

Supplementary file

Full Search Strategy

MEDLINE (Ovid)

1. whistleblow*.tw,kf.
2. ("speak up" or "speaking up" or "raise concern*" or "raising concern*" or "report misconduct" or "reporting misconduct" or "report error*" or "reporting error*" or "report wrongdoing" or "reporting wrongdoing" or "report unprofessional" or "reporting unprofessional").tw,kf.
3. ((report* adj3 (incident* or unsafe or unethical or misconduct or error* or harm or unprofessional or behaviour or behavior))).tw,kf.
4. Professional Misconduct/ or Ethics, Medical/ or Professionalism/ or Patient Safety/
5. ((ethic* or moral* or virtue* or professional* or integrity or accountability or courage) adj3 (educat* or teach* or train* or learn* or curricul* or assess* or competenc* or skill*)).tw,kf.
6. Medical Education/ or Students, Medical/ or Education, Medical, Undergraduate/ or Education, Medical, Graduate/ or Clinical Clerkship/ or Internship and Residency/ or Curriculum/ or Teaching/
7. ((medical student* or resident* or trainee* or physician* or doctor* or clinician*) adj3 (educat* or train* or teach* or learn* or curricul* or program or assessment or course)).tw,kf.
8. 1 or 2 or 3
9. 4 or 5
10. 6 or 7
11. 8 and 9 and 10
12. limit 11 to (english language and yr="2000 -Current")

Embase (Elsevier)

('whistleblow*' OR "speak up" OR "raising concern*" OR ("report*" NEAR/3 (error* OR misconduct OR unsafe OR unethical OR unprofessional)))
AND
(('medical education'/exp OR 'medical student'/exp OR 'residency'/exp OR "clinical training" OR "curricul*")
AND
(('ethic*' OR 'professionalism' OR 'patient safety'))

AND [2000-2025]/py
AND [english]/lim

ERIC (ProQuest)

(DE "Medical Education" OR DE "Medical Students" OR DE "Professional Education")
AND
(whistleblow* OR "speak up" OR "report misconduct" OR "reporting error*" OR "raising concern*")
AND
(ethic* OR professionalism OR "patient safety")
AND (2000-2025)

Scopus (Elsevier)

TITLE-ABS-KEY (whistleblow* OR "speak up" OR "raising concern*" OR ("report*" W/3 (error* OR misconduct OR unprofessional)))
AND
TITLE-ABS-KEY ("medical education" OR "medical student*" OR residenc* OR "clinical training" OR curriculum)
AND
TITLE-ABS-KEY (ethic* OR professionalism OR "patient safety")
AND PUBYEAR > 1999 AND PUBYEAR < 2026
AND (LIMIT-TO (LANGUAGE, "English"))

Web of Science (Core Collection)

TS=(whistleblow* OR "speak up" OR "raising concern*" OR ("report*" NEAR/3 (error* OR misconduct OR unprofessional)))
AND
TS=("medical education" OR "medical student*" OR residenc* OR "clinical training" OR curriculum)
AND
TS=(ethic* OR professionalism OR "patient safety")
Refined by: Languages=(ENGLISH)
Timespan: 2000–2025

PsycINFO (Ovid)

1. whistleblow*.tw,kf.
2. ("speak up" or "report misconduct" or "reporting error*" or "raise concern*").tw,kf.
3. (ethic* or professionalism or moral* or courage or empowerment).tw,kf.
4. ("medical education" or "residency training" or "clinical training" or "medical student*" or "curricul*").tw,kf.
5. 1 or 2

6. 3 and 4 and 5

7. limit 6 to (english language and yr="2000 -Current")

Grey-Literature Search

Sources: Google Scholar, institutional repositories (e.g., UBC, Dalhousie, Toronto), and medical-education organizations (AAMC, GMC, CFMS, HEE).

Search string example:

("whistleblowing" OR "speaking up" OR "report misconduct")

AND ("medical education" OR "medical student" OR "residency" OR "clinical training")