**Abstract**

Integrated care has been identified as being fundamental to health and social care reforms. How this interprofessional working impacts on professional identity is unclear. There is a lack of reviews synthesising this growing body of literature. It is therefore timely to conduct a scoping study of the literature which explores the intersection between interprofessional care and professional identity. The aim of this study is to identify the factors that impact on professional identity when working in interprofessional teams. A scoping review was conducted; Business Source Complete (EBSCO); CINAHL; Proquest; Medline; and Scopus (January 1980 to July 2018) were systematically searched for studies focusing on professional identity and interprofessional teams. Inclusion and exclusion criteria were identified and applied, data were charted and a synthesis of the narrative conducted. Sixteen papers are identified as central to this scoping review. Analysis of the papers highlights three key areas of interest: the creation of professional identity; challenges and barriers to professional identity; and implications for leadership and management. The significance of this review is considered along with an agenda for future research. Expanding the research to consider areas such as the value of interprofessional education programmes and to include the voice of those professionals no longer working or choosing not to work in an interprofessional care setting should also feature within future studies.

**Professional identity in interprofessional teams: Findings from a scoping review**

Integrated care has been identified as essential to delivering the reforms required in health and social care (Goodwin et al., 2012; Lê et al., 2016). There is a large body of literature on the topic of integrated care (see for example Ramsey, Fulop & Edwards, 2009; Lewis,Rosen, Goodwin & Dixon, 2010) with varying definitions though no universally accepted description and many sub genres (Goodwin 2016) encompassing terms such as multidisciplinary teamwork and interprofessional collaboration. The focus of this review is professional identity in the context of interprofessional teamwork. Here teams include a range of health and/or social care professionals who work closely together as a mutually dependent group in order to provide complex care for a community (Reeves, Lewin, Espin, & Zwarenstein 2010). Still, the provision of care through interprofessional teams has been an ambition in health and social care for many years and is a priority across the UK (Ham, Heenan, Longley & Steel, 2013). The relevance of delivering care through integrated services is found in each of the UK home nations: Scotland (Scottish Government, 2011); Northern Ireland (DoH, Northern Ireland, 2011) England (NHS England, 2014) and in Wales (Welsh Government, 2011). In addition, the demand for integrated care extends internationally (see for example Goodwin, 2015). Shifting the mechanisms and ethos for the provision of care through interprofessional teams has not been without its challenges (Dickinson, 2014) and a key component for successful change in health care is noted as professional identity (Gheradi 2004; Morgan & Ogbonna, 2008).

Professional identity encompasses one's professional self-perception. Ibarra (1999, p. 764/5) employs Schein's (1978) definition of professional identity, *"… the relatively stable and enduring constellation of attributes, beliefs, values, motives, and experiences in terms of which people define themselves in a professional role"*. This definition points to multiple influences on professional identity which although can develop over one's professional life

tends to remain largely unchanged once formed. Ibarra (1999) also notes that professional identity is more malleable at the early stages of a professional's career.

Much is known about the drivers that construct professional identify such as gender and profession (Adams, Hean, Sturgis, & Clark, 2006). It is also recognised that professional identity is further customised by working experience (Pratt & Corley, 2012), which centres on two areas: One; activity, i.e. role identity, with different professions' individual knowledge and skill sets only doing what they can do, thereby unique in the eyes of colleagues and patients (Caza & Creay, 2016). Two; the feeling of distinctiveness. Van Maanen and Barley (1984) explored the concept of work identities and how people develop and retain a '*sense of uniqueness*' (p. 295). They recognised work or professional social identity is constructed as an individual identifies as belonging to a profession with other individuals who engage in the same approach to a form of work – for example, physiotherapists, dieticians etc. This is of interest but does not explain why professional identity matters.

Siebert and Siebert (2005) argue an individual's professional identity (both role and work identity) is of importance as it determines work attitudes and behaviours. This may be of personal significance to an individual in how they define themselves and their place in the world of work and society. Crucially the construction of one's identity is highly relevant for those providing care as it offers "*a shared/collective representation of who one is and how one should behave"* (Hogg & Abrams, 1988, p. 3). Deciding how services are delivered is ultimately dependent on practitioners' behaviour that in turn establishes the quality of care received.

The focus of research on professional identity within health and social care is largely centred on single professions and in education (for example, Hood et al. 2014; Lindeman 2009). Little however is known about professional identities within the evolving world of integrated working (Mitchell & Boyle, 2015). We recognise there are two extant bodies of literature for professional identity and integration. Uniquely this scoping review focuses on the intersection between these two areas of the literature with a particular focus on professional identity and interprofessional teams.

