

The Value of VisualDx

QUALITY CARE BEGINS WITH AN ACCURATE DIAGNOSIS

EFFICIENCY¹

14 min

Time saved by MDs each day



19 min

Time saved by PAs each day



26 min

Time saved by NPs each day

ACCURACY

Increase of **19%**

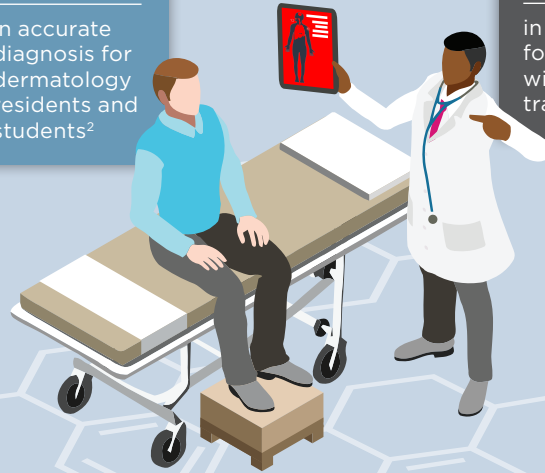
in accurate diagnosis for dermatology residents and students²

Increase of **120%**

in accurate diagnosis for non-dermatologists with just 4 minutes of training on VisualDx³

Increase of **34%**

in accurate diagnosis for general practitioners⁴



IN PRACTICE

Medical student diagnosed a herpes infection in a toddler's eye. The story was highlighted in *The New York Times Magazine*, "Thanks to VisualDx, my niece was treated and avoided a fate of corneal scarring or lifelong blindness." — Amber Bard, Medical Student

Doctor diagnosed a toddler with acute meningococemia using images in VisualDx. "The direct comparison of meningococcal and streptococcal images with VisualDx underscored the urgency of the situation and assisted in a timely and accurate diagnosis." — Submitted to VisualDx by Dr. William Finn, Emergency Medicine Physician



Doctor diagnosed early disseminated Lyme disease in an adult. "Thanks to VisualDx providing me real-time clinical information, I was able to make the proper diagnosis in a timely manner and get the patient on his way to a healthy recovery." — Submitted to VisualDx by Dr. Lincoln Heath, Family Medicine Resident

REDUCE COSTS⁵

Without VisualDx, ED physicians included the correct diagnosis in their differential for cellulitis

14% of the time

With VisualDx, ED physicians included the correct diagnosis in their differential for cellulitis

64% of the time

Cellulitis dx has an error rate of

30%

resulting in **\$1.3 billion** in unnecessary costs in U.S.



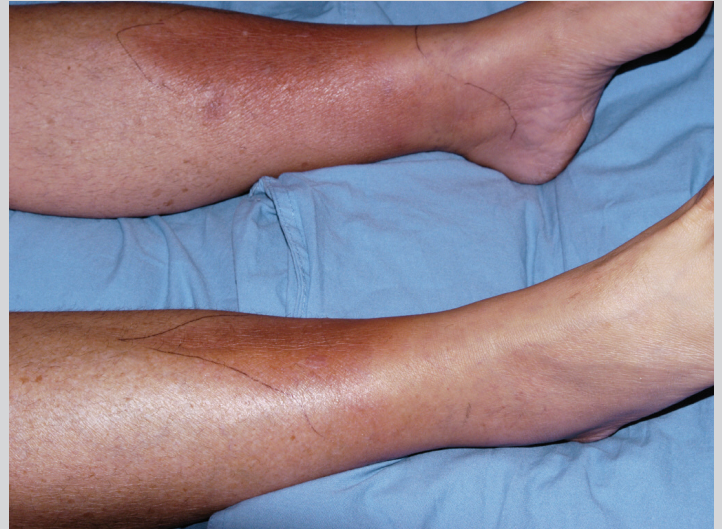
References: 1. Based on a 2013 survey of 468 VisualDx users. 2. Chou W, Tien P, Lin F, Chiu PC. Application of visually based, computerised diagnostic decision support system in dermatological medical education: a pilot study. *Postgrad Med J.* 2017 May;93(1099):256-259. 3. Papier A, Allen E, McDermott M. Visual informatics: real-time visual decision support. Poster presented at: American Medical Informatics Association 2001 Annual Symposium; November 3-7, 2001; Washington, DC. 4. Breitbart EW, Choudhury K, Bunde H, et al; Association of Dermatological Prevention, LEO Innovation Lab. Impact of a computer-based differential diagnosis tool on patient satisfaction and on the diagnostic accuracy of skin conditions. Initiative Gesundheitsindustrie Hessen. <http://gesundheitsindustrie-hessen.de/wp-content/uploads/2017/11/Abstract-LEO.pdf>. Accessed 30 Jan 2018. 5. David CV, Chira S, Eells SJ, et al. Diagnostic accuracy in patients admitted to hospitals with cellulitis. *Dermatol Online J.* 2011 Mar 15;17(3):1.

