

Consumer Driven Health Plans:

Early evidence of take-up, cost and utilization and research opportunities

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Presentation Overview

- Employer-based Analysis Overview
 - CDHP Questions
 - National CDHP Take-up
 - Cost & Utilization Comparisons Over Time
 - National HSA Simulation
 - Research Opportunities
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Employer-based Analysis Overview

- ❑ Analysis started in 2002 with six employers
 - ❑ Combined population drawn from 50 states
 - ❑ Total covered lives represented: ~250,000
 - ❑ Collect primarily employer HR data and insurance claims data for all plans.
 - ❑ New HCFO grant will create a study panel with six total years of CDHP experience 2001-2006.
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CDHP Questions

- Do CDHPs (in the form of HRAs) have national appeal?
- What are the longer-run cost & use consequences of CDHPs?
 - Where do they save money?
 - Where are they more expensive?
 - What is the impact on utilization of key services?
- Do HSAs have potential national appeal?
- Are HSAs a viable approach to addressing the problem of the uninsured?

General Caveat: We are just approaching the half-way point of our research.

Take-up Summary from the Study Employers

- All states have take-up above 5% with the exception of New York, New England States, Indiana, California and Arizona.
 - Differences may be driven by:
 - Dominance of managed care in CA, AZ
 - Insurer/provider choices in Northeast
 - Not enough data from only six employers
 - Grand experiment in 2005: FEHBP
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What is the impact of CDHPs on cost & use?

Study Design:

- Reported in 2004, August, *Health Services Research*.
 - Look at CDHP/PPO/POS cohorts within one large employer for employees over time to see 'longer run' impact of CDHP in 2001 & 2002.
 - Control for several factors to **ADJUST** cost & use estimates:
 - Health status/illness burden/health shocks (cancer, catastrophic accident)
 - Income
 - Family size and dependents
 - Age, gender
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What was the **ADJUSTED** impact on provider and patient payment?

<i>Health Plan Cohorts</i>	2000 Mean	2001 Mean	2002 Mean
CDHP Cohort N=531			
Total Expenditure	\$ 4,396.22	\$ 6,154.36	\$ 8,149.26
Employer Expenditure	\$ 4,005.28	\$ 5,903.61	\$ 7,807.39
Employee Expenditure	\$ 416.51	\$ 634.38	\$ 792.01
POS Cohort N=1,551			
Total Expenditure	\$ 5,284.53	\$ 6,773.62	\$ 7,197.50
Employer Expenditure	\$ 4,895.75	\$ 6,227.81	\$ 6,428.83
Employee Expenditure	\$ 394.70	\$ 549.32	\$ 702.49
PPO Cohort N=1,554			
Total Expenditure	\$ 5,228.42	\$ 7,050.59	\$ 8,377.78
Employer Expenditure	\$ 4,688.28	\$ 6,349.99	\$ 7,330.94
Employee Expenditure	\$ 511.84	\$ 657.16	\$ 881.47

One employer's results reported in: ST Parente, R Feldman, JB Christianson. Evaluation of the Effect of a Consumer Driven Health Plan on Medical Care Expenditures and Utilization, *Health Services Research, Vol. 39, No. 4, Part II, pp. 1189-1209, August 2004.*

NOTE: These are results from a restricted continuously enrolled sample of 50% to 60% of the total employee population and are not a reflection of the plans' full PMPM expenditures. Also note: 1) Patient expenditures from the Personal Care Account (PCA) are included in the employer payment category. 2) Consumer payment reflects deductibles, copayments, and coinsurance expenses.

What was the **ADJUSTED** impact on provider & patient payment by different services?

<i>Health Plan Cohorts</i>	<i>Year 2000 Mean</i>	<i>Year 2001 Mean</i>	<i>Year 2002 Mean</i>
CDHP Cohort N=531			
Hospital Expenditure	\$ 1,369.97	\$ 1,999.25	\$ 3,468.53
Physician Expenditure	\$ 2,093.70	\$ 2,935.84	\$ 3,510.83
Pharmacy Expenditure	\$ 935.29	\$ 1,103.72	\$ 1,341.78
POS Cohort N=1,551			
Hospital Expenditure	\$ 1,842.80	\$ 1,796.37	\$ 1,956.83
Physician Expenditure	\$ 2,381.08	\$ 2,959.90	\$ 3,088.22
Pharmacy Expenditure	\$ 1,107.64	\$ 1,498.54	\$ 1,640.25
PPO Cohort N=1,554			
Hospital Expenditure	\$ 1,779.06	\$ 2,049.76	\$ 2,367.17
Physician Expenditure	\$ 2,245.22	\$ 2,834.32	\$ 3,294.47
Pharmacy Expenditure	\$ 1,007.95	\$ 1,484.91	\$ 1,789.26

