn't put the patient in the middle ...well the two things I love most about those evenings is one is it reminds me about best practice, so actually in the same way that you know if you teach something you learn it really well.

P8MP

5.2.2.1.2.iii Personal development

More apparent even than gaining clinical experience, participants reported that the PICH programme helped to broaden trainees' and mentors' understanding of the nature of practice and that learning about integrated care could broaden a doctor's perspective of work. This was because they perceived integrated care to be 'boundary-less...unlimited', and that it thus supported an understanding of the 'bigger picture'. Mentors' reflections on their engagement with the trainees were also illuminating, as they enabled these more experienced clinicians to see situations and problems in their own practice afresh:

It makes you think about your own practice and hang on, do we have those gaps as well, and actually do we need to be addressing them. And actually is there anything I can be doing in my own practice that these guys are doing in theirs.

P14MGP

The PICH programme was also reported to enable trainees to understand themselves better by reflecting on their values and skills as a doctor:

[The programme has been]...hugely helpful to me as a doctor, it's made me a better doctor definitely ... has given me a real clarity of thought about what's right about that approach, a real determination to really work hard to transform things to do something about it

P11MP

...more skills, and more awareness of bigger issues...And a way forward.

P19TGP2

Several trainees also reflected at length about how the PICH programme had led them to think about their career. Some considered what they could do now into incorporate patient experiences more fully in their clinical practice whilst some considered future career choices:

I think it confirms to me that you know it's something that I really want to get involved in the future... because of service provision and commissioning, that's something I'm really interested in, and it's really kind of highlighted that for me.

P15TGP2

Another similar example comes from a trainee who, despite finding PICH valuable, discovered that the way in which the programme encouraged the trainees to work helped them to gain insight into fundamental aspects of their character and their preferred ways of working:

I realised...it's something I had thought of before but now it became really apparent that I'm not very good at doing projects or coming up with ideas and actually running them to the end. If I'm actually in search of an idea, like I have to do a project because I'm taking part in this programme and everyone has to do a project – I don't function like that...I start from identifying a need or something that could be done better, something that I feel should be improved or needs some work around it. And then I decide that perhaps I should do a project and perhaps I will develop it, and I function much better in that way...And this is how it started for me, I approached PICH because I was working on a project. But then after I moved hospitals I was on the other side, I had to find a new project, find an idea, and I don't ... yeah for me that doesn't work.

P22TP2

During the course of the PICH programme participants reported that they gained confidence. Two aspects appeared to be influential in this. One was asking for help from mentors and peers and receiving positive responses. The other aspect was the project work, which improved their confidence in handling data.

5.2.2.1.2.iv Leadership

As well as the acquisition of valuable clinical knowledge and the development of greater personal awareness, the PICH programme also appeared to enable trainees to gain leadership skills through autonomously developing new ways to deliver integrated care:

I think it will continue to inspire me to do ... to make changes. So to have a quality improvement project of my own and to branch out and to try and integrate care you know when I can. I mean my interest is paediatrics so improving paediatric care in the community is something I feel passionate about. But you know maybe inspiring other people in other areas to make changes as well, that might be something else to take away.

P1TGP2

The realisation that leadership skills could be deployed in order to deliver integrated care beyond the individual doctor's traditional clinical circle of influence stimulated some trainees to consider developing an interest in non-clinical roles:

...in my future career I can definitely see myself going into more clinical commissioning, and I think I'll be much more able to have an eye for things like integrated healthcare. And that's something I really want to be involved in, like as

a project for... like as a roll-out either locally or nationally whatever, and I think that's ... it has more of an impact that way.

P15TGP2

As was seen within the theme of clinical knowledge, mentors also described the enhancement of their leadership skills as a corollary of their involvement with the PICH programme:

...in my clinical work being part of PICH and being part of all the other integrated care things I do, all contribute to me delivering more holistic care for my patients...aside from my clinical care, they also contribute to me leading integrated change, and new models of care for children. I'm a better leader because of PICH and because of the impact I get from it.

P5MP

5.2.2.1.2 v Learning Environment

This subtheme describes the learning environment of the PICH programme. It was characterised by three key features; creativity; enthusiasm and support. Several participants reported that PICH allowed them to think of new questions and new ideas, not only through their project work, but also through an introduction to implementing integrated care in practice. Interviewees reported that PICH offered new opportunities for them to experiment and innovate in integrated care, improving their clinical experience, knowledge and skills. The PICH project participants particularly engaged with this and the mentors noted that they were willing to push the boundaries, in order to make changes.

I am also very impressed by the quality of the mentees. On the whole the people who self-select to do this are keen, they're hungry to do stuff, to push the boundaries a bit.

P16MP

Many reported that PICH encouraged them to 'think outside the box', facilitated through the programme's learning objectives on new projects and the encouragement to pursue new questions.

So I think it's a big ask, but I think it certainly starts people's thinking in a different way and starts to break down boundaries and barriers and starts people questioning.

P8MP

Many interviewees enjoyed the programme and one reported it was a '*fabulously fun place to be*', this enjoyment helped motivate the trainees to fit the programme requirements around their already busy schedules. Participants mentioned that they came away feeling inspired by the enthusiastic '*buzzing*' atmosphere. This positive learning environment was created through passionate high-energy contributions of people attending the seminars:

Oh the seminars have been fantastic. I didn't really know what to expect, but it's actually you know the one thing that I look forward to every month. Because the speakers are just so inspiring and everybody there is so enthusiastic and energetic that ... more than it being about paediatrics and integration, which is what we're

all there for, it's just the general learning environment that it is that I really find just motivating really.

P1TGP2

The participants reported a supportive learning environment; mentors and peers on the scheme provided significant and ongoing assistance during the programme. Support was in the form of peer and mentor feedback and having others to share their experiences with.

because she's come back to me about a few issues, and also our projects, so I've been able to support her a little bit about her project and she's been able to give me feedback about my project, about whether it's an important problem that they see within primary care, um, and I have interacted with the other participants just on a sort of social basis and on what they're doing on their project.

P9TP2

It was interesting to note that several participants commented on morale amongst the workforce of doctors being low at this time. One mentioned that in general difficult working conditions causing low morale and dissatisfaction among trainees meant the programme was a '*breath of fresh air*' to be surrounded by people with such passion and inspiration. They reported this is of particular importance in the current climate as within healthcare '*lots of people have given up.*' the PICH programme was reported to help improve morale through both the support of colleagues, who were experiencing similar pressures and the inspiration from many senior enthusiastic mentors.

5.2.2.3 Integrated care

This section is about participants' attitudes to integrated care, as exemplified by their espoused beliefs about integrated care and their reported motivation for joining the PICH programme. Participants' perceptions of systemic issues relevant to the implementation of integrated care are also described, and these have been grouped into three main categories: barriers to implementation, the delivery of efficient care and patient-centredness.

5.2.2.3.1 Motivation to join PICH

The participants report a variety of routes into the programme – however, these nearly always included having prior practical experience or exposure to integrated care. The precursor to the PICH programme were the Learning Together Clinics (LTCs), convened by the PICH organisers such that both a GP and a paediatrician co-delivered child health clinics. The success of these clinics led to the formalisation of the approach into a training course that became PICH. Several of the trainees had been involved in the LTCs which triggered them to enrol on PICH. It was clear from the data analysis that many of the trainees had interest and / or experience in integrated care projects and systems prior to being involved with PICH programme, in the UK as well as overseas:

I did most of my SHOs, so my junior doctor training at HOSPITAL paediatrics...there's a lot of integrated care projects running within TRUST, and we were kind of encouraged to take part, and we had a weekly integrated care meeting.

P22TP2

I originally trained in India....I did some work with the integrated care there and I really enjoyed working with the healthcare workers, the laboratory technicians. So I did have some experience of integrated care in India. And then I moved to the UK and just got training there.

P4TP2

For some of the participants their interest had been stimulated by their involvement the Learning Together Clinics (LTCs) that were a precursor to the PICH programme. Clearly, the participants were generally an intrinsically motivated group.

5.2.2.3.2 Beliefs about integrated care

Participants, mentors and programme leads held strongly positive views about the value of integrated care, seeing it as *'the only way that we're going to work in the future'*.

Because we have finite money and an expanding population with increasing burden. So we can't carry on, we have to think differently. And I think by thinking differently it leads to integration because you've got to share knowledge, you've got to share time resources and all that kind of stuff to cope with the changes that we're going to face.

P19TGP2

The main beliefs expressed about integrated care were the notion of improving patient outcomes through more efficient patient pathways, providing holistic care which was not *"necessarily a medical need"* (P22TP2) but which, through integration across primary and secondary care, created a *"joined up system"* (P5MP).

I think fundamentally because it creates a system that responds, that is designed around the patient, so instead of the patient doing the running around and joining up, the system is joined up and therefore the patient's needs are met in a holistic way, in an efficient way with resources used as effectively as possible.

P5MP

One mentor gave an especially lengthy explanation of their beliefs about integrated care and its importance, and praised the PICH programme for, in this interviewee's view, anticipating how care needs to be reconfigured in future:

...they're definitely touching on something very prescient and very attractive. I'm not convinced it's being explored to the extent that it should be, but...there's something very attractive to people about the whole PICH thing...I think I've learnt that you know you can't just be a blue sky thinker all the time, you know you do have to nail it down to practicalities which have never been I suppose my strongest point, you know. But it didn't take PICH to teach me that, you know, I've been around the block a couple of times, I know that's me...I think one of the reasons I've been turning up to PICH is the hope that things could be arranged slightly more patient-centric in terms of their needs than they are at the moment...rather than taking a more biosocial, or biopsychosocial model and actually looking at the... well certainly the psychological, but the social causes of their problems. You know by not doing that I think we're just generating work.

P7MP

5.2.2.3.3 Systems and organisational change

This sub-theme reports the views of PICH participants about the individual and organisational barriers to developing integrated care systems. This sub-theme then explores the ways in which the PICH programme and the skills learnt therein could be utilised to enact change, including participants' views on the patient perspective.

5.2.2.3.3.i Barriers

The sub-theme 'barriers' described the obstacles to implementing the integrated care idea. Participants reported that barriers operated at the level of the individual as well as at a systems level.

Individual barriers included professionals with fixed beliefs or unwillingness to change current ways of working and these included doctors and allied health professionals:

one of the trainees was telling me the other day that you know she was doing an asthma project, and you know one of the obstacles that she came across was you know that school nurses were not interested in collaborating with the asthma nurses.

P7MP

However, it was systems level barriers that were most commonly noted. In particular, staff shortages and heavy service demands were reported to inhibit '*going out and doing some proactive care*' (P10TP1). Participants described colleagues as being too busy to attend clinics in the community or work with other health professionals in different environments. Participants stated that the busy and stressful nature of their work means it becomes difficult to think of innovation and act on integrating efficient care:

Totally overwhelmed by the sheer numbers of patients coming in – no head space

P16MP

The structural organisation of primary and secondary care was also described as an issue. The way GPs and hospitals are funded was highlighted as a particular problem, where hospitals lose money if they don't see referrals and if more patients are treated in the community with integrated care.

...integrated care keeps patients out of hospital and bringing patients into hospital is how hospitals get their income

P5MP

I was talking to a colleague on the weekend about they're trying to set up clinics in primary care for the paediatricians to do and they just can't make the money work, because the lost revenue to the hospital is not paying for those appointments. The children coming to the hospital means that the department loses too much money

P8MP

...at the end of the day GPs are private you know self-employed contractors to the NHS, and so that could get quite complicated if we started seeing all their patients, and the patients preferred coming to a paediatrician to a GP.

I mean to be blunt, that's a loss of income

P7MP

The structural challenges encountered when working between primary and secondary care were viewed as being a particular instance of an NHS-wide phenomenon of people working within established specialty-specific and organisational boundaries:

...we do an incredible amount of silo working and we do things a certain way because that's the way they've always been done. And so trying to create change within NHS organisations seems to be incredibly challenging.

P12TP2

I think one of the biggest barriers sadly is organisational boundaries, the fact that you feel allied ... aligned ... to a particular organisation and accountable to that organisation...