Cellulitis: Diagnostic Error in Depth

ONE DIAGNOSIS. ONE BILLION DOLLARS IN WASTED MEDICAL COSTS.

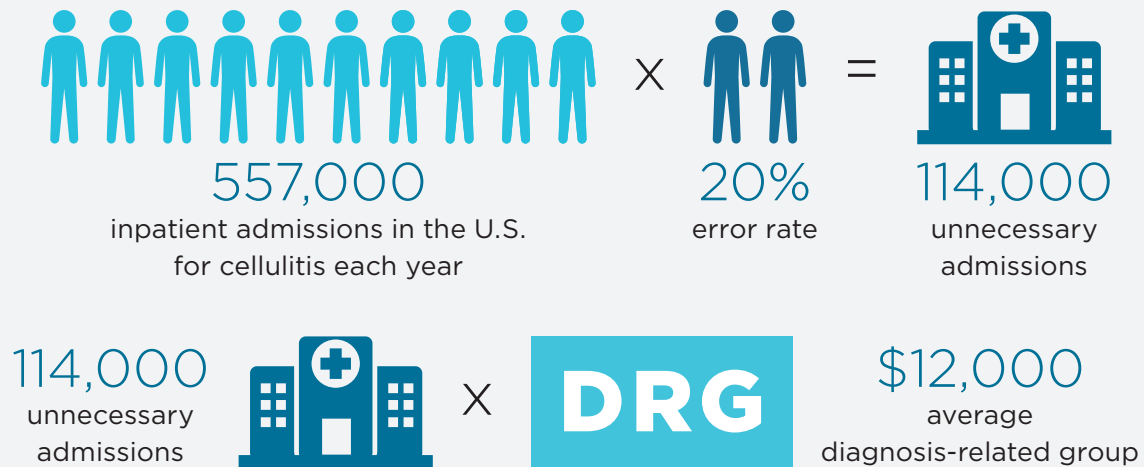
The Problem

Frequent over-diagnosis of patients with presumed cellulitis or soft-tissue infection leads to un-necessary and expensive hospitalizations and IV antibiotic therapy.^{1,2,3} Cognitive mistakes such as premature closure, lead to the “red leg” being consistently over-diagnosed as cellulitis. Unnecessary admissions put patients at increased risk for hospital acquired infections such as *Clostridium difficile*, medication reactions, and other adverse events. On the other hand, patients presenting with red skin that truly have cellulitis, may be “missed”, leading to bacterial sepsis. VisualDx aims to drive accuracy in the clinical diagnosis of “true” cellulitis.



A 48-year-old patient presenting with bilateral leg redness and swelling. The patient had been admitted to the hospital 3 times over 6 months for the diagnosis of “cellulitis.” In this case, the correct diagnosis was erythema nodosum.

Costs for Cellulitis Diagnostic Error Nationally are Staggering



RESULTS IN
\$1,368,000,000
per year cost in U.S.
does not include outpatient error or iatrogenic harm

1. David CV, Chira S, Eells SJ, et al. Diagnostic accuracy in patients admitted to hospitals with cellulitis. *Dermatol Online J.* 2011 Mar 15;17(3):1. 2. Ellis Simonsen SM, van Orman ER, Hatch BE, Jones SS, Gren LH, Hegmann KT, Lyon JL. Cellulitis incidence in a defined population. *Epidemiol Infect.* 2006;134(2):293-299. 3. Levell NJ, Wingfield CG, Garioch JJ. Severe lower limb cellulitis is best diagnosed by dermatologists and managed with shared care between primary and secondary care. *Br J Dermatol.* 2011;164(6):1326-1328.