## Abstract citation ID: bvad114.1662

## Reproductive Endocrinology

SAT357

Rising Incidence, Health Resource Utilization and Costs of Polycystic Ovary Syndrome in the United

Tom Berni<sup>1</sup>, Chris Morgan, PhD<sup>1</sup>, and Aled Rees, MD, PhD<sup>2</sup> <sup>1</sup>Human Data Sciences, Cardiff, United Kingdom; <sup>2</sup>Cardiff University, Cardiff, United Kingdom

## Disclosure: T. Berni: None. C. Morgan: None. A. Rees: None.

Background: Polycystic Ovary Syndrome (PCOS) is a common disorder but trends in incidence and impact on health resource utilization are not known. **Objectives:** 1. To describe secular trends in prevalence and incidence of PCOS in the UK. 2. To establish healthcare resource use and associated primary and secondary care costs. Methods: Data were extracted from the Clinical Practice Research Datalink Aurum database and linked Hospital Episode Statistics (HES) database (2004-2021). Patients (≥18 yrs) of acceptable research quality and eligible for linkage to HES were included. A diagnosis of PCOS was established from medcode or ICD-10 codes. Point prevalence was assessed at the midpoint of each year from 2004-2020. Incident cases (2004-2021) were defined as a first diagnosis (index date) at least 90 days after practice registration. Costs from index date were compared for incident cases (n=132,925) and controls matched (1:1) by age, BMI category and primary care practice. Primary care contacts were assigned an average cost as listed in the Unit Costs of Health and Social Care 2019. Prescription items were assigned a net ingredient cost from the Prescription Cost Analysis for England 2019. Inpatient admissions and outpatient consultations were processed into Healthcare Resource Groups and costed to the National Tariff. Results: The incidence of diagnosed PCOS increased from 1.22 per 1000 person years in 2004 to 1.77 in 2012 and 2.20 in 2019. Point prevalence increased from 0.9% in 2004 to 2.1% in 2012 and 3.4% in 2020. Mean contacts per person year (ppy) for patients with PCOS versus controls were 0.43 vs 0.25 for inpatients (p<0.001), 3.29 vs 1.83 for outpatients (p<0.001) and 6.46 vs 4.71 (p<0.001) for primary care. Mean healthcare costs (ppv) were £748 vs £438 (p<0.001) for inpatients, £383 vs £216 (p<0.001) for outpatients, £156 vs £111 for primary care and £114 vs £87 (p<0.001) for primary care prescriptions. Total health care contacts ppy were 10.81 vs 6.21 (p<0.001) and total associated costs were £1400 vs £852 (p<0.001). Conclusion: The prevalence and incidence of diagnosed PCOS has risen significantly in the United Kingdom over the last two decades. This may be partly due to increased ascertainment and recording on computerised systems. Health resource utilization and costs were almost doubled in women with PCOS compared to controls.

Presentation Date: Saturday, June 17, 2023