P16MP

Some participants talked about how barriers might develop during undergraduate training, believing that a lack of interprofessional education in the undergraduate curriculum may make it difficult to adopt integrated approaches to healthcare later in a clinician's career:

...for the vast majority of the people they'll train in a medical school or a nursing school – stay in one place and never get out of the four walls. That can't be good for patient care... I think it's terribly challenging though, it's extremely challenging, because people at undergraduate level don't get exposed enough.

P16MP

Accordingly, some participants felt that doctors didn't always understand the concept of integrated care and how it could be implemented.

...the barriers are the clinicians not understanding it or the concept...most departments at most hospitals wouldn't even have one member of senior staff that would necessarily know what integrated care's all about.

P21TP2

Despite these deeply ingrained difficulties, participants nonetheless felt that integrated care provided a logical framework for the efficient design and delivery of services.

5.2.2.3.3.ii Efficiency and change

Participants articulated two opposing views of how clinicians who know about integrated care can make use of that knowledge in practice. One view was that these clinicians should exhibit agency in driving forward patient-centred process improvement, thus developing concomitant improvements in efficiency. Trainees and mentors alike were able to identify principles encountered during the PICH programme which they felt were well suited to the delivery of efficient and effective care.

I think it's looking at how different parts of the health service interact, looking at how to identify and issue, use data to back up that as an issue and then looking at

how best to look how you might improve, how you might look at improving what, the issue that you've identified using different tools...through the service improvement cycles and patient experience and involvement and then looking at how, with the cycles looking at whether anything, any intervention you've put in, if that's made an improvement, so yes it's been that sort of quality improvement cycle has been good, but using some data and service, patient experience.

P9TP2

The other more passive view was that clinicians will be equipped to accommodate or adapt to the arrival of macro-level changes in the organisation of the healthcare infrastructure:

...so much of healthcare is moving out from secondary care into primary care in the community. And because of that, because we're trying to keep people out of hospital and manage them there, you have to have an integrated care project, there's no other way of doing it safely and effectively for a patient

P14MGP

In either case, though particularly the former, participants were aware of the need to convince colleagues of the effectiveness of integration. They suggested that this was difficult to quantify and thus to adduce as evidence to others:

I worked with kind of developing integrated care through central London and what I realised from working on that type of project is actually the clinicians involved largely get it. We understand the concepts, we understand the benefits, but actually it's very hard to produce evidence or numbers to support what we can see as an obvious fact or an obvious improvement, so that's been quite eye opening

P2MGP

However, there was evidence that even in the absence of 'hard' outcome data, doctors are aware of inefficiencies in the system resulting in either gaps in treatment or duplication of services:

on a population basis, we should all be providing services, joined up services for children with families and not just addressing the one need or replicating services

P9TP2

Integrated care was seen as a means to iron out inefficiencies, to work across traditional organisational interfaces, exploring the best way to revise systems to improve efficiency and to dissolve structural barriers:

I think it's immensely important [integrated care]. We are currently in a very evolving and changing NHS with very strange services and working together is going to be a way to improve patient outcomes and be more efficient, you know, saving resources when we can. And I think there is a lot of wastage on appointments that are maybe not needed, or advice that can't be followed through, and then health seeking behaviour of patients who are frustrated and can't get what they think they want or what they need. So I think it's all very idealistic but if we could work together better, be able to send an email or pick up the phone rather than fax over a request, I think that things would be much better overall for patients and the health care professional.

P1TGP2

I think integrated care is a good example of making sure that boundaries don't become barriers... The porosity becomes extremely important, and this is a great example of trying to put some holes into the boundary to try and get people flowing across the boundary...I don't think you can eliminate them completely, and I'm not sure it's desirable for a number of reasons.

P16MP

5.2.2.3.3.iii Patient-centred care

Many trainees and mentors felt that PICH and its principles could help to deliver better care because the patient journey is currently fragmented and disjointed. Participants highlighted the need for consistency and fluidity in care, the majority of the participants focused on the importance of patient need providing the direction and drive for treatment decisions. Placing patients at the centre for requirement for integrated care was a recurring theme in the data analysis:

I think our patients dictate why it's important...And they want you know joined up care, they want you know not there to be this massive kind of here's primary care, here's secondary care, here's tertiary care – they want a flow, they want to be looked after in a holistic manner ... they're our main concern.

P15TGP2

Mentors and trainees shared this view. P16MP gave the following explanation of why integration is important for patient care from both the perspective of the patients themselves, and the clinicians attempting to deliver it for them:

...there were two things that mattered - that the patients were satisfied and the professionals were satisfied that they were doing a good job. So integrated care is incredibly important because it's a means to that end. And you can call it whatever you want – integrated care, connected care, community ... doesn't matter what you call it, all it is the joining up of people with an end in mind which is the best possible care, the most efficient care, the safest care, the most timely care to your patients

Trainees also cited having a clear understanding of patients' wishes as a means for delivering better care:

I think probably the most powerful learning... is that it's about patient experience, how you can just by making little efforts and sitting down with patients talking through their experience...you actually truly can understand where they're coming from and what's actually important to them...So you can then make a much more informed decision how to change and improve care.

P3TP1

5.2.2.4 Integrated professions

Finally, in this last section we report the some interesting findings about the impact of PICH on developing the trainees and mentors as integrated health professionals, who are able to traverse traditionally distinct clinical domains in delivering care. Since the purpose of integration is to make care seamless between these otherwise distinct domains, the acquisition of skills that can deliver this is crucial to understanding how PICH worked. This section encompasses the educational role of sharing alternative clinical perspectives, changing

notions of professional identity and professionalism in general, and how new professional relationships emerge from working in an integrated way.

5.2.2.4.1 Communication

The project work undertaken by trainees had an important role in fostering effective communication. Participants described how the PICH programme allowed them to make new connections by reaching out and working with senior people. As P16MP describes:

What PICH fellows can do, which is actually make those bridges, make those connections

PICH participants noticed that getting key stakeholder engagement in their PICH projects was important – projects were seen as more sustainable if they had been communicated and disseminated more broadly. More globally, participants identified effective communication as being central to the delivery of integrated care in general:

I think the days of working in silos, communicating you know not quite by carrier pigeon but almost, are long gone. And the expectation of patients is for a really fast wraparound supported care, and the only ways to do that are to have those kind of relationships and those kinds of systems

P16MP

...but if we could work together better, be able to send an email or pick up the phone rather than facts over a request, I think that things would be much better overall for patients and the health care professional

P1TGP2

I suppose the most recurrent theme that keeps coming through is communication, communication, communication. And from a patient centric point of view communication at lots of levels – child level, parent level wider... Communication between practitioners. And this seems to be one of the strongest themes that keeps coming through is communication, communication

P16MP

I think we're separated so much from so early on and basically we need to communicate in a much better way and work together, because it's like there's a line between primary care and secondary care and it's just completely ridiculous, so I mean we should be having a conversation on the phone about how to manage a patient rather than someone sending a letter... asking to discuss it or whatever. It's just so antiquated.

P8MP

Whilst the PICH programme was intraprofessional rather than truly interprofessional in nature, participants did note that there were a number of people all working together to promote child health:

everybody contributes to the conversation and that's what's really important, because each of us only have one little bit of the jigsaw and so it's putting it together that makes it so much more powerful

P2MGP

Communication with other healthcare professionals was not mentioned as much as communication between GPs and paediatricians, however it was still deemed vital for effective care:

You can't manage a patient as a single speciality on your own without ... not just your other colleagues in different specialities as medics, but also all of your other health care professionals, so your physios, your OTs, nurses and everything.

P14MGP

Crucially, several participants pointed out that vital aspects of care are spread not just between doctors, but between allied health professionals as well, and that these too contribute to holistic care provision:

...for example a huge part of our workload is, say, the fussy eater or something, a child who doesn't eat well for whatever reason, and actually it's the dietician who's going to figure out really what's going on, but equally the health visitor will say actually there's been stresses and strains happening and you know I've known this family for 10 years and you know everybody contributes to the conversation and that's what's really important, because each of us only have one little bit of the jigsaw and so it's putting it together that makes it so much more powerful.

P2MGP

Frequent communication was also seen as giving rise to, and sustaining, strong working relationships, which were perceived by PICH participants to comprise another important component of effective integrated care.

5.2.2.4.2 Relationships

Relationships between clinical staff were seen as key to the integrated care enterprise, both in terms of efficient working and in terms of delivering the treatment that patients need. One mentor defended the notion that the combined strength of individuals working together was crucial in optimising the benefit that individuals can bring:

...think about ideas around social capital, how do you through those sort of relationships and connections as a system get the most out of people. I think where people have participated and turned up and got involved that's been really strong.

P11MP

Another mentor, who claimed that solidarity between the patient and all care staff, and between all care staff themselves, is vital for ensuring good practice, reinforced this view.

When there's chaos all around you, the one thing that sustains and is very central to patient care is the quality of the relationships between the patient, the primary and the secondary care provider, and tertiary.

P16MP

Another mentor characterised the development of good relationships as the ability to understand another person's situation or point of view:

Oh 100%. I mean for me there's a lot about understanding the demands, there's a lot about understanding and learning about the risk profile that primary care manages and how to follow that. There's just that subtlety of how you interact, when you interact ... and just relationship building which has been crucial.

P18MP

Trainees also reflected positively on how PICH has assisted in developing professional relationships. Of particular interest were those reflections that made explicit the causal connection between professional relationships and patient care:

I've learnt how by really persisting in developing relationships with primary care you can really change the way you deliver care for the individual patient in primary care.

P3TP1

The PICH project also helped to develop relationships by bringing people together who were otherwise geographically disparate:

Previously I think most of our training was actually based just in hospitals with very little exposure to GP practices or exposure to other GP trainees... We used to work quite independently from each other...it's given me an opportunity to gain new contacts and you know establish new professional relationships with people.

P4TP2

5.2.2.4.3 Blended professionals

This theme is about how, through exploring differences, participants gained valuable insights into other professional roles, and through sharing their unique disciplinary knowledges began to work together in more blended ways. It exemplifies how, through talking together about different roles, different workplaces, and different practices, participants on the PICH programme actually learn. Understanding other participants' alternative perspectives through sharing stories was crucial to uncovering assumptions about others and it was through new understandings about the diversity of approaches to practice that participants could subsequently identify ways of working together more effectively by altering their own practice.

P4TP2 illustrates the concept of unlocking alternative perspectives, describing the notion of multiple lenses and the importance of diversity in providing patient care:

To me, undoubtedly the multiple perspectives and lenses that are gained from getting a diverse group of people together [was the most important part of the programme]. I guess that's what I mean by lenses – that we're looking at the same thing, maybe child health or a particular piece of it, but we're coming at it through different lenses ... some more experienced lenses or some fresh eye lenses, you know some people go 'senior' and 'junior'. Well maybe, sometimes junior provides wonderful fresh eyes to things that some of us who've been around longer don't. The primary care, you know the GP aspect, public health aspect ... so that's been ...

that's been really really important. And I'd argue it matters less about what the actual content is than getting those multiple lenses. Because what you start to experience then is how multiple views on a particular situation can completely unlock things. And what my hope is that people start taking that into other aspects of their working lives.

P4TP2

Dialogue and sharing stories were essential to learning about alternative perspectives, and the idea of learning through stories resonated in the interview transcripts of participants and mentors alike.

Um, I think the importance of sharing, and that can be either you know ideas or experiences and from the trainees and trainers you know just the wealth of experience is incredible, so everyone's stories are very interesting and I think that they can all influence what we do and how we work, so there's no ... I tell you what I've really learnt is there's no 100% right way to do ... (laughs) you know there's plenty of variation and scope.

P2MGP

The coming together during the PICH programme and the shared educational space was fundamental for this expansive dialogue:

I think that the launch event has, we've had two so far and the second one was better than the first in some ways and it certainly created a lot of, a huge buzz, but also really, really initiated that interprofessional learning, but it was very striking how having a bunch of GPs and paediatricians in the room immediately sparked off different ways of thinking and behaving and different sort of dialogue.

P5MP

I think so this year we've had GPs, I think that bringing GPs into the mix has been completely brilliant. Um, and I think it's really changed the flavour of all the conversations and stuff in the meetings and they also have had a lot more, some of them they've had a lot more energy and they have a little bit more time, but they've really added to the group, so I think that has been a thing that has worked really well.

