The Affordable Care Act and Workers Compensation

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Outline of Topics

- The Affordable Care Act (ACA) and Medical Insurance Expansion
- The ACA and “Crowding Out”: Access to Primary Care
- The ACA and Wellness: Obesity and Medical Costs
- Conclusions
The ACA and Medical Insurance Expansion
New Insureds Under the ACA

- The ACA increased the medically insured population
  - Via the health insurance mandate in all states
  - Via Medicaid expansion in some states
  - Medicaid expansion, where it applies, creates a greater increase in the share of new medical insureds than the health insurance mandate

- ACA insurance exchanges and Medicaid expansion took effect in 2014
  - In 25 states including DC, Medicaid expansion took effect on January 1, 2014
  - Seven other states have expanded Medicaid since then
  - No state has rescinded its decision to expand Medicaid
Medicaid Expansion Decisions
ACA-Blue and ACA-Red States

ACA-Blue: AK AR AZ CA CO CT DC DE HI IA IL IN KY LA MA MD MI MN MT ND NH NJ NM NV NY OH OR PA RI VT WA WV
ACA-Red: AL FL GA ID KS ME MO MS NC NE OK SC SD TN TX UT VA WI WY

Medically uninsured nonelderly as a percentage of state nonelderly population

Nonelderly includes persons 0–64 years of age

Increase in Medically Insured Nonelderly from 2013 to 2014

- Change in the medically insured nonelderly as a share of state nonelderly population

The ACA and “Crowding Out”: Access to Primary Care
Access to Medical Service
Medicaid Expansion and “Crowding Out”

- ACA increases the medically insured population
  - Particularly via Medicaid expansion

- Does medical service demand from new insureds under the ACA “crowd out” WC?
  - Access to primary care, in particular

- Some states expanded Medicaid, others did not

- A natural experiment:
  - 16 NCCI states expanded Medicaid as of January 1, 2014
  - 19 NCCI states did not expand Medicaid during 2014
  - Compare the experience of both groups for 2012–2014

Note: New Hampshire expanded Medicaid effective August 15, 2014, and is excluded from the natural experiment
Measuring Medical Service Utilization

- The amount of medical services provided is measured at the transaction or hospital inpatient episode level
  - Each service is assigned a value based on the 2013 Medicare fee schedule amount, not adjusted for payment locality
  - The 2013 Medicare fee schedule is a constant yardstick for valuing different types of medical services: it is the same in every year and in all states

- Transactions for the first 90 days from the accident date for each claim are counted
  - Average medical service intensity per claim is: 
    \[
    \frac{\text{Total 90-day medical services at Medicare values}}{\text{(Total Claims)}}
    \]

- We use accident years beginning October 3
  - As an example, 2014 AY includes claims with accident dates from October 3, 2013 through October 2, 2014
  - 2012 and 2013 AYs are defined similarly
Primary Care services
- Includes office visits, ER visits, x-rays, MRI’s, testing
- Excludes surgery, physical medicine, drugs, supplies

In any state, Primary Care intensity may vary from year to year for several reasons including:
- Adoption of new treatment protocols
- Revised fee schedules
- Network penetration
- Injury mix
Variation in Primary Care Service Intensity

- The analysis here separates states into two groups:
  - Medicaid expanders effective as of January 1, 2014
  - Medicaid non-expanders during all of 2014

- We assume that 2014 Medicaid expansion is independent of other factors affecting Primary Care intensity
  - Variation in Primary Care intensity exists within each group, but is assumed to be independent between groups
A Natural Experiment
NCCI States With Medicaid Expansion Effective January 1, 2014

- Distribution of Primary Care intensity for states that expanded Medicaid is similar in all years
  - Group mean is static for 2012, 2013, 2014: 3.1 PC Svc / Claim
  - Group standard deviation is static for 2012, 2013, 2014: 0.3 PC Svc /Claim

