

# Impacts of Health Reform on State Budgets and of Prevention on Health Care Spending

Barbara A. Ormond and Randall R. Bovbjerg

Health Policy Center, The Urban Institute<sup>†</sup>

presentation to the IOM Committee on Public Health Strategies, May 5, 2011

<sup>†</sup> **standard disclaimer applies**



# Roadmap to Presentation

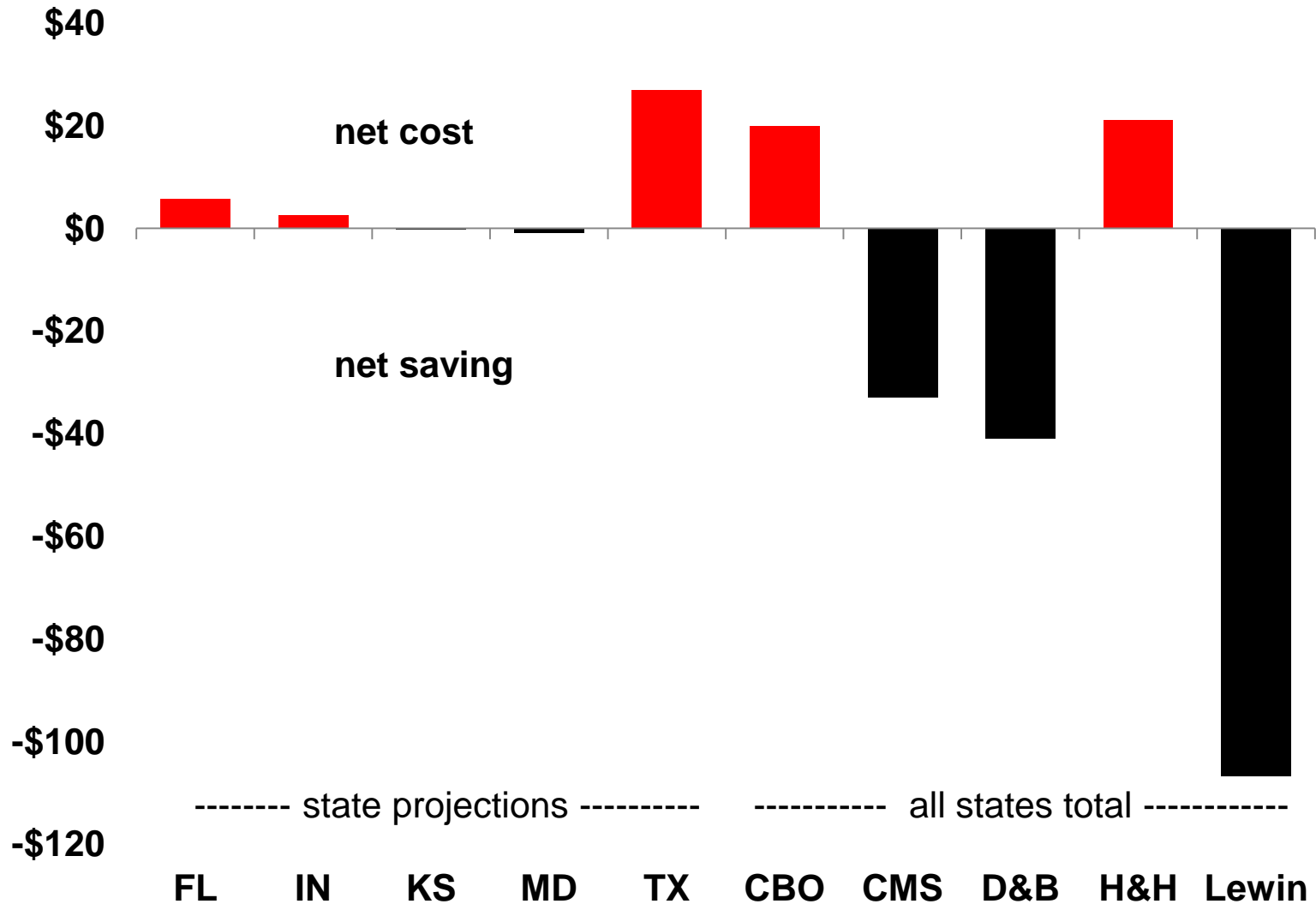
- Part 1: Impact of health reform (the ACA) on state budgets
  - review of 10 projections, synthesis, conclusion on costs, net of savings and new revenues
- Part 2: Impact of prevention on health spending
  - community-based primary prevention, literature review and modeling for 5 of the 15 most expensive conditions

# Part 1. The ACA and State Budgets: Aims & Methods

- Our questions
  - What is the range of estimated impacts?
  - Why estimates vary so widely?
  - What conclusions can we draw?
- Our methods
  - Literature scan
  - Detailed review of 5 state estimates, 5 nat'l
  - Interviews in states taking an active approach to implementation

# 1. Range of Projected Impacts

(multiple years: highest cost = +\$27.0 B; highest savings = -\$106.8 B)



CBO = Congressional Budget Office; CMS = Centers for Medicare and Medicaid Services; D&B = Dorn and Buettgens report; H&H = Holahan and Headen report; Lewin = Lewin Group report.

