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INPLASY

Quality Assessment of Health Professions YouTube: A Systematic Review of Evaluation Tools and Criteria

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 6 May 2026 and was last updated on 6 May 2026.

INTRODUCTION

Review question / Objective (1) What evaluation tools have been employed in studies assessing the quality of YouTube content for health professions education? (2) What comprehensive quality criteria can be synthesized from these tools?

Rationale YouTube is a major informal learning resource in health professions education across undergraduate, postgraduate, and continuing professional development contexts.
As an open-access platform without editorial gatekeeping, YouTube permits upload of instructional content regardless of clinical expertise, while its algorithms prioritize engagement over educational accuracy.
In health professions education, inaccurate or unsafe videos may contribute to clinical errors because learners apply acquired knowledge directly to patient care.
Studies have evaluated YouTube content using diverse instruments, including:
Generic tools: DISCERN, JAMA benchmark, Global Quality Scale (GQS)
Procedure-specific tools
Study-specific checklists
However, important gaps remain:
Lack of systematic understanding of which evaluation tools are used
Unclear coverage of quality dimensions across tools
Absence of a unified, synthesized quality framework
Prior reviews were either pre-pandemic or focused mainly on content accuracy rather than evaluation frameworks.

Condition being studied YouTube as a learning resource in health professions education. Specifically, the quality of educational YouTube videos used by
medical and dental learners across undergraduate, postgraduate, and continuing professional development contexts, with a focus on the evaluation tools and quality criteria applied to such videos.

METHODS

Search strategy A systematic search will be conducted in MEDLINE (via PubMed), Embase (via Embase.com), and Scopus for studies published from January 2020 to September 2025. Search terms will combine concepts related to health professions education and YouTube using controlled vocabulary (MeSH and Emtree) and free-text keywords. Terms will include combinations of: “YouTube”, “medical education”, “dental education”, “health professions education”, “student*”, “resident*”, “surgical education”, “video learning”, and “educat*”. Reference lists of included studies will also be screened manually to identify additional eligible studies.

Participant or population The review will include studies evaluating YouTube videos used for health professions education, including undergraduate medical and dental students, postgraduate trainees (interns, residents, fellows), practicing clinicians, and continuing professional development learners. Studies focusing on educational videos related to surgery, clinical procedures, medical knowledge, imaging, and other health professions training topics will be included.

Intervention The intervention of interest is YouTube-based educational content used for health professions education. The review specifically examines evaluation tools and quality assessment criteria applied to YouTube videos.

Comparator Mostly NA.

Study designs to be included Observational studies, cross-sectional studies, methodological studies, validation studies, and comparative studies evaluating the quality of YouTube videos for health professions education will be included. Studies must apply explicit evaluation criteria or quality assessment tools to YouTube content.

Eligibility criteria Inclusion criteria:

Studies evaluating YouTube videos for health professions education.
Studies using explicit evaluation criteria, scoring systems, or validated assessment tools.
Studies published in English from 2020 onward.

Exclusion criteria:

Studies assessing only popularity metrics (e.g., views, likes) without quality evaluation.
Studies focusing solely on learner perceptions without defined quality criteria.
Conference abstracts, editorials, commentaries, and non-English publications.
Studies unrelated to health professions education.

Information sources Electronic databases will include MEDLINE (via PubMed), Embase (via Embase.com), and Scopus. Reference lists of included studies will be manually reviewed to identify additional eligible studies. Searches will include studies published between January 2020 and September 2025. No grey literature sources are planned.

Main outcome(s) The primary outcomes are:

Identification and characterization of evaluation tools used to assess YouTube content quality in health professions education.
Synthesis of quality evaluation criteria across studies.

Outcomes include frequencies of tool usage, categorization of evaluation dimensions, and development of a synthesized framework of quality criteria.

Quality assessment / Risk of bias analysis Methodological quality will be assessed using the JBI Critical Appraisal Checklist for Prevalence Studies. The checklist will be operationalized for YouTube video evaluation studies. Items include sample representativeness, recruitment methods, validity and reliability of measurements, and statistical analysis. Studies scoring below 0.50 will be excluded. Three reviewers will independently perform quality assessment, with disagreements resolved by consensus.

Strategy of data synthesis A narrative synthesis will be conducted. Evaluation tools will be categorized into generic validated instruments, procedure-specific instruments, and study-specific tools. Individual evaluation criteria extracted from included studies will be synthesized through iterative thematic categorization. Criteria will be grouped into overarching domains such as content, structure and format, educational, media and technical, credibility and ethics, and overall evaluation. Frequencies and descriptive statistics will be reported. Surgical educational video criteria will additionally be synthesized according to perioperative phases.

Subgroup analysis Subgroup analyses will be conducted according to:

Educational domain (surgery, procedures, medical knowledge, imaging, etc.)
Type of evaluation tool (generic vs. procedure-specific)
Surgical versus non-surgical educational videos.

Sensitivity analysis Sensitivity analysis will be conducted by examining whether inclusion or exclusion of lower-quality studies changes the synthesized findings. Analyses may also compare studies using validated instruments versus study-specific tools.

Language restriction Only English-language studies will be included.

Country(ies) involved Republic of Korea.

Keywords YouTube; health professions education; medical education; dental education; video learning; quality assessment; systematic review; patient safety.

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