

Cognitive and Behavioral Patterns of Thinking and Action: Health Personas Driving Consumer Preferences and Health Care Demand

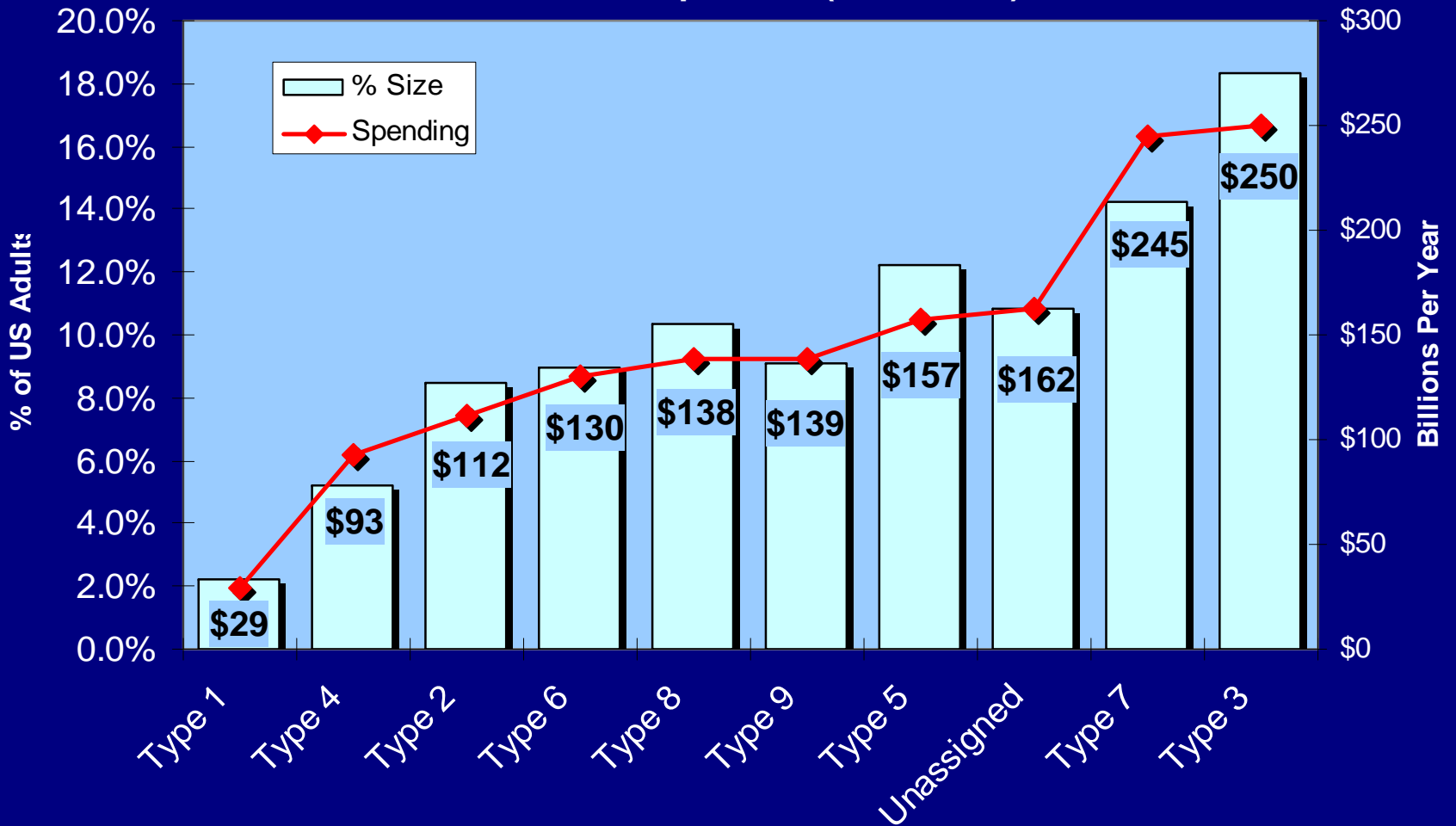
Frederick H. Navarro

PATH Institute Corporation

Directing health practice to serve health priorities

Consumer Subtype Prevalences and Spending

U.S. Adult Population (210 million)



EMPOWERING THE CONSUMER

Today's healthcare consumers face myriad decisions, the cumulative effect of which can be overwhelming. Here are six ways information can be packaged to better inform consumers' key decisions:

- **Health Plan Selection** – provide a healthcare summary of historic cost and use, as well as modeling tools to guide employees to optimal plans
- **Provider Selection** – guide consumers to higher-quality, lower-cost providers
- **Treatment Option Guidance** – educate consumers about treatment options and provide tools to identify their best choices
- **Treatment Cost Estimation** – engage consumers financially by estimating treatment costs, their liability under a given plan, deductible status and provider contracts
- **Messaging** – urge consumers to seek preventive care, comply with treatment guidelines, and reduce ongoing costs
- **Personal Health Records** – help consumers track their health information across providers and care settings with an automatically updated tool that improves care, fosters patient-proven collaboration, and reduces waste and errors

SOURCE: Thomson Medstat

Social Cognitive Theory

- Albert Bandera
- Individual as active participant
- Triadic reciprocity

Social Cognitive Theory

- Triadic reciprocity
 - Personal factors
 - Cognition (perceptions, expectations, preferences, priorities, intentions)
 - Biology (age, gender, weight, blood pressure, genetics)
 - Environmental factors
 - Family, accessibility, communications, information, finances, wellness promotion
 - Behavioral factors
 - Physical capabilities, exercise, diet, care seeking

Environmental factors

EMPOWERING THE CONSUMER

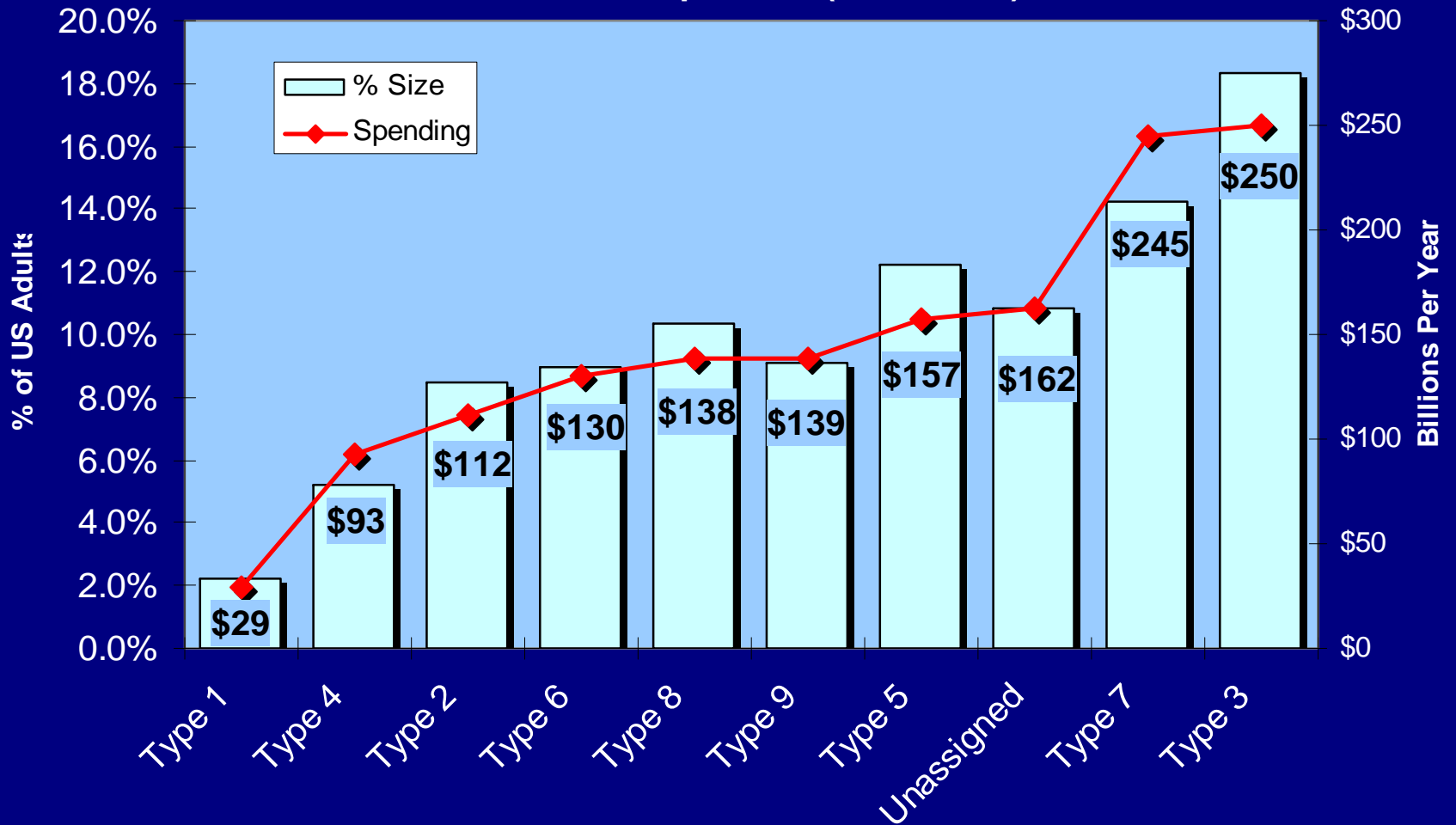
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Consumer Subtype Prevalences and Spending

U.S. Adult Population (210 million)