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With No Medicaid Expansion Effective 2014

Distribution of Primary Care intensity for states that did not expand Medicaid is similar in all years

- Group mean is static for 2012, 2013, 2014: **3.1** PC Svc / Claim
- Group standard deviation is static for 2012, 2013, 2014: **0.4** PC Svc / Claim

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With Medicaid Expansion Effective January 1, 2014

Change in Primary Care Services per Claim
First 90 Days

- \( \Delta \) (Primary Care intensity at 90 days) for 2014 Medicaid expansion states
  - Group average: \( -0.9\% \ 2012-13 \quad -0.1\% \ 2013-2014 \)
  - Group standard deviation: \( 2.3\% \ 2012-13 \quad 3.1\% \ 2013-2014 \)
  - No group-wide pattern in Primary Care intensity change from 2013 to 2014

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With No Medicaid Expansion Effective 2014

Change in Primary Care Services per Claim
First 90 Days

- (Primary Care intensity at 90 days) for 2014 Medicaid non-expansion states
  - Group average: \(-0.2\%\) 2012–13  \(0.2\%\) 2013–2014
  - Group standard deviation: \(2.7\%\) 2012–13  \(3.0\%\) 2013–2014
  - No group-wide pattern in Primary Care intensity change from 2013 to 2014

Source: NCCI Medical Data Call
Primary Care Services per Claim at 30/60/90 Days

- Of Primary Care services that occur in the first 90 days, 81% occur in the first 30 days
- Average Primary Care intensity at 30, 60, and 90 days is virtually identical across the groups of Medicaid expander and Medicaid non-expander states, and static for all AYs 2012–14

Source: NCCI Medical Data Call
Primary Care intensity during the first 90 days of a claim looks the same in 2012, 2013, 2014 for Medicaid expanders and Medicaid non-expanders

- Neither group showed a change in Primary Care intensity from 2013 to 2014, the effective year of the private insurance mandate and Medicaid expansion under the ACA
- These observations also apply during the first 30 and 60 days of a claim

The ACA does not have a visible state-level impact on Primary Care intensity in workers compensation

- But does our state-level analysis mask differential regional impacts?
Case Study: Kentucky and Florida

- Kentucky
  - WC evaluation and management fees low relative to Medicare (WCRI 2012)
  - Large medically uninsured population pre-2014
  - Early Medicaid expander in 2014
  - State-run insurance marketplace
  - State average Primary Care services per claim static over time:
    2.8 (2012)  2.9 (2013)  2.8 (2014)

- Florida
  - WC evaluation and management fees low relative to Medicare (WCRI 2012)
  - Large medically uninsured population pre-2014
  - No Medicaid expansion to date
  - Federally mediated insurance marketplace
  - State average Primary Care services per claim static over time:

Note: Workers Compensation Premium over Medicare as of July 2011 for Evaluation and Management is from Table 3 in Fomenko and Liu, Designing Workers’ Compensation Medical Fee Schedules. WCRI (June 2012)
WC Primary Care Intensity

Kentucky (2012)

Primary Care Services per Claim
- PCSvc/Clm <= 2
- 2 < PCSvc/Clm <= 3
- 3 < PCSvc/Clm <= 4
- 4 < PCSvc/Clm <= 5
- 5 < PCSvc/Clm

Source: NCCI Medical Data Call

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WC Primary Care Intensity

Kentucky (2013)

Primary Care Services per Claim
- PCSvc/Clm <= 2
- 2 < PCSvc/Clm <= 3
- 3 < PCSvc/Clm <= 4
- 4 < PCSvc/Clm <= 5
- 5 < PCSvc/Clm
WC Primary Care Intensity

Kentucky (2014)

Primary Care Services per Claim
- PCSvc/Clm <= 2
- 2 < PCSvc/Clm <= 3
- 3 < PCSvc/Clm <= 4
- 4 < PCSvc/Clm <= 5
- 5 < PCSvc/Clm

