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Patient, public and practitioner partnership within imaging and radiotherapy: An exploration of the implementation and use of the college of radiographers guiding principles

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ABSTRACT

Introduction: In 2014 the National Health Service (NHS) in England released the Five Year Forward plan[1], envisioning a shift in power from health professionals to patients and the public. In response the Society and College of Radiographers (SCoR) produced the “Patient, Public and Practitioner Partnership within Imaging and Radiotherapy: Guiding Principles” (P4) document which was implemented within four domains of radiography practice; service delivery, service development, education and research[2]. This project explored how these guidelines were implemented; and whether improvement to the quality and scope were needed, leading to making recommendations for updating the document.
Methods: A mixed methods design was adopted with two phases. Phase 1 – a survey exploring use of the P4 document's guiding principles. There was no maximum number of participants to ensure inclusivity. Phase 2 - one focus group and four one-to-one interviews from the four domains[3].
Results: 626 participants completed the phase 1 survey. 18.85% (n=118) of participants were aware of the document and used it as a reference tool for practice, teaching, and research. 81.15% (n=508) of participants stated they were unaware of the document. Themes from phase 2; importance of service user involvement in service delivery and evaluation, resources to ensure service user involvement, suggestions to update the P4 document and use of the P4 document in radiographer education.
Participants acknowledged guidance in the document was best practice. They reported more awareness of patients' needs and the effect this has on radiographers in supporting their needs.
Conclusion: Participants recommended the document be given greater visibility. The voices of patients and the public must be heard within radiography practice.
Implications for practice: Feedback from this study can be used for the future development of the P4 document.

Introduction

In 2014 the National Health Service (NHS) in England released the Five Year Forward plan providing a vision for a shift in power from health professionals to patients and the public. It was aimed at ensuring service users were involved directly in decisions about the future of health and care services.[1] It is important to ensure the voices of patients and the public are being heard and addressed within our radiography practice and that there is a positive impact on each of the four domains of radiography practice; service delivery, service development, education and research.

In response to this agenda, the Society and College of Radiographers (SCoR) held a one-day workshop in 2017 to understand how best to engage patients and the public as stakeholders within imaging and radiotherapy practice. A key outcome from the workshop was an agreement that true partnership needs a shift in SCoR strategy. It became clear that a document to provide a clear direction was needed to share this overall vision.

A small task and finish group was convened in March 2018. The group were tasked with the production of a document to set out this vision. The group comprised of patients, practitioners, researchers, educators and SCoR officers, and was intended for use by

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all those with a stake in the quality of radiography practice. The SCoR produced a strategy document the "Patient, Public and Practitioner Partnership within Imaging and Radiotherapy: Guiding Principles" (known as the P4 document) which aimed to encourage the transfer of power within four domains of radiography practice, i.e. service delivery, service development, education and research. The document comprised of four sections with each one containing core values. Guidance and Resources were provided alongside the core values to inform how the core principles could be implemented.[2]

Ahead of a review and potential update of the document, this project was undertaken to explore how the guiding principles outlined within the P4 document have been implemented and used within the four domains of radiography practice since 2018, and what benefits, if any, have been realised because of this in practice. The results of this project will be part of the consultation work for the revised P4 document alongside a scoping review of the literature published since 2018 and a consideration of the processes involved in producing an updated guidance document.

The project acted as a formal mechanism to engage with practitioners, academics and researchers to effectively explore how the core values and guidance have been implemented, whether improvement to the quality and scope of the principles were needed, and to make recommendations for updating the document. It was intended the research would guide the update of the document to ensure it remains useful and relevant to the profession going forward, and to ensure service users remain at the centre of everything we do.

Methods

This project adopted a mixed methods approach with both quantitative and qualitative data collected in Phase 1, and qualitative data in Phase 2. This approach was selected in order to start broad and gain an overview of the thoughts of radiographers and then to narrow the focus and explore the concepts in more detail. Rossman and Wilson[3] identified three reasons for combining quantitative and qualitative research. First, combinations are used to enable confirmation or corroboration of each other through triangulation. Second, combinations are used to enable or to develop analysis to provide richer data. Third, combinations are used to initiate new modes of thinking by attending to information that emerges from the two data sources.

Phase 1 consisted of a brief survey exploration of participants' awareness of the P4 document and the use of the guiding principles of the P4 document. Phase 2 was planned to consist of six focus groups from each of the four domains of practice with participants who volunteered after taking part in Phase 1, however due to lack of participants there was one focus group and four one-to-one interviews. The focus group and interviews explored these questions in further detail. The participants were qualified radiographers, student radiographers, radiography educators and researchers.

