

Neuroimaging overutilization in the Emergency Department

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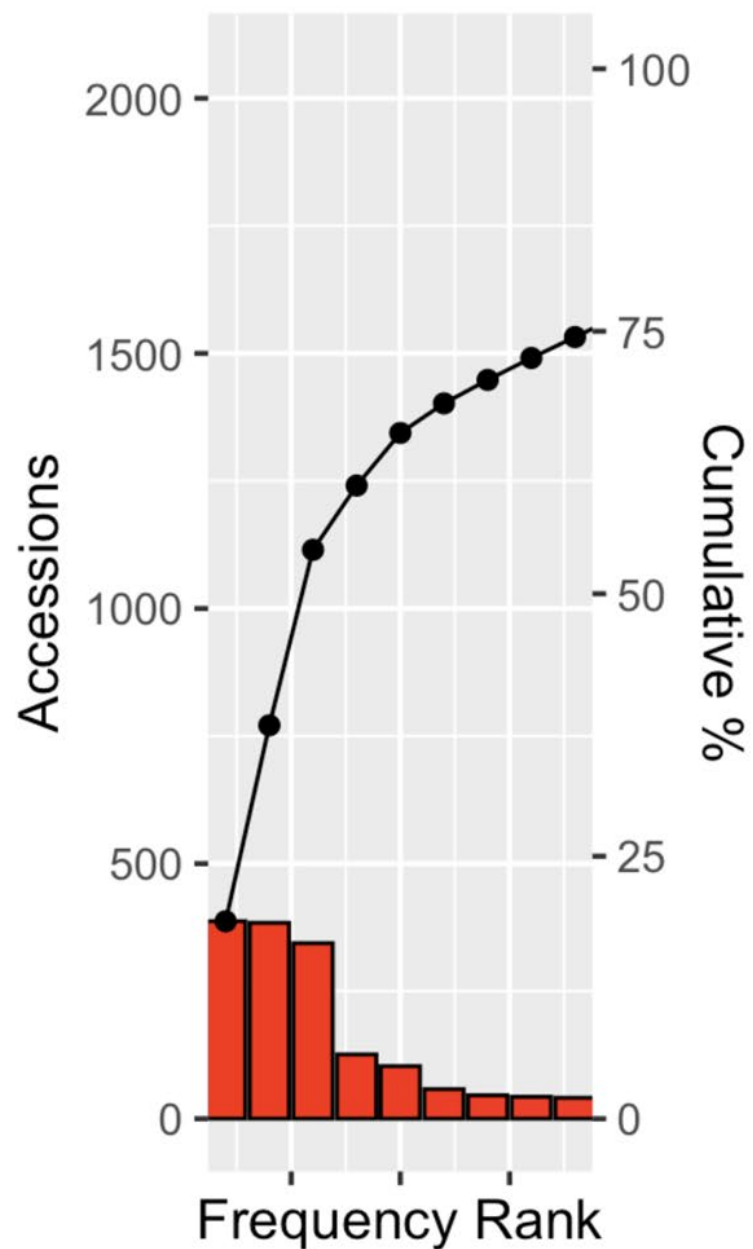
Hypothesis

- Radiologists can prospectively identify overutilization during clinical work
- Flagged studies confirmed inappropriate by retrospective review
- Facilitate interdisciplinary intervention with ordering colleagues

