

Improving the recognition of abnormalities in pubertal development through proper SMR staging in the outpatient clinic setting



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Introduction

Normal pubertal onset ranges between 8-13 years of age in females and 9-14 years of age in males. There are confounding factors, including a decrease in age of onset in African American females or lipomastia mimicking glandular breast tissue. Premature thelarche and adrenarche are generally benign findings. However, conditions that require attention from a subspecialist include: central precocious puberty, a gonadotropin-secreting tumor, medication, and arrest of puberty. Therefore, it is essential that pediatricians regularly and accurately assess pubertal status. Accurate documentation of pubertal development, identification of abnormalities, and proper subspecialist referrals, is all essential to optimal patient care.

Purpose

To improve accurate pubertal staging, documentation, and recognition of deviations from normal pubertal development by Cooper Pediatric resident physicians.

Hypothesis

Our team hypothesizes that medical personnel in the Cooper Pediatrics outpatient clinic, like many other offices, underreport deviations from normal puberty standards. Potential barriers include formatted note templates, resident physician comfort level, time restraints, limitations to sufficient education and focus on this topic. Through re-education on puberty and SMR staging, we postulate that the true incidence of inaccurate pubertal staging and noncompliance with exam is higher than current reports.

Methods

Our quality improvement project aims to assess and improve the recognition of deviations from pubertal norms in >85% of pediatric primary care patients, aged 3-17 years, seen by resident physicians during well child visits. We utilized specific metrics to review 91 charts. We evaluated if physicians appropriately documented SMR staging on the physical exam and subsequently in the plan if any concerns for abnormal pubertal development. Our team developed a knowledge assessment and current practices survey to assess resident baseline compliance and understanding of appropriate SMR staging and pubertal development. We then provided an educational session to discuss results and review why we perform SMR staging and appropriate findings, along with correct documentation. The same metrics were then used to review post-intervention charts in order to determine if there was an increase in the number of charts being appropriately documented.

Results

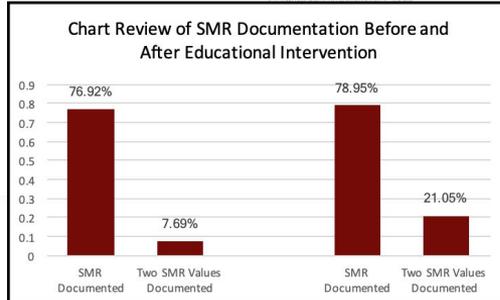


Figure 1: Preliminary data of Pre-Intervention percentage of charts with any SMR documentation (77%) vs two values documented (8%) compared to Post-Intervention values of 79% and 21%, respectively.

Figure 2A and 2B: Results from anonymous resident survey asking how each resident performs SMR staging.

Conclusion

There is room for improvement and education in resident SMR staging and documentation. Residents are cognizant of the importance of charting pubertal documentation, but there are various barriers present that result in them continuing to do so incorrectly. Barriers that we have identified include note templates, comfort with exam, knowledge gaps. Additionally, there is a lack of a reasonable way to confirm accuracy and limitations thus include inaccuracies limited to improper documentation. Future education sessions are planned to further address these issues.

