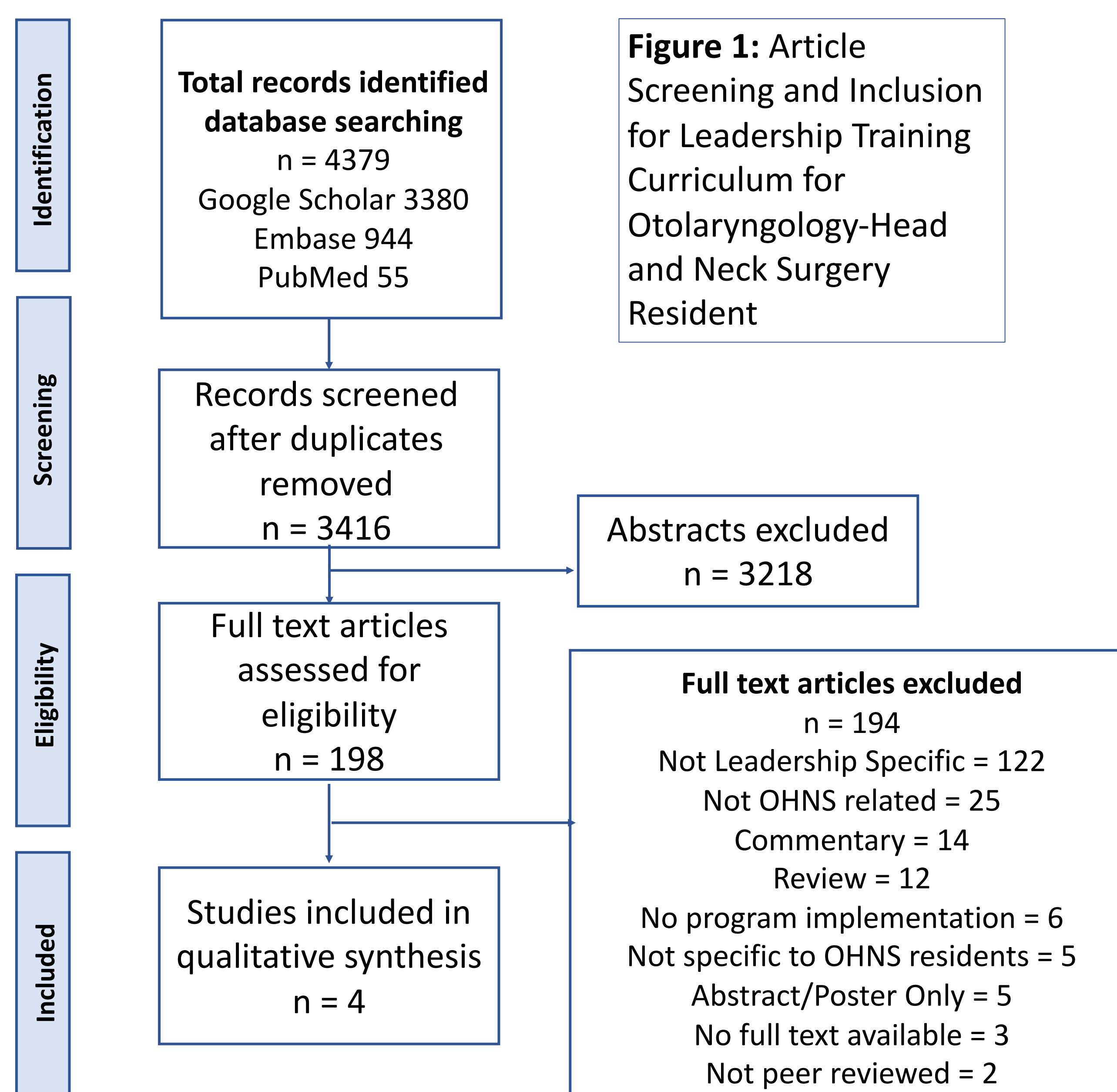


Introduction & Methods

- Otolaryngologists increasingly require strong leadership abilities to oversee surgical operations, lead diverse teams, and manage provider groups.
- Present surgical residency training **primarily emphasizes clinical and technical achievements**, with **limited attention given to non-technical skills, including leadership**.
- This study aims to assess **the current state of leadership development among OHNS residents**, identify strengths and weaknesses in existing leadership training initiatives, and discuss the future direction of OHNS leadership curriculum development.
- Our ultimate objective is **to improve and optimize leadership training to better prepare future otolaryngologists and foster the growth of strong leadership skills** essential for leading operating rooms, multidisciplinary teams, and provider groups in the field of OHNS.
- **Scoping Review Approach:** We conducted a scoping review per PRISMA-ScR guidelines, extensively researching leadership education for OHNS residents in peer-reviewed articles from EmBase, PubMed, and Google Scholar.
- **Inclusion Criteria:** We included full-length, peer-reviewed articles that involved OHNS residents and/ or leadership curricula in their interventions
- **Data Extraction:** We focused on curriculum details, evaluation (using the Kirkpatrick effectiveness score), and quality assessment (using the BEME global rating scale).

Figures



Results

- **Study Inclusion:** Four articles met the eligibility criteria for inclusion in the study (**Figure 1**).
- **Diverse Audience and Program Duration:** All studies United States based. Studies had diverse target audiences, including faculty, staff members, military personnel, and residents from various specialties. **Program durations varied from two-day immersion programs to longitudinal initiatives spanning three years**³⁻⁶.
- **Curriculum Delivery:** Most programs primarily used classroom settings with one study utilizing small group settings and an off-site location⁵⁻⁶. **Only one study conducted a needs assessment to inform curriculum design**⁶.
- **Evaluation Methods:** Three studies integrated survey data, while one study used both qualitative and quantitative methods⁴⁻⁶. Kirkpatrick effectiveness scores ranged from 0 to 2, with two studies achieving an evidence rating of 3 (conclusions can probably be based on results)⁵⁻⁶.

Discussion/ Conclusion

- Our results identified **four studies** with **substantial heterogeneity** across all of them that varied in their target audience, quality of evidence, and overall effectiveness.
