

# The Road Not Traveled: Evidence-Based Practice and Information Literacy

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## CONTEXT

Evidence-Based Practice (EBP) is the integration of best research evidence, clinical expertise and patient values to guide medical decision making. Information Literacy (IL) — a person’s capacity to recognize when information is needed and their ability to locate, evaluate, and effectively use that information — is critical to effective EBP. Previously at Stanford University School of Medicine, librarians have been responsible

for teaching information skills to medical students. There has been little formal integration of EBP and IL, or teaching engagement of clinical faculty in this domain. In 2008, we created a faculty development program designed to merge the concepts of EBP and IL. This pilot program focused on a group of health education experts: Educators for CARE.

## EDUCATORS FOR CARE (E4C)

The E4C Program began in 2008 to enhance the development of Stanford medical students as skilled, compassionate physicians. Through a competitive application process, fifteen faculty were selected from a variety of medical specialties to be E4C facilitators. The faculty form a diverse group, but were similar in that all had distinguished themselves as outstanding

physician educators. Each facilitator mentors six students from each matriculating class throughout the students’ time at Stanford. Faculty dedicate two half-days per week to the program, serving as teachers of clinical skills and professionalism and role models for students’ professional development.

### HOW WOULD YOU DESCRIBE AN INFORMATION LITERATE CLINICIAN?



In an online survey, E4C faculty were asked to describe an Information Literate clinician; the above tag cloud presents the collected responses. The font size of each word corresponds to the frequency with which the word was submitted. These responses were explored and expanded upon in a hands-on IL training session.

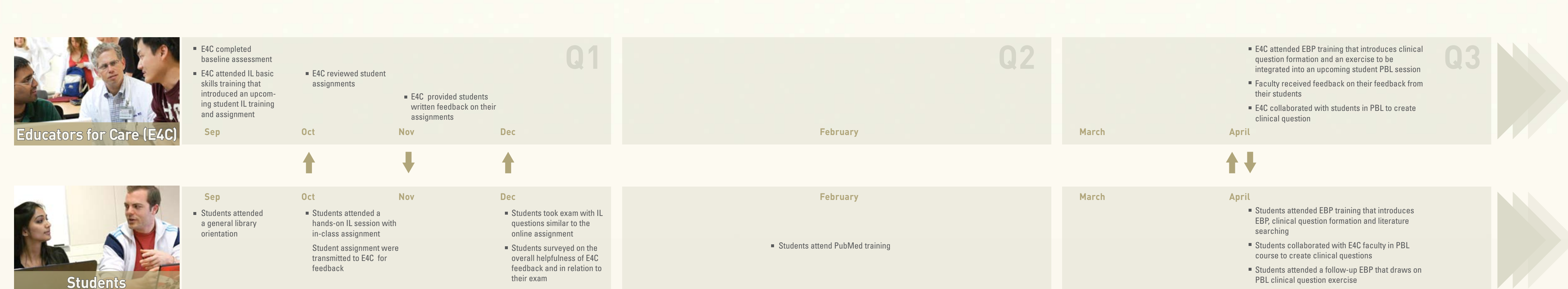
## FUTURE DIRECTIONS

Information Literacy is an important yet underdeveloped framework for clinician educators. Focused faculty development can help them pave the road between clinical questions and evidence-based answers.

To further this mission we intend to:

- Provide additional targeted IL/EBP training for faculty
- Define an Information Literate physician
- Further integrate IL/EBP skills into SOM curriculum to provide increased opportunities for faculty to practice and model IL skills
- Expand IL training to broader groups, including residents and allied health professionals
- Spread the concept of IL through publication

