An investigation to understand and evaluate the best ways to educate for and promote integrated working across the health and care sectors.

Final Report

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Glossary

ADASS	Association of Directors of Adult Social Services
BILD	British Institute of Learning Disabilities
CAIPE	Centre for the Advancement of Interprofessional Education
CC	Collaborative Curriculum
CCG	Clinical Commissioning Groups
CEO	Chief Executive Officer
CICF	Canadian Interprofessional Collaborative Framework
CIHC	Canadian Interprofessional Health Collaborative
CLDT	Community Learning Disabilities Team
CPD	Continuous Professional development
GMC	General Medical Council
GP	General Practitioner
HEI	Higher Education Institution
ICTT	Integrated Care Transformation Theme
IEPS	Interdisciplinary Education Perception
IPE	Interprofessional Education
IPL	Interprofessional Learning
LD	Learning Disability
LGA	Local Government Associations
MAPPA	Multi-agency Public Protection Arrangements
MDT	Multidisciplinary Team
MHN	Mental Health Nurse
OSCE	Objective Structured Clinical Examination
OT	Occupational Therapist

PBL	Problem Based Learning
PCT	Primary Care Trust
PI	Public Involvement
PIPES	Points for Interprofessional Education Score
PT	Physiotherapist
RIPLS	Readiness for Interprofessional Learning Scale.
TCP	Transforming Care Partnership
VBR	Values Based Recruitment
WHO	World Health Organisation

Executive Summary

This report sets out the current state of education and training for the promotion of workforce competencies and development required to deliver integrated care across the West Midlands region. The investigation provides insight that incorporates formal and informal, pre-registration and post-registration/CPD education and training that spans the future and existing health and social care workforce. The report begins by briefly describing integrated care only in as much as its principles and key features provide a necessary backdrop to the investigation. Primary research findings relating to how integrated working is incorporated into curricula in higher education institutions (HEIs) and their associated placements, and is inculcated in a small number of service settings across the region, are set against the international literature.

Findings suggest that all West Midlands HEIs are making efforts to foster the skills, attributes and capabilities in their students to prepare them for working in integrated care settings, usually through interprofessional education initiatives. However, in some instances, the language of integrated care has yet to permeate curricula to any great extent, and generally links to social work colleagues could be stronger. Where access to a wide range of professions is limited there is reliance on students meeting those professionals and learning more about them on placement. However, placements are predominantly profession-specific, indicating a need to rethink placement strategies to offer a wider experience and possibly considering the scoping of third sector organisations.

Insight from the nine practice settings accessed shows that education and training of the existing workforce is treated with importance, although in places funding can be limited. In general, staff display a strong commitment to lifelong learning. New staff are inducted and receive ongoing training in post. External training is at times necessary but in-service training provides the backbone of this continuing training. However, there is also wide acknowledgment of the informal learning which occurs as part of the daily routine due to the richness of expertise in integrated teams. Those that are well established are more likely to have progressed to a high degree of integration through cross training, which allows staff to cover for one another to provide a basic, fast and efficient service. Team training is highlighted as being crucial to promoting change, much as it is considered important to educating the future workforce through IPE initiatives. Aside from advocating that service and HEIs would benefit from working more closely together to train both the future and existing workforce, a range of recommendations are made for integrated care services, HEIs, professional and statutory review bodies and Health Education England:

Recommendations for Integrated Care Services

- Co-location allows for informal learning and exchange of ideas, as well as appearing to be an effective, timely and efficient way of problem solving. Therefore efforts to provide a base or at least a common location for breaks etc. would be beneficial.

- Where an agile working approach is adopted ensure regular meetings for contact between team members occurs and importantly available rooms for this to take place.

- Train the whole team together where possible, as this is more likely to result in change and to cement relationships.

- The focus for training needs to be of common concern to all to encourage full engagement. The impact of training may be greater where it has immediate application in meeting the needs of a specific client.

- Cross training results in a more efficient and effective service but also means that staff have greater insight into the role and responsibilities of others.

- Cascade training where possible.

- Support staff in maintaining profession-specific expertise to ensure that they do not feel deskilled – this may be crucial in keeping good staff.

- Offering placement for students and badging them specifically as integrated care placements could energise teams and provide a means of identifying future recruits.

- Continue to foster clinical supervision and team supervision as part of CPD and as a means of promoting change.

- Rotate staff into integrated care teams to promote the integrated care approach.

- Explore potential links for integrated working with third sector organisations.

- Work with HEIs to identify placements with a specific integrated care focus.

- Consider offering interprofessional placements that involve interprofessional supervision and placing students from different professions to work together. Understanding different professional roles, skills and responsibilities was identified by teams as an important element of integrated care.

- Explore potential to work more closely with HEIs to swap training opportunities between service and students in a mutually beneficial exchange.
- Consider the importance of adequate funding and the impact that the lack of long term funding for training has on project development and implementation, and more importantly staff morale and motivation.

Recommendations for HEIs

Based on good practice identified from the survey of all HEIs in the West Midlands, several recommendations are proposed to facilitate the embedding of integrated care as a desirable outcome of interprofessional education:

- The language of integrated care has yet to filter into undergraduate curricula, although it is evident in a minority of postgraduate programmes. Revalidation could be used as an opportunity to update curricula so that students can readily identify continuities in discourse between their university modules and placement experience. A subtle shift in the use of language could move students' perceptions of IPE concerning their own development, to a means of shifting focus to integrated care. Simultaneous revalidation of programmes, if it can be achieved, provides a prime opportunity to align professional programmes and negotiate space for shared learning.

- A strategic approach is necessary to embed IPE that leads to enhanced integrated working. Formal and integrated structures, such as IPE steering groups and frameworks provide a structured approach to interprofessional education that potentially gives it greater formal recognition and provides a focus for aligning activities.

- The relative pros and cons for integrating IPE into individual modules or developing a bespoke IPE/collaborative curriculum must be judged according to situation. Independent curricula can feel 'bolted on' and reduce the imperative to embed IPE across the whole curricula, but give scope for innovation. Embedding IPE in modules make it part of the norm but it may also become less visible.

- Incorporating IPE into the curriculum at stages throughout the programme allows it to be revisited and acknowledges that not all students are ready to engage with it in their early professional programme. This iterative approach also allows the IPE activities to be interspersed with integrated care placement experience that may help to enhance recognition of its importance for effective patient-centred care. IPE interventions can vary dramatically in length – combining sustained input with short bursts of interaction may enliven IPE.

- Where IPE is a mandatory part of the curriculum it should be assessed on the basis that this sends messages to students about its importance.

- Authenticity is crucial to optimising student engagement in IPL activities. A strong focus for activities around broad common interests is required to make interprofessional learning a positive by-product rather than the focus of activities. Service improvement projects may provide a real-life focus.

- Complex health and social care issues that demand an integrated approach require a suitable pedagogical approach such as case-based, problem-based or scenario-based learning that encourages students to think about the issues holistically.

- Encourage as broad face-to-face interaction with other professional groups as possible. Even brief contact is positive and can be followed up with online activity. Bilateral interaction may prove most beneficial in terms of gaining buy-in for some groups but one-off major IPE events have potential for significant learning and can possibly be more innovative. Explore the potential for inter-university initiatives to enrich IPE especially where on-site interaction is limited and use technology where contact is problematic.

- Actively promote links with social work colleagues with whom links tend to be more tenuous. Be aware of structural barriers and ensure that social work is included in IPE committees, steering groups, revalidation working groups etc.

- Encourage students to form their own IPE groups, to become involved in designing events and evaluating initiatives.

- Finding and naming integrated care placements as such is essential to help students to translate their learning into practice. Ideas of what constitutes a satisfactory placement need to be revisited and updated. Openness to non-traditional, role-emerging placements can offer contemporary experience of integrated working and whilst these should be balanced with traditional placements they offer students a wider perspective on where they might fit into practice.

- Training of practice educators/mentors should incorporate emphasis on exposing students to integrated working where feasible and interprofessional supervision.

- Explore potential to work more closely with service to swap training opportunities between service and students in a mutually beneficial exchange.

- Explore opportunities for cross-university IPE.

- Explore the training requirements of mentors in order to enable them to optimise exposure, experience and learning of students and qualified staff around the integrated care agenda.

- Explore potential learning opportunities available with Community Education Provider Networks. For example, Aston University had arranged professional experience sessions in primary care through links with their local Community Education Provider Network (CEPN) which

provided access to GP surgeries and primary care emergency services including virtual pharmacy and virtual doctor services.

- It is not uncommon for staff to be allocated to IPE teaching and this can be problematic if they do not understand the need for 'learning with from and about' (CAIPE 2002) other professionals. Facilitators and teachers who are initially students' main point of professional reference can be highly influential in encouraging positive interprofessional attitudes and values which should result in a focus on the value of integrated care.

- There is wide recognition that integrated care must feature in future provision. Physicians' Associate programmes, such as those offered by the University of Warwick, University of Worcester and University of Wolverhampton, are seen as, offering a means of promoting new roles within integrated care, and are arguably suited to professionals wishing to expand their scope of practice. The learning from delivering these programmes could be used to inform how integration could be fostered in other programmes.

- Promote the development and use of integrated care placements via the targeted use of nursing, midwifery and allied health professional placement tariff.

- Based on the literature there is a need for more longitudinal studies on integrated care.

Recommendations for Professional and Statutory Regulatory Bodies

- Continue to reinforce IPE as well as updating the language to reflect contemporary practice and to highlight the association between IPE and working within integrated care teams.

- Ensure that revalidation processes pay sufficient attention to the place of IPE and integrated care in the curricula and that this is also reflected in placement provision.

- Review professional regulations with regards to mentorship arrangements to allow for interprofessional mentorship.

- Work with other bodies to ensure consistency of approach to facilitating integrated care, including 'Social Work England', the intended independent body for the regulation of the Social Work profession, from 2018.

- Ensure professional education standards reinforce the importance of IPE within curricula.

Recommendations for Health Education England in the West Midlands

- Continue to promote the need for integrated care as an efficient, effective and when managed well, a satisfying mode of delivering care to both service user and professional.

- Encourage statutory and professional bodies to work across boundaries making greater effort to integrate social work.

- Promote the provision of integrated care placements to ensure that the new workforce is fit for practice.

- Ensure involvement of front-line workers in the design of integrated care projects.

- Encourage mentorship across professions – to align with the recommendation that PSB review professional regulations with regards to mentorship arrangements to allow for interprofessional mentorship.

- Based on the literature there is a need for more longitudinal studies on integrated care.

1. Introduction

As has been observed by many social policy commentators (see, for example, Glasby and Daly, 2014), successive governments have sought to promote more effective partnerships both between health and social care, and within health care delivery itself, via more integrated care. Integration between different parts of the health system, as well as between the NHS and other services, is aimed, as the Kings Fund has described, at care where services are well-coordinated around the needs of individual patients, service users and carers (Goodwin et al, 2012).

In many ways, this conundrum of trying to achieve integration, stretches back to the inception of the NHS as part of the creation of the post-war welfare state in which health care and social care were split between free health care at the point of delivery (NHS Act 1946) and means tested and rationed social care (the National Assistance Act 1948). The other major institutional barrier to integrated services, established at this time, was the split within health care delivery between primary care (predominantly provided by self-employed General Practitioners), and secondary and tertiary hospital-based health care provided by district general hospitals and centres of tertiary health care. Inevitably, there was, and remains, an element of fragmentation where different bodies are responsible for commissioning and/or providing 'free at the point of need' primary care (GPs), secondary and tertiary (hospital-based) health care, and means tested and rationed social care (local authorities). Thus, we have the challenges of the whole system being able, or unable, to deal satisfactorily with individuals with long term conditions and co-morbidities, as well as needs

that are on the one hand defined as health care needs, and on another, as social care.

Currently, the health and social care system is experiencing, what some would argue, unprecedented pressures of demand and increasingly limited resources. The system, as a whole, is having to respond to rising demand, due to an increasingly ageing population, arguably greater expectations, and advances in medical care and 'health inflation' (Bodenheimer 2005). For the NHS, this is at a time when, since 2010, its budgets to some extent have been 'protected' but which have arguably decreased in real terms and certainly as a proportion of UK GDP. For social care, the budgetary context has been one of significant cuts to local authority budgets of circa 46% as part of the 'austerity regime' since 2010. Whilst social care has had some protection via initiatives such as the Better Care Fund, and a council tax precept of up to two per cent per year to fund social care, it is widely recognised that social care provision has deteriorated and is a major cause of overall system pressure.

It is not surprising, therefore, that the solution has increasingly been seen to be the integration of health and social care. While this has long been a policy aspiration, and is currently best manifested in NHS England's 'Five Year Forward View' and Sustainability and Transformation Plan (STP) proposals, it remains an aspiration in many parts of the country. However, initiatives have been developed (see http://www.kingsfund.org.uk/topics/integrated-care/integrated-care-map) and, as part of the 'Five Year Forward View,' Vanguard sites identified to trial new care models, have resulted in approximately fifty approaches to integration. These vary between acute care provider collaborations, integrated primary and acute care, multispecialty community providers, and health and social care integrations. Also, these are in addition to previous, somewhat more established approaches to integration. There have been notable attempts and successes, yet it remains the case that it is not always clear as to what is meant by integration.

Shaw, Rosen and Rumbold (2011) differentiate between internal integration within the health sector i.e. between primary, secondary and tertiary care, and external integration between the health, and the adult social care sector. However, the situation is even more complex as third sector organisations begin to play a greater role as providers of social care (Dickinson et al 2012). Integrated care is therefore an umbrella term that incorporates a range of initiatives that seek to address fragmentation but that differ in underlying scope and values (Stein and Rieder 2009). Clarity over what we mean in terms of models of integration is necessary to determine the nature and shape of the workforce.

Shaw et al (2011) differentiate between:

a) Integrated care – as an organising **principle** for care delivery
b) Integration – as a combined set of **methods, processes and models** that seek to bring about improved coordination of care.

They also identify five main types of integration:

1. Systemic   Coordination of policies, rules etc.
2. Normative   developing shared values, culture and vision across organisations, professional groups and individuals
3. Organisational   Coordinating structures, governance systems etc.
4. Administrative   Aligning back office functions, budgets and finance systems
5. Clinical developing   Coordinating information and services e.g. extended clinical roles, instigating guidelines and interprofessional education etc.

The move to integrated care not only concentrates on the need for services to improve the quality of care for service users, their carers and families, by removing boundaries to receiving coherent person centred care, it also supports a wide range of new roles to support this streamlined approach, to facilitate working across boundaries (Gilburt, 2016).

2. Education and Training for Integration

Regardless of different forms of integration it seems reasonable to suggest that all depend on the actions of staff working in, and with, the health and social care organisations that will make integrated care a reality (Redding, 2013; Kodner, 2009). The World Health Organisation maintains that the development of a workforce to deliver integrated care relies on an education infrastructure which can produce flexible, responsive leaders of care, able to enter the workforce as collaborative practice ready practitioners, willing and able to engage in new roles with new expectations (WHO 2010). The need for an education infrastructure is reinforced in a report by the Centre for Workforce Intelligence (CfWI) (2013) which focuses specifically on workforce integration. The report highlights the need for education and training for new roles that also promotes a good understanding of the roles and responsibilities of other professionals. Envisaging training to work across traditional boundaries therefore raises the possibility of informal interdisciplinary training being used to enable practitioners to perform basic interventions on behalf of other professionals. However, it also stresses the importance of CPD occurring in tandem with workforce planning to counteract potential staff concerns about the loss of specialist knowledge and expertise. Interventions such as the introduction of apprenticeships were advocated as a means of building workforce capacity and the importance of leadership training to achieve change emphasised.

Education of the existing workforce

Within all, but particularly both the normative and clinical types of integration there is emphasis on the need to foster the development of requisite knowledge, skills and relational capabilities that are amenable to education and training within the entire workforce. Such learning and development for the existing workforce could take the form of learning together through expanded multiprofessional learning opportunities, training, networking and job rotation. The emphasis in the service context is on both informal and formal learning

opportunities and continuing professional development through training providers and higher education institutions. Notwithstanding the focus in post-registration training on the development of uniprofessional expertise, which has tended to be privileged as professionals strive for greater profession-specific knowledge and skills, value is now being recognised in the development of complementary broader skills and attributes. The importance of the provision of introductory as well as ongoing training has been identified as a constructive way to ensure that a common goal is established among partners in practice (Brown, Domokos & Tucker, 2003). The subsequent demand for advanced multiprofessional training, has led increasingly to suites of programmes, such as Advanced Clinical Practice Masters degrees, modules and short courses suited to a wide range of health and social care professionals.

Education of the Future Workforce

Recognition of the contemporary changes in health and social care delivery has also driven change in pre-registration training, across the UK as the emphasis on the development of uniprofessional skills and competencies required for each professional group is slowly changing. The inclusion of initiatives variously termed inter-agency, multiprofessional and interprofessional working have been incorporated in curricula since the modernisation projects of the early 2000s. They are driven by the requirements of professional and regulatory bodies whose standards of practice and professional capabilities stipulate the need for knowledge, skills and attributes underpinning teamwork, collaboration and partnership working (Shaw et al. 2011). Nevertheless, there is a mixed picture across both courses and institutions regarding the degree to which interprofessional activity is prioritised and embedded, and how it is achieved. One common factor regardless of differences in exposure to practice, is that all health and social care pre-registration professionals spend a substantial proportion of their programmes on placement. It is in this setting that the importance of the ability to work with service users, their carers and families, in addition to developing the skills to collaborate with their colleagues is brought to life. Pre-registration experiences and learning leave an indelible impression on professionals' knowledge, capabilities, attitudes and values towards their work, and therefore instilling those associated with interprofessional and integrated working could have a profound impact on future practice.

3. Local Context

The Health Education England, Integrated Care Transformation Theme (ICTT) aims to implement workforce development interventions that enable new models of care to be delivered. An important aspect of this is to develop and value the workforce. ICTT Workstream 4 focusing on workforce competencies and development programmes aims to enable an appropriately trained/educated/supported existing and future workforce across health and social care to deliver the competencies required to achieve integrated care and support people to age well.

The project at the centre of this report was commissioned to map initiatives in higher education in the West Midlands, as well as identifying instances of

successful interventions in practice. The investigation offered opportunity to establish aspects of good practice in promoting integrated working, both in the future workforce, and the existing workforce in the West Midlands. Furthermore, examining practices in the context of existing literature has provided insight into how far the West Midlands has progressed towards educating and training its workforce to foster an integrated care approach to delivery of care.

4. Project Aims and Objectives

The project aimed to develop understanding of the current pattern of workforce education and training, promoting integrated working practices for the provision of integrated care in the United Kingdom, West Midlands. Our intention was to investigate provision for both educating the future workforce within HEIs, and on associated placements in practice, and the existing workforce employed in integrated care services. The inclusion of a qualitative research synthesis of the literature on education for integrated working provided a backdrop against which to assess the extent of progress in embedding integrated working in educational practices for all health and social care professions in the region. Such insight will inform policy-makers, commissioners, service and education providers on strategies that are realistic, promote engagement and are effective in improving integrated working across health and care.

Objectives

i)   Conduct a qualitative synthesis of evidence of the effectiveness of education and training to promote integrated care across the health and care sector (Stage 2).

ii) Map elements of pre - and post-registration curricula, and CPD provision, across the West Midlands, including theory, practice and placements, promoting integrated working skills, attitudes and attributes for impact on integrated care and teaching and learning approach adopted (Stage 3, 4, 5).

iii) Identify examples of best practice, and how it is promoted, in integrated working between health and care settings in the West Midlands (Stage 4 and 5).

iv) Produce a report providing a snapshot of the current pattern of workforce education for the provision of integrated care, including examples of where integration is currently occurring (Stage 5 and 6).

5. Methodology

The project adopted a qualitative research approach comprising of two elements: desk-based research and primary research.

Primary Research Sample

The nine HEIs in the West Midlands region comprised the sample for the survey to map education and training of the future workforce across the health and social care programmes commissioned in the region. See Appendix 1 for the HEIs and their major provision. Permission to access staff was sought from Deans of Faculty in each institution.

A sample of nine integrated care teams were identified to provide insight into education/training of the existing workforce. This sample was thought to be large enough to provide the necessary rich and varied insight into provision. Some teams which were selected were well established and had received recognition for their innovative practice, whilst others were relatively new. The sample is identified in Appendix 2.

Data Collection

i) Desk-based research

The study commenced with a review that drew on a broader literature than that typical of a standard systematic review or meta-synthesis which focus exclusively on quantitative research evidence. Consequently, qualitative research studies and grey literature (reports and evaluations) produced by organizations such as The Kings Fund and the Policy Innovation Research Unit, both of which had scope to inform the research, were included. Qualitative synthesis was chosen since the evidence of education for integrated care or accounts of integrated care initiatives were likely to be found in a range of types of publications. Qualitative syntheses are distinguished from traditional literature reviews by the systematic processes adopted from the systematic review framework. Thematic analysis was used within the synthesis to draw out main themes (Braun and Clarke, 2006).

ii) Primary research – HEI curriculum mapping and semi-structured interviews.

Two data collection tools were developed. The first, a survey for education providers, was designed to map curricula to reveal the teaching approaches and pattern of pre-and post-registration coverage of theoretical, practical and placement experiences concerned with promoting integrated working skills, attitudes and attributes. The aim was to capture provision across pre-and post-registration programmes (Appendix 3).

The second data collection tool, a semi-structured interview schedule for integrated team members, was developed by incorporating insights from the literature. The interview schedule was adapted slightly to gain insight into the experiences of the manager or person in a leadership role, an established team member, and a relatively new member. The three interviews were important for gaining depth of understanding from different perspectives. (Appendix 4).

Ethical Considerations

Ethical Approval was gained through the Coventry University Ethical Approval Process (Appendix 5). Given some ambiguity with some local Research and Development Officers responsible for integrated services, the project was referred to the Health Research Authority (HRA) for clarification as to whether it required ethical review by a NHS Research Ethics Committee (REC). HRA defined the project as a service review giving the go-ahead. All Research and Development Officers were contacted subsequently for permission to proceed.

The project team adopted the six key principles of ethical research, as laid out by the Economic and Social Research Council (ESRC):

- Participants should take part voluntarily;
- Research should minimize potential risk of harm to participants or researchers;
- Participants and researchers should be given appropriate information about the purpose, methods, and intended use of the research;
- Participant preferences about anonymity, and confidentiality of information and personal data, should be respected;
- Research should be designed and undertaken to ensure integrity, quality, and transparency;
- Research should be independent and impartial.

All participants were informed of the purpose of the research and of their rights and informed consent gained.

Quality Assurance

A quality assurance team was appointed to offer project team guidance, specifically in reviewing/critiquing and approving the data collection tools and checking findings. The quality assurance team included:

- Dr Sundari Joseph, Vice-Chair of the Centre for Advancement in Interprofessional Education (CAIPE).
- Julian Mellor, Programme Manager, Integrated Care programme, HEE West Midlands.
- Rachael Mathers - colleague from practice with experience of setting up an integrated team.
- Dr Jan Quallington, Chair of the Strategic Alliance for Health Education (SafHE, West Midlands).

6. Review of Current Literature

The review (Appendix 6) provides insight into the current progress in educating the future workforce to provide integrated care, within and across a range of environments, and how and where training of the existing workforce occurs,

and the extent to which the training is translated into integrated care in practice internationally.

Given the potential volume and breadth of literature available the review was divided into two arms with the literature being interrogated in response to the following questions:

> • What are the characteristics/features of training initiatives in place for the existing workforce delivering integrated care?

> • What approaches are used to educate the future workforce (in university and on placement) in terms of skills, attitudes and attributes to work in an integrated care setting?

Results of the literature review

A total of 1,379 papers were identified from the searches. These were saved and abstracts examined for relevance to the review questions. Papers were placed in to either, or both, of the two review categories - those which dealt with the characteristics/features of training initiatives in place for the existing workforce delivering integrated care, and those which focussed on the future workforce.

A final sample of 26 papers were selected from 626 in the review for the existing workforce (Appendix 7), and 33 papers were selected from 753 for the future workforce (Appendix 8). The remainder of the papers were excluded either because they did not provide detail of characteristics or features of training, consider skills, attitudes and attributes of the future workforce, or did not relate specifically to integrated care.

The reviews were international in nature. Of the 26 papers focused on the existing workforce, 7 were from UK, 4 from USA, 7 from Canada, 5 from Australia and 3 from Europe. Five were systematic reviews, 13 development/delivery/discussion of models of training, 7 evaluations of training, and 1 was a literature review.

The 33 papers which related to training/education of the future workforce, included 10 papers from the United States, 9 from Canada, 7 from Australian, 3 from the UK, and 1 from Denmark. A further 3 papers discussed multiple countries. Twenty of the papers involved evaluations of interventions, programmes or projects. 9 were overviews or discussions of the provision of IPE education, and 4 were systematic reviews.

Discussion of Literature on Education and Training of the Existing Workforce

The first arm of the literature review was to identify characteristics/ features of training in place for the existing workforce delivering integrated care. Most of the training related to specialities which dealt with complex care or long term illness, for example, staff working with children with long term disabilities,

rehabilitation of the frail elderly, mental health, palliative care, and the primary/secondary care interface. Some of the more recent papers (Bailey and Paice 2016; Limon et al 2016) reported preliminary findings and new models of integrated care – often being part of the national integrated Pioneer programme. Most of the care delivery was located in primary or community-based settings and required input from a variety of health and social care professionals. Training was mainly focussed on increasing efficiency and effectiveness of care, as well as improving quality and safety.

Delivery of training

A variety of methods of delivering the training were reported, ranging from traditional day release in Higher Education Institutions (Carpenter et al 2006, Bajnok et al 2012) to practice or service-based training (Lasater et al 2016, Rice et al 2010, Hammick et al 2007, Ladden et al 2006). Training took the form of either face to face delivery, cross training, eLearning or blended learning. There were advantages and disadvantages to each different type of delivery, for example, many training initiatives were given in-service because of the challenges faced by service partners of releasing staff to participate (Rice et al 2010), others however stated that onsite training allowed participants to be called back into service at short notice impacting on the training programme (Reeves et al 2012). Offsite training advocates supported the notion that participants were able to focus totally on the training without being distracted by service demands (Reeves et al 2012). E learning (Evans et al 2016, Ladden et al 2006, Limon et al 2016, Atreja et al 2008) was often seen as an alternative which provided participants with the flexibility to complete the work at a time which suited them, whilst still being able to discuss and work within an interprofessional online environment. The importance of the whole team completing training together was highlighted by Bajnok et al (2012) as an important facet of being able to develop as a functioning and cohesive team.

A novel approach appeared to be the use of cross training activities (Fleury et al 2016). Cross training is described as a process of increasing workforce flexibility by providing training to increase their skills and knowledge outside of their own professional expertise. Training may be provided by other members within the interprofessional team. For example, Fleury et al (2016) use of cross training resulted in an increase in participants' confidence in facilitating networking and cooperation among clinicians from health and social service centres, as well as increasing referrals from services such as education, which had historically been low. Lasater et al (2016) also used cross training in fall reduction training, where the 4 members of an interprofessional training team shared with each other their own professional knowledge in relation to fall reduction, thereby enabling each member to be able to deliver training to others and provide professional knowledge from the interprofessional training team – for example, the pharmacist team member was able to teach orthostatics, whilst the social work team member was able to share basic information about high risk medications.

The length of interventions ranged from as little as 6 hours to 2 years (1 day a week) (Table 1). Service demands were an important factor in shaping the

length of the intervention and optimising uptake often involved making the interventions specific, targeted, relevant and succinct. In one paper, Rice et al (2010, pg 352) used an 'extremely light touch intervention' at the specific request of stakeholders because of the limited amount of time available within the service setting.

Table 1: Length of intervention

Article	Length of intervention
Andrew and Taylor (2012)	3 days (2 days followed by 3rd 6-8 weeks later)
Atreja et al (2008)	Spread over 8 weeks (web based)
Bajnok et al (2012)	6 days f2f (delivered in 2 day blocks)
Carpenter et al (2006)	2 years (1 day a week HEI)
O'Donohue et al (2012)	2 weeks
Evans et al (2016)	12 weeks (online)
Ladden et al (2006)	Not given
Lasater et al (2016)	4 hours
Leutsch and Rowett (2015)	One semester
Lotrecchiano et al (2013)	Weekly for one year
Phillips et al (2016)	Single workshop
Reeves et al (2012)	5 days
Rice et al (2010)	8 weeks
Bailey and Paice (2016)	8 months to design
Miller and Mangan (2016)	4 hours
Garcia-Lopez et al (2016)	4 weeks

Intervention objectives

The objectives of training interventions focussed on increasing skills in areas of communication, collaboration, decision making, leadership, conflict resolution and interprofessional team working and dynamics. Communication between professions and across organisations was considered a key factor in achieving improved health care. Service users and key stakeholders were, in some instances, involved in the training intervention, sometimes to offer their perspective and experiences, or to help design the training (Lotrecchiano et al 2013, Carpenter et al 2006, Bailey and Paice 2016, Garcia-Lopez et al 2016), and sometimes to develop shared partnership working, and to take more control in articulating their own care needs (Nicholson et al 2013).

Improving team working was another important element of training. Providing practitioners with skills and understanding of how to enhance team effectiveness and develop functioning health care teams, enabling them to improve clinical practice and service-user experience was a common training objective. Frequently these focussed on safety and quality initiatives (Reeves et al 2012, Nicholson et al 2013, Rask et al 2011, Ladden et al 2006). Other interventions focussed on designing new models of integrated care (Bailey and Paice 2016, Limon et al 2016).

Experiential learning, real-life case studies, adult learning with participatory approaches, concepts and models relevant to participants' workplaces, as well as use of supporting handbooks and toolkits, were used in the design and delivery of training in integrated care. Sharing knowledge and skills either via small group work, quality or health system improvement projects were common elements of training interventions along with motivational or influencing techniques (Leutsch and Rowett 2015).

Intervention outcomes

Training resulted in improved understanding of others' roles and responsibilities along with an increased respect for different roles within teams (Nicholson et al 2013). A resulting increase in confidence and empowerment in communication between professions (Bajnok et al 2012, Howarth et al 2006), with service users (Carpenter et al (2006), and also in some cases across organisational boundaries (Phillips et al 2016), Long et al 2013, Fleury et al 2016, Howarth et al 2006) was evident. Team dynamics often changed with an increase in cohesiveness, pride in team accomplishments and motivation to affect change within service redesign. In several cases, evidence of changes to practice were sustained after the end of the training (Andrew and Taylor 2012, Reeves et al 2012, Rask et al 2011). New skills were often reported to have been used in practice, role modelled, and shared with practice colleagues (Bajnok et al 2012, Evans at al 2016).

However, not all interventions reported such positive outcomes. Rice at al (2010) found no evidence of change in communication and collaboration between health professionals following their intervention. Ethnographic observations and interviews completed by the research team suggested that senior ward-based health professionals charged with cascading and role modelling the training to junior colleagues had failed to complete this task, rarely role modelling and providing minimal explanation of the intervention. There was also evidence of professional resistance from the physicians which along with the fast-paced interruptive environment reduced opportunities or incentive to enhance interprofessional relationships.

Enablers and barriers to delivering, implementing and sustaining an intervention were identified in most papers. Access to shared data was considered an essential element of delivering successful integrated care, which related to having access to information technology accessible by all professionals (Bailey and Paice 2016, Maslin-Prothero and Bennion 2010).

Capstone projects, quality improvement and patient-safety focused activities were important in helping teams to work together and enabled participants to take 'what they were learning at the moment' and integrate it into real life interprofessional initiatives. Strong high level organisational support was seen as an enabler, especially in relation to innovation (Reeves et al 2012, pg 9). Training and support needed to be delivered by credible trained professionals who understood practice and who were able to offer ongoing support, advice and motivation following the intervention should participants want this (Lasater et al 2016, Ladden et 2006, Limon et al 2016, Evans et al 2016 Nicholson et al

2013, O'Donohue et al 2009, Bajnok et al 2012). Barriers to delivering training, and its uptake and sustainability, were identified as time and space, especially if delivered in workplace setting (Miller and Mangan 2016, Andrew and Taylor 2012, Reeves et al 2012, Ladden et al 2006). Release of staff was another challenge as was the need to ensure that training was interprofessional and relevant professional groups were represented in adequate numbers (Howarth et al 2006).

In conclusion, training interventions for the existing workforce delivering integrated care was typically short, succinct, situated in real-case scenarios, and was perceived as being important training to all participants. To be able to work in an integrated team, professionals (and in some cases service users and carers) welcomed opportunities to increase team cohesiveness, to share practice, to have time to understand and respect each other's roles and responsibilities and to improve their communication skills across professions and organisations. It was important that interprofessional training gave participants the opportunity to do this by providing a level playing field, where professional hierarchy was absent (Bajnok et al 2012, Reeves et al 2010).

Discussion of Review of Education of the Future Workforce

Intervention Outcomes

The review overwhelmingly revealed an emphasis on justifying the need for interprofessional education (IPE) and demonstrating the skills, knowledge and attributes developed in University settings. As such, several papers concentrate on highlighting the positive effects of IPE and justifying the needs for it in pre-registration training. Evans, et al (2015) and Boland et al (2016) show that IPE improves confidence in students; others focus on demonstrating the skills that IPE can develop (Wong et al 2016; Macauley et al 2016 and Chehade et al 2016). The skills most commonly illustrated in the literature were team-working skills (Jakobsen and Hansen 2014; Nandan and Scott 2014; Weaver et al 2014; Reeves et al 2012, Meffe et al 2012) and communication (Delisle et al 2016; Macauley et al 2016; Evans et al 2015). Most authors conclude that IP communication is essential and this involves understanding shared care and using shared language (Ritchie, Dann and Ford 2013).