It is important and timely for this scoping review to be undertaken due to the growing expectation of what integration can deliver to meet the increasing demands on health and social care. Exploring these two bodies of literature in isolation risks overlooking the contextual influences of service delivery within interprofessional teams and how this might impact on professional identity. The aim of this review is therefore:

- To identify the factors that help us to understand the impact of working as part of an interprofessional team on professional identity.
- To provide an agenda for future research by identifying the emerging themes in the literature and considering how these might be expanded to meet the needs of contemporary health and social care.

The identification of a research question is the first step for a scoping review. Unlike systematic reviews the intention is for the question to be broad to direct the development of the search approach. This paper contributes to the discussion by exploring the following research question:

> "What are the existing themes in the field of professional identity in interprofessional teams in health and social care?"

## Methodology

### Research Design

The use of scoping studies to synthesize research evidence is becoming increasingly popular (Pham et al., 2014). There are numerous definitions and purposes for scoping studies outlined by Levac, Colquhoun, and O'Brien (2010). Our review of the literature was undertaken to examine the extent, range, and nature of research activity (Arksey & O'Malley, 2005; Levac et al., 2010) within the area of research connecting professional identity and interprofessional teams.

A scoping review provides a rigorous and transparent method for mapping areas of research (Pham et al, 2014), and can be used as a standalone project or as a in this case a preliminary step to a systematic review (Arksey and O'Malley, 2005). For this review it is of particular use given the link between professional identity and interprofessional teams has not yet been extensively reviewed (Mays et al., 2001). A scoping review can be used to determine the extent, range, and nature of research activity in a topic area and identify gaps in the existing literature (Arksey and O'Malley, 2005; Levac et al., 2010). While the scoping review approach has been added to over the years (Levac et al., 2010; Pham et al., 2014) the underlying stages identified by Arksey and O'Malley (2005) remain. These are; identifying the research question, identifying relevant studies, study selection, charting the data, collating, summarizing, and reporting the results, and finally an optional consultation. Having consulted previous scoping studies (Mossabir, Morris, Kennedy, Blickem, & Rogers 2014; Reeves et al., 2011) this paper follows these steps.

### Data Collection: Search Strategy

A comprehensive search was undertaken of the following the databases: CINAHL; Proquest; Medline; Scopus; Business Source Complete (EBSCO) and Cochrane Reviews. The key words and Boolean search operators: "professional identity" AND team* AND health were employed (January 1980 to July 2018). The search term “team*” was deliberately left broad to ensure we did not limit the potential paper returns. Similarly, the term ‘health’ was used so not to limit the different professions included in the study. In total 482 papers were found with the following returns from each database: CINAHL, 87; Medline, 128; Proquest, 40; Scopus, 211; EBSCO, 16; and Cochrane Reviews, 0.

///Insert Table 1 about here////

Table 1. Inclusion and exclusion criteria

Selecting the appropriate studies requires the development of inclusion and exclusion criteria based on the research question. Papers can then be removed from the scoping review if they do not fulfil the criteria. Table 1 lists the criteria developed and used for this scoping study.

**////** insert figure 1 about here**////**

Figure 1 Process for scoping study and numbers of paper identified Adapted from Moher Liberati, Tetzlaff & Altman (2009)

Figure 1 outlines a four-stage process of identifying appropriate papers and the results from each stage. From the 482 papers returned duplicates were removed and the titles were reviewed using the inclusion and exclusion criteria in Table 1. This narrowed the search to 64 papers. On reviewing the abstracts from the 64 papers 22 articles met the criteria in Table 1. Twenty-nine full text papers were assessed against the inclusion and

exclusion criteria based on the full text document. Thirteen papers were discarded as were not relevant to inter-professional practice (e.g. focused only on students/education or one profession – medics, nurses or paramedics). Sixteen papers therefore remained to be analysed for this scoping review.

**Data Analysis**

First the 16 papers are 'charted' (Arksey & O'Malley, 2005) before they are discussed. Table 2 extracts the context and process oriented information from each paper. In line with scoping literature process (Arksey & O'Malley, 2005) papers were not excluded on the grounds of quality or approach however the methodological details are included in Table 2. Both authors participated in the reviewing and sifting process. Where there was uncertainty whether to include a paper the article was reviewed by both authors and discussed before including/excluding.

