

Evaluating Clinical Practice Guidelines for Treating and Managing Vestibular Schwannoma

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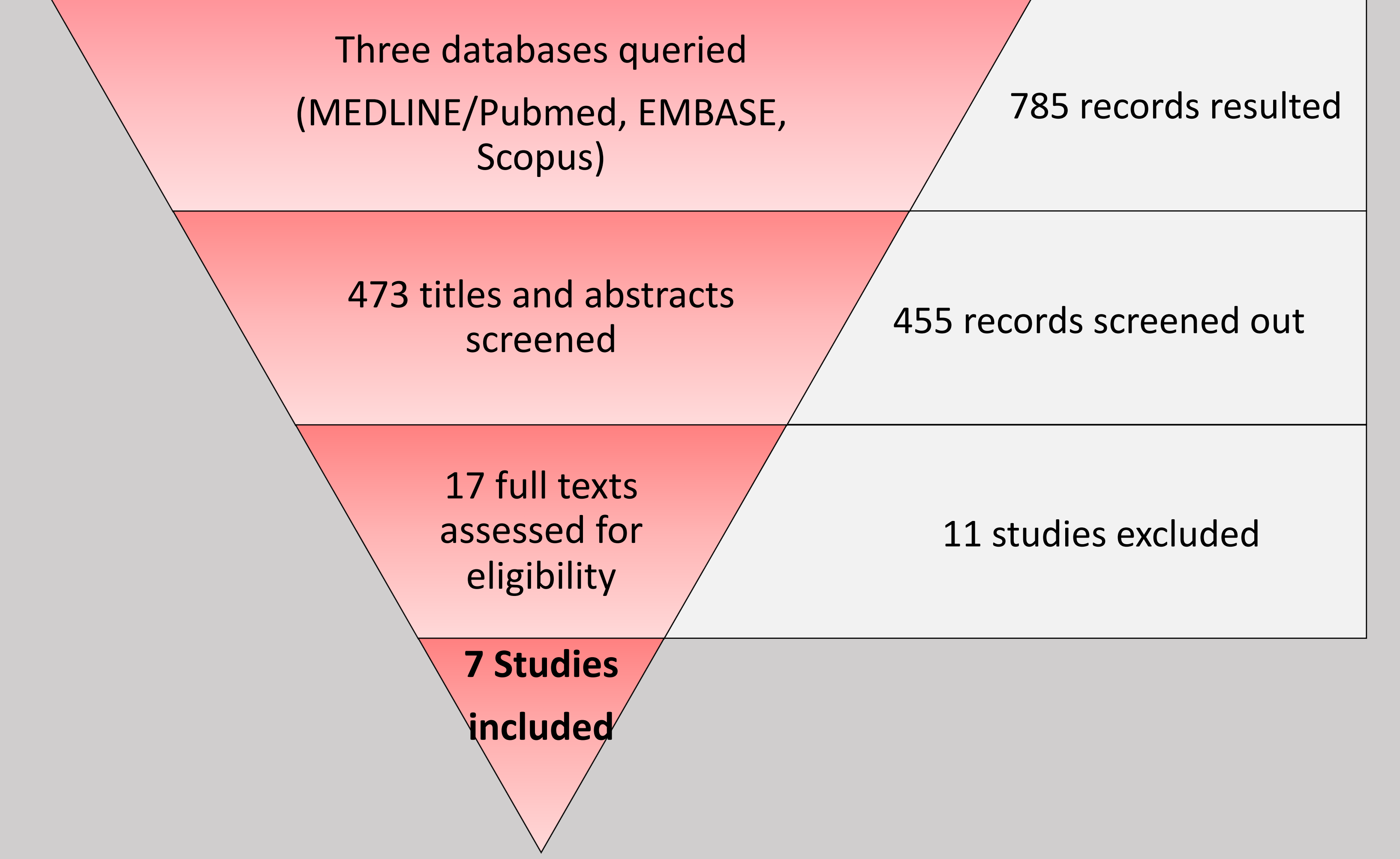
BACKGROUND

- Vestibular schwannomas are uncommon neoplasms mainly arising from the vestibular component of cranial nerve VIII.¹
- Management include observation, microsurgical resection, stereotactic radiosurgery, and combinations thereof.¹

Objective: Utilize the AGREE-II instrument to appraise the quality of Clinical Practice Guidelines (CPGs) for Vestibular schwannoma treatment & management

METHODS

- Literature search performed inception – 10/2022; PRISMA guidelines followed
- AGREE-II instrument assesses the quality and rigor of CPGs via 6 domains: Scope and Purpose, Stakeholder Involvement, Rigor of Development, Clarity of Presentation, Applicability, and Editorial Independence²
- A total of 23 total items to be scored graded on a 7- point scale (1- strongly disagree; 7-strongly agree) based on completeness and quality of reporting
- 4 reviewers independently reviewed & scored each CPG
- Domain scores calculated with threshold for “satisfactory” to be >60%
 - High quality = > 5 satisfactory, Average = 3-4, Low = < 3
- Interclass Correlation Coefficient (ICC) measured



Quality Appraisal of Included CPGs using Scaled Domain Scores

	Scope & Purpose	Stakeholder Improvement	Rigor of Development	Clarity of Presentation	Applicability	Editorial Independence	Average Score (Mean)	Overall Quality
NIH	100	76.38	26.04	84.72	44.79	0	55.32	Average
BAO	100	98.617	85.52	100	92.71	6.25	80.50	High
ISRS	84.72	47.22	70.31	93.05	26.04	50	61.89	Average
CNS	94.44	88.89	92.71	97.22	91.67	100.00	94.16	High
EANO	97.22	56.94	55.73	91.66	39.58	93.75	72.48	Average
EANS	84.72	62.5	70.83	100	43.75	100	76.97	High
FSRO	81.94	27.77	8.33	56.94	4.17	10.42	31.60	Low
Mean	92.66 ± 8.40	62.30 ± 22.30	59.52 ± 32.43	88.69 ± 14.95	43.90 ± 27.24	51.49 ± 46.33		

NIH = National Institutes of Health, BAO = British Association of Otorhinolaryngologists, ISRS = International Stereotactic Radiosurgery Society, CNS = Congress of Neurological Surgeons, EANO = European Association of Neuro-Oncology, EANS = European Association of Neurological Societies, FSRO = French Society for Radiation Oncology

Intraclass Correlation Coefficients (ICC)s for AGREE II Domains

AGREE II Domain	ICC	95% Confidence Interval	ICC Reliability
Scope and purpose	0.943	0.815-0.989	Excellent
Stakeholder involvement	0.962	0.874-0.993	Excellent
Rigor of development	0.99	0.968-0.998	Excellent
Clarity of Presentation	0.975	0.919-0.995	Excellent
Applicability	0.974	0.918-0.995	Excellent
Editorial independence	0.988	0.961-0.998	Excellent

FINDINGS

- 2 CPGs were developed in the USA
- 4 CPGs were developed in Europe (UK, France, 2 European)
- 3 CPGs were high quality, 3 average, 1 low**
- Highest domain scores:** “Scope and Purpose” and “Clarity and Presentation”
- Lowest domain scores:** “Applicability” and “Editorial Independence”
- ICC scores for all 6 domains ranged from 0.937-0.983
- Indicating high level of inter-rater agreement**

CONCLUSION

- Most CPGs regarding VS treatment and management are of average to high quality
- Societies may increase CPG quality by improving the rigor of development, applicability, and editorial independence

LIMITATIONS

- Accuracy & validity not assessed
- Subjective grading
- Addressed by implementing calculating ICC

References

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