OP 18.03. Septate uterus by updated ESHRE/ESGE, ASRM and CUME definitions: warnings for the healthcare systems, and associated cost analysis.

Artur Ludwin, Inga Ludwin, Marcela A. Coelho Neto, Carolina O. Nastri, Bala Bhagavath, Steven R. Lindheim, Wellington P. Martins

**Objective**
To anticipate costs for global, European and American healthcare systems associated with use of three definition of septate uterus: ASRM-2016, ESHRE/ESGE-2016, and CUME-2018 for surgical management.

**Methods**
“Guesstimation” techniques were used based on available data. The lower limits of 95% confidence interval (CI) of proportion of the septate uterus diagnosed estimated in 261 consecutive women of reproductive age from daily clinical practice were used for calculation of number of septate uterus using ASRM-2016, ESHRE/ESGE-2016, and CUME-2018. The “true” prevalence was considered to be 2%, as estimated by a systematic review. The total expenses were based on the assumption that the average cost would be US$1,500 per operative hysteroscopy, and that metroplasty will be considered as prophylactic procedure before pregnancy in all young women according to the recent ASRM guide.

**Results**
The lower limit of 95% CIs for prevalence of septate uterus by ASRM-2016, ESHRE/ESGE-2016, and CUME-2018 was 3%, 25%, and 9%, respectively, whereas meta-analysis based on unrestricted criteria by societies indicated that prevalence of septate uteri is 2%. According to recent estimation there are 572 million young women (15-22 y) in the world, and 21 million and 27 million young women in the United States and the European Union. The costs associated with the ESHRE/ESGE-2016 definition of septate uterus would potentially cost an extra from 100 to 200 billion dollars in comparison to ASRM-2016 and CUME-2018.

**Conclusion**
This study suggests a potential for overutilization of health care services and a potential for undue risk for harm associated with clinical application of the ESHRE/ESGE definition of septate uterus. Global studies on prevalence and clinical implication of obvious uterine morphologies using 3D ultrasound in general non-medical population are urgently needed.