

The Effects of Certificate of Need Repeal on Medicaid Long Term Care Expenditures

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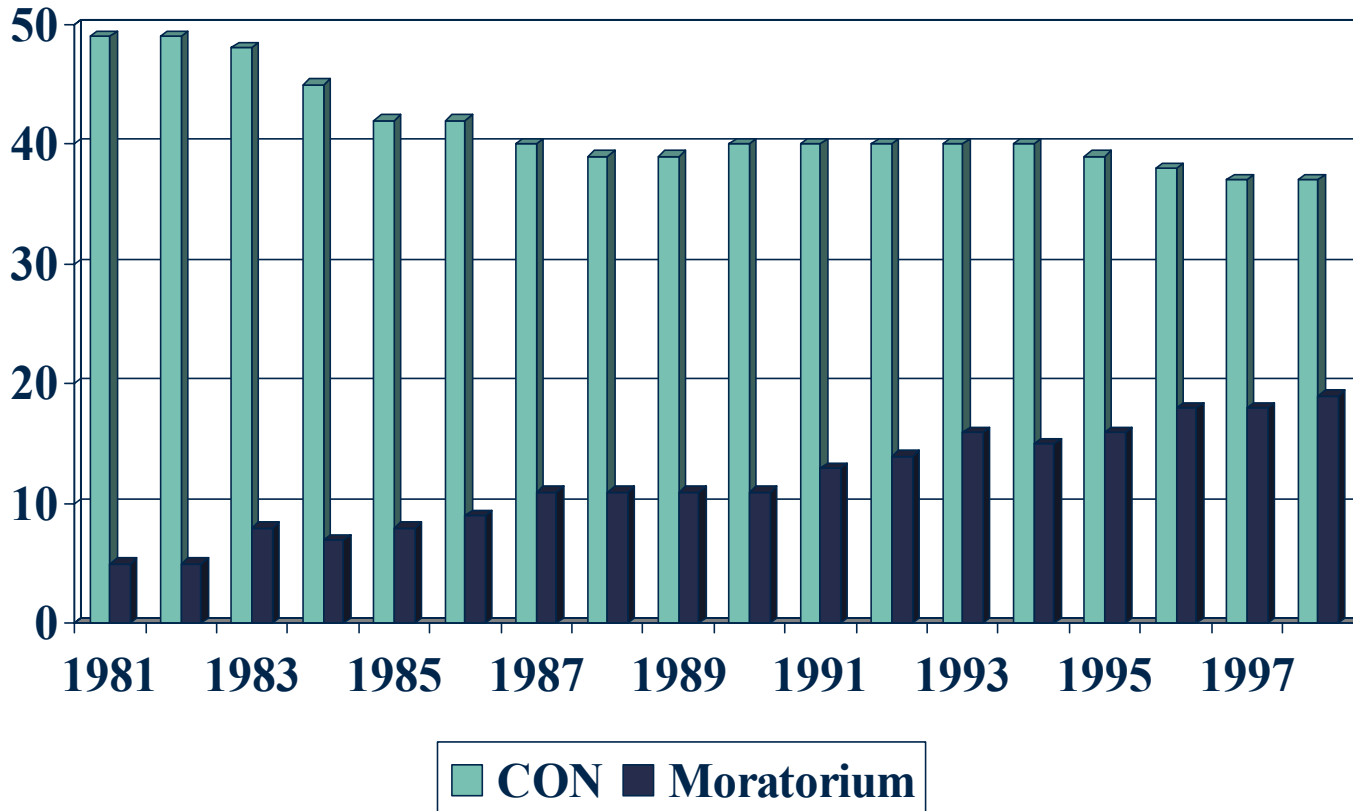
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Certificate-of-Need