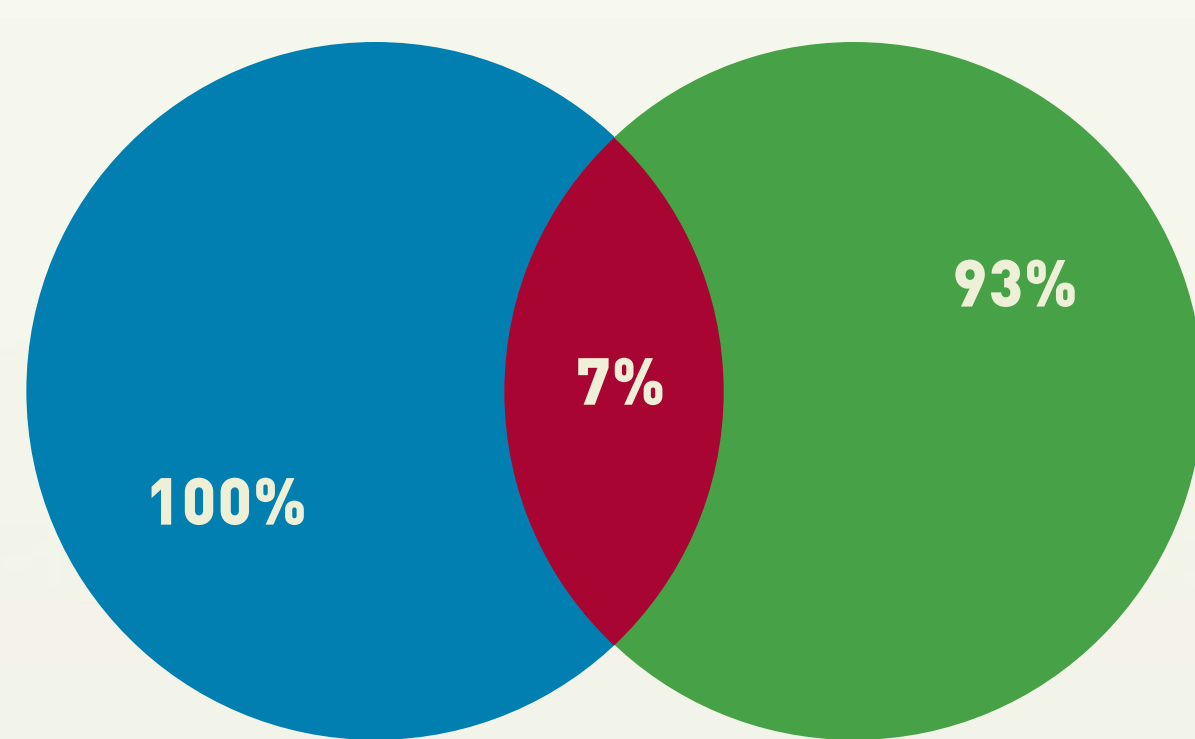
## IMPLEMENTATION PLAN



### AN ONLINE SURVEY OF E4C FACULTY

Information Literacy is IMPORTANT in supporting lifelong learning		Please rate your Information Literacy skills	
86%	Strongly Agree	29%	Beginner: I do not know what this means and do not know what skills are associated with Information Literacy.
14%	Agree	64%	Intermediate: I consider myself to be Information Literate but do not have the knowledge and skills to teach others in this domain.
0%	Disagree	7%	Advanced: I can teach others and evaluate their competency.
0%	Strongly Disagree		