- None of the included studies discussed a leadership curriculum dedicated solely to OHNS residents and mostly included vague curriculum descriptions and methods of implementation, **making replication of such programs challenging**.
- These **findings underscore the need for substantial development in leadership training within OHNS residency**, as the underdeveloped state of leadership curriculum in OHNS residency programs presents a significant opportunity for impactful development.
- Future work should prioritize needs assessments, competency-based design, rigorous evaluation with iterative improvements, and reproducibility for widespread distribution and implementation.

Citation	Participant Type	Duration/ Setting	Summary Description	Effectiveness	Quality of Evidence
Bent ³	OHNS residents, faculty members	One academic institution, no specified duration	<ul style="list-style-type: none"> When surveyed, OHNS faculty rated themselves higher as leaders vs. residents. Both groups expressed a belief in teachability of leadership skills in adults. Authors plan to introduce a leadership development pilot program at their institution in response to these findings. 	0	1
Issa ⁴	Doctors, nurses, trainees, admin/staff	One academic institution, yearlong program	<ul style="list-style-type: none"> Analyzed self-evaluation and 360-degree evaluation scores of the professionalism intelligence model. Physicians scored themselves lower than non-physicians when assessing leadership intelligence 	0	1
Levine ⁵	Chief residents, faculty members	One academic institution, two-day immersion program	<ul style="list-style-type: none"> Program covered complex geriatric patient management and leadership skills, aiding chief residents in developing achievable projects. Surveys before & after with one and two-year follow-ups indicated ongoing improvement in conflict resolution, teaching, and leadership skills among trainees. 	2	3
Schultz ⁶	OHNS residents, military personnel	One academic institution & one military academy, yearlong program	<ul style="list-style-type: none"> No notable differences in strength scores between military comparison groups and OHNS residents, but significant enhancement was seen in their comprehension of leadership vision and key concepts following 'Basic Training.' On post-test review, 100% of participants reported the program was valuable 	2	3

Table 1: Data Extraction Table for Studies Describing Otolaryngology-Head and Neck Surgery Leadership Curricula