Understanding retention in radiation oncology

Quantitative findings from the retention survey by the ESTRO Early Career Committee

Dylan Callens[1,2], Jolien Heukelom[2,3], Amanda Webster[2,4], Antonio Angrisani[5], Federico Mastroleo[6], Bartłomiej Tomasik[2,7], Daniel Portik[2,8], Danielle Fairweather[4], Hanna Alajõe[2,9], Morten Horsholt Kristensen[2,10], Nathalie Cnops[9], Pierfrancesco Franco[11], Steven Petit[2,12], Tiuri Kroese[13], Azadeh Abravan[2,14]

1 KU Leuven and UZ Leuven, BE · 2 ESTRO Early Career Committee, BE · 3 Maastro, GROW, Maastricht UMC+, NL · 4 UCLH and UCL, London, UK · 5 Oncology Institute of Southern Switzerland, EOC, CH · 6 IEO IRCCS and University of Milan, IT · 7 Medical University of Gdańsk, PL · 8 EORTC Headquarters, BE · 9 ESTRO, Brussels, BE · 10 Aarhus University Hospital, DK · 11 University of Eastern Piedmont and 'Maggiore della Carità' University Hospital, Novara, IT · 12 Erasmus MC Cancer Institute, Rotterdam, NL · 13 University Hospital of Zurich, CH · 14 University of Edinburgh and The University of Manchester, UK

51.7%
intend to leave their current position
Vs. 20-40% healthcare benchmark

788
respondents across all disciplines
696 answered the intent question

53
countries
Range 16.7% to 92.3% intent to leave

3
modifiable predictors of intent to leave
Team culture and collaboration, wellbeing, career development

01 BACKGROUND

Rising cancer incidence, an ageing population and a workforce nearing retirement put radiation oncology under growing pressure. Retention safeguards expertise, reduces recruitment and training costs, and supports access to high-quality care, yet its workplace drivers in radiation oncology remain insufficiently understood.

Aim **Quantify intent to leave and identify the workplace factors independently associated with it.**

02 METHODS

Survey design
38 questions built on the Job Demands-Resources model; Content Validity Index ≥ 0.7; piloted by ten committee members.

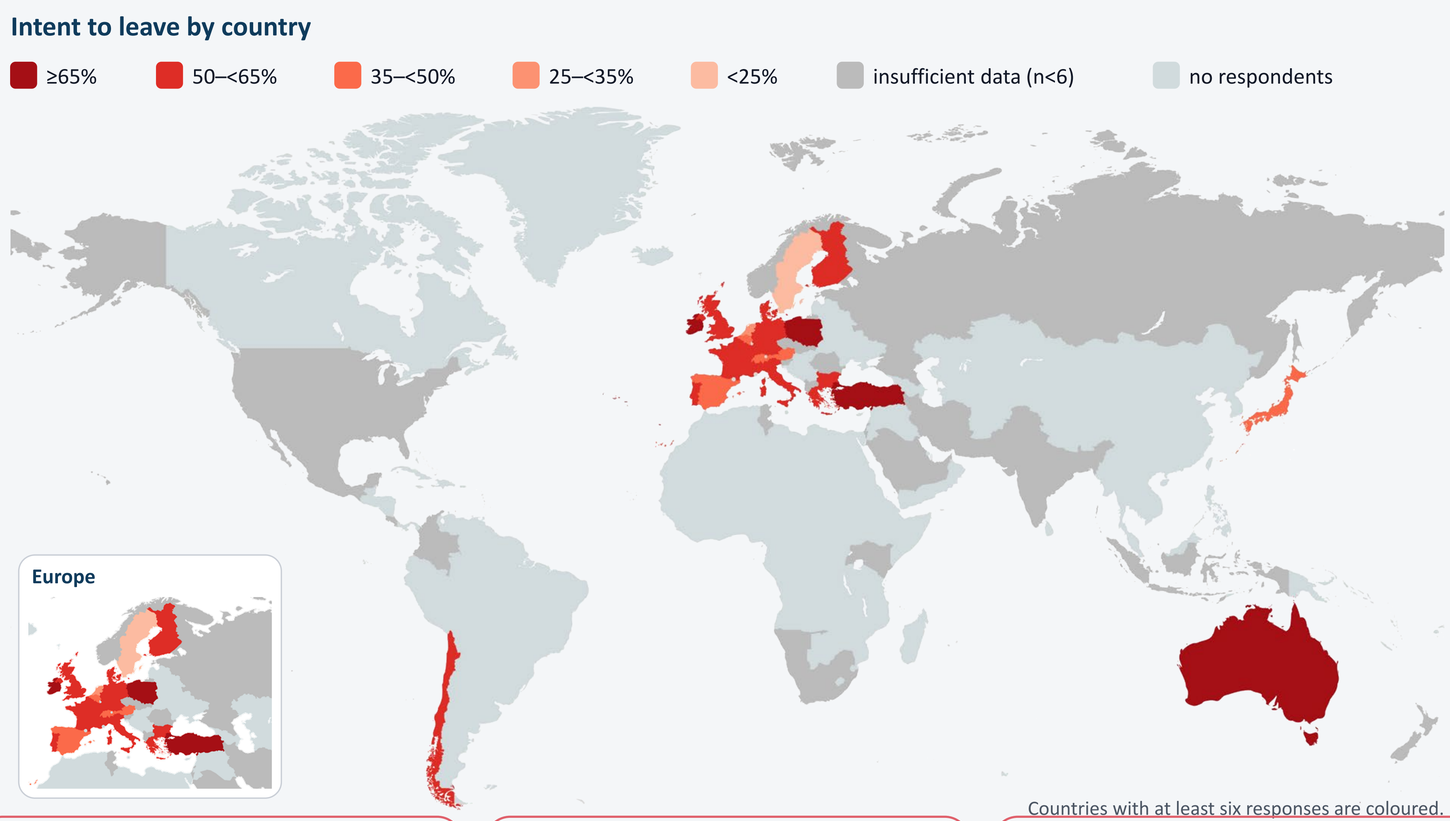
Distribution
Online via ESTRO channels to all radiation oncology professionals, May to August 2025.