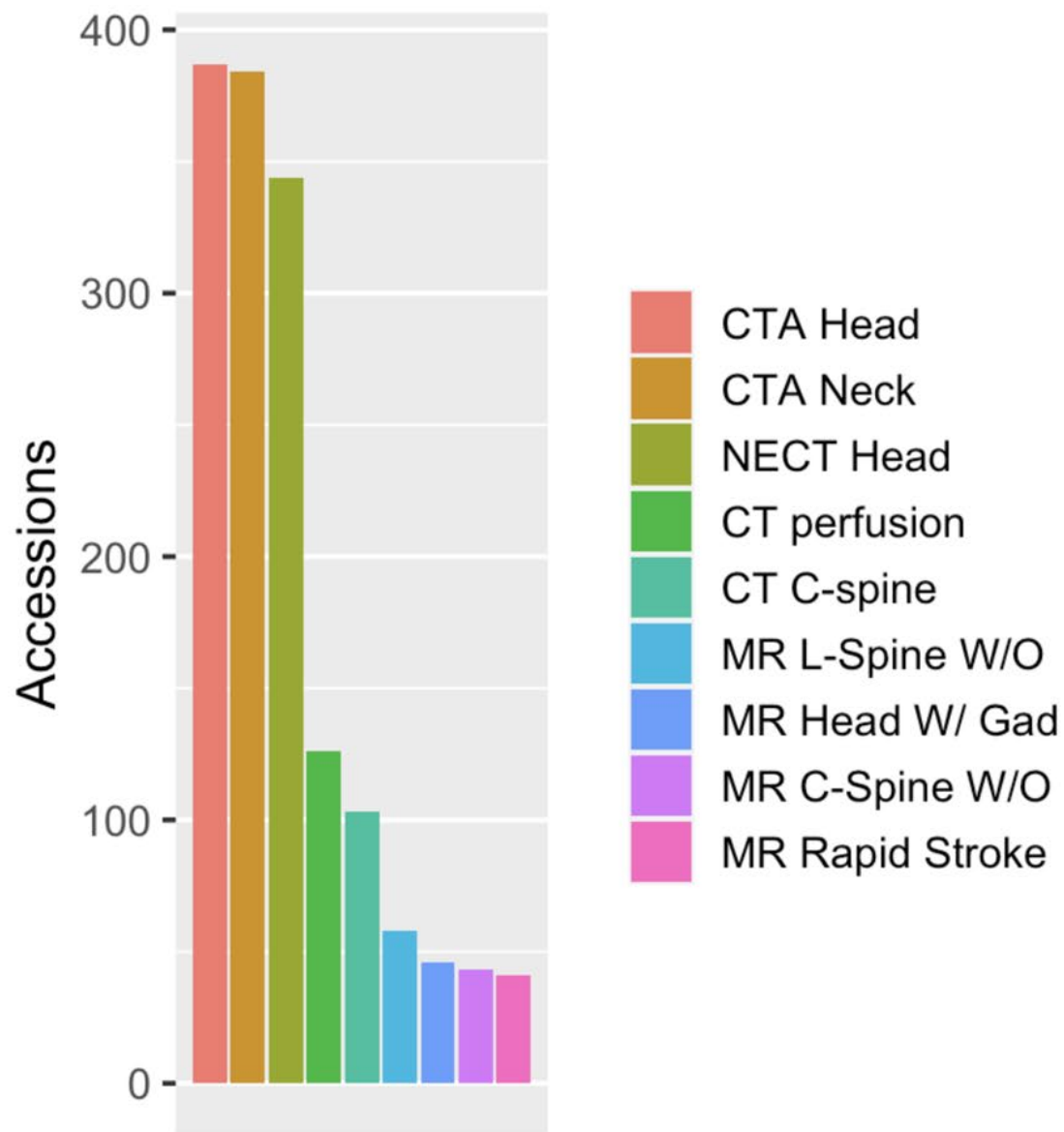
Method

- Alphanumeric code inserted with macro at time of dictation
- Studies retrieved from montage using this code
- Clinical notes + study reviewed by attendings/trainees