///insert Table 2 about here/////

Table 2. Summary of papers meeting inclusion criteria

Ehrich, Freeman, Richards, Robinson, & Shepperd (2002, p. 28) note the aim of a scoping study is to 'map a wide range of literature and to envisage where gaps and innovative approaches may lie'. Our scoping exercise revealed five methodological approaches; reviews (n=3), conceptual (n=2), quantitative (n=4), qualitative (n=6) and mixed methods (n=1). For the literature review papers only one offered a systematic approach to paper selection. The 16 papers selected for review were all peer-reviewed articles which had been published between 1997-2015. Ten papers were published since 2010, five between 2000 and 2009 and one was published in 1997. The countries of origin for the

papers were Canada, Australia, UK and Norway while the literature reviews and opinion pieces did not limit their geographical focus.

## Findings

### Qualitative Content Analysis

The final stage of a review is the collation and analysis of the papers. Levac et al., (2010) call for qualitative content analysis followed by thematic analysis, which should be reported in relation to the research question. Initial content analysis is undertaken which in this scoping review revealed three areas of interest prior to the thematic analysis being undertaken. This initial review of the sixteen papers also showed studies were undertaken in different international contexts and designed for diverse purposes. The underlying background of the majority of papers was of change – in particular highlighting changes in population needs and the subsequent drivers for service delivery redesign. Consequently, interprofessional working has become prominent within academic discussion.

The research question calls for the identification of research themes and categories (Carnwell and Daly, 2001) within the intersection of professional identity and integration. Three key themes identified from the content analysis of the papers were: i) the creation of professional identity, ii) challenges and barriers to professional identity and iii) implications for leadership and management. Sub themes of voice, power and culture were also present. Each of the 16 papers are discussed within the three key areas of interest.

**Creation of professional identity: how people construct their professional identity.** The development of professional identity is considered at the individual and group level. Clark (2014) discusses the narrative or storytelling in interprofessional practice and education.

The notion of creating one's own professional identity is explored at three places; self, relationship with patients and relationship with the others in the team. Clark (2014) finds the narrative approach allows insight into the complexity of the multiple layers of professionals and recognises the need for a variety of voices (rather than uniprofessional) in creating professional identity. This concept of voice draws on Clark's (1997) earlier work that focuses on values in health care professional socialisation (here Clark refers to socialisation as '*the acquisition of the knowledge, skills, values, roles and attitudes associated with the practice of a particular profession'* p 442). This paper is limited to medicine, nursing and social work. Socialisation is argued to be conceptualised as the development of a distinctive viewpoint with different health care professionals having unique perspectives that combine at the point of making complex clinical decisions. Interestingly, Clark (1997) goes on to draw on Kiger's (1993) analogy of professional identity as a '*carapace*' – in one respect not one whole but conjoined or as a protective armour to buffer the more traumatic elements of clinical practice. Counter to the shield of the carapace, the focus of Mitchell, Parker, & Giles' (2012) paper is open mindedness. Sinkula, Baker and Noordewier's (1997) definition of openmindedness is employed as a willingness to question one's own position and find evidence against one's beliefs or perspectives. The researchers used survey questionnaires and conclude that open mindedness offers a backdrop to enable discussion across professions. However, this has little impact where health professionals strongly identify with their own profession. In contrast where health professionals are aware of the different professional roles open mindedness can help facilitate healthy debate.

Payne (2006) looks at identity politics and argues that the way identity is constructed is changing. Historically roles have been attributed to people because of the role they played

with established power dynamics; roles were well understood. This aligns with the International Health Professionals in Neiterman and Bourgeault's (2015) paper who strongly identified themselves with their role. Payne (2006) argues with the advent of the multiprofessional teams and suggests roles now need to be negotiated due to boundaries being more complex and the different skills and resources required both within the team and beyond. Payne (2006) suggests Communities of Practice are fundamental as they help construct the identities of fellow professionals and develop a shared history.

A sub theme within the construction of professional identity is power. Payne (2006) suggests the previously stable power dynamics between professionals are shifting alongside the growth of multiprofessional teams. Lingard, Reznick, DeVito, & Espin (2002) studied the development of 'other' professional identities in the operating room. They found that the construction of 'others' were commonly quite negative especially in relation to their values and motivations. This is counter to how the 'other' profession views itself. The interpretation is dependent on whether they view motivation to be driven by a concern for the patient or a desire for power. They note where training is uniprofessional the practitioner can have '*narrow or distorted understandings of one another's roles, skills and cultures*' (Lingard et al., 2002 p. 733). MacDonald, Jayasuriya, & Harris (2012) investigation into power dynamics also centred on trust and how professionals collaborate in the management of type two diabetes. Working across professions is reported to potentially lead to uncertainty and risk and so influences how different professions collaborate. Here trust is paramount to enabling collaboration. They conclude that interprofessional relationships dominate the success or otherwise of policy at the local level. One key finding is the use of power to retain autonomy (felt as a key part of some professions' identity), including the use of passive resistance by some professions.

