Sustained Voluntary Medicaid Core Set Reporting and Cancer Screening Performance: Implications for State Quality Strategy

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Research Question

Is reporting consistency and sustained participation in Medicaid Quality Measures Reporting (QMR) associated with differences in performance and trend stability in cancer-related screening measures across states over time?

Rationale

State QMR reporting has historically been voluntary and inconsistent across measures and years. Prior research has found mixed associations between public quality reporting and improvements. However, little is known about whether consistency in QMR reporting itself is associated with differences in observed performance trends across states. As CMS transitions toward mandatory reporting of specific Core Set measures, it remains unclear whether differences in reporting consistency or duration meaningfully influence observed performance on outcomes. To address these gaps, we sought to answer the following:

- Is the duration of reporting associated with changes in cancer-related screening and prevention rates over time?
- Do states that continuously report cancer-related screening measures to QMR have different performance trajectories than states who report intermittently?
- How does reporting consistency influence the stability and interpretation of observed performance trends?

Data Sources

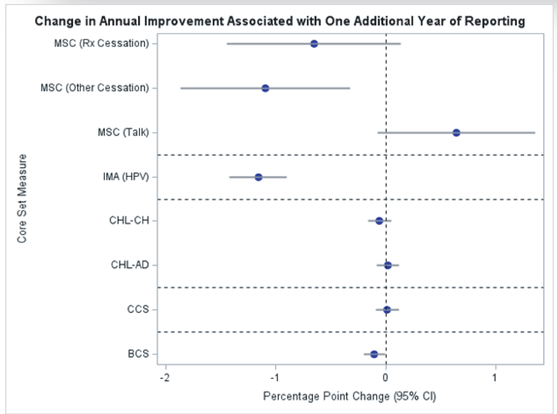
- CMS Medicaid/CHIP Child and Adult Core Sets for FFY 2014 - 2023
- CMS Medicaid/CHIP Quarterly Medicaid and Managed Care Enrollment Files
- HRSA Area Health Resource Files (provider-to-population ratios)

Statistical Analysis

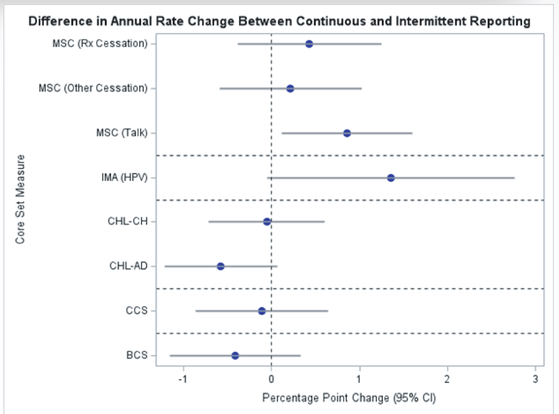
- Descriptive analyses to summarize annual changes in Core Set measure rates and to compare variability between continuously and intermittently reporting states.
- Measure-specific linear mixed-effects models using state-year observations for each measure separately to assess if adherence rates changed over time and whether trends differed by reporting consistency and duration.
- Interaction terms were included to test whether continuously reported measures improved at different rates than intermittently reported measures.
- All models were adjusted for state-level characteristics and included random intercepts to account for unobserved differences across states as well as measure-specific variation within states. All analyses were completed using SAS 9.4.

Key Findings

- We found limited evidence that additional years of QMR reporting was associated with improved adherence/screening rates over time across states.
- For some rate definitions (e.g., HPV screening, Smoking Cessation), additional years of reporting were associated with either slower improvement or declining performance over time.
- Sustained participation in QMR reporting may be associated with a better performance trajectory for some measures, but the association is not uniform or strong enough to conclude a consistent reporting advantage.



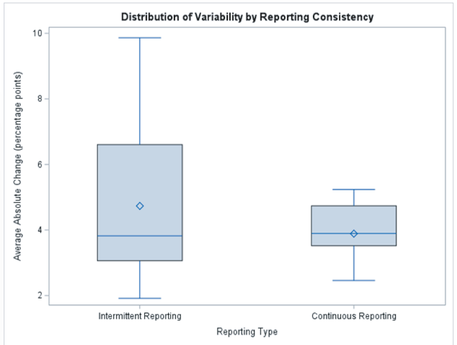
Additional years of reporting were not consistently associated with improved performance across measures. There were signals of either slower improvement or declining performance over time for IMA (HSV) and select MSC rates.



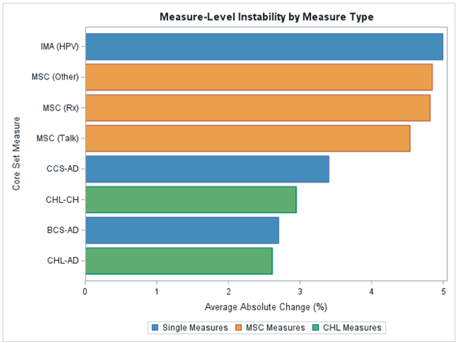
Continuous reporting was directionally associated with better performance in several rate definitions, particularly for portions of the MSC (smoking cessation) measures, but differences were modest and not consistently statistically significant.

Definitions

BCS (Percentage of Women Receiving Mammogram, Ages 50 - 64)
CCS (Percentage Screened for Cervical Cancer, Ages 21 - 64)
CHL-AD (Percentage of Sexually Active Women Screened for Chlamydia, Ages 21 - 24)
CHL-CH (Percentage of Sexually Active Women Screened for Chlamydia, Ages 16 - 20)
IMA-HSV (Percentage Completing the HPV Vaccine Series by their 13th Birthday)
MSC-Talk (Percentage of Tobacco Users Advised to Quit)
MSC-Cessation Other (Percentage of Tobacco Users Discussed Cessation Strategies)
MSC-Cessation Rx (Percentage of Tobacco Users Recommended Cessation Medications)



Intermittently reporting states exhibited substantially greater variability in overall QMR rates compared to continuously reporting states, even after accounting for differences across measures.



Variability in Core Set rates was not uniform. Certain measure types, particularly all three MSC rate definitions (tobacco cessation) and HPV vaccination rates, exhibited substantially higher instability than other measures.

Conclusion

Continuous reporting is modestly associated with better performance for smoking cessation, though effects are small and not consistently significant. There is no clear cumulative benefit from additional years of reporting; some measures (e.g., HPV) show slower improvement or decline over time. Overall, continuous reporting may offer limited gains in specific contexts but is not a strong driver of performance improvement, with progress potentially plateauing without complementary quality improvement strategies

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