MacDonald et al (2010) argue that IPE is inevitably good for students as they will learn something about each other and how to work together. Orchard and Bainbridge (2016) go further to suggest IP competencies are not in conflict with uniprofessional ones. IP capabilities can enhance the productivity and practice of clinicians. Jelley, Larocque and Patterson (2010) suggest that it is essential for students to learn together so they understand the roles and responsibilities of other professionals in a multi-disciplinary team setting. This competency provides students with the capability to be able to perform their duties (Kraft et al 2013) and focus on the patients' needs.

There was evidence from the review that the skills and capabilities developed in IPE training can translate into practice (MacDonald et al 2012; MacDonald et al 2010; Sievers and Wolf 2006; Howarth, Holland and Grant 2006). However,

most of the studies focus on single interventions, over very short time periods, and involve small samples of students. Olson and Bialocerkowski (2014) in a recent review suggest that the IPE literature lacks rigour in this regard, with too few longitudinal studies to indicate how IPE training positively translates into a practitioner's practice. This review illustrates how educators are attempting to make a link between IPE training and positive outcomes for health care delivery and service. For example, Delisle et al (2016), Hughes et al (2015) and Wong et al (2016) show how IPE supports person-centred care. These papers present finding from evaluations, or research, which show the importance of embedding IPE in the curriculum with a view to transforming health and social care delivery. Some papers from the USA, for instance, Hughes et al (2015), and Sievers and Wolf (2006) focus on how essential and strategic IPE is with respect to transforming health and social care services. A similar discussion was developed in the grey literature, particularly by the World Health Organisation (WHO 2015) who make a case for transforming global health care services by upskilling staff and integrating services through strategic models of care.

One of the major drivers for IPE therefore was the need to develop competencies in health and social care graduates that will enable them to work interprofessionally in multidisciplinary teams and provide person-centred care (Chehade et al 2016; Howarth, Holland and Grant 2006). In addressing the need for adapting global health care systems towards person-centred delivery, several papers conspicuously emphasise the need for IPE demonstrating the link between students' IPE interventions, positive experiences and an improvement in self-reported understanding of effective interprofessional working (Boland et al 2016; Chehade et al 2016; Delisle et al 2016 and Reeves et al 2012). Generally, the literature suggests IPE interventions can produce positive experiences for students.

IPE frameworks

Several IPE frameworks were evident in the literature, such as the Canadian Interprofessional Health Collaborative (CIHC) framework which has been adapted by Orchard and Bainbridge (2016) using the same competency domains. Another framework, the Integrated Model for Interprofessional Education (IMIPE) model uses collaborative, experiential, and transformative learning approaches to deliver IPE (Grapczysnski et al. 2015). There was agreement in the literature that IPE needs to be strategic and have a consistent framework if practitioners are to be clear about the learning outcomes and the competencies that are being developed through the interventions (Orchard and Bainbridge 2016; McAllister et al 2014; Thistlethwaite 2012). Thistlethwaite (2012) argues that the value of adopting a framework for initiatives is that they demonstrate the importance of the competencies being delivered, why they should be valued, and facilitate the evaluation of effectiveness.

Essential IPE competencies

The review identified the types of competencies that educators think students need to develop to become effective practitioners in integrated care settings.

Based on the Canadian Interprofessional Health Collaborative (CIHC) framework, Orchard and Bainbridge (2016) outline six competency domains:

> *Role clarification, team function, patient/client/family/community-centred, collaborative leadership, interprofessional communication and addressing interprofessional conflict (p. 528).*

These are largely corroborated in the literature with slight variations; for example, Macauley et al (2016) indicate that their student participants reported additional competencies, including the ability to think innovatively, conduct research and manage projects. However, these students from Universities in the USA and Finland were involved in an IPE intervention during which they needed to be resourceful and had to learn to overcome language barriers. Similarly, Grapczysnski et al. (2015) trialling the Integrated Model for Interprofessional Education (IMIPE) indicated that in addition to the usual competencies, their students developed critical reflection skills, ethical understanding and recognition of patient-client needs.

IPE Curricula

A variety of pedagogical strategies for the delivery of IPE were advocated in the literature. These include exchange-based learning (Macauley et al 2016), observation-based learning (Jelley, Larocque and Patterson 2010), action-based learning (Sievers and Wolf 2006), problem-based learning (Jakobsen and Hansen 2014), simulation based learning (Cavanaugh and Konrad 2012; VanKuiken et al (2016), practice based learning (Meffe, Moravac and Espin 2012) and e-learning (Stephens, Robinson and McGrath 2013). Reeves et al (2012) favour a combination of a range of learning interventions with emphasis on practice based learning (placement).

Effective Delivery of IPE

The literature does not appear to deal sufficiently with the mechanics of how IPE could be delivered effectively. This was viewed as problematic by authors who have undertaken systematic reviews or overviews of IPE (Weaver, Dy and Rosen 2014; Olson and Bialocerkowski 2014; Reeves et al 2012; Thistlethwaite 2012). There was broad reference in some papers to how IPE learning should be transformative, interactive and practical (Grapczysnski et al 2014; Evans et al, 2015).

Providing slightly more detail, Jackson et al (2006), advocate the use of face to face IPE seminar activities, reporting a significant increase in students' skills and competencies as well as attributes of care, confidence and ethics. In fact, the majority of the IPE delivered in the papers we reviewed were practical interventions, either clinic-based or group-work/case studies. However, many interventions adopt a blended learning approach, incorporating some online activities. Blended learning strategies were identified as a means of overcoming scheduling and logistical issues (VanKuiken et al. 2016; Cavanaugh and Konrad 2012). For instance, one intervention included use of case studies and simulation to deliver IPE (VanKuiken et al 2016). Simulation was identified as

potentially improving students' self-directed learning and appreciation of IPE (VanKuiken et al. 2016; Cavanaugh and Konrad 2012). Other interventions included using Wikis (Stephens, Robinson and McGrath 2013) and a virtual resource (Wong et al 2016).

The literature discusses IPE taking place within clinical settings and the community; sometimes as part of placements (Boland et al, 2016; Wong et al 2016; Jelley et al 2010). Several papers, particularly, those from Australia and Scandinavia discuss the need to provide a safe learning environment in clinical settings. The projects evaluated are often small, short (typically week-long) and voluntary. For example, Jakobsen and Hansen (2014) report that clinical tutors succeeded in creating safe and challenging learning environments for students on an orthopaedic ward having previously done so in an ITU setting. Pullon et al (2016) discuss IPE in rural settings in Australia as a means of preparing students for practice, and Chehade et al (2016) advocate the use of "entrustable professional activities" (p. 598), in a way that is relevant to students training and their future practice.

Two papers (Delisle et al 2016, Ritchie, Dann and Ford 2013) assessed the effectiveness of delivery of IPE by using validated IPE tools: the Points for Interprofessional Education Score (PIPES) or Readiness for Interprofessional Learning Scale. However, Oates and Davidson (2015) appraise the psychometric properties of nine instruments used to measure the outcome of IPE revealing that the instruments are not necessarily rigorous from a psychometric integrity point of view. The instruments like the Interdisciplinary Education Perception Scale (IEPS) (Luecht, Madsen, Taugher and Petterson 1990) or the Readiness for Interprofessional Learning Scale (RIPLS) (Parsell and Bligh 1999) do not readily identify any changes in relevance or significance of IPE. Instead the variables weigh the perception or awareness of the individual, which may have little or no bearing on a person's practice.

Exposure to IPE and its impact

The review showed that while there is extensive research and evaluation which investigates training of the future workforce with respect to IPE, there is limited understanding of how this training may influence the practice of students. There was anecdotal evidence that claimed that short training programmes or limited one-off interventions, which are only partially integrated into the overall curriculum, had an appreciable effect on students' learning or behaviour (Delisle et al 2016; Jelley, Larocque and Patterson 2010). However, the research seems to support the suggestion that effective IPE training needs to be strategically, integrated into the curriculum and that it should include training in real-world practice settings as well as having assessments that evidence integrated care competencies (Evans et al 2015; Nandon and Scott, 2014; Reeves et al 2012, Sargent 2009). Ritchie, Dann and Ford (2013) compared dental students in two cohorts after exposing the experimental group to structured IPE for a year and found no significant difference in their understanding after a year. However, by the second year the experimental group exposed to IPE began to show appreciable better understanding of the roles and responsibilities of the other dental professionals and this influenced

their practice. Reeves et al (2012) argue that IPE needs to be delivered early, regularly and in a sustained manner capitalising on the fact that students' readiness for IPE is high on entry before professional identities are formed but requires sustaining through the programme.

In fact, there was wide variation in the extent of exposure to IPE. For example, Wong et al (2016) discuss an eight-week programme, Pullon et al (2016) a five-week intervention, Sievers and Wolf (2006) evaluate a 1 month clinical experience, Boland et al (2016) a week-long IPE intervention and Delisle et al (2016) a 16 hours IPE training programme. However, the most consistent message was that IPE should be embedded throughout the curriculum (Howarth, Holland and Grant 2006; Evans et al 2015; Thistlethwaite 2012; Reeves et al 2012).

VanKuiken et al (2016) argue that students generally accept IPE training for limited periods, acknowledging the usefulness of the training programme and being able to articulate what they have learned. Nevertheless, tolerance of IPE training that is woven into professional training was low even though it is thought to be more challenging and possibly more effective. However, Meffe, Moravac and Espin (2012) indicate that negative experiences like self-silencing, conflict resolution and negation can enhance collaborative and communication skills. Students may be motivated to a greater extent where IPE opportunities embedded in the curriculum are authentic and person centred (Hughes et al 2015), or as Hamilton (2011) suggests where IPE is taught alongside other cultural competencies.

In her overview, Thistlethwaite (2012) suggested that it is important to identify best practice which effectively links IPE interventions with measurable changes in practice. However, Delisle et al (2016) point out that IPE does not seamlessly translate to practice, as interprofessional interactions remain low after IPE interventions. They suggest this is due to limited opportunities to interact professionally, professional stereotyping and hierarchical structures, especially during short, unstructured interventions. However, arguably, IPE provides opportunities for informal as well as formal learning, reducing the risk of interprofessional barriers formed as students are socialised into profession specific cultures (Hamilton 2011).

Assessing IPE

In their guidelines for IPE, Barr, Helme and Reeves (2016) suggested that assessment, both formative and summative, should be an integral part of the delivery of IPE. Reeves et al (2012, p. 242) note that effective assessment of IPE should indicate how students' learning is progressing. They highlight three separate levels: exposure, immersion and competence, which they suggest should show a trajectory from novice to expert in any given skill or attribute. VanKuiken et al (2016) advocate the use of reflective assessments that they suggest lead to a richness and valuable learning experience for students.

Teaching and Facilitation

IPE facilitation should be delivered by an experienced IPE team with in-depth understanding of learning methods (Thistlethwaite 2012; Sargeant 2009), using different models that involve high-impact learning experiences (Grapczysnski et al. 2015). Reeves et al (2012) suggest that the IPE curriculum should focus on shared understanding, avoiding profession-centrism (delivery by only one profession). When IPE is skilfully woven into the curriculum and afforded equal weight as uniprofessional content it is seen as important and relevant, yet, Thistlethwaite (2012) argues that educators need to work hard to provide the impetus for IPE that is demonstrable to students. With respect to the quality of the experience learner satisfaction was usually high when the intervention is purposeful, relevant and engaging (Thistlethwaite 2012). However, Reeves et al (2012) report that educators tend to concentrate on short term outcomes and do not evaluate effects of IPE on practice of graduates.

Challenges that inhibit IPE

The challenges in developing IPE were generally the same as they have been for the last 3 decades as noted by Reeves et al (2012). Differing health professional cultures and socialisation processes, stereotyping and hierarchical structures make IPE delivery challenging (Delisle 2016; Hamilton 2011). In addition, IPE could be present in the hidden curriculum and not explicit (Delisle et al 2016), which could create negative connotations.

Sievers and Wolf (2006) suggested that IPE is difficult to develop authentically in educational learning environments, especially, in clinical settings and Sargeant (2009) noted that IPE can be inhibited if the content is not dynamic, relevant or appropriate. It is clear that IPE needs to be relevant and have value to the students (Thistlethwaite 2012) which emphasises the need for learning outcomes and content to be carefully designed to aim for the IPE intervention to be transformative.

Logistical problems were a ubiquitous problem. These included - scheduling, logistics, resourcing, facilitation, assessment, access to professional groups and balancing disparities in student numbers (VanKuiken et al 2016). In addition, an appropriate environment was crucial to facilitating the development of communities of practice (Sargeant 2009).

In conclusion, IPE was recognised as very important to the future workforce, promoting effective delivery of integrated health and social care services (Howarth, Holland and Grant 2006). Learning in IPE spaces ultimately supports students to appreciate that care should be focused on the service user and that practitioners should develop effective collaborative behaviours. The review clearly demonstrates the importance of IPE, particularly with respect to the training of the future workforce who will be tasked with delivering complex care and managing long term conditions in multidisciplinary teams. There was a strong impetus to therefore work strategically to develop the kind of authentic, relevant and valuable learning experiences that students can engage with and

be able to learn the essential skills needed to practice in the modern health care workforce.

7. Education and Training in Integrated Care Units in the West Midlands

This section of the report provides insight into the primary research conducted during the project in a small number of services providing integrated care in the West Midlands that were accessed between January and March 2017. Approximately twenty projects in West Midlands were invited to take part in this study; of these nine consented to be involved within the exacting study time frame. The research team asked to interview 3 members from each team including a team lead/manager to obtain a strategic and recruitment insight, an experienced team member – to obtain an operational insight, and finally, a newly recruited team member to provide an inexperienced operational overview. The team believed that this would offer a 360 insight into the workings, training needs, enablers and barriers faced with delivering integrated care in the West Midlands.

Unfortunately interviewing this mix of team members was not always possible, in some cases all participants from one project provided a strategic rather than operational overview – even so this offered the team useful information into the plans, motivation and passionate belief in the need and strength of working in an integrated way. Our intention had been to access services of varied lifespan to capture how they evolved over time and the contribution of education and training to their development. As a result, the integrated teams varied widely in terms of duration of establishment. For some teams, such as HomeFirst, working as an integrated team had only just begun and these were very early days to be interviewed, as the teams were still managing massive change. Nevertheless, there was important learning here too for the research team.

In contrast, some teams were very well established. For instance, the Feldon Unit had been in place for a decade. Although person-centredness was an explicit principle for all of the services their target populations also differed. All were concerned with areas of complex care: the Esteem team catered for maternal mental health issues, HomeFirst and iCares' aim was to keep people with long term conditions out of hospital. Feldon focused specifically on rehabilitating patients with stroke. The Intensive Support TCP and Shropshire TCP &Taking Part both catered for people with learning disabilities whilst Acorns Hospice met the needs of children and their families. Three of the services were registered charities, two were funded through the Transforming Care Partnership initiative and the others were community services associated with large trusts. Each integrated care service is introduced briefly below.

Acorns Hospice

Description of the service:
The Acorns hospice is a registered charity offering a network of care for life limited and life threatened babies, children, and young people and their families.

There are three hospices in the Midlands. Established in 1988, Acorns is structured into four different areas that meet different needs but combine to provide holistic and multi-focused support for children and their families. These include a community team, which provides hospice at home care, an outreach service provided by the in-house team, and the family transition team, in addition to in-house hospice care. The integrated model of care has been formally launched and recognised as the approach adopted in the hospice since 2014 and integrated working is considered the most positive and productive way forward for families. Integrated care operates on multiple levels within Acorns as well as with the team that supports that child outside of Acorns. It is thought to be particularly important for service users in general, but specifically when working with children with complex needs inevitably involving the coordination of many professionals.

Composition
The team is comprised of a range of professionals, including nurses, GPs, consultant, physiotherapists, social workers and complementary therapists that all work together to provide care. In addition, volunteers operate across all services.

Processes
Staff have daily contact with each other in some form or another, as well as weekly meetings to discuss child and family needs. The introduction of electronic records over the next few months will potentially result in increased frequency of meetings if staff spend more time out in the community. There is an open referral system where anyone can refer to the service.

Supporting factors
- Thirty percent of the funding from Acorns comes from the CCG and the rest is funded through money raised across the three hospices, which goes into a central fund and is divided into individual budgets.

Education and Training of the Workforce

Recruitment
Staff are recruited based on how well they are likely to fit into the team. The aim is to find people with some life experience, who are dedicated, and who are likely to settle in and stay in post because of the time taken to build relationships with the families who require support, sometimes over a period of years. The appointment of people who are forward thinking, and adaptive to change, is important to provide a balance with more established staff members. The knowledge and in-depth living knowledge that people bring to the job are paramount.

Induction
A three-month induction programme is provided for new staff. There is a structured induction pack which goes through the basics of meeting everybody in the organisation to understand their role and where people fit into the bigger plan. Meeting others can take four to six weeks and the rest of the time is spent by the new staff member having the freedom to look at their own role as they

begin to work. A mentor meets with the new staff member at three points during this 12 weeks which is treated as a probationary period.

Day to day work and informal learning
The team leader is an advocate of open discussion within the team and is keen to demonstrate that she values the past experience of all members from their different professional backgrounds. She is keen to involve everyone in moving the service forward usually through discussion in the team meetings. Staff feel able to contribute ideas and share knowledge.

Essential knowledge, skills and attitudes
Willingness to engage in effective communication and to acknowledge other people's perspectives. Patience is important because everybody thinks differently. Openness to new ideas.

Challenges
- Being a charity can be a challenge to other professionals. Acorns is very well respected professionally, particularly due to the care and support provided, but sometimes the voices of staff are less well respected than those of professionals, such as social workers or community nurses.
- Resistance to change from some of the members of staff that have been in post for a long time, which they justify in that the service works for families. These staff worry about moving forward in case the special nature of the service is lost. Most are also eager to progress but probably at a slower pace, which is a factor with which the team leader has learned to work.
- Different roles bring different perspectives and approaches so good communication is needed.
- Role overlap in this case can occur when a child dies and the family team worker offers the bereavement support, taking over from the staff providing end of life care. This feels like an unnatural cut off where there needs to be a transition to avoid upset for both the professional and the family. This is an issue that the teams are working on.

Training Received and Training Given
Formal study days across the three hospices enabled sharing of knowledge which was of mutual benefit. The transition team, working with and supporting young adults, gain valuable learning from the adult services. Networking is considered to probably be the biggest resource available to staff. Staff are aware of CPD opportunities provided externally and of the availability of short online course, which earn CPD points, but because hospice work is unusual courses are sometimes less relevant. Anyone can apply to access funding for external courses and training is ongoing and highly encouraged. A member of staff has completed a non-medical prescribing course, and attended relevant conferences, and another has been supported financially to complete the first year of her counselling course. The budget was described as 'tight … but it doesn't stop the training going ahead … it just needs a little bit more thought.'

There are many opportunities to access training, such as communication and bereavement support, awareness around diversity, lone working and working

with professional boundaries, in-house within Acorns. An in-house training week occurs once a year.

Training Needs

No outstanding training needs.

Clinical supervision and mentorship

Most of the services had a system for one-to-one clinical supervision and this mostly occurred regularly every 4-6 weeks. The Acorns Hospice also had an arrangement for team supervision, which staff found very beneficial. Clinical supervision appears to be seen as a legitimate and effective means of CPD to which it is worth devoting time. Formalised mentorship arrangements were less common, although several of the staff in more senior positions spoke of informal mentorship arrangements.

Student Placement

Acorns takes students on placement with some student nurses placements lasting between 3-10 weeks, during which time they will work with their mentors regularly. However, they are currently considering taking social work students. The focus will be on understanding holistic care for the families, and to understand that a child is the central thing to a family, whatever shape or form that family takes. The placement could be legitimately termed an integrated care placement.

Esteem Team

Description of the service:

The Esteem team was established in 2011, as a community-based service. There are two streams to the team, these are complex needs and maternal emotional wellbeing, both of which were identified as gaps within services. The complex needs team deals with mental health needs as well as added complications caused by social factors, such as drug and alcohol abuse. They also work with the probation service. The maternal support services meet needs associated with pregnancy, giving birth and becoming a parent, as well as losses of babies, miscarriages, terminations, cot death or traumatic birth. Service users are frequently people who are vulnerable, had previous post-natal depression, or mental health issues surrounding pregnancy and birth, and are susceptible to relapse with subsequent children.

PCT funding for the service covered the whole of Sandwell. The service is now run by a private company, Kaleidoscope which reports to the CCG and NHS England.

Composition

The team is small with only seven staff, including an administrator, the manager, who was a registered mental health nurse, two counsellors, and a support worker who specialised in drug and alcohol issues. Another member of staff has lived experience of mental health issues and voluntary sector experience, and another has a secondary care background. The service is currently short staffed and in effect runs as two linked services.

Processes

An open referral system operates. Initial difficulty in non-qualified staff referring on had been overcome. Signposting clients to appropriate services and referring on is an important aspect of the work with people with complex needs.

Supporting factors
- A very stable team that functioned well despite lack of resources.

Education and Training of the Workforce:

Recruitment

Typically, new recruits need to have experience and ability to work independently. There is a perception that newly qualified staff are not suitable for recruitment due to the highly risky and complex nature of the service-users with whom the service works.

Induction

The team came together as part of a pilot study so were simply brought together and left to find their feet. The job role was very broad, and has been allowed to evolve, making the early days enjoyable because colleagues were from different areas and had different qualifications, but had a shared goal. Mandatory training is part of the induction process with online resources regarding health and safety etc. New staff complete one week of shadowing different team members as well as a health visitor. Ideally they will also shadow a midwife.

Day to day work and informal learning

The team have monthly team meetings where the whole team (complex and maternal care specialists) meet for up to 2 hours. However, being based in the same office, means that it is easy to catch up with people on an informal basis to exchange ideas.

There is recognition that different professions bring different skills, experiences and ways of working and that this can be positive in changing practice to increase effectiveness. An established team member suggested that if she had any queries she could turn to anyone in the team, as they shared knowledge amongst them.

Essential knowledge, skills and attitudes

Mental health and wellbeing. Flexible holistic approach to the person as a whole. Person-centred approach and consideration of the social situation and housing, family, benefits etc.

Challenges
- The team's main challenge is its pilot project status that means funding had always been limited. Time limited contracts lead to feelings of vulnerability but the service has recently been taken over. Whereas initially there was a training budget that was used to develop specific

skills, lack of funds has had a recent impact on training with the effect that staff feel undervalued and unable to develop further.

- Role boundaries can create difficulties, especially with people from the voluntary sector who are volunteering their time. There is a tendency for management to be more lenient but this needs to be balanced by a level of professionalism, particularly regarding safety. Assessing risk and having working criteria had been difficult for some people to accept when confronted by a person needing help.

Training Received and Training Given
When this project initiated there was a training budget but currently there is a lack of funding for training. As a consequence, staff feel that their development is being stifled and skills are not valued. The manager has tried to empower the team by being flexible and open to new ideas for the service. One team member is completing a self-funded counselling course and Kaleidoscope are going to be approached to ask for funding for the next level of training. Effort has been made to access free training on issues of concern, such as self-harm and suicide. Much of the training has occurred in-house. The team did attend the annual health visitors' health forum, where they were able to share practice, which included health visitors, children's nurses and other professionals.

Training Needs
There is a perceived need for additional training, specifically regarding maternal mental health. Free training available in the Sandwell Pool site (Council website) was explored but was considered to be too basic. The team feel that they need training that will challenge them and increase their knowledge.

Mentorship
None available.

Clinical supervision
One to one clinical and managerial supervision is scheduled every 4 to 6 weeks. The managerial supervision, is conducted by line managers but the choice of clinical supervisor is flexible and staff are encouraged to ensure they access their clinical supervision as a means of continuing professional development.

Student Placement
The team has provided mental health nursing placements and student health visitors have undertaken some shadowing visits. Placements are not identified as integrated care placements and this language is not used – the team has not been actively promoted as an integrated care team.

ExtraCare Charitable Trust – Coventry

Description of the service:
The ExtraCare Charitable Trust supports older people in retirement villages and housing schemes across the UK, integrating housing, health and social care. The vision is better lives for older people and the mission is to create sustainable communities, which provide homes that older people want, lifestyles they can enjoy, and care if it is needed.

Composition
The team is relatively new. The wellbeing advisor (a registered nurse) had been in post for a year and has worked with the care team, GPs and practice nurses in the four local Medical Centres. She also works closely with secondary care services, including physiotherapy and occupational therapy. The advisor can refer residents to a 'locksmith' who is involved in supporting residents with mental problems or problems with anxiety, dementia, or depression. A referral system is also established with a gym instructor who works with those residents who are experiencing balance problems, or in need of strengthening exercises. There are social workers in direct contact with the care team and Housing Officer.

Processes
The Wellbeing Advisor is responsible for assessing residents and referring to all services. Whereas in previous roles there was insufficient time to work closely with other professionals, such as the OT or physiotherapist, as everyone was too busy, in this situation she is able to spend time with others to work collaboratively to address problems.

Supporting factors
- Funding from ExtraCare for relevant training and also local medical practice.

Education and Training of the Workforce

Recruitment
The Wellbeing Advisor has experience of working in secondary care but wanted to embrace a more holistic approach to care.

Induction
Induction including mandatory training is generally 3 weeks duration and includes some shadowing.

Day to day work and informal learning
The team has daily line up every morning, so staff know what is happening in the village. The care team has its own office and there is constant communication with the rest of the team.

Essential knowledge, skills and attitudes
Belief in person-centred care. Positive team working.

Challenges
- Ensuring good communication between team members.
- Paperwork that takes time out of hands-on care.
- Ensuring that staff remain open to change and do not get stuck in ruts.

Training Received and Training Given
ExtraCare has its own training team in place. The care assistant interviewed is very positive about the company's attitude to training and that they concentrate

on training to ensure that each person is fully qualified to do their job properly. She notes that refresher training occurs annually but that there is also e-learning that staff can also work towards to.

The Wellbeing Advisor has completed training at Education for Health based in Warwick. Training events are of one to three days duration and are certified. She has been encouraged to complete 6 to 8 training courses over the past year, as well as courses at the ExtraCare head office. She is currently completing a six-month mentorship training course at university to allow her to offer placements for student nurses who she believes could benefit from experiencing all aspects of integrated care, working with the gym instructor, the locksmith and the care team. The placement will be promoted as an integrated care placement.

Training Needs
Nurse practitioner skills.

Mentorship
Mentorship merged with clinical supervision. Personal development reviews are conducted twice a year.

Clinical supervision
Monthly clinical supervision with other Wellbeing advisors

Student placement
The plan is to offer a placement for student nurses that would be promoted as an integrated care placement.

Feldon Stroke Rehabilitation Unit - South Warwickshire Foundation Trust

Description of the service:
The Feldon Stroke Rehabilitation Unit has a multi-disciplinary team working to meet the rehabilitation needs of people in Warwickshire following acute admission for stroke and transfer to the service. The unit provides a period of rehabilitation to allow patients to either return to their home or to a nursing home. Established for 10 years, there is a perception that any neurological service would need to adopt an integrated care approach because integration is so essential to holistic care.

Composition
The team consists of occupational therapists, physiotherapists, speech and language therapists, dieticians, psychologists, nurses and doctors. A social worker is present one day a week, being based otherwise at Warwick Hospital. The discharge coordinator post is not a permanent post.

Processes
The team works in close proximity. The unit is situated in a ward setting but some of the therapists also work across the stroke outreach team, following patients up in the community.

Supporting factors
- Stable team
- Active cross-over training
- Positive attitude to training

Education and Training of the Workforce

Recruitment
The team is well established. Most new members have worked within the unit previously on rotation. The Band 7 staff do not rotate and therefore provide team stability.

Induction
This depends on the individual, for those who have worked on the unit previously it tends to be very short.

Day to day work and informal learning
A significant amount of in-house cross-over training is done as needed. For example, team training in splinting has been a recent focus and the speech and language therapists had done some training on thickening drinks. This kind of training is aimed at attracting as many people as possible, especially health care assistants, and usually occurs informally on the ward, possibly focusing on the needs of an individual patient.

Essential knowledge, skills and attitudes
To be a team player and good communicator. Understanding of each other's roles and shared goals. Accepting responsibility and being able to pull your weight.

Challenges
- Whilst the newer team member felt that there is benefit in rotating for developing/maintaining a wide range of skills, the more established member felt that the system of rotating staff into the team tended to disrupt working relationships. Integrating new staff into the team can take time as everyone has slightly different ways of working.
- Integrating doctors was considered a challenge due to the different influence between the medical model and the bio-psychosocial model. The unit lacks a regular doctor and so there is interim cover from a variety of doctors which means that they may not know the patients and be interested in rehabilitation as a speciality.
- Shared responsibility means having to be very clear about who is going to action decisions, for example, following a family meeting the team discuss the outcomes and identify clearly who is responsible for ensuring any actions are taken forward and shared.

Training Received and Training Given
The original team had completed a 2-week stroke training course working alongside one another and learned more about roles and responsibilities. The course had been delivered off-site and involved speakers from a range of professions as well as ex-patients. This course is still available to new members

of staff but is run in-house. Staff also use shadowing of other professionals as this provides an understanding of where roles overlap. For instance, between physiotherapists and occupational therapists, and occupational and speech and language therapists.

Weekly in-service training often tends to be profession-specific but a recent session with the ward psychologist was aimed at the whole team, as it dealt with 'having difficult conversations' and was considered relevant to the whole team. Team training was advocated by the newer member of the team as a means of gaining a broader understanding of different roles, potential overlaps and promoting a 'group kind of thought process.' She had completed study days, such as a local leadership course at UHCW, where outside of a work setting, with a diverse interprofessional mix of participants, she had gained valuable insight into seeing very different approaches. The established staff member (with a nursing background) had experienced substantial profession-specific training, but had also completed an external speech and language communication course in a multiprofessional group. She was not aware of any leadership training. There was no training specifically targeting integrated care but it was noted that conflict resolution, an important capability associated with integrated working, was part of mandatory training.

Generally, there is a very positive attitude to training. An interviewee suggested that staff could look for relevant training courses, and generally, anything that benefitted the ward was completely supported by management.

Training Needs
Nothing specific.

Mentorship
Mentorship merged with clinical supervision.

Clinical supervision
Clinical supervision occurs sporadically, often stalling when staff move on.

Student placement
The rotational member of staff had very positive experiences of integrated working whilst still a physiotherapy student working closely with podiatry students in a podiatry clinic where they completed subjective assessments together. She had experience in facilitating interprofessional student placements on the ward, encouraging students to work alongside one another and with the patient. She could not provide any examples of where else this approach was being used but had found it had been very beneficial. She noted that whereas shadowing other professions was frequently used she felt that this approach was less effective than putting students together to work.

Forward Thinking Birmingham

Description of the service:
Forward Thinking Birmingham, is a mental health service that involves both community services and some in-patient services. It is commissioned and

provided for the Birmingham population and covers community settings, voluntary settings, A&E departments, as well as offering in-patient beds, including psychiatric intensive care units and places of safety. The main aim is to provide mental health assessment and treatment for those with complex mental health conditions, and then to work with an early intervention and prevention approach with other organisations.

The service is led by Birmingham Women and Children's Hospital but other partners include independent sector organisations, such as the Priory Group who provide beds for 18-25 year olds, and a care management organisation called Beacon UK. The service also works with Worcester Health and Care Trust to deliver the 18-25 aspect of the service, and the Children's Society, who deliver some voluntary community sector activity. The service went live in October 2016 as the first national and international service of its kind for clients from 0-25 years, following the dismantling and decommissioning of all mental health services for Birmingham. It covers a population for 0-25's in Birmingham of just over half a million, and the students at the five universities.

Composition
Forward Thinking offers an entire range of mental health provision provided by a multi-skilled workforce including nursing, psychology, psychiatry, OT, and other disciplines. The workforce is estimated at approximately 450 community based staff and additional in-patients staff of about another 183. However, commissioning of social care in Birmingham is separate therefore social care is not included. A role identified as a 'mental health practitioner' to attract a range of other professionals has been filled by a social worker, although not fulfilling the statutory social work role.

Processes
The senior leadership team meets on a weekly basis and the smaller teams meet daily. Anyone can make referrals into the service, and people can also self-refer. Any of the teams can refer out to services other than for an admission and then consultants must make the referral.

Supporting factors
- Passionate leadership

Education and Training of the Workforce

Recruitment
Students coming through the service are often encouraged to return to Forward Thinking to work and are generally nurtured by the team. There are also recruitment fairs, where candidates for posts are met and those who are particularly talented are identified. Passion for the work is necessary because the work is so hard. Recruiters also look for appropriate values. The service has a lot of people doing work experience and voluntary work so potential recruits are identified via this route.

Induction

There is a corporate induction which is mandatory/statutory and a specific Forward Thinking induction, which occurs monthly to accommodate all new starters. Because Forward Thinking is based on a new model, the induction is also open to existing internal staff who want to be inducted and orientated to the new model. The induction lasts for three-quarters of a day every month, and introduces staff to the leadership team, values and culture. It sets out what staff can expect, what is expected of them and support systems. It also orientates new starters to the partners and services and provides information on training and personal development, and Professional Development Reviews.

Day to day work and informal learning

One interviewee saw the most effective aspect of working in an integrated team as being the cross-fertilisation of training, whether it's formal or informal. She had observed that integration works best and is most effective 'when people are sharing, not only formal learning but sharing ideas, knowledge and skills, whether the focus is on basic needs like supporting a service-user to self-care and wash themselves, or teaching somebody how to do mindfulness.

Essential knowledge, skills and attitudes

Flexibility and ability to think on your feet; the ability to influence, negotiate, and compromise; a person-centred philosophy.

Challenges

- Culture and the sharing of values.
- Having to commit to integrated working to make it work, i.e. you can't just set it up and walk away, you've got to nurture it, you've got to pay attention to it.
- Having time to be able to think about professional development.

Training Received and Training Given

Staff have access to a portfolio of in-house training courses, organised by their own organisational development team, which is on a continuing relay. These vary from very role specific development to particular skills. A 'team maker' course, which focuses on integrated working, how to manage teams and understanding team dynamics, runs quarterly. This also covers personal skills and the knowledge needed to manage a team. Other courses include coaching and mentorship. External course can also be accessed, although it is noted that they are becoming costlier.

