

**Factors Related to
Working-Aged Nursing Home Residents'
Preferences and Opportunities for
De-Institutionalization in Maryland**

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Overview

- The issue
- Methodology
- Findings

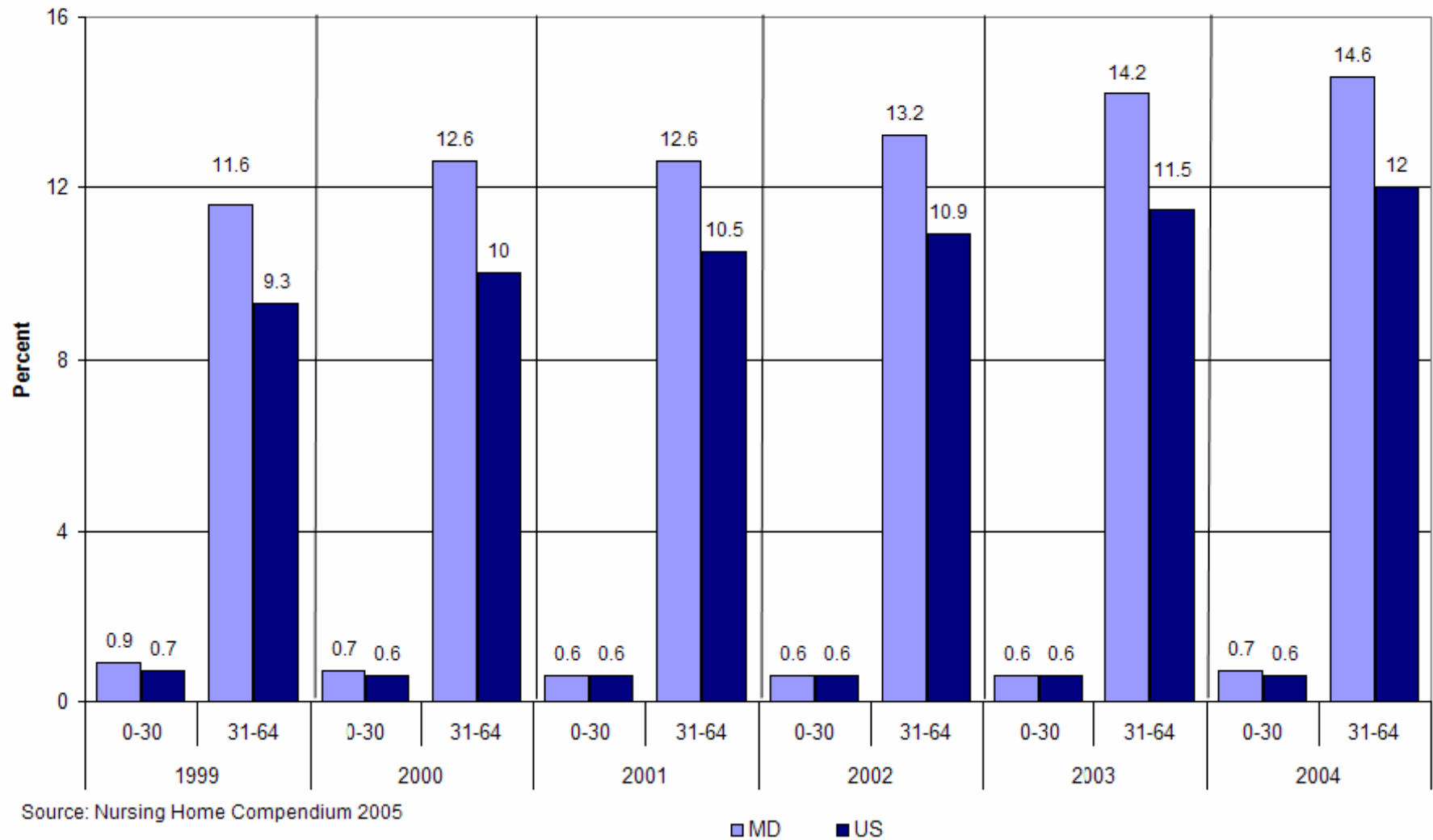
The Issue

Numbers of younger NH residents increasing in Maryland and nationally

In Maryland, the number of working-aged nursing home residents increased 43 percent from 1997-2004 (from 3,090 to 4,365)

Proportion of working-aged adults was 15.1 to 20 percent higher in Maryland than in the United States from 1999 to 2001

Nursing Home Residents by Age Group Under 65: Maryland Compared to the United States



Living in the Community is Better...

