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Moore, Heather L., Farnworth, Allison, Watson, Rose, Giles, Karen, Tomson, David and Thomson, Richard G. (2020) Inclusion of person-centred care in medical and nursing undergraduate curricula in the UK: Interviews and documentary analysis. *Patient Education and Counseling*. ISSN 0738-3991

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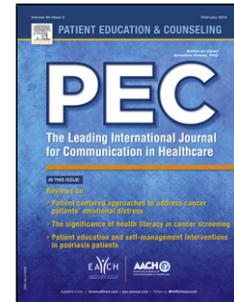
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Inclusion of person-centred care in medical and nursing undergraduate curricula in the UK: Interviews and documentary analysis

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PII: S0738-3991(20)30528-0
DOI: <https://doi.org/10.1016/j.pec.2020.09.030>
Reference: PEC 6778

To appear in: *Patient Education and Counseling*

Received Date: 27 May 2020
Revised Date: 9 September 2020
Accepted Date: 19 September 2020

Please cite this article as: { doi: <https://doi.org/>

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Inclusion of person-centred care in medical and nursing undergraduate curricula in the UK: Interviews and documentary analysis

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Highlights

- **Definition of PCC lacks clarity, leading to variation in teaching/assessment/practice**
- UK national professional standards differ in the way they incorporate PCC
- Undergraduate medical/nursing curricula reflect these differences
- Medical curricula are more paternalistic, nursing curricula more integrated
- Medical educators perceived greater barriers to inclusion of PCC in their curricula

Abstract

Objective: We aimed to understand how person-centred care (PCC) is represented in UK professional standards for undergraduate medical/nursing education and explored how these are reflected in programme provision.

Methods: We identified PCC components in medical (GMC) and nursing (NMC) professional standards and university curricula documents provided. We also identified themes from interviews with high-level informants for medical/nursing undergraduate programmes using framework analysis.

Results: The GMC appears to promote a more paternalistic model of care with discrete PCC components in specific sections and the NMC a more collaborative model with PCC distributed throughout. These differences persisted into education delivery. Medical educators perceived greater barriers to inclusion of PCC than nursing educators; however, both consistently identified cultural and organisational attributes. Clarity was lacking regarding PCC definition, how to teach/assess PCC, and competence expectations.

Conclusion: Development of a PCC skills competence framework would increase consistency and support teaching and assessment in undergraduate curricula. Further research to understand the perspectives of healthcare professionals involved in placements would help inform PCC teaching recommendations.

Practice Implications: High-level support from senior HEI leaders; multi-disciplinary approaches to curricula development, teaching, and assessment; and greater inclusion of service users would ensure higher quality PCC education for undergraduate students.

Keywords

Person-centred care; professional standards; undergraduate education; medical; nursing.

1. Introduction

Person-centred care (PCC) is recognised internationally as an essential component of 21st century healthcare. PCC involves putting people at the centre of their healthcare and making them equal partners in decision making to ensure that healthcare plans meet their needs, and are based on their values and personal circumstances[1-5]. There is evidence that elements of PCC can lead to improved health outcomes, better knowledge and understanding of risk, more active involvement in decision making and decisions better aligned with patient values, greater adherence to recommended clinical practice and medication, and reduced rates of elective procedures[6-8].

A major implementation programme on shared decision making (SDM) in the UK (MAGIC - Making Good decisions In Collaboration) has highlighted the importance of embedding PCC, and SDM micro-skills training, in educational curricula to improve delivery of PCC in healthcare professionals' everyday practice[9]. A limited number of studies have evaluated SDM or PCC training in the undergraduate curriculum (i.e. university education prior to professional registration to practice); published research in this area has shown improvements in healthcare professional confidence, skills, and attitude towards PCC practices in some but not all studies[10-13], along with a recognition of the disparity between student learning in the classroom versus clinical practice[12, 14]. SDM training for registered professionals has been linked to improved patient satisfaction, reduced patient anxiety, improved treatment adherence[15, 16], and improvements in professional decision coaching skills (including assessment of decisional needs, such as information, values clarity, support, stage and timing of decision)[17]. There is a paucity of evidence addressing the effectiveness of interventions aimed at improving healthcare professionals' uptake of SDM; the quality of evidence ranged from low to very low but interventions targeting both healthcare professionals and patients appear most promising[18]. Further, variability in outcomes evaluating the impact of training programs creates a challenge for comparing the relative effectiveness of programs across studies[19].

As professions that provide closely aligned and complementary roles that depend on working across multidisciplinary teams, it is particularly valuable to understand how approaches to PCC in medicine and nursing may differ. Inclusion of PCC in undergraduate curricula offers the potential to provide clinical trainees with the baseline knowledge, attitudes and skills required to deliver PCC. These curricula are shaped by national standards produced by the General Medical Council (GMC) and the Nursing and Midwifery Council (NMC). We have little understanding of the extent to which PCC is currently included in undergraduate medical and nursing training programmes or the factors that influence inclusion. This work focuses on undergraduate medical and nursing education, as part of a wider training needs analysis (TNA) that also included postgraduate training and CPD programmes. We aimed to understand how PCC is represented in national professional standards for undergraduate medical and nursing education, investigate how these standards are reflected in the respective curricula, and explore factors influencing inclusion of PCC in curricula content.