Forward Thinking accesses courses at local universities, such as an eating disorder pathway that is provided by City University. Staff have also accessed more general modules on research and development. The service can fund courses through 'learning beyond registration' funds.

A member of staff had completed the Elizabeth Garrett Anderson programme, which is a healthcare leadership programme focusing on promoting resilience and ability to lead in high-pressured healthcare environments. Integrated care had been covered on the programme. Another established practitioner working within a specialist team dealing with Attention Deficit Hyperactivity Disorder (ADHD) recognises the benefits of having engaged in cross-training to bring the

whole team up to standard to deal with clients consistently but she could identify colleagues who are worried about becoming a jack-of-all-trades and losing profession-specific expertise.

Training Needs
Governance. Compassion training. Leadership training in contemporary landscape. Whilst much training occurs at management level, and on topics like communication at different levels, there is a perception that it can fail to reach those people doing the day to day work and this will impact on integration.

Mentorship
Anyone at Band 6 is responsible for mentoring students. More senior staff have formal mentorship training to mentor their own profession and others.

Clinical supervision
People can choose their clinical supervisor. Although policy advocates clinical supervision once a month, its frequency is dependent on which team staff are part of. Those in the more intensive teams, which include the home treatment team, the crisis team, or eating disorder team, that look after admission of vulnerable young people, and deal with the most risky young people, have supervision up to two to three times a week. Group supervision is also used where a particularly difficult issue has occurred.

Clinical supervisors receive in-house training, although some staff have completed specific courses, such as that run by the Children and Young People's Improving Access to Psychological Therapies (CYP IAPT), programme in collaboration with Health Education England. The process is regularly audited by scrutinising supervision records on a quarterly basis and checking Professional Development Reviews.

Student placement
There is a perception that staff can learn a lot from having students in the service because they come with a fresh set of eyes that promotes continuous learning. The students are learning disability, children's nursing and mental health students. The placement experience focus is on team working, becoming a team player, how they contribute to quality, understanding what it is to work in a team.

There is a perception that placements are vital to learning in mental health – putting learning into real-life day to day situations. However, although most of the services were very integrated the placements were assessed uniprofessionally, potentially making the integration focus less explicit to students.

HomeFirst - South Warwickshire NHS Foundation Trust

Description of the service:
Overall, Discharge to Assess (D2A) comprises three pathways and is designed to move care closer to home and reduce unnecessarily prolonged acute

hospital stay. It is a multi-agency approach between the Local Authority and South Warwickshire NHS Foundation Trust. The three pathways are:

Pathway 1: For patients, who can return home with additional support from HomeFirst.
Pathway 2: For patients who cannot be discharged directly home but who have the potential to do so if given additional rehabilitation in a 24 hour care setting.
Pathway 3: This is for patients who are likely to need a care or nursing home placement in the longer term.

HomeFirst is a community-based service which went live in a co- locating format from the end of January 2017. It is expected to be fully integrated by July 2017. The transition involves significant changes for the health teams, with the introduction of agile working, new ways of working and use of technology whilst the impact has not been as great for local authority services where these practices were already established. The remit of the service is to provide seamless service that responds to a deteriorating patient in the community, to provide active treatment, including care support during recovery followed by a period of active rehabilitation or reablement. Where equipment is required to support the patient's recovery this will be provided.

Composition
Once fully integrated, the HomeFirst team will have a total of almost 300 staff bringing together previous community emergency response teams, intermediate care team and reablement services. The service consists of highly trained clinicians, nurses and therapists, supported by reablement and care staff with a wide set of skills to meet varying clinical and social care needs.

Processes
Services have been centralised to two sites in Warwickshire, although the emphasis is on 'agile working' i.e. working within the community and not returning to base unless necessary. Currently, the team is in the process of building relationships, and exploring how to amalgamate documentation and reviewing assessment processes, which they feel are crucial to working as an integrated team. Referral data continues to be interrogated to ensure that a clear understanding of daily capacity is available to support response.

Within health the professional lead role had over time morphed into a managerial role rather than a clinical role, but it is anticipated that integration will allow some managerial tasks to be transferred to the operational managers within the local authority, thus releasing professional leads to deliver patient-facing high level interventions. Clinical staff will need to be trained to deliver both generic and more advanced clinical competencies dependent upon their role and banding. In particular the role of the Assistant Practitioner and newly established role of Nursing Associate will play a significant role in the success of Homefirst. Untrained staff will also undertake a generic role which will include observational skills and basic care needs. A skills career escalator will be established to enable staff to progress within Homefirst to enable personal career development.

Supporting factors
- Shared vision of what the team wishes to achieve – to support patients and promote their independence.
- Shared adoption of a therapy outcomes measure that was already in use by health colleagues.
- Executive support from both organisations.

Education and Training of the Workforce

Recruitment
It is expected that joint recruitment will commence once formal section 75 has been agreed, however, managers have begun to attend interview panels from both organisations. Interview questions are designed to probe candidates' capabilities to work independently and with complex cases. Candidates are questioned about their understanding and knowledge of different disciplines and team working skills.

Induction
All staff are provided with a robust induction programme lasting up to 6 weeks. Staff are expected to shadow each other to gain insight into different roles. A relatively recent recruit recalled meeting the Chief Executive who talked to staff about the move to integration and the vision for the future so she was made aware of its importance from day one, which she felt demonstrated the support from all levels in the organisation. A supervision contract is produced. The manager meets with staff on a weekly basis and only when she feels that they are ready to undertake visits will she allow them to do so, although she shadowed them initially. There are 3 month, and 6 month probationary periods in place. Induction is likely to focus on gaining familiarity with team processes. It was noted that an induction programme for a recent recruit had included conflict resolution.

Day to day work and informal learning
Co-location has allowed colleagues to start to learn informally from one another in conversations, overhearing telephone calls and sharing their own professional knowledge/expertise immediately. This was seen as a welcome and useful learning opportunity and helped to make referrals/signposting much faster and more effective. Daily "huddles" to discuss capacity and patients take place, led by the leads. Joint visits between therapists and nurses are envisaged and this is expected to promote informal learning as well as team development. Organisational development plans include how teams can learn from one another and share best practice.

Essential knowledge, skills and attitudes
Open mindedness. Always remember there is person at the end. Skill mix is much wider. Communication. Respect and recognition for each other's role, and respecting somebody's decision because they're the expert in that area.

Challenges
There has been a number of challenges pre and post co-location. The complexity of integrating the services was underestimated and engagement of

multiple workstream leads was often difficult to facilitate. The three biggest challenges to date, has been:

- IT. The agreement of the single IT system including allocation of appointments, with both organisations having interdependencies that require "their "system to be the preferred system. As an interim, two patient and allocation systems are in place, with local systems that allow quick and easy sharing of patients across flows.
- Accommodation. It was agreed that there would be two integrated bases, one Health one LA. The LA base is an open plan base and supports integration and communication, however, the health base is smaller clusters of less functional rooms, which are proving challenging for integration.
- Staff dissatisfaction. Whilst the integration programme has been planned for nearly two years, a lack of enablers and recognition of interdependencies across the health system has contributed towards some staff feeling unsupported. For example, hot desk set up was delayed in some areas of the county and the lack of an agreed electronic patient record has meant that there was a heavy reliance on paper records, which are taking 2 hours to complete.

Robust plans to rectify these challenges are in place, and change agents have been identified to support staff in practice with the changes moving forward.

Training Received and Training Given

A multiprofessional systems leadership training course is available for managers and team leaders to attend but places are limited. The course is 6 weeks (one day per week), included lectures and workshops. Two managers had identified a training gap on therapy outcome measures to underpin the use of the measures across the whole service and had sourced an external course which had been funded by Warwickshire County Council.

It is envisaged that cross-disciplinary CPD sessions will be held once every three months and it is likely that these will take the form of working with case studies. However, it was also felt that other training needs would emerge as the team became more integrated. Currently Care Act training is accessed through an e-learning resource. It is considered acceptable practice to block out an hour of two of time to complete this online training which can be done in the bases or at home, in office or own time. On occasions, training, such as in the Alexander Technique training, had been bought in, with economies of scale as it involved the whole team.

Training Needs

As part of mandatory training, moving and handling training has been identified as having potential to be provided in-house by Warwickshire County Council OTs, many of whom are trainers in moving and handling. This is an example of how one sector can provide for another with the result that training can be standardised. It is possible that all mandatory training could be provided in this way.

Mentorship

Staff are encouraged to have mentors. Mentorship training is available via an e-learning resource.

Clinical supervision

Structured one to one clinical supervision is expected to take place every four to six week for all staff including team leaders. Rooms could be booked for supervision but the change in culture encourages staff to consider alternatives, for example, supervision in a less formal setting such as a coffee shop. Team supervision is also used and provides an opportunity to share, offer support and manage the major changes which are occurring. All staff would have annual personal development reviews. Supervision tends to be within the same profession and supervision ladders are used so people supervised those below their grade. However, there is some crossover clinical supervision between the OTs and physiotherapists, and vice versa, and it is envisaged that crossover supervision will eventually extend to all professions within HomeFirst.

Student placement

Placements are offered for physiotherapy, OT and nursing students. Medical students are also involved on occasions. It was likely that the placement could be promoted as an integrated care placement.

Integrated Care Services (iCares) - Sandwell and West Birmingham NHS Trust

Description of the service:

iCares is a service which has been established for approximately five years. It is also an approach to managing adults with long term conditions irrespective of their diagnosis, location or age.

Its aims are to:

- avoid unnecessary admissions to hospital
- help maintain health and wellbeing through care management
- improve independence and function with community rehabilitation

iCares is a 7 days a week service for anyone 16+ years of age with a long term condition who has a Sandwell GP or lives in Sandwell. Open access allows anyone to refer at any time. The service is person-centred in that the person is 'able to control what they want.'

Composition

There are three individual teams with four bases: Wednesbury-West Bromwich team, Rowley and Tipton team (2 bases due to distance) Oldbury and Smethwick team. The team of 105 staff includes Community Matrons, Specialist Nurses, Home Accident Prevention Officers, Rehab Support Workers, Occupational Therapists, Physiotherapists, Speech & Language Therapists, Admin & Clerical staff, and Clinical Leaders. The team has regular telephone access to social care staff. Currently the service does not extend to weekends but this is possibly going to change. The 'red steam' deal with admissions avoidance and 'green stream' with routine service user needs.

Processes

Referrals are triaged by a senior clinician who will ring the person and work with them to find out what their issues are. A clinical decision will be made with the person and information from case notes and referral, as to when a response will be provided.

- Urgent referrals, where hospital admission can be avoided will be seen within 3 hours
- Patients who are highly complex and at risk of becoming urgent will be seen within 72 hours
- Those requiring rehabilitation will be seen within 15 days.

To enhance integration, the service operates a paper-free system. Referrals received via paper are scanned onto the system so that they can be accessed at any base and triaged centrally. The general perception is that technology was working well for the team.

Supporting factors

- Flexible management support that allowed clinicians to make decisions unhampered by more practical consideration was beneficial. The priority was to sort out the patient's problems and management took responsibility for supporting this aim. For instance, on occasions staff had to arrange to have patients taxied in to the service, they were told not to worry about the finances that this would be sorted out. Staff valued this flexible approach and trust in their judgement of what was necessary.

Education and Training of the Workforce

Recruitment

The established clinician with 17 years of experience, opted into the service and was able to choose which stream/area he wished to work in. Staff can express a preference for working in certain locations but there must be a service need and this flexibility is regularly discussed at a leadership level with the aim of meeting both staff and service needs. A new staff member who had joined approximately 6 months previously had worked in intermediate care and moved to iCares because he enjoyed the MDT working. There was a sense that new recruits must demonstrate capability to fit into the mode of operation of the team. Band 5 therapists regularly rotated into iCares on 6 monthly rotations so gained good insight into the service.

Induction

New staff have their own induction plan. Band 5s rotated every six months. Apart from the mandatory training, the formal induction occurs on the day they rotated which coincided for OTs, physios and speech and language therapists, when they were involved. Induction involves going through everything about the service.

The new team member had received a programme for the first two weeks in the new role before joining and within the first 3 weeks had completed all training.

New staff are encouraged to go out with team members to learn more about their roles. Whilst this is not formally scheduled, having space in the first 3 weeks allows time for networking activities such as this.

Day to day work and informal learning

Clinicians are knowledgeable about the other disciplines and cover for each other as necessary, so could order equipment etc. New band 5 graduates are part of the rota but were supervised during triage by a more experienced member of staff. The 'red stream' admissions avoidance, was attractive for its fast pace and the need to 'think on your feet.' Frequently the work involved sorting out crises for patients which picks up any problems that other services do not. There was inherent satisfaction in knowing that problems had been sorted out efficiently.

Having common bases was considered very beneficial because after seeing a complex case there was opportunity for discussion with colleagues and the whole team immediately which helped identify any further input whilst also providing learning for the whole team. As such, integrated team working was considered to provide daily professional development for the new team member, which was made possible due to the proximity of other professions in a shared office.

Essential knowledge, skills and attitudes

Staff suggested the need for flexibility, open-mindedness and keenness to learn. A willingness to push the boundaries and extend scope of practice had to be balanced by a good level of awareness of personal limitations and when to ask for help.

It was necessary to understand others' roles, value each other's input and learn from others. iCares had been instrumental in developing caseload management capabilities and clinical reasoning skills through working with others.

Challenges

- Establishing own boundaries in a setting where professional boundaries were largely irrelevant was a potential challenge.
- The role was thought to lack regulation and could lead to a loss of professional identity.
- There was also the possibility of losing core skills, as they became diluted through doing more generic cross professional care. One member of staff said 'In certain areas you have to be a generalist, you can't be a specialist.'

Training Received and Training Given

Personal development with respect to core skills, for example, acupuncture training, was balanced with more generic training. Two staff (OT and PT) had been supported to complete an Advanced Clinical Practice Masters and had attended together. They had also completed advanced health assessment training together and were subsequently supporting in-house training of four nurses in advanced clinical practice in Admissions Avoidance. Permission had just been given to run a week-long, in-house course for all the Band 6s and Band 7s, on advanced health assessment.

Identified the need to train future students to be more than just a physio or just an OT.

Training Needs
There are no unmet training needs identified in iCares.

Mentorship
Staff are encouraged to have mentors. A senior staff member is mentored by a GP in a local surgery. Band 7 staff have professional leadership and mentoring from across the clinical group.

Clinical supervision
Band 7 staff have clinical supervision with someone more senior such as one of the managers or team leaders but not with someone from their own profession, whereas Band 6 staff have supervision from someone in their own professions.

Intensive Support Team – Coventry and Warwickshire - Transforming Care Partnership

Description of the service:
The Intensive Support Team had been operational for 15 months and is part of the national Transforming Care initiative, an NHS led programme with cross sector support from the Local Government Associations (LGA), Association of Directors of Adult Social Services (ADASS) and the voluntary sector. The programme is aimed at improving care and support for people with learning disabilities and/or autism with mental health problems or challenging behaviour. The Intensive Support Team meets the needs of people in Coventry and Warwickshire providing services in the community for people who have until recently received much of their care in an acute care environment.

Keeping people with a learning disability out of hospital unless they absolutely need to be admitted due to their condition, is key to the work of the diverse team of professionals working closely with people with a learning disability, their families and other agencies. They also help to provide alternatives to acute care for people who can live outside hospital or receive their support at home. The team are passionate about providing person-centre care that promotes quality of life and about working to fit care around the person's needs. Their emphasis is on being creative, about supporting people so that admission is the final option when all else had been considered. A whole systems approach is used so that everyone is aware and working together to avoid admissions.

Composition
The team comprises of an interprofessional mix of support workers, therapy assistants, nurses, psychologists, a psychiatrist, speech and language therapist and OTs. They are supported by an operational lead, a clinical lead and an administrator. The service has recruited energetically over the last year to reach a complement of 23 staff in post. Two social worker vacancies have yet to be filled. Social care colleagues have attended formal MDT meetings but generally the team pick up referrals from the local Community Learning Disabilities team (CLDT). The team has also come into contact and worked with wider services,

such as probation services, Multi-agency public protection arrangements (MAPPA) and the education sector.

Processes
Individual clients are often known by the CLDTs who most often made referrals. Together with the CLDT, the Intensive Support Team work to discuss potential options where clients are deemed to be at risk due to the behaviour of concern they exhibit, which may be a result of environmental factors or a change in family dynamics, or internal factors such as physical or mental health issues. The framework of transforming care, and care and treatment reviews, has encouraged a deeper analysis of the issues and where the person's needs might be best met.

Two staff interviewees felt that although transforming care had improved things, there were still areas for improvement, such as addressing the social care aspects of the service that impacted on delays, such as sourcing appropriate placements etc. in rehousing etc. Whereas the health team strive to work together effectively, social care colleagues sit separately and there is need for more effective integration. However, there are regular forums that offer the opportunities for integrated working between health and social care.

Supporting factors
- National sign up had been very useful because it brought with it funding to set up a very well-resourced team. Openness to change had led to the closure of a learning disability unit to refocus resources into the community team.
- The team benefitted from being given time to communicate and share ideas to develop a shared vision or an agreed vision for the service and to develop effective processes to make sure that the needs of the clients were met.

Education and Training of the Workforce

Recruitment
Staff had a variety of prior experience. Initial recruits came from working on wards in secondary care, whilst others were familiar with working in the community. More recently service users have been involved in the recruitment process, which is described as having a very values based focus. It is considered essential to understand why people are applying for the posts and therefore knowledge is tested by getting insight into candidates' reactions to scenarios. From a pool of applicants there is a real importance placed on recruiting the 'right' applicants.

In contrast to working uniprofessionally and within a hospital setting, the established staff member identified that she enjoyed having the opportunity to work with a wider range of professionals, as well as a greater ability to influence the outcomes for clients because she felt that hospital services were more structured and less flexible.

Induction
Due to the fast track nature of the service being set up, initial preparation has been limited. Transforming care is very new which means there were forums and workshops to attend. However, as a brand new service there were no clear boundaries the staff tried to support one another and adopted the good practices with which they were familiar. They enlisted the help of an established enhanced care team in the Trust to share ideas and develop the service.

Current induction is tailored to the experience and background of each member of staff in addition to the standard induction process of new staff. Those new to the trust have a two-week induction period during which they complete statutory and mandatory training, meet everyone on the team and undertake joint visits with some staff to other teams that the service comes into direct contact with. An early clinical supervision session during this period helps to gauge the extent to which new recruits are settling in and to identify any support that they feel might be beneficial.

Day to day work and informal learning
It is recognised that often learning by doing with support or joint working on initial cases is the most beneficial.

Essential knowledge, skills and attitudes
Openness and honesty and being prepared to reflect and change. Ability to negotiate and to reach a compromise. Person-centredness, being non-judgemental, and ability to reflect individually, but also as a team. The ethos of the team is based on positive behaviour support, which encompasses principles of the whole team working together around the person and taking shared responsibility for their care.

Challenges
- Although the transforming care documents have a very clear philosophy and vision of what might be needed to meet the needs of people with autism and learning disabilities they provide little guidance on setting up services, and how to establish a team and the parameters of what it would and would not do.
- It has been considered easier in some respects to work within the discipline in which you're trained due to an innate understanding of expectations; however, there is recognition of the richness of working with other members of the MDT.

Training Received and Training Given
The service is fortunate in being realistically resourced to allow investment in the team to ensure that they have appropriate training to acquire and build on the skills they require, and the opportunity to develop and learn more.

Staff have accessed a variety of training such as positive behaviour training provided by the British Institute of Learning Disabilities (BILD). They have also been encouraged to attend conferences or day events which are counted as part of their CPD. The trust is very good at sponsoring training. STORM suicide training provided by the NHS had recently been completed by staff, as well as

risk assessment training, mental health and learning disabilities training and safeguarding children and adults. There is recognition of the need for continuous updating as policies and guidelines are constantly changing and therefore there is a keenness to access any training that is offered.

The team also organises training events between themselves and between the teams. In-house workshops have focused on risk, mental health issues and autism. There is considerable skill and knowledge within the team which has been shared in-house but some staff team have also been on intensive interaction training, as well as training relating to other risk assessment communication strategies. The team tends to be trained in two halves, with one half keeping the service going and then swapping.

Approximately 12 months after the team was established an away day between the Intensive Support Team and the CLDTs was arranged. This proved to be very useful for reflecting on those events and aspects of the service that were going well and identifying overlaps in working practices and discussing roles and responsibilities. The clinical lead is keen to ensure that the staff in the team build their confidence and gain increased clarity about working parameters. Her aim is to make sure that they develop the capability to challenge wider practices and to provide positive behaviour support through their activities. She sees the potential to utilise the knowledge of the whole team and is constantly looking for opportunities for that knowledge to be shared, both within the team, but also with other teams with whom they work. The aim is to integrate with other services rather than be an isolated service where possible, acknowledging the practical barriers of being based in a separate location.

Staff interviewed appeared unconcerned about their profession-specific skills being shared with others, such as those of a learning disability nurse being shared with a mental health nurse because they could see that it improved quality of care. Lack of concern about losing skills can possibly be attributed to perceived security of employment and career path.

Training Needs
One interviewee identified medication training as a need.

Mentorship
A system of mentorship is in place. Staff nurses are encouraged to complete a mentorship training programme.

Clinical supervision
The service has a very clear supervision structure and supervision is usually within the same profession and occurs every 4-6 weeks. However, informal support is always available and a culture of ongoing reflection is encouraged.

Student Placements
The service offers placements in occupational therapy, with a student present at the time, and a nursing student expected the following week. The team is keen to offer placements and a recent presentation on transforming care given to the Year 3 nursing cohort at Coventry University by the clinical lead was very

well received. They see the potential to offer the placement as a specific integrated care placement in the future.

Shropshire Transforming Care Partnership and 'Taking Part'

Description of the service:
The Shropshire TCP and 'Taking Part' work in collaboration to meet the needs of people with learning disabilities with health and social care needs across the region. The TCP team had been operational since July 2016 as part of the national Transforming Care initiative. Its focus is on people with learning disabilities and autism of all ages with behaviours which are challenging. The TCP works across four organisations including two CCGs linking into other health areas, and local authorities focusing on adult social care and commissioning, widening to include links with housing and schools. There is a recognised need to develop stronger links with further education and with the criminal justice system. Plans are in hand to identify funding to put a very small nuclear team in place for the rest of the project.

Aside from maintaining people in the community, the immediate priority for the TCP is to re-settle approximately 15 people, from long stay hospitals, and to ensure that this process goes smoothly so that they do not return to hospital. This requires the involvement of social care and health colleagues who need to get to know the individuals, and to support them during the transition making sure that they are safe in the community. It was felt that this required a paradigm shift in terms of how people with learning disabilities were viewed and how services operate.

'Taking Part' is a local registered charity offering independent advice and advocacy for people with learning disabilities with health and social care needs. The charity works across Shropshire, Telford and Wrekin and has been established since 1994.

Composition
The TCP includes a wide range of staff in the CCGs, community nurses, GPs, Psychiatrists, OTs, physiotherapists and speech and language therapists. 'Taking Part' comprises one full time and 6 part-time workers and approximately 50 volunteers. They provide an established and consistent service for clients, health and social care professionals, and the CCGs where changes are more frequent. In describing the Taking Part service the CEO said 'we see ourselves as the glue.' Volunteers come from a range of health and non-health backgrounds.

Processes
One interviewee was involved with both commissioning services for the CCG and in a complex care team (managed by a mental health nurse) where she had worked for three years, prior to the advent of TCPs. She was a social worker who was responsible for pulling together Care and Treatment Reviews and identifying people at risk of admission. She was able to allocate funding to avoid hospitalization and ensure that NHS services were in place to try and prevent the admission. She was also responsible for a small four-bedded

service for challenging behaviour, which was an assessment and treatment unit. She works very closely with a team mainly comprising of nurses. All cases are held electronically. The general nurses do not have access to specialist data as they are deemed not to need it.

Voluntary sector involvement in health and social care is advocated on the basis that it represents grass roots understanding of the needs of individuals. Referrals to Taking Part come from individuals, parents, carers or professionals. Where individuals have capacity, they have to consent to referral and where they do not have capacity, Taking Part works with the multi-disciplinary team and other professionals involved in that person's life. The CEO suggested that at times volunteers were better at communicating with clients than professionals in statutory services because of clients' expectations of statutory services - being able to provide and fix everything. She suggested that the voluntary sector can address more preventative and 'self-help' approaches and ideas.

Supporting factors
- Project funding has placed greater emphasis on meeting the needs of people with learning disabilities in the area. The figures for those admitted to acute care were very low.
- Taking Part has a well-established and very stable team.

Education and Training of the Workforce

Recruitment
No special arrangements are in place in the TCP. Taking Part regularly has people wanting to join the service. They look for recruits with a good value base, with good communication skills, particularly good listening skills

Induction
In addition to mandatory induction within the TCP, time is allocated to allowing staff to make links with colleagues, such as with specialist workers in Shropshire and Stafford and share practice. Taking Part induction can last up to a month and involves gaining insight into the service as well as shadowing other advocates.

Day to day work and informal learning
It is recognised that often learning by doing with support or joint working on initial cases is the most beneficial in terms of learning. The Taking Part team meets at least once a week but there is an open-door policy for discussion whenever necessary, especially around safeguarding issues.

Essential knowledge, skills and attitudes
Staff are thought to need confidence in their professional identity, own role and duties and practice. Nurturing relationships, not judging, understanding the contributions that different people and organisations can make, and playing to their strengths and enabling them to see how collaboration is better for securing outcomes. Where there are challenges, for example over finance, owning the

problem collectively rather than blaming or expecting somebody else to sort it out tends to work well and provides an opportunity to find ways to overcome the constraints. Willingness to think outside the box, to find different solutions to deal with the potential oppression and the discrimination are important in moving forward and developing the service. For Taking Part, communication and openness to new ideas are essential.

Challenges

- The challenge of integrated working is to avoid losing the strengths of the respective disciplines. People can find themselves in the minority and subsumed within the larger team.
- Appropriate governance needs to be in place to allow flexibility whilst still maintaining boundaries.
- There is a perceived need for very clear responsibilities, a clear management structure and a need to ensure equity within practice, in who took responsibility, who held the cases. An example was cited in which health are better looked after and yet did not take the ultimate responsibility in a lot of a cases when things were going wrong.
- From Taking Part's perspective the greatest challenge are professionals not talking to each other and continuing to work in silos.
- They recognise that funding pressures cause problems but see a great need for more joined up working.
- From Taking Part's perspective the greatest challenge are professionals not talking to each other and continuing to work in silos. They recognise that funding pressures cause problems but see a great need for more joined-up working.

Training Received and Training Given

Workforce development is considered important because those used to working with people with challenging behaviour, may not be used to the scale of complexity of the clients moving into the community. It was considered to be easy to become complacent about some clients therefore the staff development training really needs to enable people to think differently and to find solutions to enable people to make their own choices within their capacity.

The social work interviewee had not had any formal training since the advent of the TCP but she had kept her 'best interest' status and was able to attend all of the team meetings in the local authority. She had completed in-house management training in house and was beginning to do some training on understanding early mortality for people with learning disabilities.

Taking Part accessed most of their training through the joint training team in Shropshire. However, some staff are members of the National Council for Voluntary Organisations (NCVO) and the British Institute of Learning Disabilities, so can access training through these networks. Several team members have recently completed an independent advocacy qualification, meeting delegates from different organisations which has strengthened their knowledge and their support. The team has also worked with the Social Care Institute for Excellence (SCIE) and Shropshire joint training to produce a video

on mental capacity for professionals and are working with further education colleges to roll out training around mental capacity and safeguarding.

Training Needs
Available training was often very expensive. There are opportunities for training within transforming care work, but also recognition of the need for profession-specific updating for which support is expected to be available. Taking Part was described as having to be frugal. However, there is a recognised need to update regularly and acknowledgment of the limitations of in-house training.

Mentorship
The TCP did not offer staff mentorship but Taking Part had a mentorship system in place.

Clinical supervision
There is no clinical supervision in place in the TCP and this was considered to be problematic even though it was acknowledged that there were good working relationships that gave opportunity for informal learning between members. Within Taking Part staff have formal supervision every four to six weeks. Training needs are reviewed during supervision and at annual appraisal, career development is considered

Student Placements
The TCP do not offer placements. The charity has had students on placement in the past. If they offer further placements they feel that they will be in advocacy, emphasising working in partnership with other organisations.

Synthesis of Findings from Integrated Care Services

Experience of working in integrated teams

There was little doubt that each team relished the opportunity to work with other professionals – the impact it made on being able to deliver quality care and the increase in job satisfaction for both the team member, as well as the service user, was apparent. Interviewees provide many examples of cases where as a team they had been able to share information and make changes to plans or referrals which were responded to quickly and with ease. The size and professional mix of teams varied widely. Core teams were frequently relatively small in number with links into wider networks with members who came and went sporadically, according to client need. Social work appeared frequently to sit on the fringes of provision. Examples of how staff saw the multi-layered services interacting are included below:
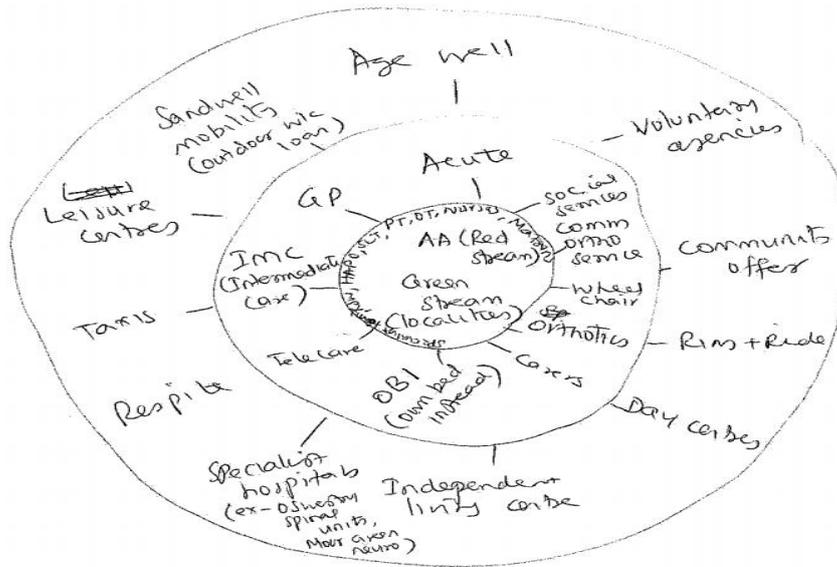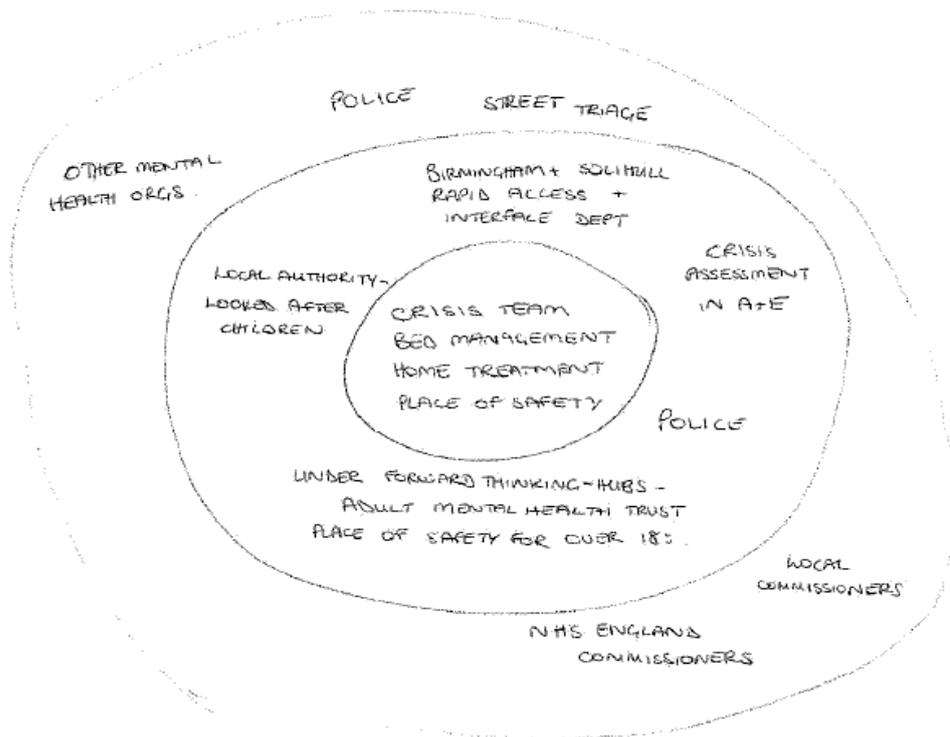
Figure 1: iCares

Figure 2: Forward Thinking Birmingham

Co-location of different professionals within one office seemed to provide the key to sharing information and learning about roles and responsibilities of each other. Frequently telephone conversations of one professional would be overheard by another and they would chip in offering relevant professional expertise or knowledge which helped the conversation. This served to cement relationships within the team which helped increase respect and understanding of where to go to seek answers to queries.