One employer's results reported in: ST Parente, R Feldman, JB Christianson. Evaluation of the Effect of a Consumer Driven Health Plan on Medical Care Expenditures and Utilization, *Health Services Research, Vol. 39, No. 4, Part II, pp. 1189-1209, August 2004.*

NOTE: These are results from a restricted continuously enrolled sample of 50% to 60% of the total employee population and are not a reflection of the plans' full PMPM expenditures.

Was **ADJUSTED** service use different for CDHPs?

<i>Health Plan Cohorts</i>	2000 Mean	2001 Mean	2002 Mean
CDHP Cohort N=531			
Hospital Admission Rate	0.05	0.10	0.16
Physician Visits	5.74	7.49	7.15
Prescriptions Filled	18.89	22.23	25.25
POS Cohort N=1,551			
Hospital Admission Rate	0.07	0.06	0.09
Physician Visits	6.75	7.56	7.29
Prescriptions Filled	22.23	22.59	30.89
PPO Cohort N=1,554			
Hospital Admission Rate	0.07	0.07	0.11
Physician Visits	5.78	6.54	6.95
Prescriptions Filled	20.63	23.79	24.50

One employer's results reported in: ST Parente, R Feldman, JB Christianson. Evaluation of the Effect of a Consumer Driven Health Plan on Medical Care Expenditures and Utilization, *Health Services Research, Vol. 39, No. 4, Part II, pp. 1189-1209, August 2004.*

NOTE: These are results from a restricted continuously enrolled sample of 50% to 60% of the total employee population and are not a reflection of the plans' full admissions and prescription drug experience.

