

Study: Who needs an X-ray?

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Teleradiology Specialists, a national teleradiology provider, performed an analysis of 7,675 X-ray studies from 56 facilities located in seven states. This analysis was primarily designed to identify what procedures were performed in urgent care centers, the demographics of patients presenting to urgent care centers, and the number of patient visits by day of the week. Comparisons from the analysis were also made to the Journal of Urgent Care Medicine June 2010 study of urgent care centers, which analyzed 1,589 patient charts in 250 centers.

COMMUNITY PULSE

What is the most common X-ray performed at your practice?

- 1. Chest
- 2. Foot/ankle
- 3. Hand/wrist
- 4. Other

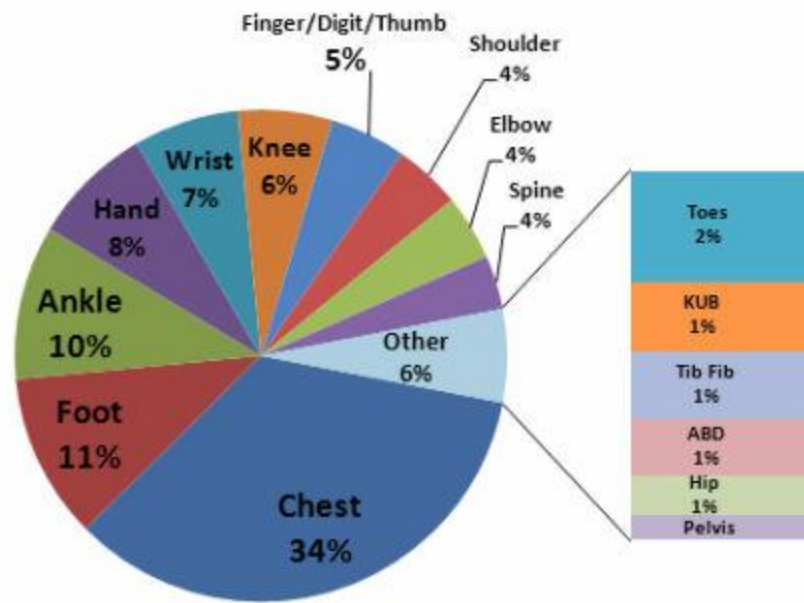
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Using data generated from the OnePacs reporting system, the following was identified:

1. Female patients accounted for 55 percent of all studies. This was very consistent with the 2010 JUCM study which identified 57 percent of patients as female.
2. Demographics for age were also strikingly similar:

Age	Teleradiology Specialists Nov. 2011	JUCM June 2010
0-13	18%	18%
14-22	16%	14%
23-35	21%	25%
36-59	32%	33%
60+	13%	11%

While the JUCM study analyzed chief complaints and diagnosis among its patients, the Teleradiology Specialists analysis focused primarily on identifying the frequency of chest, abdomen, spine and extremity X-rays. The JUCM study indicated 38.5 percent of chief complaints were pulmonary related. Correspondingly, 34 percent of Teleradiology Specialists X-rays were chest X-rays.



The Teleradiology Specialists study also identified the percentage of visits by day of week.

Day of week	Patient count	Percentage
Monday	1,367	18%
Tuesday	1,049	14%
Wednesday	959	12%
Thursday	1,086	14%
Friday	1,449	19%
Saturday	920	12%
Sunday	845	11%

Conclusions:

1. Intuitively, one might suspect pediatric or geriatric patients would be more likely to require X-ray testing at an urgent care facility. Or perhaps, one might suspect that young adults were more likely to have an X-ray exam because of a higher incidence of trauma. As it turns out, the data shows that utilization of X-ray did not favor a specific demographic age or gender group.
2. The most commonly performed X-ray exam was by far a chest X-ray, accounting for one-third of all exams. This correlates well with data from the National Urgent Care Chart Survey of 2010 which showed pulmonary symptoms as the top presenting chief complaint. Training of X-ray staff should emphasize competence in performance of chest X-ray exams. Also, this data may be helpful for anticipating the costs for radiologist over-reads.

3. For the month of November, the average number of exams performed per day at each clinic was five. Fridays and Mondays were substantially busier days for X-ray utilization, and Saturday and Sundays were the least busy. This data may be a factor to consider when planning for staffing requirements.
4. The second-most common presenting chief complaint to urgent care is ENT, with sinusitis being the most common diagnosis. However, sinus X-rays accounted for only a very small percentage of X-ray exams (less than 1 percent). Is this X-ray test being underutilized?