

Patient-reported outcomes to support regulation, reimbursement and health policy among patients with head and neck cancers



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Background:

- Head and neck cancers (HNCs) are the squamous cell carcinomas on the mucosal lining of head and neck. Usually benign, the cancers of head and neck can be formed in the oral cavity, pharynx, larynx, salivary glands, paranasal sinuses and nasal cavity.¹
- HNC is the seventh most common cancer globally, leading to 325,000 deaths annually.¹
- Patient reported outcomes (PROs) can be valuable in supporting the reimbursement processes and informing health agencies about new targeted therapies for better management.
- Lack of awareness about PROs and use of unvalidated PROs present a significant gap in the research of HNC.

Objective:

To evaluate utilization of PROs in real-world (RW) setting for supporting reimbursement, and framing health policies in HNCs.

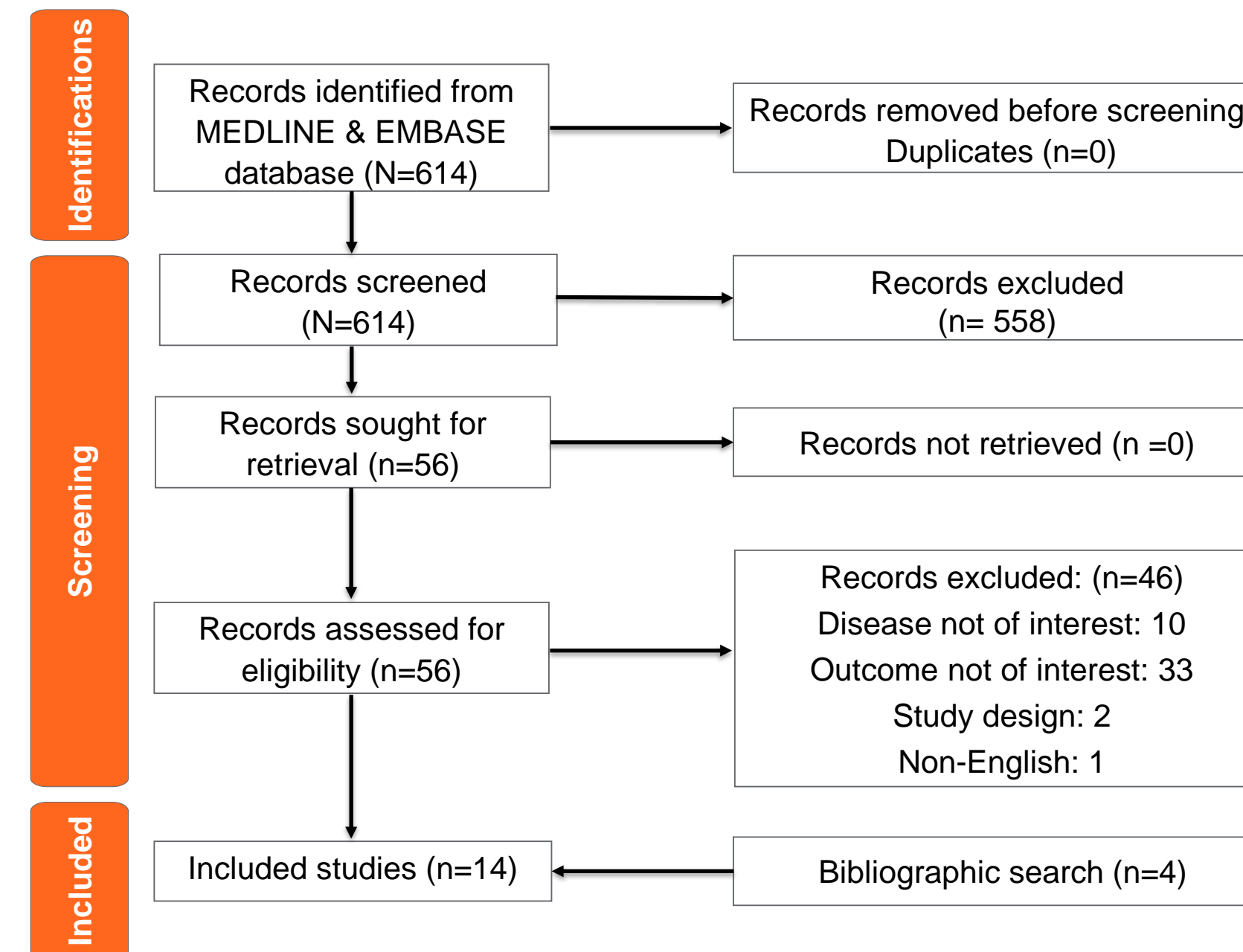
Method:

- A comprehensive literature search was conducted using Embase® and PubMed database. The literature was further supplemented using desk search on relevant HTA websites to identify the studies that use the PROs among patients with HNCs.
- The inclusion of articles was restricted to real-world evidence data of PROs. Studies focusing on the pediatric HNC population were excluded.

