# Identifying Discrepancies in Diagnosis of PCOS With Use of Different Diagnostic Criteria

Naveena Daram¹, Sangeeta Kaur² M.D.

<sup>1</sup>Class of 2022 M.D. Candidate, Oakland University William Beaumont School of Medicine <sup>2</sup>Department of Obstetrics and Gynecology, Beaumont Health System



### Background

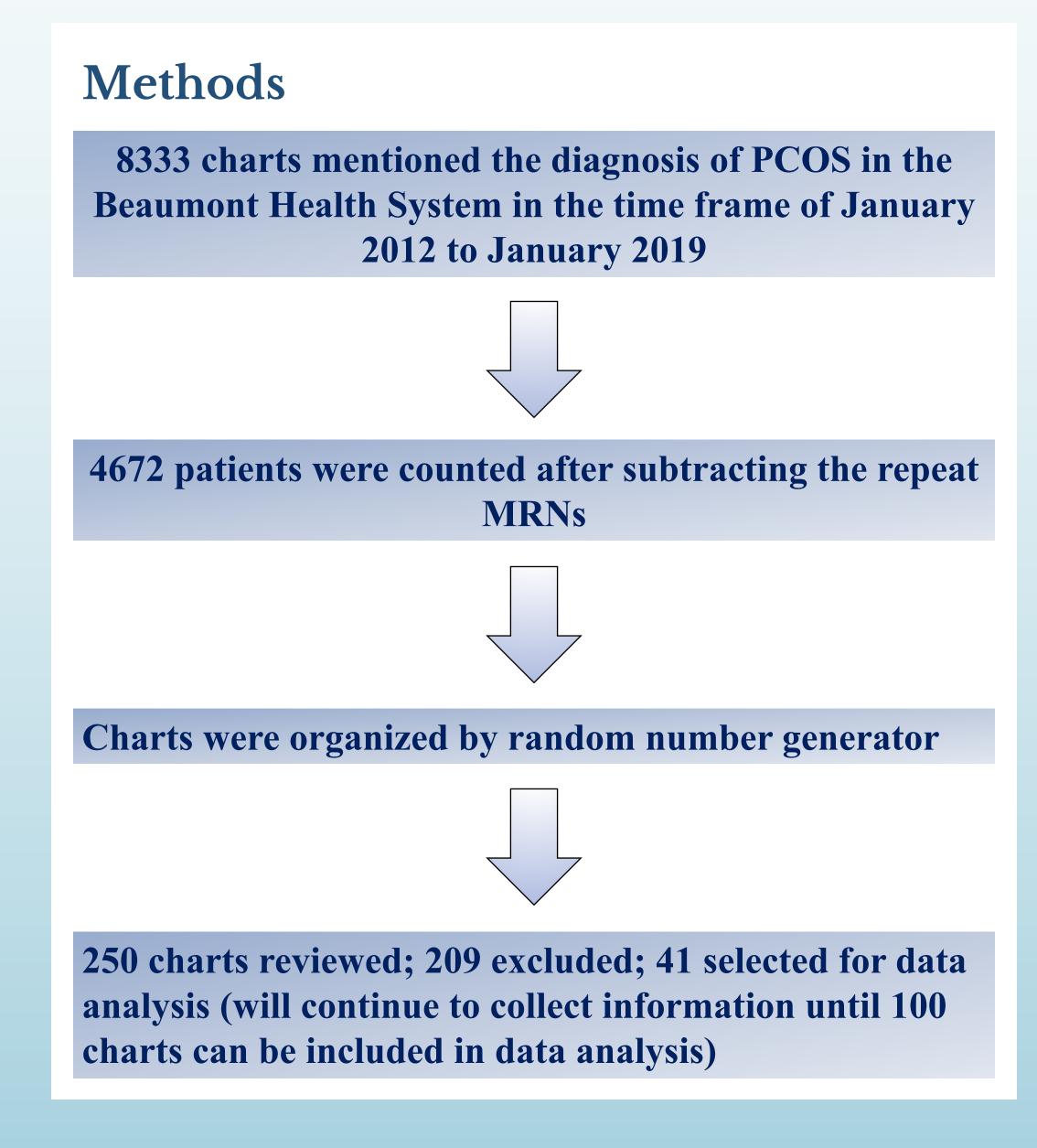
- Polycystic ovarian syndrome (PCOS) is the most common endocrine disorder in women of reproductive age.
- It it primarily characterized by hyperandrogenism, amenorrhea/oligomenorrhea, and polycystic ovaries
- Two main diagnostic criteria are used for PCOS: the Rotterdam and Androgen Excess Society (AES) criteria.
- Depending on which criteria is used, the diagnosis of PCOS may change.
- Therefore, our study investigates the discrepancies in the diagnosis of PCOS when using one criteria versus another in the Beaumont Health System.
- A PCOS diagnosis should not be made lightly as it can come with many lifelong social, emotional, and medical implications.

