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**Voluntary Physician Switching  
by HIV-Infected Individuals:  
A National Study of Patient, Physician, and  
Organizational Factors**

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# Voluntary Physician Switching

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- Physician switching can be **costly** for health care systems and difficult for patients
- **Only primary care** samples have been examined
- **Interpersonal aspects** of care are important determinants of physician switching



# Extending the Existing Voluntary Physician Switching Research

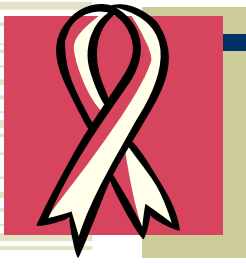
- Voluntary physician switching by **patients with a chronic illness**
  - continuity of care might have a greater impact on health outcomes
  - costs of discontinuities could be greatest
- **Physician and organizational characteristics** might be important predictors of voluntary physician switching



# Primary Research Questions



- Are physician and care site **specialization** related to voluntary physician switching?
- Are **practice demands**, and physician satisfaction and stress, related to voluntary physician switching?
- Are **interpersonal aspects of care** related to voluntary physician switching after controlling for physician and organizational factors?
- Is **visit continuity** an important determinant of voluntary physician switching among patients with complex, chronic conditions?



# HIV Cost and Services Utilization Study (HCSUS) Patient, Physician, and Site Surveys

## Patient Survey



Baseline Survey  
Jan 1996-Mar 1997  
n=2,864

Follow-Up 1  
Survey  
Jan 1997-Jul 1997  
n=2,466

Follow-Up 2  
Survey  
Aug 1997-Jan 1998  
n=2,267

## Physician Survey



692 Identified  
551 Contacted  
411 Completed  
n=1,820 patients

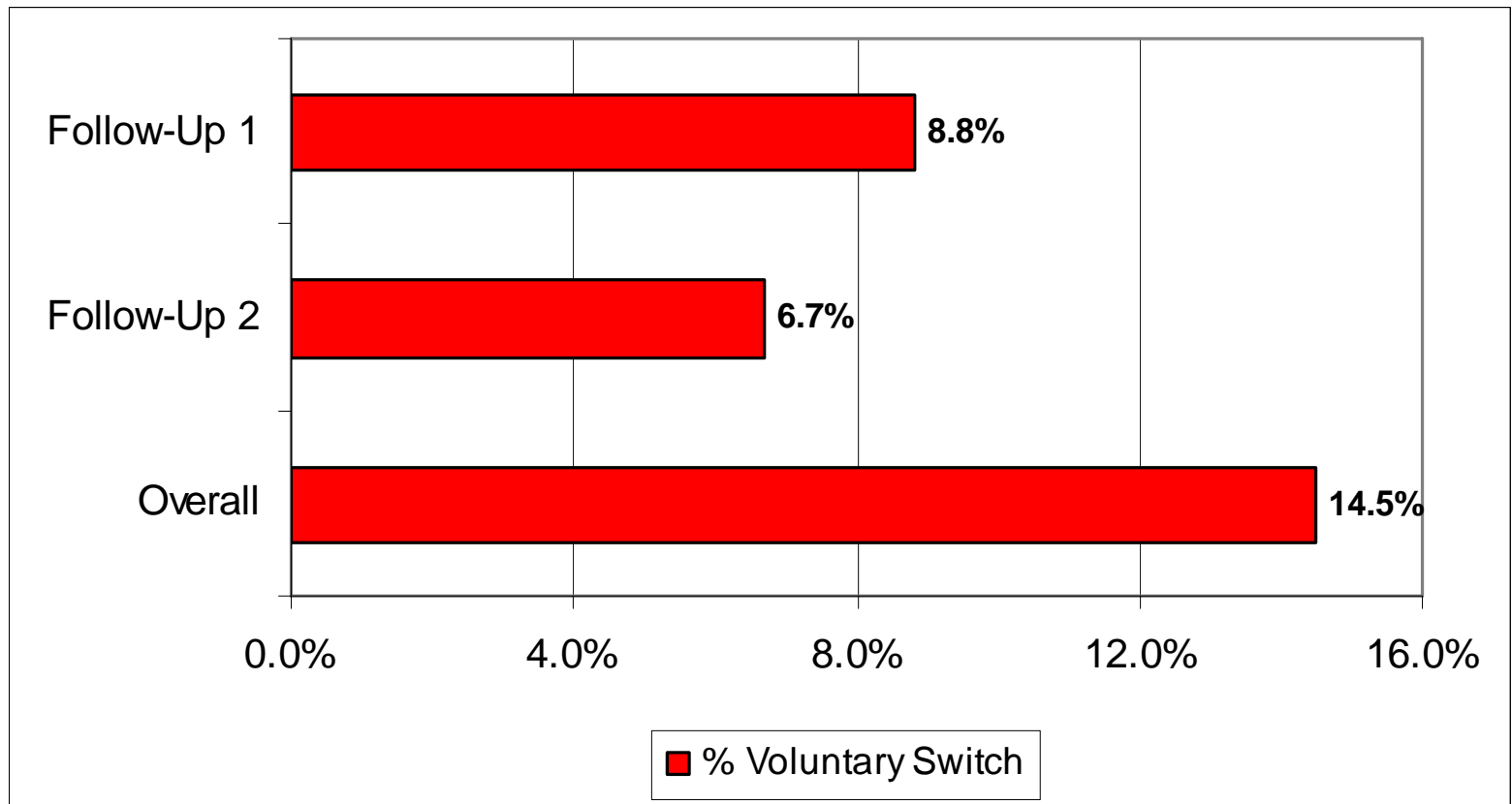
## Site Survey



282 Identified  
200 Completed  
n=2,300 patients



## Results: How Common is Voluntary Physician Switching Among HIV-Infected Patients?





## Results: Physician Characteristics (Single Predictor)



Statistically Significant Physician  
Characteristic Differences Between Voluntary  
Switchers and Other Patients

Not Significant

### Specialization

- More likely **non-expert generalist**: OR=1.54 (1.16-2.01),  $p < .01$
- More likely physician with **less than 20 HIV patients**: OR=1.39 (1.09-1.75),  $p < .01$
- Less likely a physician with high **anti-retroviral knowledge**: OR=0.67 (0.52-0.86),  $p < .01$

**Physician  
demographic  
characteristics**

