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Delfini enters its seventh year today. Just over a year after we formed Delfini, we started administering a very short 3-question pre-test to our critical appraisal training program attendees. Two of the questions are very basic and simple and only one requires a bit more sophistication - however, the question itself is a very simple one.

Our initial findings from December 2002 to June 2003 shocked even us. While we discontinued formally tallying these scores, we have since that time administered the pre-test to 1,000s of healthcare professionals, seeing consistently high failure rates.

Of note —

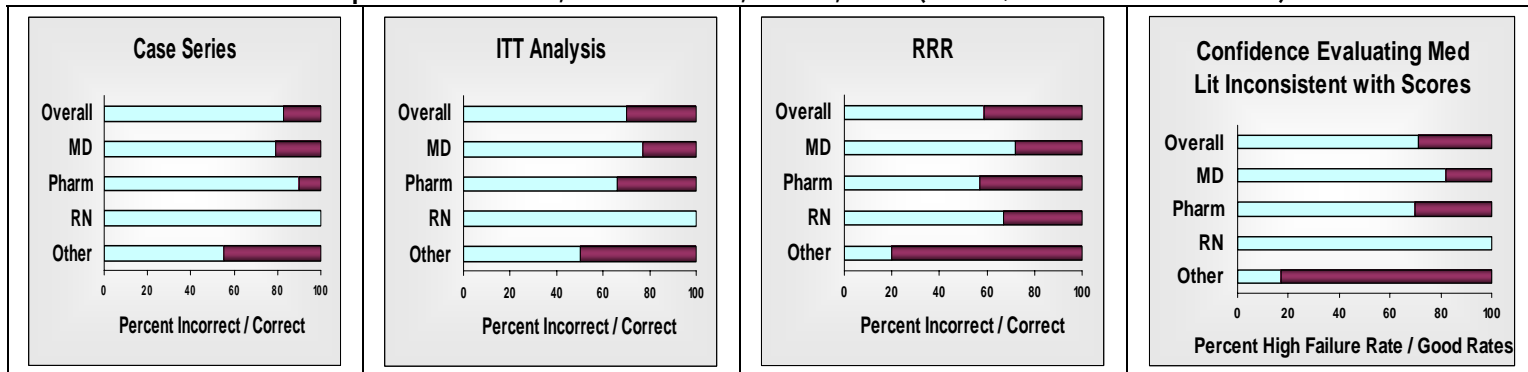
- Many of our attendees are leaders.
- Health care professionals who attend this training program are more likely to be interested in evidence-based medicine (EBM) or already possess some (or a lot of) critical appraisal skills - so we estimate failure rates in the community to be higher.
- You can take the test for Question 1 yourself at http://www.delfini.org/page_EBMTTest.htm.

Report on “Using the Medical Literature” Program Pre-test Scores: June 6, 2003

Below are pre-test scores from seven Delfini programs done from December 2002 to June 2003, which are consistent with over 15 preceding programs, representing about 500 attendees from around the country. Participants consisted of medical and pharmacy leaders (many), professors of medicine and pharmacy (several), health care administrators, physicians (many), clinical pharmacists (many), QI staff, RNs (few), epidemiologists and evidence-based consultants (few) and students (few). Over 70% of physicians reported reading medical literature weekly, with over 80% saying they use medical literature when considering a new intervention; percents for responding pharmacists are over 80 and 90 percent respectively. However, a high percent of those who report confidence evaluating the medical literature have high test failure rates, even when using “generous” criteria for correct and establishing “failure” at two or three incorrect answers.

The Test	1. A case series disguised in which an incorrect answer results in prescribing an antibiotic for a viral illness
	2. Requires understanding of the definition of Intention-to-treat (ITT) analysis or impact of missing values
	3. Requires understanding that Relative Risk Reduction (RRR) alone overstates effectiveness

Pre-Test Scores for 193 Respondents: MD=71, Pharmacist=90, RN=12, Other (often QI staff or EBM consultant)=20:



Following Delfini educational sessions and exercises, when reviewing test questions in class discussions, invariably respondents answer these questions correctly.

In My View

There is clear need for nearly universal training in critical appraisal methods for all health care professionals involved in decisions affecting patient care. These skills apply not only to reading the medical literature, but can be used to help understand and raise questions about other sources of medical information ranging from advertisements to CME lectures. Unless health care professionals have these skills, health care will continue to suffer serious problems such as those which can result from misapplying case series and from thinking that a drug should be used just because it has a high RRR. (And this test covers only a tiny set of issues.) Learning an approach to critical appraisal need not be difficult, but it is necessary to help improve health care quality and help to better utilize resources.

EBM should become so integrated in practice and training that one day we can eliminate the term “evidence-based.” To achieve this, health care decision-makers, clinical staff, faculty and editors and reviewers of the literature need basic skills in critical appraisal.