2. Methods

This work involved two components. Firstly, to address national leadership, we analysed published national professional standards for undergraduate medical and nursing curricula; two published by the GMC, their former “Tomorrow’s Doctors”[20] and recently released standards “Promoting Excellence”[21], and one by the NMC, “Standards for Pre-Registration Nursing Education”[22]. As a preliminary step, definitions of PCC were gathered (including skills and knowledge requirements, and components of PCC, such as SDM) from a range of different sources[1-3, 5, 23-35] and we used these to identify key words that encompass the concept of PCC (Table 1). We electronically searched for these keywords in each document, capturing the document phrase, location, and core message. We analysed these three documents individually then compared findings.

Table 1. Search Terms Used in Documentary Analysis of GMC and NMC Professional Standards.

Key Search Terms	
Decision* (<i>decision making and decision-making</i>)	Self-*/Self* (<i>Self-management/self management</i>)
Share*	Liter* (<i>Literacy</i>)
Person* (<i>person centred/person-centred</i>)	Communicat*
Patient (<i>patient centred/patient-centred</i>)	Prefer* (<i>Preference</i>)
Partner*	Empower
Choice/Choose	Activat* (<i>Activation</i>)
Care, Plan* (<i>Care plan/planning</i>)	

*: *Alternative endings of word accepted.*

Secondly, to explore undergraduate curricula, we conducted one-to-one, semi-structured telephone interviews with key informants with high-level responsibility for undergraduate medical or nursing programmes (e.g. programme directors, academic clinical leads, programme delivery managers and a Vice Dean). Universities that represented a range of established and newer degree programmes were purposively invited to participate and six of eleven English universities agreed to participate (three nursing and three medical courses). Reflection on the analysis of the undergraduate professional standards helped to identify key areas to cover in this interview schedule. The research team then discussed and refined potential open-ended questions, and pre-specified prompts, to ensure the schedule covered all areas relevant to subsequent analysis[36]; namely, PCC in the undergraduate curriculum at the interviewee’s organisation, including questions about whether and how PCC was incorporated and what influenced inclusion (see Appendix). The interviewer was a psychology academic with a background in clinical research. Study design was developed, and analyses interpreted, collaboratively with clinical academics with backgrounds in nursing and medicine. Interview transcripts were analysed using a framework analysis approach[37] to organise the data into predefined categories relating to the stated inclusion of PCC in the curriculum. Interrelated ideas were then identified within the data and emergent themes identified. Five of the six universities also provided additional curricular documents; a keyword search (Table 1) captured PCC components within these documents, which were compared with interview themes to identify common emergent themes.

3. Results

3.1 Documentary Analysis of PCC in Professional Standards

The original GMC standards were 105 pages long, whereas the current standards are 51 pages. The current version is more concise; however, there has been a reduction in detail, notably regarding PCC and its constituent parts. In both documents, relevant results were identified for decision making, care planning, and preferences (Box 1).

Box 1. References to elements of PCC within the GMC standards.

- a) *"Respect patients' right to reach decisions with you about their treatment and care."* (GMC 2009, p.a3; GMC 2015, p.a2)
- b) *"Determine the extent to which patients want to be involved in decision-making about their care and treatment."* (GMC 2009, p.19)
- c) *"Formulate a plan for treatment, management and discharge, according to established principles and best evidence, in partnership with the patient, their carers, and other health professionals as appropriate. Respond to patients' concerns and preferences, obtain informed consent, and respect the rights of patients to reach decisions with their doctor about their treatment and care and to refuse or limit treatment."* (GMC 2009, p.20)

While the GMC standards incorporate PCC, the language tends towards a paternalistic model of care, appearing to skew the balance of power towards the doctor and suggesting that they are to 'do to' rather than 'share with' patients. Results referring to patient preferences require doctors to seek out and respond to information from their patients, but not specifically to incorporate this information into decision making. This is further emphasised by the finding that searches for 'share' did not relate to interactions or decision making with the patient, but rather to clinicians collaborating, sharing accountability for decisions, and sharing good practice across medical schools. Nevertheless, reference to care planning introduces the idea of working with patients as partners (Box 1c). Duties relating to communication are also identical in both sets of standards (Box 2) and support involving patients in decisions about their care.