Exam Code - Top 1

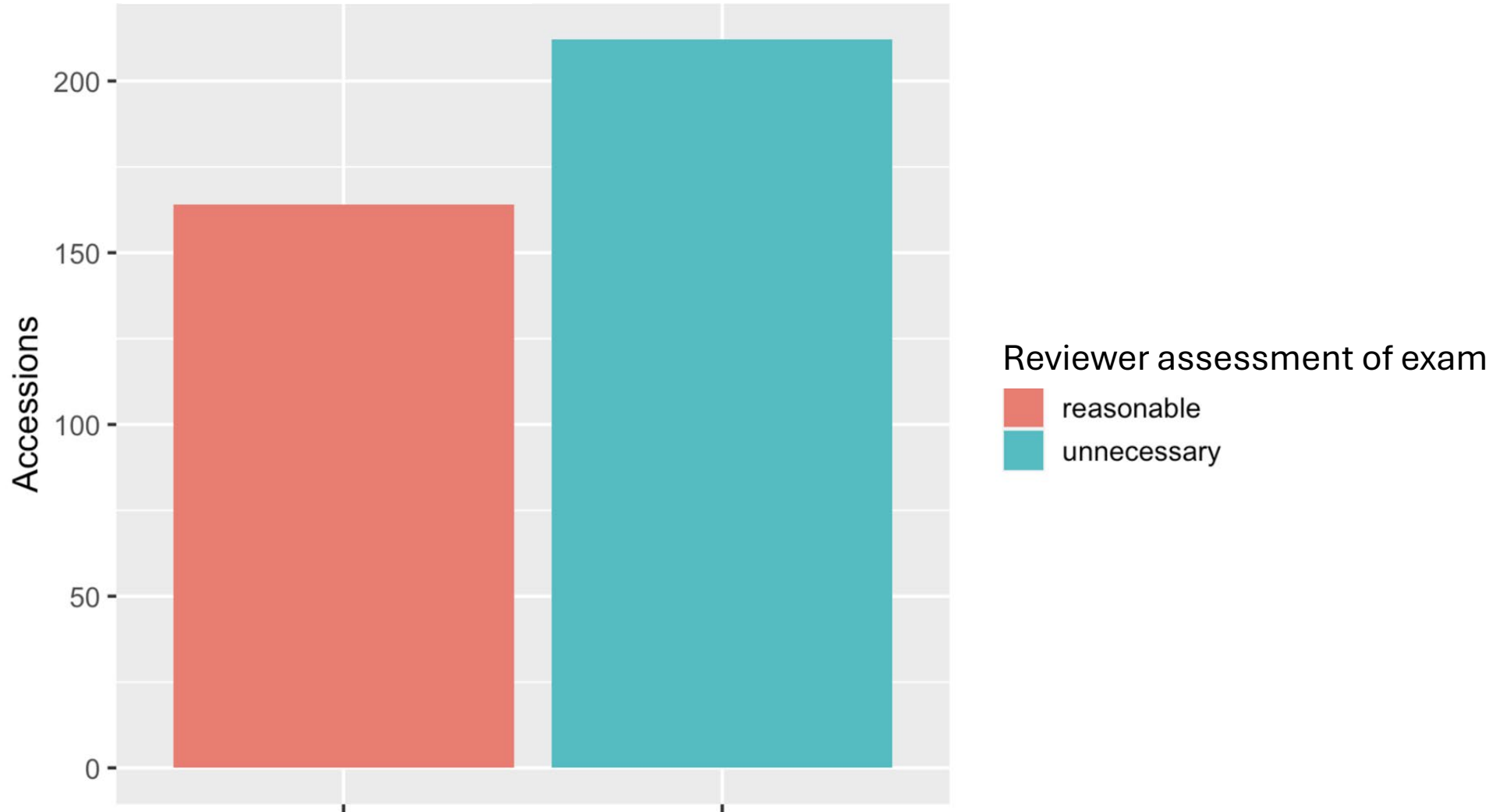


Exam Code - Top 10 %



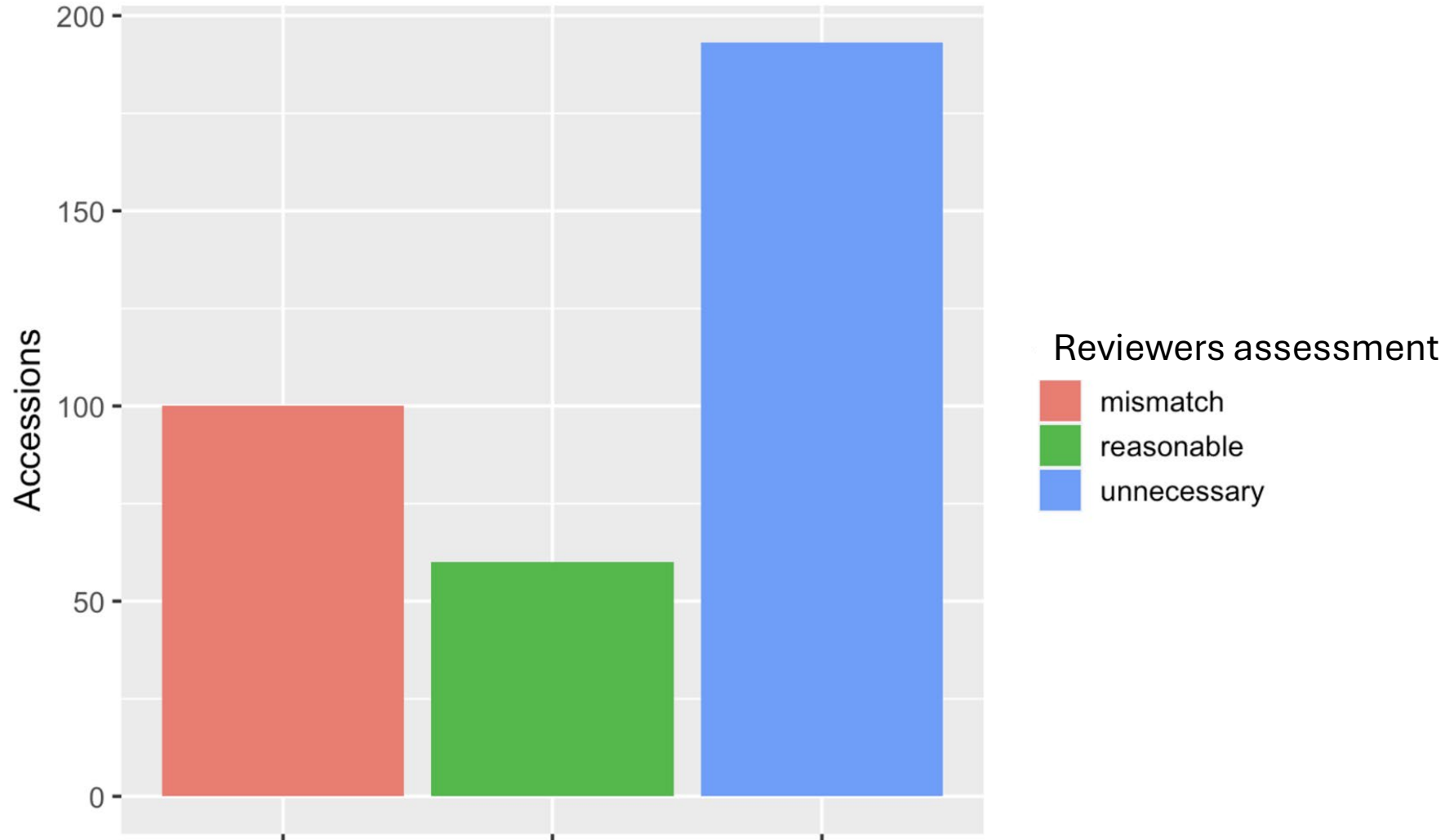
After chart reviewed

| Single reviewer



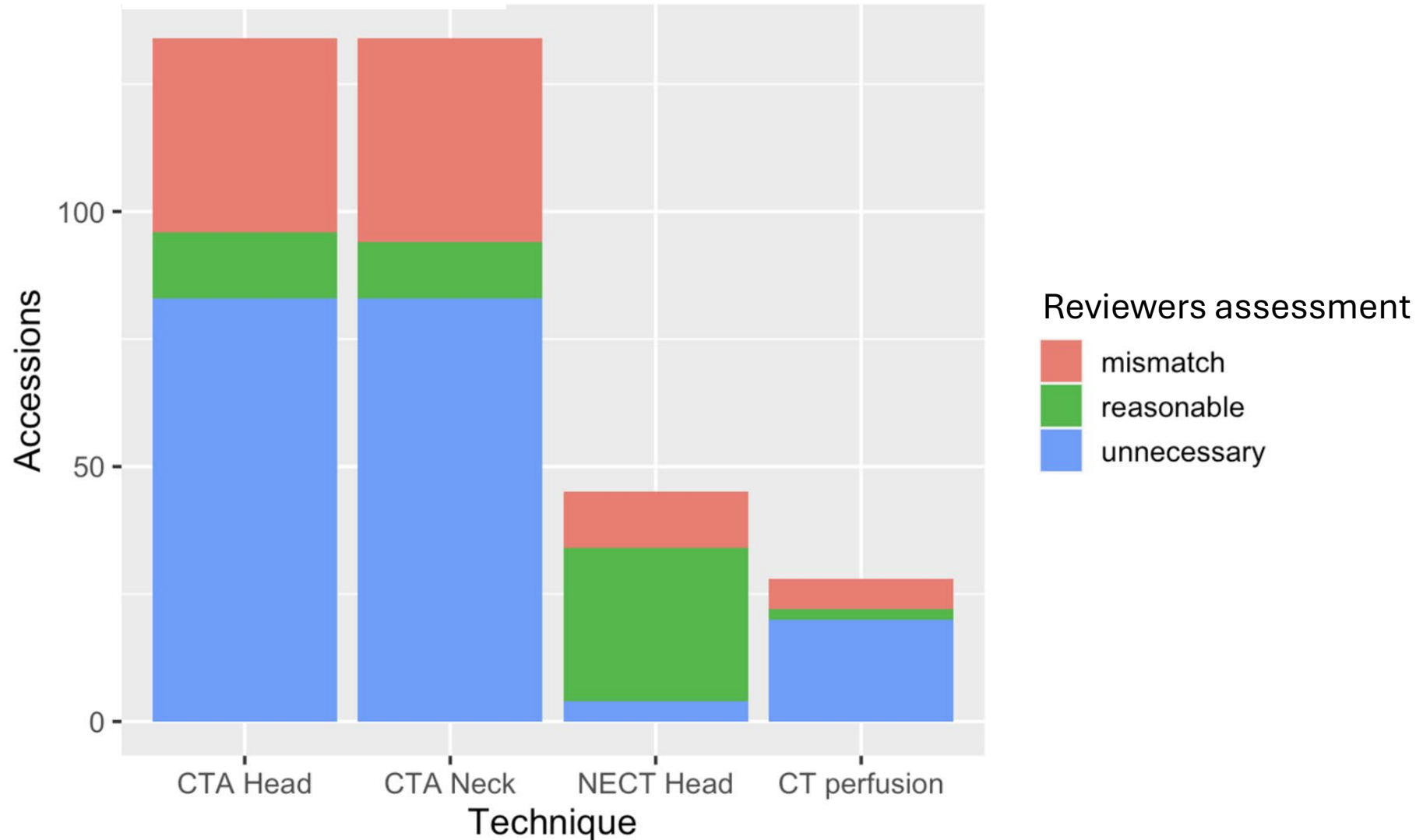
After chart reviewed

