



status. This would apply, for example, where a single repeat verification image, not normally notifiable, would be notifiable if the same underlying cause means that multiple patients are affected. It would be reasonable to assume that 'several' here means more than two. Similarly, if a prescription, volume delineation or delivery error caused a therapeutic delivery increase on multiple patients then it does need to be notified even if no patient has exceeded the guideline factors (1.1 and 1.2).

**Multiple imaging exposures:** If a patient receives multiple repeat exposures during their course of treatment then there is a problem either in the process or with the implementation of the process. The guidance now requires that if five repeat exposures (not episodes) have been necessary for an individual patient then it

should be reported, irrespective of the dose of the exposure.

### Conclusion

The new MGTI guidance should help to reduce variation in reporting following incidents in radiotherapy. However, the radiotherapy clinical and scientific community would benefit from both agreement on the application of the guidelines to current practice and, in particular, development of national standards for the setting of LEMs.



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### > NOTES

<sup>a</sup>MGTI exposures that are as a result of equipment failure are reportable under the Ionising Radiation Regulations.

### REFERENCES

- 1 The Ionising Radiation (Medical Exposures) Regulations and Amendments. <http://www.legislation.gov.uk/ukxi/2000/1059/contents/made>; <http://www.legislation.gov.uk/ukxi/2006/2523/contents/made>; <http://www.legislation.gov.uk/ukxi/2011/1567/made>
- 2 IR(ME)R guidance and good practice notes. <http://bit.ly/2p3iQbd>
- 3 Health and Safety Executive. Equipment used in connection with medical exposure. Guidance note PM77 (3rd edition). London: HMSO, 2006. <http://www.hse.gov.uk/pubns/guidance/pm77.pdf>
- 4 Guidance on investigation and notification of medical exposures much greater than intended. <http://bit.ly/2oUzih6>
- 5 RCR, SCoR, IPeM. On Target: ensuring geometric accuracy in radiotherapy. London: The Royal College of Radiologists, 2008. <http://bit.ly/2nZCBil>

## Patient and public involvement in a research project

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### RADIOTHERAPY PHYSICS

The UK National Institute for Health Research (NIHR) has been committed to the promotion of meaningful patient and public involvement (PPI) in health and social care research for a decade. Its aims are to enhance the democratic accountability of publicly funded research and to utilise the lived experiences of public contributors (lay people) to maximise the relevance and effectiveness of that research.<sup>1,2</sup> Evidence for the achievement of these aims has been compiled, with examples of PPI covering the whole of the research cycle from joint priority-setting via interviews and focus groups, through coproduction of study methodologies, to public coresearchers assisting with data analysis and the writing-up of results for dissemination and publication.<sup>3</sup> PPI has also earned widespread support, including that of senior investigators.<sup>4</sup> The Institute of Physics and Engineering in Medicine (IPEM) also has a clear aim of achieving strong public engagement (PE); an activity with aims similar to those of PPI (in the sense of bringing healthcare professionals

and the public together for mutual benefit).<sup>5</sup> It is also a requirement of the NHS Scientist Training Programme that training centres/departments show that trainees have an awareness of PPI, as part of the broader theme of respecting the rights and needs of service users.<sup>6</sup>

### Patient and public involvement in Hull and East Yorkshire

In January 2016, medical physicists from the Radiation Physics Department of Hull and East Yorkshire Hospitals NHS Trust (KA and JM) were in the process of planning a departmental, i.e. single centre, research project involving patients undergoing image-guided radiotherapy for prostate cancer. The proposed project would investigate whether the use of an ultrasound bladder scanner could reduce the number of additional CT scans required. The physicists decided to include PPI as part of the project development process, and this was achieved by engaging the services of the Trans-Humber Consumer Research Panel (CRP). The CRP is an independent PPI group made up of both healthcare delivery and research professionals (including

DM and AG), and lay people (including BM) who are healthcare consumers, i.e. people who have had personal experience of various diseases, including cancer, diabetes and heart disease, either as a patient or as a carer. The CRP, which is based in Cottingham in East Yorkshire, has been promoting public and professional partnership in medical research since 2004. It offers a service whereby local researchers can have their clinical trial/study documentation reviewed and endorsed in terms of the acceptability of the research aims and methodology to a lay population, clarity of the language used, and the accuracy and completeness of the information that is to be shared with trial/study recruits.

