

Critical Review Form

Clinical Practice Guidelines

American College of Emergency Physicians, Clinical Policy: Critical Issues in the Evaluation and Management of Patients with Syncope, *Annals EM* 2001; 37: 771-776

Objective: To assess the quality of available medical evidence to assist Emergency Physicians in answering two critical questions:

- 1) What data help to risk stratify patients with syncope?
- 2) Who should be admitted after a syncopal event? (p. 772)

Methods: “The clinical policy was created after careful review and critical analysis of the peer-reviewed literature. A MEDLINE search for English language articles published between 1995 and March 1998 was performed using the key word *syncope* with a yield of 547 articles.” Abstracts and articles were reviewed by subcommittee members with 29 articles ultimately selected because they specifically addressed the two questions posed above. References from selected articles’ bibliographies were also reviewed. Two or more subcommittee members stratified each article into one of three levels of evidence with some articles subsequently downgraded by an unreferenced standard formula which considered methodology, potential bias, conclusion validity, and sample size. The strength of evidence scale utilized was:

Class I – Interventional studies, including randomized controlled trial meta-analyses, prospective cohort and observational studies.

Class II – Other meta-analyses, case-control and retrospective designs.

Class III- Case Series and Case Reports.

Guide		Comments
I.	Are the Recommendations Valid?	Answer questions IA-D below
A.	Did the recommendations consider all relevant patient groups, management options, and possible outcomes?	<p><u>Relevant patient groups</u> would include children, young adults, older adults, pregnant patients, and cardiac versus non-cardiac patients. All groups were considered, although little specific literature or recommendations were directed at each individual group.</p> <p><u>Management options</u> include inpatient (Telemetry versus non-Telemetry), Observation Unit, or Outpatient. Among the outpatient work-up questions would include ED length-of-stay, timing of follow-up, Holter monitoring from the ED, & stress testing prior to discharge. The recommendations suggest admission for suspected cardiac syncope, ACS,</p>



		or CHF. They really don't define an intermediate risk category or alternatives to admission or discharge. Many questions left unasked.
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B.	<p>If necessary, was an explicit, systematic, and reliable process used to tap expert opinion?</p> <p><i>You should look for a clear description of how the panel was assembled along with the members' specialties and any organizations they are representing.</i></p>	Committee and subcommittee members are listed, but no mention is made of what constitutes their expertise, how they were selected, or who contributed what to this manuscript. Also, no mention is made of conflicts of interest.
C.	<p>Is there an explicit, systematic specification of values or preferences?</p> <p><i>Panelists' ratings presumably reflect the risk-benefit trade-offs of specific interventions, but whether other physicians or patients themselves would make the same decisions remains uncertain. Whether given options are value or preference related should be clearly stated in the guideline.</i></p>	"This policy is a product of the ACEP clinical policy development process, including expert review, and is based on the existing literature; where literature was not available, consensus of emergency physicians was used." Additionally, comments were solicited from other ACEP committees and other specialty organizations. (p. 772) Level C recommendations included panel consensus when insufficient literature existed and was clearly delineated as such. No mention was made of clinician or patient values or preferences in deriving these clinical guidelines.
D.	<p>If the quality of the evidence used in originally framing the criteria was weak, have the criteria themselves been correlated with patient outcomes?</p> <p><i>When the studies utilized to produce guidelines are less than randomized-controlled trials, conclusions can be strengthened by noting how outcomes can be correlated with adherence to the guidelines.</i></p>	No, these guidelines have been either retrospectively or prospectively validated on patient outcomes. <u>Essentially, these guidelines represent a systematic review of existing literature to answer two questions.</u> All recommendations are Level B or C evidence and therefore not based on strong evidence.
II.	Were the Criteria Applied Appropriately?	Answer questions II A-B below.
A.	<p>Was the process of applying the criteria reliable, unbiased, and likely to yield robust conclusions?</p>	Again, not prospectively validated so the reader really cannot assess impact on patient outcomes, admission rates, resource utilization, or adherence to recommendations.



B.	What is the impact of uncertainty associated with evidence and values on the criteria based ratings of process of care?	The impact of uncertainty can be seen as three-fold: physician angst, family concerns, and patient injury with recurrent syncope.
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III.	How Can I Apply the Criteria to Patient Care?	
A.	Are the criteria relevant to your practice setting? <i>Medical practice is shaped by an amalgam of evidence, values, and circumstances; clinicians should consider their local medical culture and practice circumstances before importing a particular set of audit criteria.</i>	The questions asked are prevalent and important to patients, physicians, insurers, and health care administrators. The answers provided by this clinical guideline, though, are incomplete and generally of little benefit. Furthermore, they have not been validated in any setting.
B.	Have the criteria been field-tested for feasibility of use in diverse settings, include settings similar to yours?	No (see discussions above).

Limitations

- 1) **Uncertain expert opinion, author contribution, and potential conflicts of interest.**
- 2) **Incomplete literature search.**
- 3) **Unreferenced, non-validated evidence rating.**
- 4) **No Kappa assessment of article selection or strength of evidence grading.**
- 5) **No clear delineation of weak evidence, no evidence, and consensus opinion for Level C recommendations.**
- 6) **Results not validated either retrospectively or prospectively in any setting.**

Bottom Line

The ACEP Syncope Guidelines are essentially a systematic review of the MEDLINE database English-language literature using a single search term by a policy committee made-up of individuals whose expertise remains undefined. Some evidence exists to suggest that patients over age 60 with cardiovascular disease may be at high risk for adverse outcomes and those under age 45 without cardiovascular disease should be considered low risk. Those with evidence of CHF of ACS and those with abnormal EKG's (ischemia, arrhythmia, prolonged QT interval, or bundle branch block) should be admitted.