The project was granted ethics approval (protocol number RETH(S)23_007) and key ethical considerations including, the risk of coercion, maintaining the confidentiality of the participants in the focus group data, perspectives of participant protection, and conducting research based on ethical standards were upheld following World Health Organisation (WHO) Guidelines.[4] The participants were provided with guidance on focus group and interview etiquette and conduct including the mention of confidential information within the focus group.[5] Participation in the study was voluntary and there were no known risks or hazards from taking part in the study.

Phase 1

The survey was conducted online using an online platform (QuestionPro). The use of online surveys is effective in speed, reach and cost-efficiency.[6,7] The sample comprised qualified and student radiographer members of the Society of Radiographers, from all radiography specialisms. The survey was designed to reach as many of these practitioners and students as possible. There was therefore no maximum or minimum number of participants specified.

An invitation to participate in the survey, the survey link and the Participant Information Sheet were advertised on the Society of Radiographers website. In addition, the study was advertised on social media using online platforms, LinkedIn and 'X' through the researchers' personal accounts and professional networks. The study was also advertised on the service managers' networks. The survey was conducted through voluntary participation. Once the participant completed and submitted the survey, they were enrolled on the study.

The survey consisted of a range of six open and closed questions and served to scope the breadth of use of the P4 document (see Appendix 1). The researchers acknowledge that they should have included some demographic questions of the participants, as without this information it was challenging to know who had contributed and if this was representative of the population. At the end of the survey, participants had the opportunity to volunteer to take part in Phase 2 of the project, i.e. a focus group. They indicated which focus group they wished to be part of and provided their name and contact details. Focus groups or interviews were held for:

- Service delivery and service development.
- Education.
- Research.

The responses from the survey were analysed inductively[8] using coding to extract key trends in responses for exploration within Phase 2 of the study.

Phase 2

This phase was planned to involve the use of six focus groups with volunteers from Phase 1 of the study. The focus group method of data collection is considered an innovative research method due to the interaction that emerges during the debate, is easy-to-organise and relatively inexpensive to conduct.[9] Six focus groups were considered pragmatic and sufficient to fully explore the emerging trends from the survey in Phase 1.[11] Questions used in the focus groups can be seen in Appendix 2. However, one-to-one interviews were used on four occasions as only one participant logged on to the online platform.

The focus group and interviews explored the four domains that were outlined in the P4 document in the following way:

- One focus group and one interview explored service delivery and service development.
- Two interviews explored education.
- One focus group explored research.

The P4 document currently lists the four domains so it was appropriate to consider each one separately. The domains of service delivery and development were combined due to the participants in this group being likely to be radiographers working in both service delivery and development.

The focus groups could each accommodate six to eight participants[10] and lasted approximately 90 min each. However, the numbers of participants were lower than expected. The volunteers

Table 1
Braun and Clarke's six Phase thematic analysis process applied to this study.

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data, reading and re-reading the data, noting down initial ideas - One member of the team transcribed the data and the rest read and re-read the transcripts.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code – two members of the team coded the data independently and then came together to share their coding.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme – again, two members of the team worked on this using their shared and agreed codes.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis – this was carried out by two members of the team.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis – direct quotes from participants have been used to illustrate the themes.

were emailed the necessary information, i.e. the Participant Information Sheet for the focus groups, and the list of the dates and times of the focus groups so that they could choose which one was best for them. The focus groups were conducted online using the Microsoft Teams platform in order to enable participation from a wide geographical area.

The focus group and interviews were conducted, and their data transcribed by a research assistant who was a member of the research team. The participants were recruited on a first come first served basis. Each participant was required to sign and return their consent form by email prior to their allocated focus group session. These were stored on a password protected computer to maintain confidentiality of the participants.

The data were analysed using thematic analysis in a precise, consistent and exhaustive manner using Braun and Clarke's six Phase process,[11] see Table 1.

Thematic analysis is a powerful, accessible and flexible method of qualitative analysis that enables the participant's experience to be described in rich detail.[12]

Experts by experience (EBE) from the Buckinghamshire New University 'People with Lived Experience Group' and 'Health Voices' group at the University of Suffolk were consulted about the project proposal and the survey questions. The EBE were keen to read the P4 document and agreed that the proposed project would provide a good review of how the P4 document has been used within radiography practice, research and education. They also commented positively on the inclusivity of the questions within the survey. Further feedback will be sought from the EBE groups when the final report is published.

