

# The Role of the Speech Pathologist in the Burn Injury Population

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## BACKGROUND

Comprehensive care for the burn patient requires collaboration and application of knowledge from an interdisciplinary team. The general role and breadth of the speech-language pathologist (SLP) includes assessment and treatment of oropharyngeal dysphagia, dysphonia, communication, and cognition. According to the literature however, application of speech pathology services for orofacial contracture management is limited in discussion and traditionally managed by physical and occupational therapy.

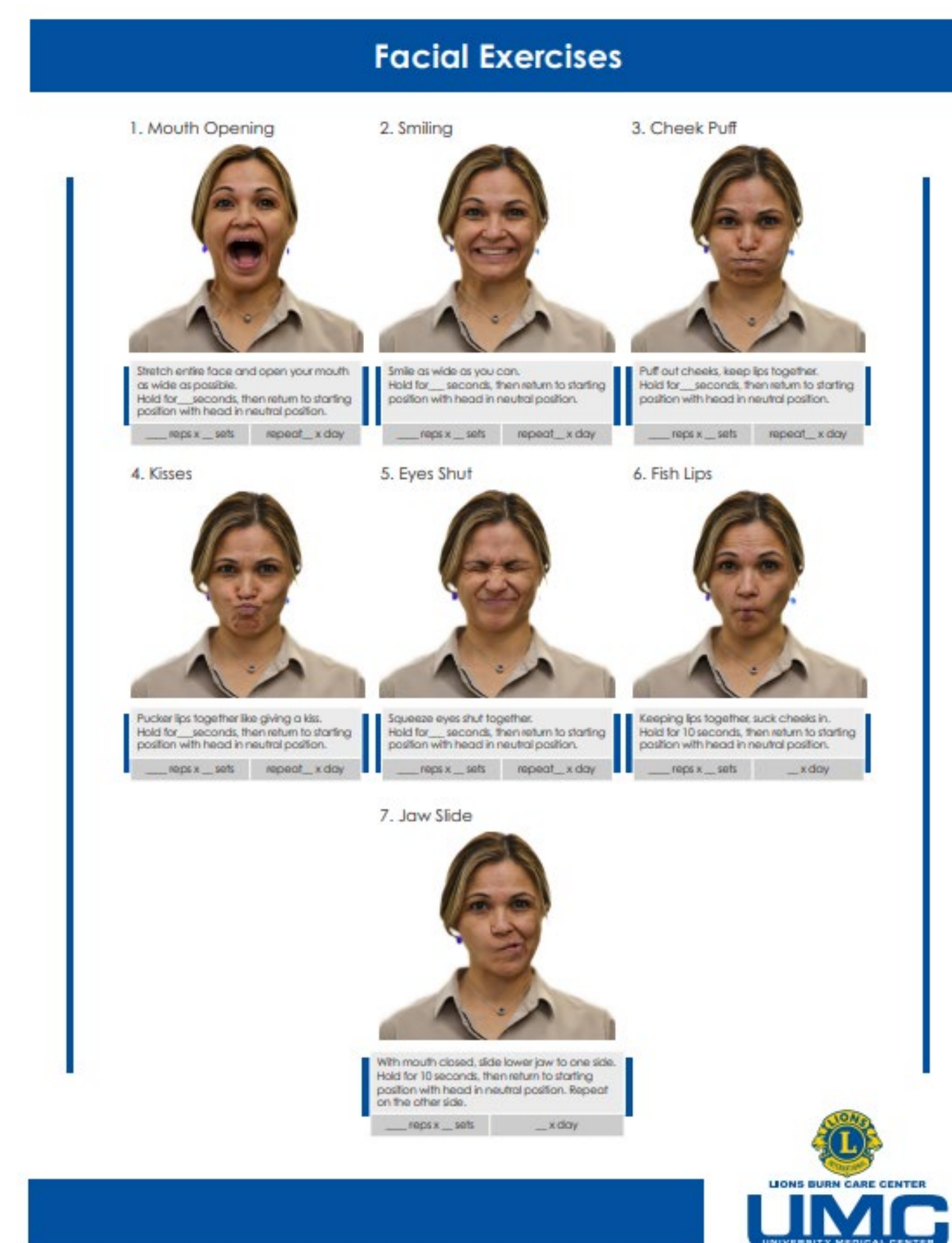
## PURPOSE

The goal for this poster is to inform and illustrate the practice patterns, role, and skillset of the SLP as an interdisciplinary team member as it relates to the mechanisms of the burn injury population and more specifically, highlight SLP evaluation and treatment beyond “traditional” roles.