Social Cognitive Theory

- Triadic reciprocity

- Personal factors

- Cognitions, perceptions, expectations, preferences, priorities, intentions

- Age, gender, **weight, blood pressure, risk factors**

- Environmental factors

- Family, accessibility, communications, information, finances, wellness promotion

- Behavioral factors

- Physical capabilities, skills, **diet, exercise, care seeking**

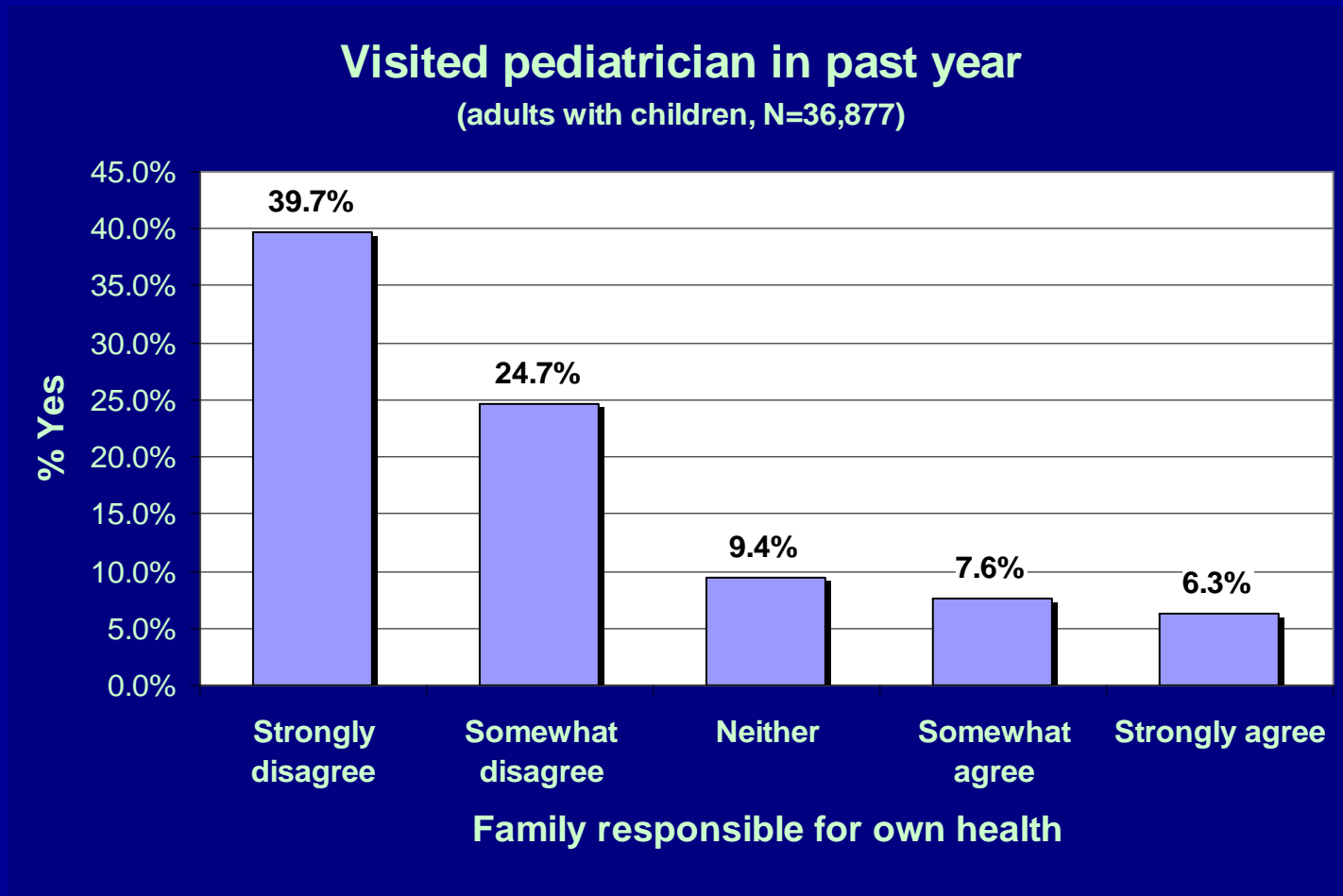
Cognitive examples

Family members responsible for
their own health

Deal with health only when
problems come up

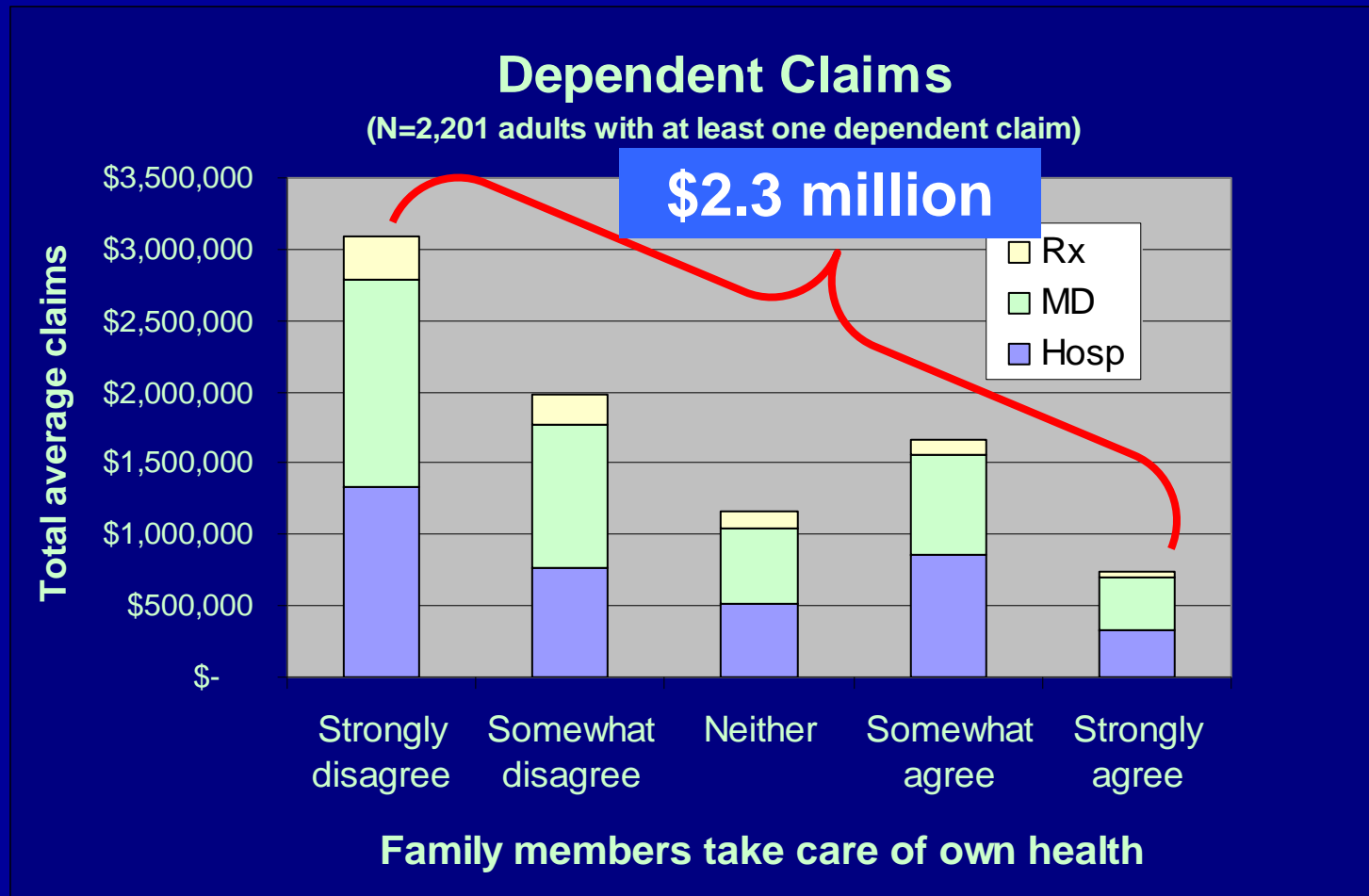
Cognitive examples

Family members responsible for their own health



Cognitive examples

Family members responsible for their own health



Cognitive examples

“Only deal with health problems when they come up”

Response	<u>Count</u>
strongly agree	756
somehwat agree	1647
neither	1016
somewhat disagree	1930
strongly disagree	2948
Total	8297

Cognitive examples

“Only deal with health problems when they come up”