Box 2. Communication, Partnership and Teamwork (GMC 2009, p.a3; GMC 2015, p.a2)

- Communication, partnership and teamwork*
- *Treat patients as individuals and respect their dignity.*
 - *Treat patients politely and considerately.*
 - *Respect patients' right to confidentiality.*
 - *Work in partnership with patients.*
 - *Listen to, and respond to, their concerns and preferences.*
 - *Give patients the information they want or need in a way they can understand.*
 - *Respect patients' right to reach decisions with you about their treatment and care.*
 - *Support patients in caring for themselves to improve and maintain their health.*
 - *Work with colleagues in the ways that best serve patients' interests.*

The former GMC standards made direct reference to PCC; however, this statement was removed from the current standards.

“Demonstrate awareness of the clinical responsibilities and role of the doctor, making the care of the patient the first concern. Recognise the principles of patient-centred care, including self-care, and deal with patients’ healthcare needs in consultation with them and, where appropriate, their relatives or carers.” (GMC 2009, p.25)

The GMC includes PCC in specific sections of their standards, particularly when referencing communication skills. In contrast, the NMC incorporates PCC elements throughout the whole document, threading them into every aspect of skills, responsibilities and behaviours. In every section of the standards, including those relating to specific specialties, the NMC standards make explicit mention of PCC practice, SDM, and the requirement to work in partnership with service users¹, their families, and other professionals (Box 3).

Box 3. Examples of PCC threaded throughout the NMC standards.

“They must then plan, deliver and evaluate safe, competent, person-centred care in partnership with them, paying special attention to changing health needs during different life stages, including progressive illness and death, loss and bereavement.” (NMC 2010, p.18, 27, 36, 45)

“They must ensure people receive all the information they need in a language and manner that allows them to make informed choices and share decision making.” (NMC 2010, p.15, 24, 33, 42)

“Works autonomously, confidently and in partnership with people, their families and carers to ensure that needs are met through care planning and delivery, including strategies for self-care and peer support.” (NMC 2010, p.107)

“They must know when and how to communicate with and refer to other professionals and agencies in order to respect the choices of service users and others, promoting shared decision making, to deliver positive outcomes and to coordinate smooth, effective transition within and between services and agencies.” (NMC 2010, p.21, 30, 39, 48)

These standards move beyond simply acknowledging preferences and consulting with patients, by requiring nurses to ensure active involvement of service users and to support SDM. Even when patients may lack capacity to make decisions for themselves, the NMC standards promote individual choice and require nurses to advocate on behalf of service users to support those choices. However, it is important to note that, where there is uncertainty or conflict around the best course of action, or issues regarding the autonomy of the service user, the standards suggest that power to decide ultimately remains with the nurse. They also suggest that nurses are obliged to advocate on behalf of individuals and work with service users, carers and families to manage situations in a legally acceptable way.

Throughout the NMC standards, PCC is referred to in a number of ways, and its components are addressed via emphasis on decision making, being involved in care planning, promoting self-care, and influencing quality of care and future policies and strategies. While the standards are not clear

¹ In the UK, the terms service user and patient are sometimes used interchangeably, dependent on context.

in their definition of PCC, or explicit about the constituent components, our analysis suggests that the NMC standards incorporate PCC as: recognising individual needs of service users; informing them about available choices and supporting them to be actively engaged in decisions about their health and treatments; actively seeking the views and preferences of service users and advocating on their behalf if required; and engaging with other professionals across health and social care to ensure that care is consistently centred around individuals.

At the time of analysis, the NMC was consulting on revised professional standards, which have subsequently been published[38]. Whilst it was not possible to fully analyse the revised standards as part of this project, a brief review suggests that they continue to embed PCC in all areas of learning and practice.

3.2 PCC in Undergraduate Curricula

Two superordinate themes emerged during integrated analysis of the interviews and curricula documents: (1) Influencers of PCC inclusion in undergraduate education; and (2) PCC delivery and assessment. Each superordinate theme split further into subordinate themes (Figure 1), which we discuss in turn below.

3.2.1 Theme 1: Influencers of PCC Inclusion in Undergraduate Education

3.2.1.1 Significant Drivers of PCC in the curriculum

From our interviews, inclusion in regulatory body requirements (GMC, NMC) was a key driver influencing both medical and nursing programmes. Nursing programme interviewees were consistent in recognising the strong role of PCC in NMC guidelines. In contrast, there were discrepancies in interpretation of GMC standards between medical interviewees, with one feeling that reference to PCC was not extensive, and another feeling that the GMC promoted a “*collaborative patient-centred approach*” that provided leverage to increase the profile of PCC in their curriculum. A number of other influences were also described by respondents (Figure 2), which either directly (e.g. by influencing professional registration requirements) or indirectly (e.g. in response to employer needs, changes to the law on litigation) affect ongoing curriculum development.

3.2.1.2 Perceived Facilitators and Barriers to Inclusion of PCC

A number of facilitators and barriers to PCC were identified and these broadly fell into two categories; organisational and cultural (Figure 3), including variation in the definition of PCC; beliefs about its importance in healthcare; beliefs about whether it can be taught; high-level leadership support and buy-in from professionals; and time and resources.

