

## Clinical Policies:

*What are they? How are they developed? How do they improve patient care?*

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ACEP Clinical Policy Committee


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**Why are clinical policies written?**

- Differentiate “evidence based” practice from “opinion based” practice
  - Clinical decision making
  - Education
  - Reducing the risk of legal liability for negligence

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**Why are clinical policies written?**

- Improve quality of health care
  - Assist in diagnostic and therapeutic management
- Improve resource utilization
  - May decrease or increase costs
  - Identify areas in need of research

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### Clinical Policies & Practice Guidelines

- Thousands in existence
- ACEP: 16
  - Chest Pain 1990
  - Sunsetting - no longer distributed
- National Guideline Clearinghouse:
  - [www.guideline.gov](http://www.guideline.gov)
  - Over 1700 registered

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### 2006 / 2007 Objectives

- Continue developing / updating clinical policies
- Review and comment on other organizations' guidelines
- Continue to promote interdisciplinary clinical policy development
- Develop clinical quality measures for emergency medicine
- Develop a strategy to integrate clinical policies into informatic technology (IT) systems

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### Clinical Policies in Review or Preparation

- Toxic ingestion
  - Acetaminophen / hyperbaric oxygen
- Abdominal pain
- Syncope
- Community acquired pneumonia
- Headache
- Early pregnancy
- Pulmonary embolism
- Deep vein thrombosis
- Pediatric fever
- Acute stroke

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### Guideline Development: Time and Cost

- Time: 1 - 5 YEARS
- Cost:
  - ACEP: \$10,000
  - AANS: \$100,000
  - AHCP: \$1,000,000
  - WHO: \$2,000,000

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### Multi-disciplinary Clinical Policies

- Neuroimaging in new onset seizures
- Diagnosis and management of MTBI
- Pediatric fever
- Pediatric sedation and analgesia
- Management of ED patients with acute psychiatric complaints
- Management of acute stroke

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### Critically Appraising Clinical Policies

- Why was the topic chosen?
  - t-PA in stroke
  - Sedation and analgesia
- What are the authors' credentials?
  - Were emergency physicians included?
- What methodology was used?
  - Consensus vs evidence based
- How was it reviewed?
- When was it written / updated?

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### Do clinical policies change practice?

- ACEP Chest Pain Policy: Emergency physician awareness. *Ann Emer Med* 1996; 27:606-609
- Clinical policy published in 1990
  - 163 / 338 (48%) response to survey
  - 54% aware of the policy
  - Majority of those aware did not know content

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### Do clinical policies change practice?

- Wears. Headaches from practice guidelines. *Ann Emer Med* 2002; 39:334-337
  - Canadian Headache Society. Guidelines for the diagnosis and management of Migraine in clinical practice.
  - Can Med Assoc J 1997; 156:1273-128US Headache Consortium.  
[www.aan.com/public/practice](http://www.aan.com/public/practice) guidelines
  - 60% of practicing EPs use narcotics as first line medications

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### Why don't physicians follow clinical practice guidelines?

- JAMA 1999; 282:1458-1465 Cabana et al.
- Review of 76 articles dealing with adherence
- Barriers to physician adherence identified:
  - Lack of familiarity (more common than lack of awareness)
  - Lack of agreement
  - Lack of self-efficacy (lack of access to intervention, lack of resources / support / social systems)
  - Lack of outcome expectancy (lack of confidence that an intervention will change the outcome)
  - Patient related barriers (inability to overcome patient expectation)

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### Guideline Development

- Consensus
- Evidence based

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### Consensus

- Group of experts assemble
- "Global subjective judgement"
- Recommendations not necessarily supported by scientific evidence
- Limited by bias

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### Consensus: Examples

- MAST trousers in traumatic shock
- Hyperventilation in severe TBI
- Narcotics in migraine headache therapy
- Blood cultures in CAP / 4 hour time antibiotic rule of CAP
- "Keep the brain dry" in severe TBI

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### Consensus: Examples

- Gastric freezing for ulcers
  - Case series, historical controls in 1960s
  - ~15,000 pts treated
  - RCT showed ineffective in 1969
- Lidocaine prophylaxis in AMI
  - Intermediate outcome: suppress PVCs, VT
  - Pt centered outcome: increased mortality

