Objective
Assess the quality of the measurement of the uterine artery pulsatility index (UtA-PI) at 11 to 13+6 gestational weeks, at the time of preeclampsia screening.

Method
• multicenter retrospective study
• UtA measurements collected at 11 to 13+6 weeks’ gestation, by 8 operators
• Mean IP values of right and left UtA (MUTA-PI) converted to MoMs (Wright 2012).
• The median and standard deviation (SD) of the log10 MUTA-PI MoM distribution.
• Individual sonographer cumulative sum (CUSUM) and target charts - to assess central tendency and dispersion and to identify systematic measurement errors and deviation from expected measurement performance.

Results
UtA-PI measurements performed in 14148 singleton pregnancies. The operators assessed between 289 and 3652 patients.

Conclusion
CUSUM and target graphs provide an individualized feedback to sonographers. They are an effective method of audit for T1 UtA-PI measurement. We recommend routinely monitoring of the quality of measurements UtA-PI, to ensure consistency and improved performance.