- **High public cost for nursing home care→Possible cost savings**
- **Improved outcomes for individuals, families, and the community**
- **Nursing home residency is associated with a reduced quality of life—**
 - Limited autonomy and privacy
 - Increased morbidity and mortality
 - Individual impoverishment

Social and Political Context for De-institutionalization

**Actions towards full social integration for people
with disabilities:**

- **Rehabilitation Act 1973**
- **Americans with Disabilities Act 1990**
- **Home and Community-Based Waivers**
- ***Olmstead* Decision 1999**
- **New Freedom Initiative (Real Choices Systems
Change Grants 2001)**

Objective today....

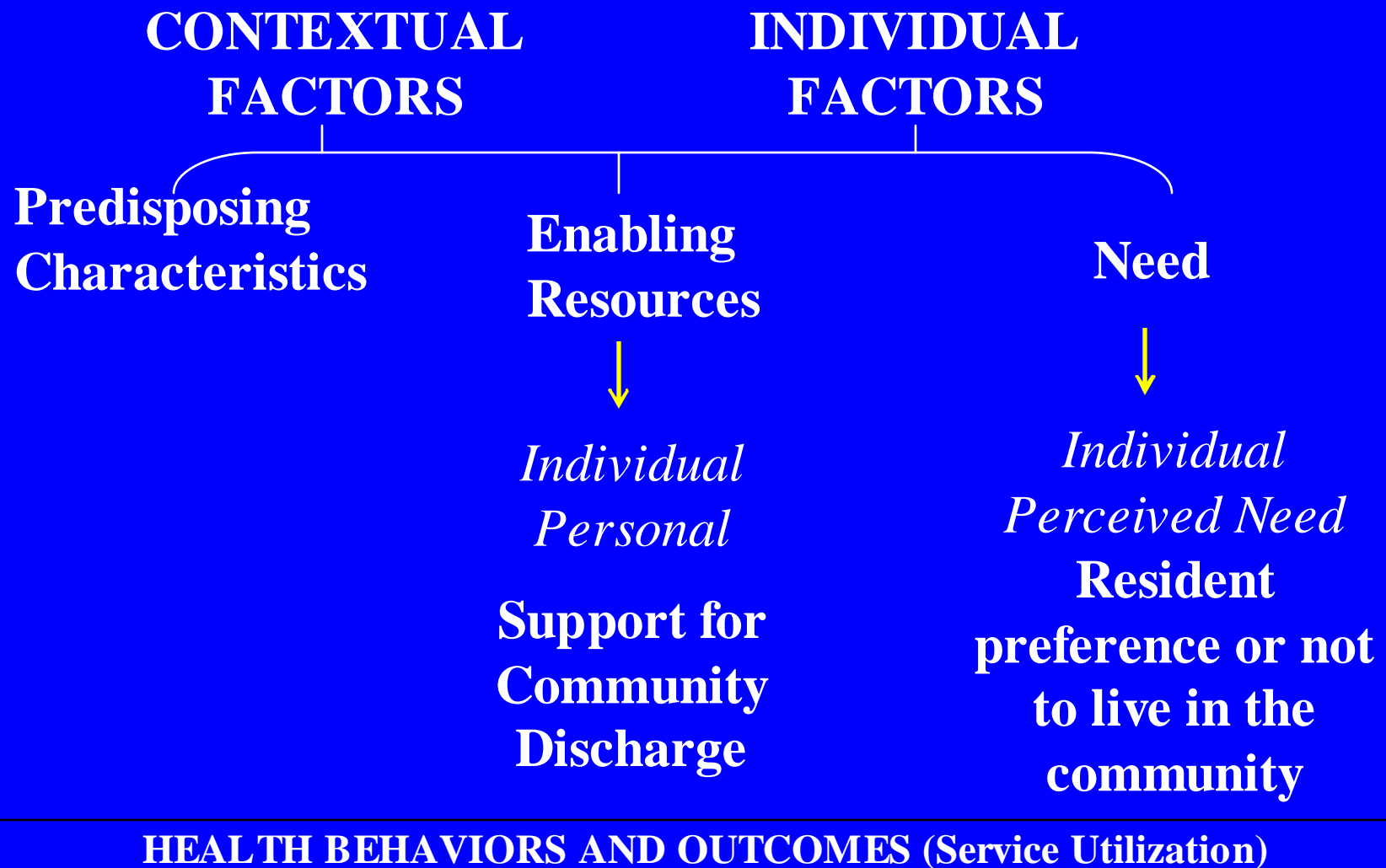
To explore the impact of two prominent factors associated with discharge to the community and continuing stays in nursing homes, among working-aged residents.