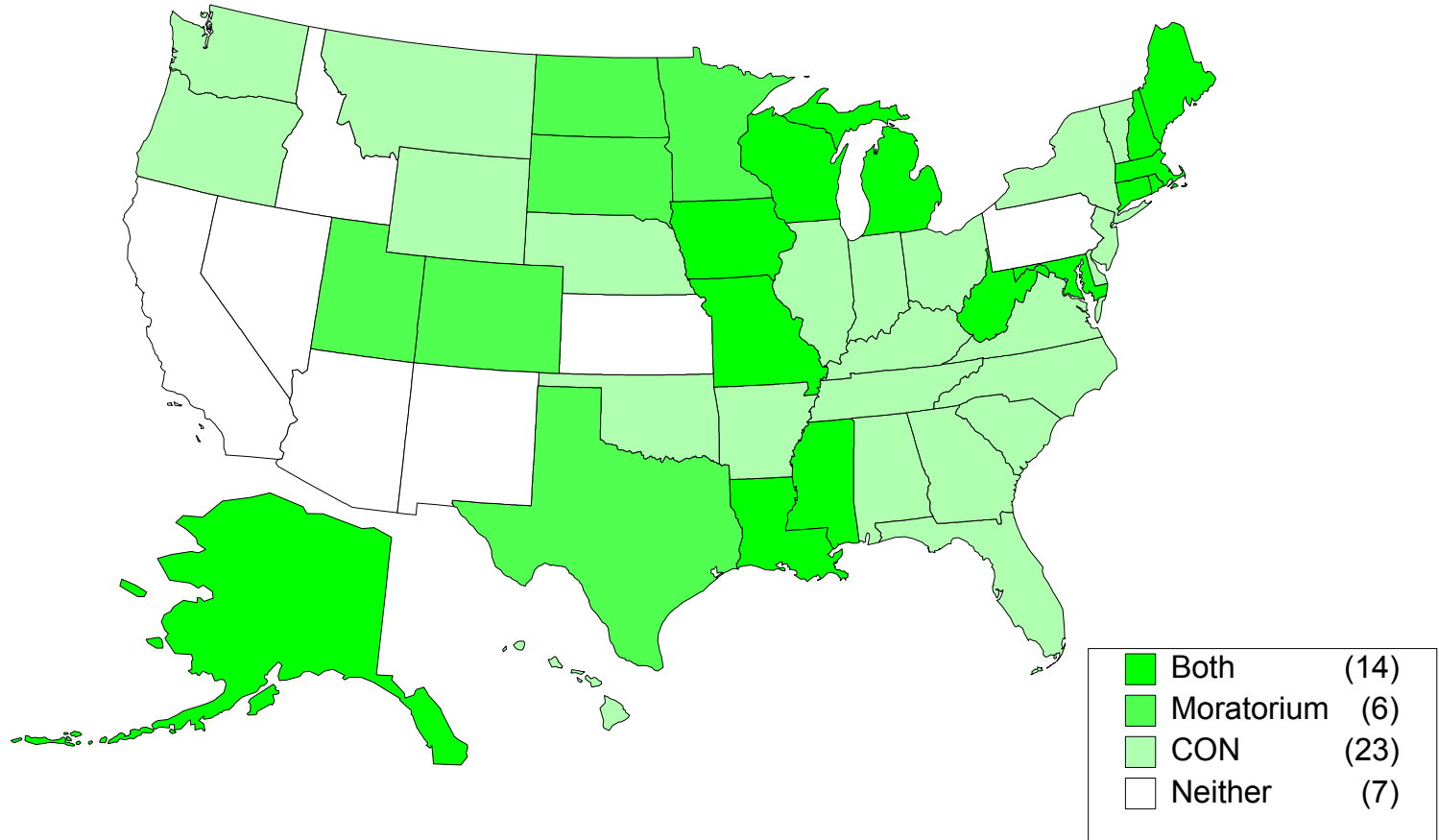
- # CON programs were established in the 1970s in the U.S. to control health care costs.
 - # Hospitals, nursing homes and occasionally other providers are required to obtain approval from a state agency by showing a “need” for services before there were permitted to open or expand a facility.
 - Criteria include occupancy rates, empty beds per community-dwelling elderly, and state budget impact
 - # Some states have also enacted construction moratoria that theoretically prevent any expansion in the nursing home sector
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CON and Moratorium (1981-98)



*Excludes AZ and DC

Regulatory Status (1998)



