

## CHANGES Decisions & IMPROVES Care

More than **60** studies involving UpToDate have demonstrated an **impact** on learning, better clinical decisions, improved quality of care, patient safety, efficiency and mortality.

UpToDate is the only clinical decision support resource associated with improved outcomes.

Over a three year period, researchers at Harvard associated the use of UpToDate with<sup>1</sup>

Lower mortality rates

**11,500** saved lives 

Improved quality of every condition on the Hospital Quality Alliance

Metrics



- Acute Myocardial Infarction,
- Congestive Heart Failure,
- Pneumonia,
- Surgical Infection Prevention

Shorter lengths of stay

**372,000** saved hospital days 

*"The data suggests the use of computerized tools such as UpToDate enables better decisions, better outcomes, and better care"*

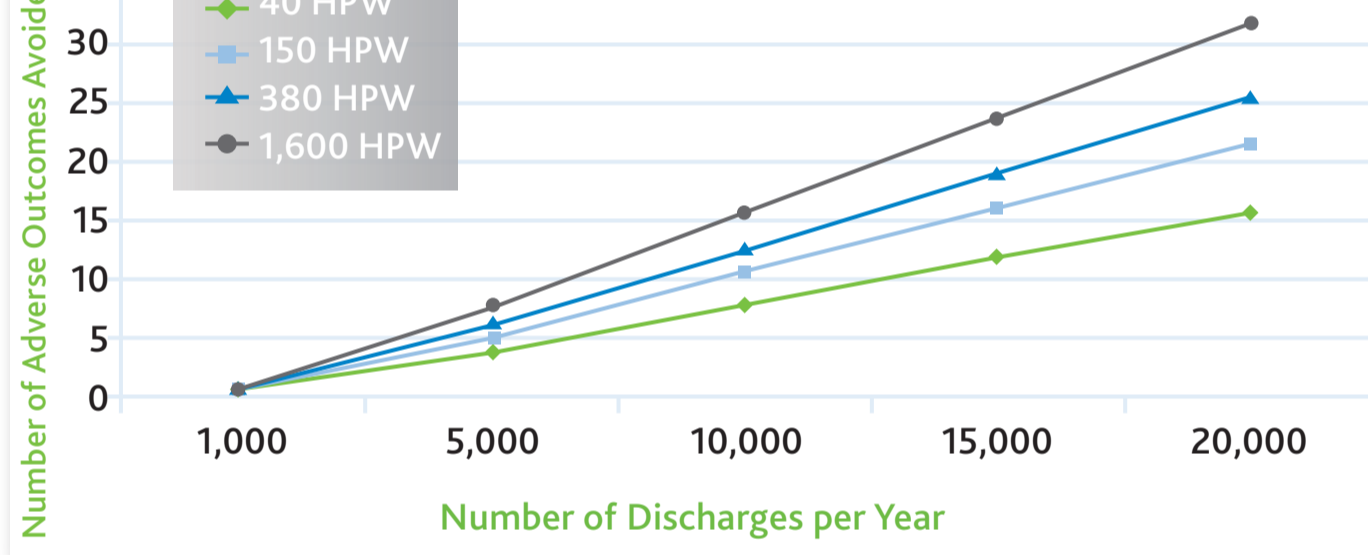
— Ashish Jha, MD, MPH, Harvard, and Study Author

<sup>1</sup> Use of UpToDate and outcomes in US hospitals. Isaac T, Zheng J, Jha A. J Hosp Med. 2012 Feb;7(2):85-90. doi: 10.1002/jhm.944. Epub 2011 Nov 16.

The more UpToDate is used — the better the outcomes.

Regardless of hospital size, outcomes improve with increased use of UpToDate.<sup>2</sup>

Estimated Complications Avoided Given Differing Numbers of Hits Per Week (HPW) for Varying Numbers of Inpatient Discharges



<sup>2</sup> Bonis PA, Pickens GT, Rind DM, Foster DA. Association of a clinical knowledge support system with improved patient safety, reduced complications and shorter length of stay among Medicare beneficiaries in acute care hospitals in the United States. Int J Med Inform. 2008 Nov;77(11):745-53.

UpToDate is preferred over other clinical decision support resources.

