WHAT NEW TECHNOLOGIES ARE LIKELY TO BE DISRUPTIVE OVER THE NEXT 5 TO 10 YEARS, AND HOW WILL THE INDUSTRY RESPOND?

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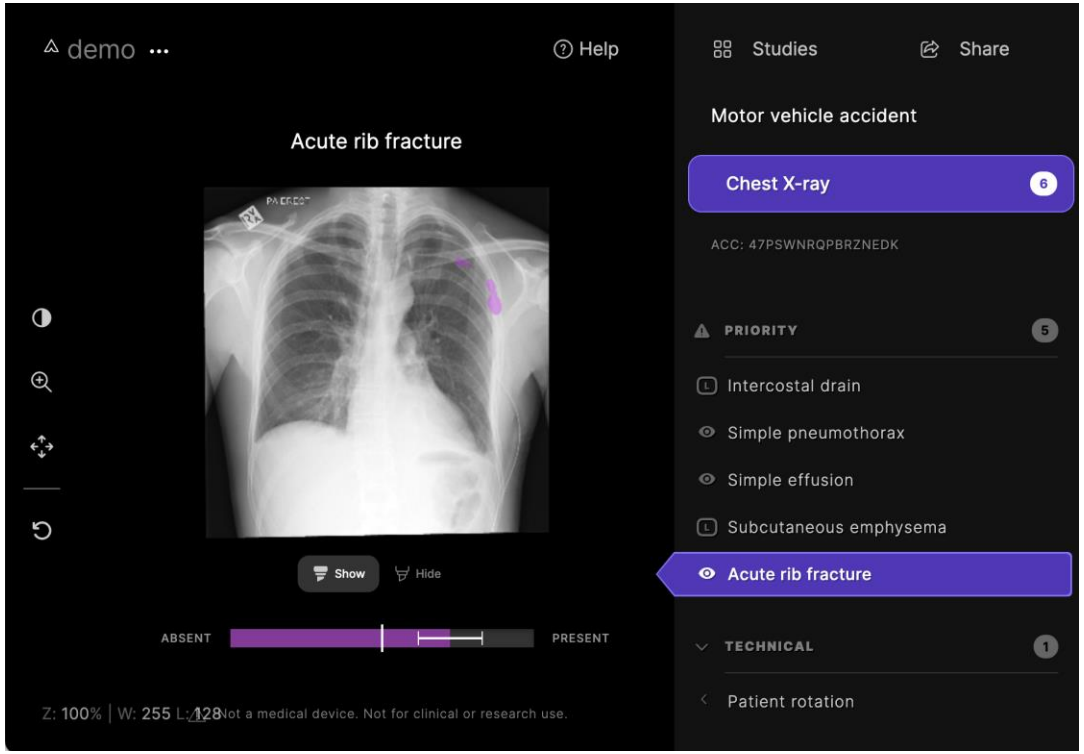
In 5-10 years …

1. In specific clinical settings involving major high-volume modalities, there will be complete automation of reporting by AI.
2. As a result, radiologists will only issue reports upon special request rather than by default, focusing instead on exceptions.
3. Most of the radiologists' time will be dedicated to information integration, system validation and high complexity modalities.
4. Radiology jobs will increase and will evolve into a more rewarding profession with a renewed focus on scientific research and discovery.

