

# Current Healthcare Utilization and Costs in Women with Endometriosis

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## INTRODUCTION

- As many as 10% of all women from the onset of menstruation to menopause may develop endometriosis<sup>1</sup>
- Delay between onset of symptom and a diagnosis of endometriosis can be long with one study identifying a median time to diagnosis of 7 years.<sup>2</sup>
- Little is known about use of medical services in the long-term prior to the first endometriosis diagnosis

## AIM

- To develop a greater understanding of endometriosis patients' clinical characteristics, provider characteristics, and costs.
- To provide caregivers with an understanding of patients and their interactions in the health care system leading up to an endometriosis diagnosis

## METHOD

- Used longitudinal commercial claims and encounters from a 1/1/2010-9/30/2018 national database
- Person-specific (blinded) clinical utilization, expenditures, and enrollment were examined.
- Patients with potentially incomplete claims, serious health conditions (i.e., malignant cancer, HIV, Liver Disease, Renal Disease and Acute MI) or costs > \$1M were excluded.
- Continuous insurance eligibility 5 years before and 1 year after first index date and ≥1 EM diagnosis between day 31 and day 365 post-index were required.
- Endometriosis diagnosis was identified by a combination of an International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis code and a confirmatory procedure (e.g., laparoscopy, hysterectomy, oophorectomy) within ±30 days
- The analysis index date was the date of the confirmatory procedure.

## RESULTS

- 5 years prior to confirmed endometriosis diagnosis 93.7% of patients visited an Ob/Gyn; 79.3% family medicine; and 52.9% emergency medicine (Table 1)
- Confirmed diagnosis averaged 984 days (2.7 years) from initial symptoms. (Table 2)
- Diagnoses for painful periods, heavy menses, infertility, and intercourse pain increased in the year before diagnosis. (Table 3)
- Approximately 27% had visits to a chiropractic office (mean 17.94 visits over 5 years); 17.6% had physical therapy (mean 10.53 visits). (Table 4)
- Average annual costs in years 5-2 prior to diagnosis were \$4,318; \$6,791 year immediately prior to diagnosis; \$17,230 in first 6 months post-diagnosis; and \$6,129 in months 7-12 post-diagnosis. (Table 5)
- Oral contraceptive was the most common hormonal therapy. (Table 6)
- Gonadotropin use was 0.8% prior to diagnosis; 12.4% in 6 months following; declined to 8.2% in the next 6 months. (Table 6)
- More than half the patients (60.1%) visited an emergency room (mean 3.46 visits). (Data not shown)

## CONCLUSIONS

- Understanding patient characteristics and historical medical claim activity may provide insight into patient clinical needs leading up to and following confirmed diagnosis of endometriosis.
- Physicians may be able to use patterns of health care utilization to improve diagnosis of endometriosis, increase efficient healthcare utilization and lower costs.