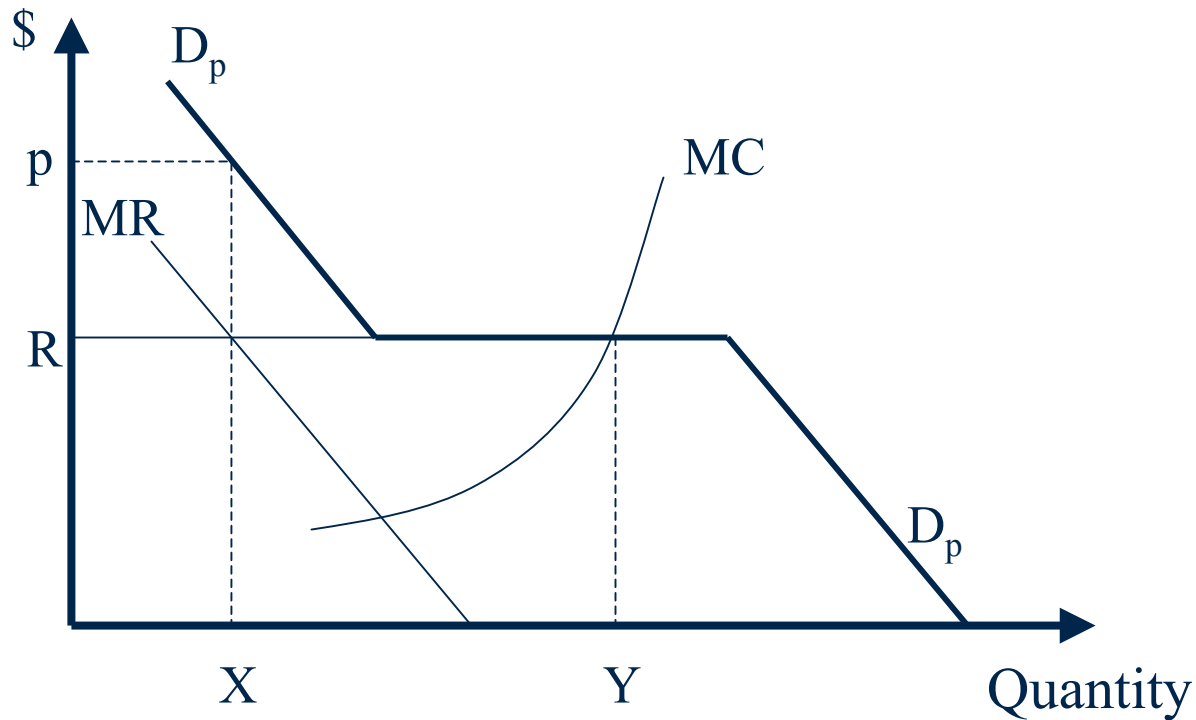
Rationale for CON

- # The original rationale was that CON would prevent the duplication of services that were being paid for through the cost-based reimbursement systems common at the time.
 - # Roemer's Law (moral hazard problem)
 - *A built bed is a filled bed is a billed bed*
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Is Moral Hazard a Concern?

- # The economic justification for certificate-of-need regulation rests on whether an unregulated market would result in an excess of capital expenditure and capacity.
 - # Depends on how responsive demand is to price given third-party insurance:
 - For residents who pay for NH care out-of-pocket, moral hazard is not a concern.
 - For those covered by Medicaid, the substantial copayment of all income and the disutility from entering a nursing home also call into question the moral hazard assumption.
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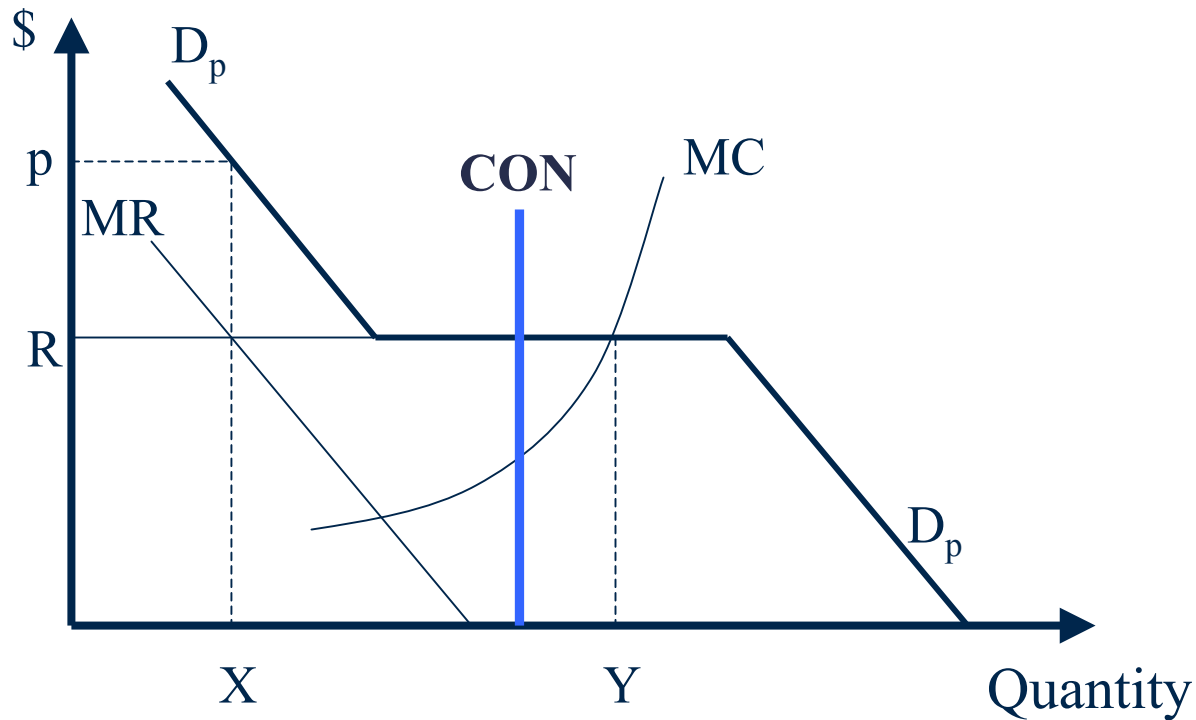
Theory of the NH Market



$X = \#$ of private residents

$Y - X = \#$ of Medicaid residents

Theory of the NH Market (cont.)



