PS5-11-20

Long Term Impact of Medicaid Expansion on Breast Cancer Mortality

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SAN ANTONIO BREAST CANCER SYMPOSIUM®
DECEMBER 10–13, 2024
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Background

- Early detection and access to care are essential components to improve breast cancer outcomes. (1)
- The Affordable Care Act (ACA) allowed states the option to expand Medicaid coverage to cover those living at ≤138% of the federal poverty level (1)
- Not all states chose to expand, creating a natural comparison group of people with and without healthcare insurance.
- This study explores whether states agreeing to Medicaid expansion reduced breast cancer mortality rates after 2015.

Methods and Materials

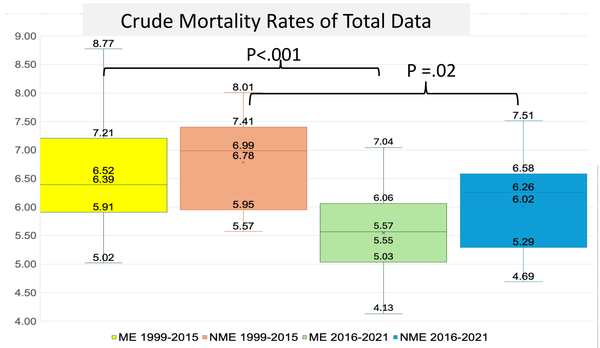
- **Study Design:** Retrospective analysis using CDC WONDER database from 1999–2021 (2) assessing breast cancer mortality rates per 100,000 death (Crude Mortality Rates (CMR))
- **Study Population:** Predominantly female (<1% male) and predominantly White (ME states: 79.07% vs NME states: 72.58%). Medicaid Expansion (ME) states had more Asian American/Pacific Islander patients than Non-Medicaid Expansion (NME) states (ME states 4.69% vs 1.42%). NME states had a higher proportion of Black patients (ME states: 15.76% vs 25.44%).
- **Primary Research Question:** Breast cancer mortality rates before and after Medicaid Expansion
- **Subgroup 1:** Breast cancer mortality rates based on ages
- <40 or ≥ 40.
- **Subgroup 2:** Breast cancer mortality rates after excluding Wyoming and Alaska (fewest oncologists per capita reflecting states that offer less specialized access)
- **Groups**
  - **ME States:** States that expanded before or during 2015
  - **NME States:** States that have not expanded or expanded after 2021
  - **Excluded:** States expanded between 2016-2021 or did not have adequate data.

Methods and Materials

- **Statistical Analyses:** For each of the above research questions four F-test and T-test were conducted:
  1) CMR pre-expansion (2015 and prior) ME states vs. pre-expansion NME states.
  2) CMR post expansion (post 2015) ME states vs. post expansion NME states
  3) CMR pre-expansion ME states vs. post expansion ME states
  4) CMR pre-expansion NME states vs. post expansion NME states

Results

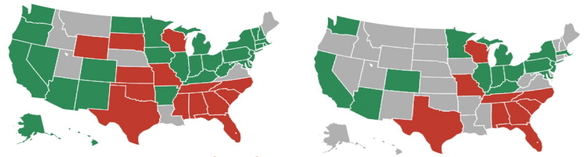
- **Total Population Breast Cancer CMR:**
  - Pre ME vs Pre NME: **6.52 vs. 6.78**, (p=.33)
  - Post ME vs Post NME: **5.57 vs .6.02**, (p = .06)
  - Pre ME vs Post ME: **6.52 vs. 5.57,** (p < .001)*
  - Pre NME vs Post NME: **6.78 vs. 6.02,** (p = .02)*



- **Breast Cancer CMR After Excluding WY & AK**
  - Pre ME vs Pre NME : **6.53 vs 6.76,** (p = 0.14)
  - Post ME vs Post NME : **5.55 vs 6.02**, (p = .04) *
  - Pre ME vs Post ME : **6.53 vs 5.55,** (p < .001) *
  - Pre NME vs Post NME : **6.76 vs 6.02,** (p = .01) *

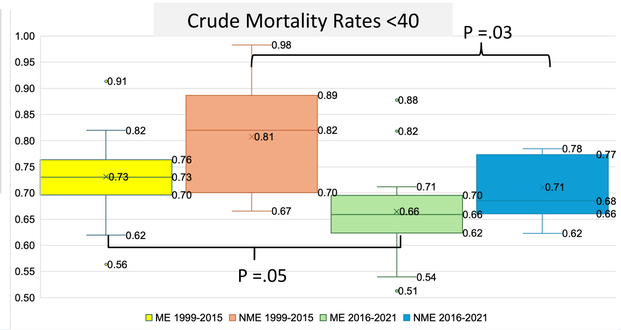
Medicaid Expansion Status (Full Analysis)

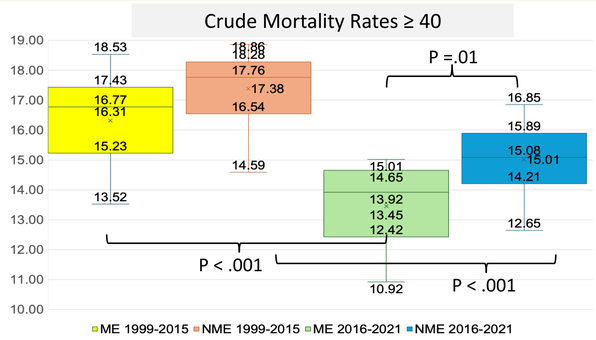
Subset Analysis of Age <40 vs >40



Non-Medicaid Expansion States
Expansion States
Not Included.

- **Breast Cancer CMR By Age Group**
  - **<40 years**
    - Pre ME vs Pre NME : **0.73 vs 0.81,** (p = .06)
    - Post ME vs Post NME : **0.66 vs 6.02,** (p = .20)
    - Pre ME vs Post ME : **0.73 vs 0.66,** (p =.05) *
    - Pre NME vs Post NME : **0.81 vs 0.71,** (p = .03) *
  - **≥40 years**
    - Pre ME vs Pre NME : **16.31 vs 17.38,** (p = .09)
    - Post ME vs Post NME : **13.45 vs 15.01,** (p = .01) *
    - Pre ME vs Post ME : **16.31 vs 13.45,** (p < .001) *
    - Pre NME vs Post NME : **17.38 vs 15.01,** (p < .001) *





Discussion & Conclusion

- Medicaid Expansion is associated with significant long-term reductions in breast cancer mortality.
- Effects are most pronounced in women aged 40–64, aligning with standard screening ages.
- Excluding states with fewer oncologists amplifies the effect of Medicaid Expansion, showing the importance of specialist access.
- For younger women (<40), improvements were smaller, suggesting barriers such as awareness, screening, and risk education.
- Expanding healthcare coverage and oncologist access can improve survival and reduce state-level disparities.

Future Directions

- Future research should explore how long-term access to specific treatments, time to diagnosis, and stage of cancer were affected by Medicaid Expansion. In addition, studies should examine racial and socioeconomic disparities in greater detail which could help identify whether Medicaid Expansion has succeeded in narrowing health equity gaps.

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References
1. Giannouchos.Theodoros V., Ukert, Benjamin, *et al.* 'Association of Medicaid Expansion With Emergency Department Visits by Medical Urgency'. *JAMA Network Open*, vol. 5, no. 6, 14th Jun. 2022, pp.e2216913, doi:10.1001/jamanetworkopen.2022.16913.
2. 'CDC WONDER' https://wonder.cdc.gov/, Accessed 10 July 2025.

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