Results and discussion

Phase 1 results

Phase 1 comprised a survey. The survey was conducted online with 3663 views. 1882 respondents began to complete the survey, however, 1256 dropped out yielding a survey completion rate of 33.26% (n = 626). It is important to note that there are currently 46,071 radiographers registered in the UK as of April 2024,[13] and so this is a very small percentage of these registrants.

The professional specialisms of the respondents are shown in Fig 1.

The findings indicated that 81.15% (n = 508) of respondents were unaware of the document and therefore did not use or refer to the guidance detailed in the document. These respondents stated that they had "not seen the document" and "never heard of it until now". Many respondents added that they "did not know anything about the document until the survey" and that "there was no communication about its existence".

18.85% (n = 118) of participants stated that they were aware of the document and used it as a reference tool for practice, teaching, and research. Below in Fig 2 is a breakdown of the domain of practice they referred to within the document.

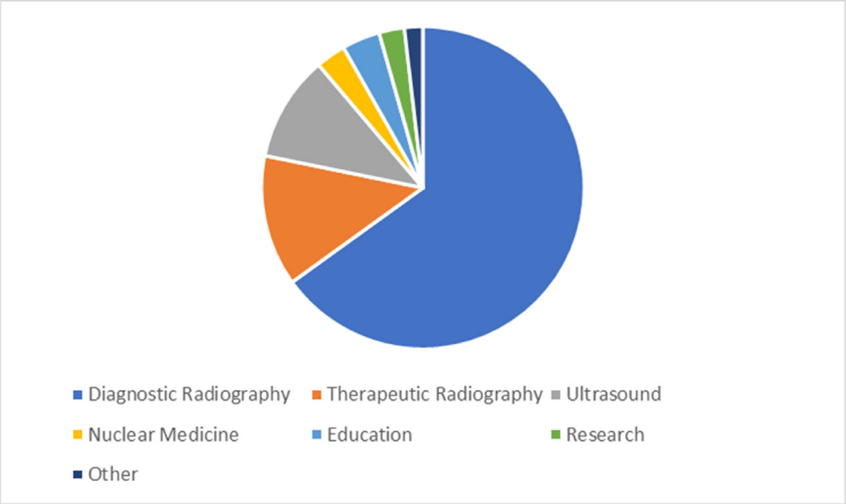

Figure 1. Range of professional specialisms of respondents.

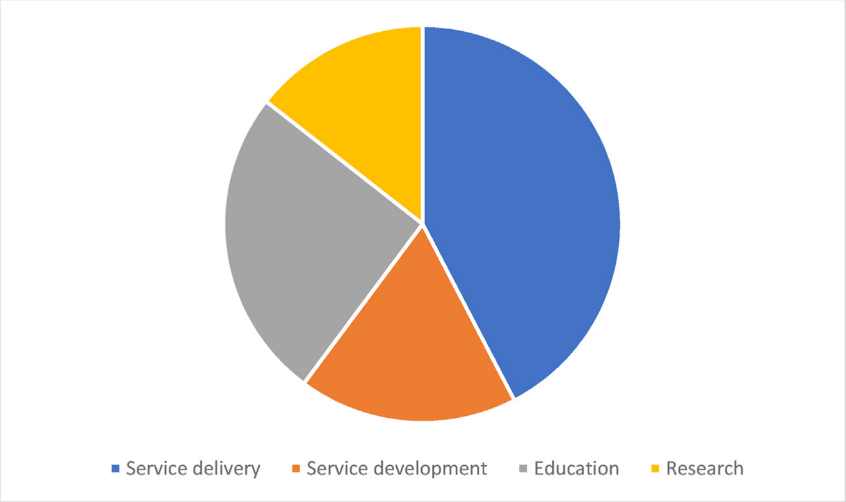

Figure 2. Domain of radiographic practice explored.

Survey findings

The findings from the survey have been grouped under subheadings.

The benefits of using the guidance

The benefits of using the guidance have been seen in gaining "more awareness of the patient voice, their reactions and needs", and "our actions and inactions" within service delivery. Implementing the guidance was found to "challenge assumptions". Referring to the document was found to benefit the "understanding of the importance of empathy" and "respect for patients and the public". The document provided practical guidance on "how to involve patients and public in decision-making processes" and to "ensure that services are accessible and responsive to diverse needs".