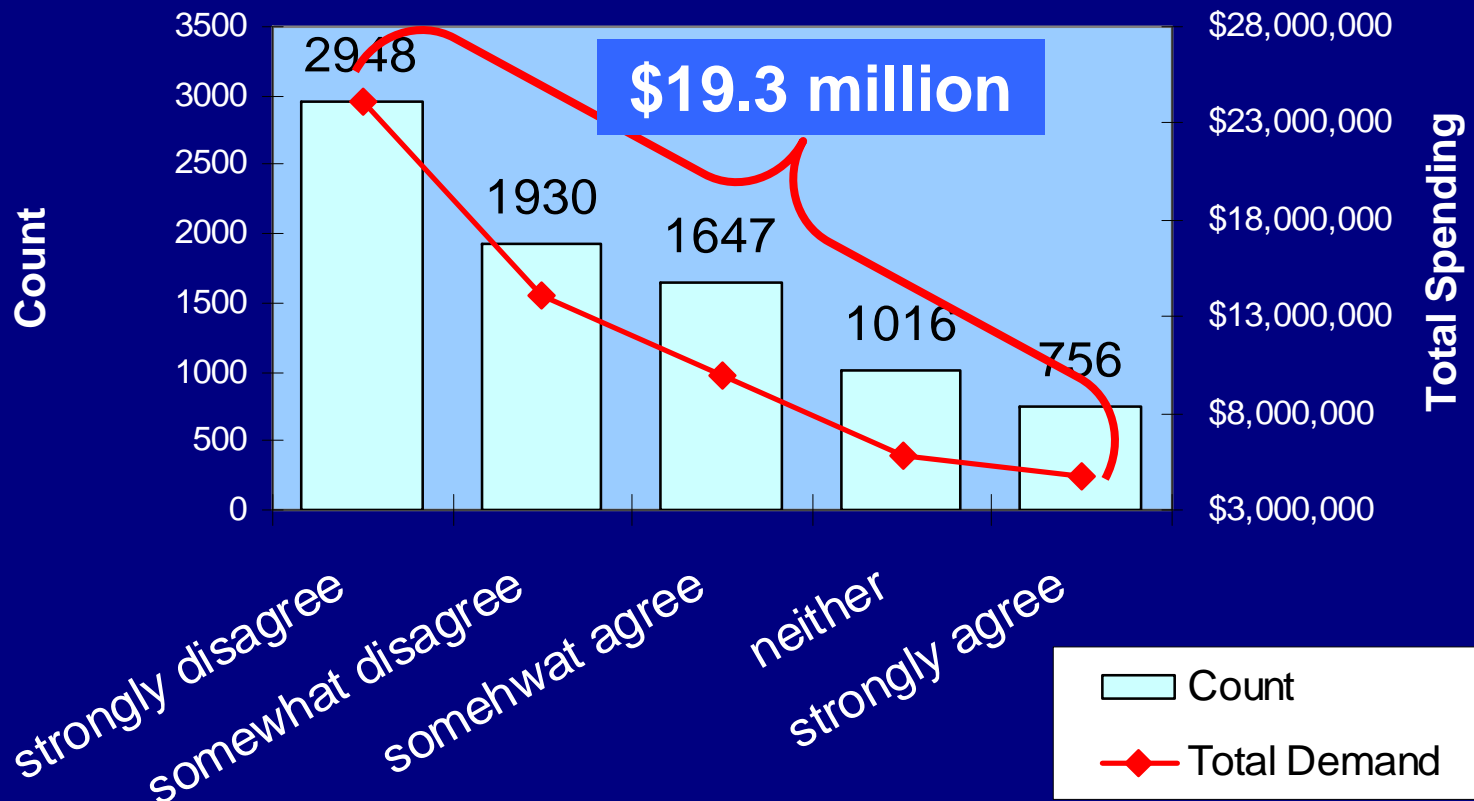
Statement: Deal with health only when problems come up

Response	Count	<u>Rx claims</u>	<u>Prof_ claims</u>	<u>Inpatient claims</u>	<u>Total Claims Per Response</u>
strongly agree	756	\$ 602.00	\$ 2,634.00	\$ 3,061.00	\$ 6,297.00
somehwat agree	1647	\$ 626.00	\$ 2,316.00	\$ 3,085.00	\$ 6,027.00
neither	1016	\$ 649.00	\$ 2,288.00	\$ 2,773.00	\$ 5,710.00
somewhat disagree	1930	\$ 801.00	\$ 2,793.00	\$ 3,701.00	\$ 7,295.00
strongly disagree	2948	\$ 964.00	\$ 3,417.00	\$ 3,806.00	\$ 8,187.00
Total	8297				
Statistical Sig.		p<0.000	p=0.000	ns	Difference
Dollar spread at extreme attitudes		\$ 362.00	\$ 783.00	\$ 745.00	\$ 1,890.00

Cognitive examples

“Only deal with health problems when they come up”

"Deal with health only when problems come up"



Social Cognitive Theory

- Triadic reciprocity
 - Personal factors
 - Cognitions, perceptions, expectations, preferences, priorities, intentions
 - Age, gender, weight, blood pressure
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 - Family, accessibility, communications, information, finances, wellness promotion
 - Behavioral factors
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Path type[®]

- Cognitive interactive patterns
- Health psycho-social domain
- Perceptions, preferences, priorities
 - Self
 - Family
 - Health care environment

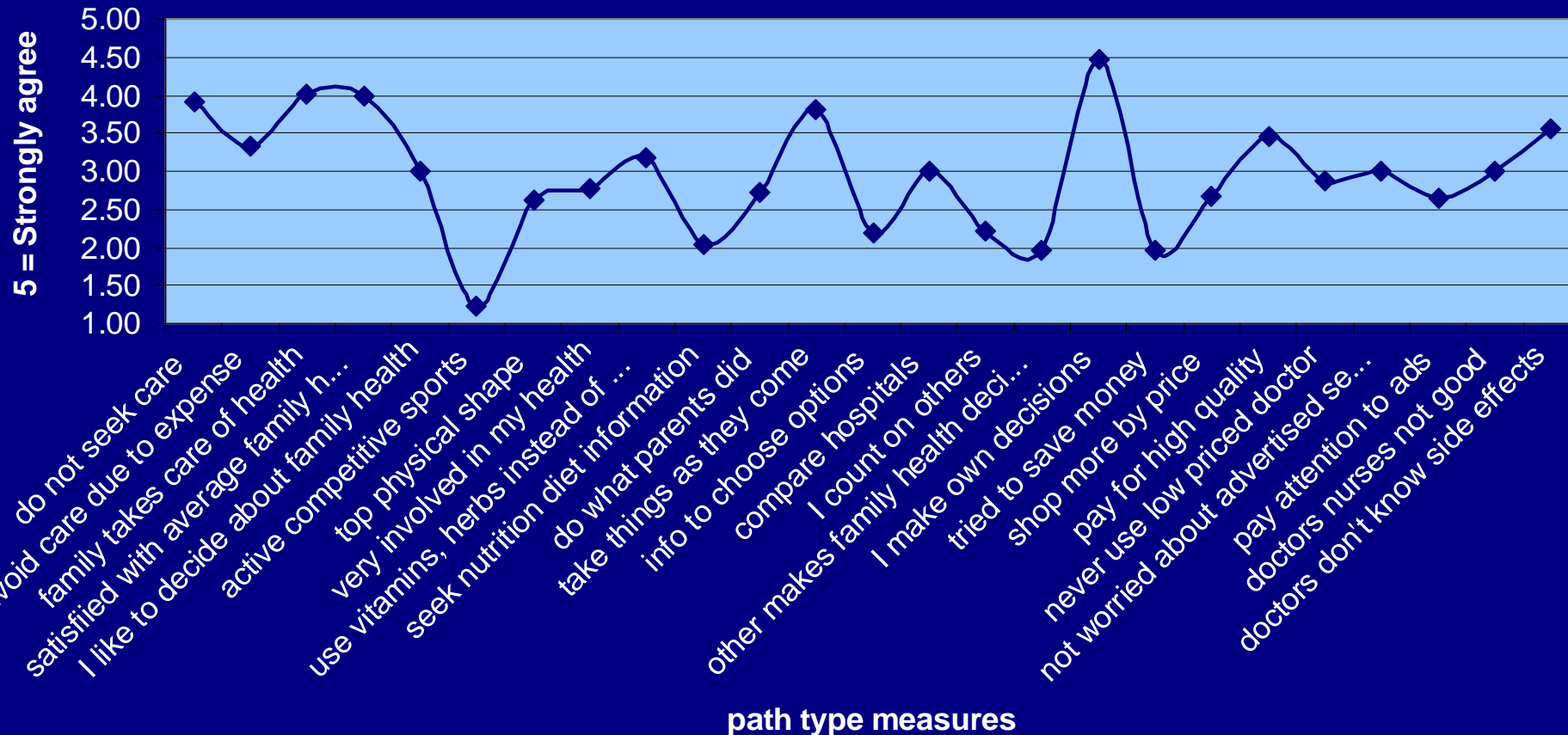
Cognitive factors

- Focus on physical fitness
- Focus on nutritional fitness
- Commitment to the health of family members
- Tendency to put off seeking health care
- Degree of active healthcare information seeking and review
- Confidence in medical professionals to do the right thing
- Independent use of alternatives to medicine
- Planning for future health benefits
- Attentiveness to healthcare advertising
- Willingness to pay more for quality
- Concern with saving healthcare dollars

