Understanding Retention in Radiation Oncology: Qualitative Findings from the Retention Survey by the ESTRO Early Careers Committee

Danielle Fairweather1, Azadeh Abravan2, Daniel Portik3, Steven Petit4, Amanda Webster1,5, ESTRO ECC Retention Research Group*, Dylan Callens6

1. University College London Hospitals.
2. University of Edinburgh; The University of Manchester.
3. Maastricht University Medical Centre; EORTC Headquarters.
4. Erasmus MC Cancer Institute.
5. University College London; RTTQA Group.
6. KU Leuven; UZ Leuven

*** ESTRO ECC Retention Research Group Collaborators = Hanna Alajoe, Antonio Angrisani, Nathalie Cnops, Pierfrancesco Franco, Jolien Heukelom, Morten Horsholt Kristensen, Frederico Mastroleo, Kroese Tiuri, Bartek Tomasik**

ESTRO Early Career Committee

Key Takeaway: The drivers of retention identified were largely organisational rather than individual, highlighting the need for structural, system-level interventions instead of approaches focused solely on individual resilience.

INTRODUCTION

Retention of the radiation oncology workforce is an increasing global concern amid rising cancer incidence, workforce shortages, and escalating service demands. While recruitment remains a priority, continued attrition across professional groups threatens long-term workforce sustainability. This study explored organisational, professional, and individual factors influencing retention across the multidisciplinary radiation oncology workforce.

Aim: To explore the organisational, professional, and individual factors influencing retention across the multidisciplinary radiation oncology workforce.

METHODS

A qualitative study was conducted within a broader international cross-sectional mixed-methods survey distributed through European Society for Radiotherapy and Oncology (ESTRO) communication channels. Radiation therapists (RTTs), radiation oncologists (ROs), medical physicists (MPs), and other radiation oncology professionals were invited to participate. Six optional open-text questions explored workplace culture, professional support, recognition, career development, and factors influencing intention to leave. Responses were analysed using framework analysis involving familiarisation, framework development, iterative coding, charting, and thematic interpretation.

RESULTS

A total of 966 participants from 53 countries responded, with **717 participants** providing qualitative data. Six overarching themes influencing retention were identified: **(1) workplace culture, (2) leadership, (3) career development, (4) resource strain, (5) recognition and value,** and **(6) wellbeing and burnout.**

Workplace culture and leadership emerged as central determinants of retention. Supportive leadership, mentorship, and collaborative workplace cultures were associated with greater professional satisfaction and engagement. Conversely, poor communication, lack of advocacy, and hierarchical or blame-driven cultures contributed to stress, burnout, and intention to leave.

Profession-specific differences were evident. RTTs reported the greatest burden of operational pressure, understaffing, limited flexibility, and burnout. MPs highlighted poor professional visibility, limited recognition, and restricted career progression opportunities. ROs emphasised administrative burden, workload, and insufficient protected academic or development time.

Across all groups, unclear career pathways, limited protected development opportunities, and insufficient recognition negatively affected morale and retention.

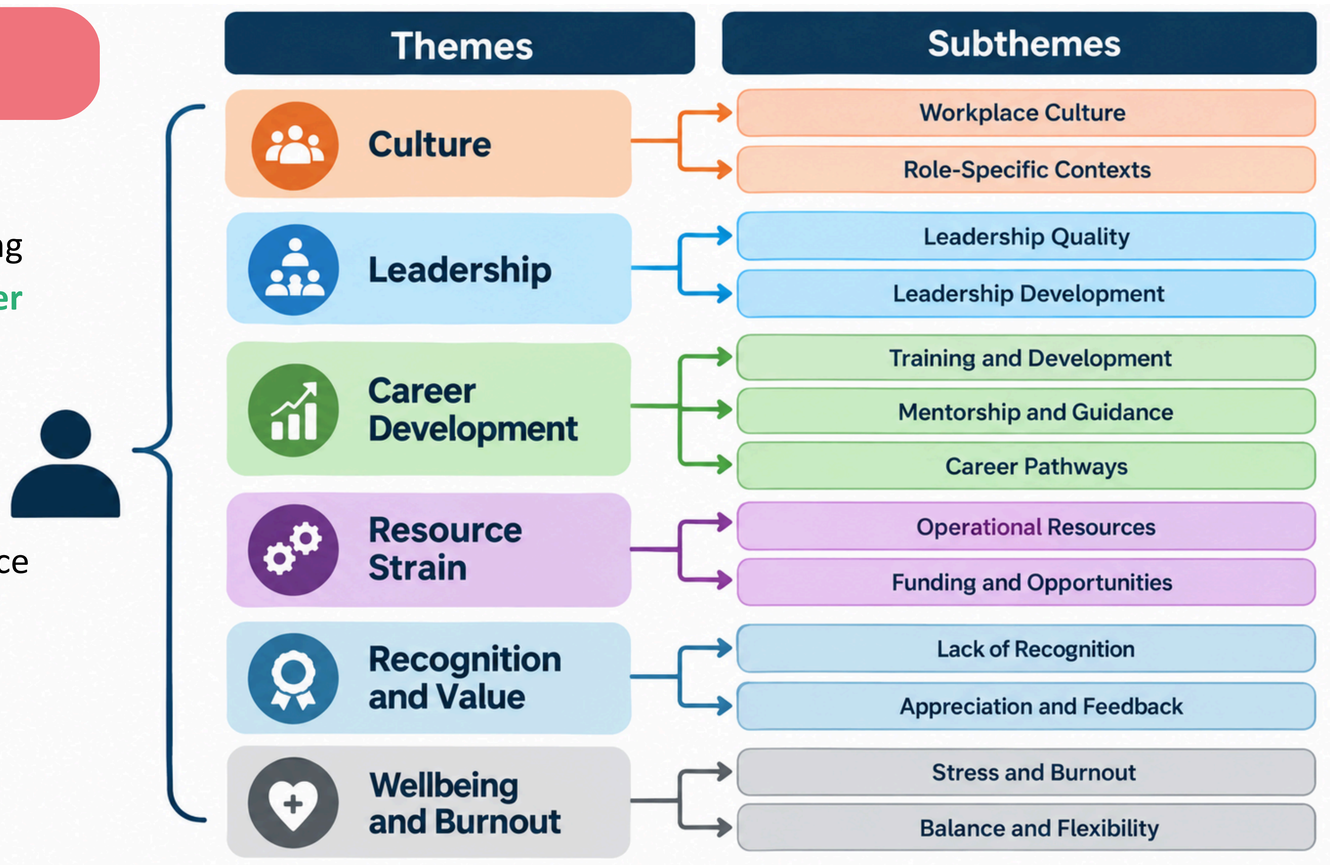

Figure 1. Overview of themes and subthemes shaping retention in the radiation oncology workforce



CONCLUSION

Retention within radiation oncology is shaped by complex, interrelated systemic pressures rather than isolated individual factors. Sustainable workforce strategies should prioritise supportive leadership, mentorship, protected professional development, improved recognition, and investment in staffing and workforce infrastructure. Profession-specific interventions are essential to strengthen long-term workforce resilience and maintain high-quality patient care.

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Reference:
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