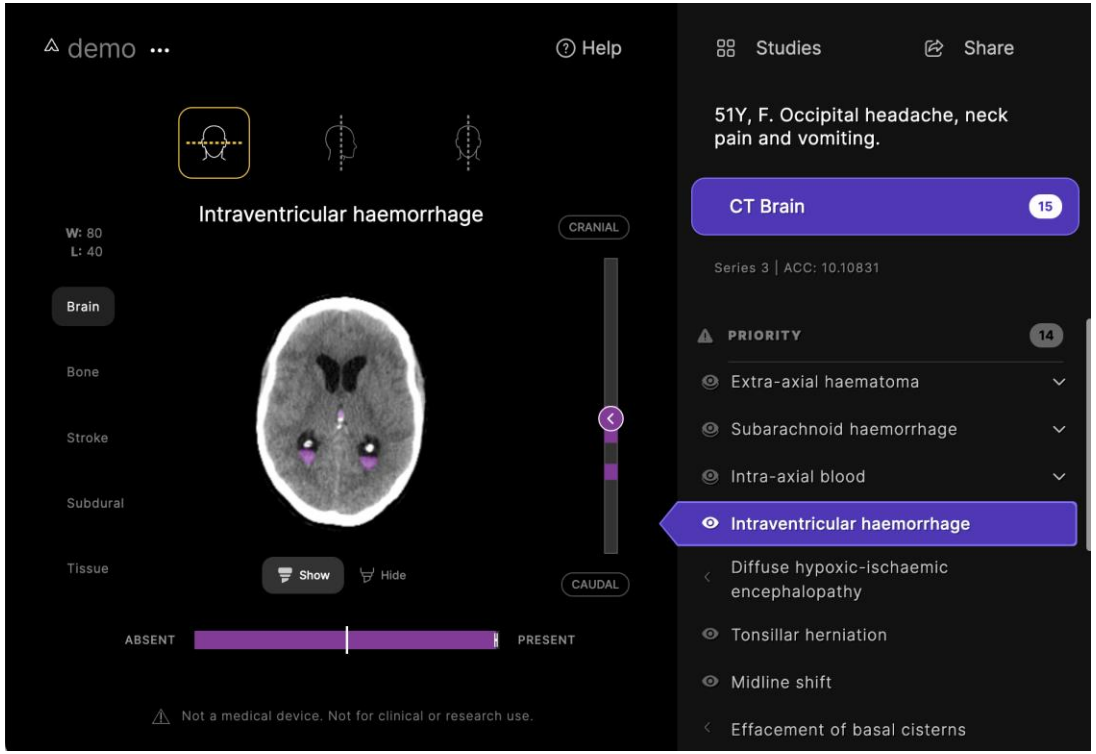
Today…



Comprehensive CXR AI - detect and localise

124

findings and charactertistics



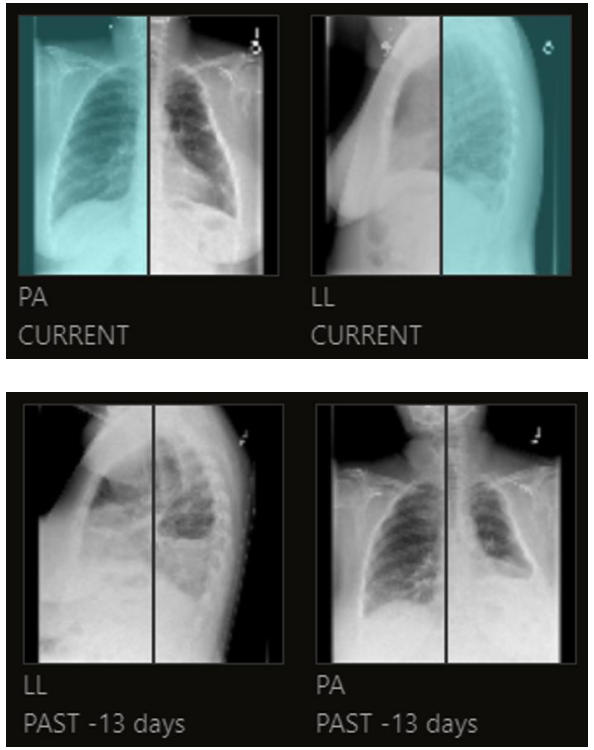
Comprehensive CTB AI - detect and localise

130

findings and charactertistics

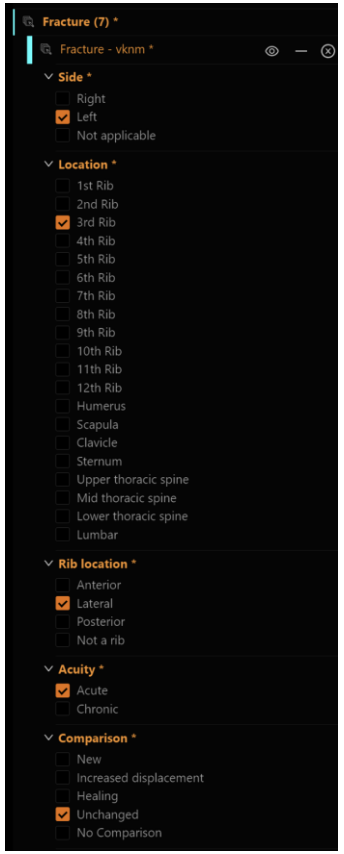
Near future…

1. IMAGES AND HISTORY



INDICATION: 30-year-old woman with multiple rib fractures. Please evaluate for fractures.

2. STRUCTURED OUTPUT



3. COMPREHENSIVE REPORT

EXAMINATION: PA and lateral erect chest radiographs.

INDICATION: 30-year-old woman with multiple rib fractures. Please evaluate for fractures.

COMPARISON: Comparison made to prior CXR performed 10/10/2010.

FINDINGS:
Supporting devices: No devices noted.
Heart: Cardiac silhouette is normal in size.
Mediastinum: Mediastinal contours are normal.
Lungs: **New left mid zone atelectasis**. Pulmonary vessels are normal in size. Normal lung volumes present.
Pleura: No pneumothorax is present. **Improving small left pleural effusion.**
Bones: ***Acute left lateral 3rd, 5th to 7th and posterior 4th rib fractures.*** **Unchanged chronic displaced right lateral 3rd rib fracture. Unchanged acute displaced left scapular fracture.**
Abdomen: **Gallstones noted.**
Soft Tissues: Unremarkable soft tissues.

IMPRESSION: […]