

# Adherence to Ottawa Ankle Rules in the emergency department of a London District General Hospital

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**Abstract :** Patients without criteria for imaging by the Ottawa Ankle Rules are highly unlikely to have a clinically significant fracture and do not need plain radiographs. The rule is sensitive and not specific, it provides a clear guide of which patients not to x-ray if all criteria are met. The aim of this QIP is to check the adherence to Ottawa ankle rules for adult traumatic ankle x-rays in the emergency department of University Hospital Lewisham and reduce the number of unnecessary x-rays in the ED.

## Background

Patients without criteria for imaging by the Ottawa Ankle Rules are highly unlikely to have a clinically significant fracture and do not need plain radiographs. The rule is sensitive and not specific, it provides a clear guide of which patients not to x-ray if all criteria are met. The aim of this QIP is to check the adherence to Ottawa ankle rules for adult traumatic ankle x-rays in the emergency department of University Hospital Lewisham and reduce the number of unnecessary x-rays in the ED.

of ED, handouts were distributed in the department and pinned on notice boards in ED. The cycle was completed in February, 2019 which showed greater adherence to Ottawa ankle rules. 28 ankle radiograph requests were analyzed. 89% (25) followed the Ottawa ankle rules, while 11% (3) did not. Avoiding unnecessary requests of ankle x-rays reduced the time spent by patients waiting in ED, improved patient flow through the department, saved the cost of extra radiographs and decreased exposure of patients to radiation.

## Method:

A retrospective review of ankle x-rays requested in the ED over the first week of September, 2018 was done. PACS office provided the data. A detailed analysis of ED clinical clerking notes and radiology requests was done to see if Ottawa ankle rules were followed while assessing the patient and before requesting ankle radiographs.

## Results:

43 ankle radiographs were included in the analysis out of which 76% (33) followed the Ottawa ankle rules, while 24% (10) did not.

## Conclusion:

These findings suggested the unnecessary use of ankle radiographs. Findings were presented in the weekly teaching

## Reference

A study to develop clinical decision rules for the use of radiography in acute ankle injuries. Stiell IG, et al. Ann Emerg Med. 1992.

: <https://www.mdcalc.com/ottawa-ankle-rule>