## Creative Financing and Public Moral Hazard: Evidence from Medicaid Supplemental Payments

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### Motivation and Research Questions

- U.S. Federal government provides \$750bn /year to states and local governments to fund public policies (health care, education, transportation ..)
  - Federal matching grants subsidize state spending

Practice: States use creative mechanisms to divert Medicaid funds away from intended purpose (Baicker and Staiger, QJE 2005)

- States lower net payments to hospitals → lowers quality of care
- Our paper: 20% of nominal Medicaid SNF payments diverted

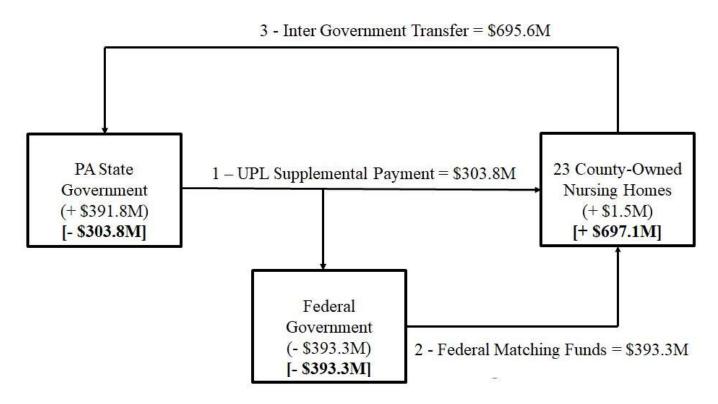
Our paper: Creative financing mechanism gives incentive to increase Medicaid services: "Public Moral Hazard"

- Extra services qualify for extra matching funds (that can be diverted)
- Health Effects on the Elderly in Skilled Nursing Facilities (SNFs)?

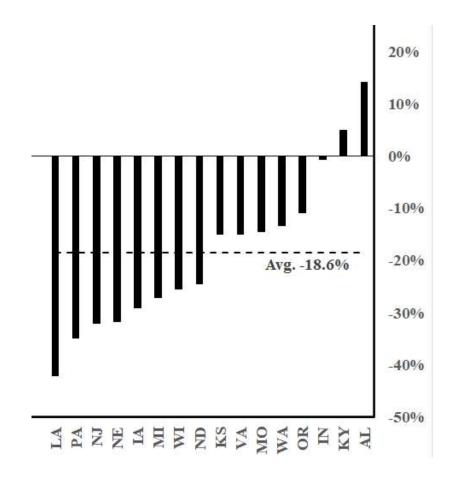
## Medicaid Supplemental Payments to SNFs

- (Traditional) Per-diem reimbursement rate:  $M^{PD}$  (per patient/day)
- Supplem. Payments:  $M^{SP}$  (per diem) with  $M^{PD} + M^{SP} \leq UPL$  (Upper Payment Limit (UPL)=Medicare Rate)
- Pre 2003 Loophole: States divert supplemental payments accrued by private SNFs ( $M^{SP} \times Q^{privSNF}$ ) to county-owned SNFs

Example from Pennsylvania 2002 (Coughlin and Zuckerman, 2003):



## Share of Diverted Medicaid Funds by State



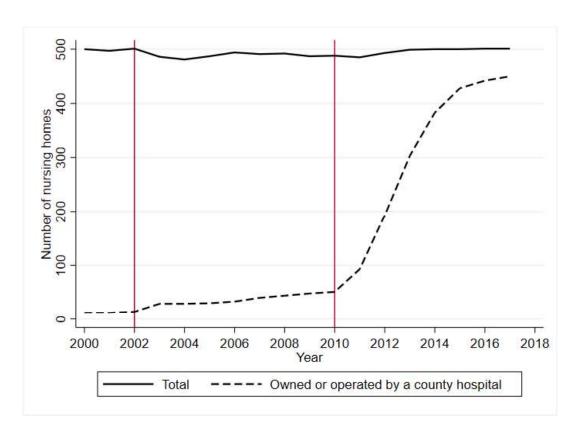
- Data: LTC focus 2000-2002
- 18.6% (\$4bn/year) of nominal Medicaid SNF spending diverted!
- Effective FMAP (federal share of actual spending) increases by 16 p.p. (Eff. FMAP=125% in LA)



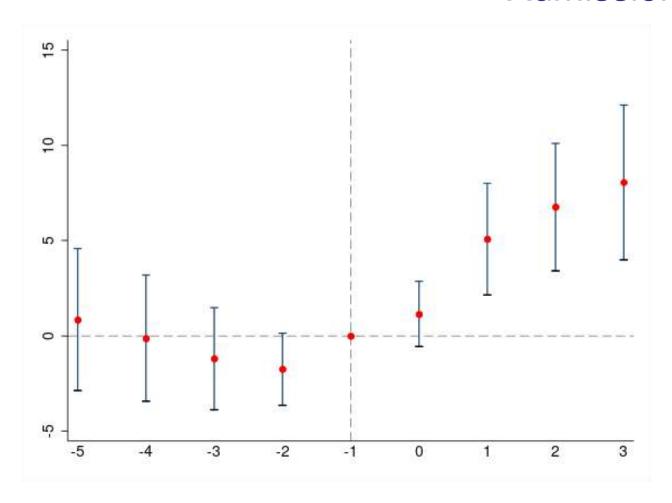
## Creative Financing 2.0 in Indiana

### Medicaid Supplemental Payments 2003 reform:

- States can only divert suppl. payments accrued by public SNFs
- Indiana converts private into county SNFs to divert funds
- Use timing of acquisition in event study design to study impact of creative financing on patient volume and outcomes



# SNF Acquisition and Dementia Patient Admissions



- SNF Patient micro data: Minimum Dat Set 1999-2015
- Event-study design: timing of SNF acquisition in years
- Significant increase starting one year after conversion

### Public Moral Hazard and Mechanism

### Following the SNF acquisition, we estimate:

- Increase in dementia patient admissions
- Increase in (dementia) Medicaid days (+5%): Public moral hazard
- Increase in number of Alzheimer special care units

#### Mechanism:

- New patients admitted from hospitals
- Medicare claims data '99-'15: Index dementia hospital patients
  - more likely to be discharged to focal SNF after conversion
  - less likely to be discharged home
  - higher one-year mortality after local SNF is converted (intent-to-treat effect)
- Increase in low-value care?

### Conclusions: Creative Financing (CF) in SNF Care

CF pervasive in state Medicaid programs for SNF care

States with supp. pay. schemes divert 20% of spending

CF distorts rate setting, SNF investments, and patient allocation

- CF distorts Medicaid to low effective rate and high volume care
- Increase in mortality pointing to a reduction in allocative efficiency

CF may contribute to broader Medicaid industry regulations:

- 1 Low Medicaid per diem rates, compromising quality of SNF care
- 2 Institutional bias in U.S. long term care: Indystar (2020): "The state's [Indiana's] elder care system is now so skewed to nursing homes and the money they generate for hospitals that the expansion of alternative options such as in-home care has been stifled."

Thank You!