'… we're all in the same office, this is my big thing about (place name) is it- that makes a massive difference because communication is so much better because we're all in the same office and we all can discuss things a lot more easily and you just get to know people so you work a lot better alongside each other……, but they(nurses) do pop in quite regularly and again, because we're only one ward you get to know everyone quite well'. (FeldonNMP)

'…I'll be on the phone and one of my health colleagues has overheard and said sorry, do you mind if I chip in because this isn't and it's like no, that's great, it's helpful. I think there's so many positives that outweigh the other side.' (HomeFirstMan)

'……we had an incident this morning, we had the doctor there, we had myself there, we had physio and we had OT right there on the spot. The doctor assessed everything, the physio then assessed things …………so that was already done on the spot so we knew that patient was okay to be moving, we weren't waiting for however long it would take to get a physio there because they're already there…' (FeldonNMN)

'I had when I very first started, a gentleman was sent home with a Zimmer frame but he was six foot something and the Zimmer frame was probably suitable for somebody who was about five foot two. It was tiny. So he was hunched over, bless him, and it wasn't a useful piece of equipment for him because he couldn't stand up properly, and he was becoming top heavy with it. So, it's recognising all those things and then using the team… like notifying the therapists. Luckily, one of them had a Zimmer frame to hand with the extended legs so they dropped it in and just checked that he was better with it and took the tiny one away.' (HomeFirstNMNPW)

'Not one person can know everything. We've got specialities and although we might have different training and experiences in other aspects, you can't know everything. So I don't know a lot about drug and alcohol so I might turn to xxxx or xxxx regarding that.' (EsteemsadMan)

The centrality of the service user was at the heart of the philosophy for all of the service units so that there was a sense in which there was very much a united aim of meeting needs as effectively and efficiently as possible. The following drawings indicate how two interviewees saw their services coming together around the client:
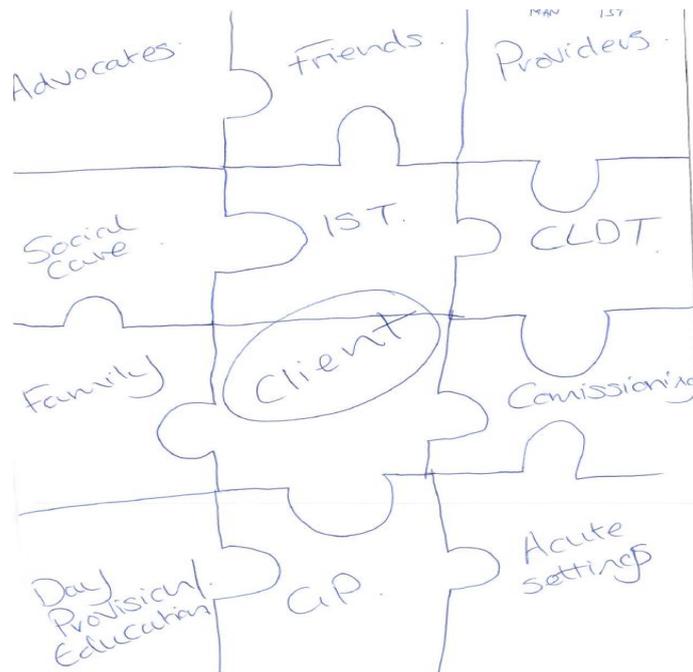
Figure 3:. Intensive Support Team
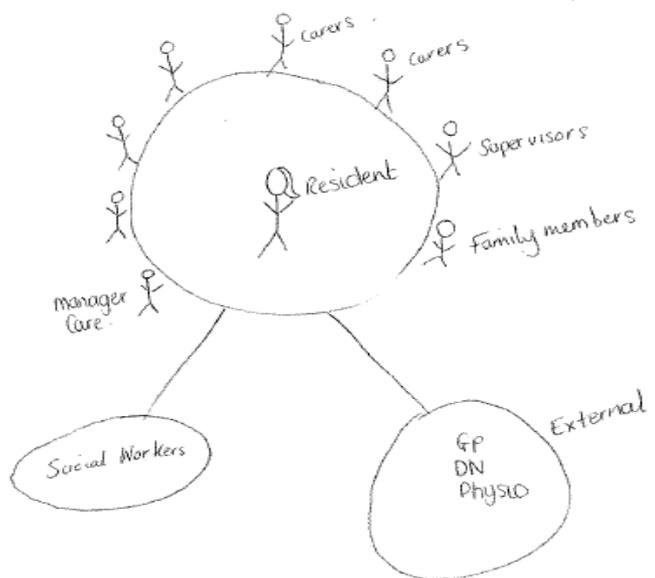
Figure 4: ExtraCare

Working in the community, and certainly in an integrated team, was identified as very different from working in a hospital - whilst participants said that they had worked with other professionals on the wards they also said that they really had not known what they did – mainly because they were often working across several wards so each profession tended to work uniprofessionally. In the community and by sharing an office this completely changed. Service users

could be discussed informally and formally at meetings. Plans could be operationalized and key workers identified so that everyone knew who was responsible for what.

In several cases, members of the team, usually team leaders or managers had been involved/attended workshops in the planning of the new integrated team. This was perceived as being hugely beneficial as it not only provided an insight into the rationale for integrated care but also offered them an opportunity to influence the design of the delivery, which led to a feeling of empowerment, involvement, respect for their knowledge and experiences of delivering care but also resulted in 'buy in' and strong motivation/champion/boundary spanning behaviour. This seemed to be important as it is sustained the team leaders in the face of the challenges which occur within any new team formation and time of change. Team leaders were able to clearly see the goals the team were aiming for, and the importance of collecting data which would provide clear indicators of the impact of integrated care on service users, that offset service costs, as well as being important in maintaining motivation for the team and ongoing support.

Funding was clearly identified as a point of concern. Some projects, such as the TCPs and Esteem team, had been provided with initial funding pots which had been ring-fenced specifically for the project – this had made the early days easier. Posts had been created on a need basis, training needs had been identified and initial training obtained using the available funding. However, as the funding had come to an end it was apparent that this was creating some anxiety for staff and accessing training was becoming more challenging. There was also some feeling of uncertainty about posts and what would happen to staff and the project when funding ceased. In some instances, the services had been put out to tender which again affected how teams perceived the work they had been involved in and the level of value placed on it by their parent organisation. This served to make the team slightly unstable as members looked for other jobs, resulting in a shortage of staff and lowering of morale. There was also a noticeable difference between the parent organisation of either health or social care. Social care employees seemed to be able to access training more easily and to a greater degree, they were also better equipped in terms of technology support for agile working and had what was considered by team members (from both organisations) better working environments.

'One of the biggest changes we brought in along with merging all the teams was we went paper-light, and now we're going paperless, all our systems. Any referrals coming in will be scanned onto the system straight away. So, we don't have to be where the referral is coming into; we can be in any base, we can access the computer and I can just go through the referral and we can give a ring to the patient. So, that's the first thing which we did; we went paperless.' (SICaresEM)

'I know where I'm based, the physios and the OTs and us, we all work in the same office. It's a very big office, and there are other professions there too, but I think it works really well, all of us being based at the same place and in the same office

because you build up the relationship with each other on a personal aspect, which then makes working easier I think.' (Homefirst NMNP)

'being out there and not needing to come back because the systems that we use are really sophisticated. Everyone has laptops, everyone has the iPad so they can all get the information they need and just get out there and do the work without having to come back to an office, whereas health haven't got that at the moment. So we're trying to, because they're very used to coming back and having that touch base and I think that's a very scary thing when that gets taken away from you. So we've been doing workshops with them and giving them information about the benefits of it really. That's been helpful as well.' (HomeFirstMan)

We're all in the same office so the difference is we've moved from an open plan office to this building which we have separate rooms, which is different for us. , (HomeFirstMan)

'it's probably similar to what I've said before about pulling our resources together, being able to get that referral quicker. We didn't have physios which was difficult, so we would be phoning round, trying to find, they were obviously on visits and you've got to wait for them to come back, so they're little things like that. It's going to be hopefully.' (HomeFirstMan)

'From my perspective, you've got a multitude of skills to tap into. No one can ever know everything and I think being able to come back and have that discussion with someone from a different discipline might mean that you get to that answer quicker and it also means that you've got other people to rely on, from different backgrounds, and get different perspectives, which is really useful.' (AcornsEM)

Networking and cross boundary working was particularly evident at strategic level, it was clear that this was an important aspect of project development. A few people acted as drivers communicating across organisations, taking responsibility to draw different parties together to achieve cross sector working and buy-in and support for new ways of working. These people were passionate about the need for integrated care, for the difference it would make in cost (keeping people out of hospital), service user and carer satisfaction, increased job satisfaction for professionals and a more efficient and effective system of care delivery. Voluntary agencies had a lot to offer and welcomed being involved and sharing their knowledge and experience – again in helping shape a service for their users.

Higher level flexible support of this nature was important for field professionals, allowing and encouraging innovation and creative thinking at field level, which served to empower and motivate staff who felt that there was trust in their judgement. This was important in developing a service, which was fit for each

particular client group, and resulted in faster and more efficient delivery of care which was satisfying to both professional and user.

> 'You can really learn from each other…... We're starting to use a therapy outcome measure which health already use. We were going to be doing it anyway, but because they're using it, we've linked up with them to see how they implemented it, what their outcomes have shown so far and interestingly their outcomes have shown when it was an OT and a physio doing a joint assessment, the outcomes increased in certain areas, …..' (HomeFirstMan)

> '…we need to have that sort of flexibility where you can make the decision, do it for the patient first and then think of what to do next – sort the patient out first, don't think of all the other stuff, whether you have to pay… Because sometimes, we have to bring the patient in a taxi, so a manager would say, Ruth would say, "Don't worry about the cost or anything, just do it, sort it out and let me know – I'll sort it out. That's my problem, that's not your problem. Your problem is to sort the patient out. Do it." And that helps. (SICaresEM)

> 'We're getting told about it all the time and we're being asked by senior managers to be more creative, think creatively……' (HomeFirstMan)

> 'Yes, fast paced, you have to think on your feet, you have to think outside the box all the time, and you're sorting the crisis out for the patients…' (SICaresEM)

> 'A member of staff recently set up a group regarding the loss of a baby, so people can come if they've lost a baby at any stage, with the mums and that's local and that's a really new thing and that's something that she's quite passionate about. So I suppose we encourage people to look at things that they're passionate about and what they want to go forward with.' (EsteemsadMan)

Recruitment

Applicants for posts in the TCPs, community based services, such as iCares or alternative provision, such as the ExtraCare Charitable Trust, generally opted purposely to work in an integrated care setting because they recognised the benefits of multidisciplinary working. This was often as a result of having worked in intermediate care or in community settings previously. Integrated care settings were perceived to be less structured than other settings allowing for greater autonomy and a sense of doing a good job and making a difference. Several units had staff rotating into teams usually on a 6-monthly basis, which allowed them to gain good insight into the service. This provided opportunity for staff to decide whether, or not, this type of work suited them but also gave managers the opportunity of spotting future recruits to their service. Several interviewees had been encouraged to apply for posts that became vacant on the strength of past involvement and fitting into the ethos of the service.

On the whole, teams erred on employing experienced professionals rather than newly qualified, simply because of anxieties relating to the type of work involved in delivering integrated care – agile working and being out in the community alone. Team leaders were concerned about the level of support available to newly qualified staff – this might be an area where training could be provided. However, where newly graduated applicants had some maturity and life experience they were deemed to potentially be able to cope.

Induction

Each team offered induction programmes, reinforcing the view that the scene had to be set to facilitate effective integration. Some were brief, while others lasted for up to 6 weeks, and at Acorns Hospice induction was combined with a 3-month probationary period. Most were designed to individual needs of the new starter, which was dependent on prior experience and knowledge. Usually it involved a combination of mandatory training, some of which could be completed online, but also shadowing of other staff to gain insight into their roles and responsibilities. Shadowing other professionals was considered a key part of the induction process and was welcomed as it provided an understanding of the roles and responsibilities of different members of the team - which helped with knowing who to go to with questions or queries once in role. The ease of being able to ask or refer a user to another profession was mentioned, it was easier to communicate verbally rather than in writing – service users' unique situations and needs could be identified clearly and more easily which often resulted in targeted and effective care delivery.

> *' I have had a lady recently who has come home after having a hip replacement operation. Very eager and keen to regain as much of her independence as possible, if anything I had to keep reminding her to go steady. To be honest, we put in support for the morning to help her with her personal care and breakfast and then we had to put a lunch and tea call in, not because she can't prepare the food, it's because she can't get the food from the kitchen to the next room because she has to mobilise with a Zimmer. She mobilises really well with it, but she has to have the Zimmer and she had no other facility of it. So I then went back to the office and referred her to occupational therapy. I spoke to one of our therapists, explained the situation – I said look, she's got everything else in place, she's doing wonderfully, all she needs is either a kitchen trolley, or the trays that they can put on top and sent the referral over to them because it has to have the paper trail as well, and they went out and assessed her and that's now in place. So now she only needs to have the one call in the morning just to help…'* (HomeFirstNMP).

Services that included rotational staff tended to have very structured induction programmes usually sent to the staff before commencing.

Processes

The importance of shared systems and good use of technology was evident. Where it worked well, such as in iCares, information was available to all at the touch of a button. A system for shared case notes was an important facet of integrated care. In one case when two organisations had joined together one had adopted the other's proforma, showing willingness to be flexible and work together. In another, two different software programmes were being used which was identified as a problem – efforts to alter this were being made by the organisation but it was clearly an important area and one which added to the challenges of team formation, development and shared working.

> *'We've had a big move to a building that is not as sophisticated as the one we were in. So we've had to just get on with it really and it's the systems, we need our systems to talk to each other because at the moment we're on two separate emails. We have Google, they have Outlook, so we're working on, we've got shared Google documents that we can all share, they can't access those.' (HomeFirstMan)*

Informal Learning through working

The opportunity for learning from colleagues as part of the daily routine was mentioned many times. This was made easier by co-location and was often thought to be most authentic and beneficial because it was client-centred. However, this was only possible where staff were open to alternative ideas and to changing practice which was thought to be essential to good integrated working. Other skills and attributes considered to be important were good communication skills, a belief in person-centred care, keenness to learn and a willingness to push the boundaries and extend scope of practice balanced by a good awareness of personal limitations. One interviewee in iCares stressed that working there had been instrumental in developing caseload management and clinical reasoning capabilities, highlighting that integrated care skills are not fundamentally discrete from profession-specific skills in many ways.

> *'Already even within the first couple of months because everyone is working together we tend to share the office together, you learn so much more professionally because everyone is together, everyone… you know, we have verbal reflections so we'll see a patient and we'll be like oh I'm not quite sure such and such and then someone else will be like oh I've seen that before' (SICaresNM)*

> *'I think when integration works really well and it is most effective I think it is when people are sharing, and I don't just mean formal learning I mean sharing their ideas, sharing their knowledge, sharing their skills, whether it's about basic needs like supporting a patient to self-care and wash themselves or whether it's actually teaching somebody how to do mindfulness. I think it is that cross-fertilisation of skills and knowledge and experience.' (ForwardThinkingMan)*

Training

Funding for external training was generally tight and required careful and creative managing as some was expensive. However, funding for training was seen as a reflection of the extent to which staff felt that their work was valued. Several interviewees suggested that if the training was deemed relevant to the service it was likely to be funded and was often, subsequently cascaded to other staff. Training was accessed through a variety of sources. Some was available through the NHS, other sources of training such as the British Institute of Learning Disabilities Sources were more specialist. CPD opportunities offered by HEIs were mentioned infrequently. The Taking Part charity had accessed training through the National Council for Voluntary Organisations.

Realistically, in-house, or in-service training fulfilled many training needs. Whereas some regular training sessions were profession specific, many were generic, suited to the whole team, and provided from within the team, tapping into expertise. Making use of other professionals' expertise and knowledge was useful in helping understand who did what and resulted in appropriate and relevant referrals. However, in some cases in-service training was considered too basic for the needs of practitioners working in integrated teams. E learning was also mentioned by several teams as a way of managing learning whilst working.

There was also evidence of cross training within the teams so that everyone had the basics to cover for one another where the need arose. For example, a reciprocal arrangement between HomeFirst and Warwickshire County Council OTs who were to teach moving and handling skills was expected to be mutually beneficial. In this sense, blurring of boundaries was evident as was the desire to extend professional skills, which were needed within the team and which would result in increased team self-sufficiency.

> '..- it was about having difficult conversations, so we recognise sort of as a team it's something that we all wanted a bit more information about and, yeah, just got the psychologist to do it for us…' (FeldonNMP)

> .'…Within the team, I think again, it's going to be as time goes on but what I'd like to see is that because we're going to be able to get so much from each other, we've got the social care side. A lot of our OTs have really good knowledge of social care. They know what to request when they're requesting certain care packages. They know about carers' assessments, they've got that background and knowledge, so it's about what we do in the CPD sessions is one of the OTs leads the session and does a presentation or a case study or something. They've got that time to lead, provide that information and that's been really successful'. (HomeFirstTM)

> '- like we did like a workshop with all of the different community teams and I think since then they've had a lot more understanding of what we do … (1stTCPCovEM)

Team training was identified as important in achieving change. In some places this involved a full study day, or a week in one case when the team got together. In another case, half of the team was engaged in training while the other half kept the service going and then they swapped over to cover. Where specialist courses had been completed, in one instance, two staff members had completed the course together on the basis that it was thought that they would be more likely to effect change based on their joint learning.

Whilst many of the professionals interviewed had no concerns over skill mix and becoming more of a generalist rather than specialist, concern for losing profession–specific skills was addressed by some clinicians by making sure that they updated profession specific expertise. Many people mentioned online training and the ability to use gaps in the days' routine to log on and complete short bursts of training, although access to computers could be an issue and using their own time at home was not unusual. Mandatory training, such as Care Act training, tended to be delivered in this way – making e-learning less attractive to some people who preferred face to face interaction.

Generally, staff had not completed any formal training related to integrated care – many said they learned it along the way or by shadowing and observation and cases. However, conflict resolution was part of mandatory training for Feldon unit and HomeFirst staff both of whom are within South Warwickshire Foundation Trust.

Clinical supervision and mentorship

Most of the services had a system for one-to-one clinical supervision and this mostly occurred regularly every 4-6 weeks. The Acorns Hospice also had an arrangement for team supervision, which staff found very beneficial. Clinical supervision appears to be seen as a legitimate and effective means of CPD to which it is worth devoting time. Formalised mentorship arrangements were less common, although several of the staff in more senior positions spoke of informal mentorship arrangements.

Student Placement

Of the newly qualified staff interviewed two had pre-registration experience of interprofessional learning/working. If this learning had taken place in a practice setting the impact was noticeable, they recalled clearly their placement, the learning, and the difference it made to their understanding of each other's roles and responsibilities. They also noted how working with others had led to informal learning, support and friendship.

The following quote from a newly qualified nurse reflects on her learning from a supervised interprofessional learning experience:

'Particularly with the OTs and physios, there just hadn't been the opportunity to sort of interrogate them exactly… interrogate is probably a bit of a strong word, but the extent of their role or the limitations of it, so with the students you could really nit-pick and say well is this your responsibility or is it my responsibility or is it the doctor's responsibility,

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and we found out a few things. I can't remember what they were, but there was ambiguity about how responsibility should be shared for certain things, so then we could go and chat with all of our mentors and get their point of view and then come back and say well my mentor said this, this role should deal with it and then the other says no it's this. So we managed to clarify quite a lot of things, which is obviously helpful now, still being on the ward, I know what's my job and what's the OTs job and what's the physio's job and what's the doctor's job………it was really nice to be able to spend time with the other specialities without their being the pressure of being the student because they all (students) were as well, it was much easier to ask them (other students) stupid questions and for them… they asked me a lot of questions as well because they are almost a little bit intimidated to ask the qualified because you know, they all know what they are doing but it is okay for us students not to have known what we were doing.' (FeldonNMN)

'Yeah, working alongside the podiatrist- I'm trying to think- I'm sure there were other professions that we worked- we had sports therapists, which is still- it's quite different but still that crossover between…..and we did have one module where we did have some of- because they didn't do occupational therapy at Huddersfield but I think we had some sort of social workers as well as some nursing staff that crossed over'. . (FeldonNMP)

Many of the services included in this study currently provide student placements or intend to do so once established. Most were profession-specific placements that after consideration could potentially be badged as offering an integrated care experience in discussion with University coordinators. Connections to the HEIs and to current students was otherwise limited. Staff from the Intensive Support Team had recently given a presentation to a nursing cohort on transforming care and this had been well received but it seems that there are probably opportunities for two-way exchange of knowledge between services and HEIs that is not optimised.

8. Mapping Exercise of Curricula in West Midlands HEIs – February 2017

This section of the report maps the provision at each of the 9 higher education institutions in the West Midlands. A table of the major programmes provided by these institutions in provided in Appendix 1. The summary for each of the institutions has been member checked by those people interviewed as part of the quality assurance mechanism. Each HEI summary is set out in a similar format and this is followed by a synthesis of findings of practice in pre-and post-registration education supporting the delivery of interprofessional learning and preparation of the workforce for integrated working.

Aston University

Preferred Integrated Care definition
There is no IPE/collaborative strategy, but the developing Public Involvement Strategy and the new Interprofessional Learning (IPL) strategy seem to resonate with the King's Fund definition of 'Care which is intended to improve the quality of care for individual patients, service users and carers by ensuring that services are well co-ordinated around their needs.'

HEI Strategy - Supporting structural features
The Public Involvement strategy has been developed by the Audiology Department and the Audiology regulatory body is pushing the PI agenda. However, the PI strategy is to be merged with IPL strategy. Both strategies are in development and there is considerable overlap. The Public Involvement forum has representation from each department. A joint forum has been established involving staff, students, service users and charities, driven by the new Dean's agenda to develop an IPL strategy in line with new opportunities as the Medical School begins admitting students in 2018. The combined strategy will focus on overarching activities – systematic teaching, systematic supervision on placement and assessment of communication. The four broad themes to be taught are – Communication, Professionalism, Emotional Skills and Competence.

Recruitment
There is some variability in whether recruits are interviewed or not across the healthcare programmes. The intention was to move to a values-based recruitment strategy in 2018.

Pre-registration delivery
Since 2012 the School of Pharmacy has been trialling an integrated care module - Interprofessional Learning and Working (module PH4705). This has developed over the last five years, first by using 'speed dating' sessions with other healthcare students and now with a greater number of activities Other experiences that were trialled in that first iteration of PH4705 in 2012 have now been moved to earlier stages of the programme, such as the communication exercises during optometry practical sessions (moved initially to third Stage, and now with changes in the way optometry is taught, to first Stage), or extended to involve other professions, such as audiology and (until 2016) podiatry. A partnership with the University of Warwick, has resulted in pharmacy students working with medical students 3 days a year.

Through the Public Involvement Strategy, skills such as communication, professionalism, emotional skills, and competences are woven into the curriculum via teaching strategies, placement assessment and communication assessments. The Calgary-Cambridge framework is used for assessing skills. Leadership skills are taught online via NHS e-learning modules.
The IPL strategy will be developed fully by 2018 when the medical school opens fully. It must be noted that in the context of pharmacy and optometry, pre-registration refers to the year after graduation when students train in a healthcare setting prior to registration.

Post-registration delivery
IPE is promoted through the PI strategy and individual taught modules that focus on team working, communication and selected competences.

Local challenges
- Few health and social care programmes, most of whom do not tend to work closely together in practice. This will change when the medical students arrive in 2018.
- Facilitating the curriculum – logistical issues, balancing larger numbers of students in Optometry and pharmacy with small numbers in Audiology and Clinical Psychology.

Notable features of provision
- Public Involvement forum – consisting of students, staff and the public (service users and voluntary organisations).
- Merging of PI and IPL strategies
- Public consultation to inform major themes for the PI curriculum –the identified themes of Communication, Professionalism, Emotional skills and competences align well with identified integrated care skills proffered in the literature.

Birmingham City University

Preferred Integrated Care definition
The King's fund definition was chosen because it emphasizes the involvement of everyone – patients, service users and carers. An interviewee stated 'that is what we believe integrated care is about.'

HEI Strategy - Supporting structural features
The aim is to develop a strategy that is efficient, relevant and logistically reasonable for the numbers and groups involved. There is a champion that drives the IPE interventions in the Learning Disabilities Nursing department and this has enthused the entire team. There are very good opportunities to get bi-disciplinary teams together.

Recruitment
Values-based recruitment is used at interview stage when students are informed about the importance of teamwork and working with other professions.

Pre-registration delivery
All programmes have some IPL embedded in the modules – most of the teaching is uniprofessional but students learn about other roles and team work. They are also encouraged to engage with other professionals on placement. Bi-disciplinary half-day sessions mostly focus on development of communication skills. These days involve simulation, working with Service Users and teaching and learning.

Much of the pre–registration IPL is driven by a champion in the Learning Disabilities nursing department. The team ensures that all the other professions learn about how to communicate with clients with learning disabilities in the

theatre, in emergency (paramedics), etc. A pilot project was recently initiated to place nursing students in care homes.

Post-registration delivery
There is no explicit IPE at this level yet, but it is anticipated that it will be developed.

Local challenges
- Large numbers of nursing students.
- Negative experience with the old IPE curriculum which was ineffective and perceived to be irrelevant for many students. When the IPL curriculum came to an end IPE became a lesser priority.

Notable features of provision
- IPE champions

Communication skills are promoted for people with Learning Disabilities across the professions

University of Birmingham

Preferred Integrated Care definition
Use of the definition from the World Health Organisation Framework for Action 2010, which is based on the CAIPE definition. 'Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.'

HEI Strategy - Supporting structural features
The IPE strategy is mapped to the Canadian Interprofessional Competency Framework (CICF) (Developed by the Canadian Interprofessional Health Collaborative). However, not all IPE activities are mapped to the framework as yet. There has been project funding to develop interventions. An IPE Steering committee is in place and an IPE Student Society – through which students work towards supporting their own IPE development, designing healthcare team challenges and volunteering with charities and vulnerable groups.
HEE West Midlands Regional Health Care Challenge was mentioned as a good way to get universities and their students to work together.

Recruitment
Students are recruited for qualities and skills which contribute to collaborative working. They engage in multiple interviews.

Pre-registration delivery
The IPE strategy is described as, being on a journey towards improving the provision. Interventions include plenary sessions, practice days, simulation, and bi-disciplinary events which are mapped to the CICF. As part of an overall placement, at Russell Hall Hospital only, there is a 2-day practice placement working as an integrated team. This is organised by the clinical team and not currently assessed. Bilateral IPE interventions occur between medical and pharmacy students, pharmacists and dentists (around prescribing), physiotherapy and pharmacy (respiratory workshop), and Year 5 medical

students and newly qualified nurses. Pharmacy students complete a uniprofessional IPE exercise relating to a video on teamwork, which is assessed in their portfolios.

Post-registration delivery
CPD is multidisciplinary in nature and content.

Local challenges
- Logistics – coordinating the students, crowded curricula
- Embedding good practice

Notable features
- IPE Steering group committed to providing exposure for all students
- IPE Student Society – students working towards supporting their own IPE development, designing healthcare team challenges and volunteering with charities and vulnerable groups
- Mapped to CICF
- 2-day practice placement working as an integrated team organised by the clinical team at Russell Hall hospital.

Coventry University

Preferred Integrated Care definition
Integrated care is an organising principle for care delivery that aims to improve person-centred care and experience through improved coordination (Nuffield Trust) because at CU the emphasis is on training practitioners rather than SU perspective. Social work is possibly more client-focused.

HEI strategy - Supporting structural features
A collaborative curriculum (CC) built on the World Health Organisation Framework (WHO 2010) runs across all years with a substantial commitment in terms of time allocation in each year. It is modular so there are different leads in each module within each year. The Lead for IPE is currently on a 0.5 secondment and has been replaced by a 0.5 Principle Lecturer for Collaborative Education for the fixed term of the secondment. A CC operational group meets three times a year.

Recruitment
Values based recruitment is used based on nursing's 6 'C's which frame the collaborative curriculum (communication, commitment, competence, compassion, courage, care, with the addition of collaboration). The collaborative curriculum is highlighted at open days and is a potential selling point for programmes.

Pre-registration provision
Ten professions are involved in the collaborative curriculum which runs through all three years of most programmes, and yr. 4 for dietitians. The curriculum picks up on the features associated with integrated working (communication, teamwork etc.). Delivery is varied with face to face, small group seminars and discussions, online, using scenarios, simulations etc. and learning outcomes

are assessed in a variety of ways at each level. A set of collaborative capabilities adapted from the Canadian Interprofessional Health Collaborative (CIHC) (2010) and Curtin University (Brewer 2011) frameworks are fostered within both theory and practice and formatively assessed by Academic Personal Tutors at the end of each year, form part of the collaborative curriculum integrating the outcomes into the uniprofessional elements of each course. The social work programme is involved in the collaborative curriculum only in one module in Year 1. The Year 3 collaborative curriculum module was written with the specific aim of promoting integrated working in interprofessional teams and focuses on a service-improvement initiative.

Interprofessional and multidisciplinary working is assessed as a component of placements across the professions. Although the term integration is not commonly used, features such as patient-centeredness, holistic management, teamwork, effective communication and collaborative decision-making do feature. Much depends on the situation and the opportunities they offer and on mentors and how much they encourage students to develop their wider appreciation of the clinical context. There are currently no specific 'integrated care' placements, although some pilot projects have occurred.

Post-registration provision
Several pathways include common modules that can stand alone (e.g. M06HLS Leadership Service Improvement and Integrated Care and 306CPD; Leadership and Change in Public service management). Both focus on incorporating integrated, interprofessional working and service improvement. Whilst M06HLS was developed specifically around integrated working other modules refer to multiprofessional/interprofessional working, shared decision-making, service improvement (Appendix 9). Therefore integrated care and working is implicit in emphasising these characteristics. Specific learning outcomes are assessed by presentation, portfolio or in written form focusing on service improvement or change initiatives.

Top up degrees are still being provided and these include interprofessional working learning outcomes. Although it is felt that commissioners do not currently emphasise integrated working as fundamental to CPD provision there is recognition that it is becoming more of a priority and there is a Masters in Rehab is planned.

Challenges
- Point of delivery – Year 1 students do not always appreciate importance of interprofessional learning which only becomes evident later in the course.
- Staff buy in – much depends on positive facilitators and teachers who are initially the student's main point of professional reference.

Notable features of provision
- Collaborative curriculum – substantial time commitment across all levels
- Possibility of face to face interaction between 10 professional groups.

Keele University

Preferred Integrated Care definition
The chosen definition is King's Fund definition because it focuses on quality. The team are very aware of the recommendations of the Francis inquiry because it directly affected the area.

HEI Strategy - Supporting structural features
The strategy is guided by the CAIPE definition in emphasizing working together and learning with, from and about each other. The team also focuses on the Francis recommendations.
Support from Faculty and Management
The presence of large cohorts of students from the major disciplines, including Medical students, nurses and pharmacists.
A long history of having IPE threaded through the curriculum and a commitment to developing the provision.

Recruitment
Interviews emphasising on value-based recruitment.

Pre-registration delivery
The curriculum is based on an old document, but content is reviewed every year.
The IPE provision is at three levels:
IPE 1 – focuses on role awareness – everyone is given a task and they produce a poster in groups. A plenary session covers what IPE is and why it is important.
IPE 2 – Case based scenarios, problem solving and a root cause analysis assessment.
IPE 3 – Practice element in placement or bi-disciplinary session on campus.

Post-registration delivery
Mainly delivered online for Pharmacy.
The medical students have a suite of courses at postgraduate level which involve IPE – mostly those focussed on leadership and specialist care – stroke care, frailty, etc.

Local challenges
- Logistics - large class sizes sometimes present resource issues.
- Some programmes have IPE placement opportunities.

Notable features
- Embedded in curriculum over a long period and commitment from Faculty and management
- Students evaluate the programme well
- Use of WEB PA to facilitate students' peer observation of engagement.

Staffordshire University

Preferred Integrated Care definition
The university has its own IC definition to shape its curricula:
'A curriculum which fosters learning cultures/experiences where two or more disciplines, having equal input, and opportunities to learn from, with and about each other. To prepare our student for purposefully working together with the common goal of building a safe and holistic approach to meet the needs of people they support.'

HEI Strategy - Supporting structural features
A new framework that seeks to embed IPE across all professions and grow the provision.
Team to assess quality of placement learning environment to ensure students are exposed to IPE.

Recruitment
No feedback.

Pre-registration delivery
The IPE strategy comprises a single strand of activity which focuses on practical elements – joint simulation, joint task based scenarios. There is emphasis on relevance to the programme not just putting students together.

Post-registration delivery
No feedback.

Notable features
- Framework focussed on evidencing how IPE outcomes are met
- Bi-disciplinary simulation, tasks, training.

University of Warwick

Preferred Integrated Care definition
The King's fund definition is most relevant because it includes 'carers' and 'quality and emphasises that patients should always be the primary concern.

HEI strategy - Supporting structural features
The medical school has a case-based curriculum that is structured around integrating care so it is implicit in all activities. The students are drawn from all walks of life and come with very diverse backgrounds so they bring very different perspectives.

Recruitment
Recruiters are looking for evidence of NHS values, good communication etc. Values based interviewing is used. The course is premised on integrated working/care and is sold on the benefits of early clinical experience. The importance of teamwork, good communication etc. is emphasised.

Pre-registration provision

There is no IPE but Social Work colleagues teach on the programme and pharmacy students from Aston University visit x 3 per to year in years 3 and 4 so are involved in shared learning. The General Medical Council acknowledgement of the importance of integrated care influences the curricula. It is included in the compulsory transition placement in Yr. 2, and assessed with a case based presentation with another professional. There is community teaching from district nurses and health visitors and in GP practice placement students are encouraged to spend time with other professions. For instance, shadowing midwives. In years 1 and 2, the complexity of real-life case-based learning opportunities is gradually increased to include co-morbidities and diverse services.

Role play and simulation are also used and a service-user group is involved in developing training videos. Frailty teaching has an integrated care focus. There is an emphasis on effective communication, which is assessed all through the course via OSCEs and use of clinical cases. Medical students link most commonly with nurse specialists in all placements. In GP practices, they link with practice nurses. Therefore, nurses and midwives tend to be the professionals with whom they have most contact. There are profession-specific learning outcomes for each placement but the integrated working learning outcomes are overarching in all.

Role awareness is promoted through community days in Yr. 1; Transition phase yr. 2; Phase 3 written reflections. One reflection is on team working and the other on working with other health and social care professionals. Partnership working /collaboration is taught through Community teaching and in GP practice and in attending MDT meetings, and shadowing midwives in Phase 2. This is assessed in phase 1 but not beyond that. There are currently no specific 'integrated care' placements, although some pilot projects have occurred.