I think it just makes everybody think of it differently, because otherwise you know as different as a group of paediatricians can be, they're not as different as a group of paediatricians and GPs.

P8MP

As the participants and mentors allude to it was the mixing of practitioners from different specialties that lead to this learning. The PICH programme therefore allowed participants to reconstruct and at times co-construct their professional knowledge. Paediatricians learnt about general practitioners, and vice versa, through their contact on the PICH programme. Both participants and mentors reported how the programme enabled trainees to gain a deeper understanding about professional differences in particular the other's roles and boundaries:

The most useful aspect that I can see is that the trainees, be it either paediatricians or GPs actually understand what the other person is doing and the challenges that

everyone faces in common, so it's just much greater understanding....you do need to learn and to know to work with local colleagues, so I think it ticks many boxes at the moment as well as the patient just well the patients and their families just really like it

P2MGP

Participants reported learning about how specialist practice differs from that of the generalist. How GPs “have to have such a wide knowledge base and so for example we think it's really important that they know everything about immunisations, but actually they need to know everything about cardiovascular disease and stroke and everything” (P9TP2). Participants gained a deeper understanding about the influence of the workplace and how the different patient demographics, the varying demands and how particular processes construct the work environment. This enabled participants to reshape their knowledge about clinical practice, as P10TP1 accounts:

I learn a lot from them every time I speak to them about work, because they see the other side of it and they're actually seeing you know a huge proportion of well children every day, and how they have to safety net and carry risk is really interesting compared to how we do

By highlighting different forms of practice, different contexts and challenges participants began to talk about their shared interfaces and how each other may experience them:

And so maybe just taking time to ... not surprising, but yeah very insightful to kind of think about ... meet them and think about them and have a chance to talk about kind of the challenges they have about looking after children and maybe their interaction and referral into secondary care.

P17TP2

Time to share stories and the active involvement in the PICH projects were catalysts for sharing knowledge and these new insights enabled doctors to ‘check’ themselves and reflect on practice. Participants picked up ideas, tips, takeaway messages, new sources for resources, and new ways of working together:

How well GPs know their patients... How well-connected GPs are to other community organisations, so that actually as a hospital when I link up with GPs I'm doing, I'm vertically integrating...because the GPs are very well horizontally integrated... I can access the wider system through the GPs... That was something I hadn't expected [learning]

P5MP

Furthermore understanding other professional practices was reported to ‘plant the seeds’ (P20TP1) about how doctors could work together more constructively in the future and participants reported a desire to extend the reach of their professional working to include learning from more established colleagues and in the community. In response to gaining these new insights some participants reported changing practices and behaviours in response:

I also think that probably in future probably if I need to pass on some information to the GP, the communication through the letters need to be really succinct and to the point ...and actually giving the information in a format which actually makes the most impact is quite useful for them.

5.2.2.4.4 Identity

There was a distinct feeling that traditional identities were still rife. P16MP's view was that traditional identities were outmoded and anachronistic:

...the concept of strong single professionals ... I think is actually a rather old 19th century concept now, and that we actually share a lot of competencies, a lot of skills, between professions.

One causal factor for these distinct identity positions was felt to be the separation of undergraduate and specialist training which encouraged rigid identity formation and that undermined collaborative practice:

It's probably changing now. But back when I was in medical school, I don't really feel we were taught properly about what other healthcare professionals actually do. It would be sort of like, what does an Occupational Therapist do? And you'd answer it in one line. I mean, it's not until you actually work with people, other healthcare professionals that you actually have a proper understanding of what they do. And, I think being able to understand that means that you can make a better use of your colleagues, as well...I think, yes, utilising the skills of your team. Because, you know, as a doctor, you're often not the best trained person for that particular skill. And you're better off delegating it, or referring to one your colleagues...

P23TP2

Participants also expressed the view that people in different medical specialties have different identities and temperaments: *'I think people chose their speciality as a bit of a...you know they kind of live the identity'* (P7MP). Some participants felt that practitioners in different medical specialties may hold negative stereotypical views about each other in terms of their clinical practice and perceived status, and that these biases would inhibit collaborative practice:

If you're telling a consultant that maybe he should spend more of his time hanging out in people's homes or in children's centres or something like that – not quite got the status of you know a hospital consultant, you know that kind of thing. GPs I think don't like having their patch trampled on.

P7MP

PICH trainees described themselves as having a particular identity that was drawn to working in an integrated way, of *"working closer with primary care and community"* however for paediatric trainees it was noted that they did this *"without becoming a GP"* (P7MP) and that joint working should be seen as distinct from merging professional identities.

In this light, the PICH project was seen as a pioneering enterprise at the vanguard of a contemporary approach to professional identity that is better matched to the realities and demands of care:

...I think lots of people are very stuck in their ways. They feel threatened either way...Older paediatricians think what am I going to, why am I going to waste my time going there? And GPs think I'm fine, I don't need their help...whereas

actually...what we're really trying to breed is a generation of people who say you know bring it on, let's all work together in a different way...if I had one line that would be my line about PICH is that we're developing a generation, a new generation of clinicians who work together in a different way.

P8MP

Several participants raised the issue of a natural identity alignment between paediatricians and general practitioners and that these similarities lent themselves to these specialities working together. Other medical specialities were believed to share this alignment, noticeably geriatrics, and other projects were mentioned by participants as examples of where these well-aligned specialties could integrate with relative ease. Conversely, it was felt that other medical specialities may not be able to integrate in such a seamless manner:

I think what would be interesting is to try and do exactly the same thing in orthopaedic surgery... you know asking a bunch of orthopaedic trainees...you know if somebody said there's some way of delivering MSK outside of the hospital, you know with GPs, so you didn't have so much...trivia coming to your clinic...It would be interesting if they were just as enthusiastic, and whether this is in fact a phenomenon of paediatrics and a phenomenon of the sort of people that go into children's medicine, who are naturally keen to not play the classical consultant role.

P7MP

5.2.2.4.5 Professional spaces

There were two forms of professional space identified in the data. One was the educational space of the PICH programme, which has been discussed in section 5.2.2.1.2.v under the theme "learning environment". The second professional space, considered below, was the workspace inhabited by participants.

Professional spaces were described as different in many ways: different parts of the health service worked in different ways which included the setting up of services, funding, possible interactions with other professional services and staff. A mentor provided a historical perspective and held that professional spaces no longer necessarily map onto the realities of contemporary care needs, given the ways in which these have changed and how medical knowledge has advanced in recent decades:

I think that the reality is that the hospitals and the GP services are set up for people who were genuinely ill 70 years ago, you know. And you know the job of an SHO on a paediatric ward when he came in in the morning would be to you know inject anti TB meningitis drugs into their spine you know. Whereas now you know a lot of the stuff is, you know, pains and aches and unexplained symptoms...

P7MP

Other participants reported how current influences bear down upon different healthcare contexts to produce qualitatively different working environments for GP and paediatric trainees.

Hearing the discussions between GPs and paediatricians has been really interesting. You know there's often a grey area between what's in the realm of GP and what's in the realm of the paediatrician, but is actually lots of shared work and

this actually lots of unknown areas that we just sort of fudge through. ...And the discussion was actually about whether paediatric services are too good and that they are not sharing care enough, so that... You know it's almost a bit unfair for GP to have to take on board a complex child or complex young adult when they've never met them before.

PTGP21

In several cases trainees noted differences between professional spaces that, although not dramatic or complex, nevertheless exerted a strong defining influence on the nature of those spaces: the affordances of various spaces differed. Geographical differences played a role in defining professional spaces which in terms of resources were described as a “postcode lottery” (P5MP):

So I work with three boroughs from my hospital but actually it seems you know that every London Borough does things a bit differently, every GP practice in every borough does things differently and it's really helpful to see where the parallels are and where the differences are and that's very illuminating

P5MP

We have heard before how shared stories and dialogue were important pedagogic devices which highlighted alternative perspectives and sharing knowledge but equally importantly this dialogue was reported to facilitate the breakdown of barriers and support the formation of professional networks.

it's good because it forms a network, it breaks down that barrier between paediatricians and GPs...because primary and secondary care is very separate, but actually for the patient it's a continuum isn't it?

P13TP2

The idea that spaces should be integrated has been picked up in theme 5.2.2.3 “Integrated care” however, it was noted that sharing spaces, paediatricians moving into community settings might also provoke territorial disputes and conflict over funding. A key focus of PICH and the evaluation was to understand how professional spaces and domains of responsibility and accountability can be negotiated when integrating care. Both geographical and psychological factors played a role. Participants frequently reflected on the significance of understanding professional spaces in being able to deliver the best possible care:

...the child will be seen by the GP for something, come into the hospital for something, and go back to the GP. So for us we're treating the child very separately, but for the child and the parents it's just ...you know it's just another doctor as part of the system.

P13TP2

I've learnt to better understand their work set up, IT system, their work pressures, their pathways and just generally their kind of GP thinking, which I think is very ... and risk management, that is very different to what we do.

P3TP1

6. Discussion, recommendations and conclusions

This section starts by précising the results and then discusses them in relation to the PICH programme, integrated care and the professional attributes needed to support this development in healthcare. The discussion highlights those areas in which the PICH programme was particularly effective as well as suggestions for development. The penultimate section draws upon the results and discussion to make recommendations for the programme leads to review. Finally, we briefly outline the limitations of our research and make concluding remarks.

6.1 Summary of main findings

This section lays out the findings of this evaluation in relation to the original research questions, which were:

1. How do course participants evaluate the PICH programme, in particular?
 - a) What are the participants' views about the structure of the programme?
 - b) What did the participants' learn from the programme?
2. What are participants' views about integrated care and its impact on healthcare, in particular?
 - a) How do participants understand the concept of integrated care, its aims, and its importance?
 - b) What do participants say are the structural issues relevant to delivering integrated care?
3. How does the intraprofessional nature of the programme influence the participants?

6.1.1 Programme evaluation

The PICH programme was perceived to be well run, worthwhile, and provided the desired benefits in terms of education and learning about how integrated care can be delivered. The observations and interviews both revealed the enthusiasm of participants, mentors and programme leads and this undoubtedly contributed to the supportive and 'buzzing' atmosphere described by many of the course participants.

The induction session, the project website, the mentoring scheme, and the monthly seminars were all largely evaluated positively. There were some complications, for example, it was difficult for all trainees to attend all seminars due to busy work schedules. The induction was felt to be rather long and presentations, whilst of immensely high quality, were perceived to be 'too good' and somewhat intimidating. Mentorship and support was appreciated by many of the trainees, both peers and mentors provided sources of influential advice. Some trainees felt that the mentoring was too open-ended and those who were unable to finalise their projects at the end of the year missed out on guidance. One critical component of the programme was the project. It caused both frustration and pleasure. Where barriers and delays were encountered, which derailed participants from submitting in a timely fashion, they often felt disappointment. However, many reflected later on the generic learning and the importance of the process. The projects gave participants an enhanced understanding of how using real data could influence traditional

systems: an authentic problem-based approach. It also provided a sense of autonomy, enabling them to craft something of personal and professional relevance, to innovate and shape their own clinical environment.

There was a widespread and positive perception of the style of learning delivered by the PICH programme. The aims of the project were clearly and spontaneously articulated in the interviews, demonstrating the success in delivering the PICH programme. Whilst participants did talk about learning clinical knowledge and skills in a speciality to which they would not necessarily have exposure, the vast majority of their talk was directed towards their own personal development: gaining confidence, independence, forming networks, tools for individual reflection and application. An important finding from the interviews, with both trainees and mentors, was that the course appeared to be successful in delivering tools for leadership too. Participants acquired skills to take forward integrated care initiatives; ready to enact change as 'leaders' of integrated care for the future.