Workplace scales
Six composite 5-point scales derived from the companion qualitative framework analysis (Fairweather et al., 2026).

Analysis
Binary logistic regression adjusted for demographics; Bonferroni correction; sensitivity analyses.

03 WHO INTENDS TO LEAVE?

Intent to leave by country



Countries with at least six responses are coloured.

50.4%
RTTs highest of all professions

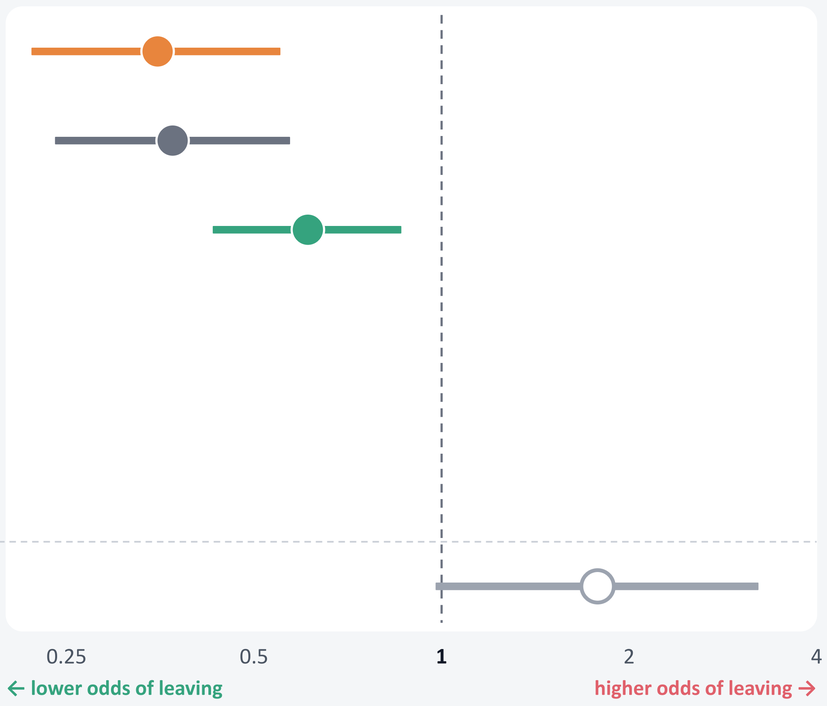
52.7%
aged 35–44 mid-career peak

51.9%
11–20 years of experience

Perceived shortages: RTTs 63%, radiation oncologists 49%, medical physicists 35%; 55% reported that the RTT shortage harms their department.

04 WHAT DRIVES INTENT TO LEAVE?

Workplace factor	Adjusted OR (95% CI)
Team culture and collaboration	**0.35 (0.22–0.55)** p < 0.001
Wellbeing	**0.37 (0.24–0.57)** p < 0.001
Career development	**0.61 (0.43–0.86)** p = 0.004
Recognition and value	*not significant*
Leadership connection	*not significant*
Resources	*not significant*
RTT vs Radiation Oncologist	**1.78 (0.98–3.22)** p = 0.057



×3

Each one-point drop in team culture and collaboration or in wellbeing roughly tripled the odds of intent to leave. For career development, odds rose by about 60%.

All three remained significant after Bonferroni correction and across sensitivity analyses.

0.862	0.331	654
AUC	Pseudo-R^2	N

Odds ratios per one-point increase on the 5-point scale, adjusted for demographics. Log scale; dashed line = OR 1.

05 WHY STAY, WHY LEAVE



Share of respondents ranking the factor in their personal top five.

06 IMPLICATIONS

- **Team culture:** build psychological safety; interprofessional (case-)discussion fora; advanced practice RTT roles.
- **Wellbeing:** protect work-life boundaries; wellbeing audits; visible commitment to equity, diversity and inclusion.
- **Career development:** formal mentoring; vertical and horizontal pathways; career ladders linked to remuneration.

Conclusion **Intent to leave is alarmingly prevalent in radiation oncology. Retention is however an organisational responsibility: team culture, wellbeing and career development are actionable targets, with RTTs most at risk.**

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Full paper