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### Evidence Based Guidelines

- Define the clinical question
  - Focused question better than global question
  - Outcome measure must be determined
- Grade the strength of evidence
- Incorporate practice patterns, available expertise, resources and risk benefit ratios

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### Two Separate Questions

- How strong is the evidence from one study?
  - Critical appraisal
- How strong is the combined evidence from multiple studies?
  - Synthesis
  - Consistency in magnitude, direction
  - Sufficiency
    - Greater risk, cost, implausibility require greater evidence

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### Interpreting the literature

- Terminology
  - MTBI: GCS of 15 or GCS 13-15?
- Patient population
  - Adult vs children
  - ED patients vs hospitalized patients
    - AHA / ACC recommendations

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### Interpreting the literature

- Interventions / outcomes
  - Head trauma: abnormal CT or neurosurgical lesion?
  - Status epilepticus: end of motor activity or end of abnormal neuronal firing?

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### Description of the Process

- Medical literature search
- Secondary search of references
- Articles graded
- Recommendations based on evidence strength
- Multi-specialty and peer review

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### Description of the Process

#### Strength of evidence (Class of evidence)

- **I:** Randomized, double blind interventional studies for therapeutic effectiveness; prospective cohort for diagnostic testing or prognosis
- **II:** Retrospective cohorts, case control studies, cross-sectional studies
- **III:** Observational reports; consensus reports

Strength of evidence can be downgraded based on methodological flaws

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### Description of the Process

#### Strength of recommendations:

- **A / Standard:** Reflects a high degree of certainty based on Class I studies
- **B / Guideline:** Moderate clinical certainty based on Class II studies
- **C / Option:** Inconclusive certainty based on Class III evidence

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### Description of the Process

- Different societies use different classification schemes which may impact applications of the recommendation
- ACEP Class I evidence must have high quality support; AHA allows Class I evidence to include "general agreement that a given procedure or treatment is useful and effective"
  - AHA Class Ic recommendation is based on consensus of experts

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### Evidence Based Guidelines: Limitations

- Different groups can read the same evidence and come up with different recommendations
- Outcome measure can be major factor
  - MTBI
  - t-PA in stroke

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### Medico-Legal Implications

- Clinical policies can set standards for care and have been used in malpractice litigation
- May protect against "expert" testimony
  - Regional practice vs national "standards"
    - Steroids in spinal trauma

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### Medico-Legal Implications

- Clinical policies developed using flawed methodology may be challenged
- Consensus / Policy statements

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### Deposition of Dr. X in a case of missed meningitis

Q. Do you read the policies of the American College of ER physicians?

A. I don't recall reading that policy. Is it something published by ACEP?

Q. Yes.

A. I don't recall reading it.

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### Deposition of Dr. X in a case of missed meningitis

Q. So if toradol relieves a headache, does that cause you to believe the patient does not have meningitis in a patient in whom you are suspecting meningitis a possible cause of their headache?

A. It's an indicator that would decrease the likelihood.

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### Deposition of Dr. X in a case of missed meningitis

Q. If toradol relieved their headache, would you rely on that as a factor in ruling out meningitis?

A. It is part of the package.

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### Clinical Policy: Critical issues in the evaluation and management of patients presenting to the ED with acute headache.

- *Ann Emer Med* 2002; 39:108-122
- Does a response to therapy predict the etiology of an acute headache?
  - Level A recommendation: None
  - Level B recommendation: None
  - Level C recommendation: Pain response to therapy should not be used as the sole indicator of the underlying etiology of an acute headache

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### How Will Clinical Guidelines Change Your Practice? Conclusions

- Guideline development lends itself to a multi-disciplinary approach and helps to identify best practice patterns
- Evidence based clinical policies are useful tools in clinical decision making

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### How Will Clinical Guidelines Change Your Practice? Conclusions

- Clinical policy development must be rigorous
- Clinical policies do not create a "standard of care" and do not necessarily override "expert witness"
- Clinical policy dissemination continues to be a challenge

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### Clinical Guidelines Questions

- Are guidelines just an academic exercise?
- Is it cookbook medicine?
- Do guidelines help or hurt the practitioner?
- Lawyers know them more that doctors...what to do about this?
- How should we learn from guidelines?

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### Questions?

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