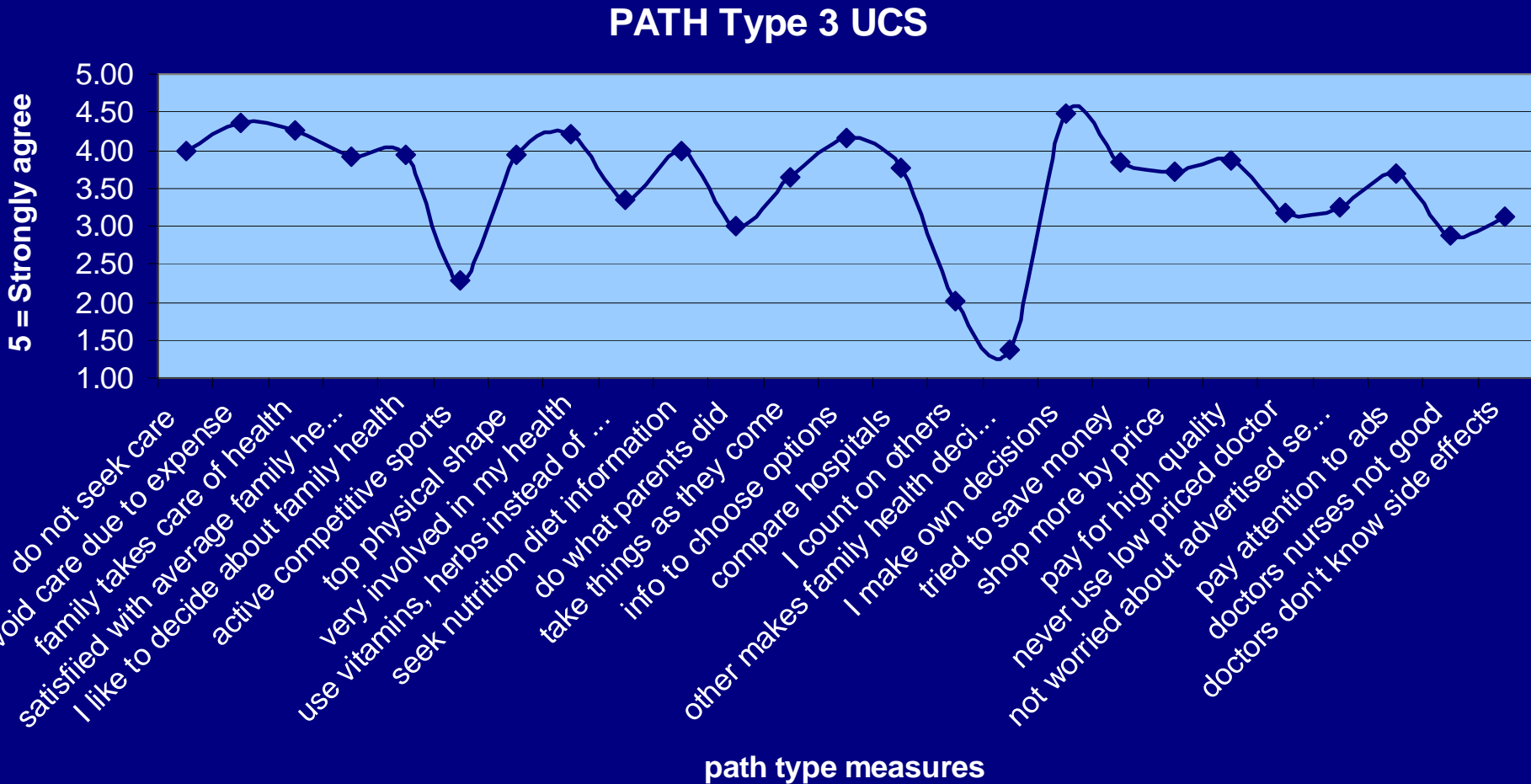


Unconscious cognitive structure (UCS)

PATH Type 2 UCS

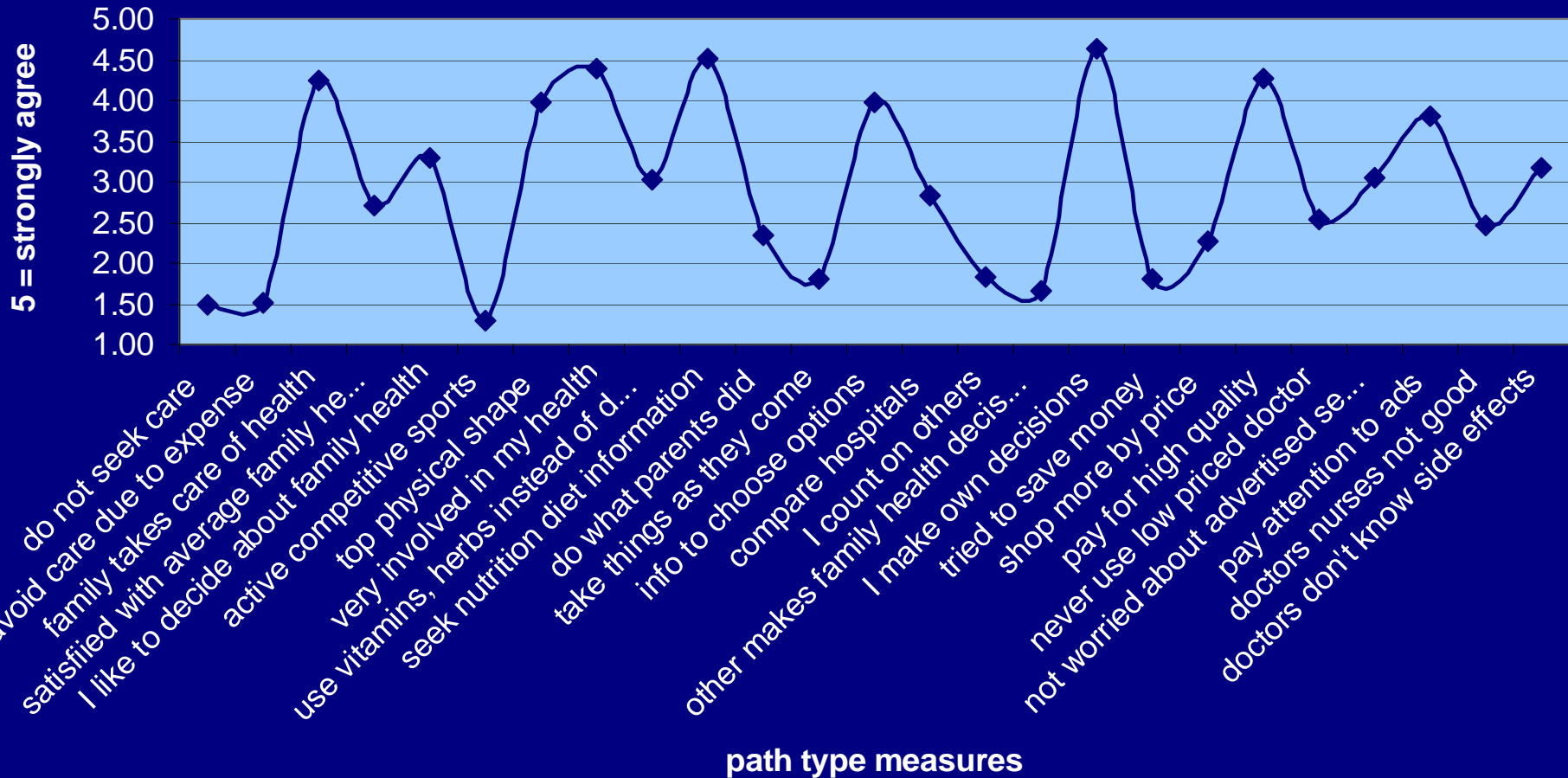


Unconscious cognitive structure (UCS)



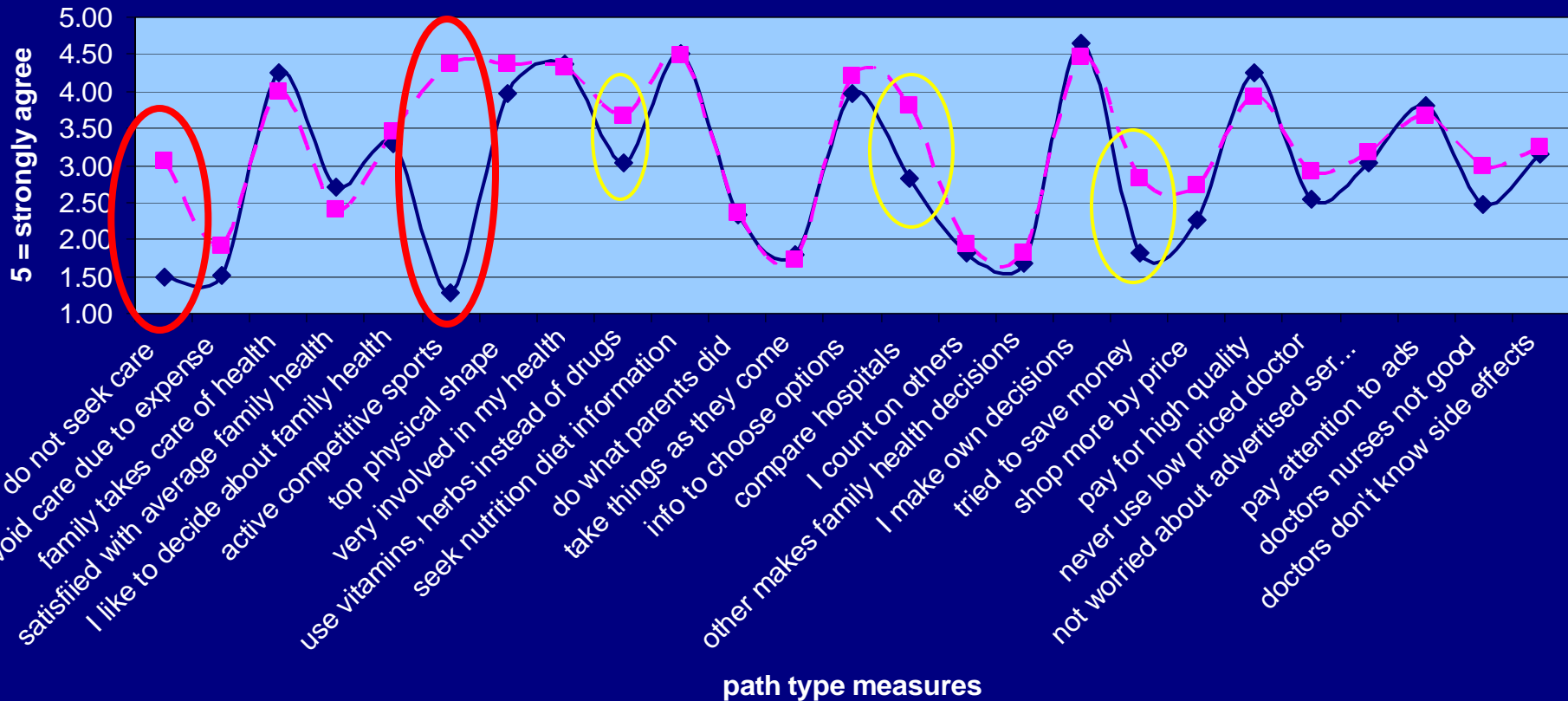
Unconscious cognitive structure (UCS)

