Project Title

A picture paints a thousand words – Enhancing patient education on breast radiotherapy

Project Lead and Members

Project members: Lim Li Hoon (Lim Liyun), Eric Pang, Muhammad Fairuz Bin Jum'ee, Cheryl Ho

Organisation(s) Involved

National Cancer Centre Singapore

Healthcare Family Group(s) Involved in this Project

Medical

Applicable Specialty or Discipline

Diagnostic Radiography, Radiology, Oncology

Aims

To enhance the current verbal patient education conducted prior to CT Simulation by assessing patients' understanding and its impact on treatment setup reproducibility.

Background

The radiotherapy process involves reproducing patients' position that was achieved during their CT Simulation procedure. Patients may not realize the importance of the CT Simulation procedure to ensure treatment setup reproducibility due to lack of knowledge and understanding.

Methods

Part 1:

- Verbal briefing conducted (n=36).

- Self-administered quantitative questionnaire to assess level of understanding.

- Treatment positioning errors verified using x-ray images with reference to CT Simulation position.

Part 2:

- Verbal + visual briefing conducted (n=5).
- Treatment positioning errors verified using x-ray images with reference to CT Simulation position.

Results

Part 1:

- 36 patients recruited.
- 22.2% (n=8) indicated they did not understand the CT Simulation briefing.
- 19.4% (n=7) felt unfamiliar with the CT Simulation procedure despite the briefing.
- 41.7% (n=15) recorded setup errors $\geqslant$0.5cm.

Part 2:

- All five patients agreed that the pictures helped them process the information and understand the procedure better.
- All recorded setup errors were <0.5cm.

Lesson Learnt

- Visual aids significantly enhance patient understanding and knowledge about the radiotherapy process.
- Improved patient education leads to better treatment setup reproducibility.

Conclusion

Introducing visual aids to supplement the current CT Simulation briefing procedure provides promising results in terms of enhancing patients' knowledge and

understanding of radiotherapy. Initial findings suggest an improvement in treatment setup reproducibility following this intervention.

Project Category

Care & Process Redesign

Quality Improvement, Clinical Practice Improvement

Care Continuum

Patient Education

Keywords

Breast Radiotherapy, Patient Education, Visual Aids, Treatment Setup Reproducibility, CT Simulation

Name and Email of Project Contact Person(s)

Name: Lim Li Hoon

Email: singaporehealthcaremanagement@singhealth.com.sg

Singapore Healthcare Management 2023

A picture paints a thousand words – Enhancing patient education on breast radiotherapy.

Lim Li Hoon (Lim Liyun), Eric Pang, Muhammad Fairuz Bin Jum'ee, Cheryl Ho

National Cancer Centre Singapore
SingHealth

Introduction

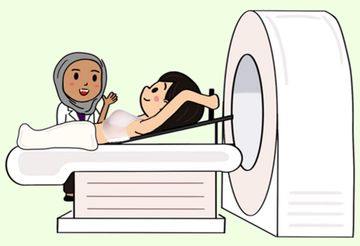
The radiotherapy process involves reproducing patients' position that was achieved during their CT Simulation procedure.

Problem: Patients may not realise the importance of the CT Simulation procedure to ensure treatment setup reproducibility due to lack of knowledge and understanding.

Aim

To enhance the current verbal patient education conducted prior to CT Simulation by assessing patients' understanding and its impact on treatment setup reproducibility.

Methodology



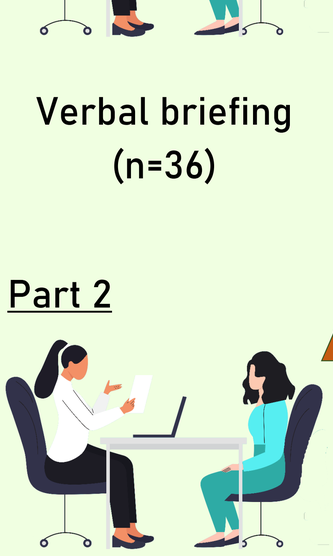
CT Simulation

1st day radiotherapy

Part 1

Verbal briefing (n=36)

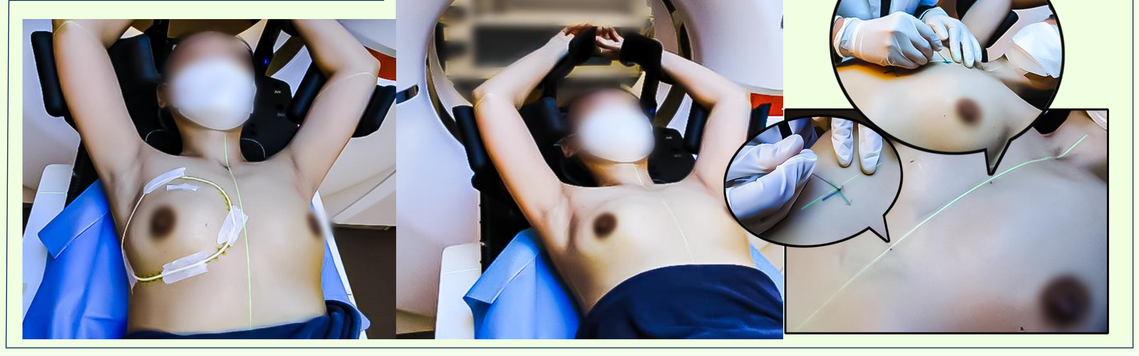
Part 2



Verbal + visual briefing (n=5)

Self-administered quantitative questionnaire to assess level of understanding

Treatment positioning errors verified using x-ray images with reference to CT Simulation position



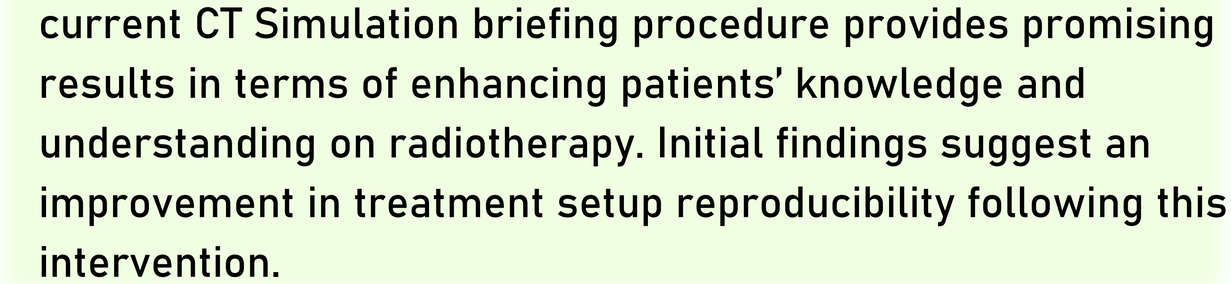
Result

Part 1: 36 patients were recruited. 22.2% (n=8) indicated that they did not understand the CT Simulation briefing and 19.4% (n=7) felt unfamiliar with the CT Simulation procedure despite the briefing. 41.7% (n=15) of the patients recorded setup error ≥0.5cm.

Did not understand CT Simulation briefing

Unfamiliar with CT Simulation procedure despite the briefing

Part 2: All the five patients agreed that the pictures help them to process the information and understand the procedure better. All recorded setup errors were <0.5cm.



PDSA

This quality improvement project has been formulated using the PDSA model.

Conclusion

This initiative to introduce visual aids to supplement the current CT Simulation briefing procedure provides promising results in terms of enhancing patients' knowledge and understanding on radiotherapy. Initial findings suggest an improvement in treatment setup reproducibility following this intervention.