## EVALUATION AND TREATMENT

Examples of SLP evaluation and treatments which may be used in the burn injury population:

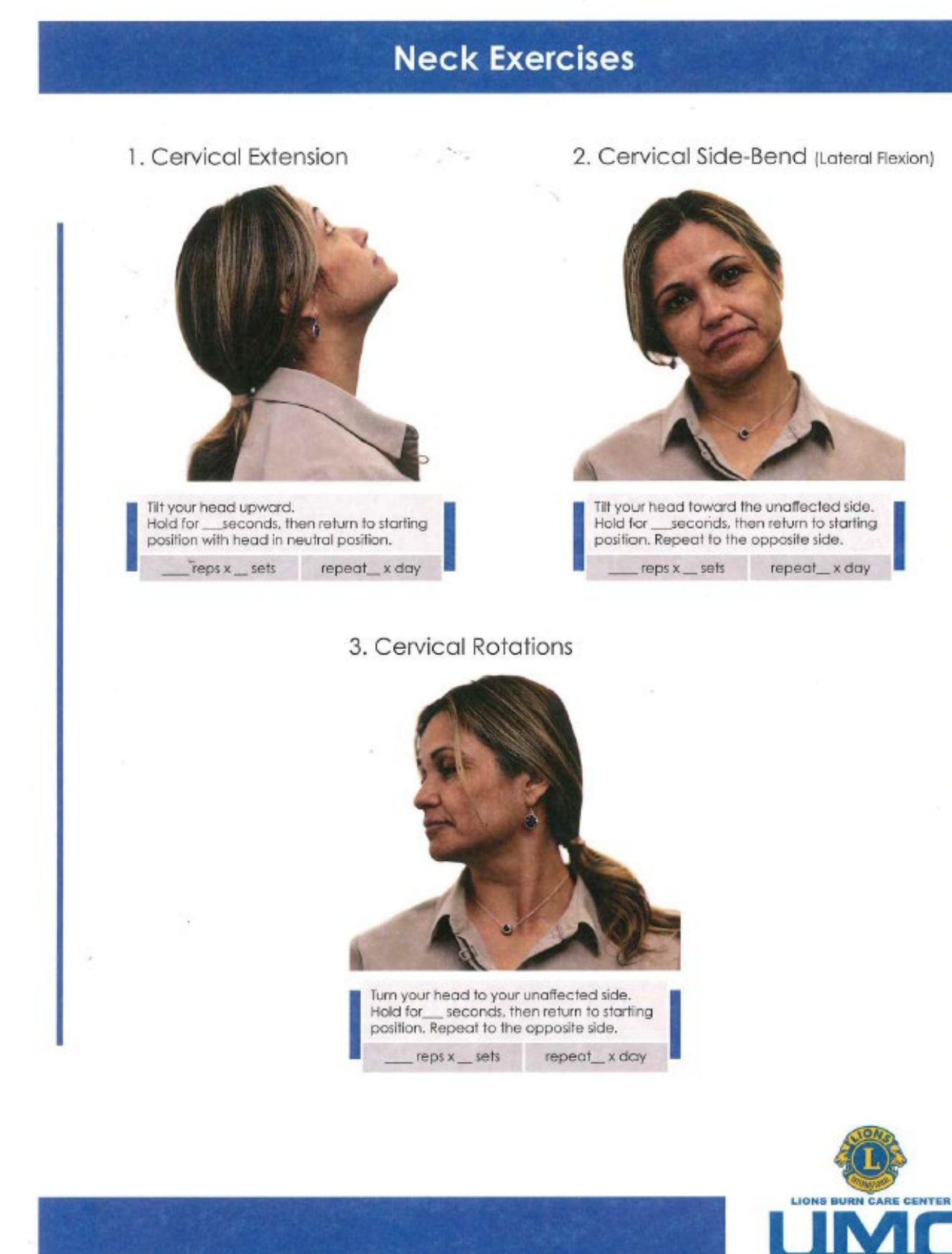
- Swallowing
  - Modified barium swallow study or fiberoptic endoscopic evaluation of swallowing
- Speech/Cognitive-Communication
  - Frenchay Dysarthria Assessment
  - Cognitive Linguistic Quick Test
- Tracheostomy Management
  - Speaking valve
- Patient Rated Scales and Functional Measurements
  - Jaw Functional Limitation Scale
  - SCAR-Q
  - Vertical and horizontal mouth opening
- Orofacial Contracture/Microstomia Management
  - Active and active-assisted range of motion exercises for orofacial + neck
  - Passive stretching
    - Oral splinting or intraoral stretching
  - Manual therapy/pressured massage
- Regular interdisciplinary communication and collaboration



