

**Emma Hyde**

**CoRIPS Research Grant 146**

**£13,675 awarded**

**Title:** Developing informed measures of patient centred care for diagnostic radiography

**Aims:**

The aim of this study is to explore the meaning of patient centred care (PCC) within diagnostic radiography from the perspective of service users, radiology managers, clinical radiographers, radiography educators and pre-registration student radiographers in order to develop observable and meaningful measures of PCC that might be applied in clinical practice. This study builds on the values and behaviours identified in the Health Education England, Skills for Health & Skill for Care Person-Centred Approaches framework (2017) <sup>1</sup>.

**Primary and Secondary Research Questions:**

- Does the term patient centred care mean the same thing to service users, radiology managers, clinical radiographers, radiography educators and pre-registration students?
- How do these groups believe PCC is demonstrated in diagnostic radiography practice?
- What observable activities do these groups believe demonstrates PCC in radiography?
- Does PCC have the same meaning across different radiography provider settings (e.g. acute settings; independent sector);
- Do participant responses reflect key policy documents on PCC?<sup>1,2,3,4</sup>
- From responses, can we develop a set of meaningful, observable measures of PCC that can be applied to diagnostic radiography practice?

**Outcomes:**

This study will use the existing HEE and Health Foundation frameworks <sup>1,3</sup> to explore differing perspectives of PCC. Findings will enable meaningful, informed, acceptable and observable measures of PCC to be developed for application to clinical radiographic practice. These measures will be

subsequently validated in a future study and a professional practice tool kit developed to support radiographers to understand, measure and evidence PCC within the clinical environment.

### **Review of literature and identification of current gap in knowledge:**

There is growing awareness of the importance of PCC in order to provide high quality care<sup>1,2,3</sup>. The four principles of PCC as defined by the Health Foundation<sup>3</sup> (affording people dignity, compassion & respect; offering coordinated care, support or treatment; offering personalised care, support or treatment; and supporting people to recognise and develop their own strengths and abilities to enable them to live an independent and fulfilling life) have now been embedded within the Person-Centred Approaches framework<sup>1</sup>, and inform recently published 'Sustainability & Transformational Plans'<sup>4</sup>, emphasising the centrality of PCC within health policy and delivery.

Diagnostic Radiography literature focussing on PCC is sparse and no identified study has explored the meaning of PCC to clinical and academic radiographers, managers or service users, and how they believe PCC is demonstrated in clinical practice. Radiographer's interactions with patients can often be relatively short and highly technically focused<sup>5,6</sup>. Consequently, radiographers may appear to be goal focused and conscious of time pressures, which could be to the detriment of PCC<sup>6</sup>. There have been a number of studies in medicine and nursing which have looked at the impact of PCC on interactions with service users<sup>7,8,9,10</sup>. All of these studies report benefits of PCC, such as reduced length of stay post-operatively<sup>9</sup> and improved perception of nurses as a source of emotional support<sup>8</sup>. However, generalisability of these studies from nursing/medicine to radiography is uncertain due to differing work environments and professional philosophies of care.

It can be argued that PCC is part of professionalism and several authors have considered the impact of role modelling on the development of professionalism and how this might shape patient centred values in student radiographers<sup>11,12</sup>. However, these studies also report the potential negative impact of anti-role modelling and how experience of poor role models may promote negative professional perspectives and behaviours in students<sup>11,12</sup>. This is a crucial factor when considering observable behaviours of effective PCC. However, as no meaningful measures of PCC in diagnostic radiography have been devised, qualifying what is high quality PCC remains unclear and subjective.

Some authors<sup>13, 14, 15</sup> have argued that the development of the profession of radiography has been limited by the dominance of medicine (radiologists and oncologists) and have advocated the use of reflective practice to increase confidence, self-esteem and empower professionalism. McInerney et al<sup>16</sup> also argue that radiographers must do more than simply implement protocols; they must apply critical thinking and reflection to their practice as this will promote greater engagement with person centred care. However, no author has explored comprehensively what PCC means to radiography professionals or radiographer service users and how it might be evidenced and measured within the clinical environment. Our study seeks to elicit this definition and, through exploration of the understanding of PCC, develop observable measures to support professional reflection, practice evaluation and fulfil health policy expectations.

### **Methodology:**

This is a 2 stage sequential mixed-method study valuing both the volume of survey response data and the richness of focus group interview data.

#### **Stage 1:**

An attitudinal survey to explore understanding of PCC by service users, radiology managers, clinical radiographers, radiography educators and pre-registration students. Using the values, behaviours and outcomes from the Person-Centred Approaches framework<sup>1</sup> a series of attitudinal statements will be developed. Respondents will be asked to indicate their level of agreement to the statements using a 5 point Likert scale. Attitudinal statements will be paired (positive and negative phrasing) to increase validity. The survey will be distributed via a web based interface. The purpose of the survey is to provide a baseline measure of knowledge, understanding and attitudes towards the concept of PCC that will be explored further in stage 2. The survey will take less than 10 mins to complete to promote participation and completion.