Table 1

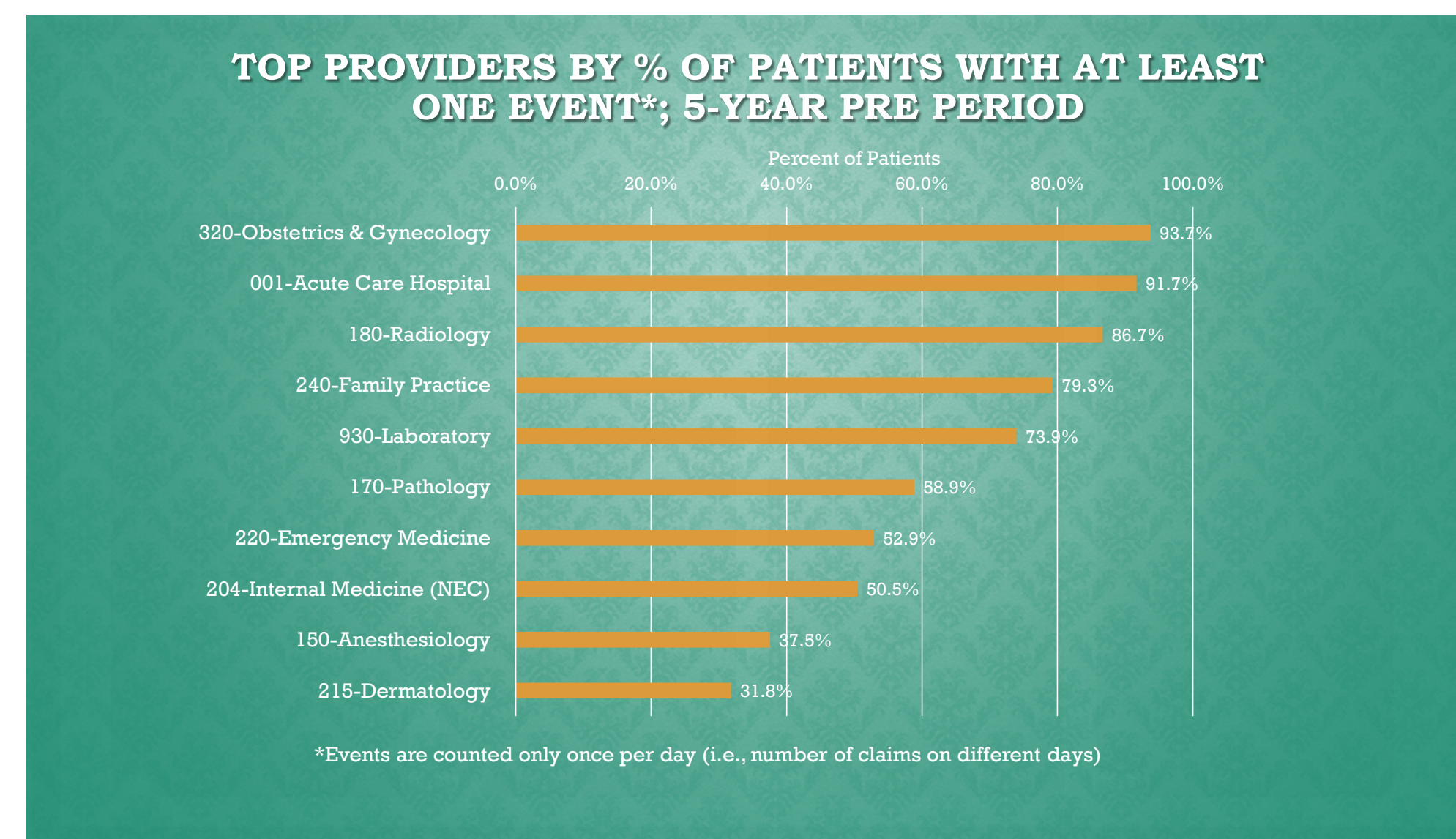


Table 4

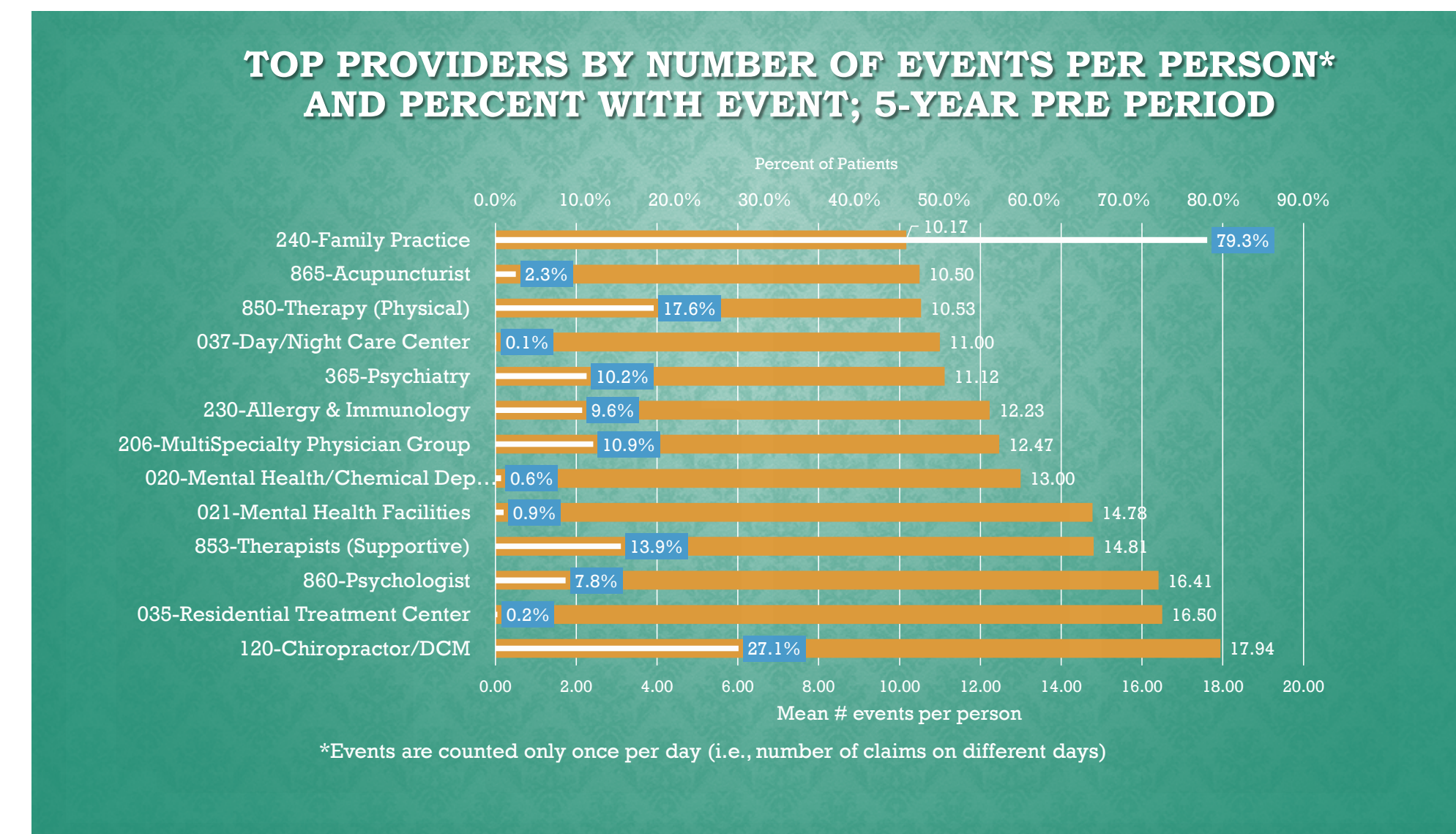


Table 2

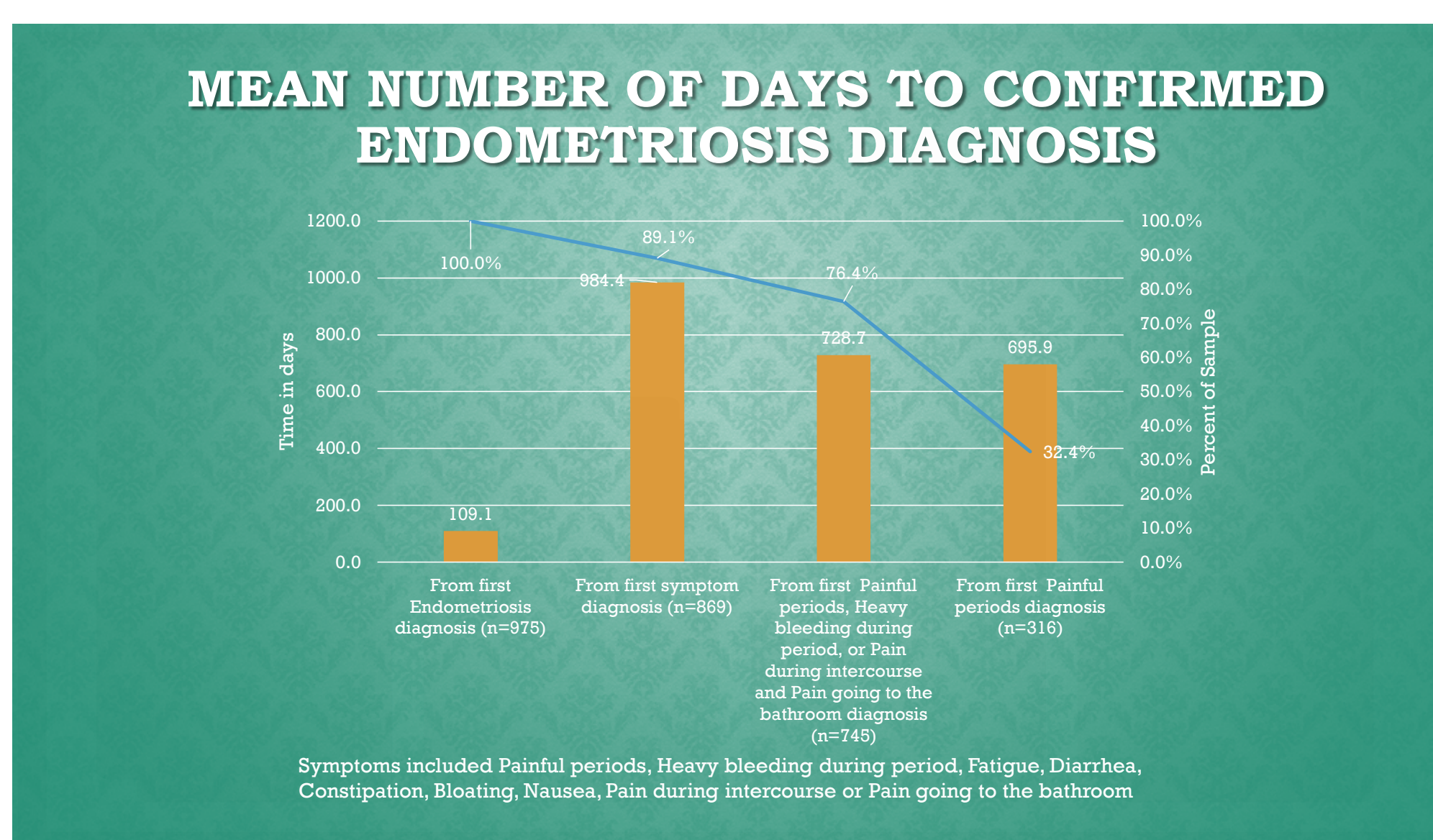