Two reviewers

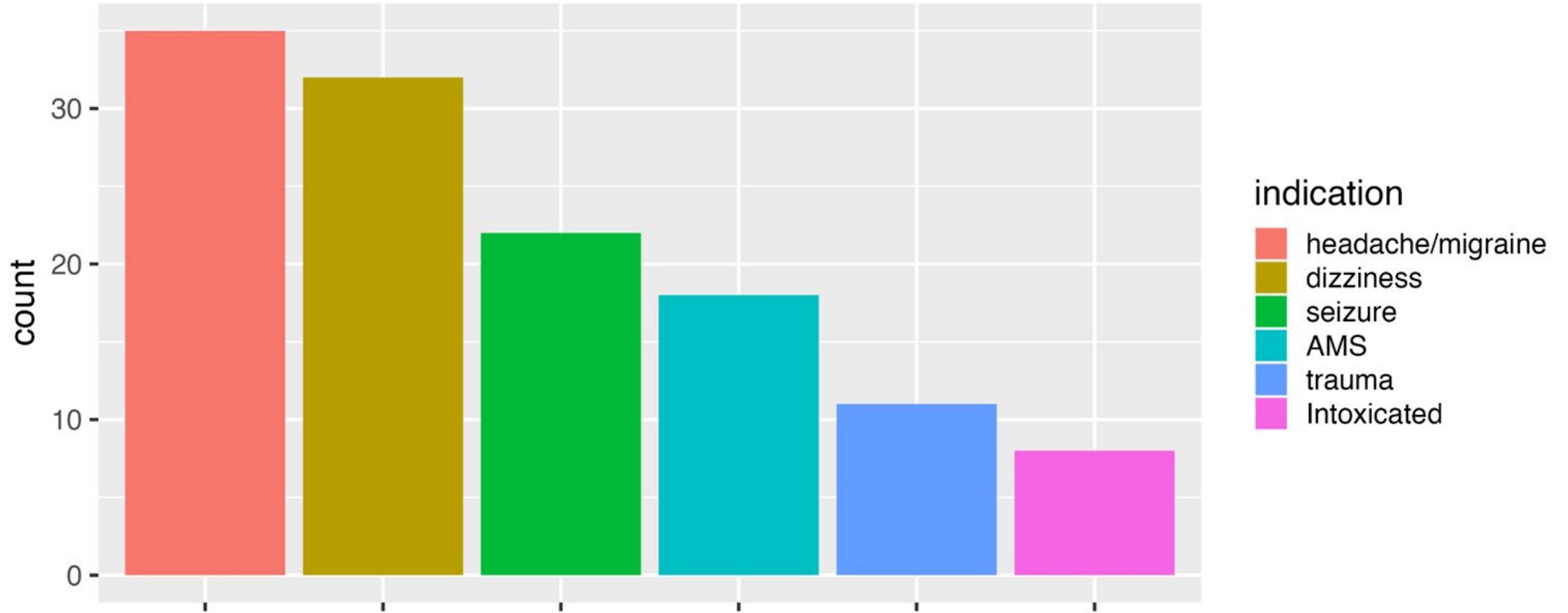


Reviewer assessment by exam

Two reviewers



Presenting symptom



Summary

- Radiologists can prospectively flag overutilization during clinical work
- 60% of flagged studies are confirmed overutilization (with inter-rater reliability 70%)
- CTA Head/Neck +/- NECT and CT Perfusion most overutilized exam types
- Headache/migraine, dizziness common indications for overutilization