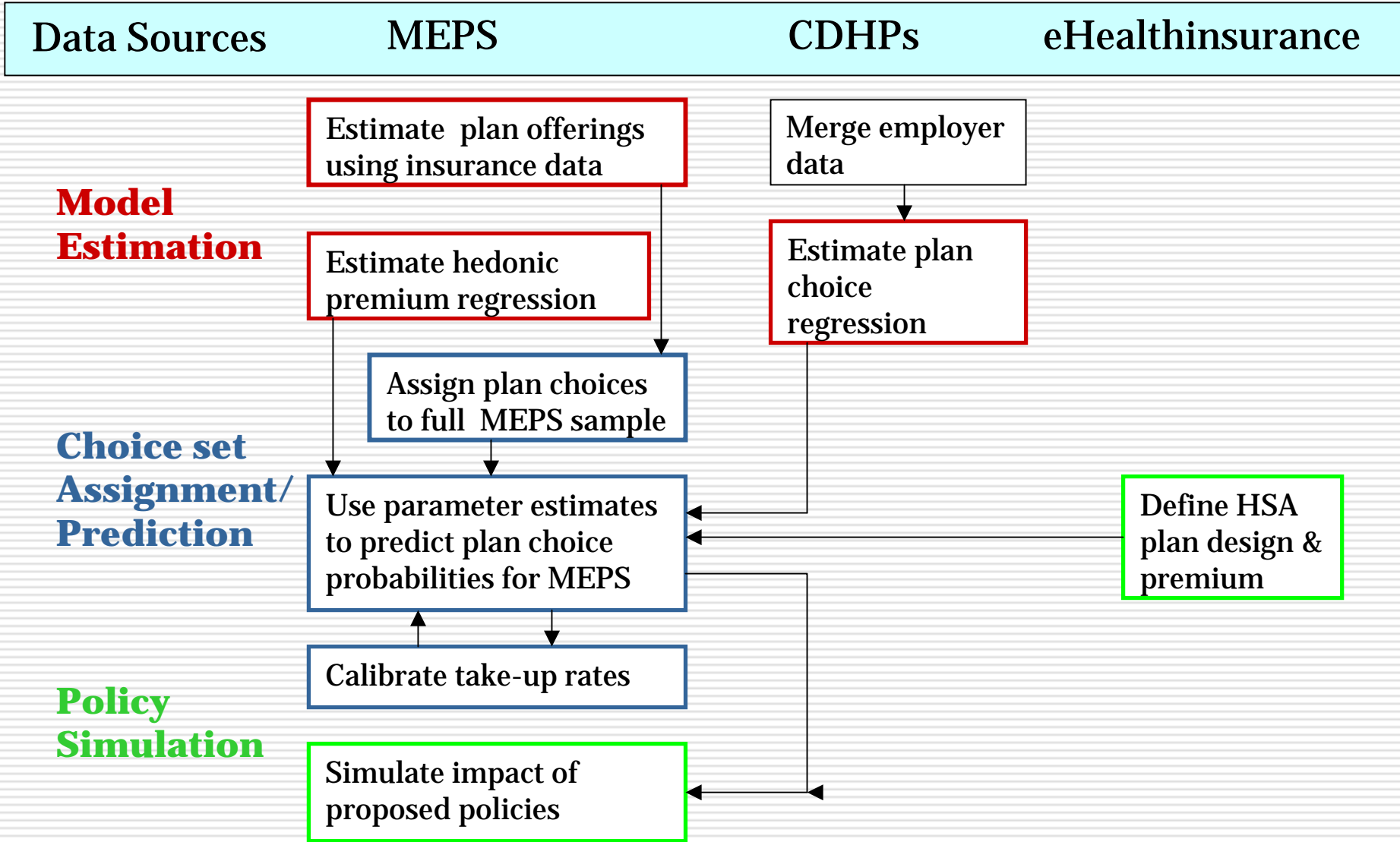
Results Summary

- ❑ CDHP plan did not have the lowest cost and utilization across all plans.
 - ❑ CDHP best (lowest) cost result was for pharmacy.
 - ❑ CDHP worse (highest) cost result was for hospital admissions – partially explained by pent-up demand for elective procedures & provider pricing differences across years.
 - ❑ Utilization results have no dramatic differences across plan types for pharmacy and physician services. Obvious access to care problem not apparent.
 - ❑ CDHP hospital admissions dramatically higher by 2nd year.
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Using HRA Results to Explore HSA Market Question & Opportunities

- What is the expected take-up rate of HSAs in the individual market?
 - What is the likely impact of the Administration's proposed HSA subsidies?
 - Take-up rate of HSAs with subsidies
 - Reduction in the number of uninsured
 - Cost of the subsidy
 - What is the impact of other possible subsidy designs?
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Analysis Design



Policy Simulations

- ❑ Baseline take-up of HSAs from the Medicare Modernization Act of 2003
 - ❑ Simulation (1): Bush Administration's proposal
 - Refundable tax credit up to 90% of premium; maximum of \$1000/adult, \$500/child (up to two)
 - ❑ Subsidy for singles with no dependents phased out at \$30,000 adjusted gross income and \$60,000 for families
 - ❑ Simulation (2): Low income buy-in subsidy
 - Set HSA premium at \$0 for < \$15,000 annual income; 50% of premium for incomes between \$15,000-\$40,000; 75% of premium for incomes between \$40,000 and \$60,000.
 - ❑ Simulation (3): Full subsidy of HSA premium
 - Set HSA premium to \$0 for all, regardless of income.
 - ❑ Simulation (3a): Full subsidy of HSA premium for “generous” HSA policy
 - ❑ Simulation (4): Full subsidy of HSA premium for the non-working, non-public insurance population
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Baseline Impact of MMA 2003

	Plan Choice	Baseline (unsubsidized) Population %	Baseline (unsubsidized) Project Pop.
INDIVIDUAL MARKET	HSA-Full Price	9%	3,155,982
	PPO_High \$\$	13%	4,651,023
	PPO_Low \$\$	1%	310,041
	PPO_Medium \$\$	4%	1,426,040
	Uninsured	74%	27,273,018
EMPLOYER INSURANCE OFFERED MARKET	HMO	31%	26,295,237
	HRA	2%	1,811,281
	HSA-Shared Prem	1%	530,882
	HSA-Full Price	0%	332,249
	PPO_High \$\$	7%	5,930,246
	PPO_Low \$\$	2%	1,571,384
	PPO_Medium \$\$	41%	34,949,793
Turned Down	16%	13,298,512	

