presence of a psychiatric co-morbiditity was not significant. However a trend was observed with patients in the lowest weight gain quartile and no psychiatric co-morbiditity having a predicted probability of readmission of 21.8% (SE = 19.2), while those patients with a psychiatric comorbidity and in the highest quartile of rate of weight gain had a probability of readmission of 48.4% (SE = 17.3).

Conclusions: This study was not sufficiently powered to detect the effect of rate of weight gain on readmission. However the observed trend of increased readmissions with rapid weight gain strongly indicates that further study is indicated. Future studies should aim to be powered to detect interactions with psychiatric co-morbidity and rate of weight gain.

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OBESITY

152.

DIAGNOSTIC EVALUATION AND COMORBIDITY SCREENING FOR POLycystic OVARY SYNDROME IN ADOLESCENTS: DOES IT DIFFER ACROSS SUB-SPECIALTIES?  
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Purpose: Polycystic Ovary Syndrome (PCOS) is a diagnosis that can have significant long term health implications. Forty to 85% of adolescents with PCOS are overweight or obese and > 60% have at least one component of metabolic syndrome. The diagnostic criteria for PCOS in adolescents have been subject to much debate. There are no consensus guidelines regarding comorbidity screening. This leads to considerable practice variability between providers and among specialties. Lack of sufficient evaluation risks underdiagnoses and unnecessary tests add to the cost of care. The purpose of this project was to evaluate and characterize this practice heterogeneity.

Methods: Retrospective chart review of a random sample of 103 electronic medical records of adolescent girls (11 – 21 years) who presented to the adolescent medicine (AM), pediatric endocrinology (ENDO) and gynecology (GYN) clinics at a large children’s hospital over a 1 year period (2011-2012), with visit diagnosis codes of PCOS, menstrual cycle disorders or hirsutism was performed. Patients diagnosed with a non-PCOS cause for symptoms were excluded. Data abstracted included details on age, age at menarche, symptoms, BMI, BMI percentile, examination findings, laboratory tests ordered and management plan. The evaluations performed were compared across specialties using Chi -square, Fischer exact and Kruskal-Wallis test, as appropriate.

Results: Fifty-seven patients (18 AM, 20 GYN and 19 ENDO) were eligible for the study. Baseline characteristics including age, reproductive age, age at menarche, menstrual symptom and presence of overweight or obesity were similar across the clinics. The proportion of patients who received LH, FSH, testosterone, prolactin and TSH testing were also similar. As compared to patients in GYN and ENDO, AM patients were less likely to be tested for levels of DHEA-sulfate (95 and 75%, respectively vs. 33%, p < 0.001) and 17 hydroxy progesterone (90 and 78%, respectively vs. 11%, p < 0.001). They were also less likely to receive a pelvic ultrasound (95% in GYN and 47% in ENDO vs. 11% in AM, p < 0.05).

Thirty percent of patients with BMI in the overweight and obese range were not identified. Girls in AM and ENDO were more likely to be identified as having elevated weight (92.8% and 100%, respectively vs. 16.7% in GYN, p < 0.001), acanthosis nigricans (85.7% and 72.7%, respectively vs. 33.3% in GYN, p < 0.001) and to receive advice or referrals for weight management (71.4% and 72.7%, respectively vs. 16.7% in GYN p < 0.001). Proportion of patients who received tests for dyslipidemia (51.4%), diabetes (56.7%) and liver enzyme derangement (54.1%) were not significantly different among clinics.

Conclusions: There is variability across specialties in evaluating adolescent PCOS with significant under evaluation of co-morbidities. The balance between cost and benefit needs to be considered. In order to better identify and treat complications of PCOS, consensus amongst specialists is needed, with subsequent emphasis on dissemination and provider education.

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153.

HIGH SCHOOL SPORTS PARTICIPATION: RISK AND PROTECTIVE FACTORS FOR EARLY ADULTHOOD PHYSICAL ACTIVITY AND OBESITY IN A REPRESENTATIVE LONGITUDINAL STUDY  
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Purpose: To determine the association between adolescent boys’ participation in high school sports (basketball, football, or both) and early adulthood by: (a) levels of physical activity and (b) obesity prevalence.

Methods: The data come from the in-school student questionnaire, the in-home student interview and the parent interview during multiple waves of the National Longitudinal Study of Adolescent Health (Add Health), a school-based study of the early life course. We examined the association of adolescent male obesity with participants in basketball and football (as well as students that reported participating in both sports and no sports). We confined the final analysis to 9,267 male adolescents with valid survey weights that had weight and activity data for at least one of the four survey waves during a 15-year period, Wave I in 1994-1995 to Wave IV in 2008-2009. Measures of BMI and physical activity were collected in every wave while the majority of demographic information was collected in the first two waves. Parent and household information (parental education, household structure, and family income) were also only collected during Wave I and II. We used questionnaire items to construct measurements of recreational sports, traditional sports and cardio are identical in Wave I and Wave II. These items are also identical between Wave III and Wave IV. The differences between the first two waves and the latter two waves are that activities are spread across a greater number of items.

Results: Boys playing no sports were less likely to participate in traditional sports or cardiovascular activity at waves 1, 2, and 3. By wave 4, there were no significant differences in activity based on sports participation in high school. Obesity prevalence was significantly greater at all waves for boys who played football in high school and lowest for boys who played basketball. Higher levels of activity were consistently associated with lower obesity