Furthermore, some benefit was seen in "leadership training", generating "continuing professional development ideas", "discussing report pathways", "setting high expectations for high quality service delivery" and "promoting good practice through formal structured documentation" although it was acknowledged that "not a lot of what is expected happens in practice".

Some respondents found benefit in "applying the principles when writing research grant applications to evidence the patient voice".

Student radiographer respondents noted that the guidance "gave ideas on how to speak and approach patients when starting in clinical practice" while radiographers gained clear "reasoning and backing when explaining ideal behaviours and expectations for students".

Lastly, a key benefit was noted in the expectation to publish results of surveys to patients, "it never occurred to me to display the patient satisfaction results so that service users could see the results. We will make this change".

Since the P4 document was published, there have been other national strategies and policies published which provide guidance on patient and public involvement in both health and social care and in healthcare research.[14–16] The guidance in these documents will need to be referred to in the update of the P4 document.

Document was unhelpful

Some respondents found the document not beneficial because of the "time to read all these documents from different sources, especially those which are not legally binding to my practice".

Respondents encountered resistance from department leads when they "publicised this document locally but it was dismissed as something we already do" due to the "lack of time" and "working pressures".

Respondents also reported that the guidance was "difficult to navigate", "out of date" and "more of a descriptive, tokenistic document without clear guidance on best practice implementation".

This feedback can all be considered to ensure that the document is laid out in a way that is helpful and easy to refer to.

How the guidance was used

Service delivery. Using the guidance helped in "communication skills when working with students and colleagues and the explanation of procedures in patient pathways".

Respondents felt that the principles "reminded us to treat every patient as a person and not an examination" by "removing the bias and avoid saying, 'the next chest". Respondents recounted that "even on busy days we have the responsibility to still maintain our core values at all times".

Student radiographer respondents considered "the recommendations around patient care and tried to implement these into my practice". Respondents also appreciated the reminder to "practise the duty of candour" and "implement the inclusive pregnancy status form to make our practice inclusive".

Lastly, respondents thought the guidance would be a useful addition to radiographer induction and preceptorship, "would be useful for preceptorship particularly for some of our fantastic international colleagues to get a feel for what patients in the UK expect from us".

It is helpful to see how the guidance has been used by radiographers in delivery of services and how this has improved their engagement with patients and the public.

Service improvement. Respondents found the guidance useful during "interviews with the local patient forum" to introduce radiology services, "the imaging department, explain what we do and undergo a question-and-answer session". Respondents also affirmed that they implemented the guidance to "ensure the principles are a core part of our team for guidance on patient safety, quality and improvement" and to "guide the creation of a vision for imaging and key deliverables". It is clear that the guidance has been helpful in how to involve service users in improving their services.

Education. Respondents used the guidance when “teaching students on placement”, to “encourage students to consider what they say to patients in simulation scenarios” and in the experiences they share, for example, “examples of personal experiences, both funny, sad and educational”.

The guidance was also helpful “to underpin curriculum development of apprenticeship, undergraduate and postgraduate programmes”, the core values “were used to design lesson plans”, and “as part of my induction as a practice educator”.

Lastly, the guidance was found to have a meaningful impact during patient and public involvement within university programmes, “when working with the university where patients volunteered to give talks to students about their experiences both good and bad, bringing to life the patient perspective”.

It is clear that the guidance has provided useful information to both students and educators and has been used in teaching about service user involvement and engagement.

Research. Some respondents found the guidance helpful when developing bids for funding, “completing a research grant application to consider how best to undertake public-patient involvement activities” while student radiographer respondents found the guidance helpful when searching for suitable research topics, “explored a topic on patient experience for my final year project”. Most grant funding applications require service user input, so guidance on this aspect is helpful.

Identifying outliers and missing elements in the document

Some respondents found that the document was “rather tokenistic in approach with no clear guiding principles for practical usage”. Respondents suggested improvements to the document to include information on “how to talk to patients and what to share with them”. Respondents would also like to see “more links with national and referral guidelines”, “actual pragmatic advice and inspiration to include expectations of patient and public involvement (PPI), e.g. boundaries, levels of input” and “areas of the new Quality Safety Inspection (QSI) standards”.

While some respondents found that the document useful, others felt that the document “does not provide much guidance in terms of adapting for minority or marginalised groups”. To reduce health inequality gaps, making healthcare accessible is a large part and communication with patients from minority or marginalised groups can be a challenging part of this. Patients frequently using the healthcare system can often have different access needs, and respondents felt that the document could be extended to include a section on this topic.