Post-registration provision

The Advanced Clinical Practice Masters was designed to provide for all professions to make it viable but also to bring them together to share their knowledge from the very different clinical backgrounds. Developing and capitalising on interprofessional capabilities is implicit rather than explicit because at this level learning with and from each other is the accepted norm. People who do the programme would choose to do something uniprofessional if they wanted profession-specific input. There is a balance to be achieved between making something too generic to appeal to numbers and making it meaningful in terms of aims and learning that can become diluted in the process. The programme should enable them to work within their own professions but in more advanced roles that gives them increased autonomy and perhaps allows them to cross some professional boundaries because they have the knowledge of those other professions and the skills to do so (i.e. boundary spanners).

An Advanced Critical Care programme attracts mainly nurses and paramedics and a community-based care module, focusing on supporting staff working at

the transition stages from secondary to primary care and vice versa, attracts mainly GPs and community nurses but is being opened to a wider group through involvement of the ACP participants.

Challenges
- Lack of professions with which to interact directly within the Medical school. It is perceived to be easier with direct access to others.

Notable features of provision
- Case-based curriculum
- Diversity of entrants with first degrees.
- Diversity in professional background of post-grad/CPD participants.

University of Wolverhampton

Preferred Integrated Care definition
The preferred definition was the King's Fund definition.

Recruitment
Applicant open days. Values-based recruitment scenarios around team working are used to select applicants.

HEI strategy – Supporting structural features
A new 'Interprofessional Experience Strategy' for the wider faculty is currently being implemented.
Recognition of the importance by staff and their commitment to making it happen.
Professional and Statutory Review bodies (PSRB) requirements.

Pre-registration provision
PSRBs ensure that all programmes incorporate the skills and attributes necessary for integrated care, such as teamwork, person-centred care etc. but without necessarily meeting other professions.
The nursing review is pending. Previously IPL had been embedded in courses and modules mainly across fields of nursing, midwifery and pharmacy but the aim is to embed it more widely across the institutes in the faculty (health professions, public health, social work and social care, sport, education and psychology). Currently there is a module in each year (Yr. 1 research awareness, Yr. 2 ethical and legal issues, Yr. 3 service improvement). The challenge is to get IPE embedded rather than bolted on when people are redeveloping curricula.

The faculty was in the process of finalising the 'Interprofessional Experience Strategy' for the wider faculty to take advantage of opportunities for working across boundaries with psychology, sport etc. For example, safeguarding can cut across all groups so there are synergies that can be exploited. The aim is to take IPL outside of modules and ensure that all students get at least two IPL experiences per year. A recent Career Development week involved nursing and psychology students working together on a Making Every Contact Count project

and this evaluated well so the aim is to roll out this type of activity across the faculty as part of the strategy.

Post-registration provision
No feedback.

Challenges
- Size of programmes
- Practicalities
- Time constraints – the previous 1 week activity was not sustainable.

Notable features of provision
- The 'Interprofessional Experience Strategy' for the wider faculty to take advantage of opportunities for working across boundaries with psychology, sport etc.

University of Worcester

Preferred Integrated Care definition
There was a preference for the King's Fund definition because it emphasised commitment to providing quality of care.

HEI strategy – Supporting structural features
Problem-based learning is used with scenarios during small group work.
There is no collaborative curriculum as such, but all curriculum leads have integrated care on their remit and they would like to develop an integrated care strategy. There are two GPs that are part of the Leadership team that can open doors to primary care. The commonality between PT and OT programmes serves as a model for promoting IPL and integrated working and the aim is to potentially add other professions.

Recruitment
Students have a session on the current landscape of health and social care. PTs and OTs are interviewed together.

Pre-registration Provision
Language is still about MDT working rather than integrated working. However, all programmes incorporate the skills and attributes incorporated in under the integrated care heading such as teamwork, person-centred care etc., without necessarily having direct contact with other professions.
Nursing has a review pending. Therefore, the curriculum is pre '5 year forward view' and there is recognition that practice has moved on and perhaps this is an issue for HEIs trying to keep up with a rapidly changing landscape in health and social care. There are pockets of IPE. PT and OT are very integrated. The other professions less so but are proactively seeking to nurture closer links and shared learning. Teachers are included in IPE days together with nurses. There are bi-lateral sessions between paramedics and nurses and paramedics and midwives. Links with social work are being developed.

Post-registration Provision
Worcester provides the West Midlands Advanced Clinical Practitioner Pathway – Advanced Practice Masters that attracts a wide range of professionals. There is a range of modules but the 'Advanced Health Assessment' module, in particular, emphasises integrated care.

Top-up degrees mainly attract nurses and paramedics.

The team is proactively seeking to scope the demands of the market, especially in primary care, to develop new programmes and modules where they see there is openness to new roles etc. The post-registration lead gave an example from practice where a new model of working was being piloted and will need to be supported by specific bespoke training, and another example of three staff being sent on the same programme to facilitate change in a service.

Challenges
- Structural – all professions have their own profession-specific curriculum criteria to meet. Changing curricula is a lengthy process.
- Logistics are tricky - even when the will is there finding space in the timetable to get together is difficult unless courses are designed together, such as occurred with PT and OT where a lot of joint learning occurs.

Notable features of provision
- Proactive in working with service, especially primary care, to scope what training is needed.
- Advanced Practice Masters
- Engagement with role emerging placements for PT/OT and exploiting third sector connections for placement where integrated working is crucial.

Synthesis of findings from HEIs

Curriculum engagement with the concept of Integrated care

There was remarkable agreement, across survey respondents, on the selection of the King's Fund definition of integrated care to best fit their understanding of what they are aiming to achieve in fostering the necessary skills and attributes in their students. The definition of integrated care as 'care which is intended to improve the quality of care for individual patients, service users and carers by ensuring that services are well co-ordinated around their needs,' was thought to capture the importance of quality and the centrality of patients as a primary concern, whilst also identifying the range of people involved in the process. Staffordshire University had developed its own bespoke definition that guided its provision and the University of Birmingham and Coventry University used the WHO Framework for Action (2010) definition to underpin their provision. However, at the University of Birmingham they emphasised that interprofessional education provides the means of achieving integrated care

and the two were not synonymous highlighting an important factor that was recognised more generally.

In fact, the language of integration, integrated working and integrated care was only rarely explicitly evident in programme specifications, module descriptors etc. Generally, these terms were translated into more familiar terminology taken to be synonymous but more commonly used in the higher education context as the means to promote integrated care. These terms subtly different in meaning included multiprofessional, multi-disciplinary, interprofessional and interdisciplinary learning and/or education. Reinforced through professional and regulatory frameworks for the health and social care professions and translated into curricula, programme specifications and learning outcomes and assessment protocols, they are disaggregated into tangible concepts including teamwork, communication skills, collaboration and partnership working, and leadership. These concepts which form the basis of activities that constitute professionalism have been part of IPE curricula over the last 3 decades and have come to constitute the core skills of IPE (Reeves et al 2012).

The requirement to map pre-registration curricula to the various standards, using these concepts, meant that it was relatively easy for all providers to identify that programmes included elements of interprofessional or multiprofessional learning. In some situations, where persuasive arguments were needed for the devotion of valuable curriculum time to interprofessional learning, the professional and statutory body requirements were important drivers.

Use of theory to underpin practice

The provision of a framework to underpin IPE curricula offers opportunity to align learning activities with proposed outcomes and validates curriculum content (Thistlethwaite 2012). The University of Birmingham had adopted the Canadian Interprofessional Health Collaborative (CIHC) framework with its six competency domains seen as essential to the development of effective interprofessional collaboration *(role clarification, team function, patient/client/family/community-centred, collaborative leadership, interprofessional communication and addressing interprofessional conflict)* (Orchard and Bainbridge 2016). Coventry University adapted the work of the CIHC (2010) and the Curtin University (Brewer 2011) frameworks to develop their collaborative capability framework. Otherwise, most interviewees referred to the Centre for the Advancement of Interprofessional Education (CAIPE) or WHO IPE definitions as guiding their curriculum. The six C's of nursing (care, compassion, competence, communication, courage, commitment) were mentioned by several interviewees, and in fact, the Coventry Collaborative Curriculum clearly utilised the 'C's to which they had added 'collaboration' to highlight the centrality of these attributes within the curriculum

Structural Support

Senior management support is clearly crucial to establishing and resourcing successful IPE initiatives and this was mentioned by several respondents. For

instance, the University of Worcester's leadership team was proactive in supporting access to primary care contacts. Birmingham University had allocated substantial project funding to develop its IPE interventions and most HEIs had staff in leading roles specifically tasked with promoting IPE. Staffordshire University had a team to assess the quality of placement learning environments to ensure students were exposed to IPE. The role of IPE 'champions' was widely acknowledged (Reeves et al 2012, Thistlewaite 2012).

Most HEIs had committee structures in place to support delivery and evaluate the effectiveness of their IPE initiatives. Aston University's Public Involvement/IPE forum performed a similar function with representation from each department, students, service users and charities. The University of Birmingham also had its IPE Student Society through which students was proactive in their own IPE development, designing healthcare team challenges and volunteering with charities and vulnerable groups.

Strategy

Strategically embedding IPE interventions in professional education ultimately results in better outcomes for patients due to the quality of knowledge, behaviours and attitudes of trained staff (Weaver, Dy and Rosen 2014). Recognition of the importance of a strategic approach to embedding IPE meant that most HEIs had strategies which were either well-established or in the process of development. There appears to be an appreciation that ad hoc and bilateral interventions are limited in scope and that whilst resourcing IPE in terms of time and staffing, must be realistic and sustainable, having an IPE strategy means that the development of knowledge, skills and capabilities that underpin integrated teamwork and partnership is taken seriously by both staff and students.

Revalidation provided opportunity to rethink curricula and several institutions ready to revalidate their nursing curricula were waiting for the outcome of the Nursing and Midwifery Council review of standards. Where programmes were due for revalidation at the same time there was recognition of more scope for shared learning. An example of how this had worked extremely well was at the University of Worcester where the physiotherapy and occupational therapy programmes were launched at the same time and have a common curriculum prior to getting students to decide for which profession they wish to opt. This allows students to spend approximately a third of their programme working together. The aim, following major reorganisation, was to extend involvement of additional professions in the Allied Health and Social Sciences Unit bringing them together as part of an overarching 'integrated care strategy.'

Aston University's IPL strategy was also in its early stages of development. A challenge, in this HEI, was the limited number of health and social care professional programmes most of which do not have traditional historical links. These include pharmacy, audiology, optometry and biomedical sciences, with the addition of medical students when the medical school opens in 2018. They recognised that initiatives can be considered by students to be contrived if they focus on scenarios that are deemed inauthentic with the result that they do not

engage with the learning, so had approached interdisciplinary learning through their 'public involvement strategy.' This strategy, led by the audiology department, was in the process of being amalgamated with an IPL strategy which originated in the School of Pharmacy where an IPL module had been offered since 2012.

The University of Warwick was in a very similar position with direct access to a limited number of professions with which to engage in interprofessional activities. In fact, pharmacy students from Aston University visited their medical colleagues for three days each year to engage in some focused interprofessional learning. Otherwise the strategy at Warwick was the adoption of a 'case-based learning approach' that placed emphasis on integrated care from a theoretical basis and then exposing medical students to a variety of experiences in practice.

Both Coventry University and Keele University had long-established strategies for interprofessional learning. Coventry's strategy had developed from an 'interprofessional learning pathway' initiated in 2005, which sat alongside the modular structure, to a 'collaborative curriculum' sitting within modules. Both strategies were ambitious in involving IPL at all levels for most of the ten programmes involved. Keele's provision, developed in 2006 was similar in that it had IPL built into all levels and included nursing, medicine, pharmacy, physiotherapy and biomedical sciences. Social Work were not able to participate temporarily due to logistical issues but were re-joining in 2018. Updated annually, IPE was deeply embedded in the culture at Keele.
The University of Birmingham had an Integrated Care strategy based on, and adapted from the Canadian National Interprofessional Competency Framework (CICF) which was used to map competencies and outcomes of IPE interventions. Although they felt that they had not yet achieved their goal, the aspiration was for all students (dentistry, dental assistants, medicine, nursing, physiotherapy, pharmacy, physicians' assistants, clinical psychology and social work) to experience interprofessional education.

The University of Wolverhampton was on the brink of launching a new and innovative strategy designed to move away from addressing IPL in courses and modules, to embed it more widely across the Institutes in the Faculty of Education, Health and Wellbeing (Health Professions, Public Health, Social Work and Social Care, Sport, Education and Psychology.) The 'Interprofessional Experience Strategy' was designed for the wider Faculty to take advantage of opportunities for working across boundaries. For example, a recent Career Development Week activity involved nursing and psychology students working together on a 'Making Every Contact Count' project which evaluated well.

Staffordshire University had its own working definition of IPE and an IPE framework that merged theory and practice. The framework made transparent and embedded integrated care across all programmes (including nursing, paramedics, operating department practitioners, midwives, clinical psychologists. Efforts were being made to integrate social work to a greater degree. Birmingham City University was in the process of reviewing its strategy.

The emphasis on nursing in a prior iteration of IPL delivered on a modular basis was deemed to be less applicable to other health and social care programmes. Their challenge was to provide authentic learning for approximately 3,000 nursing students that dramatically outnumber the other professions.

Recruitment

In agreement with the findings of a Health Education England report (2014), values-base recruitment for the selection of students and trainees was used almost exclusively across all HEIs.

Professions involved

Integrated care training requires healthcare professionals that train together if an "integrated way" of working is to be achieved (Boland et al 2016, p. 739). Some HEIs are in an ideal situation to bring together students from a variety of professions and do so successfully. However, the availability of professional groups does not guarantee involvement in a larger strategy. For example, in several institutions social work was either only partially involved, or not involved at all. One interviewee regretfully reflected that social work is heavily regulated which might create difficulties in terms of spending time doing IPE, yet was an important profession to attempt to 'draw in [to IPE].' Part of the issue may be that social work appears to often sit in other Faculties or Schools to the health programmes (for example, University of Birmingham, University of Warwick, Coventry University) therefore can sit on the fringes of developments. A major restructure at Worcester has merged social work.

Even in situations where professions are present, programme structures can prevent involvement in larger initiatives, in which case HEIs resort to bilateral IPE interventions to meet interprofessional learning outcomes. For example, midwives and paramedics working together. The issue of some professional groups such as nursing being so large that they outnumber other professions is a particular challenge. In some instances, interprofessional education seems to be occurring primarily between the fields of nursing and related professions, such as operating department practitioners.

Lack of health and social care professions with whom to interact had encouraged Aston University and the University of Warwick to collaborate in successfully bringing pharmacy and medical students together, respectively. Aston had also drawn together some unlikely professional collaborators across their programmes by gaining buy-in to their public involvement strategy, which was simultaneously effective in achieving some IPE engagement. Warwick, a previous collaborator with Coventry prior to a major curriculum review, saw opportunities in their case-based curriculum which focuses on the development of knowledge, skills and attributes necessary for the provision of integrated care that is integral to all teaching and realised particularly in placement. The innovative approach being adopted at the University of Wolverhampton is ambitious in its aspiration to take advantage of a variety of opportunities to get a wide range of students working together to address issues of common interest, such as safeguarding.

Delivery

Hamilton (2011) acknowledges the complexities and challenges of delivering IPE effectively, suggesting that integrating content into curricula as early as possible is most effective. In fact, exposure to interprofessional education showed marked variation and richness in terms of extent and type of delivery. Consistent with the literature, some IPE initiatives were limited to one-off, stand-alone events at one extreme, to modules, or at the other extreme pathways through entire programmes. Embedding IPE in modules was felt to sit comfortably with student expectations where the majority of their teaching fell into this type of format, whereas initiatives that sit outside of an existing modular structure were perceived to feel 'bolted on,' and therefore needed to be highly engaging.

Case-based learning, scenario-based learning and problem-based learning were commonly used to orientate students to the complexity of health and social care practice. These are all popular task-oriented activities advocated in the literature (VanKuiken et al 2016). Keele University students used scenario-based learning extensively, especially to highlight patient-centred care. They used emotive cases such as Victoria Climbie and Baby 'P' cases to encourage group participation and to explore values and attitudes. Decision-making was explored through Root Cause Analysis tasks which encouraged students to look at factors affecting how people act and why. WebPA (an anonymous peer review tool) was used in Year 1 and 2 IPE sessions to allow students to give each other feedback on their participation as a means of identifying those not engaging.

Even where students worked in uniprofessional groups it was believed to be possible to develop a wider appreciation of care. At Staffordshire University uniprofessional teaching sessions were followed up with interprofessional practical work. For instance, nursing and paramedic students used scenarios within simulations, nursing and social work students focused on understanding court cases, and nursing, social work and midwifery students, worked with the 'Grandma Remember Me' play to develop their communication skills.

Face-to-face teaching in small interprofessional groups was thought to be the ideal way of promoting interprofessional understanding and communication and despite widely acknowledged logistical problems this approach was most commonly used. VanKuiken et al (2016) advocate the use of technology as an option to address these problems. Coventry University had a long history of also using online interaction to overcome logistical issues of getting large numbers of students together, including online, blended and face to face activates in its collaborative curriculum. In a year 1 module the use of a virtual Tamagotchi-like patient that small interprofessional groups have to care for over a 10-day period, including evenings and weekends, had proved very successful in nurturing students' sense of interdependence and interprofessional understanding. Online activity here was balanced by Year 3 module activities in small interprofessional groups that focused on a service-improvement

project, these real-life issues were both proposed by, and later assessed by service users and practice partners.

One-off interprofessional events such as the 'emergency day' at Staffordshire University and the Careers Development Day at the University of Worcester are useful additions to the suite of IPE experiences and may offer greater flexibility in terms of being easier to open to diverse professions and can be tweaked in terms of focus etc.

Assessment

Generally, identified learning outcomes are formally assessed where they are a mandated part of the curriculum. Thistlethwaite (2012) notes that IPE oriented assessment is challenging because pre-qualification training focuses individual skills. There was a level of acknowledgement that students tend to be assessment driven therefore assessing capabilities reinforces perceptions of their importance for students. It was considered important to assess the development of the knowledge, skills and attributes necessary for interprofessional working as has been advocated (Barr, Helme and Reeves 2016). However, in a small number of cases assessment was not formalised. This was due to the interprofessional activities being voluntary and/ or ad hoc rather than common to the whole cohort, making it inequitable to assess some students against formal learning outcomes that others could not meet due to lack of opportunity. Keele University was promoting a useful form of formative assessment, using WEB PA, to facilitate peer feedback amongst students on their level of engagement. Notably, Anderson and Kinnair (2016, 557) point out that to formally improve the status of IPE assessments, governing bodies ought to take responsibility for emphasising the testing of IPL to avoid 'IPE assessments [being] dwarfed by profession-specific content.'

Placements

Placements provided a common context for developing skills in a real-life setting with the ubiquity of learning outcomes and assessment, promoting and testing the achievement of role awareness, interprofessional communication and multiprofessional working. It is here that if students have gained a theoretical insight into the role of other professions, the nature of interprofessional communication and a sense of professional boundaries and how to work to cross them that they have opportunity to meet and work with other students and qualified professionals in a range of roles. Many of the interventions in the literature (Macauley et al 2016; Delisle et al 2016; Evans et al 2015 and Jelley, Larocque and Patterson 2010) involve carefully designed pilots in clinical settings. These studies indicate how transformative learning with others can be in practice settings.

None of the HEIs could say that they had specific 'integrated care' placements per se, although the University of Birmingham had a two-day integrated experience built into a traditional placement. However, respondents could identify settings in which they expected students to gain insight into integrated care and where this would be actively promoted rather than having to happen

by chance. These settings included community placements, care homes, hospices and areas of complex care, such as head injury units and rehabilitation units, and a frailty ward. One respondent suggested that integrated care possibly occurred less in acute settings even though a range of professionals were working in close proximity, as pressure of work in these settings potentially led to silo-working. The potential for profession-specific placements to expose students to wider interprofessional aspects of practice was dependent on their mentor or practice supervisor and it was felt that in some situations mentors needed more training to help them to strengthen their ability to optimise exposure to the integrated care agenda. There seems to be a need to debate what factors constitute a satisfactory integrated care placement in collaboration with placement providers.

The University of Worcester probably had the most innovative approach to providing placements for its physiotherapy and occupational therapy students. These students were frequently placed in pairs, in third sector organisations, assessed and supported by mentors from professional groups other than their own, and experienced a very different working environment to that typical of a traditional placement. They were currently setting up a placement with a mental health charity in Birmingham where a range of students from different professions would have the chance to work together. This type of innovation was felt to be more feasible outside of traditional structures because providers were more amenable to trying out new ideas.

Aston University had arranged professional experience sessions in primary care through links with their local Community Education Provider Network (CEPN) which provided access to GP surgeries and primary care emergency services including virtual pharmacy and virtual doctor services. They also had access to St Mary's Hospice providing students with insight into palliative care provision for inpatients, day patients and hospice at home.

Common challenges

The most common challenges to developing a successful IPE initiative cited by the respondents involved logistical issues and practicalities - finding space in the curriculum, scheduling when programmes are structured differently, coordinating students, large class sizes and limited resources for facilitation are all well recognised as factors that can provide barriers to success (VanKuiken et al 2016). Imbalance in student numbers, such as large numbers of nurses, and few on programmes such as audiology, optometry, and clinical psychology, can be problematic, whereas lacking professions with whom to interact is even more of a challenge.

Embedding good practice and gaining staff buy in was a challenge for some HEIs. HEIs tend to have their IPE champions but otherwise it is not uncommon for staff to be allocated to IPE teaching and this can be problematic. Facilitators and teachers who are initially students' main point of professional reference can be highly influential in encouraging positive interprofessional attitudes and values. Mention is made of previous negative experiences presenting a barrier to gaining staff buy-in. IPE champions can be highly influential in encouraging

positive interprofessional attitudes and values that underpin integrated working. Therefore it is crucial that staff responsible for IPE fully identify with its ethos and aims.

The challenge of providing authentic IPE experience is mentioned by one HEI where great effort has been made to bring students together for a meaningful experience when their traditional links are tenuous – it is crucial that IPE content is dynamic, relevant and appropriate (Sargeant 2009), and Thistlethwaite (2012) stresses that the learning must be relevant to all. Nevertheless, gaining student buy-in at point of delivery can be difficult – the importance of IPE may only become evident later in the course. The different professional cultures and socialisation processes impact on students from early in their programmes and can be an obstacle to IPE (Hamilton 2011). One HEI suggested that not all students are able to benefit from IPE opportunities, especially on placement, this has been identified as a recognised barrier by Delisle et al (2016).

Integrated care integral to post-graduate provision

Whilst many professionals, particularly in early stages of their careers were perceived to be likely to wish to develop their profession-specific expertise once qualified, there was acknowledgement that there was a market for substantial programmes and shorter CPD courses that provided a broader experience to equip participants for working with the challenges of contemporary health and social system, such as integrated care.

However, gaining a sense of where and how the notion of integrated care permeates postgraduate provision was more challenging than mapping undergraduate curricula. Most HEIs in the region have an extensive suite of programmes, (with the possibility of various pathways through them), as well as modules, which can stand alone, and numerous training courses. Unlike undergraduate provision, overarching frameworks were not so apparent. However, Keele University was in the process of developing one that they felt would allow them to bring their IPE provision together and introduce some online programmes to appeal to a wider market. The need to promote integrated care was considered core to Keele's postgraduate provision and they were particularly strong on leadership as an area that was highly conducive to cross professional delivery which was promoted by their Leadership Academy.

Respondents were asked to identify only those programmes, modules, and courses, which stood out in terms being open to access by participants from multiprofessional backgrounds and promoting integrated thinking and working. Findings indicate that the language of integration has begun to be evident in pockets in postgraduate provision. There is also an expectation that at postgraduate level many participants have already acquired much of the explicit knowledge skills and attitudes necessary for integrated working. However, focused postgraduate training was thought to offer a unique opportunity to learn with, from, and about others who have already acquired some measure of advanced understanding to consider issues around contemporary health and social care practice.

This aspiration underpinned several of the more substantial programmes provided, such as the Masters in Advanced Practice (University of Worcester), MSc Advanced Clinical Practice and MSc Health Studies (Coventry University), Masters in Medical Science (Keele University) and the Advanced Clinical Practice Masters (University of Warwick). These programmes recruited across the professions and included assessed learning outcomes associated with integrated care. It was not uncommon for small numbers of colleagues, often from different professions but from the same service area, to be sponsored to complete the programme, or selected modules, together with the aim of promoting local change.

Delivery and Focus

Delivery methods typically included face to face facilitation, small group work and presentations but also relied to a greater degree on synchronous online tutorials, eLearning resources, discussion boards etc. than was found at undergraduate level, due to cohorts being more widely dispersed and time being at a premium. The majority of modules used a blended learning approach, although Keele University highlighted some pharmacy postgraduate provision that was entirely online with only two days on campus. Modules were diverse in focus, whilst some focused on a health condition, such as stroke or frailty, others focused on leadership or public health issues.

While academic programmes, course and modules were assessed, those delivered as CPD were not. Short courses were delivered on site where necessary and frequently drew heavily on the work-based learning experiences of participants. Typically, programmes might be five days long, delivered over 6 months, or 3 days delivered over 6 months, with reading and other materials provided.

Several HEIs continued to offer top-up degrees that included IPE learning outcomes but these were generally only accessed by a declining number of nurses and paramedics and were gradually being phased out.

Future developments in postgraduate provision

Postgraduate provision appears to be constantly changing with some programmes being judged to have run their course and closing and new ones being developed, in an attempt, to keep pace with contemporary practice. Keele University's aim was to tap into expertise in online learning and NHS systems to develop team-based leadership training around integrated care as a more effective approach to provoking change than sending one or two people on a course that subsequently makes no difference in practice.

Coventry University was in the process of developing a Masters in Rehabilitation that would be attractive to all health and social care practitioners having input in such a complex area of practice. Similarly, the University of Warwick was developing a Masters in Rehabilitation for medical students, nurses and AHPs and this would have an emphasis on integrated care. However, there was recognition that whilst there was demand for full

programmes, funding was very limited prompting an increased emphasis on short training/CPD modules that could be rolled out and repeated on a regular basis. This was where the University of Warwick was looking to expand its CPD offering. These comments were reflected by the postgraduate lead at the University of Worcester who identified the greatest need for short courses in primary care. She has been proactive in engaging with primary care in rural Herefordshire to scope their training needs.

Respondents could not identify any programmes or modules that had been developed specifically with integrated care in mind, apart from 'Leadership, Service Improvement and Integrated Care,' and Leadership and Change in Public Service Management both offered by Coventry University and 'Advanced Health Assessment' module at the University of Worcester which emphasised integrated care. However, there was wide recognition that integrated care must feature in future provision. A possible example, was the Physicians' Associate programmes, such as those offered by the University of Warwick, University of Worcester and University of Wolverhampton, were seen as, offering a means of promoting new roles within integrated care, and are arguably suited to professionals wishing to expand their scope of practice. One respondent referred to paramedics being upskilled to work with GPs in primary care, for which this qualification at diploma and degree level would be ideal.

9. Conclusions

The primary research conducted during the project provides insight into the contemporary landscape of education and training for the current and future health and social care workforce charged with providing integrated care. There are patterns that have emerged both in the HEIs and in service settings that mirror the international literature, which provides a backdrop against which the project findings can be viewed. This leads us to suggest that the West Midlands is not atypical in either the HEIs' approach to implementing interprofessional education as a means of preparing students for integrated working, or the education and training in place to foster integrated care in services across the region. We will identify consistencies with the literature, findings which appear novel, and make a series of recommendations based on findings.

The perspectives, beliefs and experiences of the integrated care teams who participated in this study closely reflect those described in the literature review. Enablers such as co-location (Maslin-Prothero and Bennion 2010), cross training (Fleury et al 2016, Lasater et al 2016), shadowing (Bajnok et al 2006) and shared paperwork (Bailey and Paice 2016, Maslin-Prothro and Bennion 2010) were essential in helping team formation and development, and to identify boundaries and opportunities for joint working. Barriers of limited funding (Reeves et al 2012), resistance to change (Rice et al 2010, Lasater et al 2016, Luetsch et al 2015), and coping with technology systems that are not compatible were also similar (Bailey et al 2016).

Whether addressing integration in service provision or promoting interprofessional learning in HEIs, the emphasis on passionate, visionary

leaders and champions with enthusiasm and energy to evoke change is vital (Reeves et al 2012), and these attributes came through very strongly during the project. These findings add weight to the existing literature. For instance, Barr (2016) notes that learning needs to be transformative and develop leadership for change. Crucially, the literature suggests that collaboration is essentially an interpersonal process that requires the presence of a series of elements in the relationships between the professionals in a team. These include a willingness to collaborate, trust in each other, mutual respect and communication. However, San Martín-Rodríguez et al (2005) also stress that even though the above conditions may be necessary, they are not sufficient, because in complex health care systems professionals cannot, on their own, create all the necessary conditions for success. Organizational determinants play a crucial role, especially in terms of human resource management capabilities and strong leadership. There is no doubt that many of the service managers or team leaders interviewed recognised the enormous leadership challenge that integrated working posed and to a certain degree there was acknowledgement by some that much rested on their own shoulders. As is recognised in the literature it seems that team managers who feel able to reach out beyond the teams to leadership within the localities, developing broader partnerships with organisations and community groups are more likely to achieve successful integration (Maslin-Prothero and Bennion 2010). Such managers might be described as boundary spanners (Long et al 2013).

Continuing professional development was seen by all as an important issue and whilst some were unable to identify training gaps this in some instances related to the stage of service development they were at. Support for training seemed to be an indicator of the vibrancy in that unit and the majority of those interviewed displayed a motivation to continue to learn, driven by a belief in integrated care. Creating time for CPD and the allocation of funding, which is well recognised as limited, difficult to obtain and sustain (Borduas et al 2006), clearly play a fundamental part in ensuring that the workforce remains up to date and motivated as these factors seem to be perceived as a measure of how the workforce is valued. Project funding can provide the means to get an idea off the ground but sustainability should always be a consideration. For instance, the Esteem team was project funded and had been very fragile for most of its life with fixed-term contracts and limited funds for training.

Support for CPD both in terms of time and funding is a factor that will either attract or dissuade new staff from joining the service and influence retention of existing staff. Nevertheless, most units had vibrant and regular in-service training, which whilst highly effective needs to be reinforced with external stimuli to avoid recycling local practice. Team training has the potential for the greatest impact on working practices. Whether it is putting undergraduate students together in interprofessional teams in universities or hosting a staff training event in practice, the importance of involvement of the whole team is crucial. It is only by sharing knowledge and ideas that people learn how others think and what their roles might entail. Relationality is a human characteristic on which integrated initiatives can capitalise. The logistical issues that are barriers to IPE are very well-rehearsed, and in places possibly mask deeper reservations based on culture and values. However, the project findings suggests that when

logistical issues are removed by co-locating teams (and where visionary leadership occurs) it does seem that professionals start to work more readily as a team simply because they establish working relationships more easily and get to know each other's roles in greater depth.

In several situations, the concept of cross training (Fleury et al 2016) had been embraced to move the team onto a different level of integration, at which they could cover for one another when necessary. This seems to present a very mature way of working that could be fostered more widely. There is recognition that learning occurs at many different levels. Reeves et al (2012) highlight the importance of informal learning and this is reflected in project findings. Incidental learning within the daily routine is often very client focused and therefore highly meaningful and authentic. Training specifically focusing on integrated care seemed to be targeted at management level, although there were instances of training, such as in conflict resolution, which catered for the grassroots workforce. Clinical supervision was adopted as a means of promoting continuing development in most service situations as opposed to being simply managerial supervision for monitoring performance. Staff in Forward Thinking Birmingham also engaged in team supervision, which seems to hold potential for those in integrated care settings.

Interviews with staff in integrated care services suggest a need for a balance between personal/professional development to maintain profession-specific skills, and genetic training more relevant to integrated care, which does not appear in the literature. While the potential loss, or putting on hold development of profession-specific skills, was not acknowledged as problematic for some staff, others were keen to ensure that they maintained their profession-specific expertise. This is an area that might benefit from further research as retaining the most talented staff is an important factor in sustainability of services.

There was unanimous agreement on the knowledge, skills, and capabilities necessary for integrated working acknowledged in the literature. However, there was also a sense of convergence of many of these attributes in the service setting that blurred the boundaries between profession-specific and interprofessional outcomes. This finding is not to our knowledge evident in the literature and deserves further attention because it suggests that the tension between delivering profession specific programmes and interprofessional initiatives that troubles HEIs may be less of an issue than it is made out to be in the literature.

Rotating staff into integrated care teams or offering students opportunity to complete an integrated care placement as part of their programme, allows them to gain valuable insight and experience and to decide whether this type of work can be part of their future career plans. Several interviewees in the integrated care teams reflected on the experience that they had had as students. A major conduit for convergence of service with HEIs is through student placements. It became clear through interviews with professionals in service that their pre-registration interprofessional practice-based working experience had had a profound and lasting impact on understanding and working with other

professions. This finding supports the need to get more students out into integrated care settings.

IPE occurs when 'two or more professions learn with, from and about each other *to improve collaboration and the quality of care*' (Centre for the Advancement of Interprofessional Education CAIPE, 2002) but the language of IPE needs to reflect the headline changes that are happening and will continue to happen in practice that are premised on the importance of integration as a progression from collaboration. In some instances, HEIs and practitioners were reluctant to badge placements as integrated, and in fact, practice appears tentative in promoting services as fully integrated, possibly reflecting the rapidity of change and the need for services to mature and grow in confidence in what they offer. Nevertheless, the centrality of the service user was at the heart of the philosophy for all service units. This is perhaps more of a challenge to keep in focus for course teams in HEIs, although a wide range of pedagogical approaches are used to ensure relevance and authenticity.

