Conclusion: The implementation of our TOC model has led to a higher inclusion in trials, an improved data collection and a higher satisfaction of patients and radiation oncologists involved in clinical trials. The TOC model has led to an optimal infrastructure for well-performed, high-quality clinical trials.

PO-0784
Targeting general practitioners: prospective outcomes of a nationwide GP education programme
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Purpose or Objective: To report the learning outcomes of a standardised national multcentre education program aimed at improving General Practitioner (GP) knowledge about radiotherapy (RT) and referral pathways to radiation oncologists (RO).

Material and Methods: In 2014, a GP education session was developed through the ‘Targeting Cancer: Radiation Oncology’ campaign (an initiative of RANZCR, Faculty of Radiation Oncology). The content and structure was developed by a committee of ROs with skills in training and education. The sessions are designed to be held within an RT department and consist of RO-led interactive teaching around two common patient scenarios, followed by a physical tour of the RT department with demonstrations of set up and treatment. Pre- and immediate post-session custom surveys were administered on consented GPs. Four key domains were assessed:
1. Objective and subjective knowledge about RT.
2. Satisfaction regarding referral pathways to ROs.
3. Self-reported referral behaviours.
4. Feedback on quality of the educational session.
A 6 question follow up survey was sent 6-8 months after the session to assess the usefulness of the knowledge gained in the clinical care of cancer patients and ongoing referral behaviours.

Results: 120 GPs attended a total 10 sessions held in RT departments across Australia between October 2014 and 2015. Pre-session, 96% of GPs reported their knowledge of radiation therapy required significant or some improvement. Post-session, 91% rated their knowledge as “excellent”, “above average” or “competent”. In concordance with this, the proportion of GPs correctly answering objective knowledge questions rose from 50% to 82%. Over one third of GPs did not know the location of their nearest RT department and 80% wanted improved referral pathways to ROs. Despite this 92% have had patients in their practice who might benefit from palliative RT. However nearly half the GPs indicated they were not comfortable referring directly to a RO. Following the session this rose to 92%. All 120 respondents felt the session improved their understanding of RT and would recommend the session to colleagues. Early data from the 6 month follow up survey shows 100% of GPs felt the knowledge gained at the education session has improved their ability to care for cancer patients and increased their confidence to refer directly to ROs.

Conclusion: A national standardized GP education program can significantly improve GP knowledge of the core RT concepts and likely influence patient referrals for RT.

PO-0785
Improvement strategies and performance enhancement in Healthcare: the reorganisation of Radiotherapy
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Purpose or Objective: Population ageing, changes in epidemiological trends and the development of new treatments are putting strain on National Health Systems, which need to implement performance measurement systems to minimize the impact of expenditure reduction on service quality and to drive value creation for the whole population. We developed a model of healthcare performance evaluation for oncology care whose main focuses are: - specific types of cancers and value for citizens of a catchment area served. The model synthesizes into a single index the value of a service - outcome and costs for the population – building upon the Italian NHS principles. We applied the model to a Radiotherapy Service before and after IRST IRCCS took over its management in January 2014

Material and Methods: We measured value produced by Radiotherapy Services for the Ravenna district (393,184 inhabitants) before 2013 and after the technological investment in 2014. We considered three performance dimensions:
- clinical outcomes;
- appropriateness;
- accessibility and geographic proximity of services.
An expert panel selected variables, indicators and weights such as waiting times for treatments, % advanced treatment (IMRT, V-MAT), passive migration cases to other areas, average access to treatment. Per-capita cost was computed as direct costs of radiotherapy minus reimbursement for “active” patient migration, plus costs for “passive” patient migration; total costs were divided by age-adjusted population. A composite indicator was computed, whose nominator synthesizes quality indicators and whose denominator accounts for costs. 2013 IRST performance in Forlì-Cesena district was used as benchmark

Results: Value assessed in Ravenna district was lower than that of Forlì-Cesena in 2013 (0.35 and 0.78, respectively), translating into a higher per-capita cost (12 euro vs. 9 euro) and lower service level (4.2 vs. 7.0 quality points). In 2014, performance of Ravenna Radiotherapy Service significantly improved (0.47; +34%): quality points went up from 4.2 to 5.1 as a result of better clinical outcome, improved accessibility and shorter wait times Fig1.
Per-capita costs decreased from 12 Euro to 10.8 Euro thanks to a reduction in “passive” patient migration, efficiency gain (fewer radiotherapy sessions for specific regimens) and economies of scale. A return on investment and financial stability were guaranteed by efficiency gain (lower emerging compared to savings from reduced “passive” patient migration) and by increased attractiveness (increased “active” patient migration) Fig2.

Fig1 Populational Performance