

Patients see doctors of introduced department after radiotherapy was finished. We investigated that how many patients wish to take the re-examinations of Radiation Oncologist.

**Materials and Methods:** The subjects were 109 consecutive patients who underwent radiotherapy. All patients undergo post-radiotherapy follow-up examinations at the referral departments. We see 400 patients per year at our hospital.

Patients were asked to complete the questionnaire, whether you desire to undergo a follow-up examination of Radiation Oncologist after the completion of treatment. The dependent variable was whether or not the patients desired a follow-up examination. The exploratory variables were gender, age, irradiation objective, dose, and anatomical location.

**Results:** A significantly greater number of women desired follow-up examinations ( $p=0.04$ ), whereas a significantly greater number of brain tumor patients did not desire follow-up examinations ( $p=0.04$ ).

**Conclusion:** Forty-three percentage of patients wishes to take re-examinations. Radiation oncologists should ask to the patient whether they want to see doctors or not.

**No conflict of interest.**

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POSTER

### Factors influencing communication skills and abilities for empathy of oncology nurses

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**Background:** This study was conducted descriptively in order to determine factors influencing communication skills and abilities for empathy of oncology nurses.

**Material and Methods:** This research was conducted with participation of 137 nurses who were working in oncology department between 15/10/2014 and 20/12/2015. In the research, data was obtained using a 15-question questionnaire, Empathic Tendency Scale and Communication Skill Assessment Scale. Empathic Tendency Scale is a 20-item likert scale which was developed by Dökmen and tests empathizing tendencies of individuals in their daily lives. Higher scores obtained from this scale indicate higher empathizing tendencies and lower scores indicate lower empathizing tendencies. Communication Skill Assessment Scale is a 25-expression likert scale which was developed by Korkut and determines how individuals evaluate their communication skills. The maximum score that can be obtained from this scale is 100, the lowest one is 0. Higher score indicates that individuals evaluate their communication skills positively. In evaluation of data; percentage estimation, Mann-Whitney U, Kruskal-Wallis and Spearman correlation tests were used.

**Results:** It was determined that, of the nurses who participated in the research; 62% were married, 42.3% graduated from vocational school of health, 56.2% had been working as a nurse for 1–8 years, 82.5% loved their occupations and 72.3% declared their satisfaction from the department they work in. The median Empathic Tendency Scale point of nurses was determined to be 55 (38–69), median Communication Skill Assessment Scale point was determined to be 83 (34–100). It was determined that there was no relationship between Communication Skill Assessment Scale score and Empathic Tendency Scale score ( $r=0.066$ ,  $p=0.440$ ).

**Conclusion:** In this study, it has been concluded that some characteristics of nurses such as educational level, status of loving occupation, status of being satisfied from the department that they work in, status of being satisfied from occupational life of nurses influence their communication skills and empathic tendencies.

**No conflict of interest.**

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POSTER

### Innovation in cancer care delivery

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**Background:** There is continuous need for innovation in the healthcare industry. Alongside dramatic advances in cancer medicine, there have been many recent innovations in healthcare delivery, such as telemedicine, cancer type units, and links to community health workers. Such innovations offer the potential for dramatic improvements in quality of life for patients. What remains a great paradox is that despite these many innovations, only a small fraction of the patients who could potentially benefit from them actually are doing so. Why so?

**Material and Methods:** I would like to address fundamental flaws in healthcare. There are remarkable innovations are happening all over the world, but these value-adding innovations are not spreading. The speed

and extent to which even remarkable breakthroughs have been adopted is highly variable. Habits and beliefs need to be changed first.

**Results:** Specialist care is expensive and various initiatives exist to improve efficiency and efficacy. However, little information is shared among different centers, countries and research groups. Important topics are:

- Innovations in IT, communication, organizational dynamics are adapted only slowly in clinical practice and research.
- Breaking down traditional specialty-based units and replace them with cross-disciplinary groups and multidisciplinary consultations and tumor boards remarkably improve patient's outcomes and satisfaction.
- Communication between primary and specialist care need to be improved, to obtain benefit of screening, prevention and correct cancer follow-up.
- Fluidity of medical information, digitalization and new IT tools avoid errors, toxicities and multiple consultations
- Encouraging people to adopt new delivery methods sounds straightforward in principle, but it often takes time, and a few failures along the way, before the adopted innovation is a success.

**Conclusions:** But getting people to 'adapt with pride' takes a shift in mindset. Adapting ideas from elsewhere requires a culture of openness, creativity and experimentation. ECCO can help in creating space for dialogue, brainstorming and information sharing among the different players in cancer care; care-providers, patients, insurers and policy makers.