10. Recommendations

Recommendations for Integrated Care Services

- Co-location allows for informal learning and exchange of ideas, as well as appearing to be an effective, timely and efficient way of problem solving. Therefore efforts to provide a base or at least a common location for breaks etc. would be beneficial.

- Where an agile working approach is adopted ensure regular meetings for contact between team members occurs and importantly available rooms for this to take place.

- Train the whole team together where possible, as this is more likely to result in change and to cement relationships.

- The focus for training needs to be of common concern to all to encourage full engagement. The impact of training may be greater where it has immediate application in meeting the needs of a specific client.

- Cross training results in a more efficient and effective service but also means that staff have greater insight into the role and responsibilities of others.

- Cascade training where possible.

- Support staff in maintaining profession-specific expertise to ensure that they do not feel deskilled – this may be crucial in keeping good staff.

- Offering placement for students and badging them specifically as integrated care placements could energise teams and provide a means of identifying future recruits.

- Continue to foster clinical supervision and team supervision as part of CPD and as a means of promoting change.

- Rotate staff into integrated care teams to promote the integrated care approach.
- Explore potential links for integrated working with third sector organisations.

- Work with HEIs to identify placements with a specific integrated care focus.

- Consider offering interprofessional placements that involve interprofessional supervision and placing students from different professions to work together. Understanding different professional roles, skills and responsibilities was identified by teams as an important element of integrated care.

- Explore potential to work more closely with HEIs to swap training opportunities between service and students in a mutually beneficial exchange.

- Consider the importance of adequate funding and the impact that the lack of long term funding for training has on project development and implementation, and more importantly staff morale and motivation.

Recommendations for HEIs

Based on good practice identified from the survey of all HEIs in the West Midlands, several recommendations are proposed to facilitate the embedding of integrated care as a desirable outcome of interprofessional education:

- The language of integrated care has yet to filter into undergraduate curricula, although it is evident in a minority of postgraduate programmes. Revalidation could be used as an opportunity to update curricula so that students can readily identify continuities in discourse between their university modules and placement experience. A subtle shift in the use of language could move students' perceptions of IPE concerning their own development, to a means of shifting focus to integrated care. Simultaneous revalidation of programmes, if it can be achieved, provides a prime opportunity to align professional programmes and negotiate space for shared learning.

- A strategic approach is necessary to embed IPE that leads to enhanced integrated working. Formal and integrated structures, such as IPE steering groups and frameworks provide a structured approach to interprofessional education that potentially gives it greater formal recognition and provides a focus for aligning activities.

- The relative pros and cons for integrating IPE into individual modules or developing a bespoke IPE/collaborative curriculum must be judged according to situation. Independent curricula can feel 'bolted on' and reduce the imperative to embed IPE across the whole curricula, but give scope for innovation. Embedding IPE in modules make it part of the norm but it may also become less visible.

- Incorporating IPE into the curriculum at stages throughout the programme allows it to be revisited and acknowledges that not all students are ready to engage with it in their early professional programme. This iterative approach also allows the IPE activities to be interspersed with integrated care placement experience that may help to enhance recognition of its importance for effective patient-centred care. IPE interventions can vary dramatically in length – combining sustained input with short bursts of interaction may enliven IPE.

- Where IPE is a mandatory part of the curriculum it should be assessed on the basis that this sends messages to students about its importance.

- Authenticity is crucial to optimising student engagement in IPL activities. A strong focus for activities around broad common interests is required to make interprofessional learning a positive by-product rather than the focus of activities. Service improvement projects may provide a real-life focus.

- Complex health and social care issues that demand an integrated approach require a suitable pedagogical approach such as case-based, problem-based or scenario-based learning that encourages students to think about the issues holistically.

- Encourage as broad face-to-face interaction with other professional groups as possible. Even brief contact is positive and can be followed up with online activity. Bilateral interaction may prove most beneficial in terms of gaining buy-in for some groups but one-off major IPE events have potential for significant learning and can possibly be more innovative. Explore the potential for inter-university initiatives to enrich IPE especially where on-site interaction is limited and use technology where contact is problematic.

- Actively promote links with social work colleagues with whom links tend to be more tenuous. Be aware of structural barriers and ensure that social work is included in IPE committees, steering groups, revalidation working groups etc.

- Encourage students to form their own IPE groups, to become involved in designing events and evaluating initiatives.

- Finding and naming integrated care placements as such is essential to help students to translate their learning into practice. Ideas of what

constitutes a satisfactory placement need to be revisited and updated. Openness to non-traditional, role-emerging placements can offer contemporary experience of integrated working and whilst these should be balanced with traditional placements they offer students a wider perspective on where they might fit into practice.

- Training of practice educators/mentors should incorporate emphasis on exposing students to integrated working where feasible and interprofessional supervision.

- Explore potential to work more closely with service to swap training opportunities between service and students in a mutually beneficial exchange.

- Explore opportunities for cross-university IPE.

- Explore the training requirements of mentors in order to enable them to optimise exposure, experience and learning of students and qualified staff around the integrated care agenda.

- Explore potential learning opportunities available with Community Education Provider Networks. For example, Aston University had arranged professional experience sessions in primary care through links with their local Community Education Provider Network (CEPN) which provided access to GP surgeries and primary care emergency services including virtual pharmacy and virtual doctor services.

- It is not uncommon for staff to be allocated to IPE teaching and this can be problematic if they do not understand the need for 'learning with from and about' (CAIPE 2002) other professionals. Facilitators and teachers who are initially students' main point of professional reference can be highly influential in encouraging positive interprofessional attitudes and values which should result in a focus on the value of integrated care.

- There is wide recognition that integrated care must feature in future provision. Physicians' Associate programmes, such as those offered by the University of Warwick, University of Worcester and University of Wolverhampton, are seen as, offering a means of promoting new roles within integrated care, and are arguably suited to professionals wishing to expand their scope of practice. The learning from delivering these programmes could be used to inform how integration could be fostered in other programmes.

- Promote the development and use of integrated care placements via the targeted use of nursing, midwifery and allied health professional placement tariff.

- Based on the literature there is a need for more longitudinal studies on integrated care.

Recommendations for Professional and Statutory Regulatory Bodies

- Continue to reinforce IPE as well as updating the language to reflect contemporary practice and to highlight the association between IPE and working within integrated care teams.

- Ensure that revalidation processes pay sufficient attention to the place of IPE and integrated care in the curricula and that this is also reflected in placement provision.

- Review professional regulations with regards to mentorship arrangements to allow for interprofessional mentorship.

- Work with other bodies to ensure consistency of approach to facilitating integrated care, including 'Social Work England', the intended independent body for the regulation of the Social Work profession, from 2018.

- Ensure professional education standards reinforce the importance of IPE within curricula.

Recommendations for Health Education England in the West Midlands

- Continue to promote the need for integrated care as an efficient, effective and when managed well, a satisfying mode of delivering care to both service user and professional.

- Encourage statutory and professional bodies to work across boundaries making greater effort to integrate social work.

- Promote the provision of integrated care placements to ensure that the new workforce is fit for practice.

- Ensure involvement of front-line workers in the design of integrated care projects.

- Encourage mentorship across professions – to align with the recommendation that PSB review professional regulations with regards to mentorship arrangements to allow for interprofessional mentorship.

- Based on the literature there is a need for more longitudinal studies on integrated care

12. Limitations

This report gives a snapshot of education and training for the current and future workforce across the West Midlands region of the UK with the aim of promoting integrated care. Whilst not generalisable the findings are likely to be transferrable nationally, and in some cases, internationally. The integrated services included in the study form a very small sample in comparison with the number of services operating and whilst the project team attempted to include as diverse a sample as possible there is a predominance of community services.

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Appendices

Appendix 1 HEIs and their major provision

Appendix 2 Sample of Nine integrated Care teams

Appendix 3 HEI Survey

Appendix 4 Interview Schedule for Practice Sites, PIS and Consent Form

Appendix 5 Ethical approval

Appendix 6 Review methods

Appendix 7 Review of Papers related to Existing Workforce

Appendix 8 Review of Papers related to Future Workforce

Appendix 9 Service Improvement Module

Appendix 1 HEIs and their major provision

	Adult Nursing	Audiology	Biomedical Sciences	Child and Young People Nursing	Clinical Psychology	Dentistry	Dental Hygiene Therapy	Diagnostic Radiography	Dietetics	Learning Disability Nursing	Medicine	Mental Health Nursing	Midwifery	Occupational Therapist	Operating Department Practitioners	Optometry	Physician Associate	Paramedic Science	Pharmacy	Physiotherapists	Podiatry	Radiotherapy	Speech and Language Therapy	Social Work
Aston University		√	√								√ 2018					√			√					
Birmingham City University	√		√ 2017	√				√		√		√	√	√ MSC 2018	√			√		√ MSC 2018		√	√	√
University of Birmingham	√		√	√	√	√	√			√		√					√		√	√ + MSc				√
Coventry University	√		√	√	√				√	√		√	√	√	√			√		√				√
Keele University	√		√	√						√	√	√	√						√	√				√
Staffordshire University	√		√	√	√							√	√		√ Dip BSc 2017			√						√
University of Warwick			√								√													√
University of Wolverhampton	√		√	√						√		√	√					√		√	√			√
University of Worcester	√		√	√								√	√	√				√		√				√

Appendix 2 Sample of Nine integrated Care teams

Unit	Address
Acorns Children's Hospice Trust	Acorns Children's Hospice Trust Walstead Road Walsall WS5 4LZ
Sandwell Esteem Team	Glebefields Health Centre St Mark's Road Tipton DY4 0SN
ExtraCare Charitable Trust	Earlsdon Park Village Albany Road, Coventry, CV5 6JQ
Feldon Stroke Rehabilitation Unit	South Warwickshire NHS Foundation Trust
Forward Thinking Birmingham	Forward Thinking Birmingham 3rd Floor, 1 Printing House Street, Birmingham, B4 6NH
Home First	South Warwickshire NHS Foundation Trust
Integrated Care Services (iCares)	Sandwell and West Birmingham Hospitals NHS Trust
Intensive Support Team Coventry and Warwickshire Transforming Care Partnership	Woodend Healthcare, 67a Deedmore Road, Woodend Coventry, CV2 1XA
Shropshire Transforming Care Partnership and Taking Part	Telford & Wrekin Council 4th Floor, A Wing Darby House Lawn Central Telford Shropshire TF3 4JA

Appendix 3 HEI Survey

An investigation to understand and evaluate the best ways to educate and promote integrated working across the health and care sectors

Survey of training programmes in HEIs across the West Midlands.

We would like to invite you to participate in a study which will inform Health Education England about how integrated care is taught and practiced across the West Midlands. **For the purpose of this project integrated care is defined as 'high quality collaborative and coordinated services providing person-centred care.'**

A range of factors have been identified as central to promoting good integrated care in the literature. These include **patient/client centredness, effective communication, role awareness, leadership, partnership working/collaboration, teamwork and decision-making.**

You are invited to participate because you deliver health care training within higher education in the West Midlands. All (Higher Education Institutions (HEIs) in the West Midlands are taking part in this evaluation. If there is anything that is not clear, or if you have any questions, please contact Arinola Adefila by e mail arinola.adefila@coventry.ac.uk or Tel: 02477658292.

What is the purpose of the investigation?

The aim of the study is to develop a framework for understanding current progress in educating the future workforce to provide integrated care, and how and where training of the existing workforce occurs across the West Midlands. We will:

- Map elements of pre and post-registration curricula, and CPD provision, including theory, practice and placements, promoting integrated working skills, attitudes and attributes for impact on integrated care and the range of teaching and learning approaches adopted.
- Identify examples of best practice, and how education is implemented, in integrated working between health and care settings in the West Midlands.

The research report will enable Health Education England, West Midlands to strategically influence the future of training and practice in the region in line with current NHS policy.

What do you have to do?

Participate in a telephone interview.

What will happen if I don't want to continue participating in the study?

You will be free to withdraw your participation at any time.

What will happen to the data we gather?

Where feasible, information collected from HEIs will be confidential and anonymised. Individuals will not be identified, however, as this is work for Health Education England, the compendium and mapping report will reveal the HEIs involved in the study. The data collated will be used to write a report for Health Education England, West Midlands and may be included in conference presentations and academic papers. The anonymised evaluation data will be kept by the Principal Investigator in a locked drawer in a locked office for a period of 5 years, at which time it will be destroyed.

Who is funding the study?

The study is funded by Health Education England in the West Midlands. The final report will be presented to and used by the organisation.

Consent

You should discuss any concerns you have about this project with the project team or ethics chair at Coventry University. To contact the ethics team, you can email ethics.hls@coventry.ac.uk or contact Laura Strumidlo at aa9039@coventry.ac.uk or write to Laura Strumidlo, Faculty Research and Governance Lead, Richard Crossman Building, Faculty of Health and Life Sciences, Coventry University, Coventry, CV1 5FB

Please tick this box to give your consent ☐

Many thanks for agreeing to take part in the Integrated Care Transformation Theme Project investigating the best ways to educate and promote integrated working.

Thank you

SURVEY – INSTITUTION - NAME

SECTION A: Overview

1. Which of the three definitions of integrated care below most closely reflects your institution's working definition of integrated care?

    a. Integrated care is an organising principle for care delivery that aims to improve patient care and experience through improved coordination (Nuffield Trust)

b. I can plan my care with people who work together to understand me and my carer(s), allowing me control, and bringing together services to achieve the outcomes to me (AgeUK).

c. Care which is intended to improve the quality of care for individual patients, service users and carers by ensuring that services are well co-ordinated around their needs (Kings Fund).

2. Do you have an Integrated Curriculum strategy at your University?

3. Are all of the Health and Social Care programmes in your institution involved?

4. If you do not have an integrated care strategy how is integrated care addressed?

5. What do you consider to be the challenges, if any, in promoting integrated care education at your institution?

6. What factors do you feel help to support the promotion of integrated care education in your institution?

SECTION B. General Course Information (tick all provided by the institution)

Programme	Provided	Inclusion of IC/IPE learning outcomes	Other Professions involved
EXAMPLE Adult nursing	√	√	PT/OT/SALT/OPD
Adult Nursing Degree			
Adult Nursing Masters			
Child Nursing Degree			
Learning Disabilities Degree			
Mental Health Nursing Degree			
Midwifery 3 years			
Midwifery 18 months			
Clinical Psychology			
Diagnostic Radiography			
Therapeutic Radiotherapy			
SALT			
SALT PT			
ODP - Diploma			
OPD degree			
Occupational Therapy F/T			
Occupational Therapy P/T			
Physiotherapy BSc			
Physiotherapy MSc (Pre-reg)			
Dietetics			
Podiatry			
Health Visiting			

District Nurses			
School nurses			
Community Mental Health Nursing			
Community Practice Nursing			
Dentistry			
Dental Hygiene Therapy			
Dental Nursing			
Paramedics – WMAS – NOT COMMISSIONED			
Technician-Paramedics - WMAS			
Child Psychotherapy			
Pre-registration Pharmacy			
Pharmacy Technicians			
Pharmacy Clinical Diploma			
High Intensity (IAPT)			
PWP (IAPT)			
IPT (IAPT)			
Supervision (IAPT)			
DIT (IAPT)			
Advance Clinical Practice			
Fundamentals in General Practice Nursing			
Audiology			
Medicine			
Social Work			
Biomedical Sciences			
Optometry			

SECTION C: Pre-registration Training

1a. Is readiness/awareness of integrated care considered within the recruitment strategy? Open response.

1b. If so, are students made aware of the inclusion of integrated care? How is this done? Open response

Course curriculum

2. Please map where integrated care is taught within the curricula for each course?

Programme	Yr 1	Yr 2	Yr3	Yr4	Yr 5	Length of intervention hrs/days/weeks					Most used mode of delivery	Assessment mode for IC/IPE competencies
EXAMPLE Adult nursing	√	√			√	15wk	2days	0	0	2 days	Lecture, use of scenarios, face-to-face small group work, online discussion, independent study, placement, other?	N/A Placement Written OSCE etc
Adult Nursing Degree												
Adult Nursing Masters												
Child Nursing Degree												
Learning Disabilities Degree												
Mental Health Degree												
Midwifery 3 years												
Midwifery 18 months												
Clinical Psychology												

Diagnostic Radiography													
Therapeutic Radiotherapy													
SALT													
SALT PT													
ODP - Diploma													
OPD degree													
Occupational Therapy F/T													
Occupational Therapy P/T													
Physiotherapy BSc													
Physiotherapy MSc													
Dietetics													
Podiatry													
Health Visiting													
District Nurses													
School nurses													
Community Mental Health Nursing													
Community Practice Nursing													
Dentistry													
Dental Hygiene Therapy													
Dental Nursing													
Paramedics – WMAS – NOT COMMISSIONED													
Technician-Paramedics - WMAS													
Child Psychotherapy													
Pre-registration Pharmacy													
Pharmacy Technicians													

Pharmacy Clinical Diploma												
High Intensity (IAPT)												
PWP (IAPT)												
IPT (IAPT)												
Supervision (IAPT)												
DIT (IAPT)												
Advance clinical Practice												
Fundamentals in General Practice Nursing												
Audiology												
Medicine												
Social Work												
Biomedical Sciences												
Optometry												

1. Of the knowledge, skills, attitudes and values identified as central to integrated working in the literature, which of these, or others, are actively promoted within your provision?

	How promoted?
Patient/client centeredness	
Effective communication	
Role awareness	
Collaborative Leadership	
Partnership working/collaboration	

Teamwork	
Decision-making	
Others	

2. To what extent are students on standard profession-specific placements likely to gain integrated care experience? Open response

3. Are there specific integrated care learning outcomes associated with profession-specific placements? Open response

4. Are there any specific integrated care placements associated with the course?   What do these placements involve?

5. In what ways do you feel the integrated care education provided at your institution will hinder your graduates to be practice ready for roles in integrated care settings? Examples?

6. In what ways do you feel the integrated care education provided at your institution will help your graduates to be practice ready for roles in integrated care settings? Examples?

7. Are there any areas of good practice in integrated care or IPE of which you are aware? What aspects do you see as transforming care?

10. Any other comments.

Course or module	Other Professions involved	Capabilities/competencies e.g. teamwork, leadership etc.	Type of delivery	Assessment mode for IC/IPE capabilities /competencies

1. **SECTION C: Post registration Courses and or Modules :** Please list CPD Provision with IC/IPE Learning outcomes and complete ta

1. What consideration has been given to the need to promote integrated care when developing your portfolio of CPD courses/ modules?

2. Have any of your courses or modules been developed specifically with integrated care in mind? If so explain briefly.

3. Are you planning to develop additional courses or modules with an integrated care focus? If so, is this due to demand from practice?

4. Do potential course participants or their sponsors/employers actively seek information on the inclusion of integrated care training?

5. Any other comments

Appendix 4 Interview Schedule for Practice Sites, PIS and Consent Form

Interview Schedules for Practice Sites

Description of the integrated care service:

Setting: Community/Primary Care/Acute/Rehab/Other
When was the service established?
Can you tell me the size of the team?
Can you tell me the mix of Health and social care staff?
Do you know the range of length of service of staff in the
team? [……………………………..]

Integrated Care Teams Leadership Perspective

- Which statement do you think best describes integrated care in your practice?(Give definitions of IC on separate piece of paper)

- What are you attitudes and beliefs about providing health services as an integrated team?

- Tell me what you trying to achieve in your team? (Aims, goals?)

- Tell me how often you meet or try to meet as a team (explore difference between try and do meet, (e.g. formal and informal, daily, weekly etc.)

- Tell me who is able to make referrals within the team? And to whom?

- Tell me what is/are the most effective aspect(s) of working in an integrated care team/service? (example)

- Tell me what is/are the most challenging aspect(s) of working in an integrated team/service? (example)

- Tell me about any differences in leading an integrated care team compared to leading a uniprofessional team? (ask for examples)

- Tell me about any similarities in leading an integrated care team compared to leading a uniprofessional team? (ask for examples)

- What preparation did you have/ or were you given for this role?

- What are the challenges in developing your team? (resistant staff, boundaries, cost etc.)

- How do you monitor how well the team is working?

- How do you influence the team to take it forward?

Recruitment

- How are people recruited to the team?

- If you are involved in recruitment what do you look for?

- Were any new posts created? (who filled these - existing staff or new?

- How are new staff inducted?

- Tell me about any ongoing training and or mentorship? If mentorship, who mentors? (Same profession or purposely different?)

- Do team members have clinical supervision? If so who supervises?

- What resources are available to support specific integrated care CPD activities?

- Do you find that there is relevant CPD training offered by institutions within the West Midlands?

- Does training tend to be in-house or sought from within HE?

- Is there a need for any training that currently is not available?

- How well prepared to join the service do you find new starters? (Especially newly qualified?)

- Do you offer student placements? Which professions?

- If so, are these placement identified as integrated care placements?

- Are there any strategies for sharing good practice across integrated care teams in the region?

- If you were asked you to draw your team, maybe in three circles, so the middle circle would be the core team, the next circle would be those that you refer or work with closely on a regular basis, and then an outer circle of those you would very occasional work or refer to. Would you be able to do that?

- Is there anything else that you would like to add to that you think is relevant to the study, maybe things I haven't asked you?

Newest Team Member Perspective

- What is your team called?

- Can you give a description of the team's work?

- How long have you been part of this integrated care team?

- How long have you been qualified?

- What experience did you have before?

- How were you recruited?

- Did you choose to work in the team or were you allocated to it? If you chose why was it attractive?

- Did you have an induction?

    - How did that work?

- Did your pre-registration training have any particular focus on integrated care?

- Have you had any training since joining the team?

- Are you or have you been mentored within the team? If so, who mentors you?

- Do you have clinical supervision? If so, with whom?

- Which statement do you think best describes integrated care in your practice?

- What are your attitudes and beliefs about providing health services as an integrated team?

- Tell me about the benefits of working in an integrated team? (ask for an example – e.g. a patient no names)

- Tell me about the challenges of working in an integrated team? (Ask for example – use prompts e.g. time constraints, workload, and communication?)

- What capabilities you think are needed to work effectively as part of an integrated care team?

- Give a specific example to illustrate how the team works.

- Where do your referrals come from?

- Is there need for any training that currently is not available?

- If you were asked you to draw your team, maybe in three circles, so the middle circle would be the core team, the next circle would be those that you refer or work with closely on a regular basis, and then an outer circle of those you would very occasional work or refer to. Would you be able to do that?

- Who do you refer to regularly and work with regularly and then who you may refer to or work with only occasionally.

- Is there anything else that you would like to add to that you think is relevant to the study, maybe things I haven't asked you?

Well Established Team Member Perspective

- Can you give a description of the team's work?

- Do you have any social care staff on your team?

- Tell me how long you have been qualified?

- What previous experience did you have?

- How long have you been part of this integrated care team?

- How were you recruited?

- Did you choose to work in the team or were you allocated to it?

- If you chose why was it attractive?

- How were you inducted?

- Have you had any training since joining the team?

- Are you or have you been mentored within the team? If so, who mentors you?

- Do you have clinical supervision? If so, with whom?

- Here are three statements describing different integrated care definitions. Do you think any of them fit your service?

- What are your attitudes and beliefs about providing health services as an integrated team?

- Tell me about the benefits of working in an integrated team? (ask for an example)

- Tell me about the challenges of working in an integrated team? (Ask for example – use prompts e.g. time constraints, workload and communication?)

- How does working in the integrated care team differ from working in a uni-professional team?

- What capabilities do you think are needed to work effectively as part of an integrated care team?

- Give a specific example to illustrate how the team works.

- Is there need for any training that currently is not available?

  - If you were asked you to draw your team, maybe in three circles, so the middle circle would be the core team, the next circle would be those that you refer or work with closely on a regular basis, and then an outer circle of those you would very occasional work or refer to. Would you be able to do that?

- Is there anything you'd like to add that I haven't asked you about, that you think is relevant?

Definitions of Integrated Care

1. Integrated care is an organising principle for care delivery that aims to improve patient care and experience through improved coordination.

2. I can plan my care with people who work together to understand me and my carer(s), allowing me control, and bringing together services to achieve the outcomes to me.

3. Care which is intended to improve the quality of care for individual patients, service users and carers by ensuring that services are well co-ordinated around their needs.

Participant Information sheet – Integrated Care Staff in Practice

An investigation to understand and evaluate the best ways to educate and promote integrated working across the health and care sectors

We would like to invite you to participate in a study which will inform Health Education England – West Midlands about how integrated care is taught and practiced across the region. This information sheet will explain the purpose of study and how you can participate. If there is anything that is not clear, or if you have any questions, please contact Arinola Adefila by e mail arinola.adefila@coventry.ac.uk or Tel: 02477658292.

What is the purpose of the investigation?

The aim of the study is to develop a framework for understanding current progress in educating the future workforce to provide integrated care, within and across a range of environments, how and where training of the existing workforce occurs, and the extent to which the training is translated into integrated care in practice in the West Midlands. Specifically, we aim to identify examples of best practice in integrated working between health and social care professionals in the West Midlands. The research report will enable Health Education England, West Midlands to strategically influence the future of training and practice in the region in line with current NHS policy.

Two new models for integrating care are proposed in the NHS 5 year forward view (NHS England et al. 2014), they are Multispecialty Community Providers (MCP) and Primary and Acute Care Systems (PACS). Integrated care focuses on the need for services to improve the quality of care for service users, their carers and families, by removing boundaries to receiving coherent person-centered care.

You have been chosen to participate because you work in an integrated care team or have experience of delivering integrated care. We are keen to capture your experiences of how the service in which you work functions and your experiences and knowledge of integrated care practice.

What will the study involve?

As the objective of this study is to investigate contemporary practice in existing integrated care settings we invite you to take part in a semi-structured interview. The study will also involve a review of literature around integrated care and capture the type of training pre-registration students receive.

What will I have to do?

Participants will be required to engage in interviews and provide data on the models of practice you use in your team, its effectiveness and challenges. The interviews will be conducted on site at a convenient time and location on site. They will typically last between 30 mins and one hour.

Benefits and risks of participation

You will be contributing to a significant evaluation that will potentially be used to influence policy and practice. It will also provide you the opportunity to introduce valuable ideas to healthcare education and policies.

Will I be paid for taking part?

You will not be paid for participating in this study. However, you will be making valuable contributions to the training of healthcare professionals and future practice.

What happens at the end of the study?

At the end of the study, we will submit a final report to Health Education England, West Midlands.
.
What if there is a problem?

You should discuss any problems with the project team or ethics chair at Coventry University. You can email ethics.hls@coventry.ac.uk or contact the ethics team, you can email ethics.hls@coventry.ac.uk or contact Laura Strumidlo at aa9039@coventry.ac.uk or write to Laura Strumidlo, Faculty Research and Governance Lead, Richard Crossman Building, Faculty of Health and Life Sciences, Coventry University, Coventry, CV1 5FB

What will happen if I don't want to continue participating in the study?

You will be free to withdraw your participation at any time. It will be helpful if you tell us why, however you are not obliged to.

What will happen to the data we gather?

All of the information collected from the activities will be confidential and will be anonymised. It will be used to write a report for Health Education England, West Midlands and may be included in academic papers. The anonymised evaluation data will be kept in a locked drawer in a locked office for a period of 5 years at which time it will be destroyed.

Who is funding the study?

The study is funded by the Health Education England, West Midlands.

This information sheet is for you to keep.

References

NHS England, Care Quality Commission, Health Education England, monitor, Public Health England, Trust Development Authority (2014) NHS Five Year Forward Plan. Available at https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf

Coventry University

CONSENT FORM: STAFF AT INTEGRATED CENTRES/SITES

Reference Number:

Title of Research Project

An investigation to understand and evaluate the best ways to educate and promote integrated working across the health and care sectors

Name of Researcher   Please tick to confirm

- ➢ I have read the information sheet (Version 1)
  for the above study.

- ➢ I have had the opportunity to ask questions about the
  study, and to discuss it.

- ➢ I understand the purpose of the study and how
  I will be involved.

- ➢ I understand, and accept, that if I take part in the study
  I will honestly commit to partake in the interviews and
  provide relevant data

- ➢ I understand that all information collected in the study
  will be held in confidence and that, if it is presented
  or published, all my personal details will be removed

- ➢ I confirm that I will be taking part in this study of
  my own free will. I understand that I have the right to change my
  mind about participating in the study during the project for any
  reason without having to give an explanation.
  This will not affect my legal rights

I agree to take part in the above research study

Signed _____ Date: _____

Signed (person taking consent) _____ Date: _____

Researcher (if different to above) _____ Date: _____

*1 copy for participant, 1 copy for researcher.

Appendix 5 Ethical Approval

Coventry University

CU_logo_vvsml

Certificate of Ethical Approval

Applicant:

Arinola Adefila

Project Title:

An investigation to understand and evaluate the best ways to educate and promote integrated working across the health and care sectors

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

19 January 2017

Project Reference Number:

P49779

Appendix 6 Review Methods

Bibliographic database searches were conducted on CINAHL, Embase, Medline, Scopus and The Cochrane database. A further 7 documents were extracted from government, organisational websites. These included:

Barr, H. Helme, M., Low, H. and Reeves, S. (2016). Interprofessional Education Guidelines. CAIPE, Fareham.

Healthcare Workforce Skills and Competencies for an Ageing Society Age UK 15 September 2010
file:///F:/papers2/healthcare_workforce_skills_and_competencies_for_an_agei ng_society_2010.pdf

The Willis Commission Oral evidence themes July 2012
file:///F:/papers2/Oral_Evidence_Themes.pdf

Willis Commission Written Evidence Submission Summary August 2012
file:///F:/papers2/Willis_Commission_Written_Evidence_Submission_Summar y_Aug_2012.pdf

Think Integration, think workforce: three steps to workforce integration. Centre for Workforce Intelligence.

Health Education West Midlands Older Adult Workforce Integration Programme: Scoping Best Practice in Older Adult and Integrated Care. April 2014. www.hee.nhs.uk

WHO (2010) Framework for action on interprofessional education and collaborative practice http://www.who.int/hrh/resources/framework_action/en/

The search strategy used search terms identified by the research team (Table 1). Keywords which identified large numbers of papers were refined further by addition of words specific to the questions - effectiveness/efficacy/success which are shown in Table 2. Organisational and government websites were also searched and bibliographies scanned to identify relevant papers.

Search restrictions were applied to include: only peer reviewed papers, published between 2006-2016, in English Language, and with abstracts

Table 1: Broad Search Terms

Integrated care
Collaborative teams
Interprofessional Collaboration
Interprofessional working
Interprofessionalism
Interprofessional teams
Interprofessional training
Collaborative care
Collaborative delivery

| Interprofessional education |
| Interprofessional learning |
| Collaborative learning and Integrated care |
| Collaborative curricula |
| Integrated care training |

Table 2: Search Terms refined

KEYWORD/ IN ABSTRACT	
Limit to Med, Health Professions Limit to publications between 20016 – present	
Interprofessional education	AND Effective AND skills AND attitudes AND attributes AND values
Interprofessional learning	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative learning	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative Education	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative curricula	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative curriculum	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative learning AND/OR integrated care	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative Education OR integrated care	AND Effective AND skills AND attitudes AND attributes AND values
Collaborative training and integrated care	AND Effective AND skills AND attitudes AND attributes AND values
Integrated care	AND Effective AND skills AND attitudes AND attributes AND values
Integrated care training	AND Effective AND skills AND attitudes AND attributes AND values
	TOTAL 1,379

Appendix 7 Review of Papers related to Existing Workforce

EXISTING WORKFORCE					
Country	Study	Design/Aim	Characteristics/features of training	Participants	Key Findings
UK	Andrew J; Taylor C (2012) Follow-up evaluation of a course to develop communication and relationship skills for palliative care. *International Journal of Palliative Nursing,* Sep 1; 18(9): 457-63	Evaluation of an interprofessional experiential course aimed at exploring the factors that support or hinder the sustainable integration of skills and learning from the course into clinical practice.	3 day experiential IP communication skills course focussed on palliative and end of life care. Course developed using evidence based guidance produced by the West Scotland Cancer Network and NHS Education for Scotland.	Involved health and social care professionals working in acute and community settings with people with long term conditions and palliative care needs.	Showed increased self-efficacy across a range of communication issues related to palliative care that was sustained 6-8 weeks after the first 2 study days. Impact on practice = comfort and confidence in skills and practice in communication - awareness of reduced blocking behaviour and improved patient centred approaches assessment, improved active listening skills and improved psychological care. More proactive and confident to engage in difficult/complex issues such as treatment decision making in palliative care withholding/withdrawing intervention. Course had empowered participants to take responsibility for facilitating communication or leading the team in palliative care discussions. Motivated to learn - refresh and update skills, challenge themselves, re-examine their attitudes because they lacked confidence or struggled with issues. Influence of peer or team support on reflective practice. Role modelling and teaching others. Time however hindered communication in practice - relating to clinical time, demands and priorities.
Holland	Atreja A; Mehta NB Jain AK Harris C Ishwaran H Avital M Fishleder AJ (2008) Satisfaction with web-based training in an integrated healthcare delivery network: do age, education, computer skills and attitudes matter? *BMC Medical Education* [BMC Med Educ] Oct 15; Vol. Pp48	Web based learning evaluation delivered to diverse healthcare workforce. 6 hospital systems in an integrated delivery network. Training on Health Information Portability and Accountability Act (HIPAA) privacy rule.	Use of real life case scenarios which matched learners' needs and experience. Use of multiple choice questions, drag and drop format, hotspots were incorporated in the design of the programme	17891 healthcare professionals from a wide variety of healthcare workforce, all ages, education levels, computer skills and attitudes to technology.	Web based training perceived as better over traditional instruction training. Age, education level or prior computer experience did not affect participants satisfaction with the course
UK	Bailey C, Paice E. (2016). North West London Whole systems Integrated Care: a case study.	Case study of the development and initial delivery of new person centred models of care tool kit	Developed an Integrated Care Toolkit for the delivery of integrated care in NWL. Developed a 'Change Academy which brings teams together alongside service users to innovate new ways of	Not specified	Local implementation revealed need for more detailed guidance about financial flows, governance and shared data.

