

2019 CAR ASM Value of Radiology Project – 1st Place Winner

Abstract #79

Introduction of Mobile Radiography Guidelines Reduced the Number of Inappropriate Mobile Chest Radiographs Performed in British Columbia

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OBJECTIVE: To reduce inappropriate mobile chest radiographs through new guidelines and staff education in hospital sites across British Columbia.

METHODS: A new set of guidelines was finalized in 2015 for ordering mobile radiography. The number of annual mobile chest radiographs in 2014 was compared to that of 2017, following the implementation of guidelines with staff education at 21 hospital sites in British Columbia.

RESULTS/DISCUSSION: The number of mobile chest radiographs performed between 2014 and 2017 decreased by 9.2% while the total number of all chest radiographs performed during this time, including both departmental and mobile, increased by 4.0%. These results represent a reduction in inappropriate mobile radiographs. Mobile radiography provides a vital role in health care by providing medical imaging to patients who cannot be safely transported to the main imaging department. However, limitations to mobile radiography include poor image quality when compared to department exams and higher ionizing radiation doses to patients. Poor quality images may require repeat imaging which subsequently delays patient care and exposes patients to additional ionizing radiation. In addition, performing inappropriate mobile radiography can strain the medical imaging department and reduce the overall efficiency and throughput of the entire hospital as a result. Guidelines aimed at appropriate mobile radiograph ordering are an effective way to reduce waste in healthcare and promote value for radiography and radiology services.

CONCLUSION: Mobile radiography ordering guidelines encourage a more responsible allocation of valuable healthcare resources, promote sustainable quality of patient care, and reduce unnecessary exposure to harmful ionizing radiation.

2019 CAR ASM Value of Radiology Project – 2nd Place Winner

Abstract #2

How Can We Help You? Elevating the Value of Radiology for Liver Reporting by Asking Our Surgical and Clinical Colleagues What They Need from Our Reports

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PURPOSE: Determine preferences of physicians regarding radiology reporting of liver observations in patients at risk for HCC.

METHODS: Members of the LI-RADS Outreach & Education Group created a survey for clinicians and surgeons to determine how radiology can add value to imaging in patients at risk for HCC. The survey consisted of 18 questions: 3 regarding respondent's demographics (type of physician, geographic location, type of work (academic/community)), 4 related to current use of LI-RADS by radiologists, 5 related to their opinions about LI-RADS, and 6 related to what they would like to see in the future.

RESULTS: 133 North American physician responses were collected: 55% from academic liver transplant centers, 31% from academic centers without transplant, and 14% from community settings. 89% of responders prefer reports using LI-RADS and 97% value having a radiologist at multidisciplinary rounds. Interestingly, 60 % of surgeons do not want radiologists to make recommendations, while 70% of other clinicians (gastroenterologists, hepatologists and oncologists) and 82% of clinicians in the private practice/community setting would like standardized recommendations in the reports. Moreover, 71% either sometimes or always manage LI-RADS 4 observations differently from LI-RADS 5. Only 27% of responders said that their input was sought at the time LI-RADS was implemented at their institution.

CONCLUSIONS: By asking those who receive radiology reports what they find helpful, we can increase future value of radiology by implementing their requests, when possible. The LI-RADS steering committee has been presented these results and will take them into consideration for future LI-RADS versions.