National Cancer Institute

Assessment of Quality of Care From Cancer Survivors' Perspective: The APECC Study

Track:	The Evolution of CAHPS Surveys
Session:	Assessment of Patient Perspectives on Cancer Care in Multiple Health Care Settings
Date & Time:	April 21, 2010, 9:30 am
Track Number:	CAHPS T1 – S5

Neeraj K. Arora

National Cancer Institute, USA

Co-authors:

Bryce B. Reeve, Steven B. Clauser, NCI, USA

Ron D. Hays, RAND/UCLA, USA

Ingrid Oakley-Girvan, Northern CA Cancer Center, USA

Presented at the 12th CAHPS and 2nd SOPS User Group Meeting, Baltimore, MD, April 21, 2010

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Cancer Institute

Background

- Systematic assessments of quality of post-treatment follow-up care received by cancer survivors are limited
- The few assessments that exist have focused on “effectiveness” of care
- Data on cancer survivors’ follow-up care experiences and perceptions of quality are virtually non-existent

National Cancer Institute

Study Objectives

- Develop and pilot test a survey to assess cancer survivors' perceptions of the quality of their follow-up care
- Identify sociodemographic, clinical, and f/up care-related determinants of patient reports and ratings of care
- Evaluate the relationship between survivors' assessment of individual aspects of care and overall care ratings

National Cancer Institute

Study Design

- Cancer survivors diagnosed in Northern California 2-5 years prior to the study
- Cross-sectional mailed survey
  - 774 of 1,572 eligible: 49% responded
  - 623 (81%) received follow-up care in the past 12 months

National Cancer Institute

Sample Description (N = 623)

- Mean age (sd): 62.6 years (12.9)
- 57% men
- 74% white
- 72% married or living as married
- 48% college education
- Income (US $)
  - 27% > $100,000
  - 30% < $40,000
- 40% working

National Cancer Institute

Sample Description (N = 623)

- 26% bladder, 60% colorectal, 14% leukemia
- Mean years since diagnosis (sd): 3.5 (0.7)
- 18% had recurrence
- 28% received treatment in the past year
- 50% had multiple co-morbidities
- 80% knew physician for > 2 years
- 34% had more than 3 visits in the past year
- 9% saw pcp, 53% oncologist, 38% other specialist

National Cancer Institute

Patient Assessment Measures

- **Five categories of patient experience assessment (10 scales, 30 items)**
  - Access-related items (3 scales, 6 items)
  - Physician items (3 scales, 17 items)
  - Health care team items (2 scales, 4 items)
  - Health promotion items (1 scale, 2 items)
  - Coordination of care (1 item)
- CFA indicated a good fit for a 10-factor model (RMSEA=0.04, CFI=0.93, TLI=0.92)

National Cancer Institute

Patient Assessment Measures

- **Overall ratings of care: 3 items**
  - Rating of doctor (0 - 10);
  - Rating of care (poor - excellent);
  - Recommend clinic/office (def yes – def no)
- Item source: CAHPS (11), PCAS (4), MHQP (5), CanCORS (2), APECC (11)
- Scores were linearly transformed to a 0-100 metric for all scales

Patient Assessment Scores

Scale	# of Items	Source of Items
Getting needed care	2	CAHPS
Timeliness of care	2	CAHPS
Waiting time in office	2	PCAS, APECC
Information exchange	10	CAHPS, APECC, PCAS
Physicians' affective behavior	4	MHQP, APECC
Physicians' knowledge	3	PCAS, APECC
Interaction with nurses	2	APECC
Interaction with office staff	2	CAHPS
Health promotion	2	MHQP
Coordination of care	1	CanCORS
Overall rating of care	3	CAHPS, MHQP, CanCORS

Patient Assessment Scores

Scale	# of Items	Source of Items	Mean	SD	Cronbach's α
Getting needed care	2	CAHPS	96.86	13.39	0.76
Timeliness of care	2	CAHPS	89.22	22.29	0.62
Waiting time in office	2	PCAS, APECC	88.24	21.13	0.65
Information exchange	10	CAHPS, APECC, PCAS	89.99	15.77	0.92
Physicians' affective behavior	4	MHQP, APECC	92.27	17.05	0.92
Physicians' knowledge	3	PCAS, APECC	72.10	24.92	0.86
Interaction with nurses	2	APECC	91.22	16.69	0.82
Interaction with office staff	2	CAHPS	88.11	20.45	0.90
Health promotion	2	MHQP	50.68	42.11	0.88
Coordination of care	1	CanCORS	89.01	19.00	-
Overall rating of care	3	CAHPS, MHQP, CanCORS	90.36	15.08	0.87

