

Patient-reported outcome measures during routine care palliative radiotherapy: Implementation experience and completion rates

Thilo Schuler^{1,2}

@thiloz

thilo.schuler@health.nsw.gov.au

Georg Hruby^{1,3} Shelley Wong¹ Kylie Grimberg¹ Blanca Gallego^{2,4} Thomas Eade^{1,3}

¹ Northern Sydney Cancer Centre, Royal North Shore Hospital, Sydney, Australia

² Australian Institute of Health Innovation, Macquarie University, Sydney, Australia

³ Northern Clinical School, University of Sydney, Sydney, Australia

⁴ Centre for Big Data Research in Health, University of New South Wales, Sydney, Australia

Background and Aim

The collection of electronic patient-reported outcome measures (PROMs) allows innovative care models and provides benefits for individual patients. However, it is particularly challenging in unwell palliative patients. We report our iterative implementation experience from paper to electronic PROM (ePROM) in a routine care palliative radiotherapy (RT) setting.

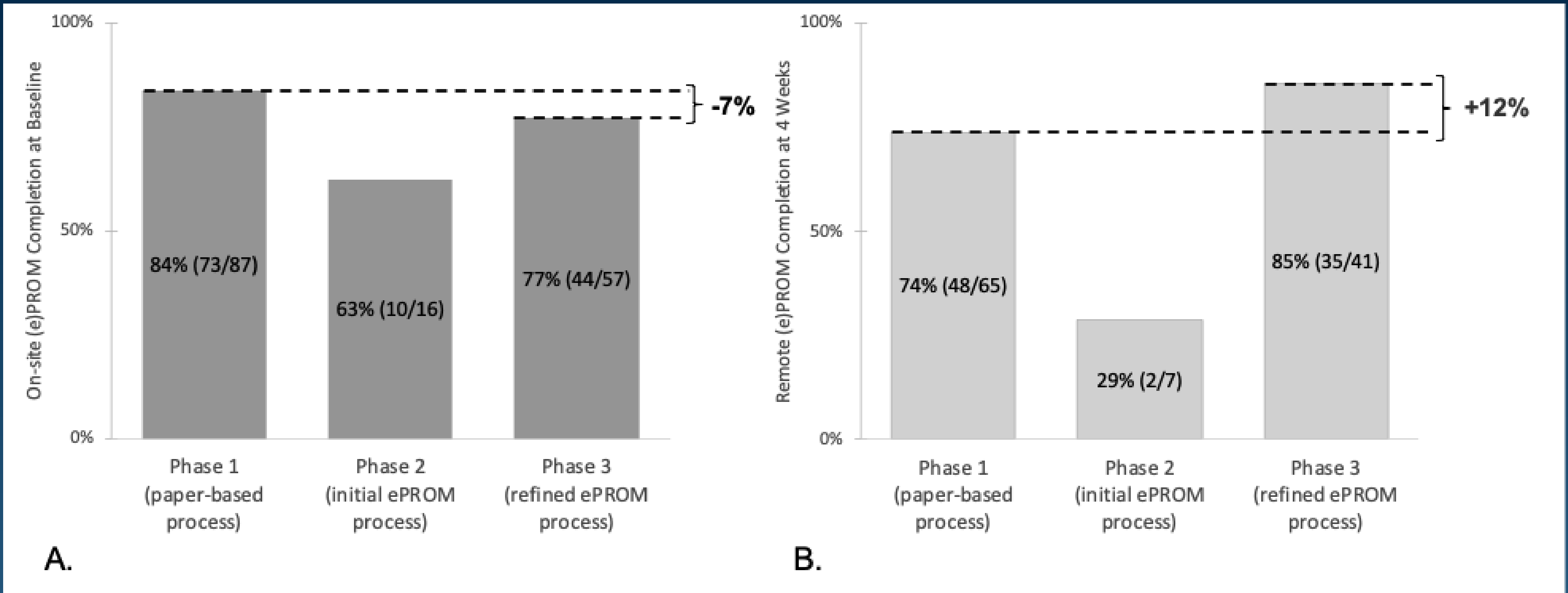
Methods

Palliative RT patients, consecutively treated at an Australian centre, were approached regarding PROM participation: cohort 1 (traditional paper/phone-based PROMs for 11 months), cohort 2 (pilot ePROMs for 1 month), cohort 3 (refined ePROMs for 7 months). Pain and other symptoms were assessed at baseline (BL; onsite collection) and at 4-6 weeks follow-up (FU; remote collection). Onsite ePROMs were collected on a tablet device, while the patient or their carer via automated invitation remote ePROMs (sent by text messages or email including up to 2 automated reminders). Completion rates were compared numerically and by Chi-Square Test (alpha 0.05).