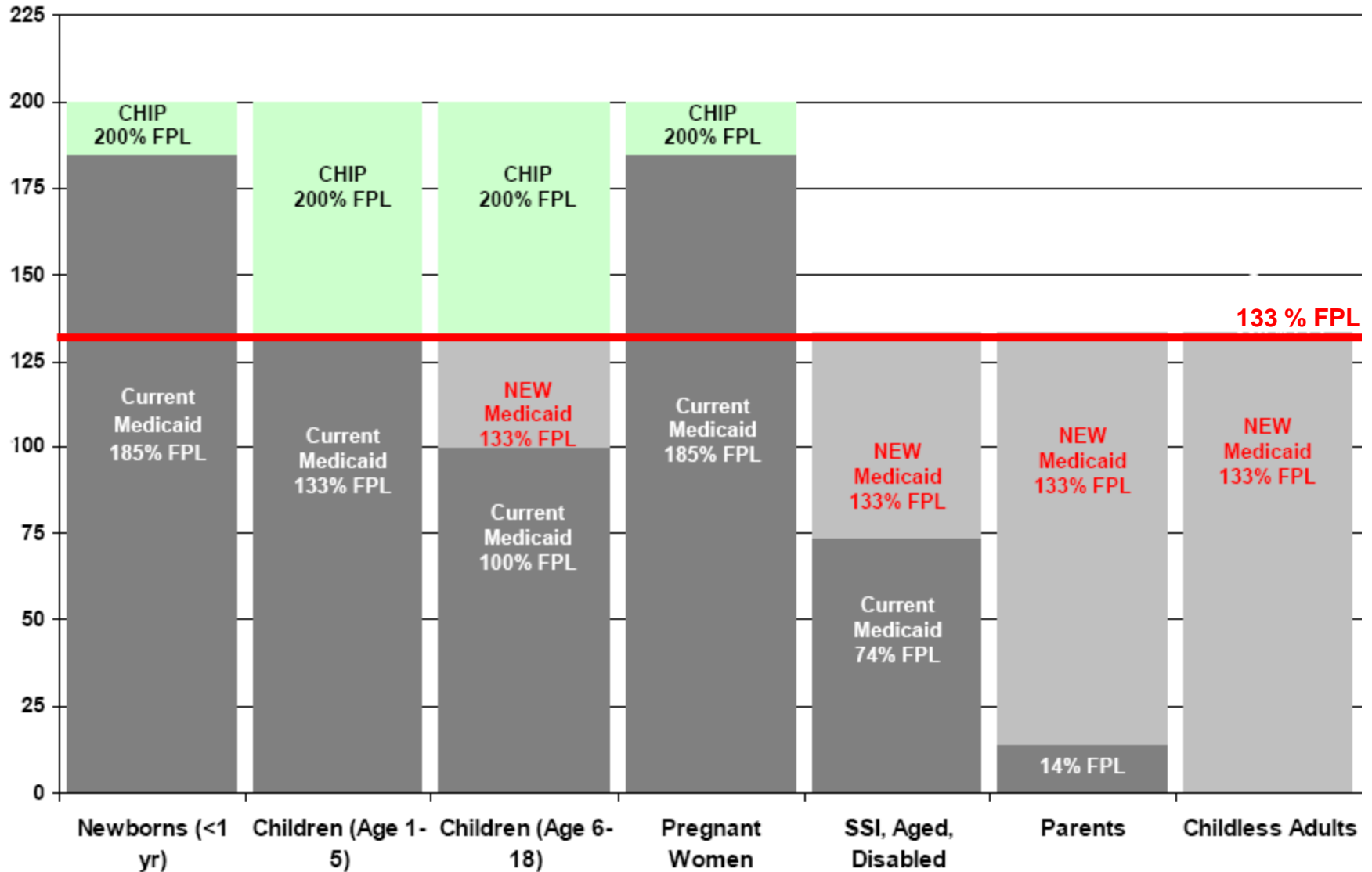
# Factors That Affect Projected Impacts - 1

