STUDY OBJECTIVE

To describe the costs and clinical outcomes of global endometrial ablation (GEA) and hysterectomy for the treatment of menorrhagia among women insured through Medicaid programs

METHODS

Data Source

This study used health insurance claims from the Truven Health MarketScan® Multi-State Medicaid Database. It contains the pooled healthcare experience of approximately 8.7 million Medicaid enrollees from multiple geographically dispersed states. Included enrollees were required to have remained continuously insured for at least 1 year.

Patient Selection

Women with menorrhagia who underwent GEA or hysterectomy (index event) between January 1, 2006, and December 31, 2010, were identified. Inclusion criteria included:

- At least 2 claims on different days with a diagnosis of menorrhagia in the 12 months prior to the index date
- Age 35-55 on the index date
- Continuous enrollment in the 12 months prior to and following the index event

Exclusion criteria included:

- Diagnosis of menopause prior to the index date
- Diagnosis of a primary cancer at anytime during the study period

Complications were defined as the presence of cervical occlusion, cervical trauma (including cervical lacerations and hematometra), uterine perforation, bowel perforation, fluid overload, pregnancy, pyometra, senile cervicitis, and device complications; a second GEA or hysterectomy within 30 days; or an inpatient stay or ER visit within 2 days of the index procedure (excluding patients with an inpatient index event).

Baseline Characteristics during 12-Month Pre-Index Period

- 1,880 women met the study criteria (mean age = 46.2); approximately one-half (50.4%) were Caucasian, 33.1% were African-American, and 2.3% were Hispanic. (Table 1)
- Nearly one-half (45.8%) of the women received their Medicaid eligibility due to disability.
- Slightly more patients received GEA (50.9%) than hysterectomy (49.1%). (Table 1)
- Both GEA and hysterectomy patients had similar baseline Dayo-Charlson Comorbidity scores (0.65) and similar baseline use of antibiotics (69.4%), baseline use of prescription non-steroidal anti-inflammatory drugs (56.3%), or oral contraceptives (5.3%). (Table 1)
- The age distributions were statistically significantly different and skewed modestly older for hysterectomy patients.

Table 1. Baseline Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>GEA (N = 923)</th>
<th>Hysterectomy (N = 957)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean, SD)</td>
<td>45.2, 6.9</td>
<td>46.0, 6.9</td>
<td>0.06</td>
</tr>
<tr>
<td>Charlson Comorbidity Index (N, %)</td>
<td>0.69, 1.18</td>
<td>0.62, 1.08</td>
<td>0.68</td>
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</tbody>
</table>

Direct Medical Costs

Expenditures of Patients with Complications

- Nearly all GEA procedures (93%) occurred in an outpatient setting while 87% of hysterectomies occurred in an inpatient setting.

CONCLUSIONS

Hysterectomy was nearly 3 times more costly than GEA for the treatment of menorrhagia, with significantly higher rates of treatment-related complications: this is consistent with previous studies comparing complication rates between GEA and hysterectomy. These results and others from this study are timely, as new federal mandates for Medicaid treatment expansion are likely to focus on outpatient treatments as ways to reduce Medicaid costs.

LIMITATIONS

- Procedure coding is limited in its ability to differentiate specific types of GEA or hysterectomy for more specified analysis.
- As observed in other retrospective claims database analyses, the most completely recorded data are those that attract reimbursement. Hence, it is expected that the capture of expenditures is highly accurate whereas there is a potential for under-ascertainment of individual comorbidities and indicators of severity.
- The study population consists of patients covered by Medicaid; therefore, the results may not be representative of all patients with menorrhagia, especially patients insured through commercial plans or Medicare and the uninsured.

REFERENCES

4. Truven Health Analytics, Cambridge, MA.

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