

Advanced practice roles amongst Therapeutic Radiographers/ Radiation Therapists -TR/RTTs European survey



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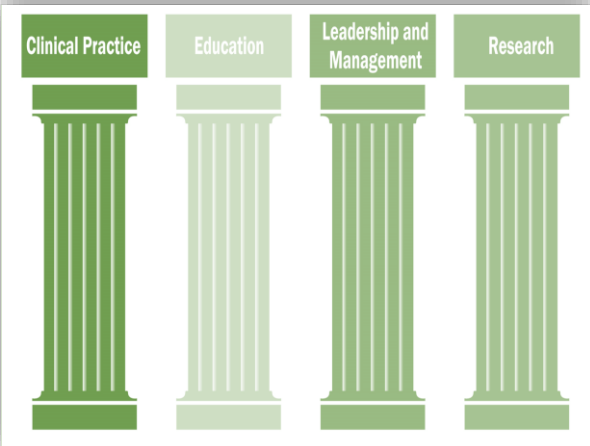
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Introduction

What are Advanced Practice (AP) roles?



Practitioners with several years of experience and additional education



Level of practice: high degree of autonomy & complex decision making



Core capabilities & area specific clinical competence to practice across **4 pillars**



Not performed at entry-level!



Introduction

Why AP roles are important in Radiotherapy?

Cancer incidence & prevalence

Cancer survivorship & expectations

Staff recruitment & retention (TR/RTTs)

Technology evolution & Artificial Intelligence



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Rationale



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Systematic Review

Advanced practice roles of therapeutic radiographers/radiation therapists: A systematic literature review

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Impact

ABSTRACT

Introduction: Advances in Radiotherapy (RT) technology and increase of complexity in cancer care have enabled the implementation of new treatment techniques. Subsequently, a greater level of autonomy, responsibility, and accountability in the practice of Therapeutic Radiographers/Radiation Therapists (TR/RTTs) has led to Advanced Practice (AP) roles. The published evidence of this role is scattered with confusing terminology and divergence regarding the perception of whether a specific role represents AP internationally. This study aims to establish an international baseline of evidence on AP roles in RT to identify roles and activities performed by TR/RTTs at advanced level practice and to summarise the impact.

Methods: A systematic PRISMA review of the literature was undertaken. Thematic analysis was used to synthesise the roles and associated activities. Six RT external experts validated the list. The impact was scrutinised in terms of clinical, organisational, and professional outcomes.

Results: Studies (n = 87) were included and categorised into four groups. AP roles were listed by clinical area, site-specific, and scope of practice, and advanced activities were organised into seven dimensions and 27 sub-dimensions. Three most-reported outcomes were: enhanced service capacity, higher patient satisfaction, and safety maintenance.

Conclusion: Evidence-based AP amongst TR/RTTs show how AP roles were conceptualised, implemented, and evaluated. Congruence studies have shown that TR/RTTs are at par with the gold-standard across the various AP roles.

Implications for practice: This is the first systematic literature review synthesising AP roles and activities of TR/RTTs. This study also identified the main areas of AP that can be used to develop professional frameworks and education guiding policy by professional bodies, educators and other stakeholders.

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Aim

To assess current AP roles amongst
TR/RTTs

To identify the educational gaps for this
advanced level practice across Europe



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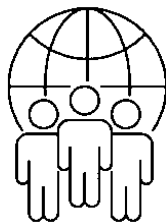
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Methods



Self-design survey

- ✓ Face & content validity
- ✓ Test-retest reliability
- ✓ Ethics approval



Self-administered survey



I- Sociodemographics

II- Professional profile

- IIA- Advanced practitioner
- IIB- TR\RTT working in AP role/tasks

III- Education & training needs



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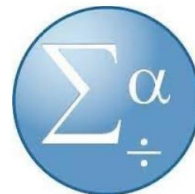
Methods