NOTE: Population is 19-64, non public insurance

Sim#1: Administration's* Proposal

Plan Choice	Unsubsidized Population %	Simulation Population %	Unsubsidized Project Pop.	Simulation Project Pop.	% Change	Subsidy Cost
INDIVIDUAL						
HSA-Full Price	9%	19%	3,155,982	6,971,694	120.9%	\$ 6,900,791,439
PPO_High \$\$	13%	11%	4,651,023	4,017,191	-13.6%	\$ -
PPO_Low \$\$	1%	1%	310,041	263,278	-15.1%	\$ -
PPO_Medium \$\$	4%	3%	1,426,040	1,215,872	-14.7%	\$ -
Uninsured	74%	66%	27,273,018	24,348,069	-10.7%	\$ -
OFFERED						
HMO	31%	31%	26,295,237	26,232,550	-0.2%	\$ -
HRA	2%	2%	1,811,281	1,803,079	-0.5%	\$ -
HSA-Shared Prem	1%	1%	530,882	528,590	-0.4%	\$ -
HSA-Full Price	0%	1%	332,249	861,387	159.3%	\$ 1,174,289,915
PPO_High \$\$	7%	7%	5,930,246	5,921,970	-0.1%	\$ -
PPO_Low \$\$	2%	2%	1,571,384	1,569,135	-0.1%	\$ -
PPO_Medium \$\$	41%	41%	34,949,793	34,627,195	-0.9%	\$ -
Turned Down	16%	16%	13,298,512	13,175,679	-0.9%	\$ -

NOTE: Population is 19-64, non public insurance. *Proposal as interpreted from February, 2004 U.S. Treasury Blue Book.

Sim #2: Low-income Buy-in Subsidy

Plan Choice	Unsubsidized Population %	Simulation Population %	Unsubsidized Project Pop.	Simulation Project Pop.	% Change	Subsidy Cost
INDIVIDUAL						
HSA-Full Price	9%	24%	3,155,982	8,814,552	179.3%	\$ 10,832,553,072
PPO_High \$\$	13%	10%	4,651,023	3,840,600	-17.4%	\$ -
PPO_Low \$\$	1%	1%	310,041	240,992	-22.3%	\$ -
PPO_Medium \$\$	4%	3%	1,426,040	1,142,829	-19.9%	\$ -
Uninsured	74%	62%	27,273,018	22,777,131	-16.5%	\$ -
OFFERED						
HMO	31%	31%	26,295,237	26,210,822	-0.3%	\$ -
HRA	2%	2%	1,811,281	1,798,914	-0.7%	\$ -
HSA-Shared Prem	1%	1%	530,882	528,097	-0.5%	\$ -
HSA-Full Price	0%	1%	332,249	1,036,512	212.0%	\$ 1,387,115,890
PPO_High \$\$	7%	7%	5,930,246	5,920,098	-0.2%	\$ -
PPO_Low \$\$	2%	2%	1,571,384	1,568,187	-0.2%	\$ -
PPO_Medium \$\$	41%	41%	34,949,793	34,506,258	-1.3%	\$ -
Turned Down	16%	16%	13,298,512	13,150,696	-1.1%	\$ -

Income < 15K, free; 25K to 45K, 50% off; 40K to 60K, 25% off

NOTE: Population is 19-64, non public insurance

Sim #3: Full Subsidy for HSAs

Plan Choice	Unsubsidized Population %	Simulation Population %	Unsubsidized Project Pop.	Simulation Project Pop.	% Change	Subsidy Cost
INDIVIDUAL						
HSA-Full Price	9%	53%	3,155,982	19,464,040	516.7%	\$ 52,302,405,014
PPO_High \$\$	13%	6%	4,651,023	2,165,844	-53.4%	\$ -
PPO_Low \$\$	1%	0%	310,041	119,097	-61.6%	\$ -
PPO_Medium \$\$	4%	2%	1,426,040	613,960	-56.9%	\$ -
Uninsured	74%	39%	27,273,018	14,453,162	-47.0%	\$ -
OFFERED						
HMO	31%	30%	26,295,237	25,480,910	-3.1%	\$ -
HRA	2%	2%	1,811,281	1,697,603	-6.3%	\$ -
HSA-Shared Prem	1%	1%	530,882	505,483	-4.8%	\$ -
HSA-Full Price	0%	7%	332,249	5,694,864	1614.0%	\$ 16,911,914,862
PPO_High \$\$	7%	7%	5,930,246	5,804,413	-2.1%	\$ -
PPO_Low \$\$	2%	2%	1,571,384	1,534,310	-2.4%	\$ -
PPO_Medium \$\$	41%	37%	34,949,793	31,684,081	-9.3%	\$ -
Turned Down	16%	15%	13,298,512	12,317,920	-7.4%	\$ -