Therefore, the physicists submitted their patient information sheet and informed consent form for review, along with their study protocol so that the CRP members could make themselves aware of all the relevant details, prior to submission for ethical and governance approval. The CRP invited the researchers to attend a panel meeting to answer any queries face-to-face. The documentation required a few amendments, after which a written



Patient involvement has been found to be very beneficial

endorsement was received by the lead researcher (KA) from the CRP, as evidence of having received PPI endorsement. Those involved in the review process were subsequently invited to submit their thoughts to ascertain how this process had been of benefit to the department.

### The benefits of patient and public involvement from the public and professional viewpoints

#### The top five benefits of PPI from the viewpoint of the NHS physicists were:

1. Meeting with the panel had assisted them in ensuring that the language used in the information sheet and consent form was appropriate for the target audience.
2. It had been particularly useful that a visitor to the panel had been through the treatment himself.
3. When attempting to simplify the language or state the benefits of the research, it had been useful to get an independent perspective (in this case the language had been initially over-simplified and the benefits understated, and the assurances given by the CRP gave researchers the confidence to raise the complexity to a more appropriate level).
4. Because the panel was local, it was much more representative of the target population than national bodies.
5. By engaging with the panel it was possible to raise awareness of the study with the general public which could lead to increased willingness to participate in future research studies, thus making recruitment easier.

#### The top five benefits of PPI from the viewpoint of the CRP's members were:

1. The differing backgrounds of the panel

members provided a rounded view of the proposal, incorporating their own experiences and local knowledge which the researchers might not necessarily have been aware of.

2. By challenging the researchers, in a supportive way, to ensure that information is written in plain English, it would make it easy for patients to understand it.
3. It was important for lay people to be involved at an early stage of the process.
4. PPI demonstrated a patient-centred approach rather than just an academic approach.
5. Presentation to the panel before going for ethics approval had confirmed the researchers had considered patient needs during the development process.

### Conclusions

The researchers and the CRP's members concluded that this brief reflection on the review of a single research study from both the public and professional standpoints had been very beneficial. The CRP is planning to build on the knowledge gained with an expanded impact measurement exercise during 2017.

If IPEM members are interested in learning more about good practice in PPI in research, INVOLVE is the organisation set up by the NIHR to promote PPI nationally and has a wealth of information on its website ([www.invo.org.uk](http://www.invo.org.uk)). It can also signpost members to other PPI groups around the UK.

The Trans-Humber CRP would also welcome enquiries about PPI from other researchers, and can be contacted by emailing its Chair, Dr Angela Green, via [angela.green@hey.nhs.uk](mailto:angela.green@hey.nhs.uk).



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### REFERENCES

- 1 Davies SC, Walley T, Smye S *et al*. The NIHR at 10: transforming clinical research. *Clin Med* 2016; 16(6): 501-2.
- 2 INVOLVE. Public involvement in research: values and principles framework; October 2015. <http://www.invo.org.uk/posttypepublication/public-involvement-in-researchvalues-and-principles-framework/>
- 3 INVOLVE. Evidence bibliography 5; October 2014. <http://www.invo.org.uk/posttypepublication/evidence-bibliography-4/>
- 4 INVOLVE. NIHR senior investigators: leaders for patient and public involvement in research; April 2014. <http://www.invo.org.uk/posttypepublication/nihr-senior-investigators-leaders-for-public-involvement-in-research/fs>
- 5 Ross D. Public engagement panel. *Scope* 2015; 24(4): 24.
- 6 National School of Healthcare Science. NHS Scientist Training Programme helpbook for training centres; May 2016. [http://www.nshcs.org.uk/images/pdfs/Helpbook\\_for\\_training\\_centres\\_stp.pdf](http://www.nshcs.org.uk/images/pdfs/Helpbook_for_training_centres_stp.pdf)