## The Uninsured Gap

	FL	IN	KS	MD	TX
<b>Reported multi-year total (\$billion)</b>	\$5.7	\$2.5	-\$0.2	-\$0.8	\$27.0
<b>Gap to be filled by expansion</b>					
Share of <65 pop'n that is $\leq$ 138% of FPL	26.1%	26.9%	24.1%	19.3%	29.3%
Share of $\leq$ 138% that is uninsured	40.3%	27.7%	30.4%	28.0%	38.9%
Share of <65 pop'n both $\leq$ 138% and uninsured	10.5%	7.4%	7.3%	5.4%	11.4%

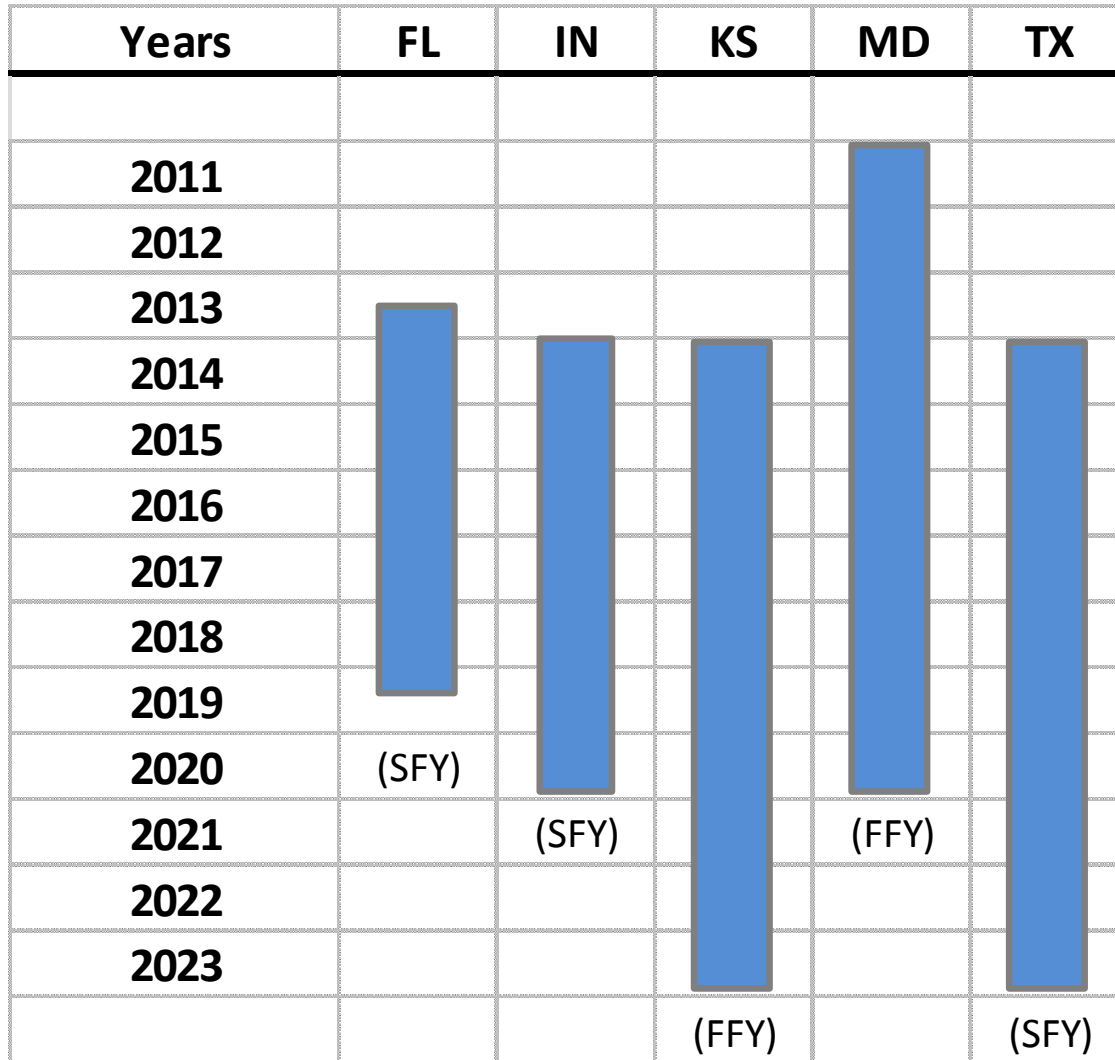
# Gap, cont'd

## Pre-ACA Medicaid Eligibility Standards, Example of Texas



# Factors That Affect Projected Impacts - 2

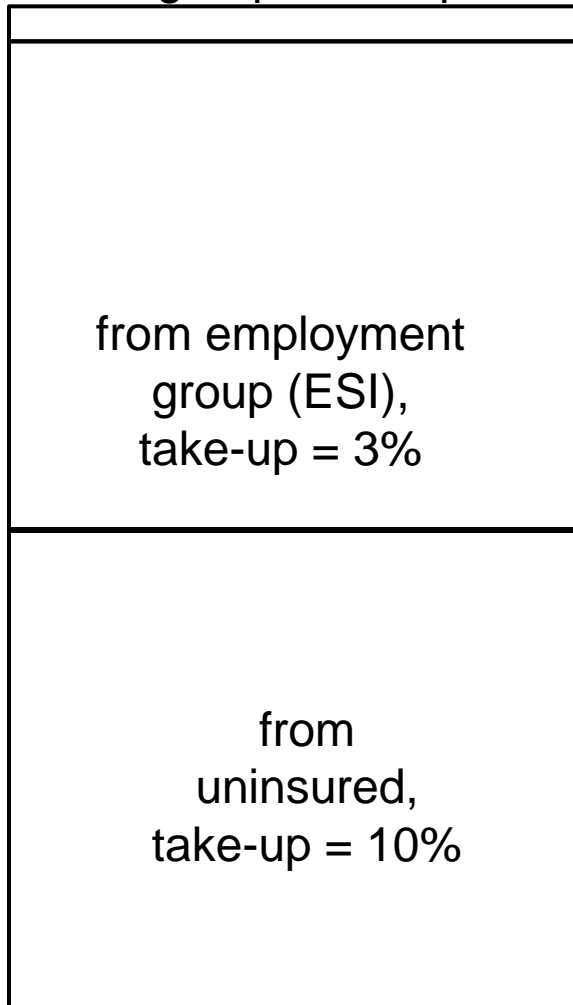
## Variations in Years Projected



# Factors That Affect Projected Impacts - 3

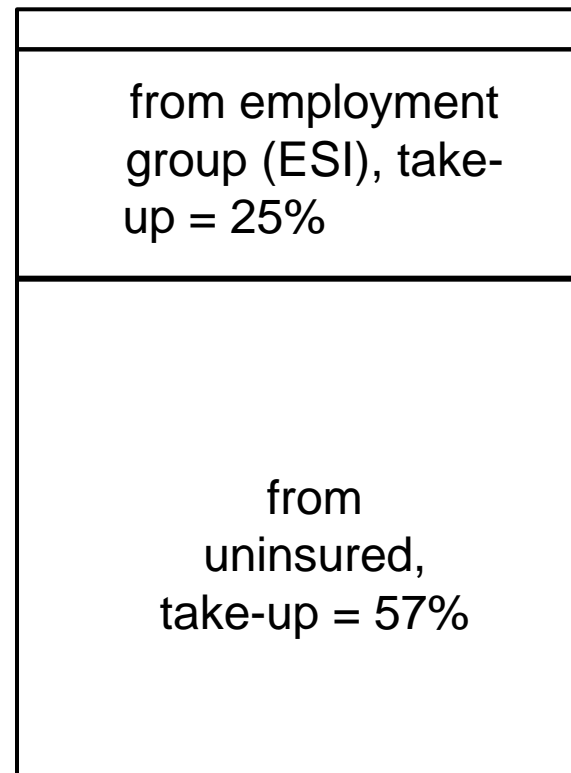
Assuming Participation Rates Near 100% (compare H &H)

Currently Eligible but Not Enrolled  
from nongroup, take-up = 7%



Newly Eligible under the ACA

from nongroup, take-up = 54%





# Factors That Affect Projected Impacts - 4

Number of Elements of Impact Accounted for

	<b>FL</b>	<b>IN</b>	<b>KS</b>	<b>MD</b>	<b>TX</b>
# Cost Elements Included	4	6	4	7	6
# Saving Elements Included	1	3	2	5	1
# Revenue Elements Included	0	0	0	2	0

- Most notable omission: savings on support for uncompensated care
- Seldom included: savings on public health, mental health
- No one sought to estimate impact of federal grants, nor longer-run impacts of prevention or medical system changes

## Concluding Discussion, Part 1

- States in the aggregate will likely save
- Few states are likely to lose because the cost of new enrollees is inversely related to the savings on uncompensated care
- The variation across projections partly reflects states' circumstances, but mainly their choices about how to do estimates
- effects of public health / prevention are not in the budgetary picture, perhaps should be

## Part 2: Modeling Potential Savings from Prevention, Research Questions

- How much can the prevalence of selected preventable conditions be reduced thru community-based primary prevention?
- Can such reductions be sustained over time and across different population groups?
- How much do people with these conditions spend on medical care?
- If the prevalence of these conditions were reduced, how much of this expenditure could be saved?
- How would these savings be distributed across payers, over time, and across states?