- 1. Preference**
- 2. Social Support**

Hypotheses

- H1** Non-elderly nursing home residents who express a preference to return to the community are more likely to do so than those who do not express this preference.
- H2** Non-elderly nursing home residents who have someone who is supportive of their return to the community are more likely to do so than those who do not have support.

Theoretical Model Based on the Andersen Behavioral Model of Health Care Utilization



Methodology

Data

Long-Term Care Minimum Data Set (MDS)

Population

The study population consisted of 27,527 Maryland nursing home residents, who were 18-64 years of age upon admission, from June 1999 and July 2005

Statistical Method

Cox Proportional Hazard regression models are used to estimate the predictive strength of selected covariates

Study Variables

Demographics

- Age
- Race/ethnicity
- Marital status
- Gender
- Education

Other individual factors

- Living alone
- Prior institutional residence
- History of mental illness
- Medicare assessment during study period

Other MDS measures

- Discharge preferences (Q.1.a)
- Availability of community support (Q.1.b)
- Projected length of stay

Censoring variable—Discharge

Resident Assessment Protocols

1. Delirium
2. Cognitive Loss/Dementia
3. Visual Function
4. Communication
5. ADL
Functional/Rehabilitation
Potential
6. Urinary Incontinence and
Indwelling Catheter
7. Psychosocial Well-Being
8. Mood State
9. Behavior Problems
10. Activities
11. Falls
12. Nutritional Status
13. Feeding Tubes
14. Dehydration/Fluid
Maintenance
15. Dental Care
16. Pressure Ulcers
17. Psychotropic Drug
Use
18. Physical Restraints