It was also felt that the document “did not provide acknowledgment and guidance on what adjustments can be made to allow for staff shortages and impossible deadlines”.

Respondents felt that the guidance was “highly professional and well-researched” but “not well known to radiographers and student radiographers”, so there is a need to increase awareness and signposting its existence. Some respondents acknowledged that a “lot of it appears to be common sense which is unfortunately lacking” in many instances now. They felt that more emphasis needs to be put on patient-centred care when recruiting students or qualified staff as stated in the document, “the recruitment process to include more emphasis on commitment of students and radiographers on the expectation for patient-centred care”.

These outliers are also aspects that need to be acknowledged, it is good to have positive feedback, but the areas for development should also be acknowledged.

Phase 2 results

Phase 2 of the study consisted of one focus group and four one-to-one interviews with participants who volunteered to take part after completion of the Phase 1 survey.

The original plan was to hold six focus groups using Microsoft Teams: two for service delivery and service development, two for research and two for education. However, it was a challenge to run the focus groups as on several occasions the research assistant waited for participants to attend, and no one came to the focus group. Therefore, there was only one focus group held and four interviews. The numbers of participants were lower than we had hoped for and are detailed in Table 2 below.

The focus group and interviews were audio recorded and transcribed using Microsoft Teams, and then the transcriptions were thoroughly checked for accuracy as there were errors in the transcription. Once the transcriptions had been updated, they were read alongside listening to the audio recordings to extract themes from the data. A thematic analysis was carried out using Braun and Clarke[11] as a structure. This was carried out by two members of the research team independently and checked to reach agreement on the themes and increasing inter-rater reliability.[17]

Four themes were developed from the data:

1. Importance of service user involvement in service delivery and evaluation.
2. Resources to ensure service user involvement.
3. Suggestions to update the P4 document.
4. Use of the P4 document in radiographer education.

Importance of service user involvement in service delivery and evaluation

It was clear from the focus group and interview about service delivery and improvement that the participants were aware of the benefits of service user involvement and there were some examples given about how radiographers were working with service users and asking about their experiences, using the guidance from the P4 document to do this. It was good to hear about some practical examples of how the P4 document had helped radiographers to involve service users.

> *We have patient forums that come round and visit our departments and speak to the staff…they make comments on how the service is delivered and then we also do ‘you said we did’ posters to highlight things that we've changed in response to something negative, but sometimes it will be like a comment like or could it be done this way…so we use those posters as well (Participant 1, Service delivery & development).*

> *We had some meetings every the last week of the month regarding patient hour, so we were involving patients for their feedback ….so we were getting out sitting with them ….we had a form to fill it up*

Table 2
Number of participants attending each focus group/interview.

Focus group/Interview	Number of participants attending
Service delivery & development 1	1
Service delivery & development 2	5
Research	1
Education 1	1
Education 2	1

> *asking them about what they need, how was their experience, how can we improve any areas, how can we improve the service, how can we involve the patients more in their service to decide what needs to be done (Participant 3, Service delivery & development).*

> *The main way that we get their involvement really is through patient feedback and acting on that feedback. If patients have needed to make complaints, we've always tried to take that on board and try to improve the services that way … we get to build a bit of a rapport with them and often get to take on their suggestions in things like the information and leaflets that we give out. We were hoping when the P4 document came out, the plan was to try and come up with some sort of patient focus group for radiotherapy … and then COVID happened, and it all just went wrong (Participant 1, Service delivery & development).*

The timing of the P4 publication and the Covid-19 pandemic was mentioned by other participants, and it was clear that the pandemic had interrupted plans for service user involvement. Due to the changes in imaging and radiotherapy services, a lot of plans could not be carried out at that time and the momentum was lost. Other participants were keen on involving patients, but the logistics made it a challenge.

> *Patient involvement is so important, but the logistics in terms of organisation and getting in touch with them, things like that, we are in a profession where we're really thin on the ground at the moment, in terms of staff, resources and availability, it makes it more difficult to do that (Participant 1, Service delivery & development).*

However, participants felt that they needed to encourage a culture of honesty and accountability by asking patients for their feedback.

> *Every patient has a different opinion and experience…so I would say for the most part, particularly when it's complaints we do act on what the patients tell us and our Trust is very much about honesty and accountability and so it's about encouraging patients to give that feedback whether it's good or bad and getting suggestions from them as well…(Participant 1, Service delivery & development).*

A participant in the research focus group also talked about the importance of involving service users in research project design.

