



Evidenced Based Medicine

The Traditional Approach



Development of systematic reviews and meta-analyses



Creation, by experts, of clinical decision guidelines ("rules") for non-intuitive scenarios



Selection of the best research studies



Decision Making Process

Patient has diarrhea, no relevant history, no blood in stool, with a low-grade fever, but otherwise with no systemic symptoms.

Should the physician prescribe an antibiotic?

The 800-Pound Gorilla

Whether findings from average results in clinical studies inform decisions about real patients who:



- Seldom fit the textbook description of disease
- Differ from those in research trials



Clinicians Often Deviate From Effective Rules

Reasons



Institutional Inertia



Deference to Authority



Personal Heuristics

Evidenced Based Medicine Revisited

A single journal

Journal of Bone and Joint Surgery 1988 – 2000

Score of greater than 75%

High Quality



60%

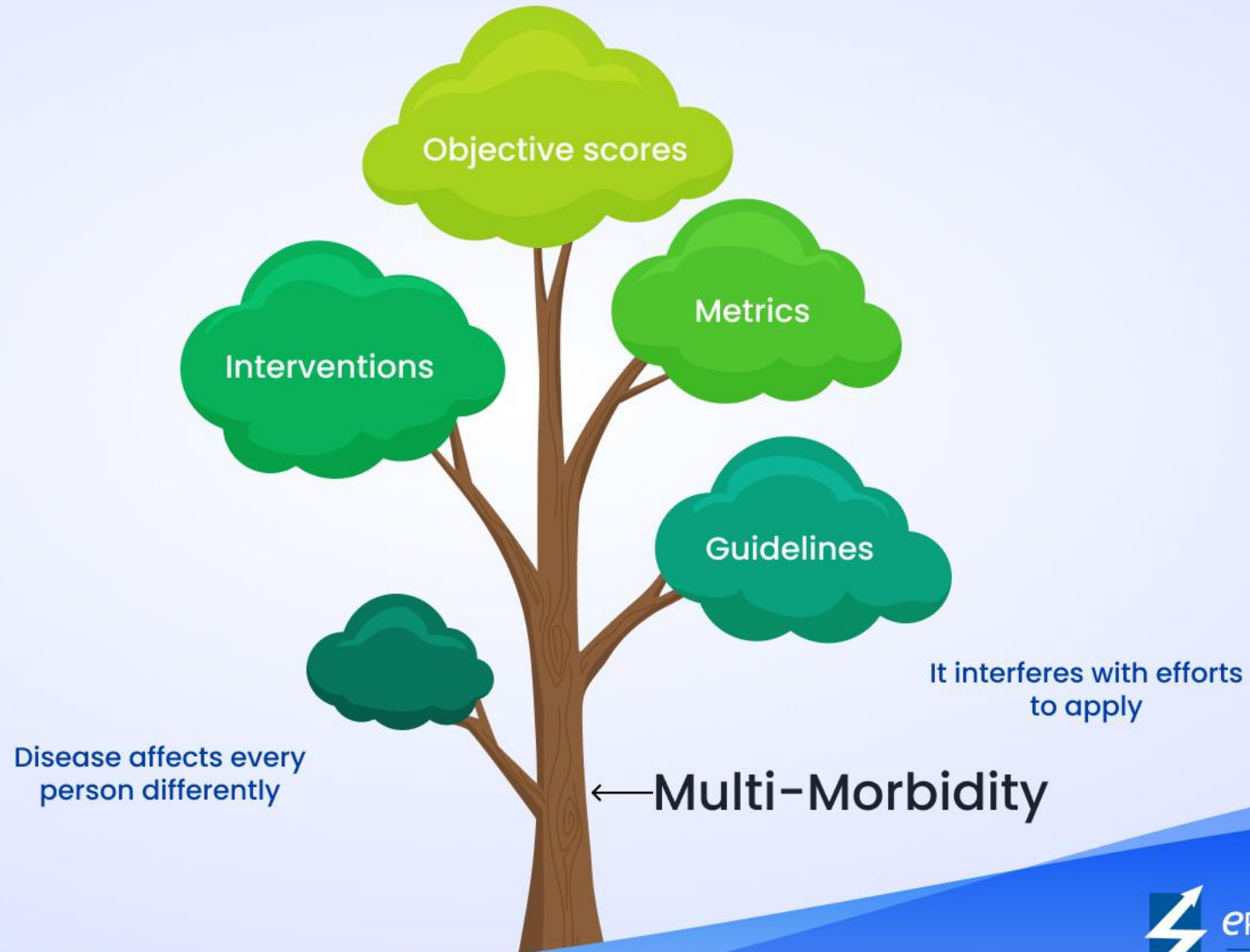
of the articles had
a score of less than 75%