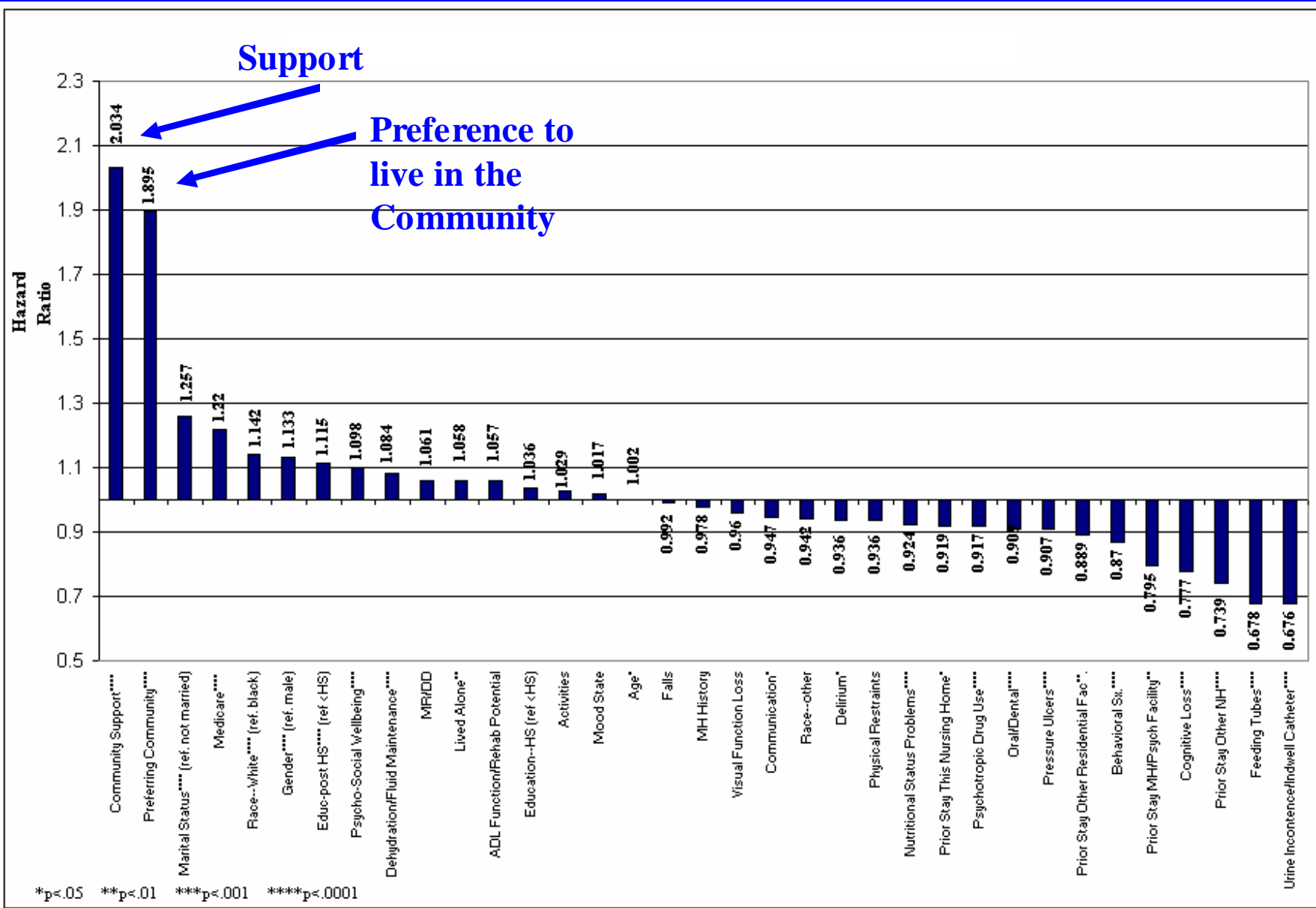
Delirium

MDS Question Summary	MDS Variable and Trigger Value
Easily Distracted	B5a=2
Periods of Altered Perception or Awareness of Surroundings	B5b=2
Episodes of Disorganized Speech	B5c=2
Period of Restlessness	B5d=2
Periods of Lethargy	B5e=2
Mental Function Varies Over the Course of the Day	B5f=2
Cognitive Decline	B6=2
Mood Decline	E3=2
Behavior Decline	E5=2