Data collection

- Dec 2021 – March 2022
- Convenience sampling

Data analysis

- Quantitative data
- Qualitative data
- Triangulation

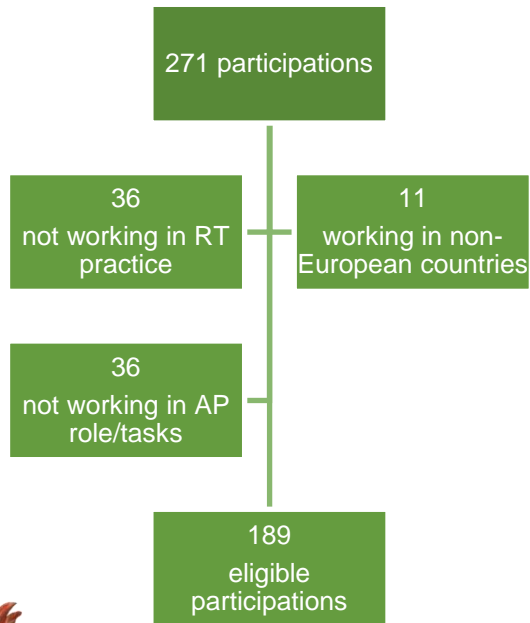


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Survey engagement

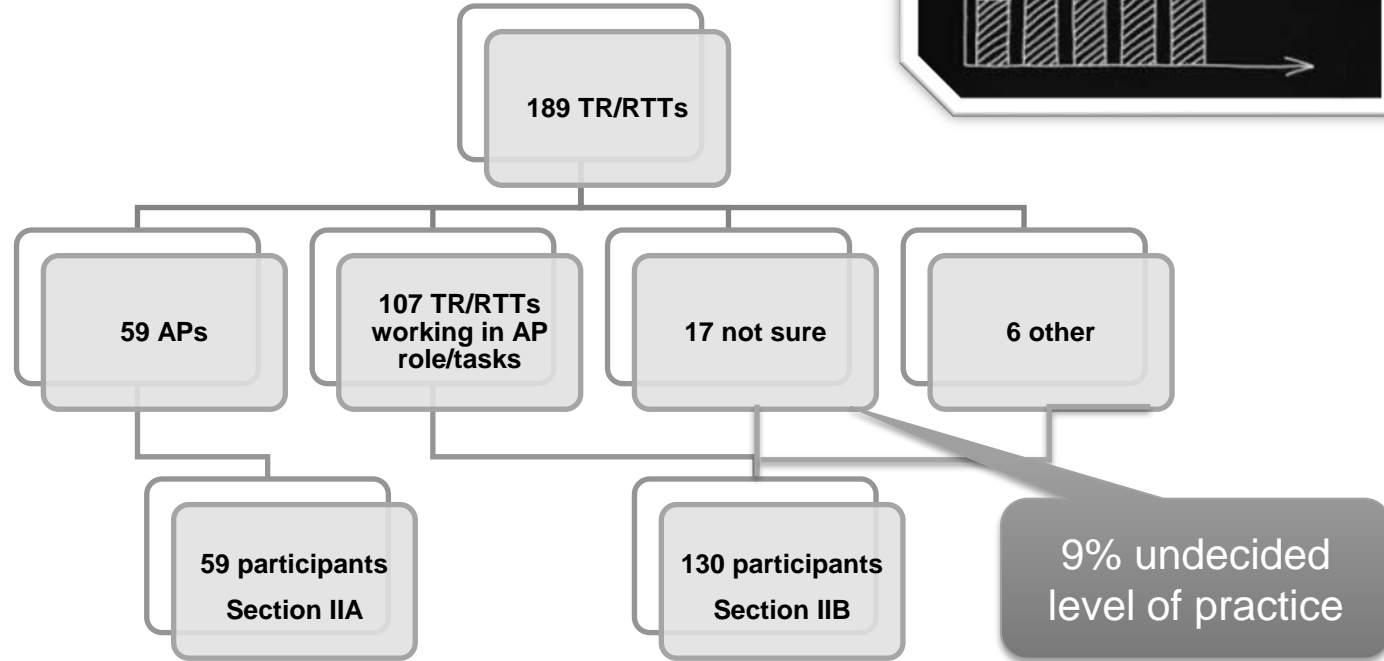


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Working practice level



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21 Countries (n=189)



