

Problem Definition

It is common with modern medical imaging technology to have incidental findings on x-ray, US, CT, and MRI studies done in the emergency department. It is estimated that incidental findings occur most often on trauma CT scans, reported at a rate 35.4-44.5% in some studies.¹⁻² While most do not require any immediate intervention in the ED, there is still a risk of any incidental lesion developing into something dangerous, which means we need to address it with the patient. Too often, it is up to the individual bedside physician to determine how to communicate these findings. Pre-intervention survey data from ED attending, resident, and APP clinicians revealed that 38 of 62 respondents (61.2%) have an approach to handling incidental findings, but with some variability as there are currently no established guidelines at Jefferson Northeast for discussing, documenting and recommending follow-up for incidental findings on emergency department imaging.

Aims For Improvement

Ultimately, the goal of properly handling incidental findings in the ED is to preserve the long-term health of the patient and reduce malpractice risk. The objective of this project is to improve the quality of attending, resident, and APP practice in communicating incidental findings noted on radiology-reviewed imaging (X-ray, US, CT, MRI) in the ED. This will be achieved by establishing a methodological approach to informing patients, accurately documenting, and providing clear discharge instructions for follow-up. This project will not include bedside imaging or wet-read discrepancies and will not include other incidental findings such as lab or EKG abnormalities.

Proposed Intervention

We have created a standardized approach for addressing incidental findings in the ED. This involves: 1) printing the radiology report for patient; 2) informing the patient bedside; 3) using 'phrase' for MDM about informing the patient; 4) adding the "incidental finding" as a secondary diagnosis; 5) using 'phrase' for discharge instructions; and 6) selecting "incidental finding" patient education from Exitcare in Sunrise Allscripts.

MDM: Incidental findings were noted on imaging and added as secondary diagnoses. Patient was notified and given a copy of the report. The patient was advised on the importance of follow up as some of these findings may ultimately be cancerous in nature and lack of follow up could result in the patient's disability or untimely death. Patient voiced understanding and expressed intent to follow up. Primary care referral information was provided in the event that the patient does not have a PCP or is unable to obtain an appointment in a timely manner.

DC instructions: You were seen in the Emergency Department today and had imaging performed. There were unexpected findings on your images that require follow up. You have been given a copy of this imaging report. It is important that you follow up with your primary care provider or PCP in one week to look into these findings. Following up on these imaging results is extremely important, because sometimes these findings can be related to something serious like cancer. Lack of following up may result in serious disability or death. If you do not have a PCP or are not able to get an appointment in a timely fashion, please call the Aria Health Referral line 1-877-808-ARIA.

Measurement Strategy

The initial test of change is distributing this standardized approach to all ED clinicians and following up after three to six months of implementation. Post-intervention survey data will be collected to assess if there has been an increase in the number of clinicians who report that they have an approach for addressing incidental findings in the ED and do it thoroughly for every patient by 50% in six months. If available, funding will be used to review all radiology reports and provider documentation for a one month period prior to the intervention and a one month period after the intervention to assess an objective outcome by measuring the number of incidental findings in our sample, the percent of incidental findings documented and the percent reported to patients in a thorough manner. The post-intervention surveys will also be used to assess balancing measures such as clinician time constraints.

