Employee Choice of a Consumer Driven Health Plan in a Multi-Plan, Multi-Product Setting

Stephen T. Parente, Roger Feldman, Jon B. Christianson University of Minnesota

September 15, 2003

Funded by the Robert Wood Johnson Foundation Health Care Organization and Financing Initiative For more information: sparente@csom.umn.edu

What are the Issues in a Multi-plan, Multi-product Setting?

- To date, most consumer driven plans have been offered as a choice with other products, such as Preferred Provider Organizations and traditional HMOs
- CDP will often be lower-priced than competing PPO plans and possibly lower than HMOs
- For CDPs to be successful in the marketplace, employees must be sensitive to premium differences among competing plans
- First issue: What is the premium sensitivity of enrollment decisions in a multi-plan, multi-product setting?

Issue #2

- Whenever employees have a choice of health plan products (PPO, HMO, CDP), sicker employees may prefer one product more than the others
- Adverse selection may lead to undesirable consequences:
- plans may try to avoid high risks by reducing benefits that attract them and/or increasing cost-sharing that deters them
- high-risk plans increase premiums and may "death-spiral"
- High risks are reported to dislike high deductibles and not to be attracted by personal care accounts
- Second issue: Do high risks tend to avoid the CDP in a multi-plan, multi-product setting?

Issue #3

- CDPs represent a departure from traditional health insurance and managed care:
 - increased consumer decision-making over health care
 - exposure to higher out-of-pocket costs, but generous coverage once the deductible is reached
 - use of information technology to create informed consumers
- Third issue: Do consumers who prefer distinguishing features of CDP plans (e.g., a personal care account that rolls over) tend to choose the CDP?

Issues Recap

- #1 What is the premium sensitivity of enrollment decisions in a multi-plan, multi-product setting?
- #2 Do high risks tend to choose the CDP plan in a multi-plan, multi-product setting?
- #2 Do consumers who prefer distinguishing features of CDP(e.g., personal care account that rolls over) tend to choose the CDP?

Study Setting

- We studied these issues through the experience of the University of Minnesota, which offered a CDP for the first time in 2002
- UM had 16,000 covered employees in 2002
- 2002 plan offerings:
 - Definity Health CDP
 - HealthPartners HMO with limited out-of-network coverage
 - PreferredOne PPO
 - Patient Choice care systems that contract directly with medical providers
- UM makes defined contribution based on the low-cost plan and does not risk-adjust the employer contribution

Definity Health Details at UM

Personal Care Account (PCA)

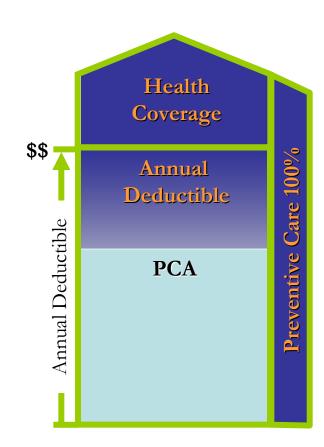
- Employer allocates PCA and decides which expenses will be eligible
- \$500 single/\$1,000 family or \$1,000/\$2,000
- Member directs PCA, which rolls over at year-end if any is unused

Health Coverage

- 100% coverage for preventive care
- Annual deductible of \$1,250/\$2,500 or \$2,000/\$4,000
- 100% coverage for in-network care once deductible is met; 70% or 80% coverage for out-of-network care
- Access to nationwide provider network
- No referrals required

Health Tools and Resources

- Care management program
- Extensive easy-to-use information and services



UM Plan Options/Enrollment

	Employee-only coverage			
		Less UM	Employee	
	Total Cost	contribution	contribution	Enrollment
HealthPartners Classic	\$137.84	\$137.84	\$0.00	5,027
Patient Choice Cost Group I	\$137.84	\$137.84	\$0.80	
Patient Choice Cost Group II	\$147.15	\$137.84	\$9.31	2,091
Patient Choice Cost Group III	\$157.90	\$137.84	\$20.06	
PreferredOne National	\$189.51	\$137.84	\$51.77	731
Definity Health Option 1	\$150.52	\$137.84	\$12.68	349
Definity Health Option 2	\$150.48	\$137.84	\$12.64	