NOTE: Population is 19-64, non public insurance

Sim #3A: Full Subsidy for Generous HSA

Plan Choice	Unsubsidized Population %	Simulation Population %	Unsubsidized Project Pop.	Simulation Project Pop.	% Change	Subsidy Cost
INDIVIDUAL						
HSA-Full Price	9%	88%	3,155,982	32,413,500	927.0%	\$ 98,708,233,232
PPO_High \$\$	13%	1%	4,651,023	458,476	-90.1%	\$ -
PPO_Low \$\$	1%	0%	310,041	29,904	-90.4%	\$ -
PPO_Medium \$\$	4%	0%	1,426,040	148,745	-89.6%	\$ -
Uninsured	74%	10%	27,273,018	3,765,478	-86.2%	\$ -
OFFERED						
HMO	31%	24%	26,295,237	20,117,174	-23.5%	\$ -
HRA	2%	1%	1,811,281	1,165,656	-35.6%	\$ -
HSA-Shared Prem	1%	0%	530,882	327,143	-38.4%	\$ -
HSA-Full Price	0%	37%	332,249	31,603,493	9412.0%	\$ 112,410,660,595
PPO_High \$\$	7%	6%	5,930,246	4,722,256	-20.4%	\$ -
PPO_Low \$\$	2%	2%	1,571,384	1,281,803	-18.4%	\$ -
PPO_Medium \$\$	41%	22%	34,949,793	18,528,647	-47.0%	\$ -
Turned Down	16%	8%	13,298,512	6,973,413	-47.6%	\$ -

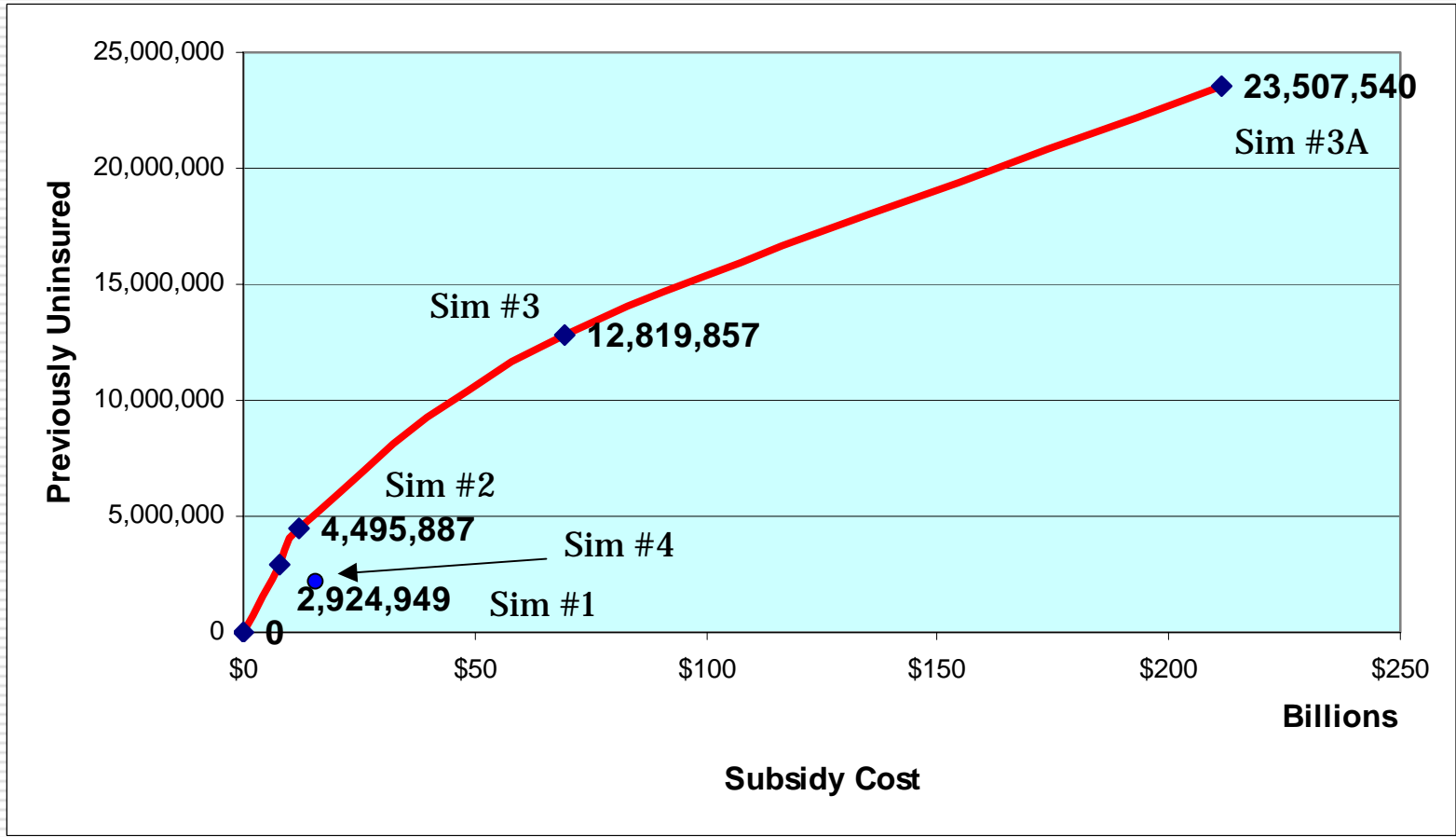
NOTE: Population is 19-64, non public insurance

