

**Efficacy and Effectiveness: Results
from a Randomized Trial of an
Alternative to Psychiatric
Hospitalization**

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A Collaboration of:

- Veterans Affairs San Diego Healthcare System (VASDHS)
- San Diego County Adult and Older Adult Mental Health Services
- UCSD Department of Psychiatry
- Community Research Foundation

Investigation Team

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Short-Term Acute Residential Treatment (START) Programs

- Alternative to acute psychiatric hospitalization
- Community-Based
- CARF Accredited
- Licensed Crisis Residential Facilities
- Medicaid Certified by California Department of Mental Health
- VA Approved
- Kaiser Permanente Approved

Program Comparison

VA Hospital

- 37-bed acute psychiatric hospital
- JCAHO accredited
- Psychiatric services by UCSD physicians
- ALOS = 9 days

START

- Six 11- to 14-bed programs
- CARF accredited
- Psychiatric services by UCSD physicians
- ALOS = 9 days

Admission Criteria

VA Hospital

- Veterans 18 and older
- Voluntary & Involuntary
- Crisis of sufficient severity to indicate hospitalization
- Can provide inpatient medical care

START

- 18 to 59 years old
- Voluntary only
- Crisis of sufficient severity to indicate hospitalization
- Outpatient medical services only

Study Overview

This ongoing study compares services, outcomes, and costs for veterans in need of acute psychiatric care who were randomly assigned to either the VASDHS Psychiatric Unit or a START program in San Diego County.

Study Components

- Qualitative component includes client and staff interviews and client-reported assessments of program and services.
- Quantitative outcome component includes objective measures such as standardized instruments, readmission episodes, living situation, and employment status.
- Cost-effectiveness component incorporates cost and outcomes.

Methods

- Consenting veterans in need of acute psychiatric care are randomly assigned to either the VA Hospital or a START program
- Study participants are interviewed and complete several instruments usually within 24 hours of admission and discharge
- Participants are followed-up at two months, six months, and one year after discharge

“Hybrid” design

EFFICACY

- Random assignment to treatment model
- Comparability controlled at baseline
- Inclusion/Exclusion criteria
- Hypothesis testing
- “Intent to treat” analysis

EFFECTIVENESS

- Observational
- Both accredited treatment models
- No controls on treatment during FU
- Includes cost
- Follows “real world” sample across time

Measures

- Structured Clinical Interview for Positive and Negative Syndrome Scale (SCI-PANSS)
- Short Form-36 for Veterans (SF-36V)
- Addiction Severity Index (ASI)
- Quality of Well-Being (QWB)

Measures (Cont.)

- Perceptions of Care (POC)
- Ward Atmosphere Scale (WAS)
- Structured Clinical Interview for DSM-IV (SCID)
- Cost and use of mental health services