**No conflict of interest.**

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POSTER

### Evaluation of early implementation of tumor-infiltrating lymphocytes in treating advanced melanoma in an academic setting: a constructive technology analysis

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**Background:** Tumor-infiltrating lymphocytes (TIL) treatment in advanced melanoma shows response rates of about 50% and one-year survival rates of 35–60% versus 43% (1 y)–23% (2 y) for ipilimumab (anti CTLA-4), standard treatment. In 2010, TIL was implemented in a pilot setting ( $n=10$ ), whereafter a "coverage with evidence development" (CED) program was started which entails a randomized phase III study evaluating (cost)effectiveness compared to ipilimumab. TIL is highly personalized, however complex and requests substantial upfront investments. Therefore we aimed to provide an early and comprehensive overview of the impact of implementation of this complex adoptive cell therapy.

**Methods:** An early stage constructive technology assessment (CTA) was conducted to identify relevant elements, regarding the dynamic nature of the new technology focusing on six aspects: (I) clinical, (II) patient-related, (III) organizational, (IV) technological, (V) economic and (VI) future perspectives. These aspects were evaluated by means of tailored semi-structured interviews with nine relevant stakeholders i.e. clinical- and management staff ( $n=6$ ), researchers ( $n=3$ ), staff of the production facility ( $n=3$ ) and patients ( $n=4$ ) during the pilot and start of CED phase. On an economical level an activity based costing analysis was conducted. To identify future implementation and diffusion scenario's, issues regarding developments in research and technology, and clinical improvements were discussed with all relevant stakeholders.

**Results:** Fourteen interviews were held. We revealed on a clinical level, the TIL process, and the work routines that already changed in the pilot series: (1) lowering the dose of and (2) less interleukin-2 (IL-2) cycles, and (3) more stringent inclusion criteria. Patients' impact of TIL therapy was described as substantial especially regarding anxiety and stress during screening, TIL-infusion and IL-2 therapy. Key organizational aspects were: training of medical and nursing staff, extremely tight hospital logistics and communication. The key technical issues were: time-consuming quality and safety regulations according to Good Manufacturing Practices and the Dutch Medicines Act (GnW), expensive lab-equipment and intensive training of technicians. On the economic level total costs for TIL were €67,000,- per patient, with the hospital days (€25,000,-) and production costs (€35,500,-) as important drivers. Examples of future scenarios are identification of a biomarker for TIL success and other immunotherapies, availability of competing immunotherapies and application of TIL in other tumors, especially in ovarian and renal cell carcinoma.

**Conclusion:** Implementing TIL therapy in advanced melanoma is feasible, but complex, especially with regard to the issues: quality and safety regulation of TIL production, implementation and intervention costs, logistics and intensive training.

**No conflict of interest.**

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POSTER

**Transmural care for glioma patients and their family caregivers: utility and feasibility as perceived by professional caregivers**

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**Background:** Patients with glioma, a type of brain tumor, face not only a poor prognosis but also debilitating symptoms and a progressive loss of capabilities. This also affects family caregivers (FC), who are grieving and addressing patients' care needs at the same time. In the ambulatory treatment setting of glioma, needs of patients and FC easily remain undetected. We implemented a transmural care pathway (TCP) delivered by a nurse coordinator at the hospital and a home nurse, who offer counseling to patients and FC, actively screen their needs and collaborate with the multidisciplinary team to plan appropriate action. Funding for this project was provided by Kom Op Tegen Kanker. The aim of this study was to evaluate utility and feasibility of the TCP as perceived by professional caregivers.

**Material and Methods:** Perceived clinical utility and feasibility were explored using self-constructed questionnaires, combining closed and open questions. All healthcare professionals involved in the TCP (general practitioners (GPs), hospital doctors, home and hospital nurses and the psychosocial team) were invited to participate. Closed questions were analyzed descriptively and qualitative data were screened on relevant themes.

**Results:** Representing 34 patients and FC included in the TCP, 64 healthcare professionals were invited to participate. Forty-six questionnaires were completed (response 71.90%). The large majority reported a positive impact for patients (93.48%), family caregivers (91.11%) and for their own caregiving role (79.07%). Goals and content of the TCP were clear to the majority of the respondents (91.30%). Access to and use of patient records reporting the observations and recommendations of the hospital and home nurse coordinators was adequate, except by some GPs (14.29%) and most clinical nurses (77.33%). Professionals reported the significant role of the nurse coordinators, who build trust with the care clients, enabling better problem detection and care. Also, they find that they benefit from the coordinators' assessment and referral themselves. Most professionals feel reassured that the coordinators provide highly needed care, while some GPs regret the introduction of new nursing roles. The majority believes that this type of care would be useful to other patients with cancer too. At the same time, some express concerns about the cost of the TCP.