# Most Expensive Conditions

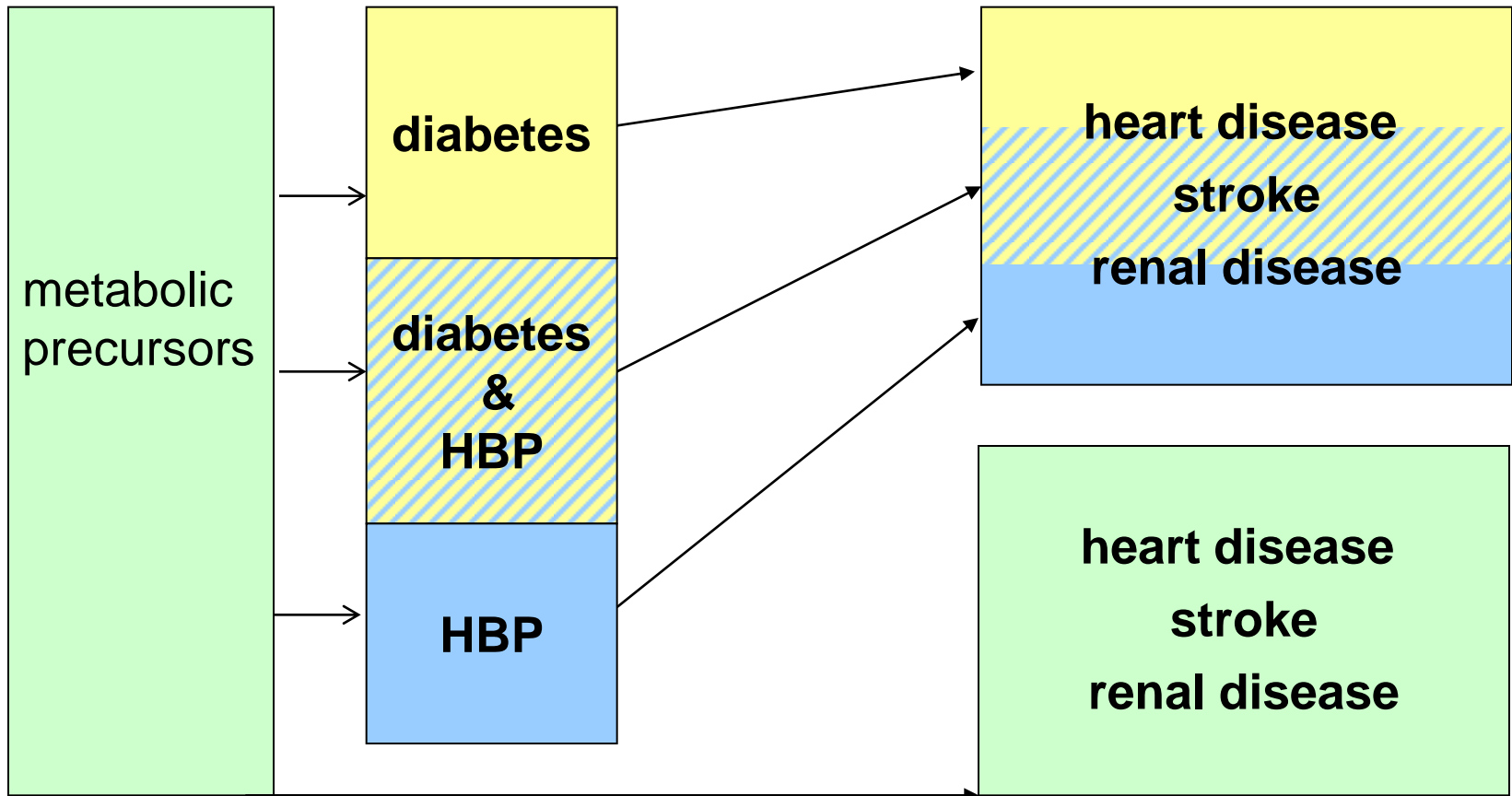
1. **Heart disease**
2. Cancer
3. Trauma
4. Mental disorders
5. Pulmonary conditions
6. **Diabetes**
7. **Hypertension**
8. **Cerebrovascular disease**
9. Arthritis
10. Pneumonia
11. **Kidney disease**
12. Endocrine disorders
13. Skin disorders
14. Back problems
15. Infectious diseases