Results

Between May 2018 and November 2019, 160 patients were treated with 84 patients assessable for pain response (i.e. available BL and FU PROM). The most common reason for missing PROMs at BL were logistical/communication issues between staff followed by patients declining, while at FU it was patients being non-contactable. When piloting ePROMs the completion rate dropped markedly but recovered in cohort 3 with a refined process. Comparing paper PROM (cohort 1; n=87) to revised ePROMs (cohort 3; n=57), onsite ePROM completion at

High (e)PROM Completion in challenging, routine care Palliative Radiotherapy setting.



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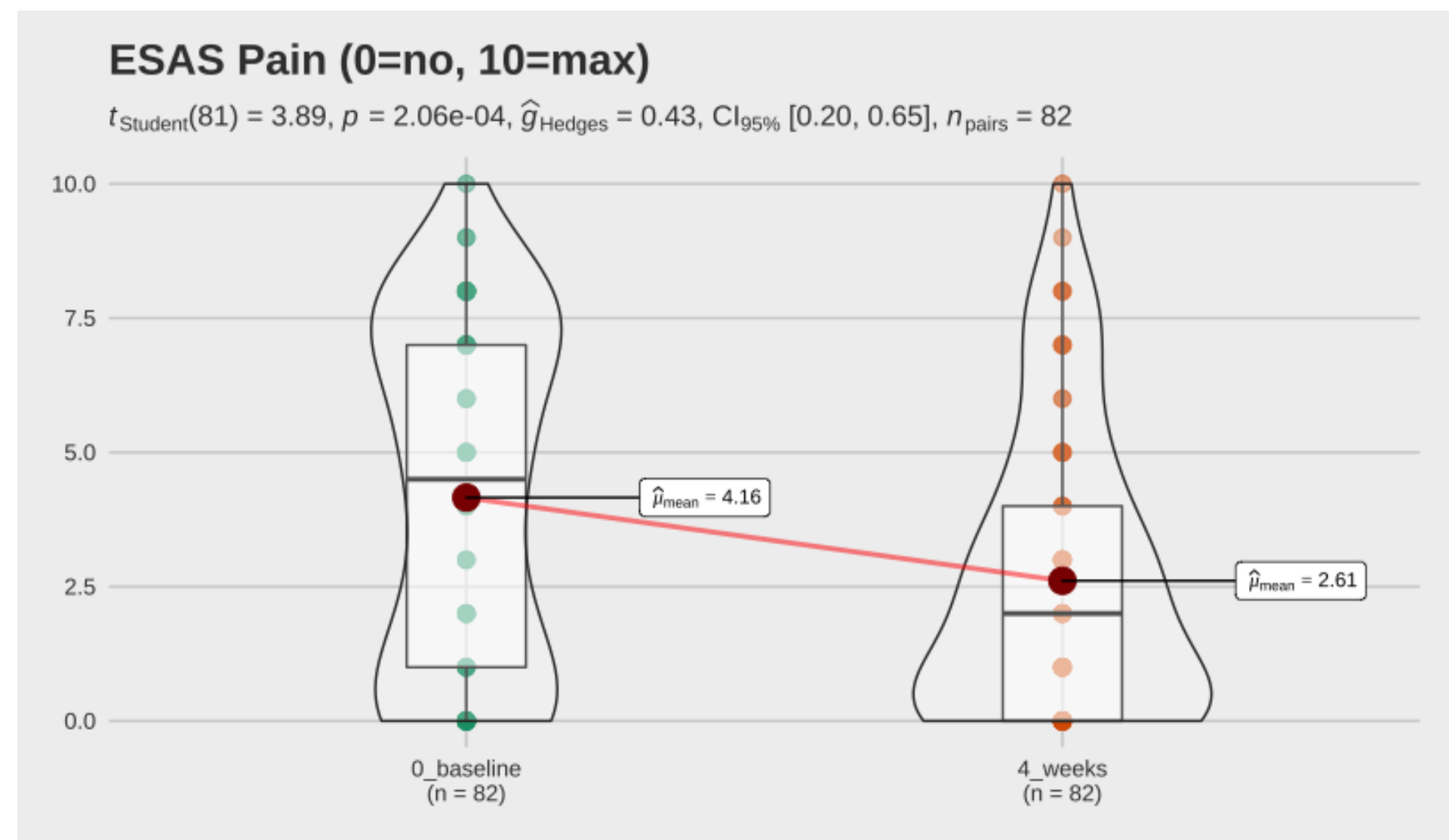
baseline was 7% lower (84% vs 77%, p=0.429; see figure in panel A), however remote ePROM completion at 4-6 weeks was 12% higher (73% vs 85%, p=0.122; see figure in panel B) after adjusting for interim deaths.

Conclusions

We successfully implemented routine ePROMs surpassing a recently published palliative care onsite ePROM completion rate of ~20% (Chua et al. JCO 2018). ePROMs can deliver similar completion rates compared to paper while reducing required staff resources (including fewer time-consuming PROM calls).

Extra Figures

Pain response in all evaluable patients



Pain response in evaluable patients with severe pain including individual trajectories