Results:

- Overall, 614 citations were identified through database searches. After screening articles based on their title and abstract, 56 citations were retained for full-text evaluation. Following detailed examination 10 studies were included. Additional 4 citations were included from the desk search.
- The most recommended and validated PROs were:
 - University of Washington Quality of Life Scale (UW-QoL) (4/14);
 - European Organization for Research and Treatment of Cancer (EORTC-QLQ-HNC) (8/14);
 - Functional Assessment of Cancer Therapy-Head and Neck (FACT-HNC) (5/14).^{2,3}
- The use of PROs at various stages of HNC patient journey was accessed.⁴
- Voice, speech and swallowing were perceived to be troublesome and required appropriate PROs (Voice Handicap Index (1/14), Speech Handicap Index (2/14) and Swallowing Questionnaire on QoL (5/14)) to evaluate their impact on the patients' QoL.^{5,6}

PRISMA Flow

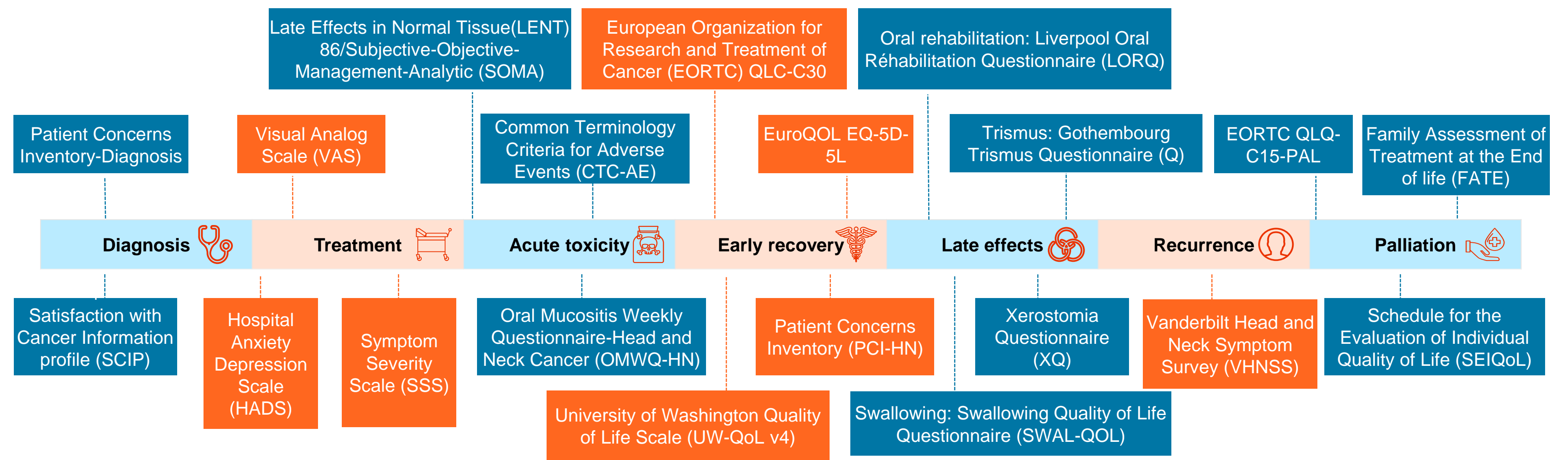


- Educating the patients for using ePROs was advocated, which could allow remote and out-of-hospital reporting.⁶
- PRO measurement during surgical timeline was considered a critical component, necessary to increase the understanding and impact of pre-rehabilitation interventions.⁷
- PRO evaluation in a surgical timeline could be improved by effective communication and using activity tracker, substantiating accurate PRO recordings.⁷
- Barriers for using PROs were lack of awareness, resources, time consuming, unproven or unvalidated PROs.^{8,9}

Conclusion:

- Utilization of PROs at different stages may lead to better patient care by allowing the development of targeted interventions or tailoring existing regimens, leading to reduced clinical, humanistic, and economic burden.
- The findings of the present review convey that there is limited availability of RWE that could highlight the utilization of PROs in HNCs.
- More studies are required that could establish the protocol and utility of PROs, taking into consideration the diagnosis, treatment costs, patient's wishes, and burden.

Patient reported outcomes at different stages among patients with head and neck cancers



HNC Patient's Journey

References: 1. Gormley et al., 2022, Br Dent J. 2. NCCN CPG version 3. 2021. 3. Silveira et al., 2010, Head & Neck Oncology. 4. Rogers et al., 2016, J Laryngol Otol. 5. Eden et al., 2014, Rehab Oncol. 6. Chera et al., 2014, JNCI J Natl Cancer Inst. 7. Daun et al., 2022, Pilot and Feasibility Studies. 8. Rinkel et al., 2014 Oral Oncol. 9. Mehnanna et al., 2006, J Laryngol Otol.