From Cohen and Krauss, Spending and service use among people with the 15 most costly medical conditions, *Health Affairs* 2003, 22(3):129-38

# Disease Clusters - Intervention Pathways

short run  
(uncomplicated disease)

medium run  
(complicated disease)



# Estimation of the Model

- Data
  - Medical Expenditures Panel Survey (MEPS), pooled 2003-2005 (adults only, excludes institutionalized population)
- Methods
  - Regression analysis to predict expenditures by disease cluster
  - Lit. review of effects and costs of interventions
  - Modeling of effects over time and across payors
- Important caveat
  - includes only potential savings in medical spending

# Application of the Model

- National estimates
- Estimates by payer
  - Medicaid
  - Medicare
  - Private payers and out-of-pocket
- State-level estimates (summary only)

# Excess Annual Medical Expenditures all payers, 2008 dollars

	spending (\$billions)	% of total
<b>Short run modifiable conditions</b>	<b>180</b>	<b>12.3</b>
Diabetes	31	2.1
High blood pressure (HBP)	97	6.6
Diabetes & HBP	52	3.6
<b>Medium run modifiable conditions</b>	<b>314</b>	<b>21.6</b>
Heart   renal   cerebrovascular disease (H   R   C)	76	5.2
Diabetes & H   R   C	34	2.3
HBP & H   R   C	120	8.2
Diabetes & HBP & H   R   C	85	5.8
<b>Total <u>excess</u> spending</b>	<b>494</b>	<b>33.9</b>
<b>Grand total, medical spending</b>	<b>1,457</b>	<b>100.0</b>



# Excess Annual Medical Spending by payer, 2008 dollars

	Medicaid		Medicare		All Other Payers	
	spending (\$billions)	% of total	spending (\$billions)	% of total	spending (\$billions)	% of total
<b>Short run modifiable conditions</b>	<b>15</b>	<b>8.6</b>	<b>30</b>	<b>9.0</b>	<b>134</b>	<b>13.8</b>
Diabetes	3	1.7	7	2.0	21	2.2
High blood pressure (HBP)	5	3.0	15	4.6	76	7.7
Diabetes & HBP	7	3.8	8	2.4	37	3.9
<b>Medium run modifiable conditions</b>	<b>32</b>	<b>17.6</b>	<b>124</b>	<b>37.1</b>	<b>158</b>	<b>17.5</b>
H   R   C	5	2.8	27	7.9	44	4.7
Diabetes & H   R   C	5	2.9	19	5.6	10	1.3
HBP & H   R   C	9	5.1	44	13.3	66	7.1
Diabetes & HBP & H   R   C	12	6.8	35	10.3	38	4.4
<b>Total Excess Spending</b>	<b>47</b>	<b>26.2</b>	<b>155</b>	<b>46.2</b>	<b>292</b>	<b>31.3</b>
<b>Total Spending</b>	<b>181</b>	<b>100.0</b>	<b>335</b>	<b>100.0</b>	<b>941</b>	<b>100.0</b>

# Excess Annual Medical Spending

percentage shares of excess by payer, 2008 dollars

	<b>All Payers</b>	<b>Medicaid</b>	<b>Medicare</b>	<b>All Other Payers</b>
	Spending (\$billions)	% of all payer total	% of all payer total	% of all payer total
<b>Short run</b>	<b>\$180</b>	<b>8.6%</b>	<b>16.8%</b>	<b>74.6%</b>
Diabetes	31	10.2%	21.7%	68.1%
HBP	97	5.7%	16.0%	78.4%
Diabetes & HBP	52	13.2%	15.5%	71.3%
<b>Medium run</b>	<b>\$314</b>	<b>10.2%</b>	<b>39.6%</b>	<b>50.3%</b>
H   R   C	76	6.7%	35.0%	58.3%
Diabetes & (H   R   C)	34	15.8%	55.8%	28.4%
HBP & (H   R   C)	120	7.7%	37.1%	55.2%
Diabetes & HBP & (H   R	85	14.5%	40.6%	44.9%
<b>Total Excess Spending</b>	<b>\$494</b>	<b>9.6%</b>	<b>31.3%</b>	<b>59.1%</b>