Common to all interviewees, the most important factor influencing inclusion of PCC within the curriculum was the regulatory requirements of nursing and medical professional bodies. Additionally, all interviewees cited the importance of high-level support for inclusion of PCC from senior leaders within HEIs (Box 4a).

One nursing interviewee noted that students enter their training already holding individual beliefs around whether PCC is an essential and integral feature of care, or an aspirational but non-essential added extra. To combat these issues, one of the nursing interviewees described using values-based recruitment strategies when allocating student places, while one of the medical interviewees described identifying, and giving further input to, students with attitudes not conducive to PCC. One medical interviewee highlighted the practical challenge of ensuring that school-level policy was implemented consistently in teaching (Box 4b). A number of interviewees discussed their awareness

of discrepancies between the theoretical training provided to students, and the non-PCC practices they can be exposed to when they are on clinical placements (the 'hidden curriculum'; Box 4c and 6d). To counter this, interviewees described teaching that encourages students to recognise, discuss, and challenge non-PCC practice. They also described facilitation of tutor 'buy in' by working with tutors to co-produce PCC curriculum materials. However, medical interviewees felt that inconsistency in training would remain unless student assessment of PCC was made mandatory by the GMC (Box 4e), whereas nursing interviewees felt the NMC is clear (Box 4f).

Box 4. Example Facilitators and Barriers to Inclusion of PCC in the Curriculum

- a) *"Then <...> the Deputy Director of Studies got <the module lead> in a room and said, 'Yes we need to be doing shared decision-making in the final year. We need this as a thread in the curriculum'. It was like, 'Way hey!'. This is where you get the policy pressure. He is the guy who reports to the GMC and the GMC was telling us we have to do this. Great. Yes. Happy to do that" Interviewee 1 (medical)*
- b) *"Some of <teachers and clinicians> are absolutely on board and some who would say, 'We haven't got time to do this kind of stuff. All we've got time for is teaching the science, and that's what matters.' So whatever we implement at school level, the challenge is then getting that to be carried out in the way we would like it carried out on the ground" interviewee 2 (medical)*
- c) *"They'll see doctors working, but not thinking about the patient. Talking about the patient as a liver, or whatever and not really understand the patient's perspective. They'll take away the message that although they learn that in class, but in the real world you don't do that or you haven't got time to do that. We know how powerful role models are. They are far more powerful, the role models and what they see in practice, than what they taught in the classroom. The trouble is, if that conflicts with what they're teaching in the classroom, then they'll probably follow the role model rather than what we've taught" Interviewee 2 (medical)*
- d) *"I think one of the greatest challenges is in relation to the application of theory to practice. I should not be saying this but once students go out into practice they say they do it differently there" Interviewee 5 (nursing)*
- e) *"Wherever we can we're putting more patient related, ethical and professionalism issues in the MCQ, the multiple choice exam. There's an end of Year 1 exam, which used to focus more on science, and we've actually shifted that. Just a gradual process of trying to just put a bit more focus on it, at this stage. Obviously, more direction from above. You asked earlier on about the GMC and so on. I think, what would really make a difference would be if we were required to do it." Interviewee 2 (medical)*
- f) *"We started off on the route that the whole curriculum is centred around the patient and their family, and the NMC Standards as well do reflect person-centred care in my opinion" Interviewee 6 (nursing)*

3.2.2 Theme 2: PCC Delivery and Assessment

3.2.2.1 Content and Structure of PCC in Undergraduate Modules

All interviewees described inclusion of PCC and its components within their curriculum, although there were differences in how this was taught in medical and nursing programmes (Box 5). Medical interviewees identified specific modules where PCC training was provided (e.g. communication skills, long-term condition management), and one suggested that it was difficult to incorporate and deliver

PCC into some aspects of the curriculum. In contrast, nursing interviewees described PCC as integral and threaded throughout the programme, with certain modules also focusing on specific relevant skills. Nursing interviewees indicated that their programmes focused on the patient/person as an individual and the role of the healthcare professional in supporting patients/people to be involved in managing their own health and illness, providing evidence-based information and supporting patients/people to make choices, and developing individualised care plans.

Box 5. Contrasting descriptions of how PCC is incorporated across medical and nursing programmes.

“We do our best to do horizontal integration. But because of the scientific nature of what we are doing and the fact that a lot of it is taught by scientists rather than clinicians, there is a bit of a clumping of <SDM training> in the doctor bits of the course”
Interviewee 1 (medical)

“It is an integrated curriculum and so if we are talking about any situation in terms of anything that we told the students about, we are constantly talking, constantly emphasising within that the client, the patient, the you know the assessment process, the patient choice, mental capacity, you know what I mean, it is very difficult to split out one aspect and say oh well we just covered that there, because actually we don’t just cover anything in one because we are constantly you know talking to the students”
Interviewee 3 (nursing)

Of the six universities involved in this study, five provided additional documents from their curricular modules. The discrepant approaches described by interviewees to incorporation of PCC in the curriculum were reflected in the documents provided. PCC is included in a more organic way throughout nursing curricula, as well as specific modules that address specific skills (e.g. mindfulness, coaching skills, decision making), whereas medical education appears to include PCC in discrete modules. This influenced the type and number of documents provided by nursing and medical educators, with nursing respondents often providing documents outlining the entire curriculum.

