

# Patient and public involvement in STP training - Ideas for training officers

*Collated by Dr Sarah Peel on behalf of the London Workforce Development Group for Healthcare Science*

## Ideas for embedding PPI into STP training locally

### **1. Outreach work**

- a) Interactive stands at 'Science4U' for secondary school science students and their teachers.
- b) Reach Out for Healthcare Science. See 1B below in further information.
- c) Hosting individuals on the GOSH young person visitor scheme.
- d) Healthcare Scientist trainees performing outreach for University.

### **2. Educate staff, patients and the public about healthcare science**

- a) Hosting stands in the hospital canteen during national healthcare science week for patients, parents and staff. See 2A below in further information.
- b) Hosting a tour of your lab or department.

### **3. Organise trainee visits to local patient support centres**

- a) Medical Physics and Clinical Engineering STP trainees on the King's College London MSc visit a local dialysis centre to interview patients. See 3A below in further information for examples of trainee reflections on the visit.
- b) Medical Physics trainees at Mount Vernon Cancer Centre visit the local Lynda Jackson Cancer Centre. See 3B below in further information for the trainee reflection on the visit.

### **4. Trainees sitting in on patient consultations**

- a) Trainees sit in on patient consultations and join ward rounds. See 4A below in further information.

### **5. Provide work experience opportunities**

- a) Hosting/teaching students during work experience weeks (includes former patients).

## Further information

### 1B - Reach Out for Healthcare Science

#### What did you do?

I helped to run a workshop for year 10 students at the Reach Out for Healthcare Science event (12th - 16th June 2017). The purpose of the event was to give students a taste of what healthcare science is, career options available within this, and to show them that there is more to a hospital than just doctors and nurses. The workshop was on medical physics and specifically radiation at Great Ormond Street Hospital. The presentation was mainly by Sweta - the laser protection advisor at RFH, and the workshop parts were jointly by me and two apprentices from medical electronics. I showed them an x-ray tube and explained how it worked, and had a game where you put different causes of ionising radiation in order from highest to lowest dose. On the last day I was one of the judges for the posters they created based on the workshops they had been to.

#### What did you learn?

I actually learnt a lot about radiation from questions the students asked. It forced me to do my homework on things such as 'Why does the US have more background radiation than the UK?' and 'What are cosmic rays?' and 'What is it within brazil nuts that makes them radioactive?'.

#### What went well?

I think the workshops went well and some students were really engaged. Part of the event included the students making posters in groups, based on any talk/workshop of their choice. Two of the groups picked Medical Physics which was great, and presented some of the things I had taught them back to me, which was very encouraging, and said that I had inspired them! Also one of the Medical Physics posters actually won second place for scientific content (see figure 1)!

#### What could you improve next time?

Some of the groups were quite shy and didn't speak or participate much; next time I would have a plan for how to engage those groups and encourage them to interact more. More planning, especially with the whole group would ensure that there was a clear narrative between what they've seen during the presentation and what they do in the workshop/practical parts. I think it may have been a bit disjointed at the start of the day; once we had done the whole thing a few times it was a lot more natural.