1 in 4 Report Sub-optimal Quality

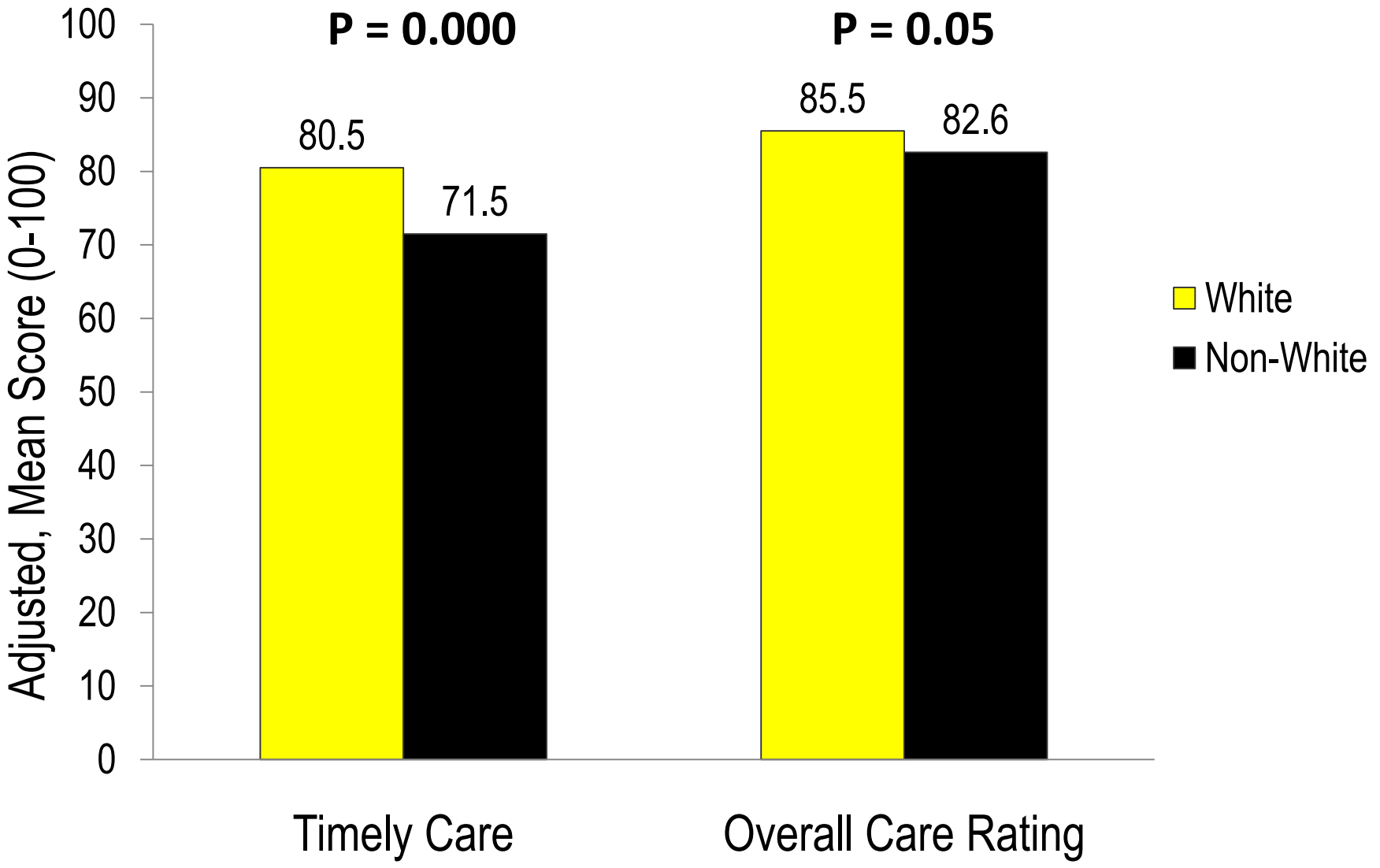
Item	Suboptimal Quality Response	%
Delay in start of appointments	> 15 minutes	26.4
Doctor encouraged you to ask all your questions	< Always	32.5
Doctor made sure you understood all the information	< Always	25.7
Doctor spent enough time with you	< Always	26.0
Doctor gave you as much info as you wanted	< Always	28.2
Rate doctor's knowledge of your responsibilities at home, work, or school	< Very good	45.0
Rate doctor's knowledge of how cancer and the medical treatments affected quality of your life	< Very good	31.9
Nurses were as helpful as they should be	< Always	25.9
Office staff were as helpful as they should be	< Always	31.7
Doctor talked with you about things you could do to improve your health or prevent illness	No	40.8
Doctor gave help needed to make changes in habits or lifestyle	No	38.8
Doctor, nurses, and other staff seem to work well together as a team	< Always	29.4