Source: NCCI Medical Data Call
WC Primary Care Intensity

Florida (2012)

Primary Care Services per Claim
- PCSvc/Clm ≤ 2
- 2 < PCSvc/Clm ≤ 3
- 3 < PCSvc/Clm ≤ 4
- 4 < PCSvc/Clm ≤ 5
- 5 < PCSvc/Clm

Source: NCCI Medical Data Call

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WC Primary Care Intensity

Florida (2013)

Source: NCCI Medical Data Call
WC Primary Care Intensity

Florida (2014)

Primary Care Services per Claim
- PCSvc/Clm <= 2
- 2 < PCSvc/Clm <= 3
- 3 < PCSvc/Clm <= 4
- 4 < PCSvc/Clm <= 5
- 5 < PCSvc/Clm

Source: NCCI Medical Data Call
A Natural Experiment
Further Observations

- Primary Care intensity during the first 90 days of a claim looks similar across all NCCI states for 2012–2014
- Medicaid expanders look similar to Medicaid non-expanders at both the state and regional levels
- The ACA does not appear to have had any effect on Primary Care intensity through 2014
The ACA and Wellness: Obesity and Medical Costs
Medical Cost Impact of Comorbidities

- An important goal of the ACA is to promote wellness
  - Many primary and preventive health care services are not subject to a deductible
- Also, workplace wellness programs are gaining traction
  - Participants may qualify for group health discounts
- Increasing wellness means lower comorbidity incidence
- Comorbidities particularly relevant to WC are:
  - Obesity
  - Hypertension
  - Diabetes
  - Pulmonary conditions
  - Drug abuse
- Obesity is the most studied comorbidity in terms of medical cost impact
Obesity is Widespread in the United States

- Obesity is defined as body mass index (BMI) ≥ 30
- Self-reported obesity rates vary across states (BRFSS, 2014)
- 35% US adult obesity rate in 2012 as estimated from clinical data (Ogden et al, 2014)

Self-reported obesity: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention
Medical Cost Relativities for Obesity

- What is the medical cost relativity for obese versus non-obese populations?
  - Different methods give different results

- Direct comparison of obese and non-obese populations:
  - 1.42x Finkelstein et al (2009)
  - 1.31x Cawley and Meyerhoefer (2012)

- Obesity as a “causal effect” on medical care costs:
  - 2.55x Cawley and Meyerhoefer (2012)
  - This estimate attempts to control for underreporting of obesity and also for episodes of obesity that are consequential rather than causal
  - However, it is unclear how to estimate what percentage of the population is obese in the “causal” sense of this estimate
  - Consequently, it is difficult to estimate the medical cost impact of “causal” obesity

Increased Medical Cost Due to Obesity

- Estimated medical cost increase at a 35% obesity rate in comparison with a 0% obesity rate
  - 11%  Cawley and Meyerhoefer (2012)

- Estimated medical cost savings from reduction in the obesity rate from 35% to 25%:
  - 4%  Finkelstein et al (2009)
  - 3%  Cawley and Meyerhoefer (2012)

- These estimates suggest that a 10% reduction in the population obesity rate might reduce overall medical costs by 3% to 4%
Obesity as a Coded Comorbidity

- In some WC claims, obesity rises to the level of a coded comorbidity
  - For example, when surgery entails obesity-related complications
  - More often, obesity (BMI ≥ 30) is not a coded comorbidity

- Medical expense relativities for coded obese WC claims versus all WC claims are extremely high
  - 9.9x (Laws and Colón, 2012)

- But cases of coded obesity are rare
  - 0.3% coded obesity in AY 2009 (Laws and Colón, 2012)
  - This compares to 35% adult obesity in the United States in 2012

- Overall, the cost impact of coded obesity is lower
  - 3% overall increase in medical cost relating to coded obesity
  - This compares to 11% to 15% overall medical cost impacts estimated for obesity defined more generally
  - Obesity that is uncoded does not “show up” in WC claims data