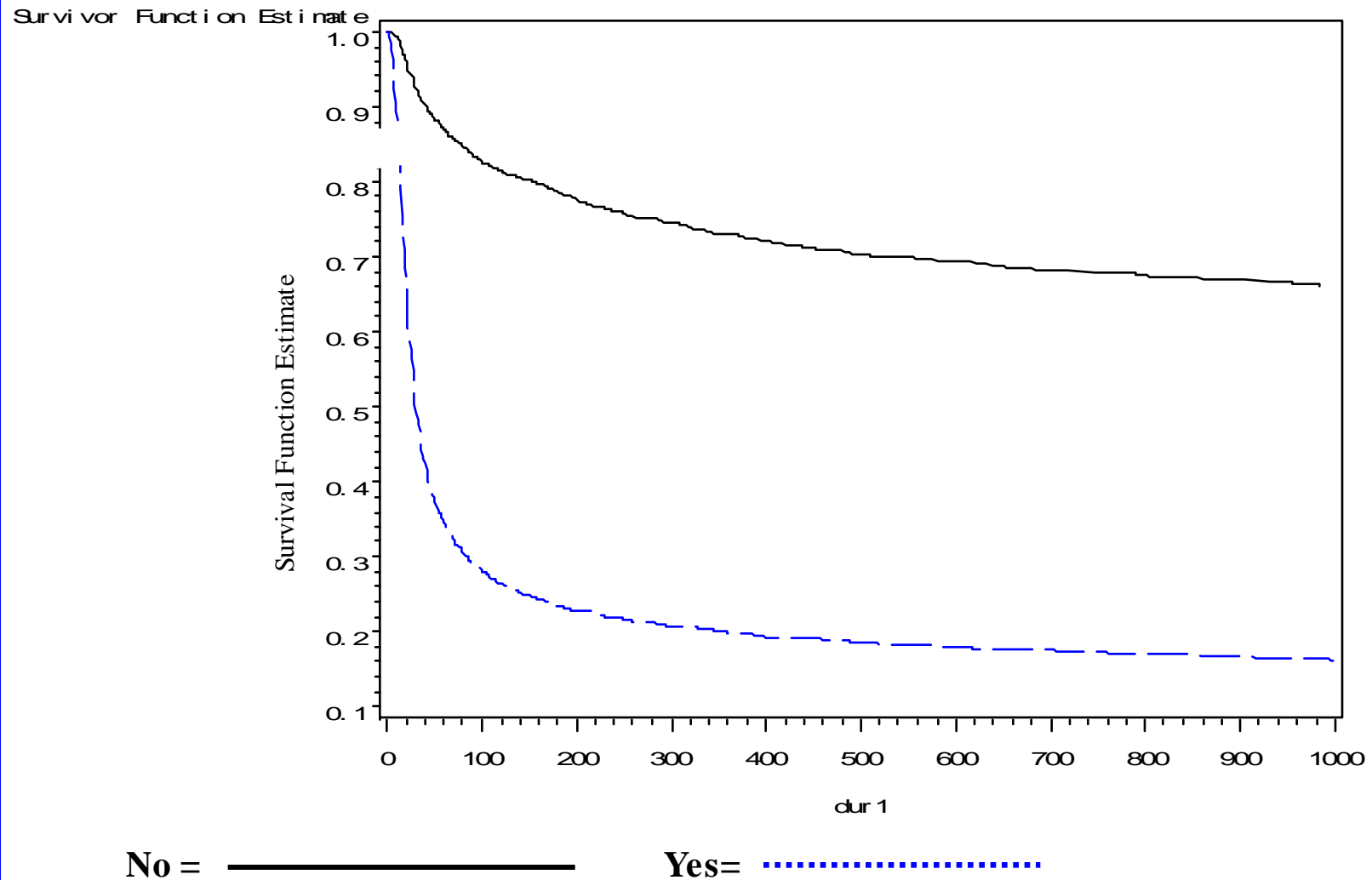
Pressure Ulcer

MDS Question Summary	MDS Variable and Trigger Value
Bed mobility problem	G1aa=1,2,3, or 4
Bedfast all or most of time	G6a=checked
Bowel incontinence	H1a=1,2,3, or 4
Peripheral vascular disease risk	I1j=checked
Pressure ulcers present	M2a=1,2,3, or 4
Skin desensitized to pain or pressure	M4e=checked