$X = \#$ of private residents

CON - $X = \#$ of Medicaid residents

Lit Review: CON & Nursing Homes

- # Feder & Scanlon (1980)
 - 8 case studies: states appeared to be using CON to limit Medicaid expenditures
- # Birnbaum et al (1982) & Lee et al (1983)
 - 1973-74: presence of CON increased nursing home occupancy rates and resulted in higher average operating costs.
- # Harrington & Swan (1987)
 - 1978-1983: 1% increase in beds per 1,000 resulted in a 0.6% increase in Medicaid LTC expenditures per elderly resident.
- # Nyman (1989 & 1993)
 - 1983 evidence that excess Medicaid demand existed due to CON, but unable to replicate with broader 1988 data

Lit Review: CON & Nursing Homes (cont.)

Harrington et al (1997)

- 1979-93: presence of CON or moratorium reduced nursing home bed growth

Miller et al (2001,2002)

- CON redirects spending to home & community based services
- States with CON have higher total per capita long term care expenditures

Sloan & Conover (1998)

- CON repeal on Medicaid plus private nursing home expenditures per capita had no statistically significant effect
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Lit Review: CON & Nursing Homes (cont.)

- # No previous study in the literature directly examines effect of CON repeals on Medicaid NH expenditures
 - # No previous study accounts for cross-sectional unobserved heterogeneity. That is, some third unobserved factor may be correlated with both CON repeal and Medicaid NH expenditures, which would lead to biased estimates of the relationship between CON repeal and expenditures.
 - # No previous study analyzes most recent NH data
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Policy Context

- # CON programs have largely been discredited as hospital cost control mechanisms. CON has been found to potentially increase hospital costs by causing inefficient substitution of non-capital inputs for capital in the production process
 - Lanning et al (1991), Sloan & Conover (1998), Salkever (2000)
 - # Yet, Medicaid commissioners have long maintained that CON regulation of nursing homes constrain Medicaid long term care expenditures.
 - # Not surprisingly, the NH industry also likes CON and construction moratoria (!)
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Research Questions

Beginning in 1983, 14 states have repealed their CON laws for some period of time:

- # Did the repeal of CON for nursing homes increase Medicaid nursing home expenditures?
 - # Did it increase Medicaid long term care expenditures more broadly defined?
 - # Did it affect Medicaid payments per day or the number of Medicaid days?
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Data

- # 18 years times 49 states = 882 observations
 - 1981 thru 1998, excludes Arizona & DC
 - # Medicaid Expenditures & Days
 - Centers for Medicare & Medicaid Services
 - Excludes expenditures for intermediate care facilities for the medically retarded
 - # CON & Moratorium Laws
 - Harrington, et al (1999 & prior editions)
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Methods

Estimate fixed effects models of the form:

$$M_{it} = X_{it}\beta + Z_{it}\gamma + \alpha_t + S_i + \mu_{it}$$

M is expenditures in state i , year t

X is a measure of CON Repeal

Z includes other time-varying variables

α and S are vectors of year and state dummies

All models estimated by least squares.