Participation in the survey will be open to anyone within the UK who confirms they are a radiology service user, radiology manager, clinical radiographer (at least 70% of role is clinical radiography), radiography educator (academia) or pre-registration diagnostic radiography student. Respondents will be asked to identify with one of these groups to access the survey. Additional demographic information regarding years' qualified (where appropriate), geographical region and gender will also be sought to inform stage 2 focus group design. As with all remote questionnaire surveys, confirmation of respondent details is not possible. However, no cause or reason for false declaration is anticipated and

demographic information requested would not result in personal identification. Recruitment will be via advertisement in professional magazines, social media, email networks and word of mouth. Service user recruitment will be through University of Bradford and University of Derby service user advocacy networks.

**Sampling frame:** Given the varying sample frame for each subgroup, a minimum response rate of 30 within each of the 5 subgroups has been determined as sufficient for within and between subgroup analysis of responses<sup>17</sup>. However, we anticipate a much higher response rate across those subgroups with larger populations (e.g. clinical radiographers) and will aim to maximise all response rates through a broad approach to study advertising and recruitment as described above. While the minimal response rate values may not be considered representative in terms of population proportion, it will allow key themes to be identified for further exploration in stage 2. Respondent self-declared subgroup will be used to inform recruitment follow-up strategies to any subgroup where response rate is low.

**Analysis:** Data from survey responses will be entered into an Excel database for summary and descriptive analysis. Cross group responses to attitudinal statements will be analysed using Kruskal-Wallis one-way analysis of variance for non-parametric data. Survey responses will be used to develop vignettes to enable deeper discussion and exploration of PCC in stage 2.

**Ethical approval:** HRA ethical approval will not be required for either stage of the proposed research. Ethical approval for both stages will be obtained from University of Derby following established research governance processes. As survey distribution is through an open source, participation in the survey requires participants to actively seek and enter the survey online. The opening page of the survey will provide information on purpose of survey and data usage including confidentiality of individual participant demographic details. Continuation to completion of survey will be considered as proxy for informed consent.

**Stage 2:**

Respondents in stage 1 will be asked to indicate whether they are interested in taking part in a focus group to explore in greater detail PCC and to provide contact details if they would like to participate.

**Participant Recruitment:** 5 focus groups, each of 8 participants will be identified representing each study subgroup. Identification and recruitment will ensure that varied geographic, experiential and demographic profiles are incorporated to increase rigour. Participants will be provided with an information sheet outlining the purpose and context of the study as well as focus group operation. They will be asked to complete, sign and return to the researcher an informed consent form prior to date of focus group. On the day of the focus group, all participants will be reminded of purpose of study, that discussions will be digitally audio recorded and confidentiality of participant identities will be maintained within published reports and papers. They will be asked to re-confirm consent prior to focus group commencing. Focus group participation will be voluntary and for radiography subgroups travel expenses and subsistence will be provided. Service user participation will also be voluntary with payments for participation and travel being made in line with INVOLVE guidance<sup>18</sup>.

**Data collection:** Focus groups will be independently moderated by an experienced qualitative researcher with a member of the named research team present to make observational field notes. Vignettes (case scenarios) will be developed from the framework document<sup>1</sup> and the findings of the attitudinal survey. These will be used to initiate exploration of themes. Participants will be prompted to consider how PCC could present itself in the vignette scenarios and discuss observable actions and interactions they would expect to see as evidence of PCC within the scenarios presented.

**Analysis:** The focus group audio recordings will be transcribed verbatim with any reference to identifying information (e.g. person; place of work) being replaced by appropriate coding to ensure participant confidentiality. Focus group participants will be provided with an anonymised transcript to verify and confirm the statements made. A framework approach to thematic analysis will be employed to draw out themes and perceptions relating to the meaning of PCC and observable actions/behaviours that might form criteria for measuring PCC within and across subgroups<sup>19</sup>.

**Assuring transferability, credibility and dependability:** The context of the study will be clearly described to focus group participants and in dissemination papers/presentations to enable judgements about transferability of findings to be made. Anonymised transcripts of focus group discussions will be made available to participants to check for accuracy and findings will be reflected back to participants through an online interactive webinar (radiographer focus

groups with wide geographic reach) or in person at local meetings (service user groups). This approach will permit participant validation of discussion and findings assuring credibility. Detailed notes relating to study processes, decision making, analysis and interpretation will enable transparency in research increasing dependability and confirmability of findings.

### **Potential Impact:**

This study will determine best practice measures for PCC to inform Radiography professional policy, practice and clinical education.

### **Dissemination Strategy:**

- To service users through service user networks at both HEIs.
- To students/educators through presentation to Heads of Radiography group and development of material to be launched via a webinar and then used locally.
- To radiography professionals through presentation at conference (e.g. UKRCO, ECR) and peer reviewed journal publication (e.g. Radiography, Journal of Allied Health).

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