There were clear challenges to analysing this documentary evidence. All documents evidenced PCC teaching somewhere and, in one case, details of a module entitled ‘Person Centred Care’ was provided. However, many of the curriculum components identified as relating to PCC involved either a general mention of PCC within module/session outlines or inclusion of concepts linked to PCC (e.g. empowerment and enablement, self-management of health, health literacy, acknowledgement of service user expertise, multi-disciplinary working). Often PCC components were built into lectures about specific conditions, issues, or specialities (e.g. nursing as it relates to children), and specific clinical skills (e.g. person-centred clinical history taking and personalised care planning, communication skills, and SDM training). A certain amount of judgement was therefore required to select modules incorporating PCC, and it was not always clear whether explicit teaching was included. Additionally, one interviewee explained by email how PCC was included in one of their modules, but this was not evident in their documentation. Further, while individual components of PCC were taught, there was little documentary evidence that students are taught about how these skills function together to provide optimal PCC.

PCC teaching appeared to be covered throughout the three-year degree of nursing students. There was more variability in the documents provided by those delivering medical training, with some covering PCC throughout the five years and some focusing more upon the final three (perhaps when clinical placements allowed application of skills). Medical curricula documents appeared to be more

structured and clearer in terms of their teaching and assessment expectations. The language used in the nursing curriculum was generally less concise and specified (Figure 4).

3.2.2.2 Patient and Public Involvement

All interviewees gave examples of service user involvement in the curriculum (Figure 5).

Medical interviewees reported concerns around how best to involve service users and reticence among some colleagues concerned about the potential for loss of control over teaching content. These concerns were not articulated by the nursing interviewees (Box 6).

Box 6. Attitudes of medical and nursing educators towards service user involvement in curricula.

"I would say that patient and population involvement has been a real challenge for us, and a challenge that I don't think we've risen to particularly well. I guess that has moved as well, because I can remember discussions 10 years ago of people saying, 'Well, what would the public have to say to us? What would they know?'. Now people are saying, 'Oh, if only we could do this it would really help us.' So I guess that is a change, but I would say that's a big challenge." Interviewee 4, (medical)

"We have service users emailing us. They have heard from their friends that we use service users in role play. For example, we have collaborated with the Alzheimer's Society and all of our students are dementia-friendly trained, all of the students. I would say the collaboration with service users, with patients to give a really good perspective to the students of what it is about putting the person at the centre of care that you deliver." Interviewee 5, (nursing)

3.2.2.3 Teaching, Assessment, and Quality Assurance

Interviewees offered a range of teaching and assessment methods to assess awareness of, and ability to deliver, PCC (Figure 6). Teaching involved both PCC-specific sessions and broader sessions that incorporated PCC (e.g. communication skills, professionalism, or a session about a specific health complaint, which concurrently introduces service user perspectives). It frequently included practical learning alongside more theoretical approaches.

While all interviewees described both formal and informal quality assurance processes, (e.g. regular formal quality meetings, feedback from students, feedback from others in relation to the extent to which students are good communicators or caring practitioners, e.g. from foundation schools, and employing hospital Trusts), none identified any processes aimed specifically at evaluating the PCC content of the programme or its impact on practice. One barrier identified was how to quantify and measure individual performance in students, which then makes both identification of effective PCC teaching and measurement of its impact on professional practice challenging.

4. Discussion and Conclusion

4.1 Discussion

SDM and PCC are essential components of high quality care, and as such, are increasingly promoted as expected practice among UK healthcare professionals throughout a range of policy documents[1-4, 24, 27, 43, 44]. This research sought to explore how PCC is included in undergraduate medical and nursing education, from UK national professional standards through to the specifics of undergraduate curricula at different institutions. It used documentary analysis of national professional standards and curricula documents, and interviews with individuals with high-level responsibility for medical/nursing programmes at six universities. We found broad differences between nursing and medicine in the way PCC is included in both professional standards and curricula; specifically, nursing threads PCC throughout all components, whereas medicine tends to include it in discrete sections. Greater barriers to inclusion of PCC were perceived within medical education; however, cultural and organisational attributes were commonly identified in both fields. These included variation in the definition of PCC; beliefs about its importance in healthcare; beliefs about whether it can be taught; high-level leadership support and buy-in from professionals; and time and resources.

