



# Improving Hospital Length of Stay (LoS) with Clinical AI

How Aidoc helps hospitals deliver faster, safer care.

By reducing bottlenecks in the patient journey, hospitals can move patients from diagnosis to treatment – and, ultimately, discharge – faster.

The benefits: Fewer complications, smarter resource allocation and better financial outcomes.

## Yale New Haven Health

**36**  
minute

reduction in Emergency Department (ED) LoS for intracranial hemorrhage (ICH) patients<sup>1</sup>

**2.3**  
day

reduction in inpatient LoS (18.1 days to 15.8 days) for ICH patients<sup>1</sup>

**2.6**  
day

reduction in inpatient LoS for all other patients<sup>1</sup>

## Cedars-Sinai Medical Center

**3**  
day

reduction in intensive care unit (ICU) LoS for pulmonary embolism (PE) patients<sup>2</sup>

**3**  
day

reduction in ICU LoS for ICH patients<sup>2</sup>

**1.3**  
day

reduction in inpatient LoS for ICH patients<sup>3</sup>

**2.07**  
day

reduction in inpatient LoS for PE patients<sup>3</sup>

## HCA Healthcare

**44.4**  
minute

reduction in mean ICU LoS (80.2 hours to 35.8 hours) for thrombectomy patients<sup>4</sup>

**55**  
minute

reduction in mean ICU LoS for ultrasound-assisted thrombolysis (USAT) patients<sup>4</sup>

Since 2016, Aidoc has delivered clinically validated results from a broad spectrum of institutions – with Aidoc solutions demonstrating a high-level of reliability and validity across more than 180 published studies or abstracts.

[DOWNLOAD THE COMPENDIUM](#)

<sup>1</sup> Davis, Melissa A., et al. "Machine Learning and Improved Quality Metrics in Acute Intracranial Hemorrhage by Noncontrast Computed Tomography." *Current Problems in Diagnostic Radiology*, vol. 51, no. 4, July–August 2022, pp. 556–561, Elsevier, <https://doi.org/10.1067/j.cpradiol.2020.10.007>.

<sup>2</sup> Gupta, Kavish, MD, et al. "Mechanical Thrombectomy, Artificial Intelligence and the Activation of a Pulmonary Embolism Response Team." *PERT Consortium 2022*, abstract presentation.

<sup>3</sup> Petry, Michael et al. "Decreased Hospital Length of Stay for ICH and PE after Adoption of an Artificial Intelligence-Augmented Radiological Worklist Triage System." *Radiology research and practice* vol. 2022 2141839. 18 Aug. 2022, doi:10.1155/2022/2141840

<sup>4</sup> Burch, Charles, Craig Ainsworth, Jairo Melo, Paige Castaneda, Anne Scheid, Odai Alhasanat, Chandra Kunavarapu, and Eric Nelson. "Improving Patient Outcomes with an AI-Enhanced Pulmonary Embolism Response Team in a Large Healthcare Network." *PERT Consortium, 2024*, Methodist Healthcare, San Antonio, TX. Abstract presentation