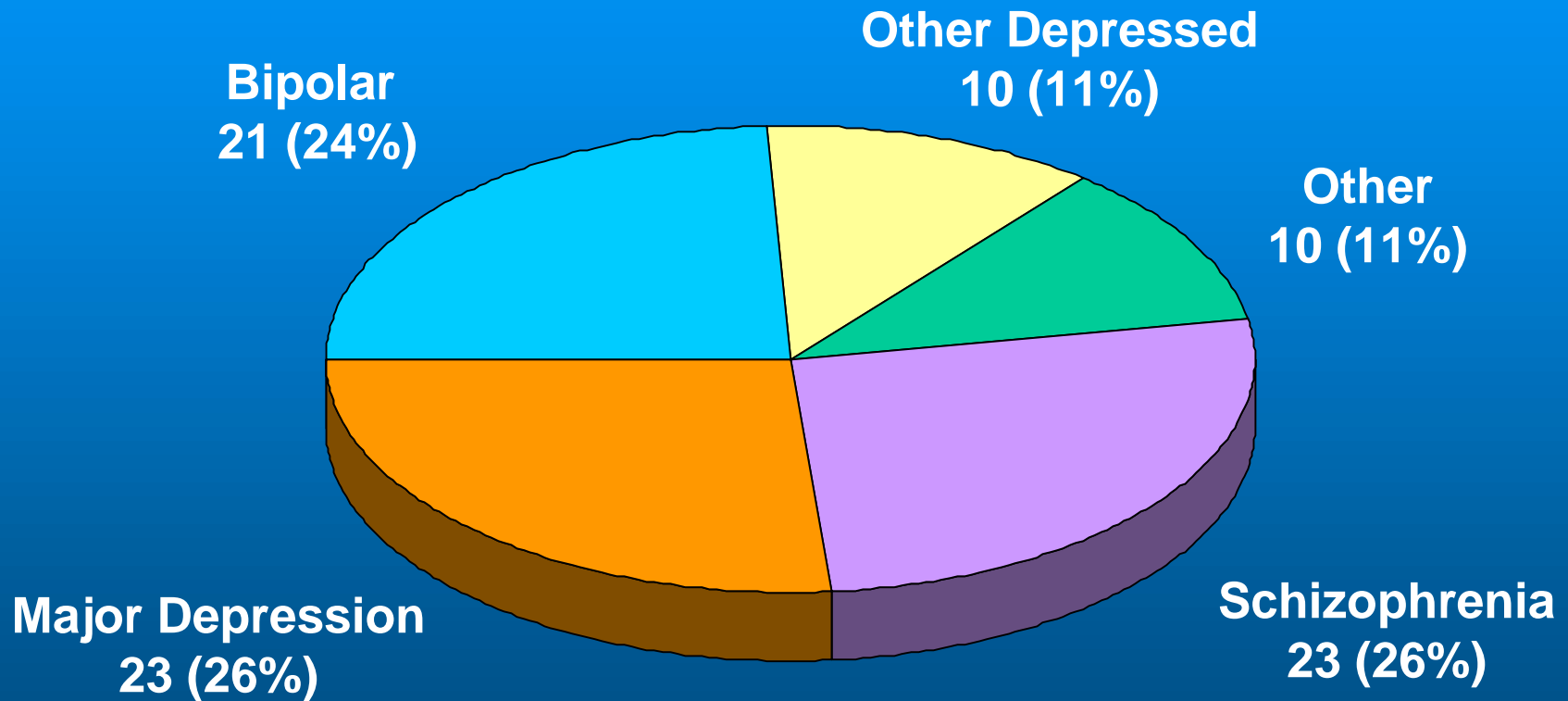
Data Sources

- Participant Self-Report
- Trained Research Staff Assessments
- VASDHS Database
- San Diego County Mental Health Services Database

Study Participants (n=87)

- Between 18 and 59 years old
- Psychotic or Major Affective Disorder
- Judged to be in need of acute psychiatric admission by attending psychiatrists at VA
- Not in need of more than outpatient medical services

Diagnostic Categories



Concomitant Substance-Related Diagnoses = 62 (71%)