Range per country  1 41



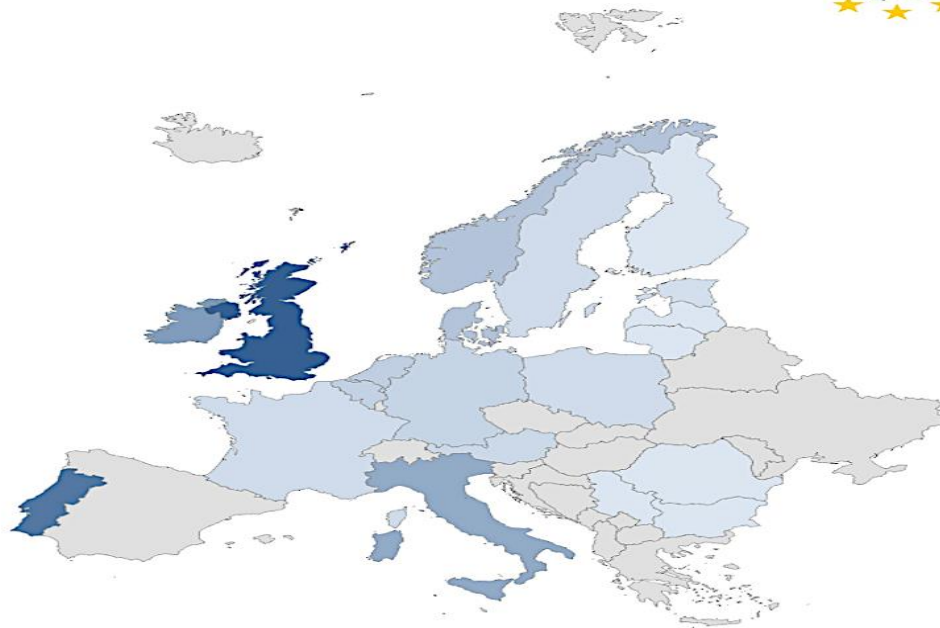
UK n=



Portugal



Ireland



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Participants' profile

72%



48%



94%



13 years

- Professional experience as TR/RTT (1-37)

EQF6

- Education academic level (EQF4 - EQF8)

6 years

- AP experience (0-30)