6.1.2 Integrated care

Trainees and mentors on the PICH programme were all integrated care enthusiasts, having been involved in other educational initiatives, in particular the 'Learning Together' clinics or having prior interest in the area. The rationale for integrating care was well understood and articulated by participants. All participants perceived a drive towards integration as rational, since they specified the patient must always be at the centre of care and it is in the patient's interest that care is seamless, which integrated care enables. Moreover, there was a widespread feeling that integrated care is an idea whose time has come, not only because of the growing prominence of 'patient-centred care' as an ideal, but also given the need to increase efficiency in view of increasing economic pressures on healthcare. Participants were hopeful that integrated care was a driver for positive health systems change and believed that more integration was inevitable. However, they were mindful of significant barriers to implementation, including financial and territorial issues. Integrated care was reported to impact on patient care positively. Specific examples of overcoming current voids in the system were smoother referral processes and getting timely specialist advice. Integrated care was also felt to improve efficiency by preventing work from being duplicated. Integration was seen as an important concept centralizing the patient in systems-based re-organisation of health care which was likely to have tangible positive impacts for children and their families.

6.1.3 Integrated professions

One of the most influential aspects of the programme was creating a shared space for participants to talk about providing care by providing stories. These narratives became fuller and more nuanced with increasing the diversity of the participants. There were frequent stories about how responsibilities are shared within child health care and this provided the impetus for them to start thinking critically about how professional boundaries interlock and / or cross over between paediatrics and general practice. They talked about the vital role of effective communication in both the intra as well as interprofessional context, although the vast majority of the dialogue related to the former. Communication was seen as a means of establishing effective relationships and reciprocally, building relationships resulted in improved communication and improved sharing of information. During the PICH programme participants' learnt about seeing the other

side of things, others' working environment, the burden of paediatric clinical work, service pressures and affiliated health care networks which supported or undermined clinical practice. It was clear that their close perceived professional alignment – paediatricians and GP – was a natural one. However, alignment was not reported as universal. Certain specialities were not seen to align as similarly, which may be problematic for implementing future integrated care pathways. Participants gained a deeper understanding of the differences and similarities in each other's clinical roles and how, crucially, they would now alter their own professional practice to take these into account. They became a more 'blended professional'; one who adapts their own practice mindful of the others. This emergence of a blended professional raises the concept of professional identity, how they thought about themselves in their clinical capacity and how stepping out of traditional identities and thus roles aided the development of them as integrated professionals.

6.2 Discussion

Our review of the PICH programme utilised a multi-methods approach, which drew on the affordances of ethnographic observation and interviews with trainees and mentors in order to piece together a comprehensive and nuanced picture of the programme. Our adoption of a critical realist stance meant that we were interested in not only identifying and describing the programme's various strengths and weaknesses, but also in understanding the causal mechanisms that underpinned these features of the course. Thus, the discussion that follows considers aspects of the programme that range from practical aspects of course design to conceptual and philosophical observations about the nature and ambitions of PICH within the current UK healthcare context.

6.2.1 Programme evaluation

Our observations of the face-to-face elements of the course and our discussions with course participants revealed a number of strengths of the programme which fell broadly into one of two categories: curriculum/course design and pedagogy.

A key feature of the curriculum was the organisation of content according to themes. These themes were aligned to the stated aims of the programme and operated to reinforce the aims as well as to guide delivery of the formally taught elements of the programme. Thus, participants repeatedly encountered the themes and took these to be proxies for the learning intentions of the course organisers. There were occasions on which the curriculum might have been better described as emergent, in that significant time was set aside for formal and informal group discussion. This seemed to be highly valued by many participants, but a few perceived this time to be a less overtly productive and were accordingly less positive in their views. This may simply be a case of some participants having different learning preferences to their colleagues, however there is potential to add a degree of structure to these group sessions. Action learning offers a framework for facilitating group discussions of real world problems such as those encountered by trainees on the PICH programme. It may be that this, or other more formalised approaches offer the same degree of useful peer and senior input while reassuring participants that they are engaged in a deliberate (if not didactic) process of teaching and learning.

Another prominent feature of the curriculum was the emphasis on self-direction and learner autonomy. The

requirement for prospective participants to demonstrate a degree of self-direction prior to joining the course, for example by identifying senior support within their hospital or trust, probably functioned to ensure that participants were indeed self-directed and motivated. It is highly likely that course participants in these early stages represent the 'low-hanging fruit' – early adopters who are already committed to the concept of integrated care and who are prepared to expend some personal effort in order to develop their interest further. This notion was substantiated by our finding that most participants had previous experience of integrated care, some of them through their involvement in the Learning Together Clinics (LTC) which were a precursor to the PICH project.

A final central feature of the curriculum was the emphasis on experiential learning through the design and implementation of authentic workplace-based integrated care projects. These projects required trainees to engage with data and develop 'systems' thinking in considering how to improve services for patients in ways that, in all probability, they would not otherwise have done. The problem-based and real world orientation of the aspect of the projects appeared to be central to the experience of the PICH programme. Key to the success of these projects was the provision of mentorship, which was almost universally reported to be a real strength of the course. However, as noted in the results chapter, some trainees struggled to engage with their mentors outside of the seminars due to issues of geography and the pressure of workload. In these instances, it was difficult for trainees to gain sufficient regular access to their mentors, which had a negative impact not only their projects but also in terms of the amount of pastoral support they could receive. We realise that in some cases it was not logistically possible to pair mentors and mentees in a more convenient manner and that circumstances are unlikely ever to be ideal. Nevertheless, ease of access to mentors was crucial to the effectiveness of the mentoring system, and as such these barriers created problems.

There was confusion about the purpose of the projects, with trainees being uncertain as to whether success on the PICH programme was formally linked to successful completion of their project work. The mentors that we interviewed were clear that, in their view, the important project-based learning was that which was derived from *attempting* to implement service improvement. Further clarity about expectations regarding the success of the projects, and what counts as success, would be helpful for participants in later cohorts. One way to do this might be to change the emphasis of the alumni presentations on the induction day to highlight learning rather than outcomes – trainees reported feeling intimidated by the achievements of their predecessors, and this may in part have contributed to the perception that projects had to be ambitious and be completed within the course of the programme. In acknowledgement of the incomplete nature of some of the projects, trainees also indicated that that some post-course support or oversight would be valuable; given that the integrated care skills were only newly learnt by this point.

Participants reported that the induction day was too long and felt overwhelmed by the amount of information provided to them. Some reported that the projects presented were of such high quality that they had doubts that they would ever achieve such high standards and this acted to demoralise them.

The PICH programme is somewhat unconventional in emphasising ongoing skills development and personal development, rather than the acquisition of a prescribed body of information, and this is a real strength of the course. It is also unconventional in not providing participants with a certificate at the end. Consequently, despite having given up a lot of time and effort over the year, trainees did not receive any qualification or document that they could use to evidence their learning on the programme. This was especially problematic for those trainees whose projects remained unfinished at the end of the course and who therefore had no 'real world' outcomes to point to either.

Our findings were therefore mixed regarding the 'signing off' process for PICH trainees. Although both cohorts overall found the programme educationally valuable and satisfying, an interesting finding in both cohorts was that the signing off process was often unclear. There was little mention of a well-defined or specific protocol for signing off at the end of the year, although it is crucial to note here that a formal signing off process *does* exist. This was developed after the end of the first year of PICH in response to feedback from that year's programme participants, and as such is already a feature of the course.

The reason for the lack of clarity in our findings regarding signing off may be due in part to the open-ended nature of PICH and the principles that it attempts to embody in its trainees. Several trainees expressed surprise or confusion regarding their expectations of the programme with respect to its closure. In these cases they had expected that the completion of their projects within the year would be a stipulation of the programme, and that support would thus be provided to ensure that this occurred, followed by their being signed off. As we reported in our findings, the mentors frequently reported that the emphasis of PICH was on the development of skills and an 'integrated' way of thinking as tools to be taken forward, rather than the completion of one specific piece of work. Most trainees grasped this principle rapidly, but a few found it more difficult to do so as it was in various ways inconsistent with their personalities or their personal views about patient care. Consequently, in both cases discussions of the signing off process were limited. What was more frequently raised in relation to signing off was that since PICH is not certificated, trainees do not have a document which clearly states what they have learnt and what extra skills they have acquired over the year that they can use to develop their career portfolio.

Having said this, we are aware of the danger in providing certificates to learners: for some, the certificate becomes the principal aim of their involvement in the programme, which is thus reduced to a tick-box exercise aimed at providing material for evidencing achievement of curriculum competencies or for career advancement purposes. Stobart (2008, p. 89) refers to this phenomenon as 'the diploma disease', in which learners pursue qualifications rather than learning, and qualifications are taken to be a proxy for learning, which may not have occurred in any meaningful way. Course organisers should therefore consider carefully how they might make decisions about certification of individual learners, and in particular how they might assess authentic engagement and learning rather than the successful completion of projects.

The learning environment was one of the successes of the PICH programme. It generated great enthusiasm and passion and appeared to be extremely effective in raising morale. The data suggested that the seminars in particular engendered infectious feelings of positivity towards the goals and methods of the programme, and this was in some cases vitally important when set against a backdrop of severe and systemic difficulties in the NHS.

A final important finding regarding learning on the programme was that it was multidirectional – trainees and mentors both reported learning from each other and trainees reported learning significantly from their peers. Of particular note was the finding that most of the mentors reported having learnt from the trainees; they appeared to derive value from reflecting on how trainees handled clinical situations that were familiar to the mentors, with the relative freshness that comes from having spent less time practising. These experiences appeared to help the mentors reflect on reasons behind their views or judgements, and thus to critically assess their own practice. There was, therefore, indication that PICH was able to promote personal professional development even amongst the most senior participants.

6.2.2 Integrated care

Our interviews revealed that the majority of PICH participants were highly motivated early adopters of integrated care who typically had previous exposure to other integrated care initiatives. Accordingly, we observed high levels of engagement within the face-to-face teaching sessions, and interviewees often spoke with enthusiasm about the benefits of integrated care in general and their appreciation for the PICH programme in particular. It was interesting to note the tone in which beliefs about the benefits of involvement in integrated care was expressed. For some participants, integrated care was seen as an idea whose time had come, and so the programme was seen to be useful in preparing trainees for anticipated systemic changes in healthcare in the UK. Thus the programme was framed as helping trainees to respond to the zeitgeist, with the trainees being cast as essentially passive recipients of change: one mentor went as far as to say that the course participants would have to await system change in order to involve themselves in the delivery of integrated care. Other participants emphasised agency – the PICH programme was framed as equipping doctors to drive forward service design or service improvement, with the expectation that they would be leaders in this endeavour. Our perception is that the latter view is not only more in keeping with the stated aims and content of the course, but is a view which is more fitting for medical professionals whose capacity to provide leadership has been emphasised repeatedly since the publication of the Francis report in 2013.

Moreover, trainees on the course demonstrated that they could lead effectively: a common theme regarding PICH's effectiveness related to the degree of agency that trainees were able to exhibit in developing integrated solutions to problems. A significant degree of judgement was necessary for defining the space in which trainees could innovate, and participants found themselves articulating and advocating for the patient perspective in the design of services. Participants, nearly exclusively, believed that efficiency and patient-centredness could be improved as a consequence of developing integrated care systems. This widely held belief was demonstrated as important in several ways. Healthcare systems frequently fragmented and having gaps or obstacles were reported to slow the patient's progress through their care journey. This is likely to result in problems such as missed appointments and delayed interventions or referrals, all of which have cost implications as well as impact significantly on the patient experience. Furthermore, without integration there is a risk of duplicating, or even omitting vital interventions or processes.

Trainees often reported encountering structural and other barriers to implementing integrated care. Individual barriers mentioned included misconceptions by other healthcare professionals about the concept, rigid professional boundaries and a lack of commitment to setting up new ways of working. Structural barriers were fiscal, pressures of service undermining the opportunity to stand back and take account of the broader aspects of patient care, the organisation of primary and secondary care and the lack of formal curricular exposure in training programmes. Participants appreciated other colleagues did not necessarily share their own views on the value of integrated care. For many, this was the first time they had become aware of the complexity of the health service, and the support of mentors was vital in guiding trainees in recognising and, where possible, overcoming these challenges.

