Angle of progression and head-to-perineum distance during labor: correlation between midwives and gynecologists
Hospital Torrejón de Ardoz, Madrid, Spain

Objective
To assess the correlation between measurements taken by midwives who never performed ultrasound examination before and expert gynecologists.

Methods
After completing 5 supervised successful assessments as required training, midwives attending uncomplicated deliveries performed measurements of the angle of progression (AOP) and head-to-perineum distance (HPD) at any stage during labor in women admitted for induction of labor for any indication. Right after them, one expert gynecologist repeated the measurements in a blinded fashion. Intraclass correlation coefficients (ICCs) were calculated to analyse the interobserver variability in the measurements, considering it to be very good when >0.90, good 0.90 to 0.80, moderate 0.80 to 0.60, and poor <0.60.

Results
We included 122 women. ICC was 0.83 (95% CI 0.73-0.90) for the AOP and 0.92 (95% CI 0.88-0.96) for the HPD, therefore showing good and very good correlation respectively.

Conclusion
Attending midwives can reliably assess the AOP and HPD to evaluate progression of labor.