Implementation Plan

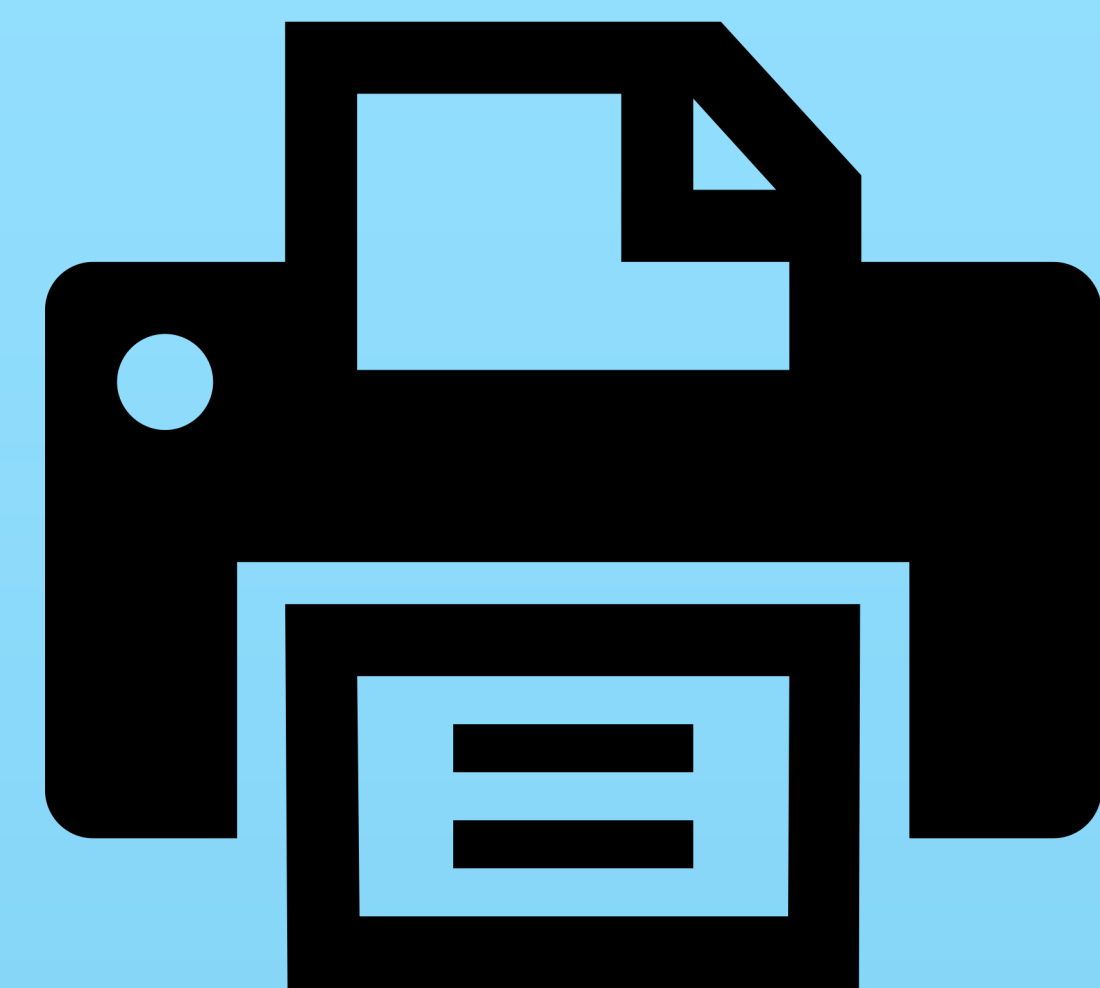
The estimated implementation of this intervention will be August 2020. In November 2020 and February 2021 (after three and six months of implementation respectively), a post-intervention survey will be sent to ED attending, resident, and APP clinicians to assess self-reported practice regarding incidental findings. Funding requests will be submitted during this time to secure a research partner to review radiology reports for imaging ordered in the emergency department, as well as the corresponding patient charts and discharge instructions.

¹ Ekeh AP, Walusimbi M, Brigham E, Woods RJ, McCarthy MC. The prevalence of incidental findings on abdominal computed tomography scans of trauma patients. *J Emerg Med.* 2010;38(4):484-489. doi:10.1016/j.jemermed.2008.11.019

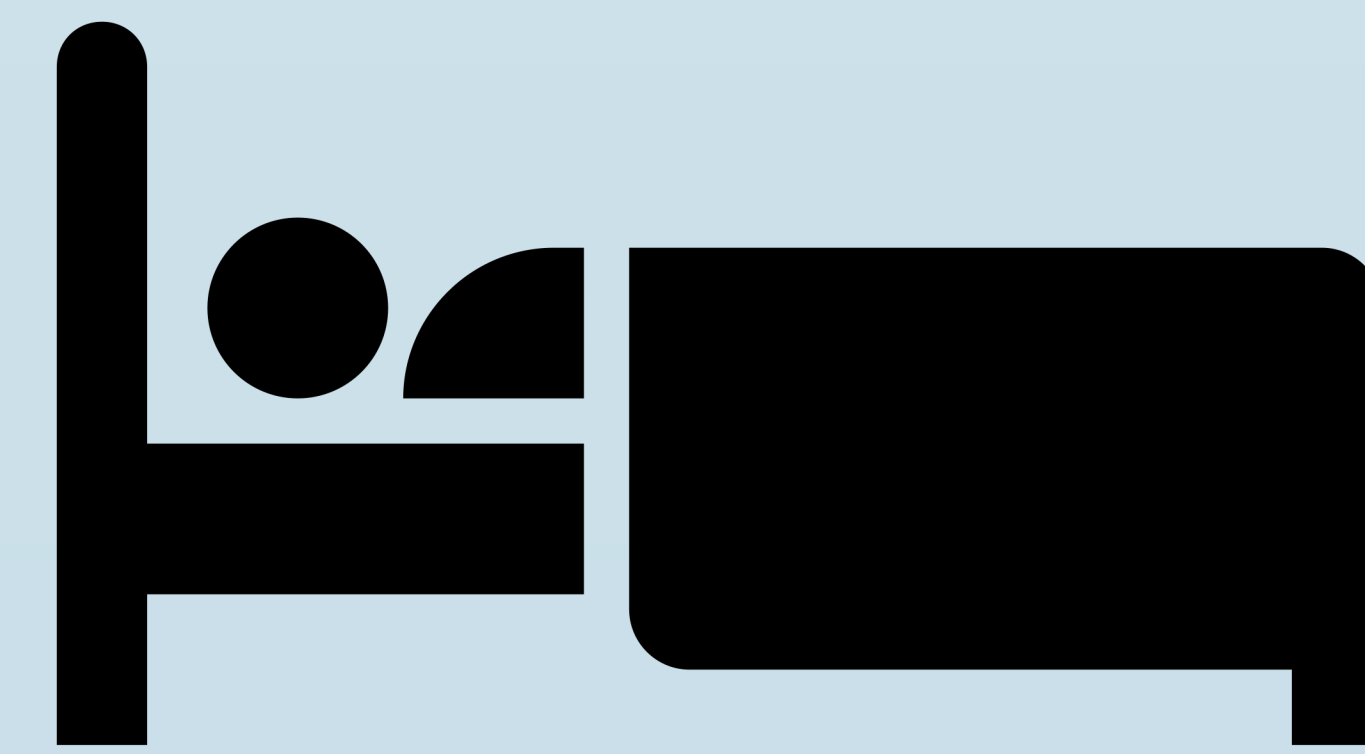
² Sierink JC, Saltzherr TP, Russchen MJ, et al. Incidental findings on total-body CT scans in trauma patients. *Injury.* 2014;45(5):840-844. doi:10.1016/j.injury.2013.10.009