The teaching methods used in PICH – seminars, projects, presentations, placements, and mentoring – are not unusual in themselves. Rather, it is the content of those teaching methods and the way in which they are designed that has been crucial to PICH's success; namely, the bringing together of doctors from different specialisms within the context of each of the methods used so that GP and paediatric trainees can learn from each other towards developing a more comprehensive, holistic, and nuanced view of a patient's

needs. We therefore suggest that *how* PICH teaches is effective in terms of the methods used, and it may be made more effective by widening the scope still further to bring in other medical specialists and allied health professionals.

The challenge for the programme is therefore likely to come when attempting to broaden its reach, which we would certainly recommend, in order to draw in those who are less familiar with the concept on integration and give them the same transformative experience of integrated care. To this end, one of the key findings of our research was that trainees had often come to believe in integrated care by doing it, and we therefore recommend that the PICH programme retains a firm focus on bringing together doctors (and perhaps other healthcare professionals) from different specialties to work on authentic workplace-based projects so as to maximise the value from teaching integrated care approaches.

6.2.3 Integrated professions

The intraprofessional nature of PICH was a particular success. Our data clearly indicated that trainees derived a significant benefit from sharing stories and working with doctors from a different medical background. In this study, both professional groups reflected on the value of being able to understand the challenges that the other specialism faces and the strengths of working more closely with each other. The themes listed under the overarching theme “integrated professions” were about data reporting this dialogue about the inter-relational aspects of the programme, about understanding differences, awareness of similarities and adapting professional practice to become a doctor who is more highly sensitised and responsive to the work of their fellow professionals: the concept of a “blended professional” (Whitchurch, 2009). Blended professionals are those individuals whose practice is shaped and influenced through engagement with other colleagues and other communities; they negotiate internal organisational boundaries as well as reach across into external institutions. The advantages of becoming a blended professional, according to Whitchurch (ibid) is that these individuals better understand the multiplicity of perspectives concerning practice, embed and integrate themselves into the workplace, develop meaningful relationships with others and are those that are willing to challenge the status quo (see Whitchurch, 2009 p5).

In order to explore this idea of emerging blended professionalism in more detail we compared the coded data from cohort one with cohort two. It was apparent that cohort two generated significant more conversation relating to the subthemes described in the overarching theme “integrated professional”. Cohort two actively talked about communication, relationships, alternative perspectives, sharing knowledge, professional identity as well as gaining understanding about other doctor’s professional spaces. Therefore, we would recommend that the diversity of the cohort be maintained to its fullest in order to generate these professional insights. Furthermore, where possible we would also recommend continuing to pair both GP and paediatric trainees together. By providing each trainee with a permanent counterpart in the other specialism throughout the year, both would be better able to capitalise on this learning and cement the necessary requisites and skills required to become a doctor, with personal capabilities to support the development of integrated care.

On the contrary the PICH programme did not appear effective in enabling interprofessional working skills, but this probably because all of the participants in the programme are doctors. As it is not open to nurses,

pharmacists, and other allied health professionals, the value of their perspectives was missing. Nevertheless, as our results indicate, PICH was indirectly effective in this respect. Several of the trainees reflected on how PICH enabled them to gain a more holistic view of patient care, taking more conscious and explicit account of all the various professionals involved in providing care for children. Particularly making reference to allied professionals such as school nurses, nutritionists, physiotherapists, occupational therapists and the vital contribution they provide to ensure the right treatment decisions are made. In this respect PICH appeared to be a proxy for the development of better inter-professional working skills. However, further research in this area is recommended.

Elsewhere in our findings participants queried if the integrated care and educational interventions would work well with other professional pairings. The two specialisms coming together in the PICH programme were reported to have sufficient similarities, which enabled them to work constructively together. Rheumatologists and geriatricians were discussed in the same vein. However, participants were unclear how other, in particular surgical specialities would be able to learn and work in this way. Consequently, it is unclear how easily the PICH model could be replicated in other domains of medicine. However, in our view, assuming the presence of certain conditions relating to practical feasibility and sufficient willingness between specialisms, there is no theoretical reason or reason in principle why the PICH model could not be replicated elsewhere. As such, determining this would be a worthwhile and valuable avenue for future research.

6.3 Recommendations

In this section we highlight key recommendations for the PICH programme, both elements to capitalise on as well as areas for further development. The section relies on the data analysis done by the research team but also reports participants direct responses in interviews.

- More support after the programme, particularly as many want to continue the ideas instilled in PICH such as talking about leading change- this will require ongoing support or support for their projects which may not have been completed in time
- Consideration should be given to shortening the induction session from a whole day; as such a long session with so much new information was reported to be daunting for new trainees.
- Some participants wanted easier access to mentors, as their respective locations made it difficult for them to meet. We recommend ensuring that trainees are paired with mentors nearby if at all feasible.
- Given the vital peer support role that the seminars have played in PICH's success, we recommend the programme continue to provide educational space where participants can share stories about their experiences and projects.
- Given the focus on process rather than outcomes of integrated care, we recommend that trainees are able to hear stories from previous trainees and invited speakers not only of success, but failure, and how to overcome barriers and obstacles.

- The trainees need ongoing support once they leave the programme. This could be virtual or physical, but we suggest that a follow-up system be developed by which trainees and mentors retain some degree of contact for an agreed period of time after the programme finishes.
- Post-programme structured support is also needed because many trainees will want to continue developing key ideas instilled through PICH, for example about leading change or commissioning services. Some trainees may also need extra support to complete unfinished projects.
- We recommend that PICH provides some form of signing-off procedure, such as a certificate, so that those that participated felt they had something to put in their portfolios in recognition of the time they committed and the skills that they learnt.
- More and clearer information is needed for PICH trainees about what to expect regarding its ethos and expectations. In particular we recommend that greater emphasis is given to what trainees will learn from the journey that they go on in doing their projects, rather than their completion.
- All the PICH participants have been 'early adopters' of integrated care, understood its principles and / or had some prior experience of it. We therefore recommend widening participation to recruit trainees from further afield with less relevant prior knowledge or experience.
- We recommend research involving cohorts including trainees who have not been exposed to PICH or integrated care previously. It is important to discover if the PICH is as effective for a less enthusiastic group, and if the PICH team's enthusiasm 'rubs off' on those new to integrated care.
- Keeping both specialisms is essential for facilitating intra-professional learning and working. We also recommend involving other health professionals working in child health care, to increase the inter-professional mix of the programme and facilitate new learning and skills.
- Given the benefits the GP and paediatric trainees derived from working with the other specialty, we recommend continuing to pair up different professionals on the projects, to enhance intra-professional learning and trainees' understanding of different specialties.
- Not enough is known about how the PICH model could be applied elsewhere to deliver integrated care across other specialisms, so we recommend research into this.

6.4. Limitations

In this section we report on limitations of our study. Our initial study design included a focus group session as well as the interviews and participant observations. Our proposal was to run a mixed focus group of GP and paediatric trainees from both cohorts so as to elicit discussion between them and discover similarities and differences in their views on the issues being investigated. Despite repeated attempts to organise the focus group, unfortunately it was not possible to do so, due to the numerous demands on the trainees' time, and the geographical dispersion of the trainees across London which prevented us from being able to find a time and place that was convenient for all volunteers. Although this has reduced the amount of data that we

were able to collect overall, in our view it is not a significant limitation. The interview data contains rich accounts of participants learning about, from and with on another – which was the purpose of the focus group.

Our sample is not equally distributed between either the two specialisms or the trainees from both cohorts. It was more difficult to contact trainees from the first cohort as they had left the programme a year prior to the study beginning, and since only paediatricians were in the first cohort we could not interview any GP trainees from the PICH's programme first year. Moreover, it appeared to be more complex for GP trainees to spare time for interviews than paediatricians, and as such our results are weighted slightly more heavily towards the views of paediatric trainees in the second cohort. Although this slight imbalance is a limitation, again we do not consider it to be seriously limiting to the reliability of our findings, as overall there was significant homogeneity of opinion across trainees from both cohorts and between both specialisms, and as such we believe that it is unlikely we would have discovered new information of significance even in an ideally balanced sample.

6.5 Concluding remarks

The PICH programme was highly evaluated by participants and mentors. The overall feeling was that of a generally well-run course, which was populated by enthusiastic mentors and trainees, and which led to significant learning for everyone involved. Fundamental to its success were two key ingredients. Firstly, the learning environment established at the seminars provided both support and challenge from peers and senior colleagues and secondly, the project which allowed participants to engage with data, work with authentic problems and innovate. Whilst there were logistic issues with attendance and some frustration about project completion participant's reported developing clinical, professional and transferable skills including leadership.

Participants were all enthusiastic adopters of the concept of integrated care. However, they were aware of the practical realities of implementation, often significant structural barriers, but considered integrated care to be an effective patient-centred model for health service development.

Alongside organisational systems participants learnt, through the PICH programme, the importance of the interpersonal. They articulated the value of understanding and adapting roles and identities to change professional behaviours and how to work as 'integrated professionals'.

7. References

- Ahgren, B., 2010. Mutualism and antagonism within organisations of integrated health care. *Journal of Health Organization and Management*, 24(4), pp.396-411.
- Ahgren, B. and Axelsson, R., 2011. A decade of integration and collaboration: the development of integrated health care in Sweden 2000–2010. *International Journal of Integrated Care*, 11(5), pp.1-8.
- Allen, D., Gillen, E. and Rixson, L., 2009. Systematic review of the effectiveness of integrated care pathways: what works, for whom, in which circumstances?. *International Journal of Evidence - Based Healthcare*, 7(2), pp.61-74.
- Bakx, K., 1991. The 'eclipse' of folk medicine in western society. *Sociology of Health & Illness*, 13(1), pp.20-38.
- Barr, H., 2013. Toward a theoretical framework for interprofessional education. *Journal of interprofessional care*, 27(1), pp.4-9.
- Berger, P. L., & Luckmann, T. 1966. *The social construction of reality: A treatise in the sociology of knowledge*. UK: Penguin.
- Bevan, G. and Janus, K., 2011. Why hasn't integrated health care developed widely in the United States and not at all in England?. *Journal of Health Politics, Policy and Law*, 36(1), pp.141-164.
- Billings, J. and De Weger, E., 2015. Contracting for integrated health and social care: a critical review of four models. *Journal of Integrated Care*, 23(3), pp.153-175.
- Blaxter, M., 1978. Diagnosis as category and process: the case of alcoholism. *Social Science & Medicine. Part A: Medical Psychology & Medical Sociology*, 12, pp.9-17.
- Brock, D., Abu-Rish, E., Chiu, C.R., Hammer, D., Wilson, S., Vorvick, L., Blondon, K., Schaad, D., Liner, D. and Zierler, B., 2013. Interprofessional education in team communication: working together to improve patient safety. *BMJ Quality & Safety*, 22(5), pp.414-423.
- Brown, J. & Duguid, P. 1991. Organisational learning and communities-of-practice: towards a unified view of working, learning and innovation. *Organisational Science*, vol. 2, no. 1, pp. 40-57.
- Browne, A., Carpenter, C., Cooledge, C., Drover, G., Ericksen, J., Fielding, D., Hill, D., Johnston, J., Segal, S. and Silver, J., 1995. Bridging the professions: an integrated and interdisciplinary approach to teaching health care ethics. *Academic Medicine*, 70(11), pp.1002-5.
- Burgess, R. 1984. *In the field: an introduction to Field Research*, Allen & Unwin, London.
- Byrne, B. 2012. Qualitative interviewing, in *Researching Society and Culture*, C. Seale, ed., Sage, London, pp. 206-226.
- Campbell, H., Hotchkiss, R., Bradshaw, N. and Porteous, M., 1998. Integrated care pathways. *BMJ: British Medical Journal*, 316(7125), p.133.
- Chan, A.K., Mateyu, G., Jahn, A., Schouten, E., Arora, P., Mlotha, W., Kambanji, M. and van Lettow, M., 2010. Outcome assessment of decentralization of antiretroviral therapy provision in a rural district of Malawi using an integrated primary care model. *Tropical Medicine & International Health*, 15(s1), pp.90-97.
- Cubic, B., Mance, J., Turgesen, J.N. and Lamanna, J.D., 2012. Interprofessional education: Preparing psychologists for success in integrated primary care. *Journal of clinical psychology in medical settings*, 19(1), pp.84-92.