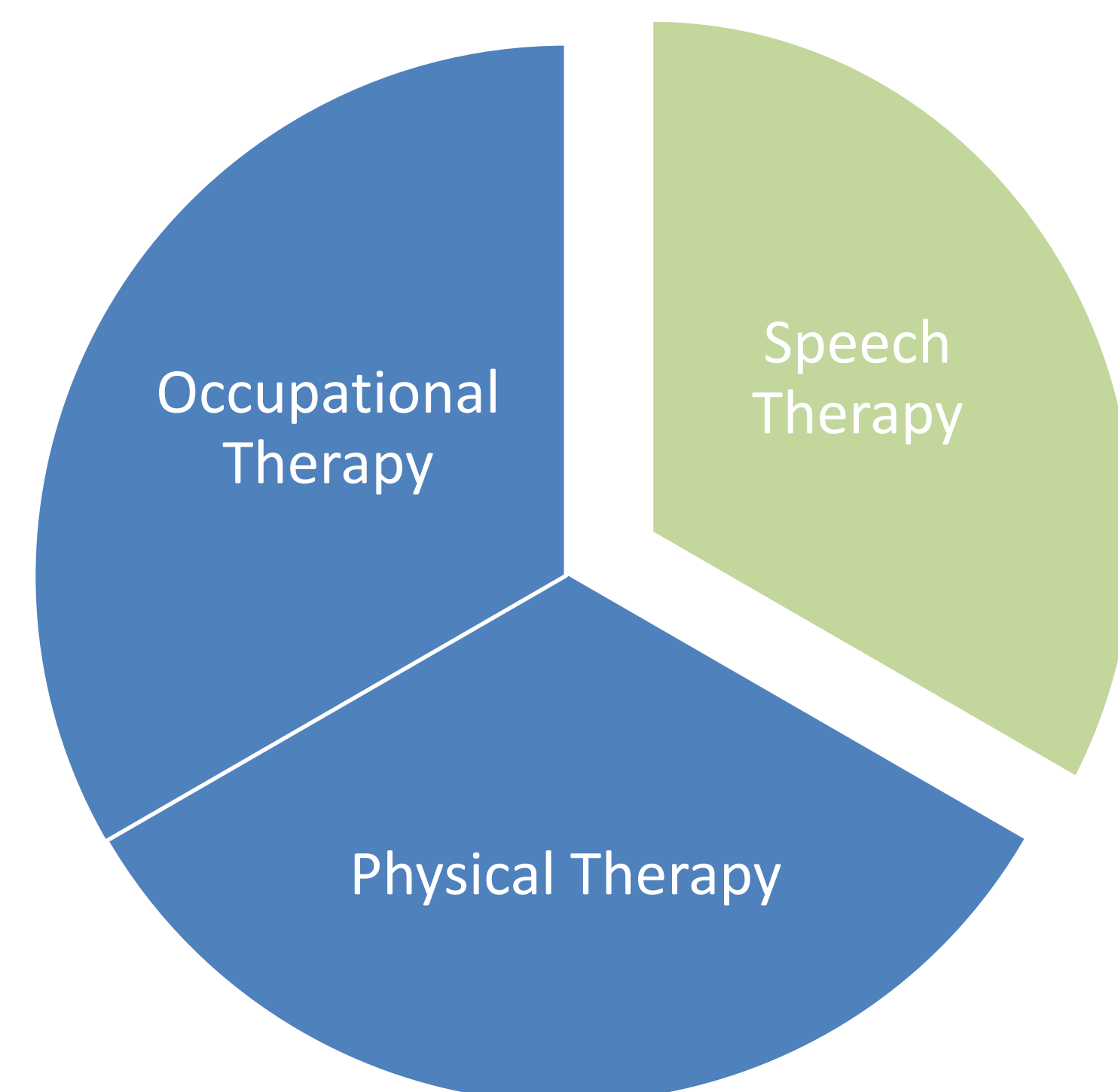
## Orofacial contracture and scar management

