

We have noticed a steady increase in the number of x-ray imaging exams ordered to be done at bedside. We recognize that this is in part due to the increased acuity of the patients we treat. However, we believe some instances may be contributed to the differences in ordering practices from organization to organization which might lead to confusion for new MDs & residents.

Here at Children's, the radiology department works incredibly hard to obtain the highest quality images whenever possible in order to provide the clinicians with timely, diagnostic results to facilitate continuum of care. Images obtained in the radiology department have superior diagnostic quality and should be obtained whenever possible; assuming it's safe for the patient to travel to radiology. Performing the exams in radiology is ideal as we have a fixed environment with a wide range of positioning aids and radiation exposure tools that create a superior image with just the right amount of radiation. Most importantly, we have the necessary trained staff readily available to assist as needed in the department. Given limited staffing resources and our desire to stay in line with value based care, it's rarely possible to send two technologists to the floor. Imaging in our department sets us up for an optimal image on first exposure (limiting potential increased radiation) in an efficient manner. When exams are done at bedside there are many factors that can alter ideal positioning which may result in a repeated image and/or a lower quality image. The patient's bed, level of patient cooperation, space, lack of restraints and "trained" staff on the floors can all have a negative impact on image acquisition. While the radiology team works hard to mitigate these issues at bedside and still obtain a high quality image, a superior image is always obtained in our radiology exam rooms.

A little background - In recent months, we've encountered increased situations where we presented to the unit with our portable only to discover that the child likely could have come down to the department for imaging. Examples include: the patient was sitting up in bed watching TV, the patient was getting ready to go down to the gift shop or cafeteria, the patient was in the play room, the patient was in the shower etc. We've seen increased inconsistency in regards to when portable exams are ordered. Because of this, we encourage our team to call and clarify when an exam that isn't typically ordered at bedside, is entered. There are varying reasons we are given as to why the exam was ordered to be done at bedside, some of which include: "the patient is uncooperative", "the patient is in isolation", "the patient is on monitors/oxygen", "it's only a single view chest or abdomen", the indication is "only to check for NG tube placement/constipation" etc. All of these reasons alone are NOT enough to perform the exam portably. Another regular response we get is something along the lines of "oh, that's what we did where I was before". We want to avoid performing portable images simply as a convenience for the patient or the nurse. Again, if it's medically safe for the child to come downstairs, it truly is in their best interest.

It is routine for us to image NICU and PICU kiddos at bedside, but even they travel to radiology for certain exams that are better imaged in our department. Because of the reasons I share above, I encourage my team to clarify the need when a portable is ordered outside of the ICU or if the patient condition and/or indication is not one that would typically warrant portable imaging. Without this communication, we are left to guess what truly should be portable and what patient is safe to come down. Please know that we are not questioning to be defiant or question the provider's judgement on their patient's condition. We have no desire to put any patient in danger during transport; we simply want to do provide the patient with the best that Children's has to offer. We recognize that there will be situations where imaging at the bedside is necessary and we will accommodate your patient's need as indicated.

Radiology has general appropriateness criteria for ordering pediatric portable exams based on best practices set out by the American College of Radiology and Society of Pediatric Radiology. Portable radiography would be the examination of choice in patients under circumstances such as those shown below.

1. Patients on life-support devices who cannot safely be transported to radiology.
2. Patients who are critically ill or medically unstable (ICU).
3. Evaluation of patients with cardiopulmonary signs and/or symptoms following cardiac or thoracic surgery or trauma. (Even these kiddos come down stairs – chest tubes and all - as soon as it's safe for them to travel).
4. Patients who because of their clinical condition, cannot be transported for standard imaging in the radiology department.

Thank you for taking time to assist with passing along this education. If you feel this could be shared with other key individuals, forward me their names and I will reach out to them as well. Your concerns, feedback and suggestions are welcome! I'd appreciate being in the loop when education goes out so I can actively watch for changes in ordering trends. I value collaborative work efforts and want to keep patient safety a top priority!

Sincerely,

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