PATH Type 7 UCS



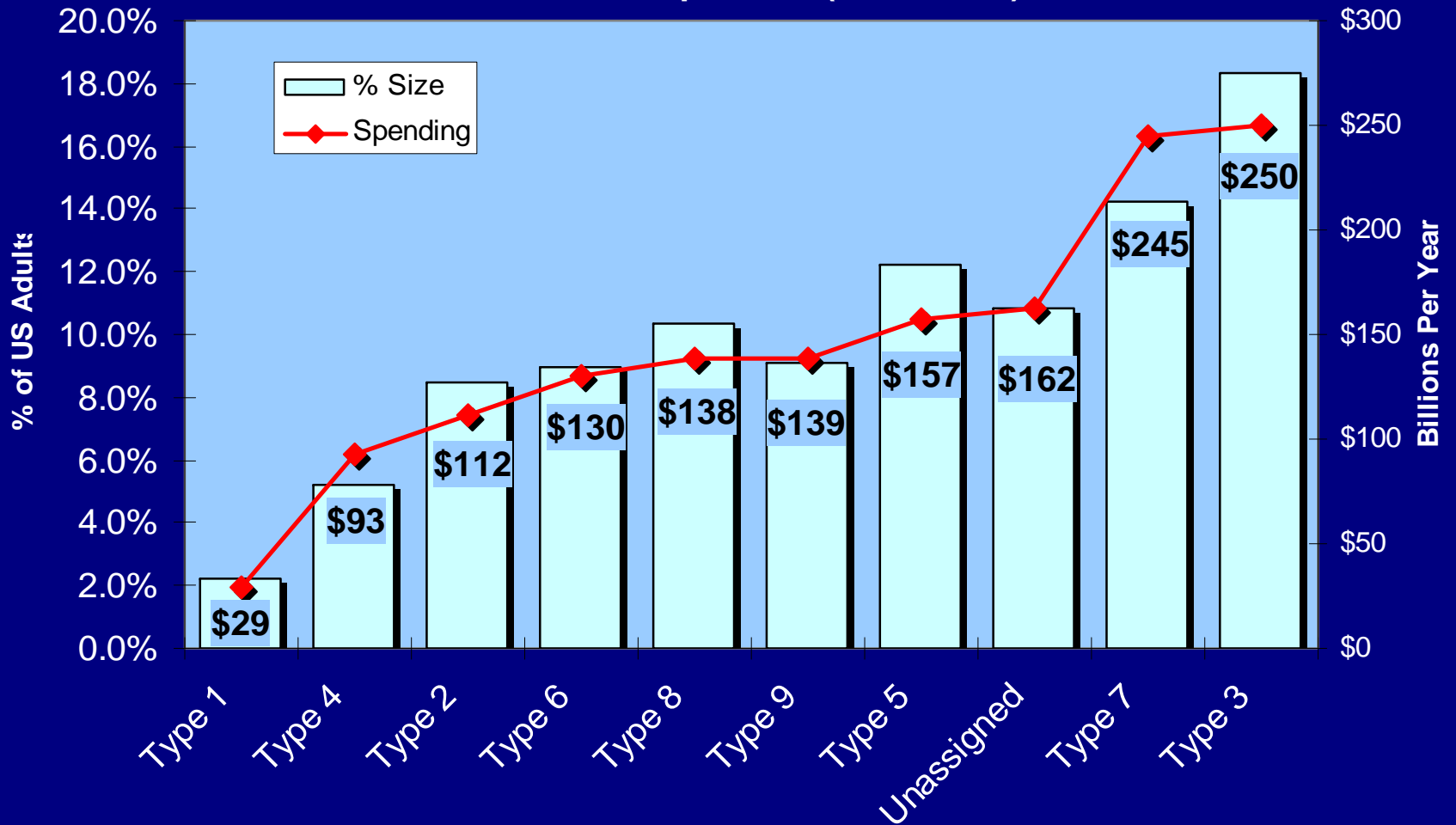
Unconscious cognitive structure (UCS)

PATH Type 7 and PATH Type 8



Consumer Subtype Prevalences and Spending

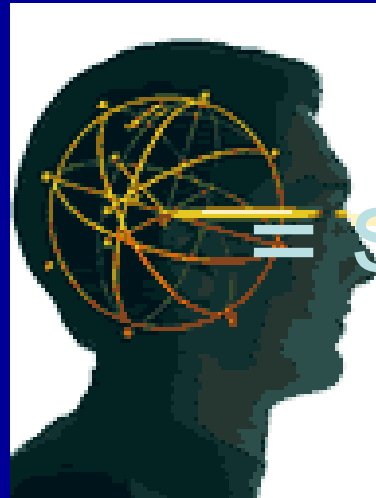
U.S. Adult Population (210 million)



- Cognitive/
psychological
view of person



- Dynamics within person
- Cognitions that shape perception

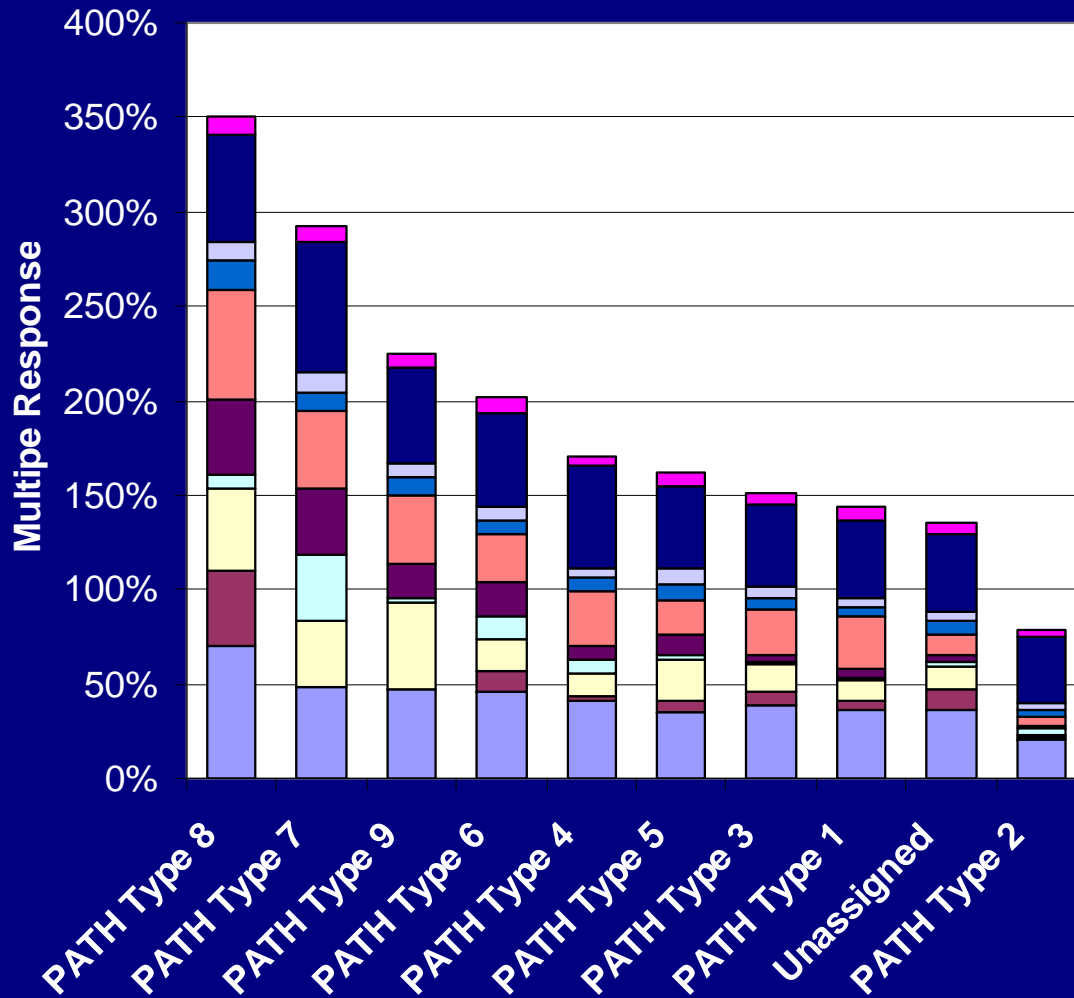


= sub type

Path types

- Health behaviors
- Health risks and disease
- Patient satisfaction
- Health care demand and spending