National Cancer Institute

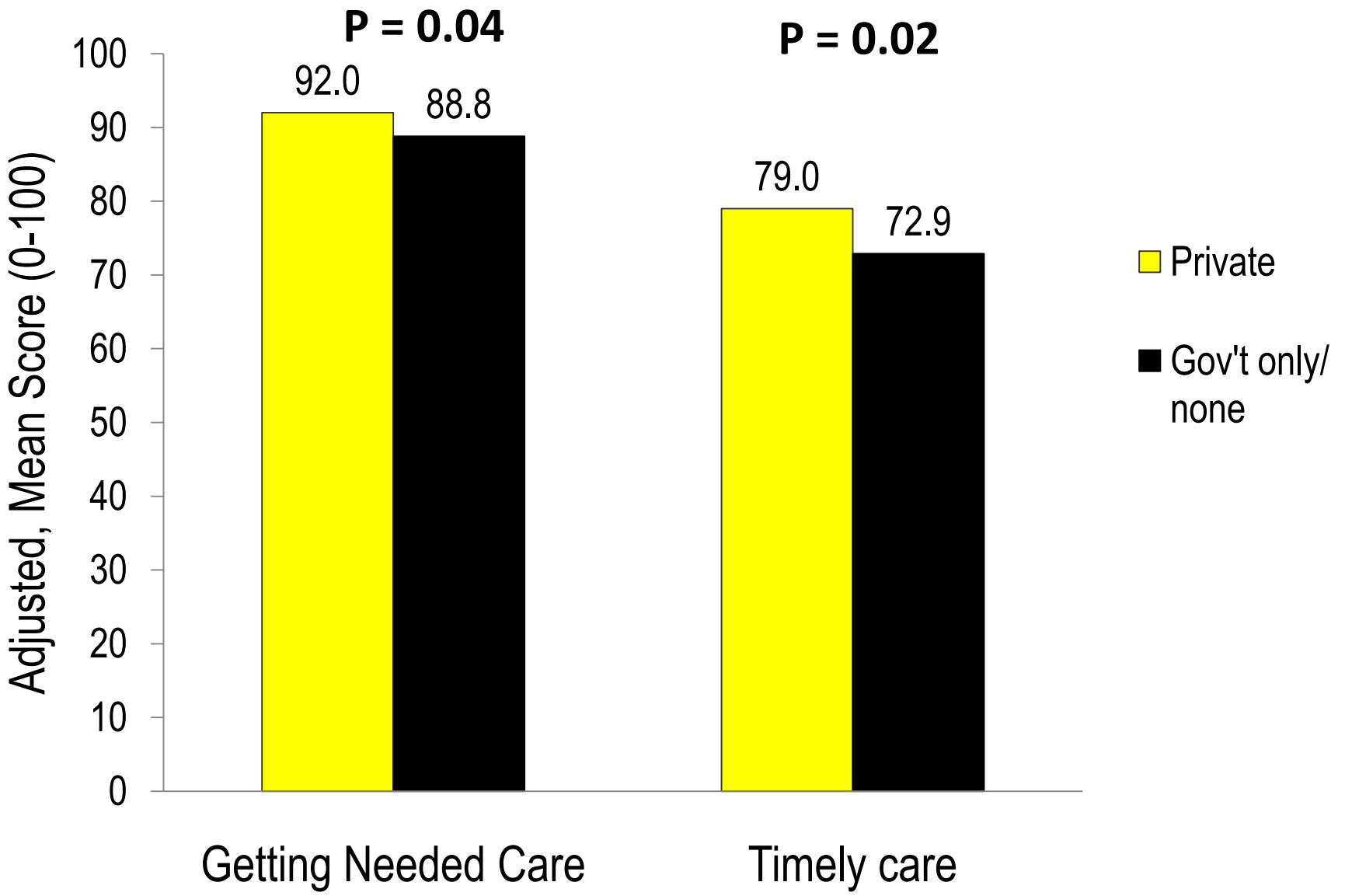
Correlates of Patient Reports and Ratings of Quality

- ANCOVA models
  - Case mix: age, education, health status
- Independent variables
  - Sociodemographic: race/ethnicity, gender, marital status, MUI, insurance
  - Clinical: cancer type, time since dx, recurrence, # of comorbidities
  - F/up care: length of relationship, physician gender, gender match, number of visits