- Cunningham, S., Logan, C., Lockerbie, L., Dunn, M.J., McMurray, A. and Prescott, R.J., 2008. Effect of an integrated care pathway on acute asthma/wheeze in children attending hospital: cluster randomized trial. *The Journal of pediatrics*, 152(3), pp.315-320.
- Easton, G. (2010). One case study is enough. Lancaster University Management School Working Paper 2010/034.
- Fabrega, H., 1997. Earliest phases in the evolution of sickness and healing. *Medical Anthropology Quarterly*, 11(1), pp.26-55.
- Flyvbjerg, B. 2004. Five misunderstandings about case-study research. in *Qualitative Research Practice*, C. Seale et al., eds., Sage, Thousand Oaks London.
- Foster, G.M., 1976. Disease etiologies in non - western medical systems. *American Anthropologist*, 78(4), pp.773-782.
- Godlee, F., 2012. Integrated care is what we all want. *British Medical Journal*, 344, p.e3959.
- Goodwin, N., Smith, J., Davies, A., Perry, C., Rosen, R., Dixon, A., Ham, C. 2012. Integrated care for patients and populations: Improving outcomes by working together. The King's Fund.
- Gröne, O. and Garcia-Barbero, M., 2001. Integrated care. *International journal of integrated care*, 1(2).
- Hall, J., Cohen, D.J., Davis, M., Gunn, R., Blount, A., Pollack, D.A., Miller, W.L., Smith, C., Valentine, N. and Miller, B.F., 2015. Preparing the workforce for behavioral health and primary care integration. *The Journal of the American Board of Family Medicine*, 28(Supplement 1), pp.S41-S51.
- Ham, C. and Curry, N., 2011. Integrated care. What is it? Does it work? What does it mean for the NHS? The King's Fund
- Ham, C., Walsh, N. 2013. Making integrated care happen at scale and pace. The King's Fund.
- Iacobucci, G., 2015. NHS England announces 29 sites to spearhead integrated care models. *BMJ: British Medical Journal (Online)*, 350.
- Kitchiner, D., Davidson, C. and Bundred, P., 1996. Integrated care pathways: effective tools for continuous evaluation of clinical practice. *Journal of evaluation in clinical practice*, 2(1), pp.65-69.
- Kleinman, A. and Sung, L.H., 1979. Why do indigenous practitioners successfully heal?. *Social Science & Medicine. Part B: Medical Anthropology*, 13(1), pp.7-26.
- Kodner, D.L. and Spreeuwenberg, C., 2002. Integrated care: meaning, logic, applications, and implications—a discussion paper. *International journal of integrated care*, 2(4).
- Lloyd, J. and Wait, S., 2005. Integrated care: a guide for policymakers. Alliance for Health and the Future.
- Malin, N. and Morrow, G., 2009. Evaluating the role of the Sure Start Plus Adviser in providing integrated support for pregnant teenagers and young parents. *Health & social care in the community*, 17(5), pp.495-503.
- Mangan, C., Miller, R. and Ward, C., 2015. Knowing me, knowing you: Inter-professional working between general practice and social care. *Journal of Integrated Care*, 23(2), pp.62-73.
- Middleton, S. and Roberts, A., 2000. Integrated care pathways: a practical approach to implementation. Elsevier Health Sciences.
- Monitor. 2012. Enablers and Barriers to Integrated Care.

- Morgan, M.D.L., 2011. Action plans for COPD self-management. Integrated care is more than the sum of its parts.
- O'Brien, K., Bracht, M., Macdonell, K., McBride, T., Robson, K., O'Leary, L., Christie, K., Galarza, M., Dicky, T., Levin, A. and Lee, S.K., 2013. A pilot cohort analytic study of Family Integrated Care in a Canadian neonatal intensive care unit. *BMC pregnancy and childbirth*, 13(1), p.S12.
- Olson, R. and Bialocerkowski, A., 2014. Interprofessional education in allied health: a systematic review. *Medical education*, 48(3), pp.236-246.
- Øvretveit, J., Hansson, J. and Brommels, M., 2010. An integrated health and social care organisation in Sweden: creation and structure of a unique local public health and social care system. *Health Policy*, 97(2), pp.113-121.
- Owen, D. and Lewith, G.T., 2004. Teaching integrated care: CAM familiarisation courses. *Medical journal of Australia*, 181(5), pp.276-281.
- Pettie, J.M., Dow, M.A., Sandilands, E.A., Thanacoody, H.R. and Bateman, D.N., 2011. An integrated care pathway improves the management of paracetamol poisoning. *Emergency Medicine Journal*, pp.emj-2011.
- Reeves, S., Zwarenstein, M., Goldman, J., Barr, H., Freeth, D., Koppel, I. and Hammick, M., 2010. The effectiveness of interprofessional education: Key findings from a new systematic review. *Journal of interprofessional care*, 24(3), pp.230-241.
- Reeves, S., Perrier, L., Goldman, J., Freeth, D. and Zwarenstein, M., 2013. Interprofessional education: effects on professional practice and healthcare outcomes (update). *Cochrane Database Syst Rev*, 3(3).
- Romøren, T.I., Torjesen, D.O. and Landmark, B., 2011. Promoting coordination in Norwegian health care. *International Journal of Integrated Care*, 11(5).
- Rudkjobing, A., Olejaz, M., Birk, H.O., Nielsen, A.J., Hernández-Quevedo, C. and Krasnik, A., 2012, July. Integrated care: a Danish perspective. In *BMC* (Vol. 345, No. 2012, pp. 4451-4451). BMJ Publishing Group.
- Selwood, K., 2000. Integrated care pathways: an audit tool in paediatric oncology. *British Journal of Nursing*, 9(1), pp.34-38.
- Shaw, S., Rosen, R., Rumbold, B. 2011. What is integrated care? Nuffield Trust
- Steeden, A. and Tahir, A., 2011. Integrated care. All together now. *The Health service journal*, 121(6278), pp.32-33.
- Stobart, G. 2008 *Testing Times: The uses and abuses of assessment*, Oxford: Routledge.
- Thannhauser, J., Russell-Mayhew, S. and Scott, C., 2010. Measures of interprofessional education and collaboration. *Journal of Interprofessional Care*, 24(4), pp.336-349.
- The Mid Staffordshire NHS Foundation Trust. 2013. Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. UK Stationery Office.
- Thistlethwaite, J., 2012. Interprofessional education: a review of context, learning and the research agenda. *Medical education*, 46(1), pp.58-70.
- Tresolini, C.P., Shugars, D.A. and Lee, L.S., 1995. Teaching an integrated approach to health care: lessons

from five schools. *Academic Medicine*, 70(8), pp.665-70.

UK Parliament. 2012. United Kingdom Health and Social Care Act.

Victoria, C.G., Aquino, E.M., do Carmo Leal, M., Monteiro, C.A., Barros, F.C. and Szwarcwald, C.L., 2011. Maternal and child health in Brazil: progress and challenges. *The Lancet*, 377(9780), pp.1863-1876.

Whitchurch, C., 2009. The rise of the blended professional in higher education: a comparison between the United Kingdom, Australia and the United States. *Higher Education*, 58(3), pp.407-418.

Wight, C. (2012). Critical realism: Some responses. *Review of International Studies*, 38(01), 267–274.

Worsley, P., 1982. Non-western medical systems. *Annual Review of Anthropology*, 11(1), pp.315-348.

Young, A., 1976. Some implications of medical beliefs and practices for social anthropology. *American Anthropologist*, 78(1), pp.5-24.

Young, A., 1983. The relevance of traditional medical cultures to modern primary health care. *Social science & medicine*, 17(16), pp.1205-1211.

Zander, K., 2002. Integrated care pathways: eleven international trends. *Journal of Integrated Care Pathways*, 6(3), pp.101-107.

Zoberi, K., Niemiec, R.M. and Margolis, R.B., 2008. Teaching integrated behavioral health in a primary care clerkship. *Medical teacher*, 30(7), pp.e218-e223.

http://www.wales.nhs.uk/documents/Chronic_Conditions_English.pdf

<http://bolton.diabetesukgroup.org/>

<http://www.londoncanceralliance.nhs.uk/information-for-healthcare-professionals/forms-and-guidelines/south-east-london-cancer-network/>

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/198748/DEFINITIVE_FINAL_VERSION_Integrated_Care_and_Support_-_Our_Shared_Commitment_2013-05-13.pdf

8. Appendices

Appendix 1: Interview Schedule

PICH participants one-to-one interview schedule

Structure

30-45mins

Aims of study

The study will explore the experiences of PICH trainees and trainers across cohorts 1 and 2. The aim is to understand the impact that experience of the course has had on their understanding of the importance of and motivation to deliver integrated care in paediatrics and general practice. It will be illuminating to explore the experiences of both cohorts in order to discover what barriers and enablers are at work in relation to the delivery of integrated care. The comparison of the two cohorts will be valuable for the study because it will provide insights into intra- and interprofessional learning between medical specialities.

Your views will be fed back to Health Education England London Region, and will inform the development of subsequent intra- and interprofessional education and integrated care programmes.

We want to hear your views about your experience of participating in the PICH programme, either as a trainee or a trainer.

Process

1. This discussion will be recorded and analysed, looking for common themes that arise from this and other trainee and trainer interviews.
2. Transcripts will be analysed by the research team.
3. Transcripts will be anonymized and no identifying data will be presented in the report to Health Education England London region

Consent

Please read and sign the consent sheet and agree that everything being discussed in this interview is confidential. Do you have any questions before we start the tape?

Background

- 1) Firstly, please could you tell me whether you are from:
 - a. Cohort 1 or 2?
 - b. Trainee or trainer?
 - c. GP or paediatrician?
- 2) How did you become involved in PICH?
- 3) Did you have any experience of integrated care or working with other medical specialities in this way prior to this program?

The programme

- 4) Please could you tell me about the PICH programme and course?
- 5) What do you think is / are the aim/s of PICH?
- 6) What aspects of the course did you feel worked well?
- 7) Which aspect, if any, has been the most educational / useful and why, e.g. your personal project, the CYP meetings?
- 8) What aspects of the program are working less well?
- 9) Do you think PICH has covered everything needed to enable the delivery of integrated care? If not, what was missing and could be improved upon?
- 10) Has participation in PICH surprised you in any way, and if so, how?
- 11) What have you learnt on PICH as a trainee or a trainer?

Prompts (ensure cover of the following):

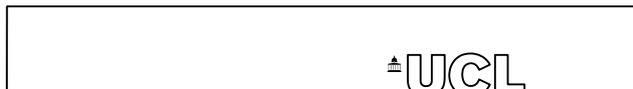
- a. *What did you learn about yourself?*
 - b. *About others?*
 - c. *About patient care?*
 - d. *About your organisation?*
- 12) How would you describe working with peers?
 - 13) How would you describe working with trainers or trainees?

Integrated care and working together

- 14) Please reflect on working with clinicians from a different specialism, i.e. paediatrics or general practice:
 - a. What have you learnt about the other specialism?
 - b. What impact if any has it had on your understanding of your own?
- 15) Do you think interprofessional healthcare training is important, and if so why?
- 16) Do you think integrated care is important, and if so why?
- 17) Do you think there are any barriers to delivering integrated care? If so, what are they?
- 18) How do you think that participating in PICH will impact on the way you work in the future?
- 19) What impact, if any, has PICH had on you as a clinician?

Prompt: What have you learnt? Has PICH changed the way you work in a clinical context? If so, how?

Appendix 2: Ethics Application



IMPORTANT: ALL FIELDS MUST BE COMPLETED. THE FORM SHOULD BE COMPLETED IN PLAIN ENGLISH UNDERSTANDABLE TO LAY COMMITTEE MEMBERS.