	International Journal of Integrated Care 16(6) :A246,pp1-8	focussing initially on people aged over 65.	working and to break down organisational and professional barriers and ensure patient is at the centre of their care. System wide transformation takes time because new models of care require considerable time to embed.		Importance of co-design, building a strong vision and framework grounded in the needs of service user provides a strong foundation for transformation but takes time and can be challenging, necessary to embed ownership locally to make changes relevant and sustainable. Integrated data is critical to integrated care- shared data is necessary for both the commissioning and delivery of effective person-centred integrated care.
Canada	Bajnok, Irmajean; Puddester, Derek; Macdonald, Colla J.; Archibald, Douglas; Kuhl, David (2012) Building positive relationships in healthcare: Evaluation of the teams of interprofessional staff interprofessional education program.) . *Contemporary Nurse: A Journal for the Australian Nursing Profession* (CONTEMP NURSE), Aug; 42(1): 76-89. (14p)	Evaluation of whether interprofessional team development for practicing healthcare professionals makes a difference in team functioning, team member satisfaction, ability to work effectively both individually and as a team and improved patient wellbeing.	Three, two-day face-to-face inter professional educational (IPE) sessions (July, September and February) over an 8-month period aimed at increasing learners knowledge and skills related to collaborative practice, to ensure individual attitudes enhanced team effectiveness, to improve inter professional communication skills and practice and to develop functioning health care teams to improve clinical practice, job satisfaction, patient quality and safety and quality of work life. Training delivered to 5 multi professional teams in acute, community and rehabilitation settings. Sessions were given in their own teams and were inter professional and covered topics on appreciative enquiry, conflict resolution, and critical conversation methodology, cultivating team work culture, having difficult conversations and how to develop a team agreement. Opportunities for formal and informal teambuilding and networking were included. The project design included specific learning session as well as application time back in the workplace and was based on the qualitative improvement collaborative methodology.	Nurses, physicians, physiotherapists' occupational therapist, dietetics, social workers.	Biggest gains from involvement in this programme were: an increased awareness of IPP CPD education; the roles and responsibilities of their team members; effective team functioning; and limitations and barriers their team members face. They made changes in their personal and team practice – changes included meeting regularly, improving manuals, using team agreements, running more efficient and effective team meetings, learning how to quickly touch base as a team in the busy workplace and taking more initiatives in meetings.. communication procedures had improved, how they had a gained a better understanding of each other roles and responsibilities, developed strategies and mechanisms that resulted in improving the workplace environment and patient care programmes need to be engaging, reflect the actual and ongoing needs of participants, be delivered by credible professionals who understand practice and offer some specific tools to make teamwork more tangible in order to have any effect.
UK	Carpenter J, Barnes D, Dickinson C & Wolfe D. (2006). Outcomes of interprofessional education for Community Health services ibn England: The longitudinal evaluation of a postgraduate programme. *Journal of Interprofessional Care* March; 20(2):145-161	Evaluation of a 2 year part time post grad programme (1 day per week) designed to enable health and social care professionals in England to work together to deliver new community mental health services	Included psychosocial interventions. Modules includes user participation, self-help, assessment, inter professional working in community teams, interagency collaboration, psychosocial interventions such as cognitive behaviour therapy and family therapy. College based with work based assignments	111 students – psychiatric nurses, social workers, occupational therapists, psychologists, and psychiatrist, voluntary sector	Increased confidence in their jobs derived from evidence based and up to date teaching across a range of topics. Increased knowledge and skills in key areas of partnership with users, psychosocial interventions and multidisciplinary team working, significant increase in knowledge of core roles and tasks of other professions and of principles and skills in multidisciplinary team working. Use of psychosocial interventions increased over time.

				workers, service users.	Increase in role conflict over duration of training – suggest demands of the programme on students to change their practice and implement their learning may have increased the difficulties performing their roles. Users felt that students treated them with more respect and understood them and their experience of mental ill health 75% of users considered that the student had worked with other agencies to ensure that their needs were met, their named worker had checked that they had been able to get help the user considered they needed from the services. Again over 75% said that the students has involved them in care planning as much as they wished. However programme users did not improve significantly more than the comparison groups in terms of psychiatric symptoms and mental health.
Australia	Evans, S., Shaw, N., Ward, C., Hayley, A. (2016) "Refreshed…reinforced…reflective": A qualitative exploration of interprofessional education facilitators' own interprofessional learning and collaborative practice. *Journal of Interprofessional Care*, 30 (6), pp. 702-709. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84994071428&doi=10.1080%2f13561820.2016.1223025&partnerID=40&md5=03f6f3be1e59f5b0016efcae97246a7e		Three emergent themes and associated subthemes characterising participants' reflexivity as IPE facilitators: interprofessional learning; professional behaviour change; and collaborative practice expertise.	Sixteen facilitators of an online pre-licensure IPE semi-structured telephone interviews.	Participants experienced interprofessional learning in their role as facilitators, improving their understanding of other professionals' roles, theoretical and empirical knowledge underlying collaborative practice, and the use and value of online communication. Participants also reported having changed several professional behaviours, including improved interprofessional collaboration with colleagues, a change in care plan focus, a less didactic approach to supervising students and staff, and greater enthusiasm impressing the value of collaborative practice on placement students. Participants reported having acquired their prior interprofessional collaboration expertise via professional experience rather than formal learning opportunities and believed access to formal IPE as learners would aid their continuing professional development.
Quebec Canada	Fleury M-J, Perreault M, Grenier G, Imboua A, Brochu S. (2016). Implementing key strategies for successful network integration in the Quebec Substance-Use Disorders Programme. *International Journal of Integrated Care*, 166 (1):7,pp1-18	Identify integration strategies implemented in Quebec substance use disorder networks. 2 regions and 4 local substance use disorder networks.	Training activities identified as cross training - a strategy to enhance collaborative environments by simultaneously training clinicians with expertise in substance use disorders or mental health disorders. Allowing creation of links with people to work and integrate better. Allows for staff exchanges among organisations. Cross training was used to increase knowledge on substance use disorders. Interagency exchange days for case	105 stakeholders (social workers, nurses, psycho educators, directors, programme managers and coordinators)	Majority of respondents viewed cross training on co-occurring disorders as a facilitator to networking and cooperation among clinicians from health and social service centres and the public and certified substance-abuse disorders treatment centres who were involved in substance use disorders and mental health disorders. Cross training also facilitated the referral process between programmes, supporting client follow-up and the

			discussions especially for dual diagnosis to improve the effectiveness of interventions and the development of an integrated system of care for this clientele. Also basic training was offered to primary care workers on assessment tools (1st session), on motivational approach (2nd session).	from 4 local substance use disorder networks.	development of individualised service plans. Cross training also offered to schools , jails (local partners of the organisations) - respondents reported that such training to teachers and adult education staff had the effect of facilitating referrals to specialised services.
Belgium	Garcia-Lopez M, Criel B, Pirard M, Horlberger A, Jiang L. (2016). An experience in training international health professionals in people centred care: the imperative of bridging health and social perspectives. *International Journal of Integrated Care* 16(6):A144,pp1-8	Description of a 4 week course (situated in Masters programme) to address training gap around people centred care and integrated health and social care	Training included concepts and models pertaining to the analysis, planning, organisation and evaluation of local health systems and their interactions with social services. Use of adult learning approach and participatory approach -use of interactive lectures, critical reading of scientific papers, real life case studies. Students also are able to observe process of people centred care in first line health services and to interview key stakeholders -e.g. nurses, doctors, social workers and psychologists.	40 experienced health professionals from Africa, Asia, Latin America and Europe	Following training most participants understood the comprehensive and systemic characteristics of people centred care and integrated health care and of the importance of including social sector when organising health services at local level.
Canada	Halabisky B; Humbert J; Stodel EJ; MacDonald CJ; Chambers LW; Doucette S; Dalziel WB; Conklin J (2010) eLearning, knowledge brokering, and nursing: strengthening collaborative practice in long-term care. (*CIN Comput Inform Nurs),* Sep-Oct; 28(5): 264-273.	'Working Together' E learning for training in Collaborative practice delivered in modules x 8	7 essential elements of collaborative practice (Way et al 2001) cooperation, assertiveness, responsibility/ accountability, autonomy, communication, coordination, mutual trust and respect. Each module has a text based information, online activities, audio clips, video clips, worksheets. Meet face to face x 4 times with team to complete a group assignment.	Caregivers in long-term care	Training in collaborative practice resulted in change in knowledge but not necessarily change in behaviour because of lack of interventions that facilitate the use of new knowledge and skills in the workplace setting. Traditional learning methods are not meeting their needs of providers. E learning can be effective mode of educating providers of LTC. Learners' evaluation showed significantly more confidence, increased communication, increased understanding of roles and responsibilities, working in teams allowed learning from each other. Increased levels of interprofessional collaboration but quantitative findings showed no change in learner's attitudes regarding collaborative practice Nurses were identified as team leaders because of their pivotal role in the long-term care home and collaboration with all patient care providers Nurses are ideal as knowledge brokers for the collaborative practice team.
UK	Hammick M, Freeth D, Koppel I, Reeves S and Barr H (2007) A best evidence systematic review of interprofessional education: BEME Guide no 9. *Medical Teacher* 2007;29:735-751	Systematic review. 6 of the 21 identified papers were continuing professional development. 5 of these were all practice based and involved Quality improvement. 1 was a residential workshop.	Mainly practice based and involved Quality improvement. Authenticity and customisation of IPE are important mechanisms for positive outcomes of IPE. Formal educational initiatives with at least 2 different professional groups aimed at improving care and learning with, from and about each other. CPD occurred in neonatal intensive care, primary	Various	Coaching session were insufficient to sustain practice changes. Strong ongoing coaching relationship with practice teams was essential to the teams' commitment to practice change. Need to appreciate differences between urban and rural health care sites - urban practice teams consisted of different professionals who were isolated from

			care (cardiovascular disease) emergency departments, palliative care, chlamydial screening, and primary care preventative services.		each other impacting on opportunities to collaborate - rural teams the team members knew each well. Practice teams identified the necessity of having all team members attend the training and coaching sessions to receive the same message.
UK	Howarth M, Holland K, Grant MJ. (2006) Education needs for integrated care: a literature review *Journal of Advanced Nursing* 56(2) 144-156	Systematic literature review to identify the education needs of the workforce within primary care to promote the effective delivery of integrated health and social care services.	Health needs assessment to identify local needs, creative thinking about working, organizational boundaries, and strong links with national priorities. Need to improve coordination hence employment of care coordinators. Details of delivery of training are not given in the review - education needs are however highlighted. Understanding and acknowledgement of each workforce role is a key attribute to the delivery of successful integration and collaborative practice. Workforce development should take account of the need for education at all levels of the organisation. .Partnership and collaboration between HEI and health and social care organisations are essential to ensure a skilled and knowledgeable nursing workforce.	health professionals, social care professionals and carers, admin staff	6 key themes identified from literature review as education needs of the workforce within primary care: team working, communication, role awareness, professional and personal development, practice development, leadership and partnership working. Require supportive infrastructure, Need to develop specialist skills and ability of staff to work across organizations and professional boundaries, need to develop good team working skills. Team working strongly linked to patient safety. Team working, resource and knowledge management, decision making in client care. Role negotiation in team removes professional tribalism and turf war issues. Team values individual roles and commitment to team objectives.. Respect for other team members and awareness of roles supported by good communication and attributes thought to play a pivotal role in the management of collaboration. Professional need to be aware of other roles and demonstrate understanding of different responsibilities. Sharing of case notes VIP for successful integration. Partnership working can only be achieved by organization that exhibit – joint goals, highly connected communities, which show little concern about reciprocation and high degrees of mutual respect and trust. Equal status.
USA	Ladden MD, Bednash G, Steven DP, Moore GT. (2006). Educating interprofessional learners for quality, safety and systems improvement. *Journal of Interprofessional Care* October;20(5):497-505	Description of Achieving Competence Today (ACT) an interprofessional education programme for quality, safety and health systems improvement.	Four-module active learning course during which learners from different disciplines work together to develop a Quality Improvement Project to address a quality or safety problem in their own practice system.	More than 350 learners' have worked together in teams to develop a quality improvement project to address a safety or quality problem in their	Mutually reinforcing benefit created by bringing quality, safety and collaboration together as educational objectives and as real experiences in health professional curricula. In the process of trying to solve the quality or safety problem, professionals discovered that collaboration with other disciplines was necessary. Focusing attention on quality and safety starts interprofessional conversations.

					own practice system.
Canada	Lasater,K, Cotrell, V, McKenzie G, Simonson W, Morgrove M, Long E, Eckstrom E. (2016) Collaborative falls prevention: Interprofessional team formation, implementation, and evaluation. *Journal of Continuing Education in Nursing*, 47 (12), pp. 545-550.	Descriptive paper of an IP team used a cross training approach to teach each other. 25 teams coached by an IP team over a year. IP team consisted of 4 professions - nursing, medicine, social work and pharmacy. Aim was to address fall prevention in older adults.	Training sessions were interactive, evidence based sessions, individualized team coaching. IP team used cross training approach to teach each other. They taught and coached IP teams from variety of community practice settings, training was 4 hours long All had equal responsibility, All had equal value, All had equal contributions to the team. Training topics consisted of Basic screening for falls, Vit D supplementation, Medication review and education, Exercise especially tai chi, Environmental assessment. Cross training: Pharmacists teaching orthostatics, SW teaching basic info about high risk medications. Team also strengthened skills in motivational interviewing. Team leader identified in each group – team monitored systematically the team progress. Importance of appreciating differences between different settings.	Various	Coaching session were insufficient to sustain practice changes. Strong ongoing coaching relationship with practice teams was essential to the teams' commitment to practice change. Need to appreciate differences between urban and rural health care sites - urban practice teams consisted of different professionals who were isolated from each other impacting on opportunities to collaborate - rural teams the team members knew each well. Practice teams identified the necessity of having all team members attend the training and coaching sessions to receive the same message.
Spain	Limon E, Blay C, Burdoy E, Ma Pepio J, Carrillo R, Lozano J. (2016). Training for caring complex health needs in the community: the impact of the synergy between top and bottom. *International Journal of Integrated Care* 16(6):A155,pp1-8	Development of an online learning problem based programme - Course Self-related in Primary health Care (CAPPS)	Education tools developed for training of the trainers, multimedia website, and open access to Course self-related in Primary Health care (CAPPS), supportive website to CAPPS.	1005 participants registered to CAAPS. 1248 have accessed web material. 96 sessions carried out at health centres, with 305 students having completed the Training the Trainers course.	Continuing education is seen as a key element of success in implementing new module of integrated care. Cooperation of government and scientific societies can be crucial to achieve high impacts in educational coverage.
Australia	Long J, Cunningham F, Braithwaite J (2013). Bridges, Brokers and boundary spanners in collaborative networks: a systematic review. *BMC Health Services Research* [BMC Health Serv Res] Vol. 13, pp. 158.	Systematic review of brokerage roles 1994-2011 – 21 papers identified of which 3 were in healthcare.	Bridges, brokers and boundary spanners facilitate transactions and the flow of information between people or groups who either have no physical or cognitive access to one another, or alternatively, who have no basis on which to trust each other. The health care sector is a context that is rich in isolated clusters, such as silos and professional "tribes," in need of connectivity. It is a key challenge in health service management to understand, analyse and exploit the role of key	Unknown	Brokers can support the controlled transfer of specialised knowledge between groups, increase cooperation by liaising with people from both sides of the gap, and improve efficiency by introducing "good ideas" from one isolated setting into another. They can increase cooperation by liaising with people from both sides of the gap and improve efficiency by introducing good ideas from one isolated setting into another. BUT Brokers can

			agents who have the capacity to connect disparate groupings in larger systems		become overwhelmed by the role and so need support in order to function optimally. Within healthcare paper brokerage across professional subgroups resulted in better coding performance
USA	Lotrecchiano G. R., McDonald P. L, Lyons, L., Long, T., & Zajicek-Farber, M. (2013) Blended learning: Strengths, challenges, and lessons learned in an interprofessional training program. *Maternal and Child Health Journal, 17*(9), 1725-1734. doi:10.1007/s10995-012-1175-8	Field report on providing a blended learning model leadership education in neurodevelopmental related disabilities (LEND) for an interdisciplinary training programme for health care professionals who care for children with disabilities. Overarching goal of LEND_CN is to promote collaboration within teams and with families, to advocate for appropriate services and to generate efficient and effective intervention models.	2 semester programme aimed at replacing f2f class sessions with online learning activities promoting increased engagement with course maternal, continuous interactions with peers and faculty and contextualised discussion based on daily clinical experiences. To replace f2f class sessions with online learning activities to allow trainees a greater flexibility in scheduling of clinical responsibility and increased opportunity for community engagement. To add an online learning environment allowing participation in the programme by specialists beyond the LEND-CN faculty.	Health care professionals involved with caring for children with disabilities.	Face to face and onsite training, Integrated online interactive instructions, online course work, Community engagement experiences, Onsite training with maternal and child health community engagement opportunities, Adult learning principles, Leadership Online learning to provide increased engagement with course material, continuous interaction with peers and faculty, contextualized discussion based on daily clinical experiences. Increased flexibility in learning around clinical commitments/demands.
Australia	Luetsch K; Rowett D; (2015) Interprofessional communication training: benefits to practicing pharmacists. *International Journal Of Clinical Pharmacy* [Int J Clin Pharm] Oct; Vol. 37 (5), pp. 857-64. *Date of Electronic Publication:* 2015 May 13.	Thematic analysis of interviews and assessed reflective assignment. Exploring clinical pharmacists' experiences and reflections following completion of a semester long learning and practice model situated in a postgraduate pharmacy progamme which introduced them to a framework for successful interprofessional communication.	Offers overview of social marketing with online tutorials, with exercises to elicit features, benefits, barriers and enablers for selected key messages. Session topics include exploring values and beliefs, the concept of needs, identifying needs, barriers to behaviour change, communication theory and influencing techniques. Course involves role play, role modelling, practice based learning and other interactive and reflective activities. Included was also an action learning element consisting of a short visit to a health professional at the end of the course where pharmacists communicated a clinical topic related to safe and effective use of anticoagulants.	Clinical pharmacists, physicians and nurses of 48 hospital and 7 community based pharmacists..	Pharmacists gained confidence and capabilities to successfully conduct a clinical discussion with a health professional. The framework also enhanced their professional identity, credibility and ability to build a collaborative working relationship with other health professionals.
UK	Maslin-Protheroe & S.E, Bennion AE. (2010). Integrated Team working: a literature review. *International Journal of Integrated Care.* Vol 10 29April	Systematic Literature review identifying 16 articles identified	4 articles highlighted training needs.	Not specified	Establishing agreed roles and responsibilities may overcome some of the conflicts that arise for professionals; joint training and cross agency secondments provide an opportunity to engage and invest in personal, professional and organizational development, providing support and training to enable staff to work creatively. Managers who understand their role in managing multi professional teams may be able to reach out beyond the team, to leadership within localities, developing broader partnerships with

				organisations and community groups. For many staff in integrated teams there appears to be a trade-off between job satisfaction and career progressions (Coxon 2005)
UK	Miller R, Mangan C. (2016). Crossing the tracks: continuing inter-professional development in social and primary care. *International Journal of Integrated Care* 16(6):A188,pp1-8	Development and evaluation of a resource to support IP learning and development across adult social care teams and General Practice.	4 hour interactive face to face sessions facilitated by someone external to the services.	General Practices and adult social care teams	Despite professionals working with each other for many years' knowledge of and confidence in working with others was often weak. A multiprofessional development and facilitation team is important in providing the knowledge and insights to engage successfully with an inter-professional group. Current and real views and experiences provided validity to the content of the course. Difficulties recruiting of services to participate in course because of other priorities, changing structures and a lack of recognition of the cultural aspects of joint working alongside those of systems and processes.
Australia	Nicholson C; Jackson C Marley J (2013) A governance model for integrated primary/secondary care for the health-reforming first world - results of a systematic review. *BMC Health Services Research [BMC Health Serv Res]* Dec 20; Vol. 13, pp. 528. *Date of Electronic Publication:* 2013 Dec 20.	Systematic literature review to synthesise the existing published literature on elements of current integrated primary/secondary health care. 21 studies met the inclusion criteria of which 11 studies highlighted continuing professional development supporting the value of joint working.	Training addressed Quality improvement theory, measurement and tools, health care policy and systems and leadership was provided to all clinical staff and leaders. Inter organisation and inter sectoral multidisciplinary professional development underpins integrated clinical care. Clearly identifying roles and responsibilities and using/developing guidelines across the continuum creates a skill set to meet community need, content and incentives to promote continuity of care supporting smooth transitions of patients from one type of care to another. Through interprofessional collaboration and training, providers identified areas where they could share resources and work more effectively with others and enable staff to have expanded clinical roles.	Not identified within review	Important aspects: Joint planning, Integral information communication and technology, Change management, Shared clinical priorities, Incentives, Population focus, Measuring - using data as a quality improvement tool, CPD development supporting the value of joint working, Patient/community engagement Innovation.
USA	O'Donohue WT, Cummings NA, Cummings JL (2009) The unmet educational agenda in integrated care. *Journal Of Clinical Psychology In Medical Settings* [J Clin Psychol Med Settings] Mar; Vol. 16 (1), pp.94.-100	Discussion paper highlighting training needs and delivery model for conventionally trained experienced mental health professional who know speciality care practice but do not know integrated care.	Suggested option to hire consultants to deliver training to postgrad professionals - training lasts 1-2 weeks which includes case consultation and problem solving during implementation. Successful integrated care project delivered in a military treatment facilities. Training consisted of general introduction to integrated care, medical psychology, practicing in a primary care team, psychopharmacology, quality improvement, clinical role plays delivered over 2 weeks.	mental health professionals	military treatment facilities project achieved high patient satisfaction, provider satisfaction, clinical outcomes, improvements in functioning and evidence of increased physician efficiency

Australia	Phillips C, Hall S, Irving M (2016) Impact of interprofessional education about psychological and medical comorbidities on practitioners' knowledge and collaborative practice: Mixed method evaluation of a national program. *BMC Health Services Research*, 16 (1), art. no. 465	Mixed method evaluation of impact of Mind the Gap - a continuing education programme about management of dual illnesses on practitioners' knowledge, use of psychological strategies and collaborative practice.	6 hour module addressing knowledge and skills needed for patients with physical and psychological illnesses. Consisting of a summary of existing research, personal presentation by carer/consumer about their experiences with health sector and managing co-morbid illnesses, reflective activities, practice using assessment tools, management and relapse prevention strategies use of case study. Interprofessional case study discussion and identification of interprofessional referral pathways, basic principles of mindfulness, behavioural activation, motivational interviewing, and solution focused therapy, relaxation strategies and dealing with grief.	837 practitioners from mixed health professional backgrounds through locally facilitated workshops at 45 Australian sites.	Improvement in knowledge and confidence to manage patients with psychological and physical illnesses. Referral networks increased across 7 disciplines, improvements in confidence and knowledge sustained after 3 months post training, doctors reported an increase in the use of motivational interviewing and mindfulness.
USA	Rask KJ, Gitomer RS Spell 3rd N O, Culler SD, Blake SC, Kohler SS, Hawley JN, Bornstein WA. (2011) A two-pronged quality improvement training program for leaders and frontline staff. *Joint Commission Journal On Quality And Patient Safety /Joint Commission Resources* [Jt Comm J Qual Patient Saf] Apr; Vol. 37 (4), pp. 147-53	A 2 pronged Quality Improvement training programme	A 2 day programme leadership for Healthcare Improvement offered to leadership. A 4 month programme of Practical Methods for Healthcare Improvement for frontline staff and middle managers.	5 hospitals and a multispecialty physician practice. 600 employees completed one of the training programmes.	In house broad based QI training programme for multidisciplinary staff across an integrated health system. Leadership course participants showed significant improved knowledge in all content areas (Current state of health care, reporting of quality data and public accountability, distribution and variation, human factors, health care processes, quality and cost, improvement techniques – lean, six sigma etc.) and high comfort levels with QI principles. Practical method participants (factors and roles in highly functioning teams, barriers to ram function, conflict negotiation, successful Process improvement examples, introduction to Lean, Six Sigma etc., health information technology, culture transformation, sustainment) participants were able to initiate and implement QI projects. Significant numbers of completed QI projects were sustained up to 1 year after programme completion.
Canada	Rice K, Zwarenstein M, Gotlib Conn L, Kenaszchuk C, Russell A, Reeves S. (2010) An intervention to improve interprofessional collaboration and communications: A comparative qualitative study. *Journal of Interprofessional Care* July; 24 (4):350-361	Qualitative findings of IP intervention designed to improve communications and collaboration between different professionals in general internal medicine hospital wards. 2 clinical teaching units received intervention, 2 acted as a control.	Brief 1:1 training with most senior ward based professionals within each profession in the ward given by research team, they then acted as ward intervention leaders for their profession. . Leaders were charged with spending 30 mins to explaining the intervention and to answering questions from colleagues - leaders were also responsible for role modelling and promoting the intervention and for offering reinforcement at rounds and IPE meetings. Intervention = introduce oneself to the member(s)	all professions on 2 clinical teaching units	Results - follow through was poor- many front line staff had limited awareness of the intervention. Interactions were similar on control as to intervention wards. Fast paced environment and medical hierarchy were offered as reasons for poor take up.

			of the other profession by name, then state to the other interacting(s) one's own professional role in the team or GIM division and describe it specifically with respect to the care of the patient under discussion, share with the member(s) of the other professions ones unique professional and training specific issues, problems and/or plans relating to the patient under discussion then elicit interaction specific feedback from the other participants in the interaction using prompts such as 'do you have any concerns? Or 'Is there something else I should consider?'		
Canada	Reeves S; Tassone M; Parker K; Wagner SJ; (2012) Interprofessional education: An overview of key developments in the past three decades. *WORK,* Jan 1; 41(3):	Narrative overview of salient IPE literature. Discusses when IPE should be delivered - pre or post registration	Post grad IPE courses were more commonly delivered in the workplaces using interactive learning methods, seminar based discussions, and group problem solving and role play activities. Post registration IPE could be used to support interprofessional collaboration in practice within specific contexts of care. IPE composition can be affected by demands of clinical work can be overcome by offering IPE off site. Sufficient representation of different professionals. IPE more commonly delivered to post grad professionals in the workplace. Post grad IPE less problematic to arrange as fewer logistical/organization barriers but senior faculty support is required to ensure providers have sufficient time and resources to attend the IPE programme and if knowledge gains are to be successfully translated into collaborative practices changes. Case study given of a 5 day immersion and experiential programme where participants attend in organizational teams with a 'capstone' project. Focus on those already teaching students either in university/or within clinical and practice settings. Training on Professional stereotype, Collaborator roles, Navigating through conflict, Group dynamics, IPE facilitation, Change leadership, Assessment and evaluation. Capstone projects are VIP elements of programme since participants can take 'what they are learning in the moment' and integrate it into a real world IPE initiative that will be introduced and sustained in their respective organisations	Wide variety of health professionals - pre and post grad.	IPE programmes developed with focus on faculty and professional development. Organizational leaders are now seeing this training as a valuable way of supporting professional development as a way of moving forward on the agenda of collaborative practice therefore they request customized programmes that are context specific – e.g. mental health, paediatrics. Community of practice – formal venue for organisers, facilitators and leaders to regularly come together to learn, share and network across organisations as they develop, implement and evaluate new IPE programmes and early collaboration initiatives related to patient care. Approach needs to be interactive as this promotes the development of competences required for effective collaboration. Highlights the importance of IPE facilitators, the importance of expert ice breaking sessions, informal learning, importance of an equal mix of members from each professions involved in IPE, use of adult learning principles

| Canada | Reeves S, Zwarenstein M, Goldman J, Barr H, Freeth D, Hammick M, Koppel I (2008). Interprofessional education: effects on professional practice and health care outcomes (Review). *Cochrane Database of Systematic Review,* Issue 1. Art. No.: CD002213. DOI: 10.1002/14651858.CD002213.pub2. | Review paper to assess the effectiveness of IPE interventions compared to education interventions in which the same health and social care professionals learn separately from one another; and to assess the effectiveness of IPE interventions compared to no education intervention | 6 studies found. | Health and social care professionals | IPE improved some ways in how professionals worked together and the care they provided in 4 studies. It improved the working culture in an emergency department and patient satisfaction; decreased errors in an emergency department; improved the management of the care delivered to domestic violence victims; and improved the knowledge and skills of professionals providing care to mental health patients. |

Appendix 8 Review of Papers related to Future Workforce

	Country	Study	Design/Aim	Characteristics/features of training	Participants	Key Findings
1	Canada	Bainbridge, L; Nasmith, L; Orchard, C. and Wood V. 2010. Competencies for Interprofessional Collaboration. Journal of Physical Therapy Education. 24(1): 6-11	This article will describe an emerging Canadian competency framework for interprofessional collaboration that (I) considers previous descriptions of collaborative practice and (2) uses existing literature to support a model for describing competencies for collaborative practice	Interprofessional collaboration in health care is now considered a high priority, as concerns about patient safety, health and human resources shortages, and effective and efficient care have reached epic proportions.	Overview	6 competency domains are identified and described using a competency statement and a set of associated descriptors. Collaborative leadership, dealing with interprofessional conflict, team functioning, and role clarification domains intersect with all of the others, though they are distinct. While patient-centered care and communication are also distinct domains
2	USA	Boland, D.H.; Scott, M.A.; Kim, H.; White, T. and Adams, E. 2016. Interprofessional immersion: Use of Interprofessional Education Collaborative Competencies In Side-By-Side Training of Family Medicine, Pharmacy, Nursing, and Counselling Psychology Trainees. Journal of Interprofessional Care, 30 (6), pp. 739-746.	Healthcare faculty and staff from each profession worked side-by-side to provide integrated training utilising the Interprofessional Education. Trainees were placed into small teams with representatives from each profession; each team observed, learned, and practiced working within teams to provide quality patient care. 1 week long.	Qualitative and quantitative data were collected to identify the effect of the training on trainees' self-reported team skills, as well as the extent to which the trainees learned and utilised the competencies.	Pharmacy, Counselling Psychology, Nursing, and Family Medicine residents	Interprofessional training often takes place after healthcare providers graduate and are practicing in the field. After the week long training, trainees felt more confident in their ability to work within an interprofessional team and more likely to utilise a team-based approach in the future.
3	USA	Cavanaugh, J.T. and Konrad, S.C. 2012. Fostering The Development of Effective Person-Centered Healthcare Communication Skills: An Interprofessional Shared Learning Model. WORK, 41(3): 293-301	To describe the implementation of an interprofessional shared learning model designed to promote the development of person-centered healthcare communication skills. Activities were evaluated through narrative feedback	Students engaged in 3 learning sessions over 2 days. Sessions involved interactive reflective learning, simulated role-modelling with peer assessment, and context-specific practice of communication skills.	Master of social work (MSW) and doctor of physical therapy (DPT) degree students.	Students valued opportunities to learn directly from each other and from healthcare consumers. The interprofessional shared learning model shows promise as an effective method for developing person-centered communication skills.

| 4 | Australia, Canada and UK | Chehade, M.J.; Gill, T.K.; Kopansky-Giles, D.; Schuwirth, L.; Karnon, J.; McLiesh, P.; Alleyne, J. and Woolf, A.D. 2016. Building Multidisciplinary Health Workforce Capacity to Support the Implementation of Integrated, People-centred Models of Care for Musculoskeletal Health. Best Practice and Research: Clinical Rheumatology, 30 (3), pp. 559-584. | Review of MSK services and upskilling the work force to support person centred care | Greater emphasis on educating MSK healthcare workers as effective trainers of peers, students and patients is required. | Review | The need for integrated people-centred models of care

A competent health workforce is required to support the implementation of MSK models of care.
Training should be aligned to define "entrustable professional activities", and include collaborative skills appropriate to integrated and people-centred care and supported by shared education resources.
These healthcare policies require consumer engagement and alignment to social, economic, educational and infrastructure policies to optimise effectiveness and efficiency of implementation.
Funding is required to create employment positions with resources for service delivery and training a fit-for-purpose workforce. |
| 5 | Canada | Delisle, M. Grymonpre, R., Whitley, R. and Wirtzfeld, D. 2016. Crucial Conversations: an Interprofessional Learning Opportunity for Senior Healthcare Students. Journal of Interprofessional Care, 30 (6), pp. 777-786. | Evaluate how clinical errors and preventable deaths can be reduced by fostering IPL | A resource called Crucial Conversations is developed for pre-reg senior healthcare students, as a way to foster interprofessional collaboration, and as a method of empowering students to vocalise their concerns. The attributes of this IPL opportunity were evaluated using the Points for Interprofessional Education Score (PIPES). The University of the West of England Interprofessional Questionnaire was administered before and after the course to assess changes in attitudes towards IPL, relationships, interactions, and teamwork. | Medicine, Pharmacy, Nursing and dentist | In practice, practitioners are not able to challenge others during critical decision-making moments as a result of conflicting opinions and power differentials.
Crucial Conversations strongly attained the principles of interprofessional education on the PIPES instrument.
A total of 38 volunteers completed the 16 hours of training: 15 (39%) medical rehabilitation, 10 (26%) medicine, 7 (18%) pharmacy, 5 (13%) nursing, and 1 (2%) dentistry. Baseline attitude scores were positive for three of the four subscales, all of which improved post-intervention. Interprofessional interactions remained negative possibly due to the lack of IPL opportunities along the learning continuum, the hidden curriculum, as well as the stereotyping and hierarchical structures in today's healthcare environment preventing students from maximising the techniques learned by use of this interprofessional initiative. |
| 6 | Australia, Norway, UK and Sweden | Evans, J., Henderson, A.J. Sun, J. Haugen, H. Myhrer, T. Maryan, C. Ivanow, K.N. Cameron, A.; Johnson, N.W. 2015. The Value of Inter-Professional Education: A Comparative Study of Dental Technology Students' Perceptions Across Four | The study compares DT curricula, and students' attitudes and perceptions regarding collaboration in practice, from four countries. Students (n = 376) were invited to complete an education profile questionnaire, and | Learning together, evaluating effectiveness teaching of team-working skills | Dentists Dental technology students | The ability to function as an effective member of a dental care team is a highly desirable - frequently mandated - attribute of dental technology (DT) graduates. Currently, there is little rigorous examination of how the learning of team-working skills might best be structured in a DT curriculum.
Students given opportunities to engage with others had better perceptions of inter-professional learning (IPL). |