Wellness Activities by PATH Type

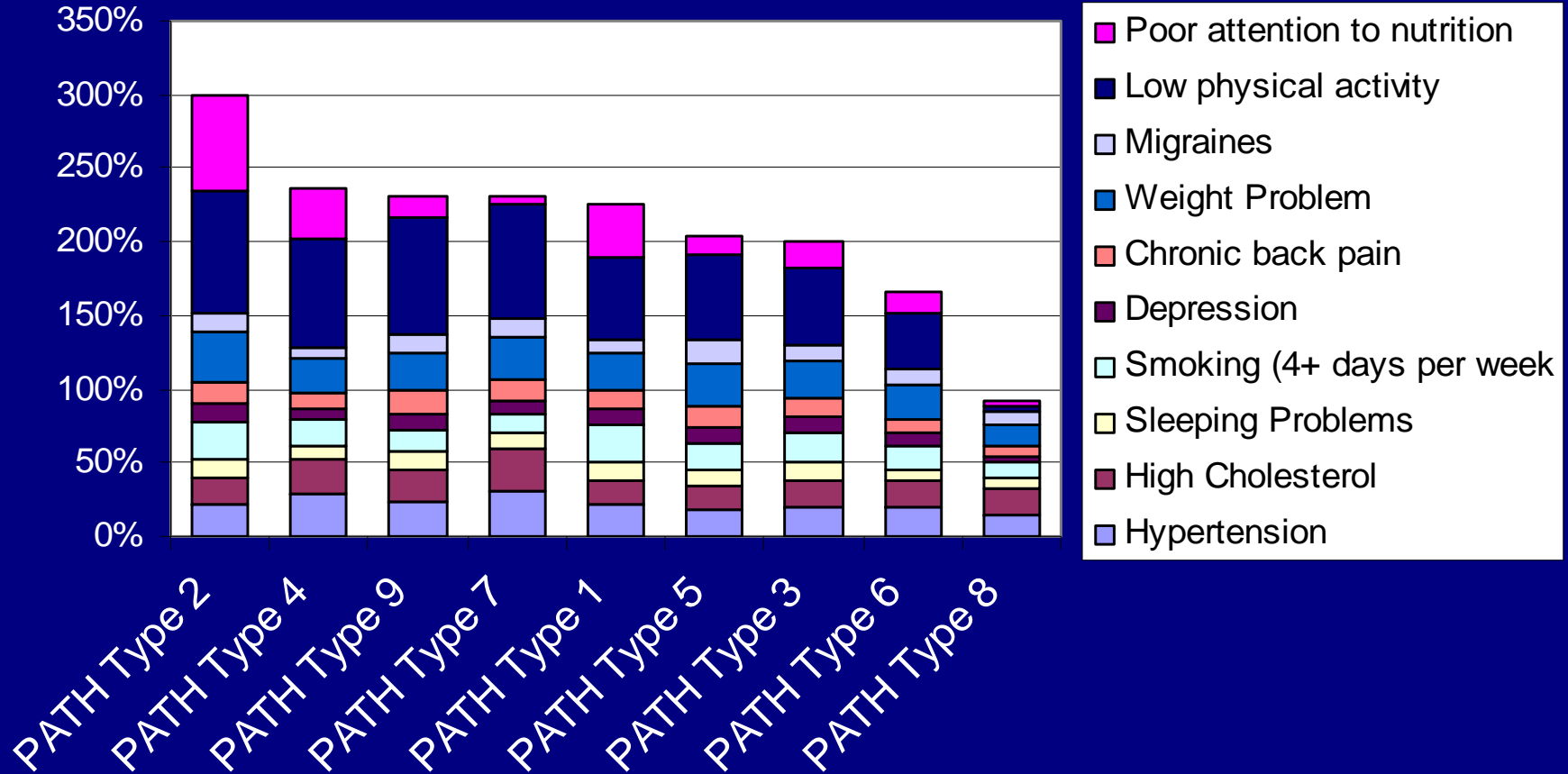


- Health Screening
- Routine Physical
- Attended Health Ed Class
- Attended Wellness/ Fitness class
- I am very involved in my health (Strongly Agree)
- I don't plan ahead, I deal with health issues when they come up (Strongly Disagree)
- Only seek care when really sick or injured (Strongly Disagree)
- Attention to Nutrition & Healthy Diet (Strongly Agree)
- Active or Competitive sports (Strongly Agree)
- Exercise 4+ days per week

Health Risk Conditions and PATH Types

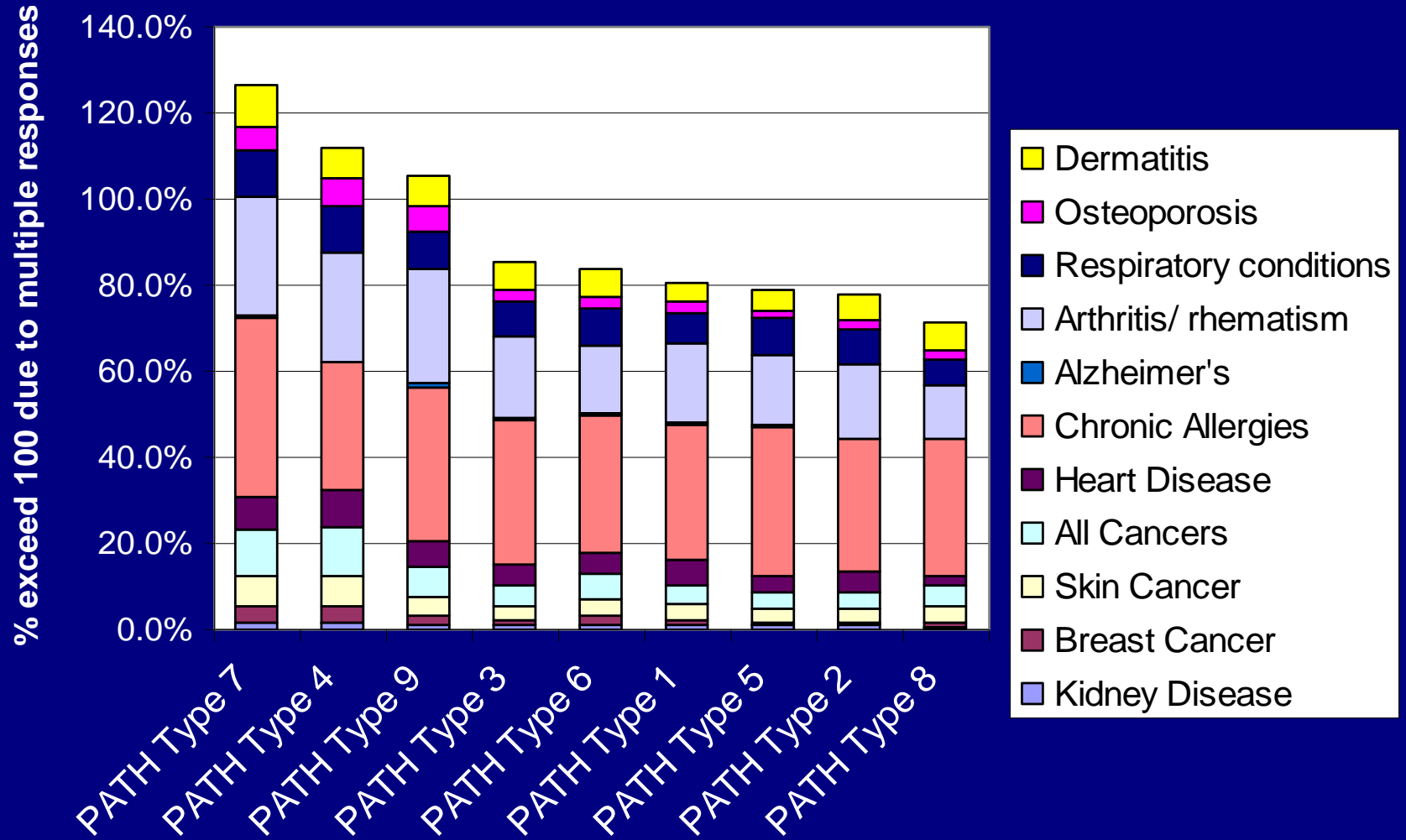
Sach/Scarborough HealthPlus, 2001, N=93,400