**Conclusion:** Professional caregivers for glioma patients and FC perceived the TCP as a valuable program, both for care receivers as for themselves. Further actions should focus on adequate exchange of information and on active involvement of the entire multidisciplinary team.

**No conflict of interest.**

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POSTER DISCUSSION

**Communication between clinicians and patients with advanced cancer: assessing the 'face validity' and acceptability of a serious illness care guide to improve clinical communication**

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**Background:** The Serious Illness Care Programme, developed in the US by Atul Gawande's ARIADNE Labs, is a complex intervention to support clinicians in generating personalised care plans for patients with advanced cancer. Within the programme, clinicians receive training on how to structure conversations with patients and their families, using the Serious Illness Conversation Guide (SICG). In the UK, a National Serious Illness Care Programme has been developed in collaboration with ARIADNE, with pilot implementation funded by NHS England. Prior to implementation, it was necessary to assess the appropriateness of the SICG for a UK context. **Aim:** Establish 'face validity' and acceptability of the SICG for use within the UK, and make recommendations for amendment if required

**Methods:** Two groups of stakeholders reviewed the SICG:

1. Nominal Group Technique with 3 'expert' groups (5 Oncologists, 5 Communication Skills experts, 4 Palliative Care specialists) to: review SICG; reach consensus; comment on applicability within the UK.
2. Cognitive Interview Technique with 6 patient and public representatives to: Understand how respondents perceive and interpret prompts in the SICG; assess format, context and language.

**Results:** *Nominal Group Technique:* Consensus that the SICG provides support for clinicians to initiate difficult conversations. Minimal amendments to wording were suggested.

*Cognitive Interviews:*

- Overall concept valued; promoting a 'partnership' approach to care planning;
- Some wording/phrases too 'formal': e.g. 'goals', 'priorities and wishes', 'abilities', 'critical';
- Education and training key; SICG should enable flexibility;
- Phrase "we're in this together" to be removed.

**Conclusions:** Participants felt the SICG would aid communication between clinicians and patients, and the approach was valued by all. Small amendments were identified and a revised SICG for the UK was developed. A National pilot is underway at three NHS, funded by NHS England. Research to investigate the acceptability and feasibility of the implementation of the Serious Illness Care Programme UK is being undertaken in one cancer centre in the North West.

**No conflict of interest.**

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POSTER

**Acute oncology education: developing a pedagogy with stakeholders using online learning to enhance learning, clinical practice and patient care**

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**Background:** The Independent Cancer Task force (2015) estimate that every two minutes someone in England will be informed they have cancer and that half the population born since 1960 will have a cancer diagnosis in their lifetime. With this increasing incidence of cancer and the wider availability of treatment options, a significant proportion of acute admissions to hospitals are accounted for by cancer patients. The aim of Acute Oncology (AO) is to provide specialist advice to improve the care and length of stay for acutely unwell cancer patients in alignment with national standards. Consequently, the management of these acutely unwell patients requires both a multidisciplinary and evidence based approach. In turn effective delivery of healthcare learning for clinicians needs to be up to date and flexible in order to meet the needs of the individual, their patients and a constantly evolving National Health Service (NHS).

**Materials and Methods:** A multidisciplinary specialist group consisting of clinical stakeholders from the North West of England and educationalists from The University of Liverpool (UoL) developed an online 15 credit, Masters level acute clinical oncology module. The focus was directed towards the development of AO clinical practitioners through the use of a social constructivist (Morris 2003) and student-centred (Cotton 2005) paradigm. The delivery method of the module allowed for asynchronous access to learning materials to align with the demands of clinical job roles and personal commitments. Emphasis was placed upon the development of learning materials which were inter-professional, evidence based, patient centred and 'fit for purpose'. The module consisted of online lectures, discussion boards, quizzes, supporting articles and key documents. Salmon's "5-Stage Model" was used to introduce the acute oncology E-learning materials to avoid overwhelming learners. Additionally learners were encouraged to reflect critically on their professional development throughout the duration of the module utilising Schon's "Reflective Practitioner Model" (1991).

**Results:** The module is currently commencing its 5<sup>th</sup> iteration. Thematic analysis of the discussion fora and module evaluations indicate that the resources meet the learning needs of clinicians. Comments from learners identify that they feel better informed in regards to their daily clinical practice and that knowledge gained from the module has helped develop their local AO service.

"The module encouraged me to reflect on different aspects of my role and potential areas of development for me personally as well as for the service." Anonymous Online Acute Oncology Student UoL 2015.

**Conclusion:** To date, module evaluations and thematic analysis of data indicates a positive impact on the individual learner, their local AO service and ultimately patient care.

**No conflict of interest.**