PATIENT NOTIFICATION OF INCIDENTAL FINDINGS ON EMERGENCY DEPARTMENT IMAGING

Print Radiology Report



Inform Patient at Bedside



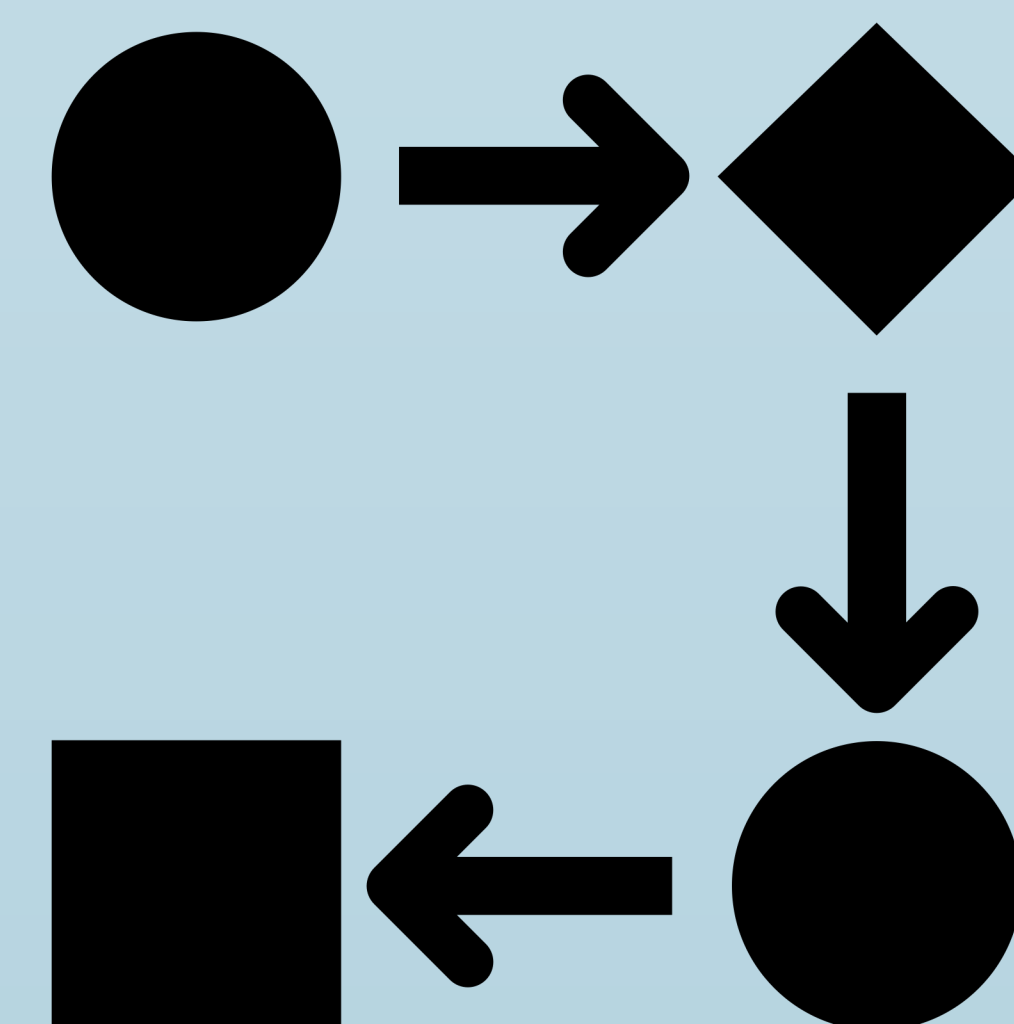
MDM Documentation



Incidental Findings as
Secondary Diagnoses



Discharge Instruction
Documentation



Patient Education on
Incidental Findings