# Estimated Potential Savings

from illustrative 5% prevalence reduction

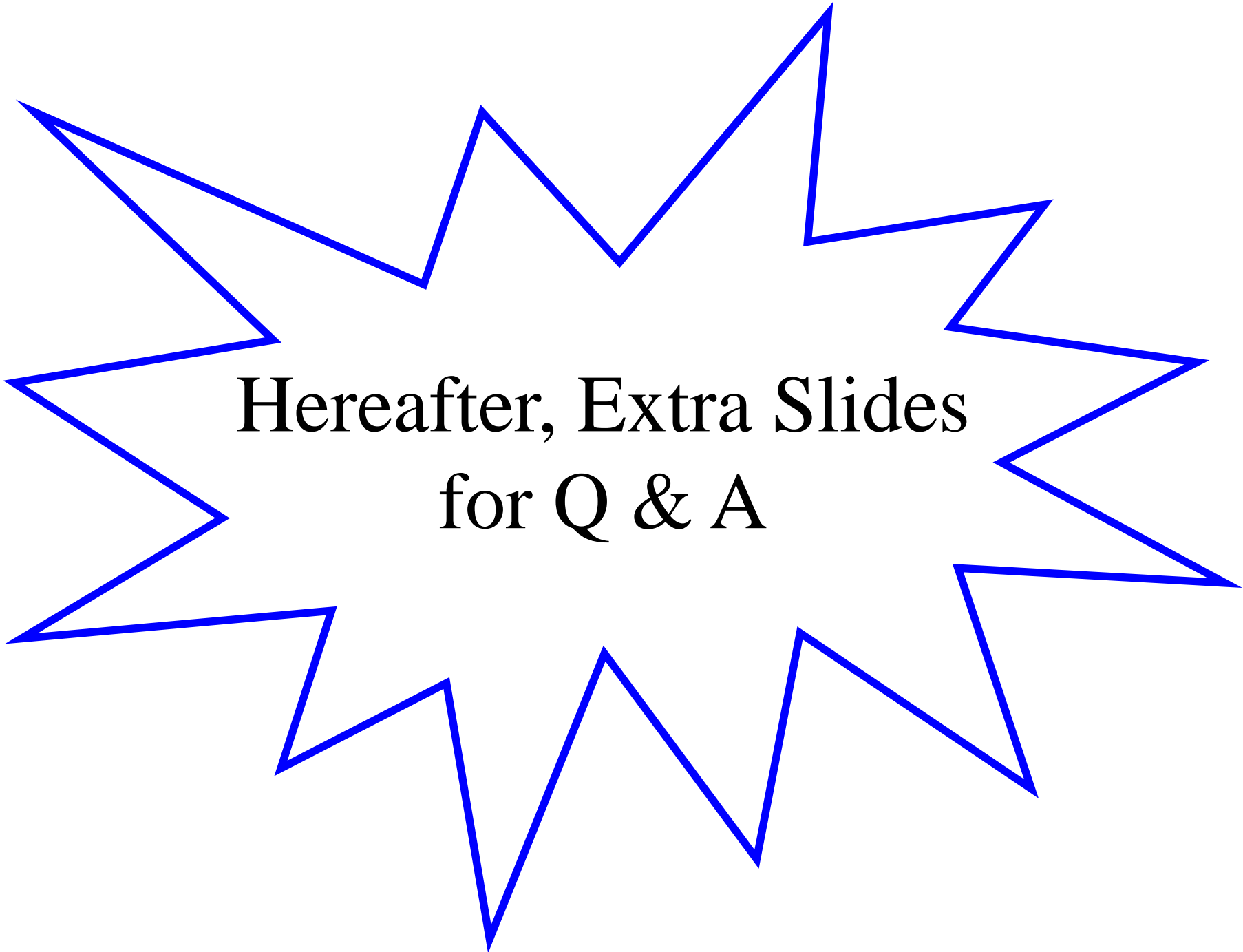
- National annual savings
  - \$9 billion from preventing uncomplicated disease in short run
  - \$24.7 billion reduction in complications in medium run
- Largest states have greatest potential \$ savings
  - CA, NY, FL, TX, and PA
- Greatest potential % savings are in states with high disease burdens
  - WV, MS, AL, AR, and SC

# Discussion - 1

- Community-level interventions can reduce or delay chronic disease, affecting morbidity, disability, and costs.
- The estimated \$9 billion national savings in the model's first period would cover an investment of \$29 for every US resident.
- Second period savings would increase three-fold, although the timing of such returns is uncertain.
- The distribution of potential savings by age and payer suggests that community-level prevention could serve help reduce health disparities.

# Discussion - 1

- How much should we spend on primary prevention?
- Why have we not yet made this investment?
- Who should bear the costs?
- Why does this question of costs versus savings arise for spending on prevention and not for curative care?