Dependent Variables

Medicaid expenditures

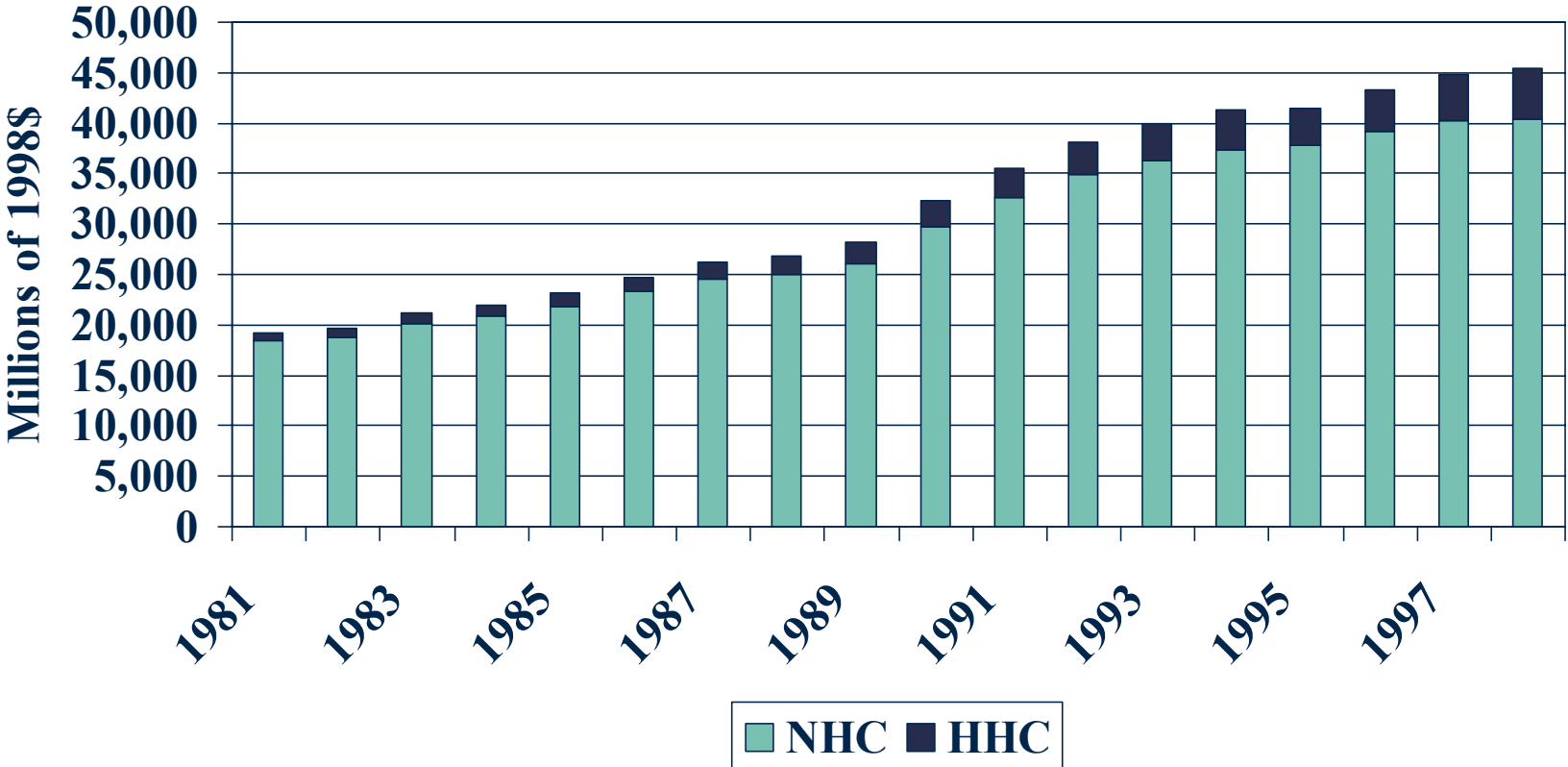
- Nursing home
- Nursing home + home health