Laws and Colón, Comorbidities in Workers Compensation. *NCCI Research Brief* (October 2012)
Conclusions
The Affordable Care Act and Workers Compensation

- Primary care intensity during the first 90 days of a WC claim is static at the state level during 2012–2014
  - Medicaid expanders and non-expanders look the same at both state and regional levels
- We see no evidence that the ACA has “crowded out” WC access to primary care
- If the ACA’s wellness initiatives are successful in reducing comorbidities such as obesity, this may materially reduce medical costs of WC claims
The Affordable Care Act and Workers Compensation

Thank You

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- This presentation and a research report to follow will be available for download at ncci.com
Appendix
Distribution of Primary Care intensity for states that expanded Medicaid is similar in all years

- Group mean is static for 2012, 2013, 2014: **2.5** PC Svc / Claim
- Group standard deviation is static for 2012, 2013, 2014: **0.2** PC Svc / Claim

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With Medicaid Expansion Effective January 1, 2014

- Distribution of Primary Care intensity for states that expanded Medicaid is similar in all years
  - Group mean is static for 2012, 2013, 2014: **2.9** PC Svc / Claim
  - Group standard deviation is static for 2012, 2013, 2014: **0.2** PC Svc /Claim

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With Medicaid Expansion Effective January 1, 2014

Change in Primary Care Services per Claim
First 30 Days

- **Δ (Primary Care intensity at 30 days) for 2014 Medicaid expansion states**
  - Group average: 0.5% 2012–13  0.6% 2013–2014
  - Group standard deviation: 2.2% 2012–13  3.5% 2013–2014
  - No group-wide pattern in Primary Care intensity change from 2013 to 2014

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With Medicaid Expansion Effective January 1, 2014

Change in Primary Care Services per Claim
First 60 Days

- ∆ (Primary Care intensity at 60 days) for 2014 Medicaid expansion states
  - Group average: −0.3% 2012–13 0.1% 2013–2014
  - Group standard deviation: 2.2% 2012–13 3.2% 2013–2014
  - No group-wide pattern in Primary Care intensity change from 2013 to 2014

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With No Medicaid Expansion Effective in 2014

Primary Care Services per Claim
First 30 Days

- Distribution of Primary Care intensity for states that did not expand Medicaid is similar in all years
  - Group mean is static for 2012, 2013, 2014: **2.5** PC Svc / Claim
  - Group standard deviation is static for 2012, 2013, 2014: **0.3** PC Svc /Claim

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With No Medicaid Expansion Effective in 2014

Primary Care Services per Claim
First 60 Days

- Distribution of Primary Care intensity for states that did not expand Medicaid is similar in all years
  - Group mean is static for 2012, 2013, 2014: **2.9** PC Svc / Claim
  - Group standard deviation is static for 2012, 2013, 2014: **0.4** PC Svc / Claim

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With No Medicaid Expansion Effective in 2014

Change in Primary Care Services per Claim
First 30 Days

- Δ (Primary Care intensity at 30 days) for 2014 Medicaid non-expansion states
  - Group average: 1.1% 2012–13 1.4% 2013–2014
  - Group standard deviation: 2.6% 2012–13 3.9% 2013–2014
  - No group-wide pattern in Primary Care intensity change from 2013 to 2014

Source: NCCI Medical Data Call
A Natural Experiment
NCCI States With No Medicaid Expansion Effective in 2014

Change in Primary Care Services per Claim
First 60 Days

- \( \Delta \) (Primary Care intensity at 60 days) for 2014 Medicaid non-expansion states
  - Group average: 0.3% 2012–13 0.5% 2013–2014
  - Group standard deviation: 2.7% 2012–13 3.2% 2013–2014
  - No group-wide pattern in Primary Care intensity change from 2013 to 2014

Source: NCCI Medical Data Call