Total 8,198

	Family coverage			
		Less UM	Employee	
	Total Cost	contribution	contribution	Enrollment
HealthPartners Classic	\$344.59	\$323.92	\$20.67	3,967
Patient Choice Cost Group I	\$329.60	\$323.92	\$20.67	
Patient Choice Cost Group II	\$351.30	\$323.92	\$39.23	2,808
Patient Choice Cost Group III	\$376.80	\$323.92	\$65.73	
PreferredOne National	\$448.40	\$323.92	\$143.91	997
Definity Health Option 1	\$353.00	\$323.92	\$51.63	346
Definity Health Option 2	\$327.50	\$323.92	\$51.55	

Total
Single & Family Total

8,118

16,316

Employee Survey

- Survey goals: Record preferences for health plan features, employee health conditions, and experiences with Definity and other health plans
- Survey administered in April-June 2003 with reporting on 2002 health plan experience
- All Definity Health enrollees were surveyed, plus a random sample of enrollees from other health plans
- Interviewers from UM human resource staff were trained specifically for this research project
- 433 Definity Health respondents (62.6% response rate)
- 503 Other health plan respondents (73.3% response rate)

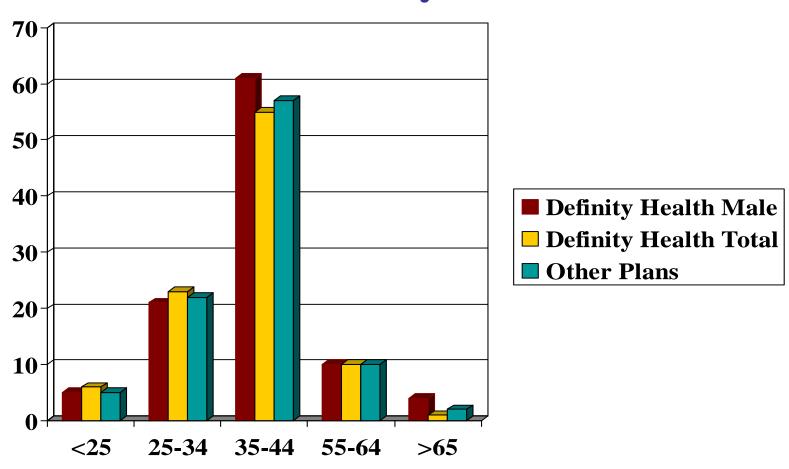
Data from Employee Survey

- Answer to question: Do you or your dependents have a chronic condition such as asthma, hypertension (high blood pressure), diabetes or arthritis?
- Employee was asked to select 3 most important features of a health plan (not necessarily the one they are in):
 - national network of providers
 - the plan's network includes my providers
 - the plan covers preventive care
 - the plan does not require referrals or pre-authorizations
 - the potential out-of-pocket expense in addition to premiums is small
 - the balance in a personal care account rolls over
 - the plan provides on-line tools and resources to manage medical care

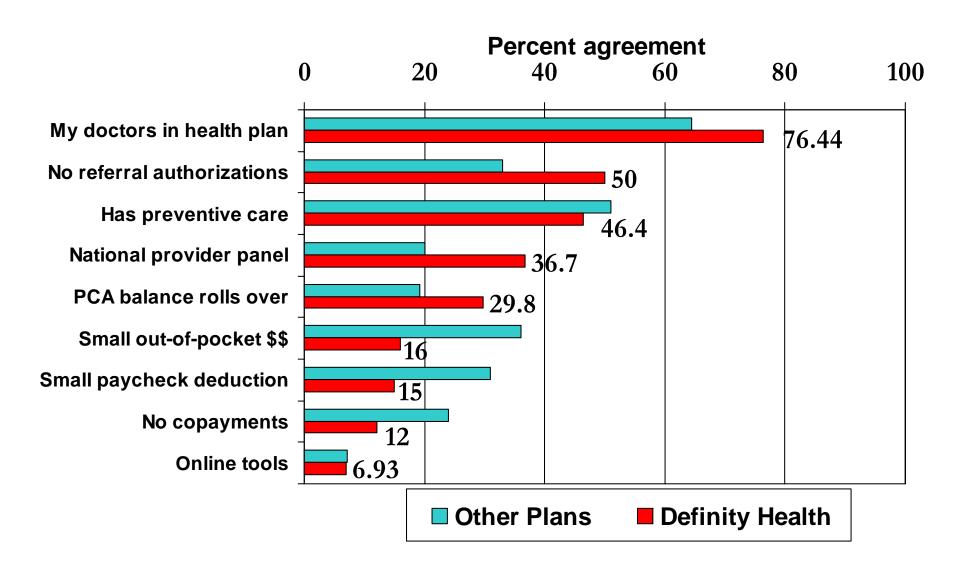
Additional Data from UM Personnel System

