

Assessing Geographic Variation in Rates of Recurrent or Metastatic Cervical Cancer (Based on Commencement of Systemic Therapy) Among Medicaid Enrollees

C.A. Leath 3rd¹, J. Nysenbaum², A. Fiori³, J. Ting⁴, Y.J. Zhang⁴, N. Pauly³

¹O'Neal Comprehensive Cancer Center, University of Alabama in Birmingham, Division of Gynecologic Oncology, Birmingham, AL, USA. ²Mathematica, Princeton, NJ, USA. ³Manatt Health Strategies, New York, NY, USA. ⁴Seagen Inc., Bothell, WA, USA

IGCS 2022
ANNUAL GLOBAL MEETING

INTRODUCTION

- Cervical cancer (CC) disproportionately impacts individuals insured through Medicaid
- Previous research has assessed characteristics of Medicaid beneficiaries with recurrent or metastatic CC (r/mCC) but has not examined geographic variability in r/mCC burden
- A better understanding of the geographic variation of r/mCC burden among Medicaid enrollees will help stakeholders identify areas of the US with high cervical cancer education and resource needs and target interventions to these areas

METHODS

Study Design and Data Source

- Retrospective analysis of nationwide Medicaid claims data to assess geographic variability of cervical cancer and r/mCC burden from 2016 – 2019
- This study relied on Transformed Statistical Information System (T-MSIS) Analytic Files (TAF), which include beneficiary-level Medicaid enrollment data as well as claims and encounter data from all state Medicaid agencies

Patient Population

- CC patients were identified as those with ≥ 1 inpatient or ≥ 2 outpatient claims with a CC ICD-10 code (C53.xx)
- r/mCC was defined as:
 - CC with ≥ 1 claim for systemic therapies included in guidelines for treatment of r/mCC on or after the first CC diagnosis date, and ≥ 45 days following chemoradiation or surgery (index date)
 - Continuously enrolled with full Medicaid benefits for ≥ 6 months preceding and ≥ 3 months following systemic treatment initiation

Geographic Distribution

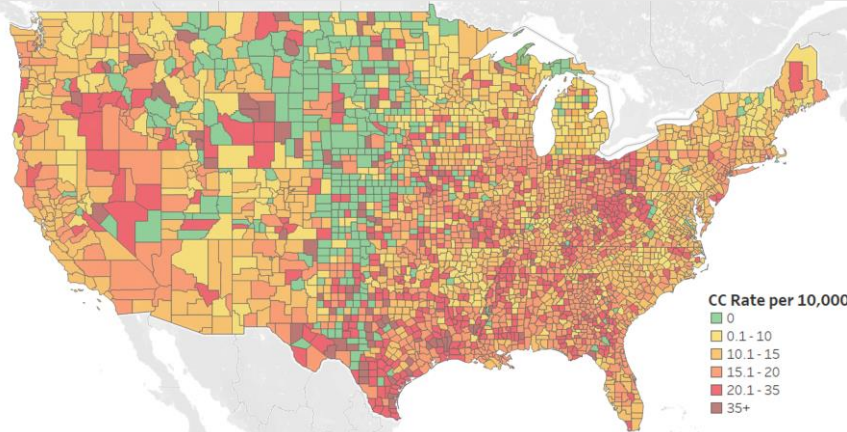
- CC rates were number of CC patients over the total number of adult female Medicaid beneficiaries for each state or Metropolitan Statistical Area (MSA) in a given year
- r/mCC rates were number of patients initiating r/mCC systemic therapy over total CC diagnosed patients in a given state or MSA in a given year

Statistical Analysis

- Overall and annual rates of CC and r/mCC were calculated at the state and MSA levels from 2016 – 2019

RESULTS

Figure1: MSA level cervical cancer rates per 10,000 adult female Medicaid beneficiaries (2016 – 2019)

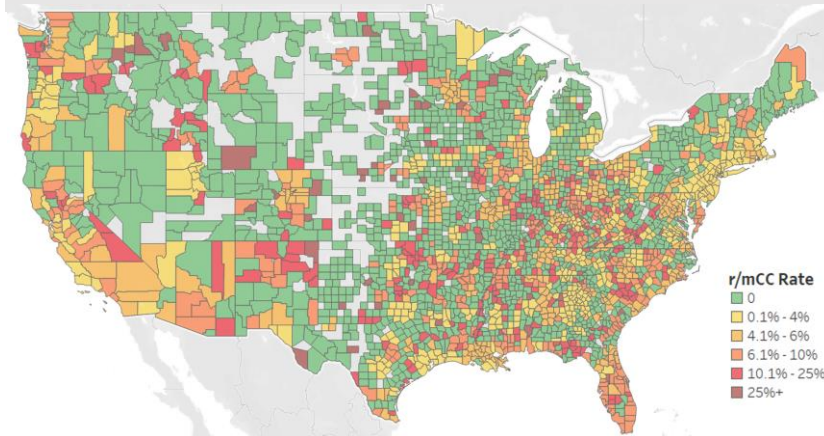


Note: Alaska, Hawaii, and Puerto Rico not shown

- 70,865 adult CC patients were identified in 2016-2019, among whom 3,375 initiated r/mCC systemic treatment
- Relatively more MSAs in the South, Midwest, and West appear to have higher CC rates (>20 cases/10,000) (Fig 1). These regions somewhat correspond to those with higher r/mCC rates (Fig 2)

- Three MSAs had r/mCC rates consistently $>5\%$ from 2017–2019, although these rates have been decreasing over time (Tab 1)

Figure2: MSA Level r/mCC rates among adult female Medicaid beneficiaries with cervical cancer (2016 – 2019)



Note: Alaska, Hawaii, and Puerto Rico not shown. Gray areas did not CC diagnoses from 2016 – 2019.

Table 1: MSAs with r/mCC rates consistently $>5\%$ (2017-2019)

MSA	r/mCC Rates			CC Rate per 10,000		
	2017	2018	2019	2017	2018	2019
Kokomo, IN	10.0%	6.7%	6.7%	11.2	16.5	16.2
Gulfport-Biloxi, MS	11.8%	5.4%	5.0%	10.7	11.7	12.8
Kennewick-Richland, WA	7.1%	6.3%	5.9%	4.4	5.1	5.4

CONCLUSION

- Although MSAs with consistently high r/mCC burden show a decreasing trajectory over time, their underlying CC rates have been increasing or remained stable, potentially suggesting decreased initiation of systemic therapy among r/mCC patients
- Our analysis identified areas with disproportionately high CC and r/mCC disease burden to inform targeted interventions