Hereafter, Extra Slides  
for Q & A

# Sources

Randall R. Bovbjerg, Barbara A. Ormond, and Vicki Chen, *State Budgets under Federal Health Reform: The Extent and Causes of Variations in Estimated Impacts*, Washington, DC: Kaiser Commission on Medicaid and the Uninsured, February 2011, accessible from

<http://www.urban.org/publications/1001515.html>.

Barbara A. Ormond, Brenda C. Spillman, Timothy A. Waidmann, Kyle J. Caswell, and Bogdan Tereshchenko, “Potential National and State Medical Care Savings from Primary Prevention,” *American Journal of Public Health* 101(1):157-164, January 2011, accessible from

<http://www.medscape.com/viewarticle/737960>.

# Part 1



# Scorecard of Impacts - 1, New Costs

	<b>FL</b>	<b>IN</b>	<b>KS</b>	<b>MD</b>	<b>TX</b>
Expansion of Medicaid Enrollment	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Administrative Costs for Medicaid		<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
assumed percentage of medical costs		<b>3.75-6%</b>	<b>6%</b>	<b>5%</b>	<b>8%</b>
Administrative Costs for State Exchanges		<b>x</b>	<b>x</b>	<b>x</b>	
Higher Physician Fees	<b>x</b>	<b>x</b>			<b>x</b>
Reduction in federal DSH Payments				<b>x</b>	
State Employees Benefit Plans Costs				<b>x</b>	
Medicaid to cover foster children to 26		<b>x</b>			<b>x</b>
Transfer CHIP to Medicaid <133%	<b>x</b>			<b>x</b>	<b>x</b>
Lost Pharmaceutical Rebate: FFS			<b>x</b>	<b>x</b>	<b>x</b>
Change of Eligibility Criteria for 209(b) States		<b>x</b>			

# Scorecard of Impacts - 2, Offsets

<b>New Savings</b>	<b>FL</b>	<b>IN</b>	<b>KS</b>	<b>MD</b>	<b>TX</b>
Savings on Uncompensated Care					
Medicaid Savings					
Shift of Pregnant Women / Adults > 133 % FPL		<b>x</b>			
Add'l Federal Match for Current Medicaid					
Breast & Cervical Cancer Program		<b>x</b>		<b>x</b>	
Benefits redesign for newly eligible					
Reduced State Match for DSH			<b>x</b>		
New Pharmaceutical Rebate: MCOs				<b>x</b>	
Reductions in State Funded Programs					
Pre-existing state coverage					
Direct state support for services				<b>x</b>	
State High Risk Pools				<b>x</b>	
Higher federal CHIP Match after 2016	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Efficiencies in Care Delivery or Payment Methods					
Obtain Federal Grants or Similar Funding					
<b>New Revenues</b>	<b>FL</b>	<b>IN</b>	<b>KS</b>	<b>MD</b>	<b>TX</b>
Increased Collection of Insur. Prem. Tax				<b>x</b>	
Increased Collection of Provider Taxes				<b>x</b>	

# Concluding Discussion - 2

(goes beyond KFF publication)

- Foregoing factors explain how estimates vary
- Why did states make them vary?
  - political agenda
  - built-in conservatism of budgeting
  - costs are nearly automatic and near term, whereas savings need state action, are often long term
  - states vary in capabilities and desire to change
  - culture clash: ACA reflects national priorities, not state

# Part 2

# Estimation of excess medical costs

$$E(S_{pi}) = \exp\left[ \sum \gamma_j C_{ji} + \mathbf{X}_i \mathbf{B} \right]$$

# State-level estimation

- Creation of “pseudo-states”
- Re-estimation of excess medical costs
- Calculation of potential savings by payer

# Limitations and assumptions

- There is limited data on the scalability of the interventions or the sustainability of the effects. Hence, we have assumed a one-time effect of interventions sustained over time.
- We have not yet modeled severity and differences in cost at different periods in disease and treatment process. The model calculates savings from reductions in prevalence not from reductions in severity.
- Savings are presented in 2008 dollars for both time periods.
- MEPS relies on self reports for diagnoses so some people may have been misclassified into disease clusters.
- The statistical rather than direct estimation of state effects is a source of possible error. Comparisons to state level findings from other research and to reported Medicaid costs of chronic disease (e.g., from CDC) provide external validity tests.
- The literature on the effects of community based prevention is diverse. Interventions differ widely as do reported measures of their effects. Studies do not provide results over a long enough time or represent diverse enough populations to allow good judgments about the duration of effects or their broad applicability. Costs associated with interventions are rarely reported. Overall, while our reading of the literature suggests that a 5% reduction in uncomplicated diabetes and hypertension can be achieved and sustained, the direct evidence for the efficacy of this type of intervention is still being collected and is not yet as strong as we would like.