> *I engage patients and the public in my research and actually talk to them, so if I come up with an idea for a research project and start to design what it's going to look like, then involving patients and the public in the design is really, really important, and it's important on two levels, first of all, most funding applications nowadays have it as a prerequisite that patients and the public must have been involved in the design, but secondly, and very importantly, from my point of view, as most of my research is around patient experience within radiography, it's absolutely crucial that their voices are heard within it, and that includes the design of the research (Participant 1, Research).*

There was a consensus from all participants in the interviews and focus group that service user involvement is an important component in service delivery, design and evaluation.

Resources to ensure service user involvement

Participants described the P4 document as being a useful resource that they had used in their practice to enable service user involvement.

> *All the guidance is there about in within the document about respect and dignity, making sure that patients are aware that we try to individualise their care as much as possible. I think it probably gets referred to more in terms of general care that that's given (Participant 1, Service delivery & development).*

> *I absolutely love section one and two that tell you what they (patients) want the patients voice…I just think that this is like really beneficial…I'm really pro CPD, it's like a really good example for reflection, but I just really love how you can easily relate the examples given to real life and I think it'll be really beneficial. I think sometimes seeing it written down, it just crystallises … whereas when you verbally say it doesn't quite sound the same. I thought the examples from the patient's perspective were like fantastic (Participant 4, Service delivery & development).*

> *I think section one and two, the service delivery and development are really well written, and it helps you to go through all the points (Participant 2, Service delivery & development).*

These participants had evidently used the P4 document to provide guidance and enjoyed reading the sections that articulated the patient's voice. They found it useful to be able to understand the patient's perspective and what the patient's expectations were. This had assisted them in planning how to include patients in their work.

Participants also commented that the research section was helpful in terms of thinking about how service users can be involved in research projects.

> *Research is something we should be building into normal everyday practice and this document really gives you the backup of doing that (Participant 1, Service delivery & development).*

> *Things I continue to draw upon are about working in partnership with people and what they can bring to the research, making sure that the people are involved in the design of the research, and then the dissemination as appropriate, making sure that we're using the most up-to-date national guidelines and good practice thinking about diversity, so making sure that there's a range of different people (Participant 1, Research).*

The P4 document can also be used in planning teaching sessions for students and embedding person-centred care.

> Section 3 *was one that I did go back to quite a few times when thinking about education towards person centeredness ….so in thinking about how to get authentic patient experiences as part of learning was a key thing…inviting people to be part of assessing student patient care skills and developing courses … inviting people to be part of selection of students (Participant 1, Research).*

The P4 document has been used to inform person-centred care teaching sessions, using the advice and pointers in the document. There has been a greater emphasis on person-centred care over the past five years with several key publications from Hyde and Hardy[18–20] and a textbook by Strudwick et al.[21] All of which need to be included in an updated version of the document, so that up-to-date research and guidance is included.

As well as being a resource for practice, research and education, one participant suggested that bringing the P4 document back into focus would remind staff of the importance of the document as a resource.

> *I think that the P4 document needs to be brought back to the fore again, and certainly through the induction process and student*

> *training process, to really put this patient focus to the fore of intention for training and induction processes (Participant 4, Service delivery & development).*

However, there are barriers to all this work which include time alongside funding.

Suggestions to update the P4 document

As part of all the focus group and interview discussions, suggestions were made about updating the P4 document. It should be noted that those involved in the focus group and interviews were radiographers who have heard of and have used the P4 document in their practice, and therefore there will be an element of bias in the responses reported. There were radiographers who had not heard of the document, which was highlighted in the questionnaire responses.

Participants felt that the P4 document needs to be better publicised amongst the profession and they suggested that case studies could be included.

> *Some of them would say probably never heard of it (the P4 document)…so I think that's it about pushing it, publicising it more, making everyone aware that it's there as a resource to help education, encourage radiographers at all levels that they can use it to improve patient-centred care…another thing is you could include decent case studies on the P4 document (Participant 1, Service delivery & development).*

It was felt that the P4 document needed to be more colourful and interactive, like the CoR Education and Career Framework.[22] The current document is very text heavy, and statistics need to be presented visually – graphs etc.

One participant suggested a different format.