% exceed 100 due to multiple response

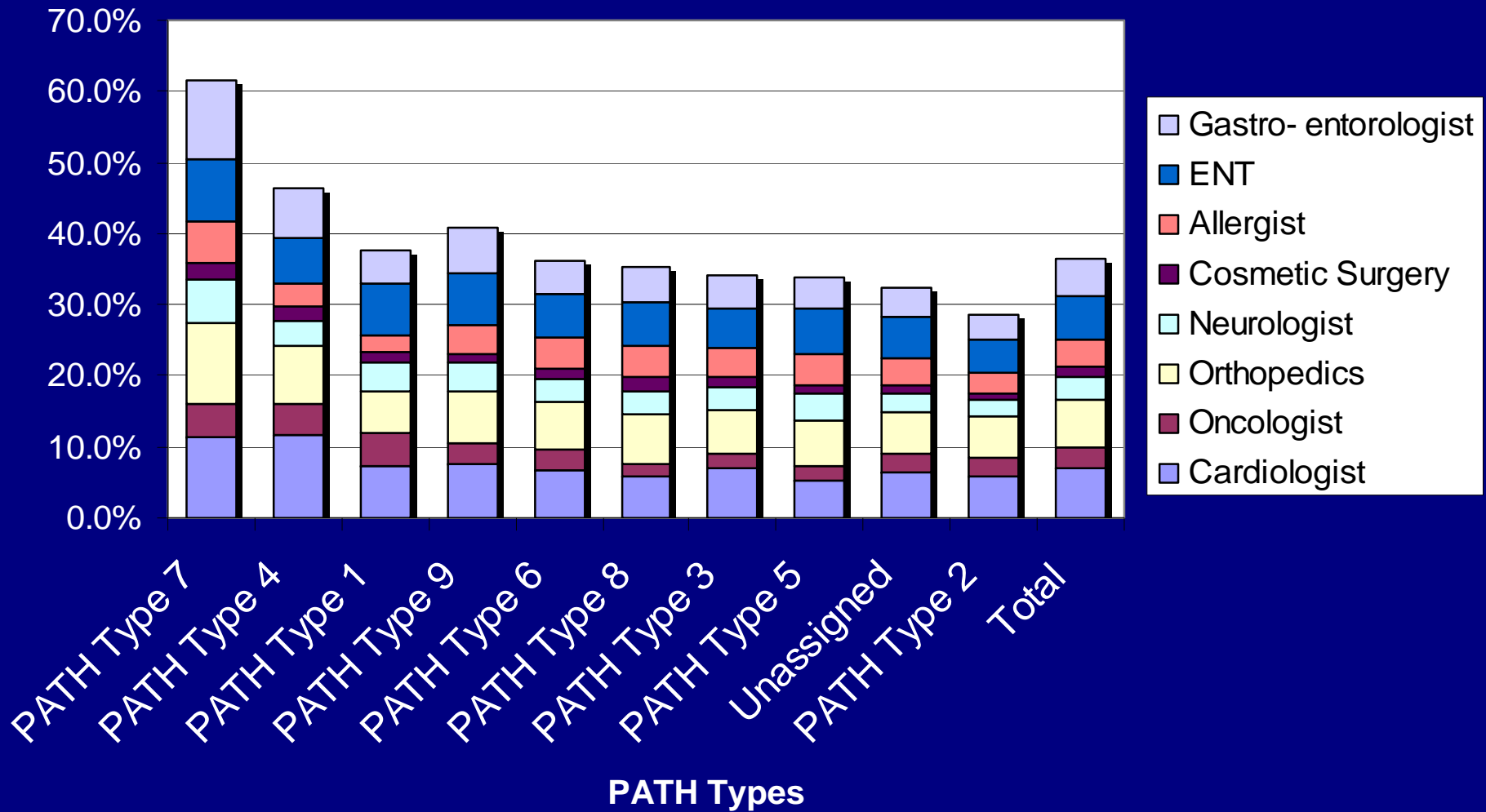


Reported Disease Conditions by PATH Type

Sachs/Scarborough HealthPlus USA Survey, 2000, N=61,000

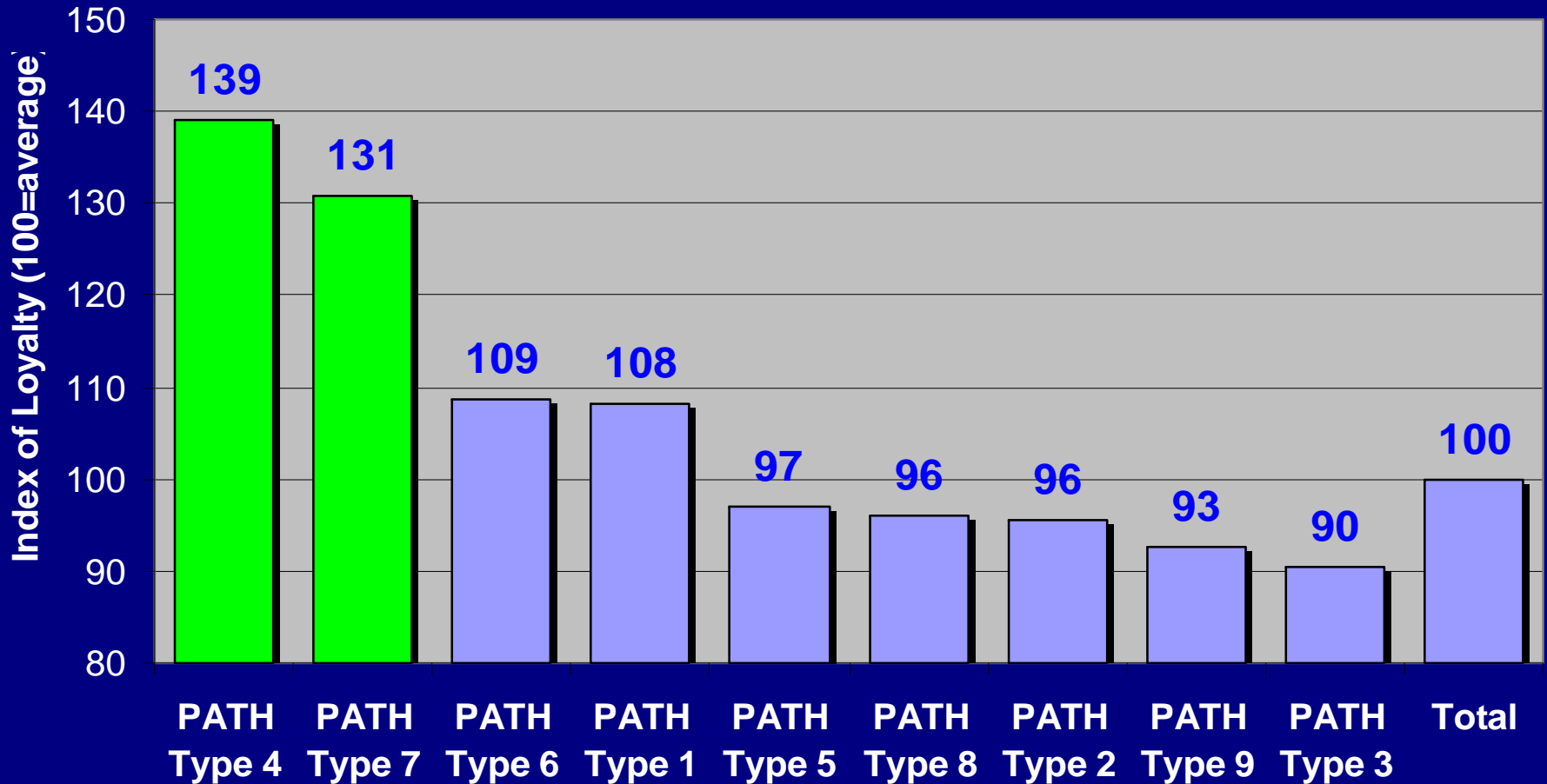


Specialty Care Demand



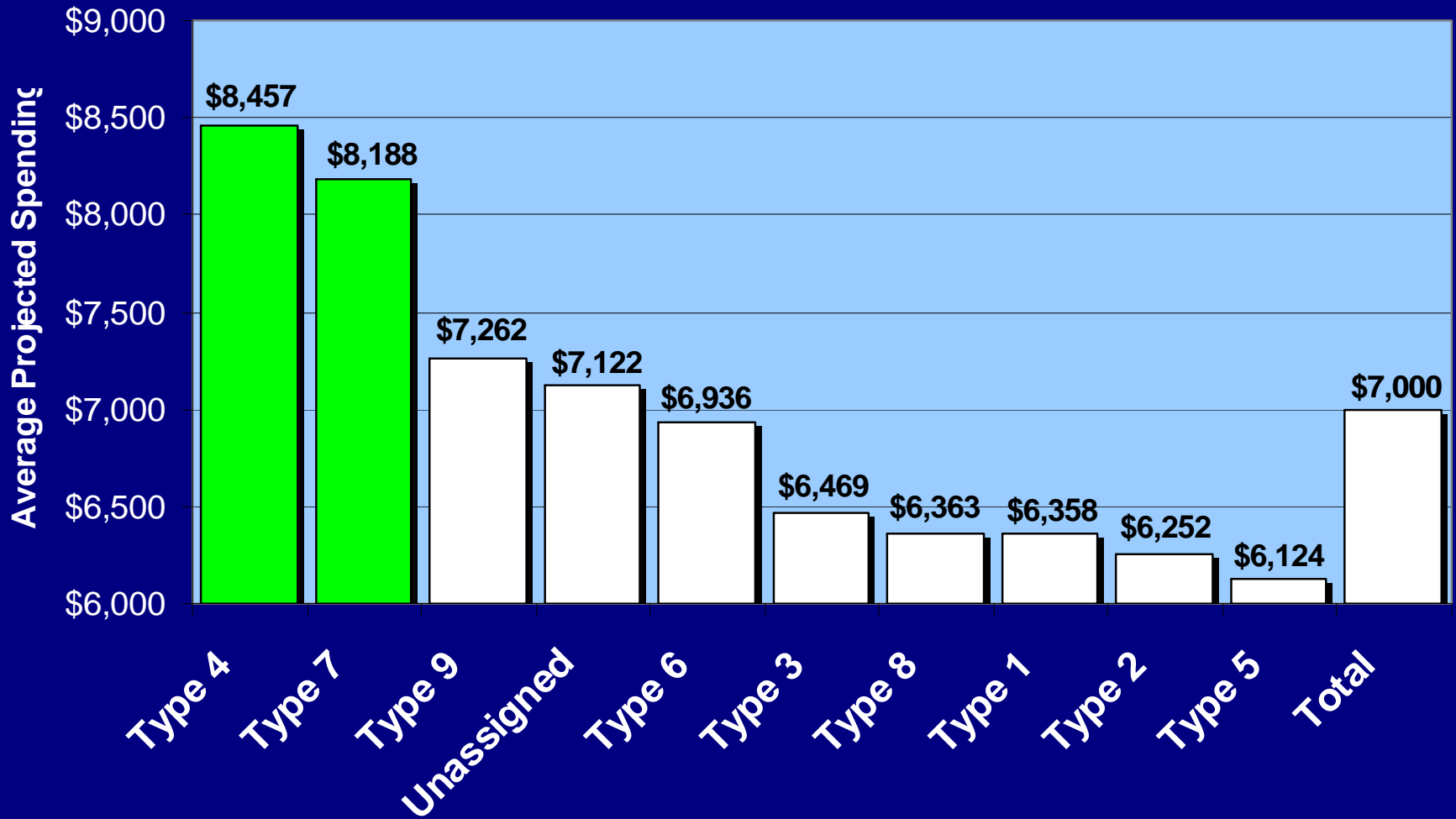
Health Plan Loyalty/Retention Index

(membership length, satisfaction, intent to switch, intent to recommend)