In creating a professional identity the above studies acknowledge it is a social activity (from practice or education). The development of a 'strong' professional identity is not noted to be undesirable but more significant due to the need to recognise the professional identity of others and negotiate ones' own professional identity while constructing that of other professions. Trust is identified as a vital component when negotiating professional identity during a period of change. In summary this section notes how the use of power can be found to have a negative effect in building the perceived professional identity of others. Other challenges for professional identity in interprofessional teams are explored in the next section.

**Challenges: Interprofessional teams – threat to professional identity?** The challenges to professional identity present in several ways. The policy context is explored by Pate, Fischbacher, and Mackinnon (2010 p. 203) who identify that change produces a fear of perceived dilution of professional identity with a need to '*defend their turf*'. Pate et al. (2010) note the fight for professional identity is not new, with the concept of professional identity being long standing and highly valued by health professionals. As a result there are associated 'in' groups and 'out' groups. The paper refers to many studies on the challenges to professional identity which commonly discuss the challenges without identifying solutions. Here Pate et al. (2010) offer a potential solution from the conflict resolution and negotiation literature: decategorisation (downplaying the significance of the profession), re categorisation or dual identity. The first two are not considered in a positive light while dual identity is perceived to have greater possibilities, involving recognition of the identity of the professional and the team.

Mitchell has three papers in this scoping review. In this paper, Mitchell, Parker & Giles (2011), note the challenge of diversity, with a focus on the impact on team effectiveness. Their quantitative study used survey data from 47 teams and identified the negative effects of diversity. Here an increase in the diversity of a team formed a threat to professional identity and impacted on performance. Building on Chrobot-Mason, Ruderman, Weber, & Ernst's (2009) work, McNeil, Mitchell, and Parker (2013) review the literature to draw out threats to professional identity. The authors identify five triggers of professional identity conflict: differential treatment, different values, assimilation, insulting or humiliating action, and simple contact. The paper explores how each of these triggers can act as a '*professional identity faultline'* when working across professions providing challenges to the development of interprofessional team working (Implications for management and leadership will be considered later). These faultlines serve to divide professions. Nevertheless, the need for mutual reliance is drawn out in a qualitative study by Holmesland, Seikkula, Oystein, Hopfenbeck, & Arnkil (2010). Findings from focus groups demonstrate that in order for the team to function successfully practitioners need insight about their own role and that of others. The traditions of specialisation, the difficulty in letting go of ones' own role is found to be impacted by stereotypical anticipation of roles by those unfamiliar with the potential breadth of others' work. Drawing on the concept of Community of Practice, in line with Payne (2006), they identify the need for familiarity with others and their knowledge to break down cultural barriers.

The role of culture is also identified by Neiterman and Bourgeault (2015). This paper explores several areas, including professional identity, with overseas educated health professionals adapting to working in Canada. The health professionals forming the sample for this study are not strictly part of one interprofessional team but there is a focus on

resocialisation with an interesting perception of presumed inferiority of internationally educated health professions joining teams. The idea of a culture of professional hierarchy through professional identity is drawn out as a barrier to interprofessional working.

The first three papers discussed in this section centre on conflict whether from a lack of recognition for each profession, diversity or faultlines. The remaining papers discussed within the theme of challenges recognise the role organisational and professional culture can play (for good or ill) in building or overcoming challenges to professional identity in teams. The need for leadership and management is intimated by some of the papers in the first two sections of the discussion and are drawn out further in the next section.

**Implications for leadership and management.** The essential role of leadership for integrating services is recognised (Best, 2017) and the need to actively manage the integration of different professionals, not leaving it to chance, is noted in several papers. Workman and Pickard (2008) offer a reflection on three years of working within a multidisciplinary team. Interprofessional teams in their UK locality are reported not to be an add-on to mainstream services but rather being the mainstream. Their reflections suggest that some of the fears of integrated working were negated by two management strategies: i) effective planning and ii) reporting the benefits back to staff to ensure they retained confidence in the change. An interesting finding reported in this paper is on how different professions will apply for different posts, with social care staff more likely to apply for management posts than health professionals.