SEE NOTES IN STATUS BAR FOR ADVICE ON COMPLETING EACH FIELD. YOU SHOULD READ THE ETHICS APPLICATION GUIDELINES AND HAVE THEM AVAILABLE AS YOU COMPLETE THIS FORM. APPLICATION FORM

SECTION A APPLICATION DETAILS

| | | |
|-----------|--|---|
| A1 | Project Title: Investigating the Programme for Integrated Child Health (PICH) | |
| | Date of Submission: 26.04.16 | Proposed Start Date: as soon as ethics clearance is granted |
| | UCL Ethics Project ID Number: 8949/001 | Proposed End Date: March 2017 |
| | If this is an application for classroom research as distinct from independent study courses, please provide the following additional details: | |
| | Course Title: not applicable | Course Number: |

| | | |
|-----------|---|--|
| A2 | Principal Researcher | |
| | <i>Please note that a student – undergraduate, postgraduate or research postgraduate cannot be the Principal Researcher for Ethics purposes.</i> | |
| | Full Name: | Position Held: Deputy Director, UCL Medical School |
| | Address: The Directorate, Medical School Building, 74 Huntley Street, London WC1E 6AU | Email: |
| | | Telephone: (020) 7679 0890 |
| | | Fax: |
| | Declaration To be Signed by the Principal Researcher | |
| | 4. I have met with and advised the student on the ethical aspects of this project design (<i>applicable only if the Principal Researcher is not also the Applicant</i>). | |
| | 5. I understand that it is a UCL requirement for both students & staff researchers to undergo Disclosure and Barring Service (DBS) Checks when working in controlled or regulated activity with children, young people or vulnerable adults. The required DBS Check Disclosure Number(s) is: not applicable | |
| | 6. I have obtained approval from the UCL Data Protection Officer stating that the research project is compliant with the Data Protection Act 1998. My Data Protection Registration Number is: not applicable | |
| | 7. I am satisfied that the research complies with current professional, departmental and university guidelines including UCL's Risk Assessment Procedures and insurance arrangements. | |
| | 8. I undertake to complete and submit the 'Continuing Review Approval Form' on an annual basis to the UCL Research Ethics Committee. | |
| | 9. I will ensure that changes in approved research protocols are reported promptly and are not initiated without approval by the UCL Research Ethics Committee, except when necessary to eliminate apparent immediate hazards to the participant. | |
| | 10. I will ensure that all adverse or unforeseen problems arising from the research project are reported in a timely fashion to the UCL Research Ethics Committee. | |
| | 11. I will undertake to provide notification when the study is complete and if it fails to start or is abandoned. | |



DATE: 25/04/2016

SIGNATURE:

| | | |
|-----------|--|----------------------------|
| A3 | Applicant(s) Details (if Applicant is not the Principal Researcher e.g. student details): | |
| | Full Name: Dr. Alex McKeown | |
| | Position Held: | |
| | Address: Academic Centre for Medical Education, UCL Medical School, Room GF664, Royal Free Hospital, London NW3 2PF | Email: a.mckeown@ucl.ac.uk |
| | | Telephone: 07791 502 405 |
| | | Fax: |
| | Full Name: | |
| | Position Held: | |
| | Address: | Email: |
| | | Telephone: |
| Fax: | | |

| | |
|-----------|---|
| A4 | Sponsor/ Other Organisations Involved and Funding |
| | a) Sponsor: <input checked="" type="checkbox"/> UCL <input type="checkbox"/> Other institution If your project is sponsored by an institution other than UCL please provide details: |
| | b) Other Organisations: If your study involves another organisation, please provide details. <i>Evidence that the relevant authority has given permission should be attached or confirmation provided that this will be available upon request.</i> Health Education England |
| | c) Funding: What are the sources of funding for this study and will the study result in financial payment or payment in kind to the department or College? <i>If study is funded solely by UCL this should be stated, the section should not be left blank.</i> |

| | |
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| A5 | Signature of Head of Department or Chair of the Departmental Ethics Committee (This must not be the same signature as the Principal Researcher) |
| | I have discussed this project with the principal researcher who is suitably qualified to carry out this research and I approve it. The project is registered with the UCL Data Protection Officer, a formal signed risk assessment form has been completed, and appropriate insurance arrangements are in place. Links to details of UCL's policies on data protection, risk assessment, and insurance arrangements can be found at: http://ethics.grad.ucl.ac.uk/procedures.php |
| | UCL is required by law to ensure that researchers undergo a Disclosure and Barring Service (DBS) Check if their research project puts them in a position of trust with children under 18 or vulnerable adults. |
| | *HEAD OF DEPARTMENT TO DELETE BELOW AS APPLICABLE* |
| | I am satisfied that checks: (1) have been satisfactorily completed |

If checks are **not** required please clarify why below.

Chair's Action Recommended: Yes No

A recommendation for Chair's action can be based only on the criteria of minimal risk as defined in the Terms of Reference of the UCL Research Ethics Committee.

PRINT NAME: DEBORAH GILL

SIGNATURE:



DATE: 26/04/2016

SECTION B

DETAILS OF THE PROJECT

B1

Please provide a brief summary of the project in simple prose outlining the intended value of the project, giving necessary scientific background (*max 500 words*).

There is a clear care-orientated rationale behind the PICH educational project and it is this rationale which informs the study we propose. PICH has been developed in anticipation of a continuing move towards distributing high quality holistic care in paediatrics and general practice more widely across the care infrastructure. Improving child health depends on a rounded understanding of what constitutes good child health and the necessary professional knowledge that supports this provision. Improving child health is not simply a matter of a clinical response to medical needs but must involve the psychosocial dimension of care and the ability to ensure not only that ill-health is treated but that good health is maintained, which includes attention to prevention. Delivering this depends on effective communication between primary and secondary care and hence integration of these services will be better equipped to improve child health, and it is this approach which has driven PICH. The study will explore the experiences of PICH trainees and trainers across the two cohorts that have so far taken the course. The aim is to understand the impact that these experiences have had on their ability to deliver integrated care in paediatrics and general practice. Cohort 1 comprised only paediatric trainees, whereas cohort 2 included general practice as well. It will be illuminating to explore the experiences of both in order to discover whether the ability to deliver integrated care is enhanced through interprofessional learning between specialties, and the comparison of the two cohorts will therefore be valuable for this study.

| | |
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| B2 | <p>Briefly characterise in <u>simple prose</u> the research protocol, type of procedure and/or research methodology (e.g. observational, survey research, experimental). Give details of any samples or measurements to be taken (<i>max 500 words</i>).</p> <p>The study will be comprised predominantly of interviews with trainees working in the two fields, along with a focus group, and three sessions of ethnographic participation of the trainees. However, a holistic understanding of integrated care also depends on understanding the 'vertical' integration between trainees and trainers. With that in mind, the interview component of the study will also comprise interviews with trainers in order to explore their experiences of assisting more junior doctors developing skills in integrated care. The interviews and focus group will be designed with the aims of the PICH course in mind in for the purpose of exploring how the trainees and trainers have engaged with the goal of delivering integrated care. As such, the contents of the study will be driven by features of the PICH course, and discussions will cover aspects thereof including intraprofessional learning between medical specialisms; 'horizontal' and 'vertical' aspects of integration in delivering care; the mentoring process from the perspective of both trainees and trainers; the projects carried out by the trainees on the course and their impact on patient care; reflection on the group seminars and the role that they have played in achieving integrated care. Alongside the interviews, the second component of the analysis will be ethnographic observations of the trainees as a peer group, to be carried out at their monthly meeting. These will be used to explore how their interactions and discussions of the PICH course help them to understand and deliver integrated care. Observation of the 'horizontal' aspect here is important not least because integrated care depends on successful collaboration between healthcare professionals, and it is therefore crucial to gain insight into how the participants related to their peers, cope with the pressures of their professional life, and develop strategies for succeeding personally and professionally through their work.</p> <p>Prior to the main study, a pilot will be conducted to test and refine the interview guides and become familiar with the observational setting. The interviews and observations will investigate specific aspects of learning that are consistent with the aims of PICH and its goal of facilitating integrated care. The study will also explore how and whether PICH enabled participants to work effectively across clinical and service boundaries between primary and secondary care. Finally, the study will investigate what impact, if any, PICH has had on the clinical learning environment and multidisciplinary healthcare teams. It is in relation to this final aim in particular that the voices of trainers, i.e. those of 'vertical' integration, will be valuable for understanding how the course has worked.</p> <p>Taking all of this into account, the study will seek to answer three central questions:</p> <ol style="list-style-type: none"> 1) How do trainees and trainers in PICH understand the concept of 'integrated care', its aims and its importance? 2) What contribution, if any, does PICH make to enacting change and realising better integration in clinical practice? 3) What lessons, if any, have been learnt from PICH regarding the value of interprofessional learning that could be used to deliver integrated care between other specialties? <p><i>Attach any questionnaires, psychological tests, etc. (a standardised questionnaire does not need to be attached, but please provide the name and details of the questionnaire together with a published reference to its prior usage).</i></p> |
|-----------|--|

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| B3 | <p>Where will the study take place (please provide name of institution/department)?</p> <p>If the study is to be carried out overseas, what steps have been taken to secure research and ethical permission in the study country? Is the research compliant with Data Protection legislation in the country concerned or is it compliant with the UK Data Protection Act 1998?</p> <p>Observations and focus groups will take place at University of London premises, e.g. Senate House and Stewart House. Interviews will take place either by telephone or at a private location convenient to the participants.</p> <p>All aspects of the study are compliant with the UK Data Protection Act 1998.</p> |
|-----------|---|

| | |
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| B4 | <p>Have collaborating departments whose resources will be needed been informed and agreed to participate?</p> <p><i>Attach any relevant correspondence.</i></p> <p>Not applicable</p> |
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| B5 | <p>How will the results be disseminated, including communication of results with research participants?</p> <p>A research report and peer reviewed journal publications</p> |
|-----------|--|

| | |
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| B6 | <p>Please outline any ethical issues that might arise from the proposed study and how they are be addressed. Please note that all research projects have some ethical considerations so do not leave this section blank.</p> <p>We do not foresee any areas of concern arising, as all the participants are medical professionals, and no patients, minors, or vulnerable groups will be involved.</p> |
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| SECTION C | DETAILS OF PARTICIPANTS |
|------------------|--------------------------------|

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|-----------------------------------|--|-----------------------------------|------------------|------------------|----|------------------|----|
| C1 | <p>Participants to be studied</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 30%;">C1a. Number of volunteers:</td> <td>Approximately 20</td> </tr> <tr> <td style="text-align: center;">Upper age limit:</td> <td>60</td> </tr> <tr> <td style="text-align: center;">Lower age limit:</td> <td>24</td> </tr> </table> <p>C1b. Please justify the age range and sample size:</p> <p>These are the participants in the programme.</p> | C1a. Number of volunteers: | Approximately 20 | Upper age limit: | 60 | Lower age limit: | 24 |
| C1a. Number of volunteers: | Approximately 20 | | | | | | |
| Upper age limit: | 60 | | | | | | |
| Lower age limit: | 24 | | | | | | |

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| C2 | <p>If you are using data or information held by a third party, please explain how you will obtain this. You should confirm that the information has been obtained in accordance with the UK Data Protection Act 1998.</p> <p>Not applicable</p> |
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| C3 | <p>Will the research include children or vulnerable adults such as individuals with a learning disability or cognitive impairment or individuals in a dependent or unequal relationship? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>How will you ensure that participants in these groups are competent to give consent to take part in this study? <i>If you have relevant correspondence, please attach it.</i></p> |
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| C4 | <p>Will payment or any other incentive, such as gift service or free services, be made to any research participant?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, please specify the level of payment to be made and/or the source of the funds/gift/free service to be used.</p> <p>Please justify the payment/other incentive you intend to offer.</p> |
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C5**Recruitment**

(i) Describe how potential participants will be identified:

We have already identified potential participants, as all are drawn from the two cohorts already taking part in the programme

(ii) Describe how potential participants will be approached:

(iii) Describe how participants will be recruited:

Face-to-face and via email

Attach recruitment emails/adverts/webpages. A data protection disclaimer should be included in the text of such literature.

C6

Will the participants participate on a fully voluntary basis?

Yes No

Will UCL students be involved as participants in the research project?

Yes No

If yes, care must be taken to ensure that they are recruited in such a way that they do not feel any obligation to a teacher or member of staff to participate.

Please state how you will bring to the attention of the participants their right to withdraw from the study without penalty?

This right will be stated explicitly on the consent form and information sheet.

