

# Understanding pre-treatment patient anxiety in radiation oncology using a distress thermometer

Marc Currie, Jack Leggat, Megan Scott, Grace Lewis



## INTRODUCTION

Distress is experienced by many cancer patients, adversely affecting their quality of life and cancer care. Although it is often manageable, it remains underidentified and underreported. [1]

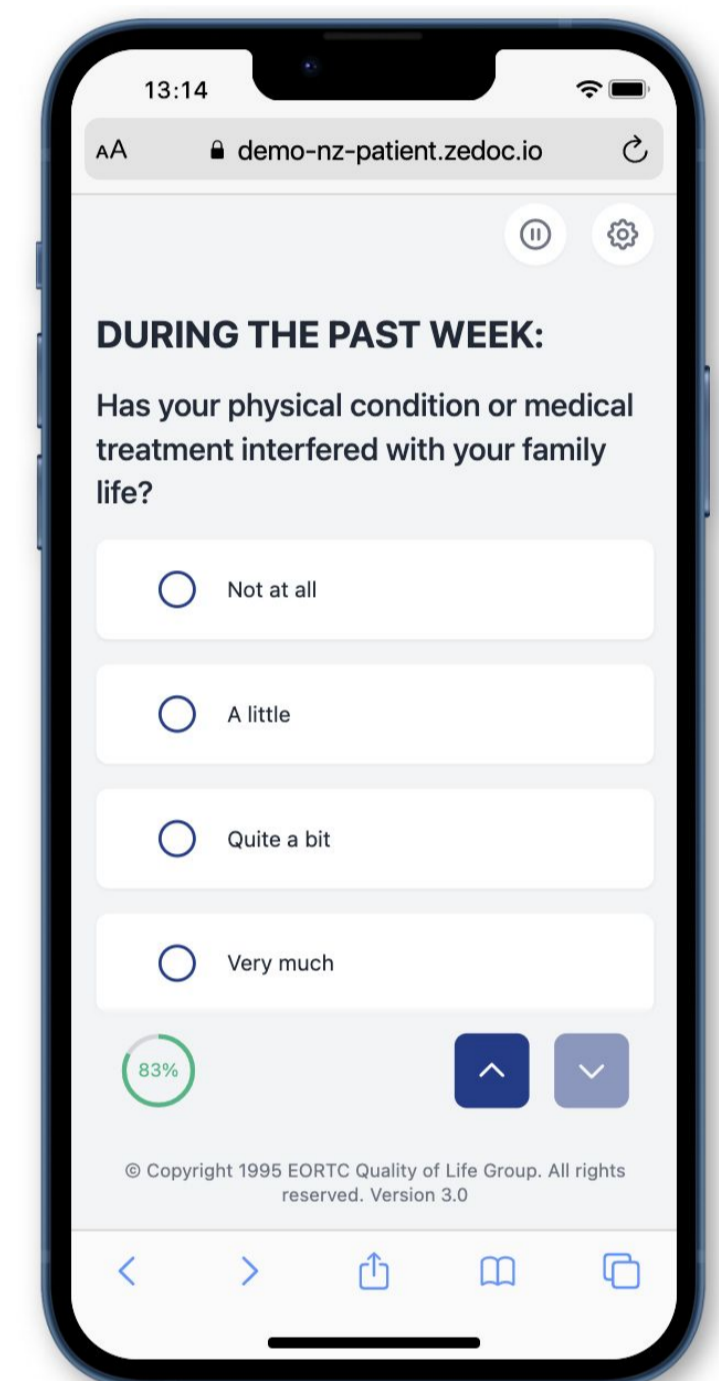
In South Australia, the Radiation Oncology nursing team at Royal Adelaide Hospital has been measuring distress via a paper-based form completed by nursing staff in the clinic for a number of years, in order to identify and alleviate patient concerns early. In 2024, in order to improve the existing process, the department began implementing a new digitally-enabled workflow, which highlighted a number of key learnings applicable to healthcare services across the globe.