Callan, Gallois, Mayhew, and Grice (2007) also argue for the need to actively manage teams though from a different perspective. This study explores the multiple identities of health professionals in the context of change. Although practitioners may be members of

many different work groups, professional identity is the primary one. In line with Kiger's (1993) *carapace* Callan et al. (2007) find professional identity has a protective role, in particular during periods of uncertainty. Change is just such a situation and threatens group status. Change threatens professional distinctiveness and attempts to ignore a threatened identity in favour of the identity required for the change will reinforce the old identity – especially in lower status groups. Callan et al. (2007) note professional identity during the process of change needs active management and suggest endorsing both the previous identity and the new one required. This is in line with the concept of dual identity from Pate et al. (2010).

Mitchell and Boyle (2015) develop their ideas on openmindedness outlined earlier by investigating the moderating role openmindedness plays on several factors including professional diversity when innovating. In this later paper they start from the conundrum that interprofessional collaboration can be detrimental to innovation however homogenous groups can stifle innovation. The findings of the survey-based study demonstrate that when openmindedness is high the indirect influence on professional diversity is constructive, in contrast, when openmindedness is low the indirect impact on professional diversity is less helpful. These findings suggest the positive role openmindedness plays in professional identity in diverse healthcare teams. Nevertheless the findings show high openmindedness and diversity alone will not promote innovation. There is a need for all team members to be aware of (and think of) other team members. Mitchell and Boyle (2015) note implications for practice and identify that leaders need to understand how to support open communication within the team to develop interprofessional innovation.

Brown, Crawford, and Darongkamas (2000) identify arguments for and against blurring roles and boundaries between professions. They note one of the challenges as '*creeping genericism'* (p. 426) and stress the need to retain a professional voice. In this qualitative study in the mental health context Brown et al. (2000) conclude that while some perceive professional boundaries as a relic they are in fact alive and well. Kreindler, Dowd, Star, and Gottschalk (2012) undertook a 'critical scoping review' to explore silos and social identity. The paper is structured through five key areas of social identity theory noted as; social identity, social structure, identity content, strength of identification and context. Kreindler et al. (2012) note a regular theme from the literature as the importance of identity mobilisation and/or change in context in seeing changes in service delivery. Without a shift in professional identity change is less likely to succeed. They identify the work of Chreim, Williams, and Hinings, (2007) to reframe physicians working practices to enable their professional identities to be able to move with the required change. As noted earlier, the need to actively manage professional identity within interprofessional teams is key. Kreindler et al. (2012) conclude that there is a need to welcome the opportunities of working 'with and through' health professionals to overcome silo working in favour of effective service delivery.

## Discussion

As a result of this scoping review we have identified three cross-cutting themes that are worthy of further discussion. These themes are the role of others, the social nature of professional identity and identity mobilisation. Each of which will be considered in relation to the current interprofessional literature and the review's aim of identifying implications for future research.

////Insert Table 3 about here/////

Table 3. Summary of paper findings

The *role of others* is commonly identified within interprofessional teams in relation to knowledge sharing (Falk, Hult, Hammar, Hopwood, & Abrandt Dahlgren, 2017) or patient care (Lapierre, Gauvin-Lepage, & Lefebvre (2017). In addition, several of the papers in this scoping review recognised *the role of others* as playing a significant role in developing professional identity amongst practitioners in interprofessional teams. This idea suggests that to progress our understanding of professional identity in interprofessional teams a focus on single professions will be of limited value. Future studies will benefit from engaging the wider health and social care professions team to ensure advances in knowledge support interprofessional team working and in turn patient care.

Tying in with the concept of '*others*' the theme of the *social nature* of creation of a professional identity is drawn out. Socialisation manifests as the process by which interaction with others occurs and so facilitates (or otherwise) the development of professional identity. The place for socialisation is recognised with student cohorts (Byszewski, Gill, & Lochnan, 2015; Gould, Day & Barton, 2017) but less so amongst post qualifying staff groups. This leads to considering whether different approaches and different career stages for facilitating socialisation lead to different professional identities being created. What are the factors around socialisation that impact on how the professional identity is formed? Is it who is involved (uni/multi professional) what stage (in training, early career, later career) or location?