Sim #4: Full Subsidy for Non-working

Plan Choice	Unsubsidized Population %	Simulation Population %	Unsubsidized Project Pop.	Simulation Project Pop.	% Change	Subsidy Cost
INDIVIDUAL						
HSA-Full Price	9%	19%	3,155,982	6,858,372	117.3%	\$ 11,234,374,712
PPO_High \$\$	13%	12%	4,651,023	4,266,913	-8.3%	\$ -
PPO_Low \$\$	1%	1%	310,041	279,884	-9.7%	\$ -
PPO_Medium \$\$	4%	3%	1,426,040	1,281,403	-10.1%	\$ -
Uninsured	74%	66%	27,273,018	24,129,531	-11.5%	\$ -
OFFERED						
HMO	31%	31%	26,295,237	26,295,237	0.0%	\$ -
HRA	2%	2%	1,811,281	1,811,281	0.0%	\$ -
HSA-Shared Prem	1%	1%	530,882	530,882	0.0%	\$ -
HSA-Full Price	0%	0%	332,249	332,249	0.0%	\$ -
PPO_High \$\$	7%	7%	5,930,246	5,930,246	0.0%	\$ -
PPO_Low \$\$	2%	2%	1,571,384	1,571,384	0.0%	\$ -
PPO_Medium \$\$	41%	41%	34,949,793	34,949,793	0.0%	\$ -
Turned Down	16%	16%	13,298,512	13,298,512	0.0%	\$ -