PMC 3124652



ePhysician's Office, Inc.
Doctors with AI solutions

CLINICAL DECISION RULES PITFALLS



Crisis In Evidence-based Medicine



- 01** The evidence based “QUALITY MARK” has been, to some degree, misappropriated by vested interests.
- 02** The volume of evidence, ESPECIALLY CLINICAL GUIDELINES, has become unmanageable.
- 03** Statistically significant benefits may be marginal in clinical practice.

PMC 4056639

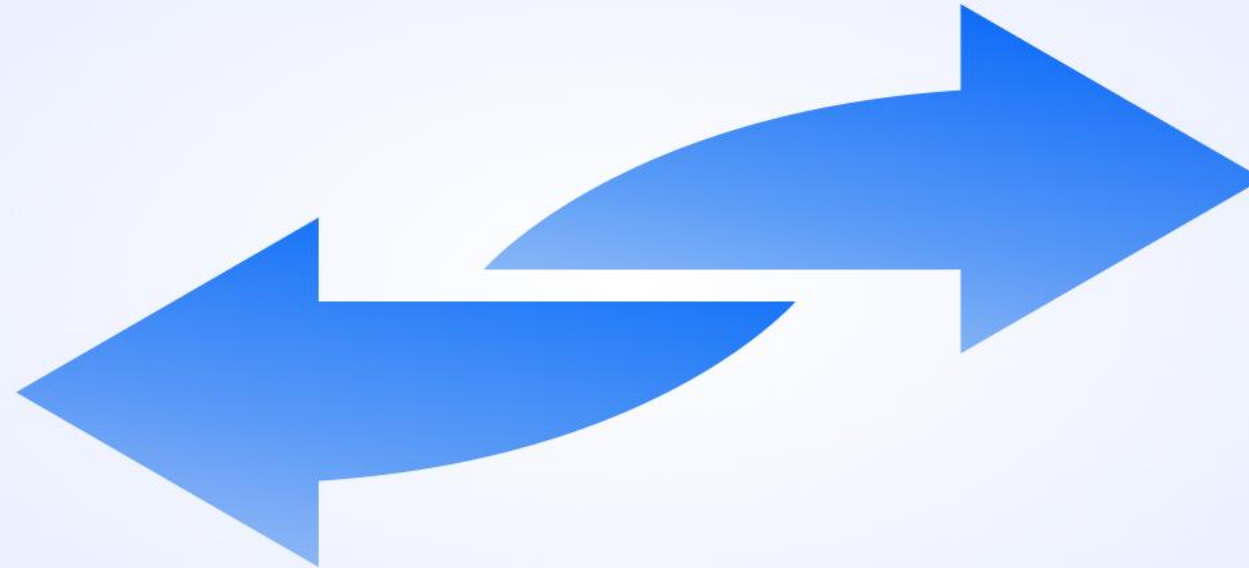
Crisis In Evidence- based Medicine

Inflexible rules and technology driven prompts may produce care that is
MANAGEMENT driven rather than PATIENT centered.

Evidence based GUIDELINES often map poorly to complex co-morbidity



Is not Bound by Rules



Real Evidence Based Medicine