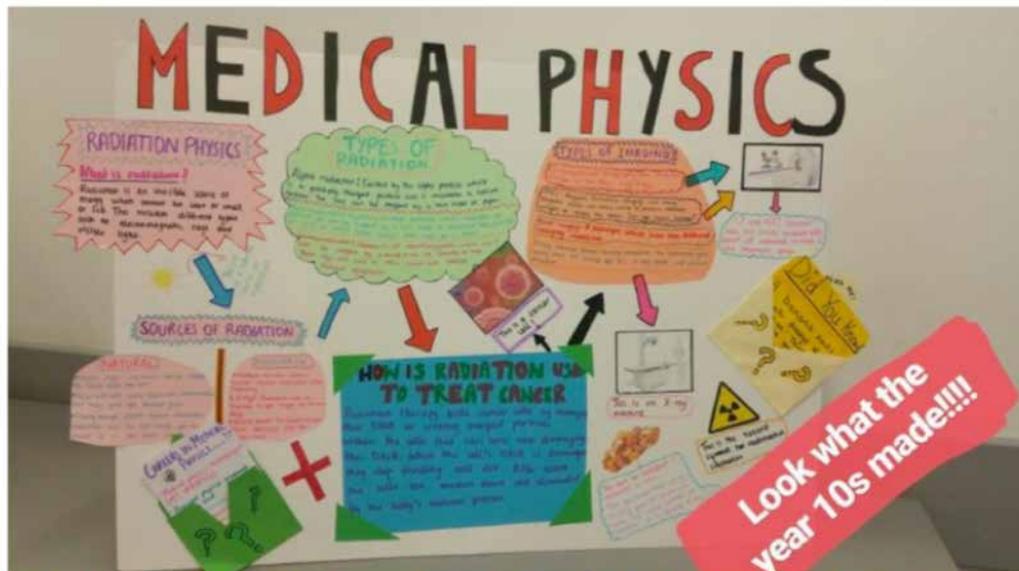


Figure 1: A poster one of the groups made on Medical Physics! This one won second place for scientific content. It even contained parts on careers in medical physics and 'fun facts' on radiation like 'Did you know a banana contains 1  $\mu\text{Sv}$  of radiation?'

## 2A - Educate staff, patients and the public about healthcare science

a) Host stands in the hospital canteen during national healthcare science week during which patients, parents and staff drop by.

<http://www.nhsemployers.org/blog/2017/03/celebrating-healthcare-science-week>

## 3A - Trainee visits to local patient support centres

a) Medical Physics and Clinical Engineering STP trainees on the King's MSc visit a local dialysis centre to interview patients.

### Trainee reflection 1

We were placed at Borough renal unit, near Guy's and St. Thomas' to interact with a patient undergoing dialysis. We explored the patient's health, their history and their experience with dialysis treatment. We managed to discuss a number of interesting topics, many of which were directly related to their current situation and were glad to hear on leaving that we had helped pass the time quicker.

It was incredibly useful to talk to a patient undergoing treatment. There are many nuances of healthcare and ways to improve it which can really only be understood when seen from a patient's point of view. For a medical physicist or clinical engineer the ability to make equipment mobile

can have a huge impact on patient's well being. It is also useful to experience talking to a patient for future reference. Asking vague, general questions seemed to be an optimal way of talking to this particular patient in some cases as they were happy to talk about all manner of things from their family life to their medical history. Of course in situations where medical history is important, specific health related questions are more applicable. Overall the experience was great and definitely helped to make me think about how equipment and procedures can be altered not just to improve effectiveness but also the overall quality of life of patients.

### Trainee reflection 2

Visiting the dialysis centre and seeing the patient gave us a very good understanding of what a person goes through when they are suffering from chronic illnesses, how life altering these experiences are and how our healthcare system supports and helps the patients. The patient was well aware the complications associated with his illness and was making an effort to cope with them by changing his lifestyle and habits and also by staying positive. His optimism and positive attitude towards his life was commendable. Despite everything going on, he was friendly, cheerful and was willing to give us as much information as he could. He showed hope, courage and a will to survive. He believed that complaining or being unhappy only makes things more difficult. Taking out frustration on medical staff by being rude to them is totally pointless. Instead, he stressed, that one must try to bond with the people who are there to help you.

Another thing that occurred to me after this conversation is the role of the internet in our lives. With the help of the internet, the patient was able to keep himself well informed on all the treatment procedures and medications that he has been given which was very good because he could understand what the doctors told him and provide information about his condition very well. Overall it was a very insightful and informative experience for us. By interacting with patients and staff we can get first-hand knowledge of the challenges in healthcare system. This knowledge will help us design our future learning and projects towards finding ways to overcome these challenges. For example, making the system more efficient, easy to access and as patient-friendly as possible.

### Trainee reflection 3

Listening to the patient's narrative was very beneficial to me as a training healthcare professional as it allowed me to connect with an individual whose life relies on the NHS workforce and see first-hand the importance of research and development in healthcare and the effect it has on the public. It was also interesting to listen to a patient's understanding of their condition and how it's being treated.

The patient had not heard of clinical scientists and could not describe any roles of hospital staff beyond doctors and nurses. He seemed to understand the role of clinical scientists once explained to him and was positive about the roles.