C7**CONSENT**

Please describe the process you will use when seeking and obtaining consent.

Once participants have agreed to be interviewed from the email invitation, we will verbally take them through the participant information sheet and ask them to sign the consent form. The participant information sheet will be emailed to them in advance of the interview.

A copy of the participant information sheet and consent form must be attached to this application. For your convenience proformas are provided in C10 below. These should be filled in and modified as necessary.

In cases where it is not proposed to obtain the participants informed consent, please explain why below.

C8

Will any form of deception be used that raises ethical issues? If so, please explain.

C9

Will you provide a full debriefing at the end of the data collection phase?

Yes No

If 'No', please explain why below.

Not all participants will wish to have a full debriefing at the end of the data collection phase, and for this reason we will not include one as such. Nevertheless, some participants may wish to provide feedback or to discuss their experiences of their involvement in the study, and to this end we will provide a session for this, at which debriefing can be delivered if desired.

A poorly written Information Sheet(s) and Consent Form(s) that lack clarity and simplicity frequently delay ethics approval of research projects. The wording and content of the Information Sheet and Consent Form must be appropriate to the age and educational level of the research participants and clearly state in simple non-technical language what the participant is agreeing to. Use the active voice e.g. "we will book" rather than "bookings will be made". Refer to participants as "you" and yourself as "I" or "we". An appropriate translation of the Forms should be provided where the first language of the participants is not English. If you have different participant groups you should provide Information Sheets and Consent Forms as appropriate (e.g. one for children and one for parents/guardians) using the templates below. Where children are of a reading age, a written Information Sheet should be provided. When participants cannot read or the use of forms would be inappropriate, a description of the verbal information to be provided should be given. Please ensure that you trial the forms on an age-appropriate person before you submit your application.

Information Sheet for

in Research Studies

You will be given a copy of this information sheet.

Title of Project: **Researching the Programme for Integrated Child Health**

This study has been approved by the UCL Research Ethics Committee (Project ID Number):

Name Dr Ann Griffin

Work Address Academic Centre for Medical Education, UCL Medical School, The Directorate, 74 Huntley Street, London WC1E 6AU.

Contact Details Tel: 0207 679 6400 / E: a.griffin@ucl.ac.uk

We would like to invite you to participate in this interview study run by UCL Medical School and funded by Health Education England London Region.

Details of Study: In this research study we will explore the experiences of PICH trainees and trainers in order to understand the impact that the experience of the course has had on their ability to deliver integrated care in paediatrics and general practice. As such, the contents of the study will be driven by features of the PICH programme, and discussions will cover aspects including:

- 1) Intra-professional learning between medical specialties
- 2) Learning from each other and senior colleagues about delivering integrated care
- 3) The mentoring scheme, from the perspective of both trainees and mentors
- 4) The projects carried out by the trainees on the course and their impact on patient care
- 5) Reflection on the monthly CYP seminars and the role that they have played in achieving integrated care.

If you agree to take part, you will be asked to take part **either** in an hour-long focus group with other trainees run by the research team, **or** a 30-minute one-to-one interview with a researcher. You will also be asked to consent for being observed during two CYP sessions. Interviews may be face-to-face or over the phone and will be run at a time and place that suits you. Interviews will be audio-recorded for accuracy.

Everything you say and all data that you provide will be kept strictly **confidential**, and will be **anonymised** before being analysed and written up. **All data will be collected and stored in accordance with the Data Protection Act 1998.** No identifiable data will be published or passed on to any individual or organisation outside of the UCL Medical School research team. Only the UCL Medical School research team will have access to identifiable data which will be kept on password-protected computers and encrypted memory sticks.

Benefits of taking part: If you take part you will get a certificate for your portfolio and a copy of the final report. Refreshments will be provided for focus groups. We also hope that participants will benefit from knowing they are contributing to improving training for doctors.

Possible risks of taking part: It is always possible that talking about your experiences may bring up issues that you find difficult or distressing. A comprehensive list of support services for doctors can be found here: <http://bma.org.uk/practical-support-at-work/doctors-well-being/websites-for-doctors-in-difficulty>

Please discuss the information above with others if you wish or ask us if there is anything that is not clear or if you would like more information.

It is up to you to decide whether to take part or not; choosing not to take part will not disadvantage you in any way. If you do decide to take part you are still free to withdraw your data at any time until 6th January 2017 when the report will be written, without giving a reason.

Thank you for reading this information sheet and for considering taking part in this research.

Please discuss the information above with others if you wish or ask us if there is anything that is not clear or if you would like more information.

It is up to you to decide whether to take part or not; choosing not to take part will not disadvantage you in any way. If you do decide to take part you are still free to withdraw at any time and without giving a reason.

All data will be collected and stored in accordance with the Data Protection Act 1998.

Thank you for reading this information sheet and for considering take part in this research.

When you have completed your Information Sheet, please DELETE the advice section below from your application form before submitting it to the Committee.

Details of Study MUST include the following:

- 2) Aims of the research and possible benefits.
- 3) Who you are recruiting
- 4) What will happen if the participant agrees to take part (when, where, how long etc)
- 5) Any risks (e.g. need for disclosure of information to a third party, possibility for distress)
- 6) Possible benefits (it is good practice to offer participants a copy of the final report)
- 7) Arrangements for ensuring anonymity and confidentiality (see optional statements below for examples). To ensure compliance with the Data Protection Act participants must be informed of what information will be held about them and who will have access to it (this relates to information that is identifiable or could potentially be linked back to an individual.)

Statements which researchers MIGHT also include as appropriate:

- A decision to withdraw at any time, or decision not to take part, will not affect the standard of care/education you receive.
- If you agree to take part you will be asked whether you are happy to be contacted about participation in future studies. Your participation in this study will not be affected should you choose not to be re-contacted.
- You may withdraw your data from the project at any time up until it is transcribed for use in the final report (*insert date*).
- Recorded interviews will be transcribed (written up) and the tape will then be wiped clear.
- If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form.
- Submission of a completed questionnaire implies consent to participate.
- As participation is anonymous it will not be possible for us to withdraw your data once you have returned your questionnaire.
- What if I have further questions, or if something goes wrong? If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact UCL using the details below for further advice and information:
Student researchers: Insert the name and full UCL contact address and number of your supervisor.
*Staff researchers: Please insert the following: The Chair, *Insert full address details for the UCL Research Ethics Committee, ethics@ucl.ac.uk

Informed Consent Form for _____ in Research Studies

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Project: **Investigating the Programme for Integrated Child Health**

This study has been approved by the UCL Research Ethics Committee (Project ID Number):

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement

I

- 5) have read the notes written above and the Information Sheet, and understand what the study involves.
- 6) understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
- 7) consent to the processing of my personal information for the purposes of this research study.
- 8) understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- 9) agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.
- 10) Agree that my data, after it has been fully anonymised, can be shared with other researchers *[to satisfy Research Council funded projects as Research Councils have changed their guidance regarding data sharing]*

Signed:

Date:

When you have completed your Informed Consent Form, please DELETE the advice section below from your application form before submitting it to the Committee.

Statements which researchers MIGHT include as appropriate:

- I understand that my participation will be taped/video recorded and I consent to use of this material as part of the project.
- I understand that I must not take part if
- I agree to be contacted in the future by UCL researchers who would like to invite me to participate in follow-up studies.
- I understand that the information I have submitted will be published as a report and I will be sent a copy. Confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications.
- I understand that I am being paid for my assistance in this research and that some of my personal details will be passed to UCL Finance for administration purposes.
- I agree that my non-personal research data may be used by others for future research. I am assured that the confidentiality of my personal data will be upheld through the removal of identifiers.

This is not an exhaustive list and you should consider whether you need to amend any of these statements or design different ones that are more applicable to your research.

SECTION D DETAILS OF RISKS AND BENEFITS TO THE RESEARCHER AND THE RESEARCHED

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| D1 | Have UCL's Risk Assessment Procedures been followed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No , please explain. |
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| D2 | Does UCL's insurer need to be notified about your project before insurance cover can be provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p style="text-align: center;"><i>The insurance for all UCL studies is provided by a commercial insurer. For the majority of studies the cover is automatic. However, for a minority of studies, in certain categories, the insurer requires prior notification of the project before cover can be provided.</i></p> <p>If Yes, please provide confirmation that the appropriate insurance cover has been agreed. <i>Please attach your UCL insurance registration form and any related correspondence.</i></p> |
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| D3 | Please state briefly any precautions being taken to protect the health and safety of researchers and others associated with the project (as distinct from the research participants). Major precautions are not necessary. All settings will be local to the researchers, so only local travel will be involved. Several modes of travel are available to reach each of the destinations, so safety concerns are unlikely to be a significant factor. Furthermore, much of the work will be carried out in University of London premises, which with the researchers are already familiar. |
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| D4 | Will these participants participate in any activities that may be potentially stressful or harmful in connection with this research? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes , please describe the nature of the risk or stress and how you will minimise and monitor it. |
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| D5 | <p>Will group or individual interviews/questionnaires raise any topics or issues that might be sensitive, embarrassing or upsetting for participants?</p> <p>If Yes, please explain how you will deal with this.</p> <p>No</p> |
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| D6 | <p>Please describe any expected benefits to the participant.</p> <p>We hope through the process of talking about their involvement in PICH to somebody from beyond the programme that this opportunity to engage in reflection on what they have been doing will be of benefit to the participants. We hope by enabling them to stand back from the course itself and discussing the ways in which it has helped or hindered them, what they have learnt, and what impact it has had on their practice that this opportunity will deepen their understanding of their role as clinicians. We also hope that by engaging in this process that these reflections will help them in future in their careers when making clinical decisions.</p> |
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| D7 | <p>Specify whether the following procedures are involved:</p> <p>Any invasive procedure(s) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Physical contact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Any procedure(s) that may cause mental distress <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Please state briefly any precautions being taken to protect the health and safety of the research participants.</p> |
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| D8 | <p>Does the research involve the use of drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, please name the drug/product and its intended use in the research and then complete Appendix I</p> <p>Does the project involve the use of genetically modified materials? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, has approval from the Genetic Modification Safety Committee been obtained for work? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, please quote the Genetic Modification Reference Number:</p> |
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| D9 | <p>Will any non-ionising radiation be used on the research participant(s)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, please complete Appendix II.</p> |
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| D10 | <p>Are you using a medical device in the UK that is CE-marked and is being used within its product indication? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, please complete Appendix III.</p> |
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CHECKLIST

Please submit either 12 copies (1 original + 11 double sided photocopies) of your completed application form for full committee review or 3 copies (1 original + 2 double sided copies) for chair's action, together with the appropriate supporting documentation from the list below to the UCL Research Ethics Committee Administrator. You should also submit your application form electronically to the Administrator at: ethics@ucl.ac.uk

| Documents to be Attached to Application Form (if applicable) | Ticked if attached | Tick if not relevant |
|---|-------------------------------------|-------------------------------------|
| Section B: Details of the Project | | |
| 20) Questionnaire(s) / Psychological Tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 21) Relevant correspondence relating to involvement of collaborating department/s and agreed participation in the research. | <input type="checkbox"/> | <input type="checkbox"/> |
| Section C: Details of Participants | | |
| • Parental/guardian consent form for research involving participants under 18 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| • Participant/s information sheet | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • Participant/s consent form/s | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • Advertisement | <input type="checkbox"/> | x <input type="checkbox"/> |
| Section D: Details of Risks and Benefits to the Researcher and the Researched | | |
| 1) Insurance registration form and related correspondence | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Appendix I: Research Involving the Use of Drugs | | |
| 2) Relevant correspondence relating to agreed arrangements for dispensing with the pharmacy | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Written confirmation from the manufacturer that the drug/substance has been manufactured to GMP | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Proposed volunteer contract | <input type="checkbox"/> | x <input type="checkbox"/> |
| 7. Full declaration of financial or direct interest | <input type="checkbox"/> | x <input type="checkbox"/> |
| 8. Copies of certificates: CTA etc... | <input type="checkbox"/> | x <input type="checkbox"/> |
| Appendix II: Use of Non-Ionising Radiation | | |
| Appendix III: Use Medical Devices | | |

copied to other named individuals.