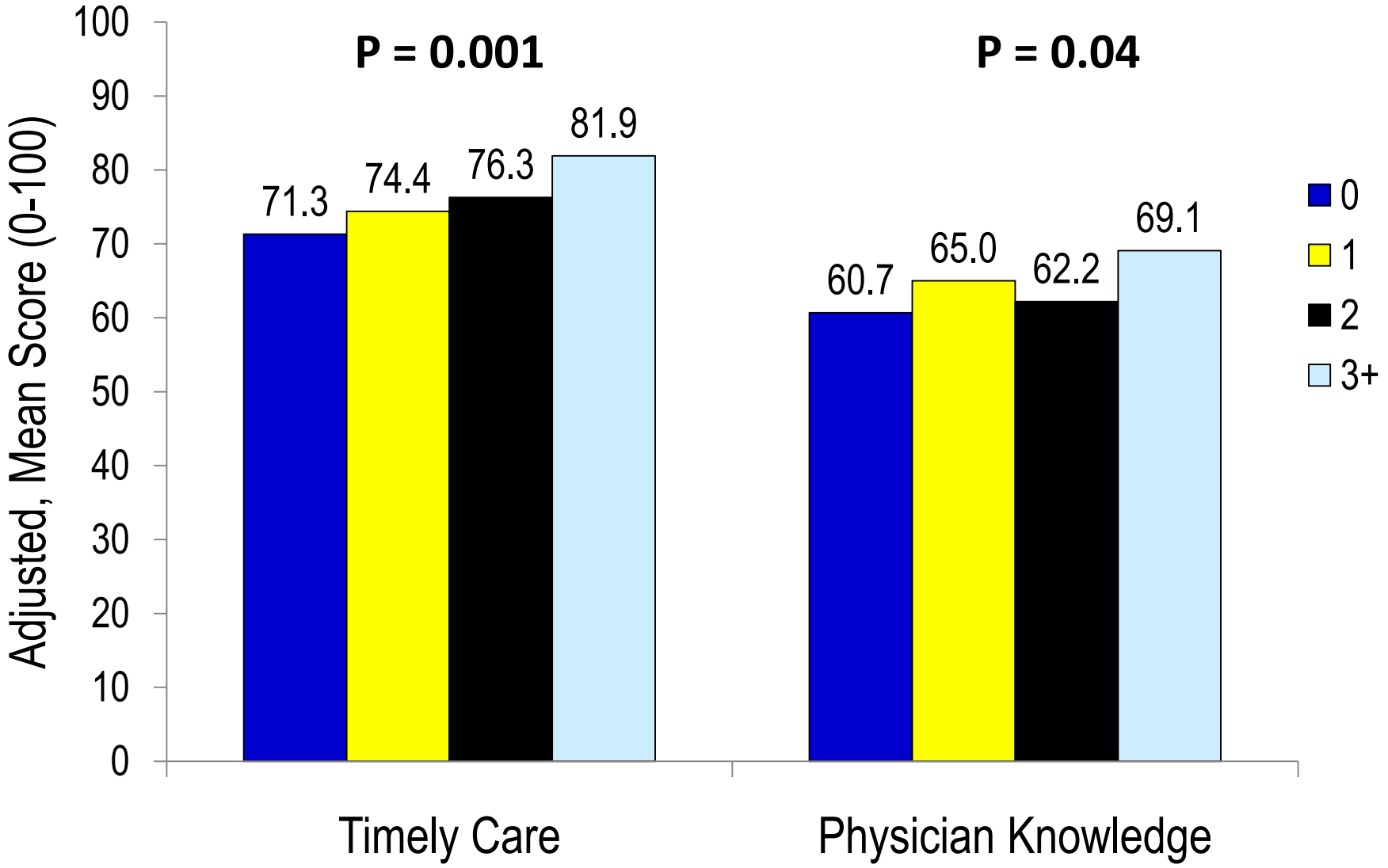
Race/Ethnicity



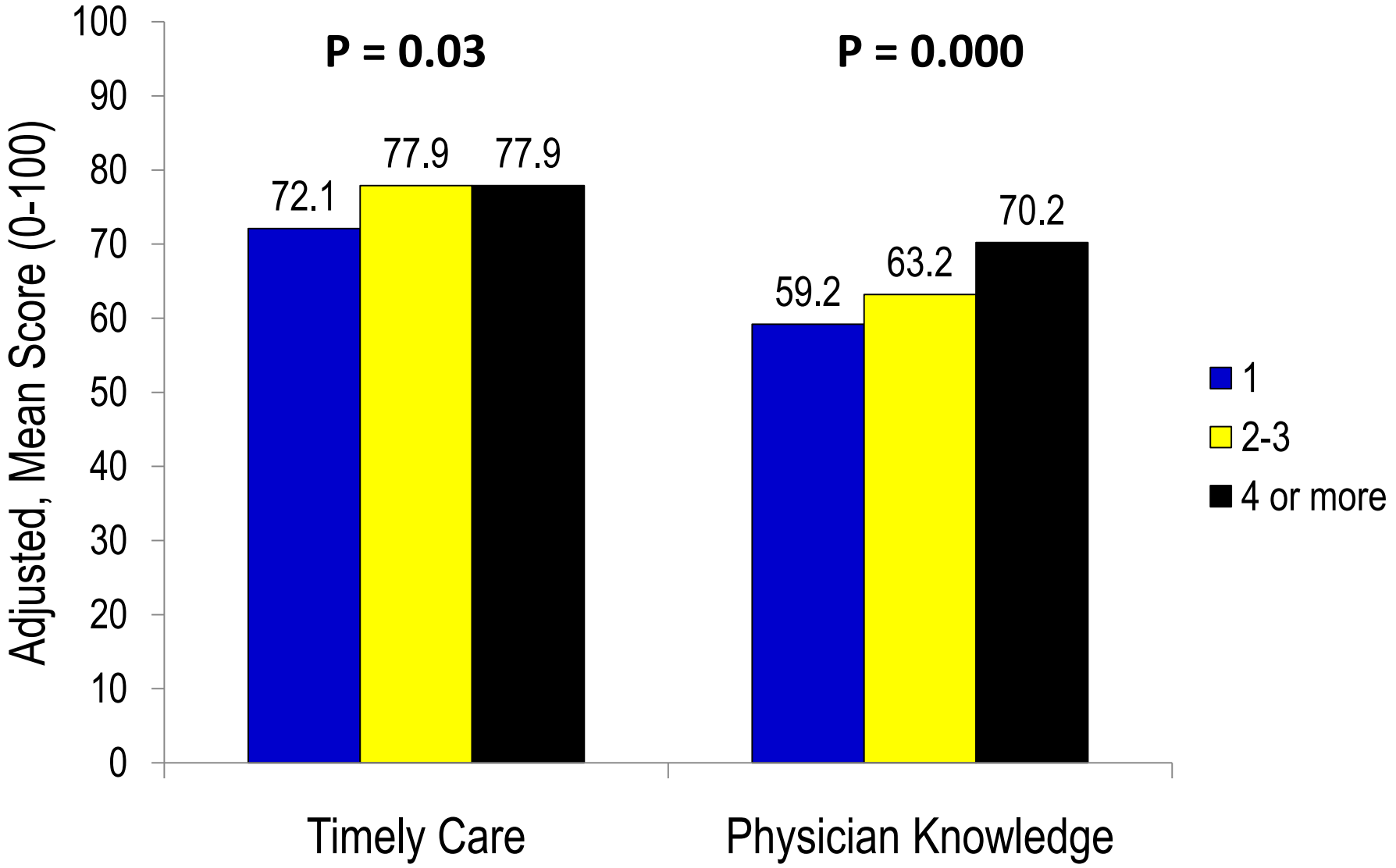
Health Insurance Status



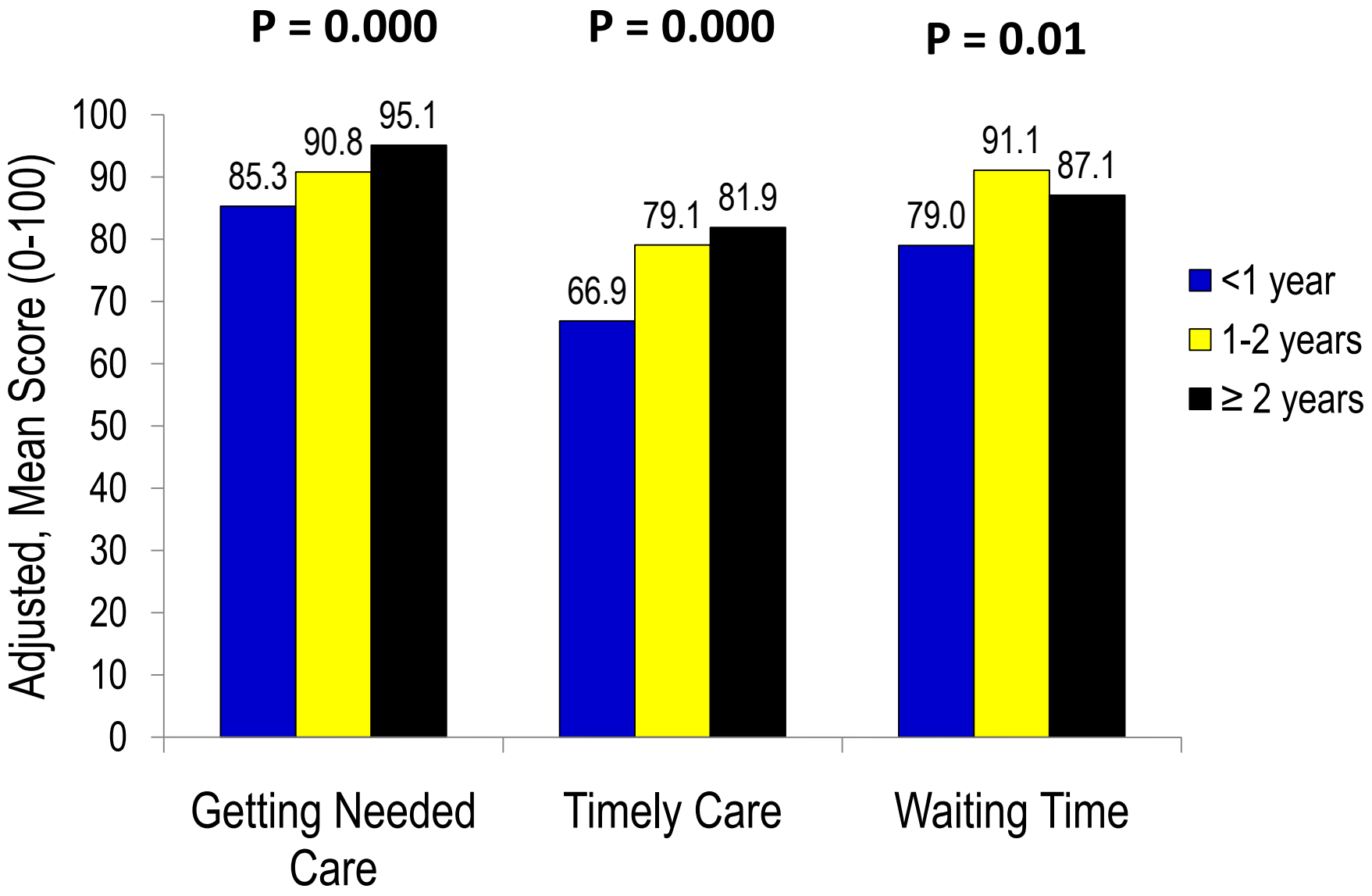
Of Comorbidities



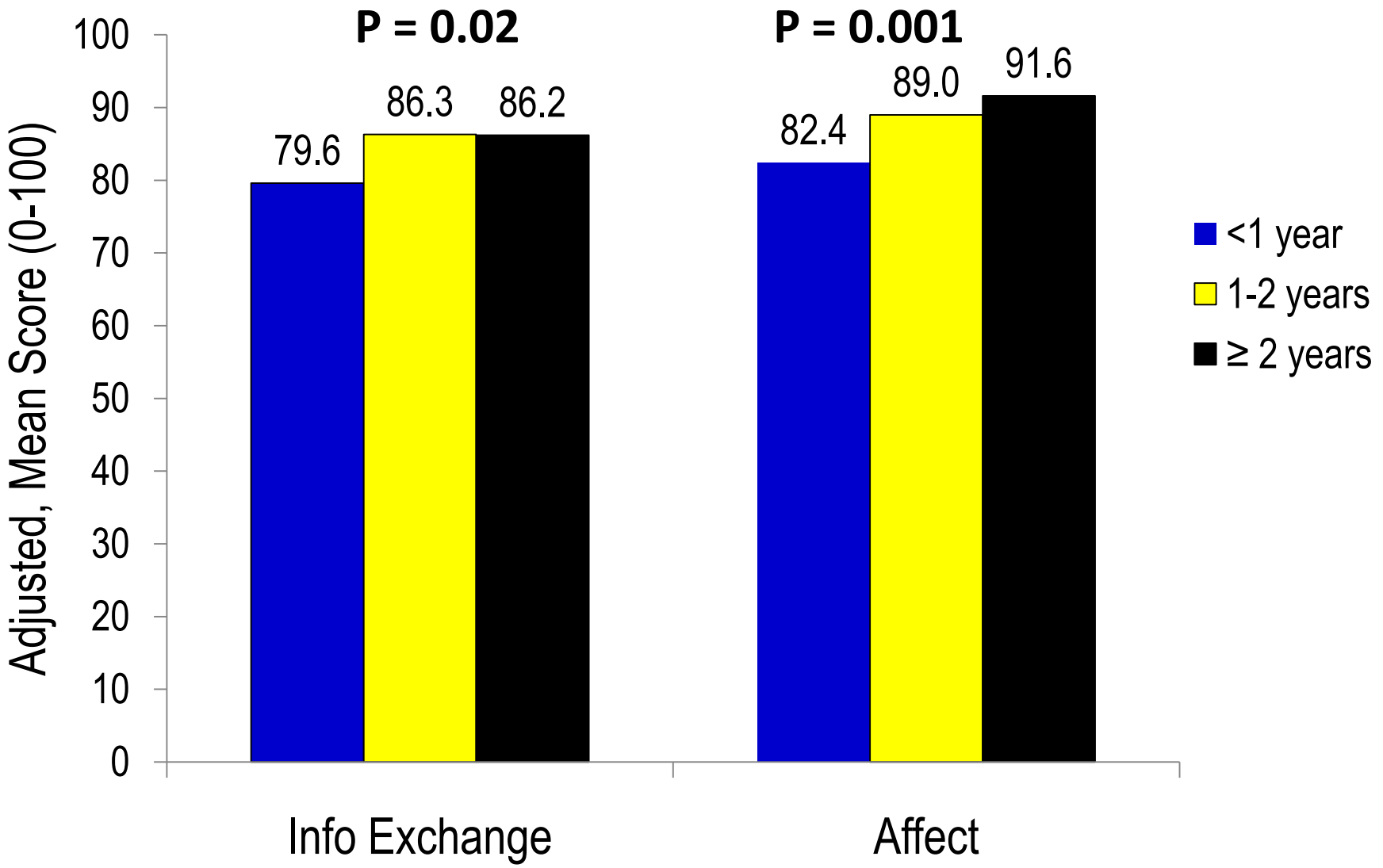
Of Visits in Past Year



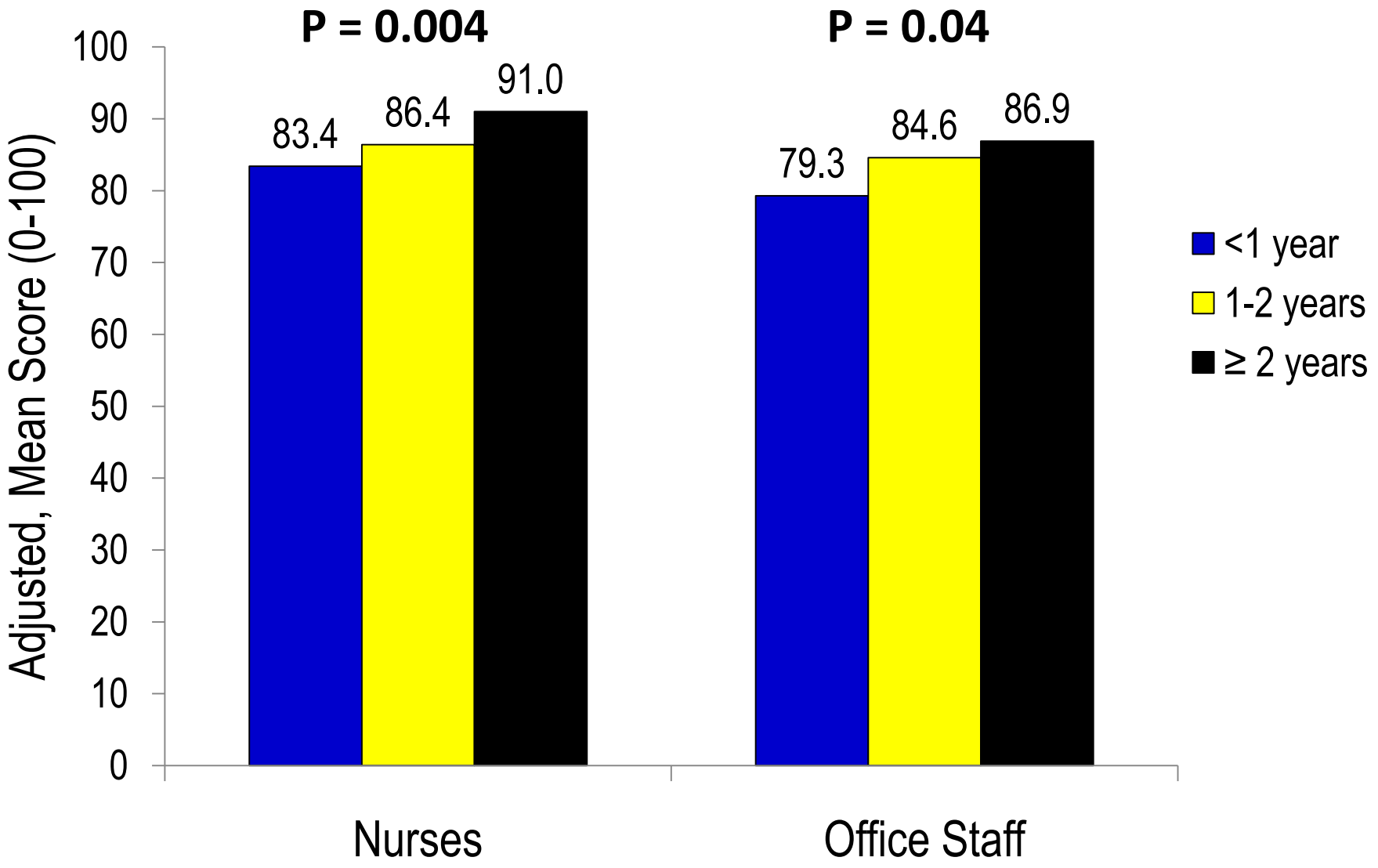
Length of Relationship



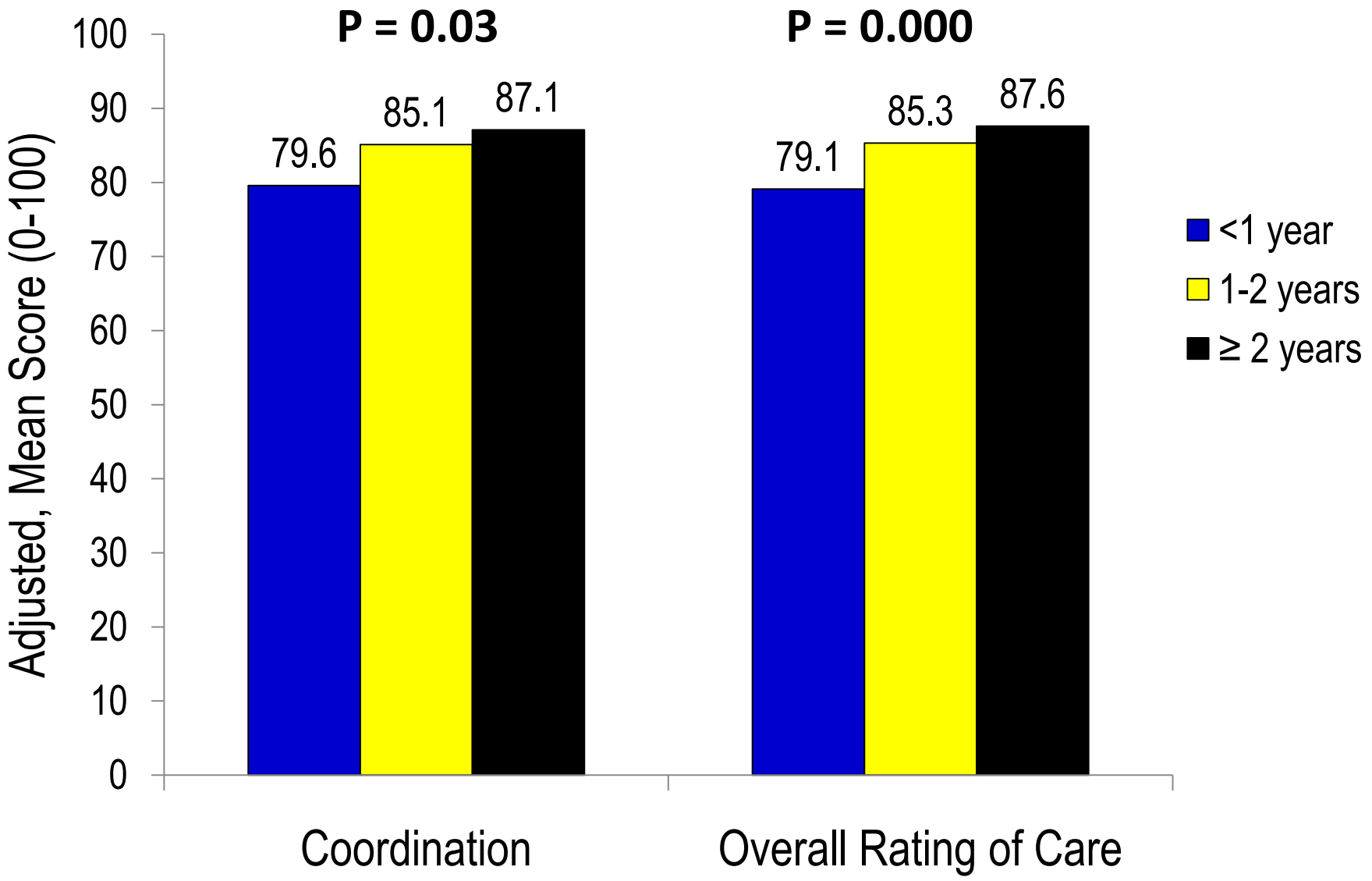
Length of Relationship