## Purpose

The specific aims of the study are as follows:

**Aim I:** Assess whether there are discrepancies in diagnosis of PCOS in patients based on the type of criterion the physician used to define the syndrome and identify how significant the discrepancies are if any.

Aim II: Identify whether patients face any long-term or short-term implications starting from the diagnosis of PCOS, such as the placement of medications or other treatments which have been proven to have certain effects



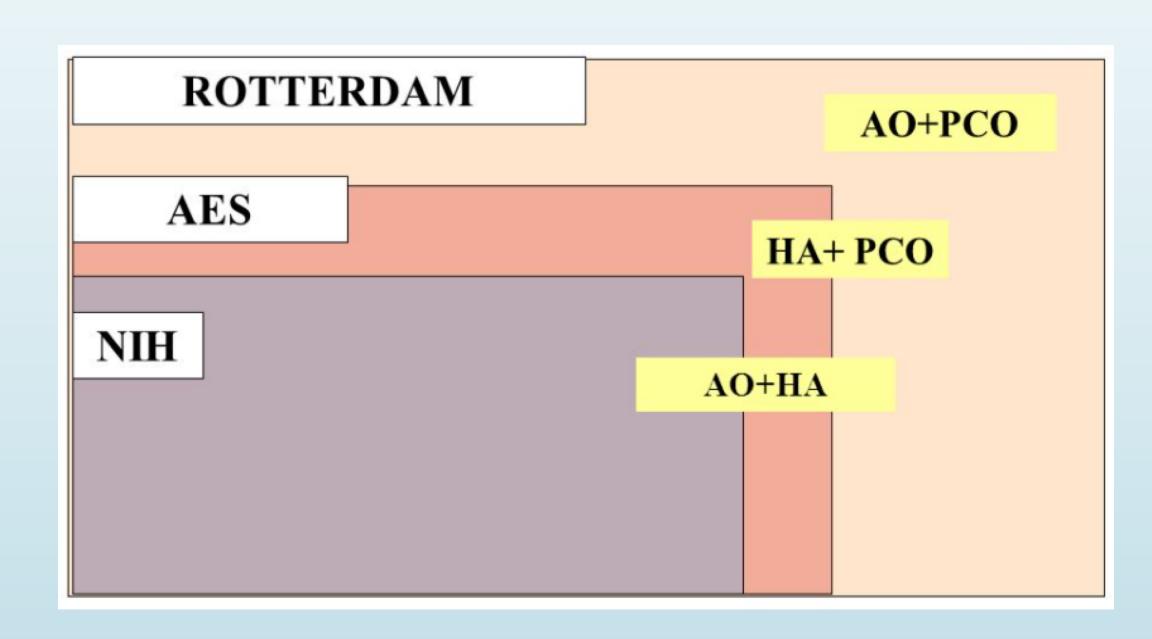
#### **Data Collection**

We have data from 41 patients. Once we obtain all of the data, we will complete a full statistical analysis.