42% Additional education



- ☐ Master's degree
- ☐ Specific module

25% Professional experience



- ☐ Minimum working years
 - 5 years

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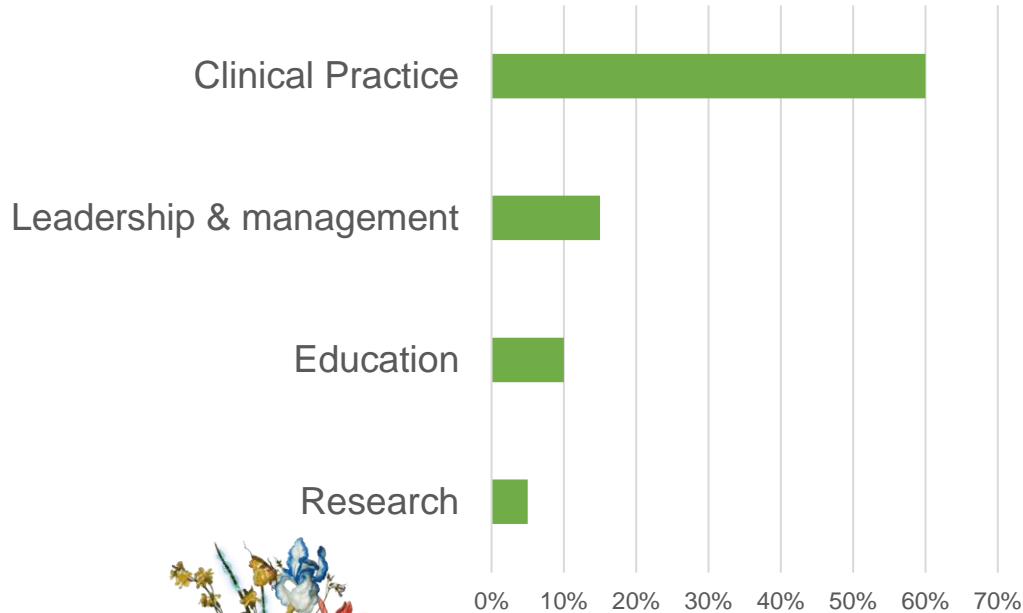
A word cloud of various radiation therapy roles. The most prominent words are 'radiation', 'radiographer', 'specialist', 'therapist', 'dosimetrist', 'advanced', 'clinical', 'radiotherapy', 'practitioner', 'manager', 'planning', 'education', 'therapeutic', 'practice', 'consultant', 'brachytherapy', 'radiation', 'radiographer', 'specialist', 'therapist', 'dosimetrist', 'advanced', 'clinical', 'radiotherapy', 'practitioner', 'manager', 'planning', 'education', 'therapeutic', 'practice', 'consultant', 'brachytherapy'. Two callout boxes are present: one on the left pointing to the word 'practitioner' containing the text '32% with job plan', and one on the right pointing to the word 'advanced' containing the text 'Advanced Practitioners'.



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Working time by AP pillar



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Scope of AP roles



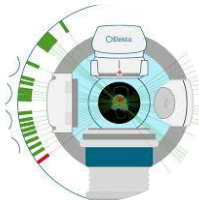
Activities



☐ IGRT/ART

☐ Patient information

☐ Patient assessment & management



Tumour-site



☐ Prostate

☐ Breast

☐ Head & Neck



Clinical areas



☐ Palliative care

☐ Practice development

☐ Brachytherapy



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Educational gaps



Knowledge areas



☐ IGRT/ART

☐ Multimodal imaging & technologies

☐ Advanced treatment planning

Advanced skills



☐ Leadership skills

☐ Management skills

☐ Clinical-site/specialty expertise



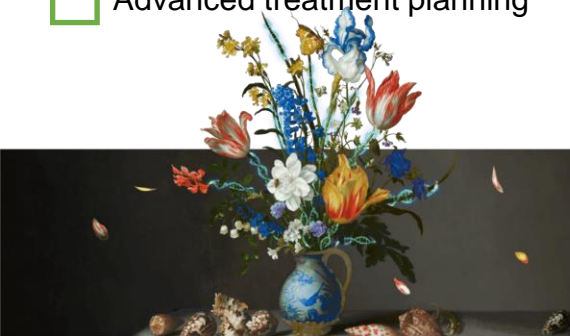
63% new AP roles



52% gaps in education & training



32% do not know



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Conclusion & Recommendations

“Mixed-bag” of AP roles & job titles

- Standardization to improve role recognition

Inconsistency in education

- AP requirement at Master level
- Update curricula of AP programmes with emerging roles

Disproportion between AP pillars

- Importance of working across all AP pillars (job plan)



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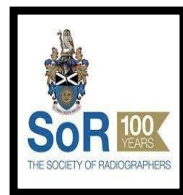
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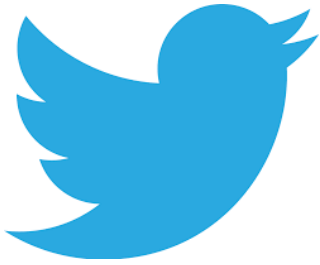
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