In the professional standards, curricular documents, and interviews, there was a clear divide in how PCC was incorporated and delivered in relation to other competencies required by the professional. Overall, the GMC appears to promote a more paternalistic model of care and the NMC a more collaborative model. The GMC acknowledges the right of patients to have opinions about their care, whilst the NMC emphasises supporting patients to make the right decision for them, in conjunction with their multi-disciplinary team, and advocating on their behalf when needed. Ultimately, both standards put the final decisions around care with the doctor/nurse, but the NMC standards use more subtle language and appear to make nurse-only decision making a final resort. This may perhaps reflect the historical context of the two professions, where formal decisions about patient care, and responsibility for outcomes, traditionally rested with the medical profession. The development of roles that increasingly give nurses formal responsibility for treatment decisions (e.g. nurse consultants and practitioners) are blurring these role boundaries, and it will be interesting to see whether this has any impact on collaborative approaches to healthcare decision making.

In terms of curricular content, within the medical documents analysed, PCC was included in discrete sections and specific modules, often tied into communication skills and case studies exploring social and cultural influences on conditions. Nursing documents integrated PCC teaching into all aspects of their programme. Whilst we can observe this difference, we have little understanding as to which approach leads to more PCC competent practitioners. Interviewees also emphasised the importance of the 'hidden curriculum' in shaping undergraduate practices and beliefs with regard to PCC[45]. This observation has been made elsewhere[46] as creating practice that is discrepant with overt teaching and student attitudes. Interviewees suggested that involving tutors and service users in PCC curricula development may increase engagement with these skills within their clinical services, but clearly PCC teaching needs to be wide-reaching in order to counteract the negative practices that some students experience on clinical placements.

This work identified a number of PCC teaching and assessment techniques, using robust methods in an exam setting. However, no institution involved in this work described any systematic evaluation of the amount and/or quality of PCC teaching and assessment in their formal curriculum and/or learning whilst on placement, nor the extent of their impact on the PCC competence and professional practice of their graduates. This may reflect the challenges of quantifying and

measuring individual PCC performance in students and the impact of PCC teaching on knowledge, practice, or patient outcomes identified in the literature[10-13]. Durand and colleagues[47] are currently attempting to address this on a larger scale by measuring the knowledge and attitudes of medical students towards SDM, and participation in training, in four countries, across all years of training.

The challenge to assessment seen in previous literature and our own work arises because the specific attributes and skill set of a PCC-competent practitioner are not well defined[48]. This partly results from a lack of clarity about what makes a competent PCC-practitioner within the literature[49], in professional standards, and across education institutions. This makes assessment of PCC competence amongst students, and the success of the curricula in helping students to achieve that competence, challenging. Without adequate quality assurance, PCC skills are unlikely to be held to the same rigour as other areas of the curriculum[46]. With regards to SDM specifically, an international, interdisciplinary group of 25 individuals met in 2012 to discuss core competencies and, while there was disagreement about whether there is currently enough evidence to define SDM and its competencies fully, they did agree that relational competencies and risk communication competencies were key[48]. Development of a competence framework that defines what skills are expected, and to what level a practitioner should be competent in PCC practices at the point of professional qualification, should be considered as a means of addressing these issues.

The single greatest driving force for inclusion of PCC in the curriculum described by interviewees is the regulatory requirement for graduates to be PCC competent practitioners. The GMC and NMC therefore have a clear role in driving undergraduate provision of PCC specific teaching. High-level support within HEIs is also essential for stronger representation in the curriculum. Beyond this, there are considerable perceived organisational and cultural barriers to inclusion of PCC in the undergraduate curriculum. With a shifting focus of priorities in healthcare, it can be challenging for education providers to amend their curricula to keep pace. Nevertheless, there may be opportunities for shared learning between medical and nursing educators, or opportunities to enhance or increase multidisciplinary education at this level. With the introduction of new medical schools in the UK, it will be interesting to observe whether a clean slate allows greater freedom to cover these important topics in a more wide-reaching way. However, the apparent de-emphasis of PCC and SDM in the latest medical professional standards for undergraduates[21] may complicate inclusion in a time-pressured curriculum.

These results are only applicable to training programmes designed to meet GMC and NMC professional requirements for registration and are based on a small sample. It is possible that our findings may not reflect practice at all institutions; therefore, one must be careful not to overextend the scope of the conclusions. However, consistent themes emerged across a range of established and newer programmes, suggesting that the results may be valid in the wider context of nursing and medical undergraduate education. Verification at other UK institutions would be valuable. While our results evaluate the application of the professional standards to formal undergraduate curricula, in this training needs analysis we did not consider the perceptions of healthcare professionals involved in workplace training, nor evaluate how they incorporate PCC teaching and assessment into student learning while on placement. The power of this hidden curriculum highlights the importance of closing the loop in future research, to inform understanding of PCC in all aspects of the undergraduate curriculum. It would also be beneficial to extend this work into postgraduate studies, considering PCC teaching, assessment, and expectations of competence in different disciplines and at different stages beyond graduation.