Finally, *mobilisation of professional identity*. Most of the studies within the selected papers were conducted within the context of change. These papers highlight the point that

professional identity requires active engagement and management and cannot be ignored, particularly during periods of uncertainty. Innovating is recognised by several papers as a time of insecurity and stress the need for clear communication. This is not to say the papers suggest professional identity should remain frozen: Table 3 highlights a recognition for the need for identities to be mobile. The call for a flexible workforce is commonplace today with the challenges facing health and social care requiring different ways of thinking about how professionals work (Dubois & Singh, 2009). Harvey, Annandale, Loan-Clarke, Suhomlinova, & Teasdale (2014) explore mobilising the identities of middle and junior managers, including clinical managers, with a focus on their manager identity. They find a nuanced picture of the 'reluctant manager'. Switching the emphasis of their study to clinician identity may provide interesting insights into mobilising clinician professional identity taking in queries such as has the notion of a single professional identity for life, created before graduating, now become outmoded and no longer fit for purpose?

Returning to the research question posed earlier in the paper '*What are the current themes in the field of professional identity in interprofessional teams in health and social care?*', we identified three key themes from the professional identity in interprofessional teams' literature: challenges and barriers to professional identity, how people create their professional identity within an interprofessional team and finally implications for leaders and managers. In addition, we identified three less evident and cross-cutting themes that emerged from our analysis of the papers: the role of others, the social nature of professional identity and identity mobilisation. All of these themes have formed the future research agenda we propose for professional identity in interprofessional teams. Before moving onto this agenda it is important to recognise the strengths and limitations of our study.

One of the strengths of this review was exploring an under studied, though vital arena within professional identity. This focus set much of the inclusion and exclusion criteria. In turn this focus can be pointed to as a limitation. The exclusion of papers centred on students or uniprofessional studies led to the exclusion of many excellent papers on the topic of professional identity. These would form an interesting paper in their own right and may help respond to a different research agenda: to what extent are there difference between professional groups in how they develop / maintain their professional identities and respond to integrated care initiatives.

The multiple definitions within integrated care can cause confusion and added complexity within the field. Often papers failed to provide a clear definition and therefore this means the papers shortlisted may not adopt the same viewpoint of what an interprofessional teams consist of. Greater use of the terms as defined by Reeves et al. (2010) would be helpful to both the research community and professionals.

Another area that would benefit from consideration, but not included in this study, are people who work in integrated teams but whose roles are not part of a formal profession. This may include support staff or non-registered team members such as support staff (clinical and administrative) or managers. These groups were not included in this study in a bid to place some boundaries on an already large topic.

While scoping reviews facilitate reporting and transparency (Brien, Lorenzetti, Lewis, Kennedy, & Ghali 2010) scoping studies have been criticised as being limited in rigour with a potential for bias (Grant & Booth, 2009). In this paper this complaint is mitigated with a thorough description of the search process undertaken and the adoption of a well-recognised approach used to guide the design of the review process (Arksey & O'Malley,

2005). The analysis of the papers was conducted and cross-checked by both researchers and themes and categories identified as advocated by Carnwell and Davey (2001).

## Concluding Comments: Future research agenda

The salient points arising from this scoping review (see Table 3) are centred on creating a professional identity, while working within an interprofessional team, and how this links with others and social interaction. The most pertinent context for developing and maintaining a professional identity from this review is change. The main implication for practitioners working interprofessionally across health and social care settings is what the literature refers to as 'identity mobilisation'.

Following this scoping review an agenda for future research is proposed specifically for studies to focus on the intersection between professional identify and integration. There is a lack of primary research studies in this space and further investigations in this area need to employ robust methodologies to strengthen the evidence base. Given the significance of the integration agenda in contemporary health and social care delivery the following areas of research will help to shape future studies.

- The practitioner's perception of the value of professional identity in interprofessional teams needs to be further explored.
- The voice of health and social care professionals who actively choose not to work in interprofessional teams would be interesting to hear. Very few studies have been able to include this viewpoint within their research.
- The level of integration across health care professional groups is narrow and further research is needed to explore teams with a larger representation of professions and the inclusion on non-professionals.

- The role of education is noted in several papers and a study focusing on those professionals who do have joint undergraduate training could be informative. Papers that specifically focused on students and education were outside the remit of this review, but we noted many of these have been recently published. Interprofessional teaching and training is attracting more attention and we recommend that professional identity needs to feature within this cross-disciplinary work.
- Some interprofessional teams are solely based in health and further research explicitly exploring those working in health *and* social care would shed light on working across organisational boundaries and associated challenges to professional identity in interprofessional teams.
- The focus of this study has been the health care professionals. Further study exploring approaches to mobilising professional identity and then the impact this has on service users' perception of care would be of interest to many.
- Several papers mentioned team cohesion and further investigation into the links between professional identity, team performance and service delivery would be of interest.
- Should professional identity be found to be significant then support and development mechanisms will need to be identified.

