Introduction
CTU is a high radiation dose investigation and it is important therefore to optimize CTU imaging protocol. Currently there is no internationally agreed standard CTU imaging protocol. Adequate contrast opacification of the renal collecting system is the major limiting factor of CTU quality.

Objectives
To assess adequacy of renal collecting system opacification during CTU using the department protocol

Methodology
The department imaging protocol included non-contrast scan from kidneys to pelvis, post contrast nephrographic phase (90 seconds) and excretory phase (8 minutes) after intravenous injection of 95ml iohexol. Supine scan was first obtained. Prone scan was performed when the lower ureters were not opacified. A total of 30 consecutive CTU from Jan 2013 to Feb 2013 were reviewed retrospectively. Assessment of opacification of each renal collecting system as either complete, near complete and poor/no opacification. The target was based on the audit template from the Royal College of Radiologists: - renal calices and infundibula 95% (complete or near complete) - renal pelvis 98% - upper ureter 85% - lower ureter 72%

Result
- renal calices and infundibula = 100% - renal pelvis = 100% - upper ureter = 100% - lower ureter = 96.7% The department imaging protocol of CTU achieved adequate opacification of renal collection system.