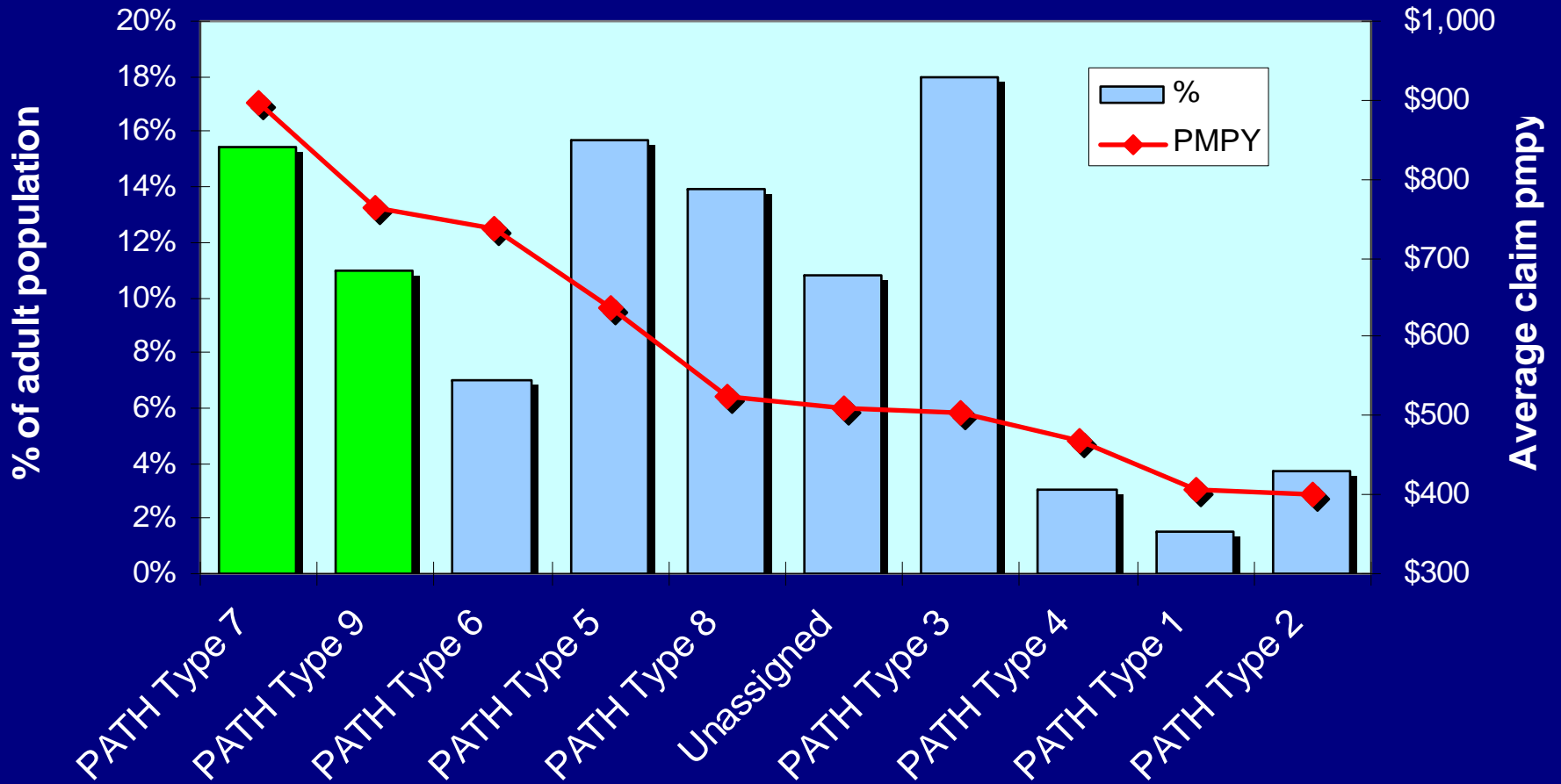
Est. Medical Costs Per Adult by PATH Type

(N=51,000+, four health plan composite, adults)



Rx Reimbursements by PATH Type

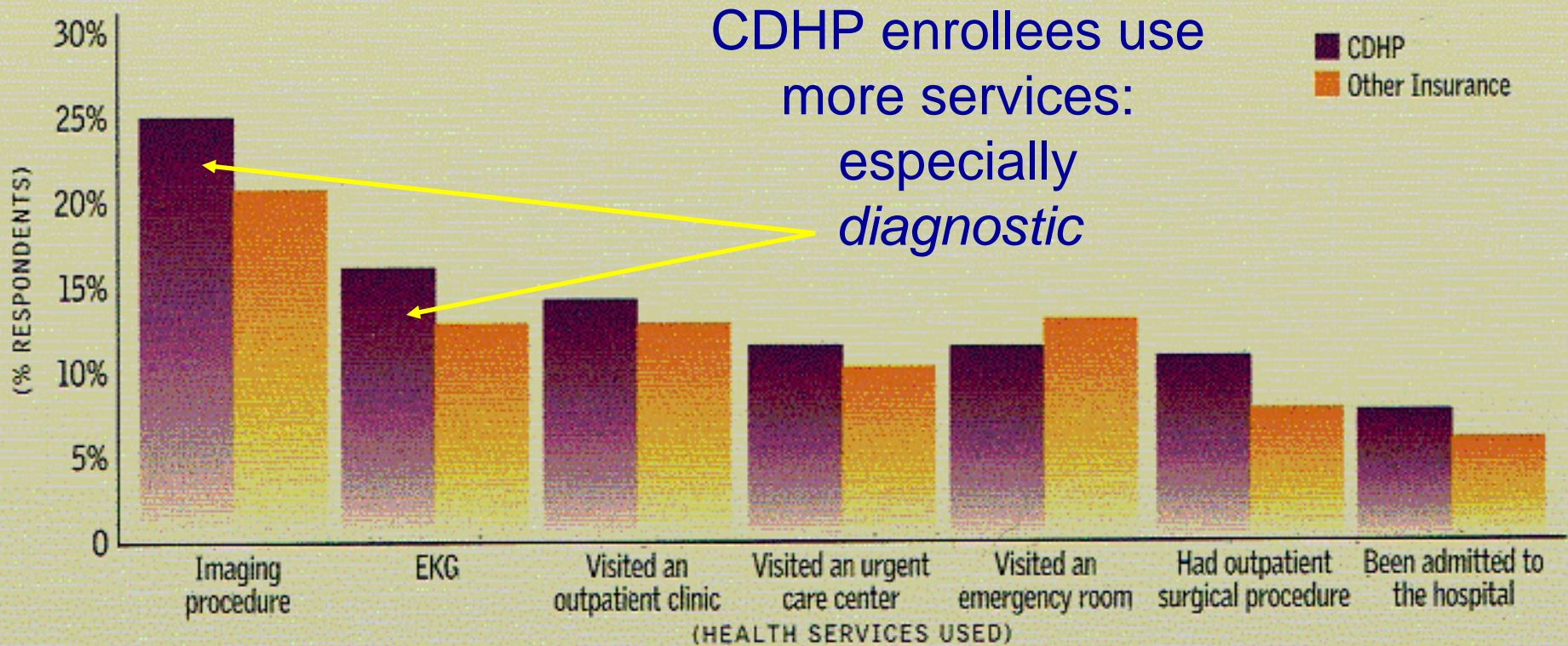
N=13,296 Commerical Plan Members



HealthLeaders "Fact File" September, 2008

... BUT THEY USE MORE SERVICES?

CDHP enrollees report using more visits and procedures, except for the emergency department, than their non-CDHP counterparts. This outcome is curious because the increased out-of-pocket expenses were expected to lower utilization of unneeded services and because the CDHP enrollees report better health status at enrollment. The findings raise the question of whether CDHP plans will reduce health-care expenditures as promised.



SOURCE: Thomson Reuters


Parente, S., Christianson, J., & Feldman, R. (2007, August).
Consumer-Directed Health Plans and the Chronically Ill.
Disease Management & Health Outcomes, 15(4), 239-248.

From Abstract:

- **CDHP enrollees with chronic illnesses assign higher ratings to their plan than do other CDHP enrollees ($p < 0.07$).**
- **They are more likely than other CDHP enrollees to use informational tools ($p < 0.05$),**
- **more likely to anticipate spending all of their savings account dollars ($p < 0.05$),**
- **and more likely actually to spend more than the deductible (particularly for prescription drug expenditures [$p < 0.05$]).**
- **Compared with other CDHP enrollees whose spending exceeds the deductible, enrollees with chronic illnesses spend significantly more on prescription drugs.**

Consumer-Directed Health Plans

Consumer-directed health plans aim to reduce healthcare expenditures by creating a financial savings vehicle for enrollees' increased out-of-pocket healthcare expenses to create incentive to spend wisely. But some early findings have raised questions about the plans' effectiveness in this regard. One study found that although increased out-of-pocket expenses were expected to lower utilization of unneeded services, CDHP enrollees

reported making more visits and undergoing more procedures than non-CDHP enrollees. One explanation is that CDHP enrollees have a higher “health conscience” that prompts them to use excess services even in the face of higher out-of-pocket costs. Whatever the reason, CDHPs may need to alter their incentives and offer new forms of information to enrollees to achieve the lower expenses they seek. 

Beginning recognition of cognitive impacts on health and demand

Summary

- CDH fails to understand health consumers
Empowerment = management
CDH primary focus = environment, not consumers
SCT: health behavior is driven by many factors
CDH ignores individual differences
Path type psychology reveals UCS structure
UCS patterns shape risk, demand
CDH promise will require recognition of UCS
CDH on verge!
A focus on changing just three UCS

Questions/Comments

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