Belief that IL is Important



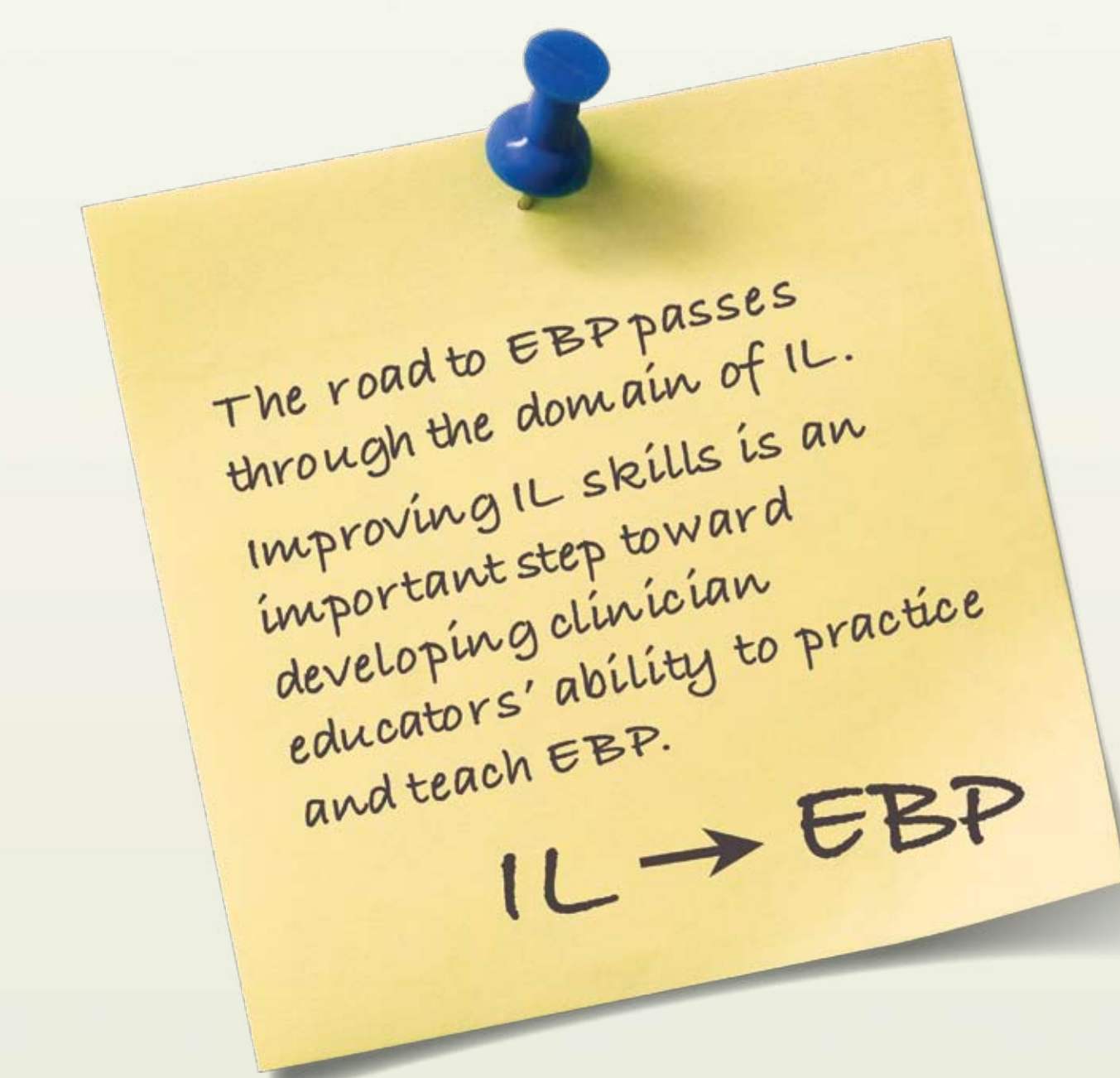
Lack Knowledge and Skills to Teach IL

While all E4C faculty feel that IL is important, only a small minority of them feel they can effectively teach IL skills.

The survey also revealed that:

- 50% use information resources everyday in patient care
- 43% distribute health information to their patients at least once a week
- When they hit a roadblock searching for Evidence-Based answers:
  - 57% — Make a decision with whatever information they have
  - 36% — Ask a colleague for assistance
  - 7% — Consult a librarian
- 57% feel comfortable writing research questions
- 93% are comfortable writing clinical questions
- When searching for evidence-based information, they find too much information:
  - 7% — Every time
  - 36% — More than 2/3 of the time
  - 50% — Less than 1/3 of the time
  - 7% — Rarely: usually find too little

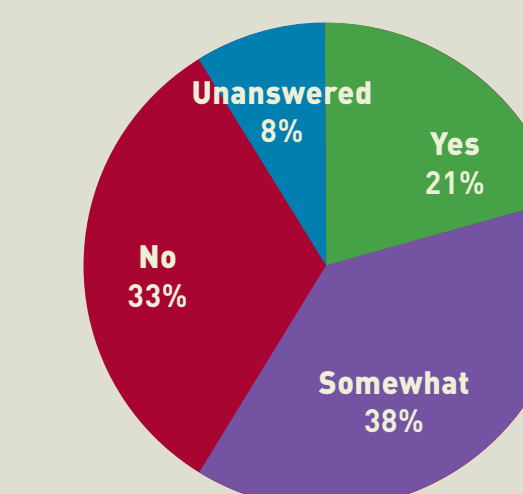
## LESSONS LEARNED



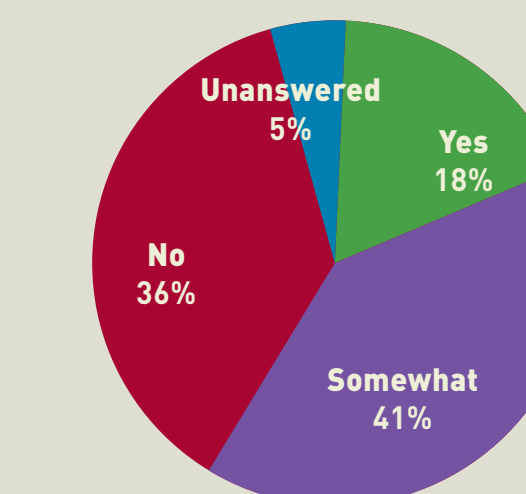
- The concept of IL is not widespread in medicine
- There is no clear vision of an Information Literate physician
- Keep all data collection simple
- Link students and faculty experience as closely as possible

Training must foster faculty skills in providing helpful IL feedback

Was Your Facilitator's Feedback Helpful Overall?



Was Your Facilitator's Feedback Helpful for the Exam?



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