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*Papers included in the review

Table 1. Inclusion and exclusion criteria

***Inclusion criteria***

Studies were included if they:

1. Were written in English
2. Published between 1980 and July 2018
3. Were focused on registered health and or social care staff (HCPC, NMC etc)
4. Were focused on teams working in health and/or social care
5. Included multi-professional teams
6. Published in peer reviewed journals

***Exclusion criteria***

Studies were excluded if they:

1. Were focused on one professional group
2. Were focused on education in isolation. Papers were included if they included education as an aspect of the study
3. Were focused on professional identity for students
4. Were not related to health or social care
5. Were conference papers or dissertations.
6. Published in grey literature

Table 2. Summary of papers meeting inclusion criteria

| Paper title | Year | Author(s) | Stated aim of paper | Professions identified | Methodological approach | Data colle |
|---|---|---|---|---|---|---|
| 1. When do interprofessional teams succeed? Investigating the moderating roles of team and professional identity in interprofessional effectiveness. | 2011 | Mitchell, R., Parker, V., & Giles, M. | To explore the moderating role of team identity and professional identity threat in interprofessional team performance | 3-5 different professions (detail not given) | Quantitative | Surv from inter onal a ter refer hosp |
| 2.Interprofessional practice and professional identity threat | 2013 | Mcneil, K. A ; Mitchell, R.J, & Parker, V. | To use Chrobot-Mason et al's (2009) typology to explore the triggers of professional identity conflicts, to understand why faultlines appear in interprofessional teams and why professional identities become salient and impair team functioning | Doctors, nurses, social workers, allied health professions, physicians assistants | Review of literature & summary of workplace studies | Not s |

Professional identity in interprofessional teams

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|---|---|---|---|---|---|---|
| 3.Open Dialogues in social networks: Professional identity and transdisciplinary collaboration | 2010 | Holmesland, A., Seikkula, J., Nilsen, O., Hopfenbeck, M., & Arnkil, T | To explore the challenges connected to the transformation and emergence of professional identity in transdisciplinary integrated care | Health care professionals and social & educational professionals | Qualitative | Thre<br>inter<br>cond<br>with<br>focus<br>1. he<br>profe<br>; 2.<br>profe<br>from<br>socia<br>educ<br>secto |
| 4. Narrative in interprofessional education and practice: Implications for professional identity, provider-patient communication and teamwork. | 2014 | Clark, P. | To look at narrative approaches in research and practice; self-narrative, co creation with the patient, co constructed with members of health care team | Health and social care professionals | Review of literature | Data<br>Cinal<br>PubM<br>Psycl<br>and<br>Socio<br>Abst<br>Beha<br>and S<br>Scier<br>searc<br>with<br>keyw<br>time |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | used Num pape sour prov |
| 5.Professional Identity in Multi-Disciplinary Teams: The Staff Speak | 2008 | Workman,A. & Pickard, J. | To reflect on the experience of an integrated multi-disciplinary team over three years. | Included; nurses, social workers and housing support officers | Qualitative | Expe an in mult disci team three and t studi |
| 6. Forming professional identities on the health care team: Discursive constructions of the 'other' in the operating room. | 2002 | Lingard, L., Reznick, R., DeVito, I., & Espin, S. | To explore team members' interpretations of team communication in the operating theatre | Surgeons, nurses, anaesthetists, trainees | Qualitative | 52 te mem divid 14 fo grou |

Professional identity in interprofessional teams

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|---|---|---|---|---|---|---|
| 7.Restructuring The Multi-Professional Organization: Professional Identity And Adjustment To Change In A Public Hospital. | 2007 | Callan, V., Gallois, C., Mayhew, M., Grice, T., Tluchowska, M., & Boyce, R. | To focus on employees' multiple group memberships and their acceptance of organisational change | Nurses, administration, medical and 'other health professional' | Quantitative | Orga (larg hosp wide (n= 1 with (n= 7 |
| 8.Blurred roles and permeable boundaries: The experience of multidisciplinary working in community mental health | 2000 | Brown, B., Crawford, P., & Darongkamas, J. | To interrogate the implication of the teamwork approach for professional identities and occupational boundaries for those working in community mental health. | Community mental health nurses, occupational therapists, clinical psychologists, psychiatrists, mental health support workers | Qualitative | Inves of th inter ary n healt – int (n=2 three |
| 9.Values in Health Care Professional Socialization: Implications for Geriatric Education in Interdisciplinary Teamwork. | 1997 | Clark, P. G. | To explore the process of acquiring a professional identity | Social workers, physicians and nurses | Conceptual | Fram deve discu litera |