4.2 Conclusion

This research is the first to consider how PCC is represented in national professional standards for undergraduate medical and nursing education, and to investigate how these standards are reflected in the undergraduate medical and nursing curricula, as well as exploring factors that influence inclusion of PCC in curricula content. The GMC and NMC take different approaches to PCC in their professional standards; GMC includes discrete components in specific sections, whereas NMC distributes PCC throughout all sections of their standards. The differences observed between GMC and NMC professional standards for undergraduates were also evident in the interview and curricula data. While only six universities across the UK were consulted regarding PCC in their curriculum (three nursing and three medical), we interviewed key stakeholders from traditional and new universities to include a range of opinions and found consistent themes. By considering interviews and documentation together, we were able to capture the whole picture around formal PCC teaching in nursing and medical undergraduate education. What emerged was a lack of clarity around what constitutes PCC in practice, how this should be taught, and what level a nursing or medical graduate should have achieved at the end of their undergraduate training; all of which contribute to variation in teaching and assessment.

4.3 Practice Implications

Development of a PCC skills competence framework would increase consistency and support teaching and assessment in undergraduate curricula. Mandated PCC training by professional bodies, and continued high-level support, may also facilitate improvements in teaching and placement quality. Further research to understand the perceptions of healthcare professionals involved in training students on placement would close the loop and help to inform recommendations for PCC teaching across all aspects of undergraduate training.

Author Contributions

Heather L. Moore: Data curation; Formal analysis; Investigation; Methodology; Project administration; Roles/Writing - original draft; Writing - review & editing.

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Acknowledgements

We would like to express our gratitude to all participating organisations and individual respondents.

This work was supported by funding from the Health Foundation and Health Education North East.

Competing interests: None to declare.

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Legends

Figure 1. Superordinate and subordinate themes resulting from integrative analysis of interviews and curricula documents.

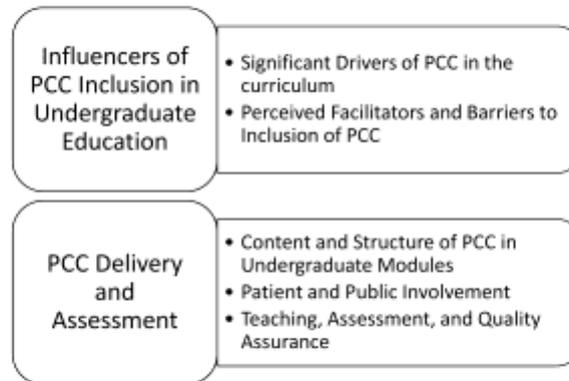


Figure 2. Influencers on undergraduate medical and nursing curricula.

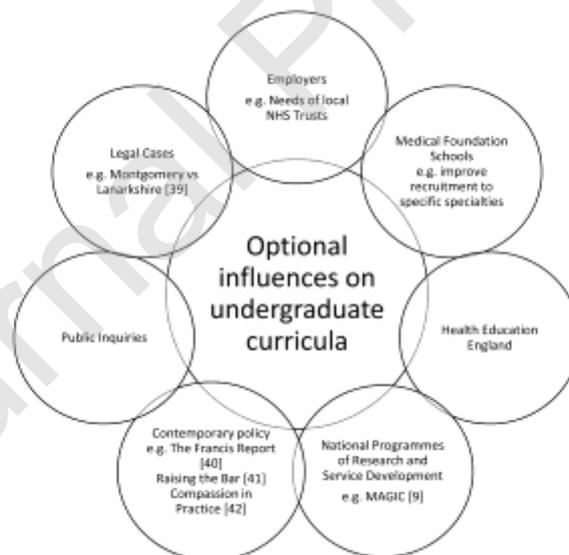


Figure 3. Attributes Influencing Inclusion of PCC in the Undergraduate Curriculum.