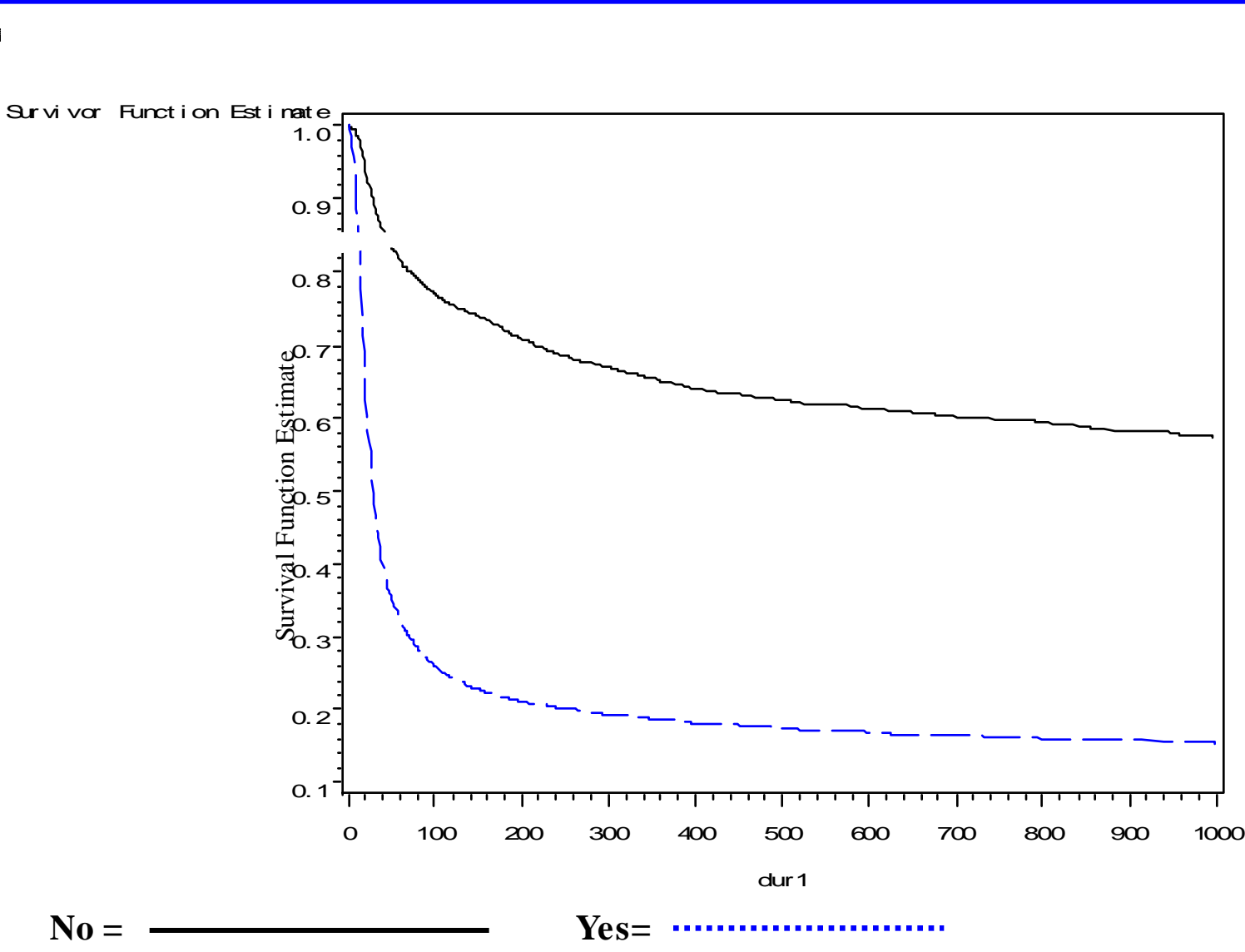
Covariate Hazard Ratios for “Risk” of Discharge



Adjusted Survival Curves Showing Stratified Preference to Return to the Community



Adjusted Survival Curve Showing Stratification of Support for Returning to the Community



Preference & Community Support Models

	Model	Degrees of Freedom	Final -2 Log Likelihood
1	Base Model (with Q1a and Q1b)	36	319224.09
2	Without either Q1a or Q1b	34	363234.9
3	With Q1a/Without Q1b	35	362985.01
4	With Q1b/Without Q1a	35	362709.2