## METHODS

Despite distress being routinely measured, the workflow in place was reactive rather than proactive and could cause delays or interruptions to patient flow. In 2023, as part of South Australia's Statewide Patient Reported Measures (PRMs) program, Royal Adelaide Hospital became an early adopter of a digital PRMs system that aimed to transform how distress was measured and utilised in routine care.

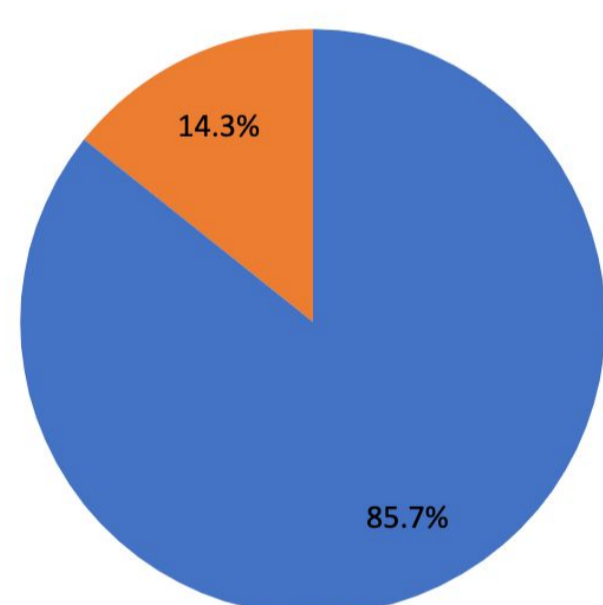
The validated distress measure used by the Radiation Oncology department, the National Comprehensive Cancer Network (NCCN) Distress Thermometer (DT), was translated into a digital version and together the department, Commission on Excellence and Innovation in Health (CEIH) and digital PRMs platform provider The Clinician worked together to redefine the outcomes measurement journey.

Working backwards from the vision of the distress program, a decision was made to shift collection from in-clinic during the consult, to remotely 1 week prior, enabling patients to privately report their distress at home while freeing up nursing staff time and allowing patient concerns to be proactively addressed. Responses of high distress were also automatically reported to nursing staff online, enabling early and informed intervention. Critically, these changes to the workflow were implemented in a stepwise manner, which supported change management within the department and promoted buy-in.



## RESULTS

Do patients identify Concerns? (n=91)



DT Score	N	%
0	22	21%
1	11	10%
2	14	13%
3	9	8%
4	12	11%
5	15	14%
6	10	9%
7	8	7%
8	4	4%
9	2	2%
10	0	0%

- Of the 224 patients enrolled since February 2024 (48% completion rate) - 86% of patients reported distress and 46% reported moderate or serious distress, highlighting the importance of routine measurement.
- Shifting from in-clinic, nurse-led reporting of distress to patient-led, remote reporting was identified as producing more reliable data and has helped free up 20 minutes of consultation time per patient (45 minutes for highly distressed patients who required additional support).
- Transitioning to a digitally-enabled pathway with a PRMs system was well received by department staff and patients - 92% of patients reporting a positive experience and nursing staff finding the solution not only easy to use but also a valuable tool for facilitating more meaningful interactions with patients.

## CONCLUSIONS

The clinical team recognised the importance of undertaking the workflow design and build process with dedicated guidance and support. The PRM team and The Clinician highlighted design and workflow considerations which resulted in the Radiation Oncology team reviewing the broader patient flow through the clinic. They have reported a high level of satisfaction with these changes and state they would not have thought to introduce the changes without implementation support.

The project also showed how effective partnership and fit-for-purpose digital platforms are necessary to not only collect outcomes reliably at scale but to enable the data to be used meaningfully by clinical teams to improve patient flow.

[1] Ownby K. K. (2019). Use of the Distress Thermometer in Clinical Practice. *Journal of the advanced practitioner in oncology*, 10(2), 175-179.