

2575 Evolutionary Phases in Quality Research in Radiation Oncology over the Last 35 Years

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Purpose/Objective(s): Quality Research in Radiation Oncology (QRRO) has evolved in three overlapping phases over the last 35 years. The purpose of this presentation is to describe the characteristics and evolution of each of these phases.

Materials/Methods: As the Patterns of Care Study (PCS), this unique project received its first 3 year federal funding award in 1974 and has been funded almost continuously as an RO1 or contract since then. As PCS evolved into QRRO, radiation oncology has conducted periodic assessments of practice quality nationally. Keeping pace with overall conceptual and scientific trends in quality research, three phases can be defined.

Results: Based on the structure / process / outcome model, Phase 1 emphasized defining the structural base for radiation oncology practice and describing how processes of care related to this base. Efforts during Phase II sought to link disease specific outcomes to the process of care for several major diseases. In Phase III the focus of evaluation has expanded to explicit evaluation of the quality of the process of care provided in a multimodal context comparing the care actually delivered to evidence based standards and guidelines used as surrogates to define high quality.

Conclusions: Continuous quality research is essential to evaluate the standard of radiation oncology practice being met nationally, to identify deficiencies and to provide benchmark data against which practice improvement can be monitored. In the future, Phase IV will expand strategies to evaluate the appropriate and correct use of emerging technologies by providing electronic real time data collection to allow contemporaneous evaluation of care as it is being delivered. These serious challenges must be met.

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