Model 1 and Model 2 difference = 44,010, 2 df → Chi square p=0.000

Model 1 and Model 3 difference =43,761, 1 df → Chi square p=0.000

Model 1 and Model 4 difference =43,485, 1 df → Chi square p=0.000

Model 2 and Model 3 difference = 250, 1 df. → Chi square p=.001

Model 2 and Model 4 difference= 525.7, 1 df → Chi square p=.001

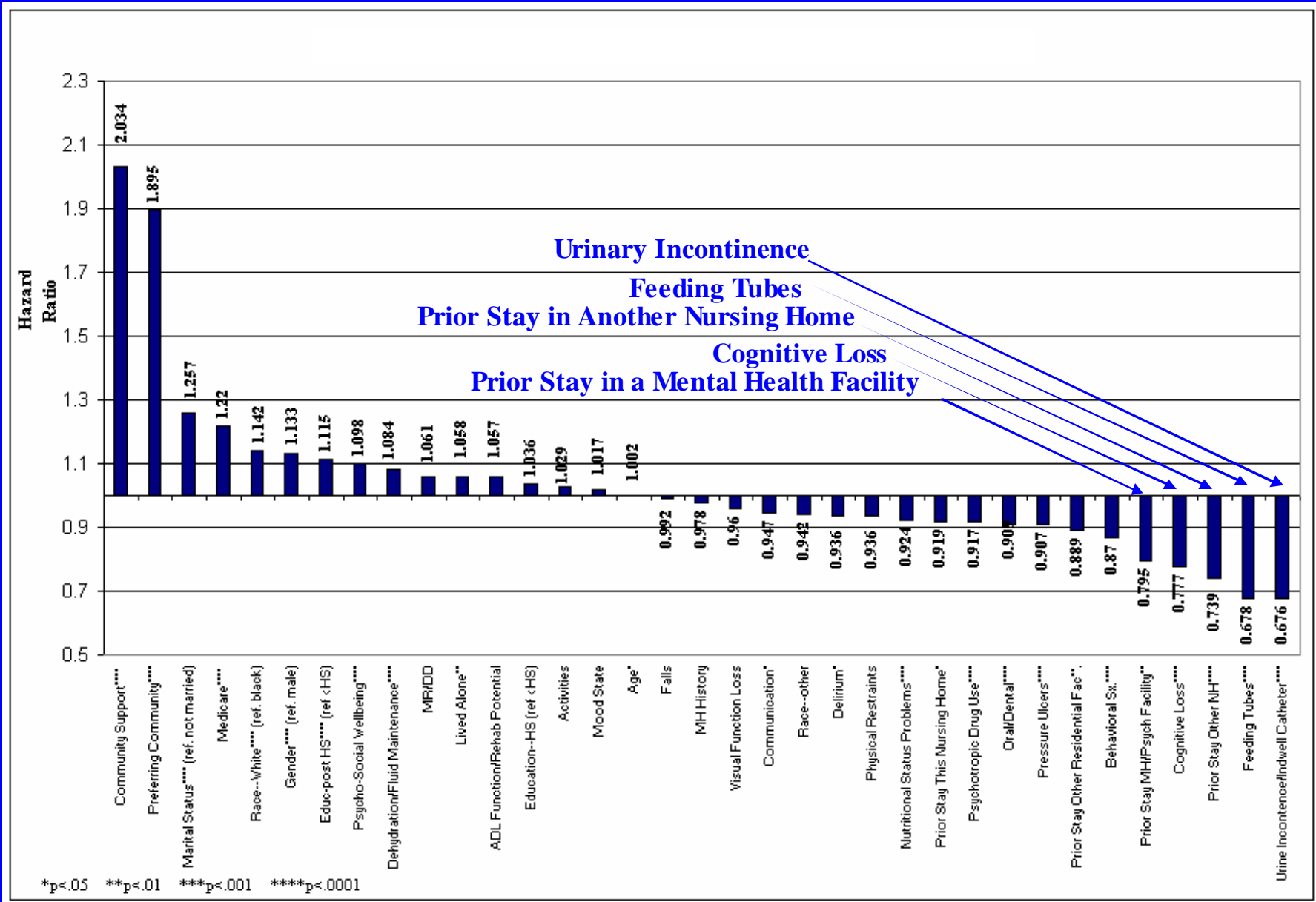
Conclusions

1. Social supports are important
2. Having a preference to live in the community matters a great deal
3. Univariate and multivariate analyses in this study show that race matters
4. A number of clinical issues that should not necessitate institutionalization appear to significantly decrease the likelihood of discharge *

Though not included in this study...

5. Housing opportunities are critical to the success of transitioning people who live in institutions to the community.
6. There appears to be an inadequate workforce of qualified people, for the safe delivery of community-based services due to issues such as inadequate compensation, training, and oversight *

Conditions Associated with a Decreased Likelihood of Discharge*



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Thank you.