Medicaid nursing home

- Payment rate
- Medicaid recipient days

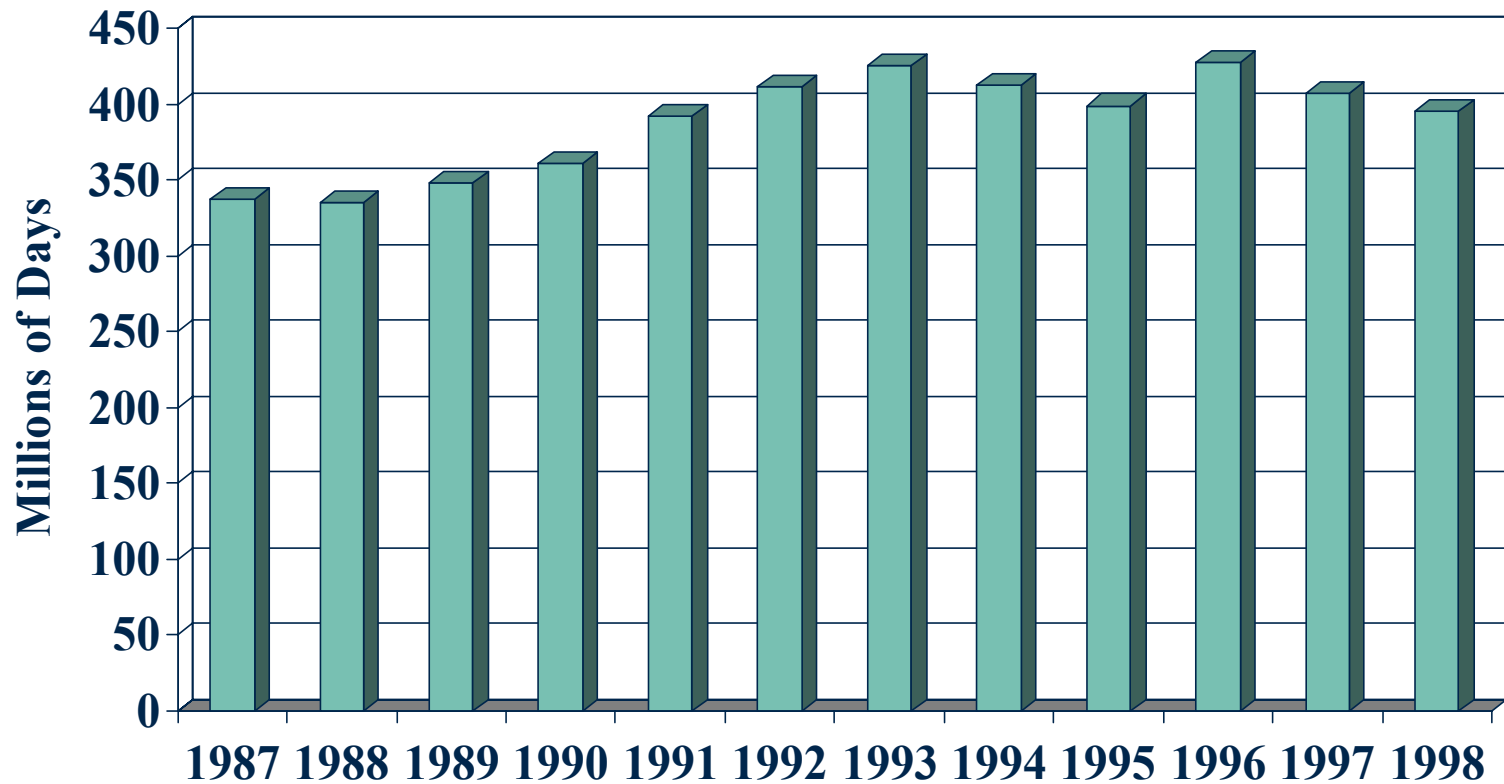
All measured in natural logs

Medicaid NHC+HHC Expenditures (1981-1998)



