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CONFERENCE ABSTRACT

Quality of Dutch integrated head and neck cancer care: measurements and evaluation

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Introduction: Oncologic care is very complex, and delivery of integrated care with optimal alignment and collaboration of several disciplines is crucial. In addition, providing patient-centred care is an essential component of high quality integrated care. To monitor and effectively improve high-quality integrated oncologic care, a dashboard of valid and reliable quality indicators (QIs) is indispensable. We aimed to develop a set of QIs specifically for head and neck cancer (HNC) patients from three perspectives: patients, medical specialist (MS) and allied health professionals (AHP).

Methods: QIs on process, structure and outcome of care, were developed using an evidence based method: the Rand modified Delphi method from perspective of MS and AHP. Data was collected in 10 Dutch hospitals from 1632 patients (November 2014 - December 2016). Frequencies of all indicators were calculated on national and hospital level and corrected for case-mix. For measuring patient perspectives an high quality care, validated questionnaires (patient reported outcomes (PRO): EQ-5D-3L, EORTC QLQ-C30, EORTC QLQ-H&N35 and, patient experiences (PRE) Consumer Quality index for Oncologic care (CQO) and Radiotherapeutic care (CQR)) were distributed at baseline, 3, 6 and 12 months follow-up. With descriptive analysis, ANOVA and mixed model analysis, differences over time and between treatment groups were analyzed.

Results: The final aggregated indicator set contained 5 outcome indicators (e.g. PROs and PREs) and 31 process indicators, and three structure indicators. Besides, 10 case-mix factors were selected. Current practice assessment, in 1632 patients, produced high scores on some integrated care indicators, e.g. the percentage of patients discussed in multidisciplinary team

meeting (MTM) before start of the treatment (n = 817; score 96%; range 88-97%). However, involvement of dental teams (n = 664; score 83%; range 63 – 100%) and malnutrition screening before start of the treatment (n = 555; score 52%; range 3-74%) could be improved in most hospitals. Questionnaires were filled in by 238 patients. Pain decreased significantly at 6 and 12 months follow-up and dry mouth increased significantly at 3, 6 and 12 months follow-up compared to baseline. Outcomes on pain and sticky saliva differed between different therapies ($p \leq 0.05$).

Discussion: The quality of integrated multidisciplinary care for patients with head and neck cancer in the Netherlands is already high on some aspects, but varied between hospitals and shows room for improvement.

Conclusion: This study visualizes the usability of measuring the quality of integrated oncologic care by using indicators. This study can be an example for other oncologic diseases where integrated care is necessary.

Lessons learned: It is a challenge, but it is possible to develop an indicator set to assess the quality of oncologic integrated care agreed by MS, APH and patients.

Limitations: Data was included of 10 Dutch hospitals, however the amount of patients for each hospital differed from six to 643 patients. More data is needed to generate reliable results.

Suggestions for future research: More research could be done to correlate process and outcomes indicators, including PROs and PREs.

Keywords: head and neck cancer; multidisciplinary care; integrated care; quality indicators; patient-centered care