A large-scale, multi-site study of **118** hospitals (16,000+ clinicians) revealed:

UpToDate was the most used Clinical Decision Support resource by physicians and residents, used significantly more than any other resource.<sup>3</sup>

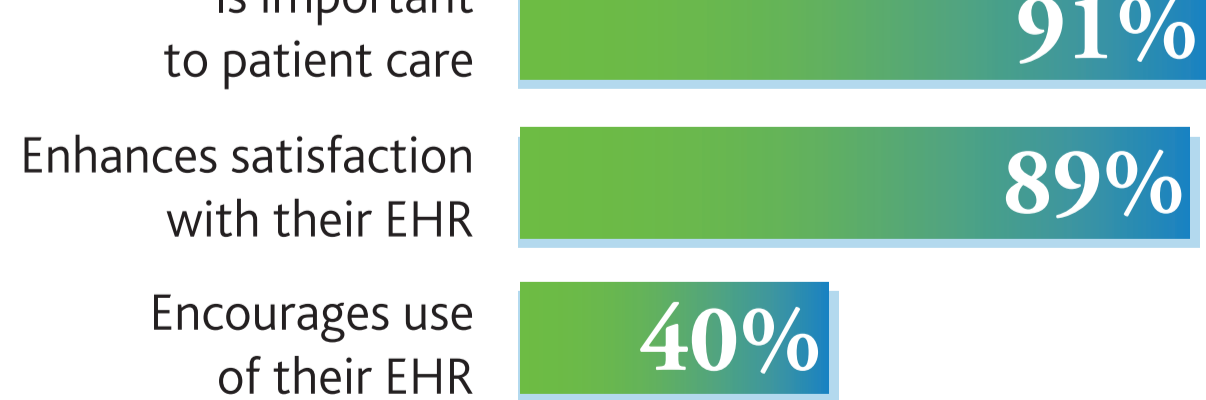
Information resource	Overall (n=14,591)	Physicians (n=5,233)	Residents (n=2,050)	Nurses (n=6,280)
Journals	46%	59%	56%	30%
PubMed/MEDLINE	42%	51%	59%	25%
<b>UpToDate</b>	<b>40%</b>	<b>53%</b>	<b>77%</b>	<b>18%</b>
Books (online)	30%	32%	46%	22%
Micromedex	24%	14%	18%	35%
Books (print)	21%	24%	25%	16%
eMedicine	20%	20%	38%	15%
Ovid MEDLINE	16%	22%	18%	11%
Journals (print)	16%	22%	12%	11%
MD Consult	16%	19%	25%	10%
ePocrates	13%	18%	28%	6%
Professional association websites	12%	12%	8%	13%
Clinical evidence (BMJ)	10%	10%	15%	7%
CINAHL	9%	1%	1%	14%
Nursing Reference Center	6%	.1%	-.%	18%
Consumer health resources	4%	2%	1%	5%
Dynamed	3%	2%	8%	1%
Stat!Ref	2%	2%	3%	2%
Essential Evidence Plus	1%	1%	2%	1%
Other	12%	9%	6%	15%
Not sure	3%	1%	.1%	6%

<sup>3</sup> Respondents were able to select all that applied, so column percent does not equal 100. (Note that not all participating sites had all listed information resources. Used with permission from the Medical Library Association)

<sup>3</sup> Marshall JG, Sollenberger J, Easterby-Gannett S, Morgan LK, Klem ML, Cavanaugh SK, Oliver KB, Thompson CA, Romanosky N, Hunter S. The value of library and information services in patient care: Results of a multi-site study. Journal of the Medical Library Association 2013 Jan; 101(1):39-46.

Bringing UpToDate into the Clinical Workflow.

Users say having UpToDate embedded in their EHR:<sup>4</sup>



<sup>4</sup> June 2011 Clinicians Survey, N=1,228

*UpToDate has transformed the way we use our EpicCare EMR. By leveraging UpToDate clinical decision support, our clinicians can now instantly access actionable, evidence-based clinical content that is disease- and age-specific without having to interrupt their workflow to launch a web browser window or to enter multiple logins.*

— DR. DAVID BUTLER  
ASSOCIATE CHIEF MEDICAL INFORMATION OFFICER  
BON SECOURS HEALTH SYSTEM