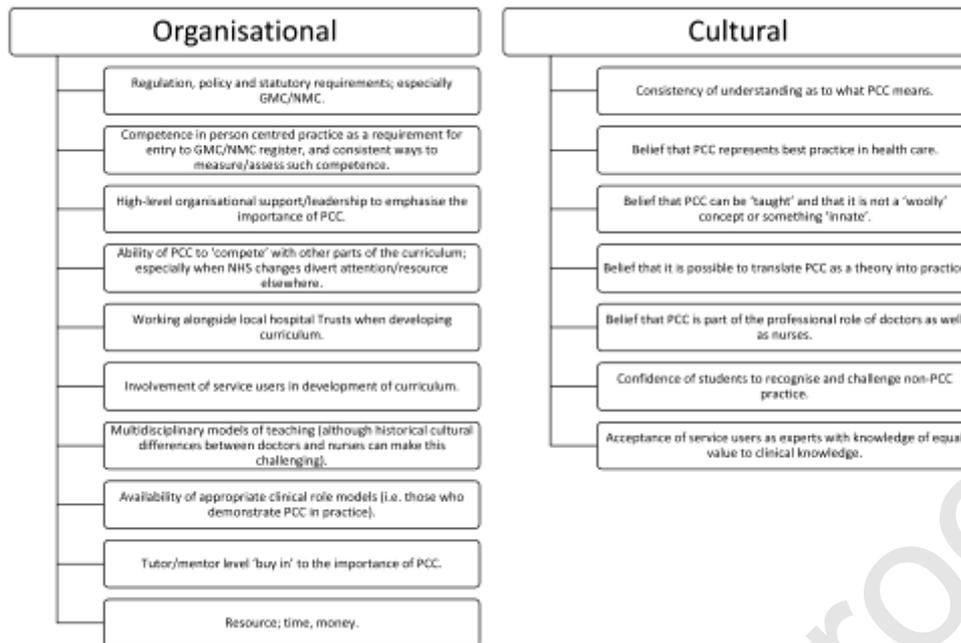


Figure 4. Example learning outcomes from medical and nursing curricula documents.

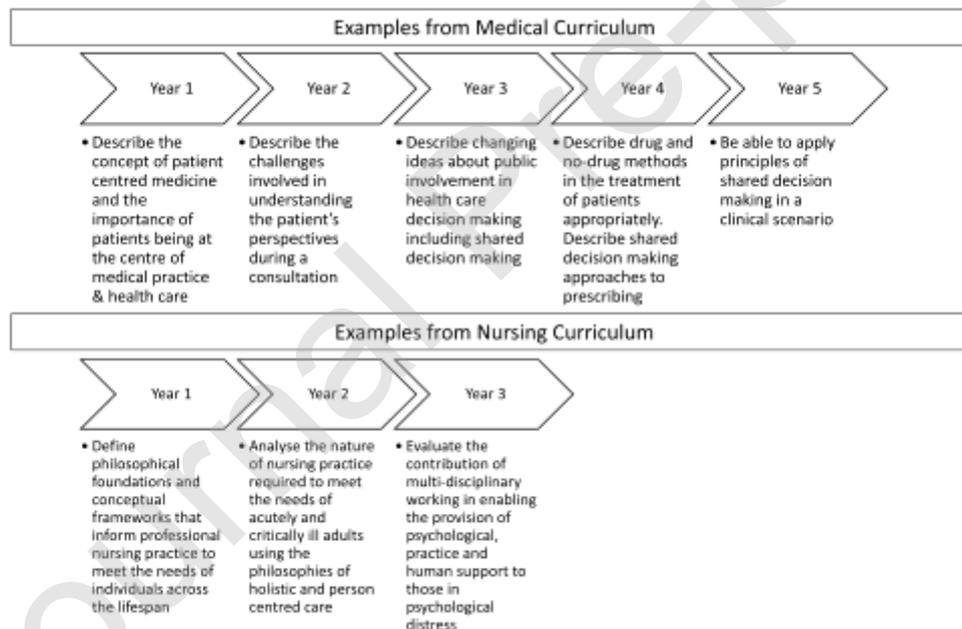


Figure 5. Examples of Service User Involvement in Curriculum Development, Teaching, and Assessment.

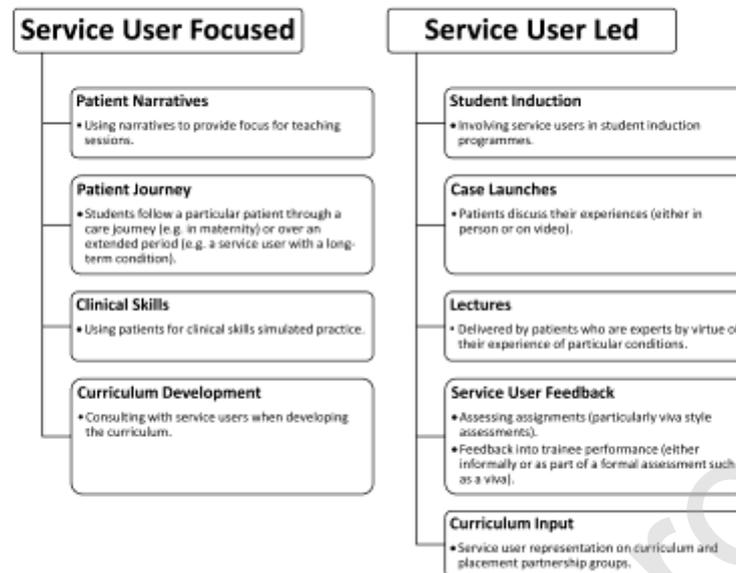


Figure 6. Examples of teaching and assessment of PCC in undergraduate medical and nursing curricula. N.B. OSCE: Objective Structured Clinical Examination; OSCA: Objective Structured Clinical Assessment; MOSLER: Multiple Observed Structured Long Examinations.