Table 5

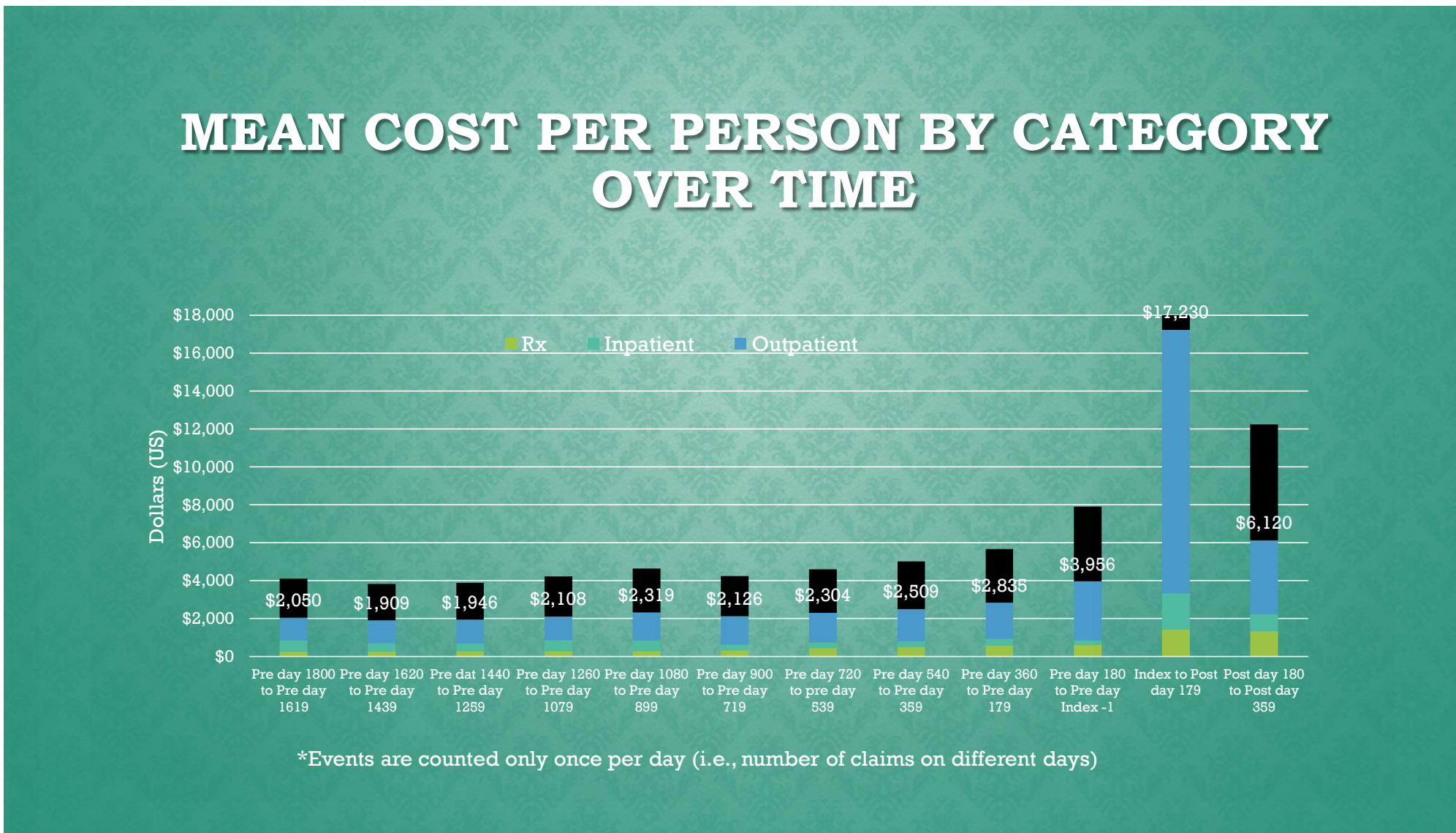


Table 3

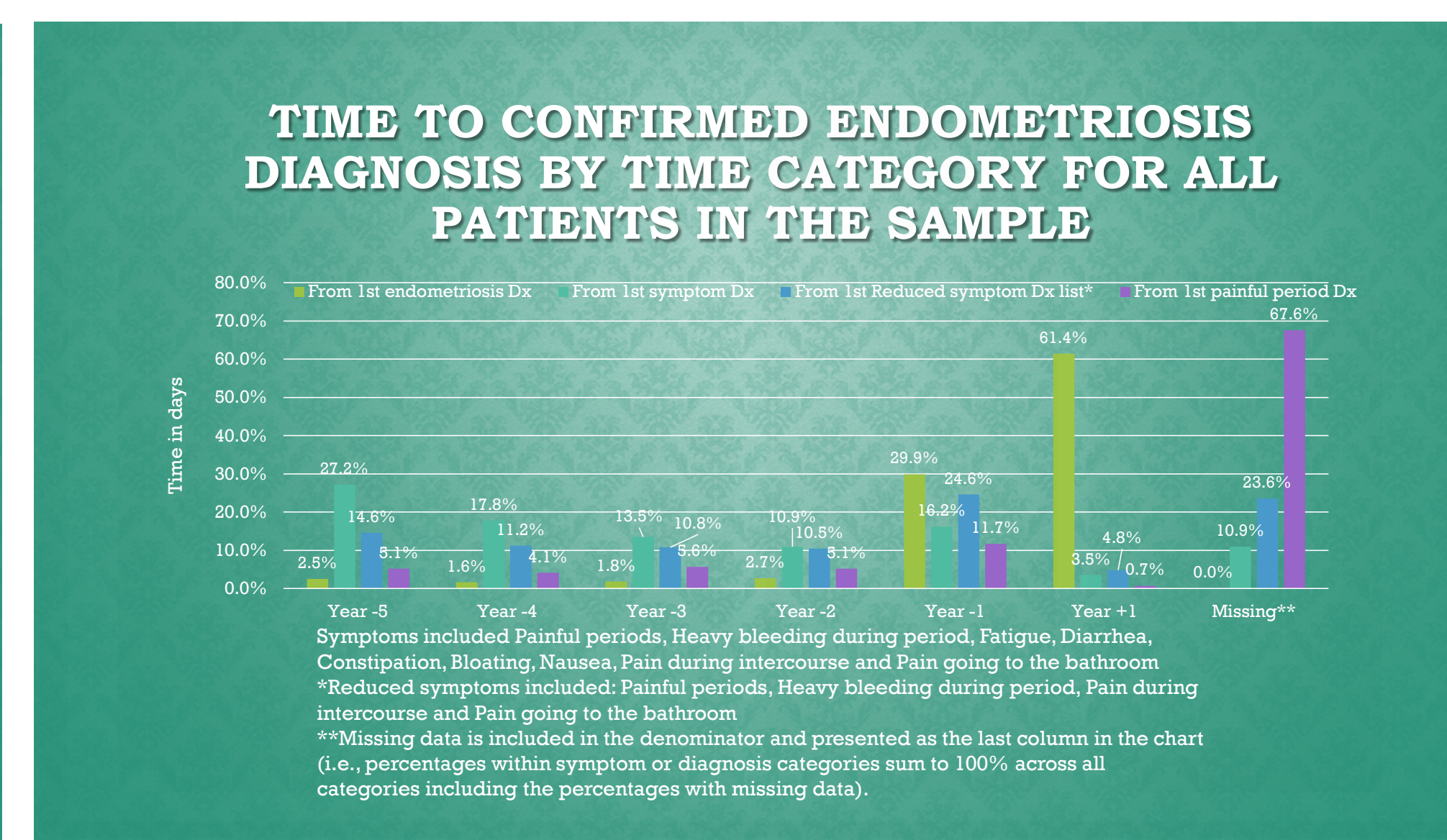
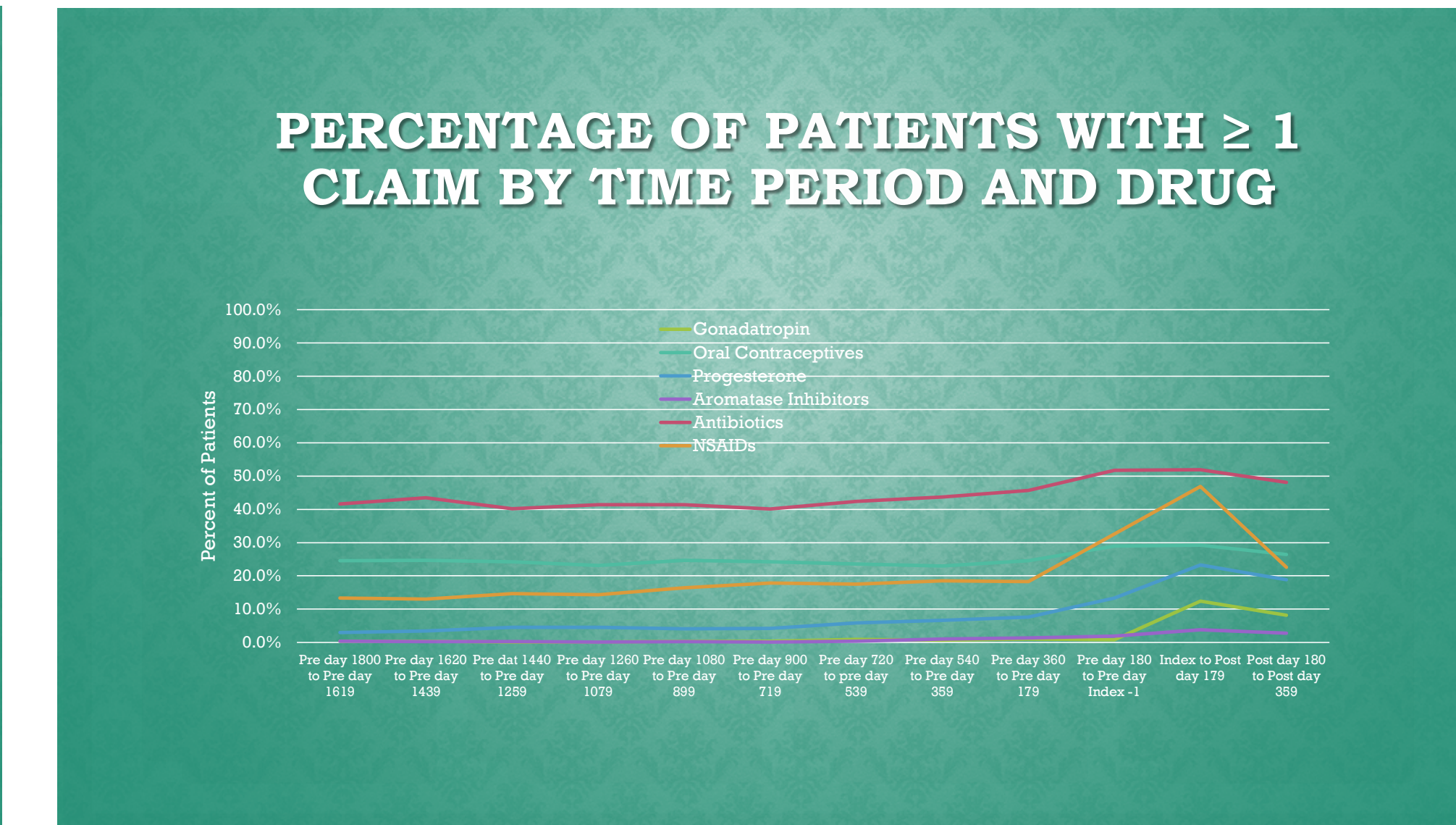


Table 6



## REFERENCES

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- Arruda MS, Petta CA, Abrão MS, Benetti-Pinto CL. Time elapsed from onset of symptoms to diagnosis of endometriosis in a cohort study of Brazilian women. *Hum Reprod*. 2003;18(4):756-759.

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## CONTACT INFORMATION

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