### Demands/Satisfaction

- More likely a physician with **more patients per hour**: OR=1.51 (1.02-2.23),  $p < .05$



## Results: Practice Site Characteristics (Single Predictor)



Statistically Significant Site Characteristic Differences  
Between Voluntary Switchers and Other Patients

Not Significant

### Specialization/Expertise

- Less likely a site with **moderate volume of HIV patients**: OR=0.57 (0.36-0.91),  $p<.05$
- Less likely a site with **clinical trial enrollment**: OR=0.72 (0.53-0.97),  $p<.01$
- Less likely a site with **Ryan White Care Act** funding: OR=0.49 (0.36-0.67),  $p<.001$
- Less likely a site with high **practice guideline monitoring compliance**: OR=0.64 (0.46-0.90),  $p<.05$

### Human Resources

- Less likely a site with **on-site support services**: OR=0.73 (0.61-0.88),  $p<.01$

**Most Human and  
Financial Resource  
Measures**





## Results: Final Combined Model



	Final Model
<b>Patient-Level Predictors</b>	
Trust	0.74 (0.61-0.90)**
<b>Physician-Level Predictors</b>	
Anti-Retroviral Knowledge	0.26 (0.13-0.53)***
<b>Site-Level Predictors</b>	
HIV Patient Volume, % of Overall	
HIV site, High volume	-
HIV site, Moderate volume	0.09 (0.03-0.31)***
HIV site, Low volume	1.16 (0.35-3.86)
Non-HIV site	0.50 (0.23-1.11)
Ryan White Care Act Funding	0.27 (0.14-0.52)***
Constant	0.44 (0.20-0.99)*



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## Summary

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- **Physician and site specialization** are significantly related to voluntary switching
- **Physician practice satisfaction** is not related, but **site demands** appear to be
- **Patient trust** is an important measure of the physician-patient relationship
- **Visit continuity** is not an important determinant among HIV patients



# Study Limitations

## **Internal Validity:**

- Self-report measures
- Physician non-response

## **Generalizability:**

- HIV patients are unique
  - Tight social networks
  - Disease complexity
- Time: 1996-98 was a period of rapid technological change



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## Concluding Thoughts...

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- Challenge the idea that patients do not make decisions based on technical quality
- Measures of physician and site specialization were related to voluntary switching
- Patients use indirect **markers** to assess quality
- Potential to **reduce switching** by facilitating high quality physician-patient relationships and ensuring adequate organizational support