Professional identity in interprofessional teams

| | | | | | | |
|---|---|---|---|---|---|---|
| 10.Identity politics in multi-professional teams: Palliative care social work | 2006 | Payne, M. | To examine professional identity in social work and then developments in thinking about multiprofessional teamwork | Palliative care practitioners including social workers and nurses | Conceptual | Not s |
| 11.Health improvement: Countervailing pillars of partnership and profession | 2010 | Pate, J. Fischbacher, M. & Mackinnon. J | To assess the extent to which employees identify with their professions and whether professional identity poses a significant barrier to multi disciplinary interorganisational partnerships | Managers, nurses, doctors, social workers | Mixed Methods | Mixe meth appr Surv 31 pe resp rate. inter |
| 12.The influence of power dynamics and trust on multidisciplinary collaboration: A qualitative case study of type 2 diabetes mellitus. | 2012 | McDonald, J, Rohan, J. & Fort Harris, M. | To explore the influence of power dynamics and trust on collaboration between health professionals involved in the | A 'diverse' range of professions including GPs, pharmacists, physiotherapis ts, community | Qualitative | Semi struc inter with five h servi prov |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | management of diabetes and their impact on patient experiences | nurses, dieticians, optometrists, podiatrists and other community support workers | | from nine orga and patie |
| 13.Open-mindedness in diverse team performance: Investigating a three-way interaction. | 2012 | Mitchell, R., Parker, V., & Giles, M. | To explore the role of openminded interaction in professionally diverse teams. | Nurse, Dietician, Physiotherapist, Social Worker, Medical Practitioner, Pharmacist, Occupational Therapist, Speech Pathologist, Radiographer and Psychologist | Quantitative | Surv from mem 47 profe y div team |

Professional identity in interprofessional teams

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|---|---|---|---|---|---|---|
| 14.Professional integration as a process of professional resocialization: Internationally educated health professionals in Canada | 2015 | Neiterman, & Bourgeault. | To examine the integration *process.* | internationally educated physicians, nurses, or midwives | Qualitative | Inter with inter y edu healt and T fede prov and r stake |
| 15.Silos and Social Identity: The Social Identity Approach as a Framework for Understanding and Overcoming Divisions in Health Care | 2012 | Kreindler, S., Dowd, D., Star, N., & Gottschalk, T. | To explore the integrative potential of a single theory (social identity approach) focusing on group level dynamics | Included: Doctors, nurses, managers, health care assistants, allied health professions | Systematic literature review | 348 r Litera sourc to th 2010 |
| 16. Professional diversity, identity salience and team innovation: The moderating role of openmindedness norms | 2015 | Mitchell, R. & Boyle, B. | To investigate a mediating role for professional salience in the relationship between professional | Nurses, medical doctors, paramedical staff, biomedical scientists, welfare workers, | Quantitative | Two surve to 12 healt team team respo |

Professional identity in interprofessional teams

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | diversity and team innovation | dentists, dieticians, pharmacists, psychologists, occupational therapists, opticians, physiotherapists, podiatrists and radiographers. | | |

Table 3 Summary of findings

| | ***Creation of Professional Identity*** | | | ***Challenges*** | | | ***Implications fo*** |
|---|---|---|---|---|---|---|---|
| *Sub theme:* | Others | Social | Power | Conflict | Interdependence | Culture | Multiple roles |
| *1. Mitchell et al (2011)* | | | | * | * | | |
| *2. McNeil et al (2013)* | * | * | * | * | | | |
| *3. Holmesland et al (2010)* | * | | | * | * | * | |
| *4. Clark (2014)* | * | | | | | * | * |
| *5. Workman & Pickard (2008)* | | | | | * | | * |
| *6. Lingard et al (2002)* | * | | * | | | * | |
| *7. Callan et al (2007)* | | | | | | | * |
| *8. Brown et al (2000)* | * | * | | | | | |
| *9. Clark (1997)* | * | * | | | | | |
| *10. Payne (2006)* | * | | * | | | | |
| *11. Pate et al (2010)* | | | | * | | | * |
| *12. McDonald et al (2012)* | | * | * | | * | | |
| *13. Mitchell et al (2012)* | * | * | | | | | |
| *14. Neiterman & Bourgeault (2015)* | | * | | | | * | |
| *15. Kreindler et al (2012)* | * | * | | | | | |
| *16. Mitchell & Boyle (2015)* | * | | | | | | |

Figure 1: Process for scoping study and numbers of paper identified (Adapted from Moher et al, 2009)