> *Could we create little video vignettes or something that shows it in action so that people could access this in a different way because not everybody's a learner that likes to just look at a document and understand what's being said … and could there be a little points of learning that could be expressed that way … just the way in which it's presented would make it more attractive and more people would engage with it then (Participant 5, Service delivery & development).*

Participants also suggested that the P4 document included outdated references to other relevant documents and that the P4 document needed an update.

> *This document being published in 2018 means that there's elements of it that need to be updated to reflect the changes in the Health and Care Professions Council (HCPC) standards of proficiency (Participant 1, Service delivery & development).*

> *The P4 document makes very good links to the NHS pages on personalised care, which is a core concept which was defined in the NHS long term plan and then set out core competencies for healthcare professions and then following that it should link to the Personalised Care Institute which has lots of free resources to support people with delivering personalised care (Participant 1, Research).*

Participants had ideas for re-launching the P4 document which included webinars and a poster competition.

> *They should relaunch it, and give it a bit of a makeover, but also can't this link in with the national AHP practice educator roles. Prerecorded webinars can be produced and there is a real opportunity for practice educators to be linked in to helping to promote this, and actually ensuring that it's implemented in daily normal practice (Participant 1, Service delivery & development).*

> *Having a poster competition for this work to get it into people's heads, and it could provide something that people can put up in their department waiting rooms about, you know, talking to your patient to get feedback from them. This could come centrally from the college of radiographers and invite through the email lists to encourage people, but it will create something down the line could we consider something along those lines that are really practically oriented, it's waving the flag for the average radiographer, who is doing their thing, being recognised for what they do. Getting people to remember…actually, it's a person at the end of this process, so it's creating that excitement about the mundane stuff in in actual practice (Participant 5, Service delivery & development).*

Participants also suggested inclusion of specific topics such as LGBTQ+ and equality, diversity and inclusion.

> *There needs to be bits about transgender and LGBTQ + because a lot of us have commentary that still says, 'women of childbearing age' when it should be 'person of childbearing capacity'. We had a recent issue with a non-binary person, and I dealt with it and they were fine about it, but it was one of the ones that if it wasn't handled right, it could have gone catastrophically wrong, and so I think maybe some examples of non-binary or transgender would be really useful (Participant 1, Service delivery & development).*

The section on educating the public needs more examples to make it realistic and achievable for radiographers so that they can see how they can do this.

It was also suggested that the document could include a succinct summary of each section.

Use of the P4 document in radiographer education

There were suggestions from participants about how useful the P4 document is for students.

> *When I was a student, it would have been so good to have that guidance on exactly what patients want from me, and what the people that are training me want me to do is what patients actually expect from me (Participant 1, Service delivery & development).*

> *As students I particularly like the idea of involving patients in the student journey, in an assessment, getting what the patient thought of the assessment at the time and but also to train staff to emphasise this again at with videos of how we expect you to be treating patients and talking to people as they arrive, so the idea of, you know, some sort of videos would be absolutely brilliant (Participant 4, Service delivery & development).*

Participants also suggested that the P4 document is used to train staff about communication skills.

> *We could actually show them this evidence and say, look, this is what the patients want, this is important to the patients, this is a documented study, I think this is excellent to give that feedback (Participant 4, Service delivery & development).*

The document could be part of staff induction and mandatory training.

> *This should be part of the induction to know about this, we have social media, everyone on their phones these days with their smartphones, so if the parts of this P4 document could be broken down into pieces to advertise them a summary or some information to be shared with the wider public, everyone will have a read quickly to have more information but we need the ideas to spread to include in people's practice as well (Participant 3, Service delivery & development).*

> *It's very important that qualified staff are up to date in terms of knowledge and skills and but they should extend beyond critical topics like life support…But we don't just do life support, so we do dementia…We do, you know, deprivation of liberties…We do child safeguarding, so there's quite a lot of other stuff in there as well as umm, just life support…So I think that it's maybe having a look at what other patient centred care type subject areas are being covered (Participant 1, Education).*

It was suggested that the P4 document could be embedded in the e-learning for health platform.

Participants also suggested that there needed to be more information about including patients and their values in the recruitment and selection of students. Students need to undertake research that benefits patients and their experiences. The document can be used by students in their work.

> *Students will use the P4 document in essays and assignments when talking about best practice (Participant 1, Education).*

In summary, the P4 document was well-used and valued by those involved in the focus groups. They were able to provide examples of how the P4 document had been used in service delivery and development, education and research.

Participants acknowledged guidance in the document was best practice. They reported more awareness of patients' needs and the effect this has on radiographers in supporting their needs.