NOTE: Population is 19-64, non public insurance

Diminishing Subsidy Returns



HSA Simulation Implications

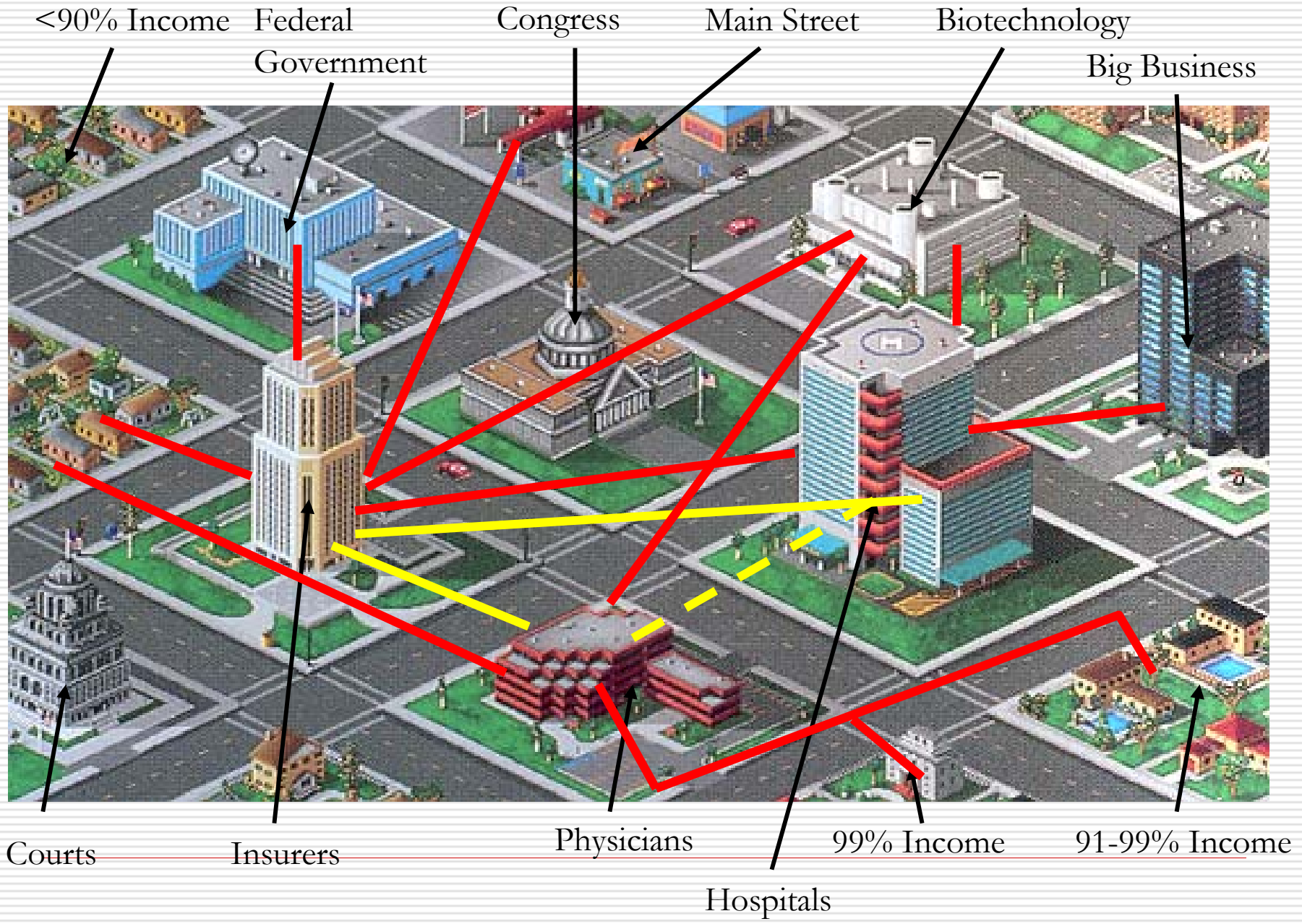
- Without any subsidies, the 2003 MMA HSAs could have a take-up of ~3.1 million.
 - Hypothetical tax subsidies for HSAs could increase coverage among the uninsured from 4 to 9 million.
 - Offering a free premium HSA to the non-working population covered by public programs reduces the uninsured, but less efficiently than income targeted subsidies.
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Where are the Research Opportunities?

- How will the consumers ‘drive’?
 - ‘Pull’ information where consumers search?
 - ‘Push’ information where consumers are actively guided?
 - What information has enough signal for consumers to:
 - Understand
 - Take action
 - Have the action affect (positively) their health status
 - Are current market conditions conducive for CDHPs to grow and realize the original intent of having consumers be ‘*more engaged in the health care purchases than a status quo PPO market*’?
 - Can the two ‘flavors of the year’ CDHP and Health IT be combined to make something more than just the sum of their parts?
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Actual eLinks

To Build for Interoperability



HSA/CDHP Clients Will Need:

- A technology that can gather all their administrative and clinical data together for using the NHIM record locator technology (to be named/built):
 - Electronic health record
 - Medical opportunity finder
 - Personal health status benchmark / underwriter
 - A technology to check how well a provider performs using the same record locator technology.
 - Aggregate patient records
 - Let patients check quality on every transaction (ebay like)
 - A platform to allow true portability of data regardless of CDHP or HSA account or time period. In medical record utility back-office that functions like a credit history sweep.
 - **The Question is: Is this Sci Fi or an opportunity for address the weaknesses of CDHPs (adverse selection) and Health IT (actuarial value proposition) by a fusion?**
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Summary

- ❑ Working CDHP market that was spawned by e-commerce has arrived.
 - ❑ The opportunities for business and society from CDHPs have never been higher in the health insurance field.
 - ❑ The stakes have never been greater.
 - ❑ Good and timely research can address whether the potential of this market is real and what tangible mileposts can be observed to move beyond the hyperbole, conjecture, anecdote and science fiction.
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