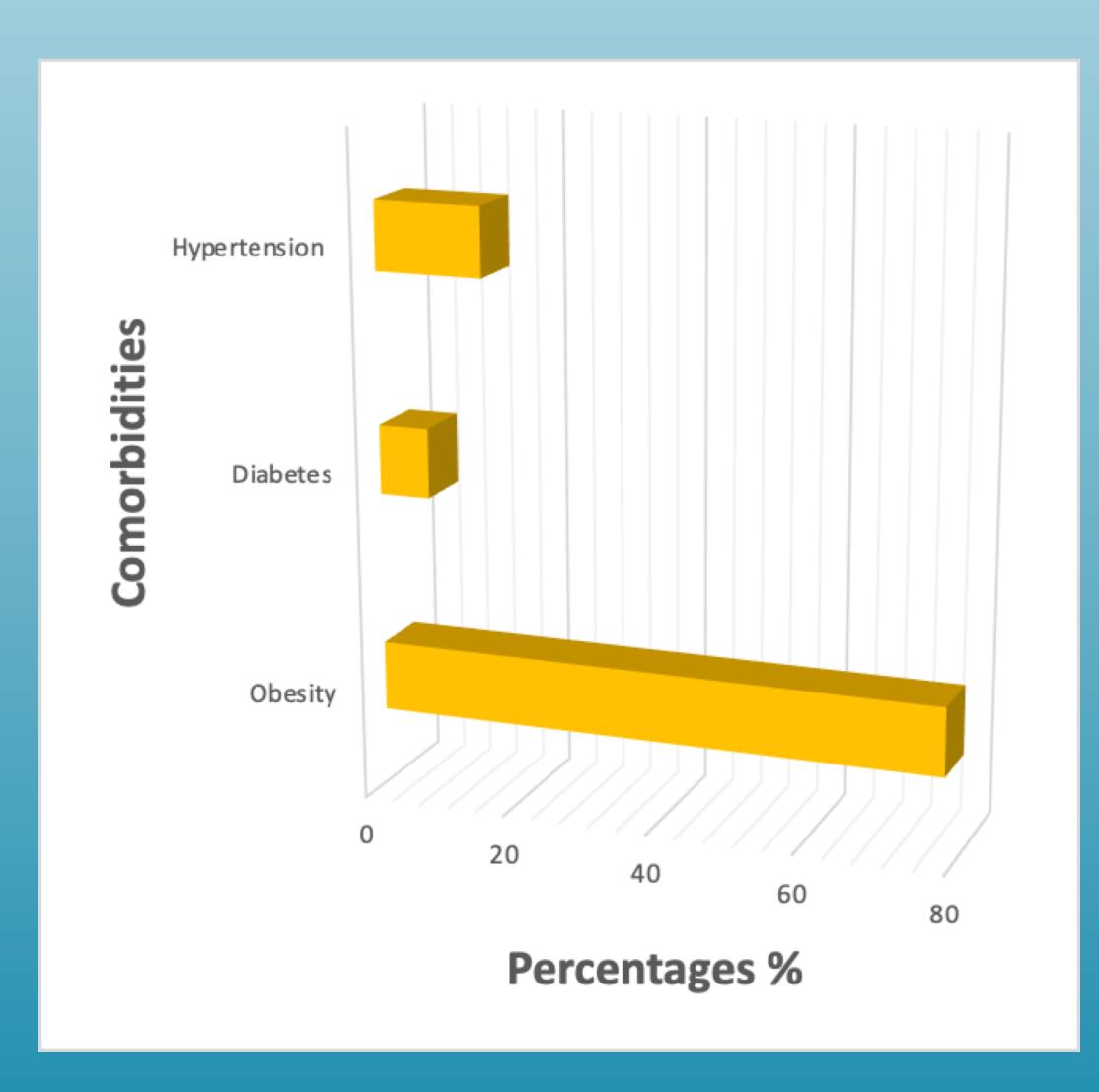
We have collected the following measures:

- Evidence of polycystic ovaries
- Biochemical hyperandrogenism (ie, testosterone levels)
- Clinical hyperandrogenism (ie, hirsutism)
- Signs of ovulatory dysfunction (ie, amenorrhea)
- Age at diagnosis (was unable to obtain for every patient)
- Current age
- Current medications
- Presence of comorbidities (ie, hypertension, diabetes mellitus, obesity)

# **Preliminary Results**



	Patients	Percentages
# of patients that only meet the Rotterdam criteria	4/41	$\sim 10\%$



#### Conclusion

- Our preliminary data suggests that there is a discrepancy in the diagnostic rate of PCOS when using the Rotterdam criteria vs. the AES criteria
- Many of the patients in our research take similar medications and have similar demographics. However, causality cannot be determined in our study. Further research is needed to determine lifelong implications of a PCOS diagnosis.
- Statistical analysis of our final results is still underway
- Future studies should include a broader database of patients including multiple hospitals and a larger sample size for retrospective chart review
- This study sheds light on the need for further research into developing a consensus for diagnostic criteria of PCOS given its potential lifelong implications

#### References

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