Limitations

We acknowledge that we should have included demographic questions as part of the survey to determine who had taken part.

We acknowledge that there were limitations in terms of sample size for the focus groups and therefore one-to-one interviews were used instead which do not have the opportunity for discussion. We tried many approaches to recruit participants for these, but sadly we could not recruit any more participants. This may have been due to the timing of the planned focus groups and the methods of recruitment. However, we felt that the data obtained from the focus group and interviews was both rich and detailed.

Conclusion

It is clear that the document was fit for purpose when it was published in 2018 and has been well-used by those radiographers that were aware of its existence. However, it was clear from the results of this study that it was now out of date and needed a refresh. Participants made lots of helpful suggestions about how the document could be presented, and how it could be re-launched and promoted to the radiography community.

Participants recommended the document be given greater visibility as there was evidence from the survey that the P4 document was not known about by the whole of the radiography community. However, it was agreed that the voices of patients and the public must be heard within radiography practice and their feedback and input can have a positive impact on each of the four domains: service delivery, service development, education and research.

Despite the small numbers responding to the survey and the small numbers participating in the interviews and focus group, the participants have clearly highlighted areas for improvement in the next iteration of the P4 document.

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Appendices

Appendix 1 - Phase 1 Questionnaire

Project aim: The aim of this project is to explore how the SCoR guiding principles contained within the Patient, Public and Practitioner Partnership within Imaging and Radiotherapy: Guiding Principles (P4) document have been implemented and used within the four domains of radiography practice service delivery, service development, education and research.

This project comprises 2 phases, a questionnaire phase followed by focus groups.

The conduct of this questionnaire forms Phase 1 of this project. The purpose of this questionnaire is to briefly explore how guiding principles within the document have been used within the four domains of radiographic practice. We are interested in your experience of using the P4 document in your area of practice.

There are 6 questions in this questionnaire which should take approximately 15 min to complete.

Thank you for your time in completing this questionnaire, your participation is valued.

By completing and submitting this questionnaire you are consenting to your responses being used within this study.

Kindly provide your response to each of the following questions.

1. Which of the following best describes your professional specialism?

Please tick all that apply.
Diagnostic radiography.
Therapeutic radiography.
Ultrasound.
Nuclear medicine.
Education.
Research.
Other, please state.
1.1 - If no, state your role.

2. Are you aware of the "Patient, Public and Practitioner Partnership within Imaging and Radiotherapy: Guiding Principles" document?

Yes/No.
2.1 - If yes, state how you know about this document:
Internet search.
Email.
Colleague.
Manager.
SCoR website.
SCoR event.
Other — free text.

3. Have you referred to the guidance contained in this document?

Yes/No.

3.1 – If yes, tell us which domain of radiographic practice you have referred to.
Service delivery.
Service development.
Education.
Research.

4. Tell us how you have used the guidance from the domain/s above
5. Did you find any benefit in using the document?
Yes/No.
5.1. If yes, tell us what benefits you have found.
5.2. If no, were you looking for specific information that was not included?
Yes/No.
5.2.1. If yes, tell us what information you were looking for.
5.2.2. If no, help us understand why it was not beneficial.

6. Tell us anything else you would like to say about the document.
Thank you for your time in completing this questionnaire.

Next steps…Phase 2
We are recruiting research participants for Phase 2 of this study.
Phase 2 involves participating in a focus group. The focus groups will last approximately 90 min each and will be conducted using an online platform.
If you would like to participate in a focus group, let us know which one of the following you would like to volunteer to participate in:
Service delivery.
Service development.
Education.
Research.
Kindly provide your name and email address and we will be in touch with you shortly.
Name.
Email address.
Thank you once again.

Appendix 2 Phase 2 Focus groups questions

Indicative questions for prompting discussions.

- Start off by discussing how the public and patients are involved within their area of professional practice:
  - Service delivery & Service development
  - Education
  - Research
- Move onto talking about how they have implemented the guidance from the P4 document
  - Explore at which stage of their process they referred to the guidance
  - Which parts of the guidance did they find most helpful and why?
  - Which parts of the guidance did they find least helpful and why?
- Add emerging trends from Phase 1 questionnaire responses and explore their views on those (These responses are not available to comment on at present as the data collection has not yet begun)
- Explore their suggestions for revising and/or improving the P4 document with rationale for changes to be made.
- Explore any other comments they would like to make regarding the P4 document

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