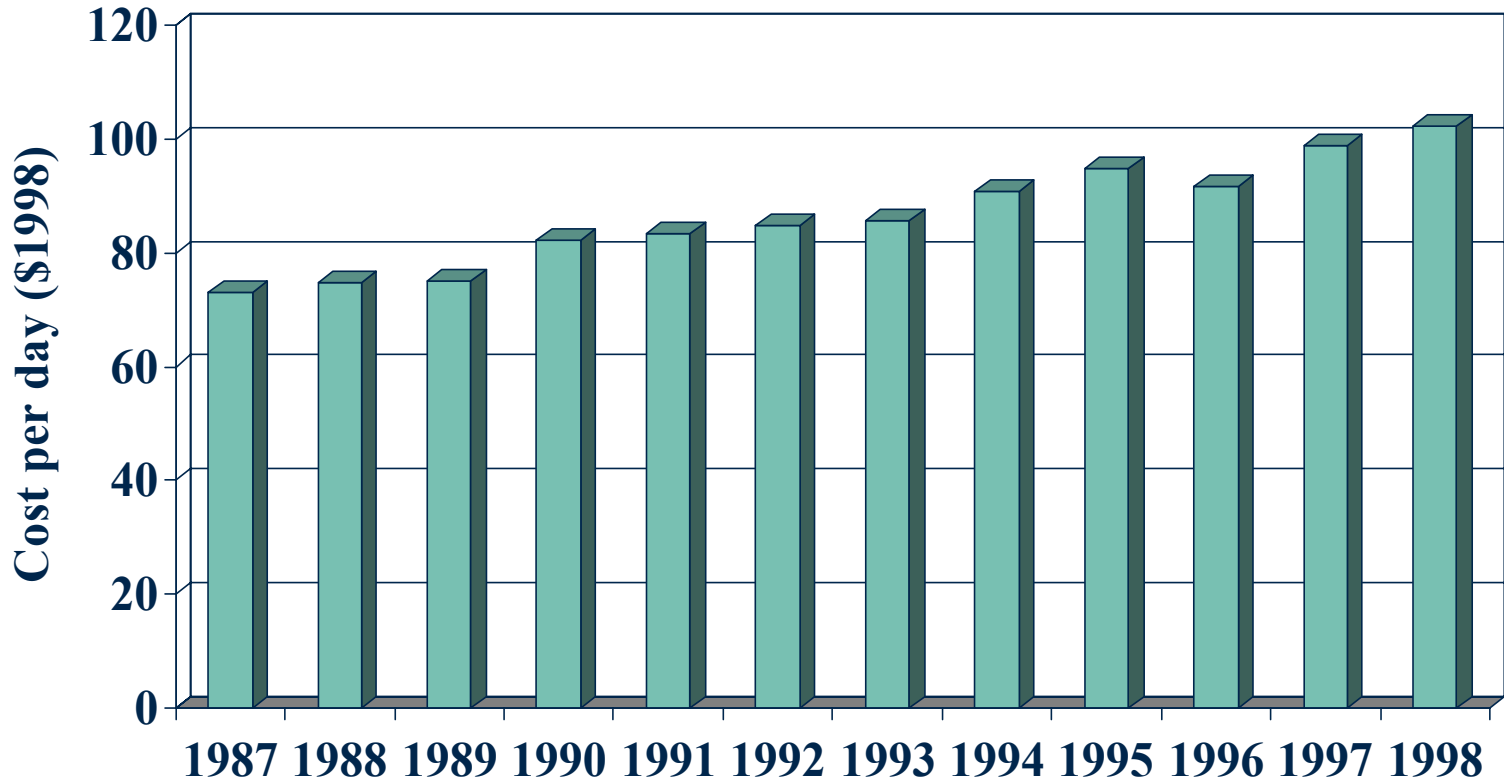
*Excludes AZ and DC

NH Medicaid Days (1987-98)



*Excludes AZ and DC

Medicaid NH per diem (1987-98)



*Excludes AZ and DC

Measuring Regulation

- # Previous research has defined the “bindingness” of CON/moratoria in multiple ways
 - Dummy variables
 - Scales
 - “New” versus “Mature” programs
 - # Beyond presence of the program, very difficult to make detailed classifications over 18 years of the study.
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Measuring Regulation (cont.)

- # Moreover, calls to states revealed that a CON is often indistinguishable from a moratorium
 - # In several states with only a CON, no expansion of beds occurred.
 - # In states with a moratorium, some limited expansion results from:
 - compliance with federal law
 - “a clear and compelling public health need”
 - exemptions for smaller, existing facilities.
 - lawsuits filed by nursing homes
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Measuring Regulation (cont.)