- 2002 plan choice and coverage type
- Income
 - Important for two reasons: (1) higher-income employees/families may prefer certain plans, and (2) outof-pocket premiums are paid with pre-tax dollars so higher-income employees get larger tax subsidy
- Age and gender

Definity Health Age/Gender Distribution 2002 University of Minnesota



Preferred Health Plan Features



Conceptual Choice Model

We estimated a choice model based on the idea that the employee chooses a health plan to maximize utility, which is formally stated as:

$$Uij = f(Zj,Xij)$$

- i is the employee choosing among j health plan products
- Zj = health plan product attributes such as the outof-pocket premium
- Xij = interactions between product attributes and employee characteristics such as self-reported health status and preferences

Results: Premium Sensitivity

- Employees are sensitive to out-of-pocket premiums, and surprisingly, employees with chronic conditions are more premium-sensitive
 - If Definity Health raised its premium by 1%, it would lose 4.6 % of healthy single enrollees and 5.4% of healthy families
 - 1% premium boost would cause 6.9% of singles and 10.7% of families with chronic condition to leave Definity Health
 - The results depend on passing 100% of the premium hike along to the employee (i.e, defined contribution), as the UM does

Results: Health Status and Other Employee Characteristics

- Employees and families with chronic conditions prefer the PPO, but otherwise, there is no evidence of adverse selection
 - Having a chronic condition is associated with an 11.8 percentagepoint increase in the probability of choosing PreferredOne
 - Note that PreferredOne had the highest premiums (\$189.51 for single coverage and \$448.40 for family coverage per pay period), suggesting that this plan is experiencing adverse selection
- Higher-income employees chose Definity Health or Choice Plus, suggesting these plans may evolve as favorites of the 'well-to-do'
- Older employees chose PreferredOne or Choice Plus

Results: Employee Preferences (Marginal effects)

<u>Feature</u>	Definity Ch	noice Plus P	<u>referedOne</u>						
<u>Health</u>									
National Panel	11.7%	No Effect	4.5%						
Preventive Services No Effect No Effect No									
Effect My Doctor in Panel 11.9 29.6									
35.0									
No Referrals	11.5	5.0	6.2						
Low Cost-Sharing	No Effect	6.2	No Effect						
PCA Rolls Over	No Effect	No Effect	-7.3						
On-Line Tools	No Effect	20.2	-18.1						

"Marginal effect" is the percentage-point increase in the probability of choosing each plan for an employee who rates

Conclusions (for this population)

- Employees are sensitive to premium differences among competing health plans
- Employees and families with chronic conditions are more premium-sensitive
- The CDP was not disproportionately chosen by the young and the healthy, but it was chosen by the wealthy
- Definity Health's preferred features are a national panel that includes the employee's doctors and has no restrictions on referrals

Implications and Conundrums

- Offering a CDP will not segment the risk pool into 'healthy' and 'unhealthy' groups, but adverse selection can arise for other reasons such as offering a PPO in competition with CDP and HMO plans
 - It is not clear if PreferredOne can avoid a death spiral
- Definity Health can 'win' employees by keeping its premium low, but it might win the unhealthy ones
- At this point, Definity Health's 'special' CDP features such as on-line tools and a PCA that rolls over don't provide a competitive advantage or disadvantage