### Orofacial contractures may affect/result in:

- Reduced oral range of motion
- Speech/articulation
- Nonverbal communication (e.g. humor)
- Oral intake
- Oral hygiene



## Therapy Disciplines



### SLP involvement has resulted in:

- Increased interdisciplinary communication and collaboration
- An additional member to treat orofacial contractures/share rehabilitative demands
- Specialized clinical perspective to support interdisciplinary care
- Pt reported and clinically judged improvement of functional outcomes

## Evaluation and Treatment Continued

Speech-language pathology assessment/treatment areas may include: **Fluency, speech production** (e.g. motor speech), **language** (e.g. aphasia or social communication), **cognition** (e.g. memory or executive functioning), **voice/resonance, feeding and swallowing** (e.g. Modified barium swallow studies or fiberoptic endoscopic evaluation of swallowing), **alternative augmentative communication**, and **auditory habilitation/rehabilitation**.

## RESULTS

Within the burn injury population, the SLP assesses and treats disorder areas of oropharyngeal dysphagia, dysphonia, speech, language, and cognition in patients who have experienced “facial burns, inhalation injuries, tracheostomies, prolonged intubations” (Arguello and Kerr, 2022), as well as those with traumatic brain injury. SLPs also manage orofacial and neck contracture as, “burn injuries impact oral motor function, swallowing, speech intelligibility/articulation, oral hygiene, nonverbal communication, and facial expression” (Arguello and Kerr, 2022). Furthermore, physical and occupational therapy are responsible for addressing multiple therapeutic areas of the patient. Consistent involvement of the SLP allows for rehabilitative demands to be shared and further improve functional outcomes for orofacial contractures.

## CONCLUSIONS

SLPs have a broad skill set that allows for management within not only, “traditional roles in voice, cognition, communication and dysphagia,” but also, “as a leader in treatment of orofacial contractures,” (Arguello and Kerr, 2022). Contribution from the SLP optimizes functional outcomes for burn injury patients and lends itself as a valuable constituent to the interdisciplinary team.

## REFERENCES

- Arguello, L. A. and Kerr, K. M. (2022). Speech-language pathology's role in management of orofacial contractures after a facial burn. Perspectives of the ASHA Special Interest Groups, 7(5), 1514-1519. [https://doi.org/10.1044/2022\\_persp-21-00337](https://doi.org/10.1044/2022_persp-21-00337)
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- Handouts Courtesy of UMC- UMC Approved Exercise Handout