I feel I benefited from the discussion with the patient as it was a good experience interacting with someone and learning how they deal with their condition and how they view the NHS having experienced its care first-hand. It is interesting to observe the relationship patients have with staff and understand from their point of view which aspects of care are most important. It's an important skill to learn how to communicate with patients on a personal level and be respectful and aware of the psychological effect a condition may have on someone as well as physical. Listening and being able to respond accordingly to a patient's needs where possible is the most important part of being a healthcare professional and practicing this will help me achieve the most out of the MSc course. The dialysis centre visit was a good step in the right direction of practicing communicating with patients and understanding the benefits of healthcare science on the general public.

### **3B - Medical Physics STP trainees at Mount Vernon Cancer Centre visit the local Lynda Jackson Cancer Centre**

#### Trainee reflection

I spent a day at the Lynda Jackson Centre at Mount Vernon Hospital to get a feel for the type of services that the Macmillan Cancer Support Charity offer in hospitals.

There were three main services that I was able to observe. The first session in the morning was a drop-in service where patients sit down with the volunteers to have a chat about their concerns

and fears. Many patients come with their partners or children etc. Although the volunteers are not trained counsellors, most of them have been directly or indirectly affected by cancer. There were two group information sessions held for radiotherapy and chemotherapy respectively. These were open to family members as well as the patients.

In the radiotherapy session the groups were taken to one of the linear accelerators. A common question asked by patients at this point was related to how they would get on to the couch as in the treatment position it is relatively high. The movement of the couch and the gantry was demonstrated. The group was then shown a presentation about radiotherapy and the whole process was explained. They were talked through what they could expect and given the relevant information for the whole process, from parking right through to treatment and any potential side effects to look out for. The patients were given the opportunity to ask any questions after the presentation.

The final session I attended was the group information session on chemotherapy, this was similar to the radiotherapy session - the whole process from start to finish was explained including the purpose of chemotherapy and the side effects of the treatment etc. There was an open discussion at the end of the session where patients were able to express their concerns and ask any questions. After this the patients were shown the wards.

My role during the day was limited to showing patients around and observing the sessions. I found the days very informative as during my rotation in radiotherapy there was limited patient contact. These sessions helped to put the work we do as clinical scientists into context. It was also very apparent from the questions that the patients were asking that their main concern were about the logistics of the day.

#### **4A - Trainees sitting in on patient consultations and join ward rounds**

##### **Competencies Addressed**

PP1 – C – 1: Treat each patient as an individual, respecting their dignity and confidentiality and upholding the rights, values and autonomy of every service user.

## Introduction

Iodine-131 therapy is an outpatient procedure used to destroy the thyroid, in cases where the thyroid is overactive. Thyroids produce hormones which regulate breathing, heart rate, the central nervous system, body weight, muscle strength, period cycles, body temperature and even cholesterol levels. When the thyroid is overactive, patients may lose a lot of weight, sweat more than usual, suffer from tremors, be very sensitive to high temperatures, feel anxious, and have heart palpitations. In the case of diseases such as Grave's disease, the eyes may appear bulgy and continued eye problems may occur. If allowed to continue, an overactive thyroid can lead to cardiac problems and osteoporosis.

Therefore I-131 is used to ablate the thyroid. The patient is asked to eat an iodine-free diet for 2 weeks before the therapy so that the thyroid is starved of iodine, its fuel. Then a capsule containing 600 MBq of I-131 is taken by the patient. This is taken up by the thyroid and kills the cells over a period of weeks/months. If the treatment is successful, the thyroid will be destroyed, and the patient will need to take hormone replacement tablets each day for the rest of their life.

## Patients

Before the patient has the therapy, they will be called in for an informal chat to tell them about the therapy, ask them about their living situation and job to get an idea of the kind of restrictions they will need after the therapy, and to ensure that they will want to go ahead. At these chats, a doctor is present to explain the biological effects of the therapy, and a physicist explains the radiation protection consequences.

## Reflection

Observing these informal chats reinforced the fact that each patient is an individual, and their wishes must be respected and not overlooked. Even though as clinicians or physicists we may feel as though a certain treatment will have the best outcome for the patient, if the patient is of sound mind and is not a minor we can never force the patient to take it. Their fears and concerns are valid and as healthcare professionals it is important for us to listen to them. The best we can do is to explain the patient's options to them as clearly as possible so that they can make informed decisions about their healthcare.