CON Repeal

- 14 states have repealed nursing home CON for at least some period of time

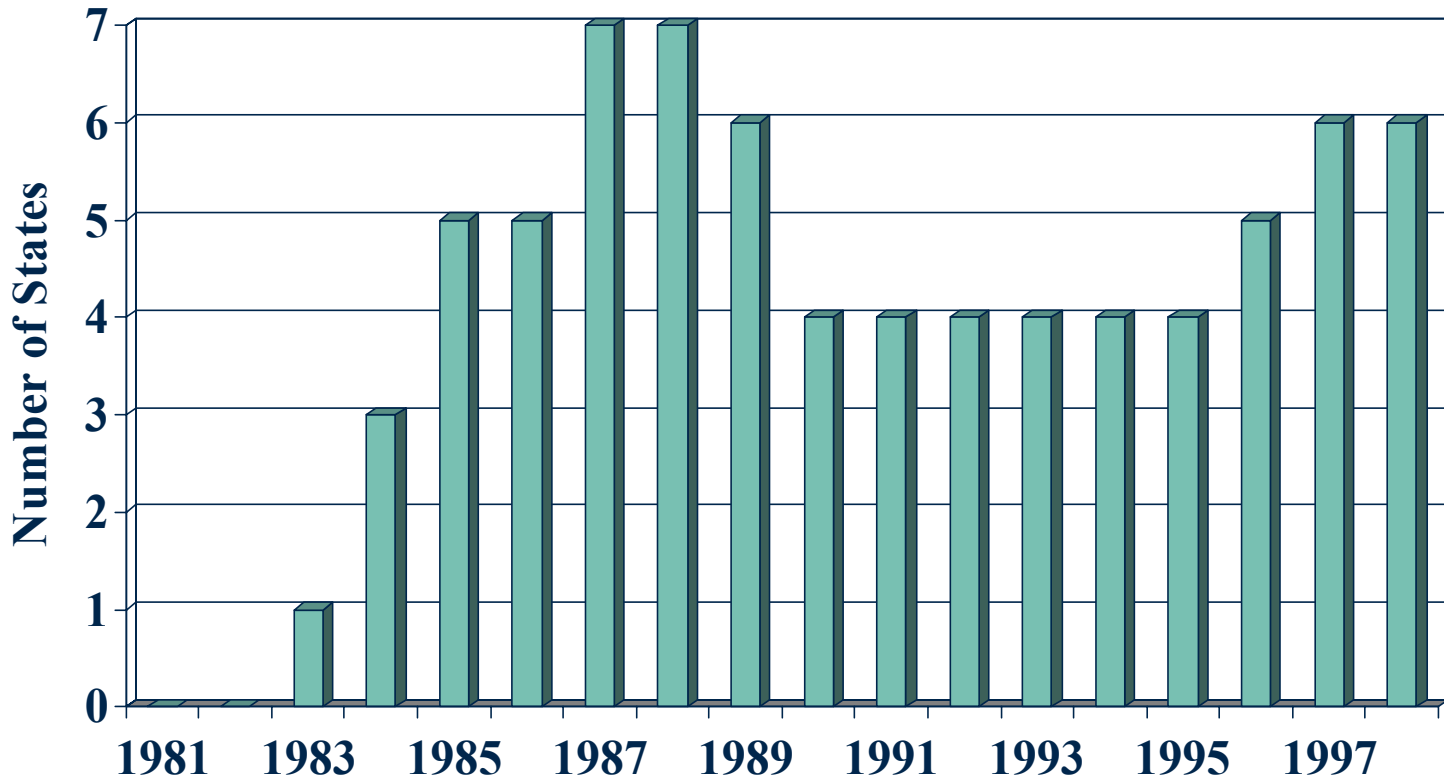
Construction Moratorium

- 24 states have imposed a moratorium on construction of nursing homes for at least some period of time

CON Repeal without a Moratorium

- 10 states
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CON Repeal without Moratorium



*Excludes AZ and DC

Other Variables

- # Population
- # Percent population aged 65 to 84
- # Percent population aged 85+
- # Per capita income
- # Percent metropolitan population
- # Nursing home wage rate

All measured in natural logs

Effects of CON Repeal (without Moratorium)

	Coefficient (std error)
Medicaid Nursing Home Expenditures	0.030 (0.029)
Medicaid Long Term Care Expenditures	0.025 (0.037)
Medicaid Per Diem	0.029 (0.017)
Medicaid Days	0.002 (0.029)

Robustness Checks

- # 1 & 2 year lags between repeal & effect
 - # State-specific linear time trends
 - # Analysis limited to 10 states with repeal
 - # Within-state first order auto-correlation
 - # Endogenous repeal
 - Tried IV, but failed Staiger-Stock test
 - Gruber-Hanratty test adding dummy for year prior to repeal.
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Pennsylvania

- # PA repealed its CON law in 1997 because it was “lengthy, expensive and often got bogged down in legal proceedings”
 - # However, PA almost immediately substituted a regulatory provision under which nursing homes building new beds without state approval would be terminated from the Medicaid program
 - # Moreover, PA refuses to reimburse capital costs for those new beds that are State approved and have had that policy for two decades
 - # Results do not substantively change if PA coded as having a “moratorium”
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Pennsylvania (cont.)

- # We do not believe the PA experience is widespread. E.g., Indiana repealed CON because:
 - internal analyses found no effect of CON on state Medicaid spending
 - It was discouraging closure of small, inefficient homes
 - # The PA experience also highlights how strongly states feel about CON (and related programs) as Medicaid cost saving mechanisms
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Summary of Results

- # Repeal of nursing home CON had no statistically significant effect on Medicaid expenditures
 - # Even if the results had been statistically meaningful, the size of the increases in expenditures were small
 - About 3 percent or less, and most of the effect is Medicaid per diem, not quantity.
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Discussion

- # Regulation may never have worked:
 - CON may not have been binding
 - CON may have led private paying residents to seek alternative sources of care in the face of lower quality
 - # Nursing Home market may have changed:
 - Changing medical protocols
 - Shift from retrospective to prospective payment
 - New availability of assisted living & other substitutes for nursing home care
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A Changing NH Market

Year	Data	Empty Beds per 1,000 elderly (65+)	Study
1969-1973	U.S.	5	Scanlon (1980)
1983	WI	5	Nyman (1989)
1988	WI	6.4	Nyman (1993)
1988	MN	4.1	Nyman (1993)
1988	OR	5.6	Nyman (1993)
1996	U.S.	10	Grabowski (2001)

Growth in Assisted Living Care

Two problems in calculating growth of assisted living facilities:

- # Definitional problem
- # Limited government regulation = limited data

However, one-third of facilities that call themselves "assisted living" have been in business for five or fewer years, and 60% have been in operation for ten or fewer years (Hawes, Rose & Phillips, 1999)



Bottom Line

- # States have little to fear in terms of increased Medicaid nursing home expenditures from CON repeal
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