



2022 LEAD Capstone Poster Session

Expediting Contrast-Enhanced CT Scans in the Emergency Department

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Abstract

- Emergency room patients requiring contrast-enhanced CT scans for life-threatening conditions face unnecessary delays to diagnosis as a result of risk stratification procedures
- My goal is to create a pathway to avoid those delays with an electronic medical record intervention



Objectives

- Create an EMR intervention to expedite contrast-enhanced CT scans for high-risk conditions
- Evaluate the effect of this intervention on ED length of stay



Background Information

- Certain conditions require contrast-enhanced CT imaging for diagnosis
- Radiology department protocols require patients to be evaluated for their risk of contrast-induced nephropathy prior to administering contrast
- The benefits of earlier diagnosis outweigh any risk of CIN



Project Plan

- Implement an EMR solution to communicate that the patient requires the ordered scan emergently
- Evaluate the use of this communication on length of stay
- If successful, disseminate this model for other departments across the country



Application of What You Learned at LEAD

- Involving stakeholders
- Coordinating teams
- Negotiating participation



Proposed Budget

- None required
- Efforts fall under already-funded responsibilities



Innovation and Significance

- These barriers to diagnosis exist for almost all emergency physicians across the country
- This intervention could potentially be a model for other departments
- Improvements in LOS benefit hospital throughput



References

- Davenport MS, Perazella MA, Yee J, et al. Use of Iodinated Contrast Media in Patients with Kidney Disease: Consensus Statements from the American College of Radiology and the National Kidney Foundation. *Radiology*. 2020;294:660-668. doi:10.1148/radiol.2019192094