Length of Relationship



Length of Relationship



Association Between Individual Reports and Overall Care Ratings

Independent Variable	B	S.E.	95% CI	P-value
Getting needed care	0.08	0.03	0.02, 0.14	0.01
Timeliness of care	0.04	0.02	-0.00, 0.07	0.08
Waiting time	0.03	0.02	-0.01, 0.07	0.12
Information exchange	0.25	0.04	0.17, 0.34	0.000
Affective behavior	0.13	0.04	0.06, 0.20	0.000
Physician's knowledge	0.14	0.02	0.09, 0.18	0.000
Interaction with nurses	0.06	0.03	-0.00, 0.12	0.06
Interaction with office staff	0.09	0.03	0.04, 0.14	0.001
Health promotion	0.00	0.01	-0.02, 0.02	0.98
Co-ordination of care	0.11	0.03	0.06, 0.16	0.000

National Cancer Institute

Summary

- Cancer survivors reported very positive experiences on most aspects of follow-up care
- Health promotion and physicians' knowledge of the "whole" patient were two areas with greatest reports of sub-optimal quality
- Lack of health promotion discussion however did not seem to impact survivors' overall ratings of care

National Cancer Institute

Summary

- Our results suggest that:
  - Underserved survivors may potentially be at risk for worse experiences
  - Survivors with greater disease burden and more contact with the health care system may be getting better interpersonal care
  - Greater continuity of care is likely to result in more positive patient experiences

National Cancer Institute

Conclusion

- To improve the patient-centeredness of cancer care delivery, it is important to assess, monitor, and improve care from patients' perspective
- The survey instrument tested in the APECC study lays the foundation for such efforts