		Countries. British Dental Journal, 218 (8), pp. 481-487.	the standardised measure - the shared learning scale.			Most students believed that team-work and collaborative skills were best acquired by learning together with other dental care professionals Preferably sharing cases for real patients - authentic IPL. Collaboration and team-work needs to be embedded through the whole undergraduate programme.
7	USA	Grapczysnski, C. A; Schuurman, S.; Booth, A. D.; Bambini, D. and Beel-Bates, C. 2015 The Integrated Model for IPE A Design for Preparing Health Professions Students to Work in Interprofessional Teams. Journal of Allied Health, Volume 44, Number 2, (7) pp. 108-114	A model for interprofessional education, the Integrated Model for Interprofessional Education (IMIPE) is used to introduce students in the health professions to the roles and responsibilities of some of the other healthcare professionals with whom they will work in practice.	Findings show that students met or exceeded the minimum competency for the ranking of "developing" for all 6 of the behaviors evaluated. Results also revealed that this half-day extra-curricular IPE event was viewed favourably by health professional students and created a venue whereby students belonging to different health professional programs can enter into discussions and learn about each other's respective roles and responsibilities in patient care.	Students from nursing, occupational therapy, physician assistant studies, and social work	IPE involves designing high-impact learning experiences that engage students in meaningful learning that is collaborative and experiential and can transform students understanding of their own and others' roles in the health care process. The IMIPE is focused on practical knowledge and problem-solving skills. IMIPE enables students to engage with collaborative, experiential, and transformative learning approaches to foster outcomes of communication, critical reflection, teamwork, ethics, and recognition of patient-client needs. These outcomes represent those identified by the World Health Organization and the Interprofessional Education Collaborative Expert Panel. The creation and implementation of short term extracurricular IPE events may be a valuable alternative for healthcare programs that are unable to implement IPE activities due to some of the common barriers impacting the development, implementation, or continuation of IPE opportunities
8	Australia	Hamilton, J. 2011. Two Birds With One Stone: Addressing Interprofessional Education Aims and Objectives in Health Profession Curricula Through Interdisciplinary Cultural Competency Training. Medical Teacher, 33 (4), pp. e199-e203.	Teaching IPE and cultural competency to groups of students	Exploring how IPE could be taught effectively	Multi	There are a range of obstacles to development of effective IPE programmes even though IPE is viewed as essential. Differing health professional cultures and socialisation processes have been identified as two potential barriers. Paper suggests IPE should be taught alongside intercultural competency In the course of acquiring values, attitudes and skills consistent with a culturally competent practitioner, students may simultaneously develop a capacity to apply these same skills and attributes to their relationships with students (and future colleagues) from other health professions. CC training delivered early in undergraduate years may be an effective vehicle for meeting IPE aims and objectives, and examining an example of this in practice. This article suggests that interdisciplinary programmes developed to jointly meet CC and IPE aims and objectives may provide a platform for fostering interprofessional tolerance, promoting shared values and

						discouraging the formation of interprofessional barriers as students are socialised into their professional cultures.
9	UK	Howarth, M; Holland, K and Grant, M.J. 2006. Education needs for integrated care: A literature review Journal of Advanced Nursing, 56 (2), pp. 144-156.	Systematic review to identify the education needs of the workforce within primary care to promote the effective delivery of integrated health and social care services	Education which embeds essential attributes to integrated working is needed to advance nursing practice for interprofessional working.	Systematic review	The ability to work interprofessionally is an important skill which needs to be developed to support integrated working. Six themes were identified which indicate essential elements needed for integrated care. - effective communication between professional groups within teams, an emphasis on role awareness, partnership working, skills related to practice development, leadership and professional+ personal development is needed to support integrated working. The reinforcement of partnerships between higher education institutions and health and social care organizations should ensure that the workforce is educated to manage continuous change in service delivery. Innovative ways of teaching and learning which promote inter-professional working need to be explored.
10	USA	Hughes, L.S.; Tuggy, M.; Pugno, P.A.; Peterson, L.E.; Brungardt, S.H.; Hoekzema, G.; Jones, S.; Weida, J. and Bazemore, A. 2015. Transforming training to build the family physician workforce our country needs. Family Medicine, 47 (8), pp. 620-627.	Need for expanding IPE and reforming US health care delivery	Strategies Incorporating ethics and social determinants of health in the curriculum Introducing community learning and service into medical education, as well as training in advocacy. Connecting students with dedicated, full-scope family physicians and peer mentors. Mitigating any environment that permits specialty disrespect and "trash talk" about students' career choices. Exposing students to new models of care and sustainable examples of patient-centered care, such as the patient-centered medical home (PCMH). Establishing diverse outpatient training settings where everyone is seen regardless of ability to pay,	Family Physicians and Primary Care practitioners	The need for the medical education continuum to produce a family physician workforce that is sizable enough and highly skilled is significant. A need to acquire skills needed in new practice and payment environments. Identifying, training, and supporting family medicine role models and mentors on all levels, including medical students, residents, early career physicians, academic faculty, and community preceptors. Collaborating with our primary care colleagues to design high-quality and effective interprofessional training opportunities. Need for educational standards that reflect the public's expectations of family physicians, to collaborate with our primary care colleagues to develop effective interprofessional training, and to design educational programs that are socially accountable to the patients, families, and communities we serve.

#	Country	Citation	Method	Aim	Professions	Findings
				including rural offices and community health centers. Creating opportunities to train students in a team-based, interdisciplinary setting. Developing rural tracks, tailored electives, or advanced clerkships that allow students to appreciate the full scope of family medicine practice, including procedures, in different settings.		
11	Australia	Jackson, C. L.; Nicholson C.; Davidson, B. and McGuire, T. 2006. Training the primary care team - A successful interprofessional education initiative. Australian Family Physician 35(10): 829-822. (1p)	102 students from seven Health Science programmes at Uni of Q completed between one and three interprofessional seminars involving small group work, case discussion, expert panel presentation, and interactive question and answers	A multidisciplinary approach to the education of health professionals is being increasingly promoted as a means to cultivate collaborative practice between professions in the health care sector and to enhance patient care.	Medicine, nursing, pharmacy, physiotherapy dietetics, Speech pathology, OT	Paired sample T testing indicated significant differences in pre- and post-responses related - knowledge of effective clinical management, multidisciplinary assessment, goal setting, roles and responsibilities, and referral networks across all disciplines. Similar testing also indicated significant shifts in attitude to increased job satisfaction, reduced fragmentation of care, and reduction in professional boundaries related to multidisciplinary care. Ninety-six percent of participants indicated that the benefit of a team approach was effectively modelled. Undergraduate interprofessional education can result in highly significant shifts in knowledge of, and attitudes to, multidisciplinary team care.
12	Denmark	Jakobsen, F. and Hansen, J. 2014. Spreading the Concept: An Attempt to Translate an Interprofessional Clinical Placement across a Danish hospital. Journal of Interprofessional Care 28(5): 407-412.	The aims of this study were to evaluate whether the students learned about interprofessional collaboration and strengthened their professional identity and whether the clinical tutors could create a safe and challenging learning environment. Clinical tutors from the professions together planned the pedagogical approach and practical organization of two pilot studies in an orthopaedic	A Danish Interprofessional Training Unit (ITU) where the clinical tutors have succeeded in developing a safe learning environment combined with challenging the students by giving them responsibility for the patient's care and rehabilitation.	Occupational therapy, physiotherapy, and nursing	In the ITU, students improved their uniprofessional and interprofessional knowledge and capability while strengthening their professional identity. These skills were transferred to the Orthopaedic ward A one-week interprofessional clinical placement can contribute to students learning about interprofessional collaboration and to their development of professional identity. Clinical tutors indicated that they needed to create a safe and challenging learning environment but emphasized that a thorough planning and continuous monitoring and adjusting of the clinical placement is necessary for success. It is possible to create successful interprofessional learning opportunities in a normal ward environment in a restricted time

			ward. Focus group interviews with students and clinical tutors after the intervention were performed and analyzed.			frame. This knowledge can be applied to other ward settings where interprofessional clinical training is a natural possibility.
13	Canada	Jelley W.; Larocque, N. and Patterson, S. 2010. Intradisciplinary Clinical Education For Physiotherapists And Physiotherapist Assistants Canadian Physiotherapy Association, 62(1): 75–80	The project investigated a 5-week clinical placement on physiotherapy (PT) and physiotherapist assistant (PTA) students' skills. Three pairs of PT and PTA students participated in concurrent paired placements incorporating the concepts of reciprocal peer coaching and the 2:1 model of supervision. Qualitative data were gathered using pre- and post-placement interviews and the participants' journals	Pairing PT and PTA students on clinical placements and incorporating a collaborative peer-coaching model can result in improvements in the students' skills in communication, consultation, and assignment of tasks.	Physiotherapy (PT) and physiotherapist assistant (PTA)	Students were supervised by a PT clinical instructor (CI) using a collaborative peer-coaching model. Students reported that using this clinical education model increased their self-directed learning. Informal teaching among students, as expected from the integration of reciprocal peer coaching and 2:1 model Students' competencies increased in - communication, consultation, and assignment of tasks within the physiotherapy team. The students further reported an increase in their confidence with regard to their respective roles and an improvement in their ability to work effectively within the physiotherapy team.
14	USA	Kraft, S.; Wise, H.; Jacques P. and Burik, J. 2013. Discharge Planning Simulation: Training The Interprofessional Team for the Future Workplace. Journal of Allied Health, 42(3): 175-81	Occupational therapy, physician assistant, and physical therapy students (n=173) participated in a discharge planning simulation (DPS) focused on a patient with a stroke and subsequent hip fracture. Pre and post surveys were sent to the students.	The integration of interprofessional education (IPE) into health professions curricula offers a possible way to increase collaboration among health professionals	Occupational therapy, physician assistant, and physical therapy students	Participation in the DPS model resulted in significant changes in perception of a student's individual role as well as the role of their interprofessional team members in discharge planning for the complex patient.
15	Australia	McAllister, M.;, Statham, D.; Oprescu, F.; Barr, N.; Schmidt, T.; Boulter, C; Taylor, P.; McMillan, J.; Jackson, S and Raith, L.2014. Mental Health Interprofessional Education for Health Professions Students: Bridging the Gaps. Journal of Mental Health	The outcomes of an interprofessional learning experience targeting final year Australian students enrolled in health promotion, registered nursing, enrolled nursing, paramedic science, psychology, social work and occupational therapy	Though difficult to generalise results, they demonstrate that intensive interprofessional learning experiences in tertiary education can be effective means of increasing students' awareness of the role of other professionals in MDT.	Nursing, health promotion, social work, psychology, OT	Interprofessional tertiary sector training is absent, ad hoc or not documented, leaving students inadequately prepared for disciplinary differences in opinions and practices. There was a significant increase in clinical confidence at each time interval, suggesting that the intervention effects were maintained up to three months post-training. IPE expanded students' appreciation for difference; this in turn expanded students' cross-disciplinary communication skills. Growing appreciation for diverse world views was seen to be relevant to person-centred mental healthcare and practice

		Training, Education and Practice, 9 (1), pp. 35-45.	who are intending to work in mental health teams are presented. Using a mixed method, pre- and post-test design (four time intervals), with data collected from three scales and open-ended questions, this study measured participant changes in knowledge and attitudes towards interprofessional education and mental health. The study also examined students' and educators' perceptions of the value of an interprofessional teaching and learning model.			Articulating one's own disciplinary views clarified professional identity.
16	USA, Finland, Denmark	Macauley, K..; Skov, H.; Lehtonen, K. and Shulman, B. 2016 Perceptions of an International Interprofessional Education Experience: Findings from Students Based In Europe And North America. Journal of Interprofessional Care, 30 (5), pp. 606-614.	Evaluates students experiences and skills across 4 years of programme implementation of The International Innovation Program for health profession education Survey data was collated and analysed	The International Innovation Program for health profession education students provides students the opportunity to learn in interprofessional, international teams and apply didactic knowledge to community problems using the innovation process.	Multi	Students who participated in the programme reported improvements in – collaboration, teamwork, project management, interprofessional teamwork, professional growth and development, thinking in an innovative manner, research and development skills, information seeking, and willingness to work on international projects. Data indicates that these attributes developed in training can be transferred into a clinical context
17	Canada	MacDonald, M.B., Bally, J.M., Ferguson, L.M., Lee Murray, B., Fowler-Kerry, S.E., Anonson, J.M.S. 2010. Knowledge of the professional role of others: A key interprofessional competency. Nurse Education in Practice, 10 (4), pp. 238-242.	Discusses the competency knowledge of professional role of others and its associated behavioural indicators, especially as these relate to the interprofessional education of nursing students.	Focuses on the key competency of understanding and knowing the role of other professionals in a team	Nursing	Six key competencies of interprofessional collaborative practice for patient-centred care – communication, strength in one's professional role, knowledge of professional role of others, leadership, team function and negotiation for conflict resolution. The identification the competency of knowledge of professional role of others and antecedent behavioural indicators serve two purpose – it is a basis for the preparation of students, preceptors, and faculty for interprofessional practice, and it develops a tool for assessing student performance in such practice.

18	UK	McGettigan, P.; McKendree, J.; Reed, N.; Holborow, S.; Walsh, C.D and Mace, T. 2013. Identifying attributes required by Foundation Year 1 doctors in multidisciplinary teams: A tool for performance evaluation. BMJ Quality and Safety, 22 (3), pp. 225-232.	Study focuses on newly qualified Foundation Year 1 (FY1) doctors, creating and testing a tool to evaluate their performance in the MDT. Repertory grid technique was used to elicit attributes needed by FY1 doctors to function effectively in the MDT. Study participants (all experienced MDT members) used these to evaluate MDT working by FY1 doctor colleagues. Data on 57 FY1 doctors were collected from 95 MDT members working in five hospitals. Participants also ranked the attributes in terms of importance for effective team functioning and rated an 'Ideal' FY1 doctor.	Effective working in multidisciplinary teams (MDTs) is promoted as essential in ensuring good healthcare outcomes.	Medicine	FY1 doctors who undertook interprofessional training were rated no differently than UK-trained graduates without such training. UK-trained graduates were rated significantly higher on all attributes than non-UK-trained graduates. Overall, FY1 doctors were rated lower than the 'Ideal'. Factor analysis and rankings suggested tensions between clinical attributes needed for good team functioning and more 'social' attributes. The study demonstrates the potential of repertory grid methodology in eliciting attributes that are important for effective team working, and using these to evaluate MDT working by FY1 doctors.
19	Canada	Meffe, F.; Moravac, C. C. and Espin, S. 2012. An Interprofessional Education Pilot Program in Maternity Care: Findings From an Exploratory Case Study of Undergraduate Students. Journal Of Interprofessional Care 2012 May; Vol. 26 (3), pp. 183-8.	A case study that explored how participation in an IPE program in maternity care may enhance student knowledge, skills/attitudes, and may promote their collaborative behavior in the practice setting. Twenty-five semi-structured, in-depth interviews were completed with nine participants at various time points up to 20 months post-program.	The program was launched at a Canadian urban teaching hospital and consisted of six workshops and two clinical shadowing experiences.	Nursing, midwifery and medicine	Competencies developed - relationship-building, confident communication, willingness to collaborate and woman/family-centered care. Participant statements about their intentions to continue practicing interprofessional collaboration more than a year post-program lend support to its sustained effectiveness. The provision of a safe learning environment, the use of small group learning techniques with mixed teaching strategies, augmented by exposure to an interprofessional faculty, contributed to the program's perceived success.
20	USA	Nandan, M. and Scott, P. A. 2014. Interprofessional Practice And Education: Holistic Approaches to Complex Health Care.	Examines interprofessional practice	What is IPP? What is IPE? What competencies are necessary to effectively engage in IPP	Overview	Use of interprofessional health care teams and education to effectively address the social, psychological, biological, environmental, and economic dimensions inherent in today's health care challenges.

		Journal of Allied Health 43(3): 150-6		Who should be educated to serve on IPP health delivery teams; and What educational model can best prepare health care professionals with the skills and practice experiences needed to address complex health issues in a comprehensive fashion?		Authors propose a unique university-based IPE model that effectively addresses complex health issues and maximizes collaboration among clinical, nonclinical, and community stakeholders.
21	Australia	Oates, M., Davidson, M. 2015. A Critical appraisal of Instruments to Measure Outcomes of Interprofessional. Medical Education, 49 (4), pp. 386-398.	This review set out to identify instruments available to measure outcomes of IPE and collaborative practice in pre-qualification health professional students and to critically appraise the psychometric properties of validity, responsiveness and reliability against contemporary standards for instrument design	A range of instruments have been developed to measure the outcomes of IPE. Nine instruments were critically appraised, including the widely adopted Readiness for Interprofessional Learning Scale (RIPLS) and the Interdisciplinary Education Perception Scale (IEPS).	Multi	Interprofessional education (IPE) is believed to prepare health professional graduates for successful collaborative practice. An understanding of the psychometric properties of instruments used to measure the outcomes of IPE is important if they are to be used to measure the effectiveness of IPE. Instruments available to measure outcomes of IPE and collaborative practice in pre-qualification health professional students are identified. Ceiling effects and lack of scale width contribute to the inability of some instruments to detect change in variables of interest. Limited reliability data were reported for two instruments. Scale development and scoring protocols were generally reported by instrument developers. The inconsistent application of scoring protocols for some instruments was apparent. The psychometric integrity of these instruments is limited. The theoretical test construction paradigm on which instruments have been developed may be contributing to the failure of some instruments to detect change in variables of interest following an IPE intervention.
22	USA	Olson, R. and Bialocerkowski, A. 2014. Interprofessional Education in Allied Health: A Systematic Review. Medical Education Vol. 48 (3), pp. 236-46.	Patient care now less focused on acute conditions traditionally managed by specialists' teams to treatment of chronic disorders or long term conditions. This shift means that patients are becoming more on complex organisations of services involving various health professionals across a variety of settings.	The systematic investigates the best approaches to pre-licensure, university-based allied health IPE to determine which aspects require modification and contexts are most effective to provide optimal learning experiences. It is focuses IPE in allied health, despite differences in recruitment and socialisation across the health professions.	Systematic review	Large gaps – relating to methods, theory and context – remain within this body of literature. Studies measured students' attitudes and understanding of other health professional roles, teamwork and knowledge in response to IPE interventions using patient scenarios, lectures and small-group work. Factors affecting IPE effectiveness include differences in power and curriculum placement Evaluation remains the primary aim within this literature. Few studies use theory, take an inductive approach to understanding the processes behind IPE or include detailed participant descriptions.

			A systematic search of 10 databases was conducted for articles published in English, between January 1998 and January 2013. Studies were included if they used quantitative or qualitative methodologies to report on the outcomes associated with IPE in allied health. Two independent reviewers identified studies that met the inclusion criteria, critically appraised the included studies and extracted data relating to the effectiveness of IPE in allied health. Data were synthesised narratively to address the study aims.			
23	Canada	Orchard, C. and Bainbridge, L. 2016. Competent for collaborative practice: What does a collaborative practitioner look like and how does the practice context influence interprofessional education? Journal of Taibah University Medical Sciences, 11 (6), pp. 526-532.	Evaluating an example of a competency framework focused on interprofessional practice and guided by an integrative pedagogy - Canadian Interprofessional Health Collaboration (CIHC).	(CIHC). This framework provides a structure for assessing an individual's ability to collaborate based on the integration of knowledge, skills, attitudes and values leading to judgements in varying contexts.	Overview	Need to understand and enact the competencies required for collaborative practice. A consistent framework for competencies is seen as one way of developing this knowledge and guiding IPE curriculum development, learning activities and assessment processes in both educational and practice settings. The framework posits that interprofessional competencies are consistent and stand the 'test of time', while associated descriptors are reflective of learners' or practitioners' experiential base and context. The CICH competency framework includes 6 integrated competency domains that together result in interprofessional collaboration Each competency domain has its corresponding indicators
24	Australia	Pullon, S.; Wilson, C..; Gallagher, P.; Skinner, M.; McKinlay, E.; Gray, L. and McHugh, P. 2016 Transition to practice: Can rural interprofessional education	The intervention programme integrated learning objectives in four related domains: interprofessional practice; hauora Māori (Māori	In rural communities where health need is multidimensional, there is potential for multiple intentional collaborative	Dentistry, dietetics, medicine, nursing, pharmacy and physiotherapy	The transition from student to health practitioner at entry-to-practice is complex, requiring critical acquisition of collaborative practice skills. A five-week, rurally-located, clinically-based interprofessional programme was introduced as a transition-to-practice rotation for final-year, pre-registration health professional students in the

		make a difference? A cohort study. BMC Medical Education, 16 (1), art. No. 154.	health); rural health; long-term condition management. This study investigated student learning experiences over the first two complete years of the programme, comparing responses from participating students with those from a cohort of non-participating peers. Using a pre and post quasi-experimental design, respondents from two successive student year cohorts completed questionnaires at the start and end of their final year. Additional survey data were collected from participating students at the end of each rotation.	learning objectives to be met concurrently.		professions of dentistry, dietetics, medicine, nursing, pharmacy and physiotherapy. Participating student respondents (55/131; 42 %) reported being significantly better prepared than a cohort of 56 non-participating colleagues in many aspects of their understanding of and knowledge about each of four key learning domains. At entry-to-practice level, multiple learning objectives, including indigenous health learning, can be met simultaneously in the clinical context within an integrated, rotational programme. Rural settings are highly suitable for delivering such programmes if well supported.
25	Canada	Reeves S; Tassone M; Parker K; Wagner SJ. Interprofessional education: An overview of key developments in the past three decades. WORK, Jan 1, 2012; 41(3):	A narrative review of the salient IPE literature was undertaken to generate key source materials for this paper	A case example of the work currently being undertaken at our own institution, with a focus on how various IPE developments have been integrated into our organizational priorities. Based on the results presented, a series of key conclusions for the future development and implications of IPE are outlined.	Overview	This paper provides an overview of key developments of interprofessional education (IPE) in relation to its evolution over the past 30 years. The emergence of IPE, different learning/teaching approaches; the evidence base for IPE; organizational elements.
26	Australia	Ritchie, C. Dann, L. J Ford, P. 2013. Shared learning for oral health therapy and dental students: Enhanced understanding of roles and responsibilities through interprofessional education	Over a 2-year period, all commencing OHT and DS students were invited to participate in this study. One cohort (n = 93) was enrolled into a traditional, discipline-specific programme (TRAD), whereas the other cohort	To enhance interprofessional learning outcomes, The School of Dentistry at The University of Queensland redesigned first-year curricula. Courses for Bachelor of Oral Health (OHT) and Bachelor of Dental Science (DS)	Oral Health Therapy and Dental	Following completion of 1 year of learning, both INT and TRAD cohorts showed similar levels of readiness for shared learning. At the commencement of the second year of the study programme, however, there was a significantly better understanding of shared care amongst INT students. The INT cohort had significantly improved understandings of the roles and responsibilities of dentists and oral health therapists. The results of this study have been used to refine ongoing curriculum developments.

		European Journal of Dental Education, 17 (1), pp. e56-e63. Cited 6 times. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84871675556&doi=10.1111%2fj.1600-0579.2012.00762.x&partnerID=40&md5=ab9be937d755183001ce1afc0c131537	(n = 93) experienced an integrated learning programme (INT) with combined courses for OHT and DS students. The Readiness for Interprofessional Learning Scale (RIPLS) and a modified dental and dental care professional roles and responsibilities (DRR) survey were completed to determine students' awareness of dental professionals' roles and responsibilities, and their attitudes to interprofessional education and teamwork.	students were combined, and learning content created to support the development of skills, knowledge and attitudes required for the oral healthcare team to work effectively in providing the best possible care for patients.		
27	Canada	Sargeant, J. 2009 Theories to aid understanding and implementation of interprofessional education. Journal of Continuing Education in the Health Professions, 29 (3), pp. 178-184.	The article draws upon a small number of social and learning theories to explain the rationale for IPE needing a new way of thinking, and proposes approaches to guide development and implementation of IP continuing education.	Education is key to increase collaboration and communication explicit goal of IPE should be communication	Overview	Need for greater interprofessional collaboration and communication, including initiatives aimed at enhancing patient safety and preventing medical errors. IPE differs from most traditional continuing education in that knowledge is largely socially created through interactions with others and involves unique collaborative skills and attitudes. IPE requires thinking differently about what constitutes teaching and learning. Social psychology and complexity theory explain the influence of the dynamism and interaction of internal (cognitive) and external (environmental) factors upon learning and set the stage for IPE. Theories related to professionalism and stereotyping, communities of practice, reflective learning, and transformative learning appear central to IPE and guide specific educational interventions. IPE requires educators to adopt new content, recognize new knowledge, and use new approaches for learning.
28	USA	Sievers, B. and Wolf, S. 2006 Achieving Clinical Nurse Specialist Competencies and Outcomes Through Interdisciplinary Education Clinical Nurse Specialist, 20 (2), pp. 75-80.	A quality improvement initiative is evaluated. The intervention was to create an interdisciplinary educational experience for clinical nurse specialist (CNS) students and postgraduate physicians.		Clinical nurse specialist (CNS) students and postgraduate physicians.	Without formal education, many healthcare professionals fail to develop interdisciplinary team skills When students are socialized to interdisciplinary practice through academic clinical learning experiences, effective collaboration skills can be developed. Increasingly, educational environments are challenged to include clinical experiences for students that teach and model interdisciplinary collaboration.

			An interdisciplinary cohort of learners engaged in a clinically focused learning experience. During this 1-month clinical experience, students applied the new skills by implementing a quality improvement project focusing on medication reconciliation in the outpatient			The CNS students exhibited 5 of the 7 essential characteristics of the CNS (leadership, collaboration, consultation skills, ethical conduct, and professional attributes) while demonstrating competencies and fulfilling performance expectations. Interdisciplinary clinical experiences offer students opportunities to develop needed collaboration and communication skills. Educators need to create interdisciplinary educational experiences for students to better prepare them for their roles in a clinical setting.
29	UK	Stephens, M., Robinson, L., McGrath, D. 2013. Extending Inter-Professional Learning Through the use of a Multi-Disciplinary Wiki. Nurse Education in Practice, 13 (6), pp. 492-498.	The aim of the Wiki was to facilitate inter-professional learning for students who, having met face-to-face once for a classroom based activity, would not be timetabled to meet again. It was designed to allow students from differing disciplines to: construct knowledge together, learn from and about one another, and collaboratively produce a textual learning resource.	Using a Wiki for a student learning activity which employed a Wiki for student radiographers and nurses to build on an inter-professional learning event. 150 nursing and radiography undergraduates were provided with a PBL trigger related to the acute presentation of stroke. Students met once face-to-face and over the course of five weeks developed the wiki with the support of a wiki champion.	Nursing and Radiography students	The students found the activity engaging and reported that it supported flexible leaning. The Wiki was able to support students learn from and with each other. However, there was a variation in the level and quality of student participation. About 20% of the students did not engage because they reported of lack of IT skills or insufficient time. Non-engaging students also reported that they did not feel comfortable airing negative views on line, this lack of confidence or fear of contributing has many implications for team work and collaborative practice.
30	Australia	Thistlewaite, J. 2012. Interprofessional Education: A Review of Context, Learning and the Research Agenda. Medical Education, 46 (1), pp. 58-70.	Systematic reviews of IPE have shown some evidence that IPE fosters positive interaction among different professions and variable evidence that it improves attitudes towards other professionals.	The rationale for IPE is that learning together enhances future working together. The delivery of complex health care requires a team-based and collaborative approach, although teamwork and collaborative practice are not necessarily synonymous.	Overview	The drivers for IPE include new models of health care delivery in the context of an ageing population and the increasing prevalence of long-term chronic disease, in addition to the patient safety agenda. Generalisation across published papers is difficult because IPE initiatives are diverse and good evaluation methodology and data are lacking. In terms of constructive alignment from an education viewpoint, there is a need for educators to define learning outcomes and match these with learning activities to ensure that IPE demonstrates added value over uniprofessional learning. Assessment is difficult as pre-qualification professional education focuses on the individual and professional accreditation organisations mandate only for their own professions. Challenges for IPE – time, logistics, etc.
31	USA	VanKuiken, D. M., Schaefer, J.K., Elaum Hall, M. and	This article shares the many challenges to	IPE is a preferred model for educating health	Athletic training (undergraduate	Higher education is heeding the call to prepare students to value teamwork and develop skills for working in interprofessional teams.

		Browne, F. R. 2016. Integrating Interprofessional Education into the Curriculum: Challenges and Solutions for a University without a Medical Center. Journal of Interprofessional Education and Practice Volume 2 pp 5 – 11.	implementing IPE within this context and presents strategies one university used toward developing an integrated IPE program that is relevant to nine health-related disciplines.	professionals in the era of health care teams, we still have much to learn about how to best implement IPE in the smaller universities	[UG]); clinical mental health counselling (graduate [G]); health services administration (UG/G); nursing (UG/G); occupational therapy (UG/G); psychology (doctoral); radiologic technology (associate degree); social work (UG); and special education (UG	Specifically in University with no medical centre Focuses on using case studies, large scale simulation, placements, creative assessments
32	USA	Weaver, S. J., Dy, S. M. and Rosen. M. A. 2014. Team-training in Healthcare: A Narrative Synthesis of the Literature. BMJ Quality and Safety 23(5):359-372.	A PubMed search for review articles examining team-training interventions in acute care settings published between 2000 and 2012 was conducted. Following identification of relevant reviews with searches terminating in 2008 and 2010, PubMed and PSNet were searched for additional primary studies published in 2011 and 2012. Primary outcomes included patient outcomes and quality indices. Secondary outcomes included teamwork behaviours, knowledge and attitudes.	Overall, moderate-to-high-quality evidence suggests team-training can positively impact healthcare team processes and patient outcomes. Additionally, toolkits are available to support intervention development and implementation. Evidence suggests bundled team-training interventions and implementation strategies that embed effective teamwork as a foundation for other improvement efforts may offer greatest impact on patient outcomes.	Review	Both simulation and classroom-based team-training interventions can improve teamwork processes (egg, communication, coordination and cooperation), and implementation has been associated with improvements in patient safety outcomes. Thirteen studies published between 2011 and 2012 reported statistically significant changes in teamwork behaviours, processes or emergent states and 10 reported significant improvement in clinical care processes or patient outcomes, including mortality and morbidity. Effects were reported across a range of clinical contexts. Larger effect sizes were reported for bundled team-training interventions that included tools and organisational changes to support sustainment and transfer of teamwork competencies into daily practice.
33	Canada	Wong, E.; Leslie, J.J.; Soon, J.A. and Norman, W.V. 2016. Measuring Interprofessional Competencies and Attitudes	Undergraduate health care students worked collaboratively to develop virtual patient case-based learning modules on the	The purpose of this study was to evaluate the changes in perception towards interprofessional collaboration (IPC) among	Multi	The Virtual Interprofessional Patients-Computer-Assisted Reproductive Health Education for Students (VIP-CARES) Project took place during the summers of 2010-2012 for eight weeks each year at the University of British Columbia (UBC).

		Among Health Professional Students Creating Family Planning Virtual Patient Cases BMC Medical Education, 16 (1), art. No. 273.	topic of family planning. Participants – students from medicine, pharmacy, nursing, midwifery, dentistry, counselling psychology, and computer science	the participants, before and after the project. The study utilized a mixed methods evaluation using self-assessment survey instruments, semi-structured interviews, and reflective essays. Pre- and post-project surveys were adapted from the Canadian Medical Education		Student attitudes toward IPC were positive before and after the project. Statistically significant increase in the participants' self-assessment competency scores at the end of the project Increases too in the CIHC domains of interprofessional communication, role clarification team functioning and collaborative leadership Students report that they have improved understanding of why communication and respect as key to team functioning Students understand the relevance of role clarification within the team Students also identify inherent challenges to IP Communication.

Appendix 9 Service Improvement Module - Coventry University

Working Together to Lead Service Improvement

302CC

1. MODULE SUMMARY

Aims and Summary

The intention is that students are supported to gain a commitment to ongoing reflection and learning, underpinning their development as competent health and social care professionals to take up leadership roles as reflexive practitioners in complex service delivery environments.

Students are supported to work in small inter-professional teams (normally made up of students from at least three different pre-registration professional courses) with local communities, patient, carer and service user groups, to develop service improvement proposals, which can produce positive, measurable improvements in person-centred care.

Student teams produce a project proposal, which is assessed by staff and other student teams with contributions to that assessment from patient, community, service groups (as above).

Students will also be exposed to self and team development activities and tools which will allow them to explore and reflect upon their own professional identity, leadership competency, and increase their self-awareness.

Individual students then produce a critical analysis of their own team's work and their own contribution to successful collaborative inter-professional practice.

Special Features

Enquiry-based learning in inter-professional teams. This module prepares students for professional practice and potential future leadership roles, and involves extensive partnership work with community groups/patient groups/carer groups/service user groups and full professional standards of behaviour are expected. It includes a range of leadership self-assessment activities and use of change management and service improvement models.

This module is part of the Collaborative Curriculum and will support students in achieving a number of the personal/professional,

organisational and ethical components of the collaborative capability
framework.