No significant differences between hospital and START groups

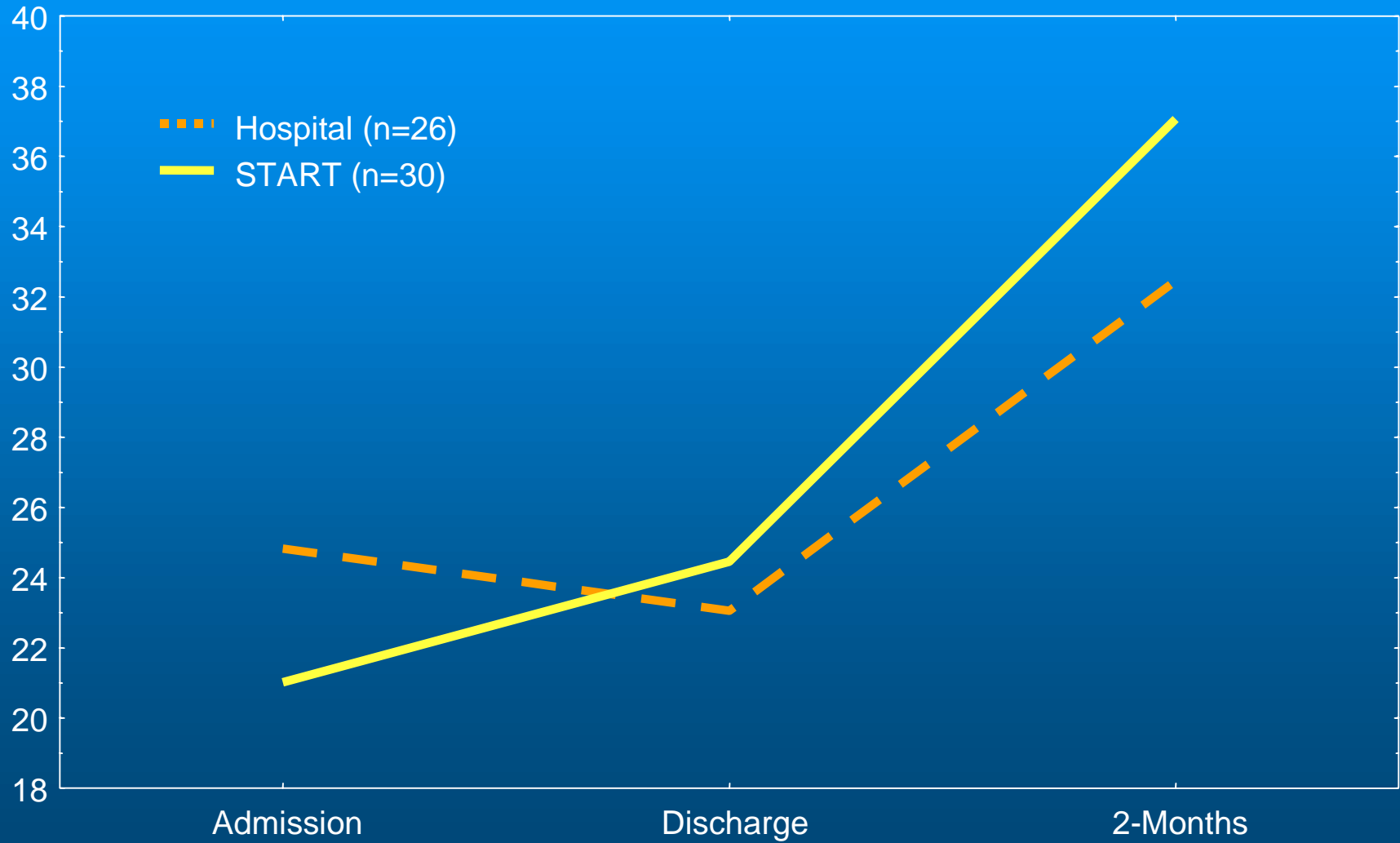
Preliminary Findings

- Significant improvements were found across admission, discharge, and 2-month follow-up for both groups on PANSS Total, QWB Total, SF-36V MCS, and the ASI Alcohol Composite scale (ASI at discharge & 2-month only).
- There were no significant differences between the groups on the same measures across time.

Mean SF-36V Mental Component Summary Scores

Main effect: $F(2,108)=23.05$; $p<.000$

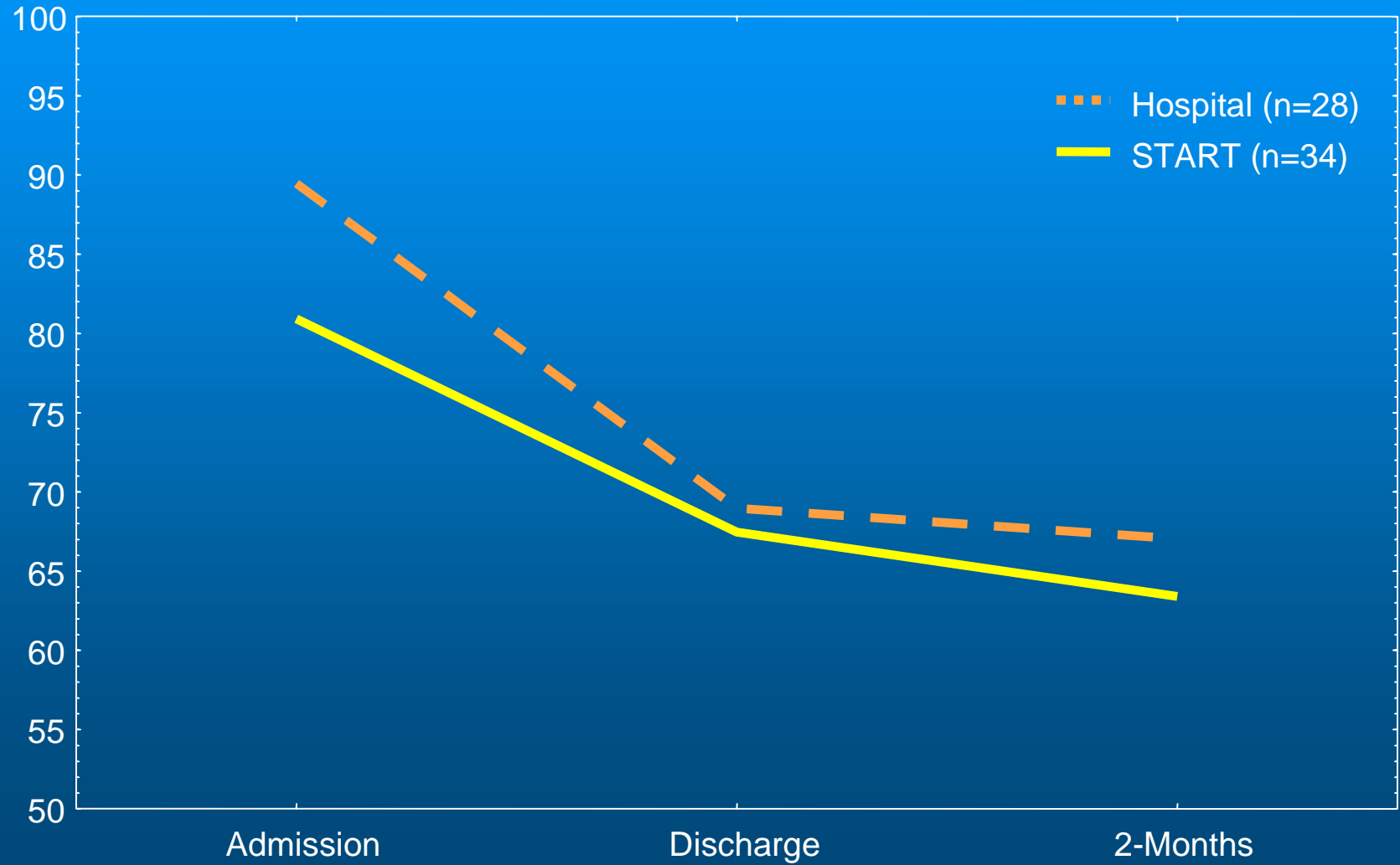
2-way: $F(2,108)=2.38$; $p<.0971$



Mean PANSS Total Scores

Main effect: $F(2,120)=60.83$; $p<.000$

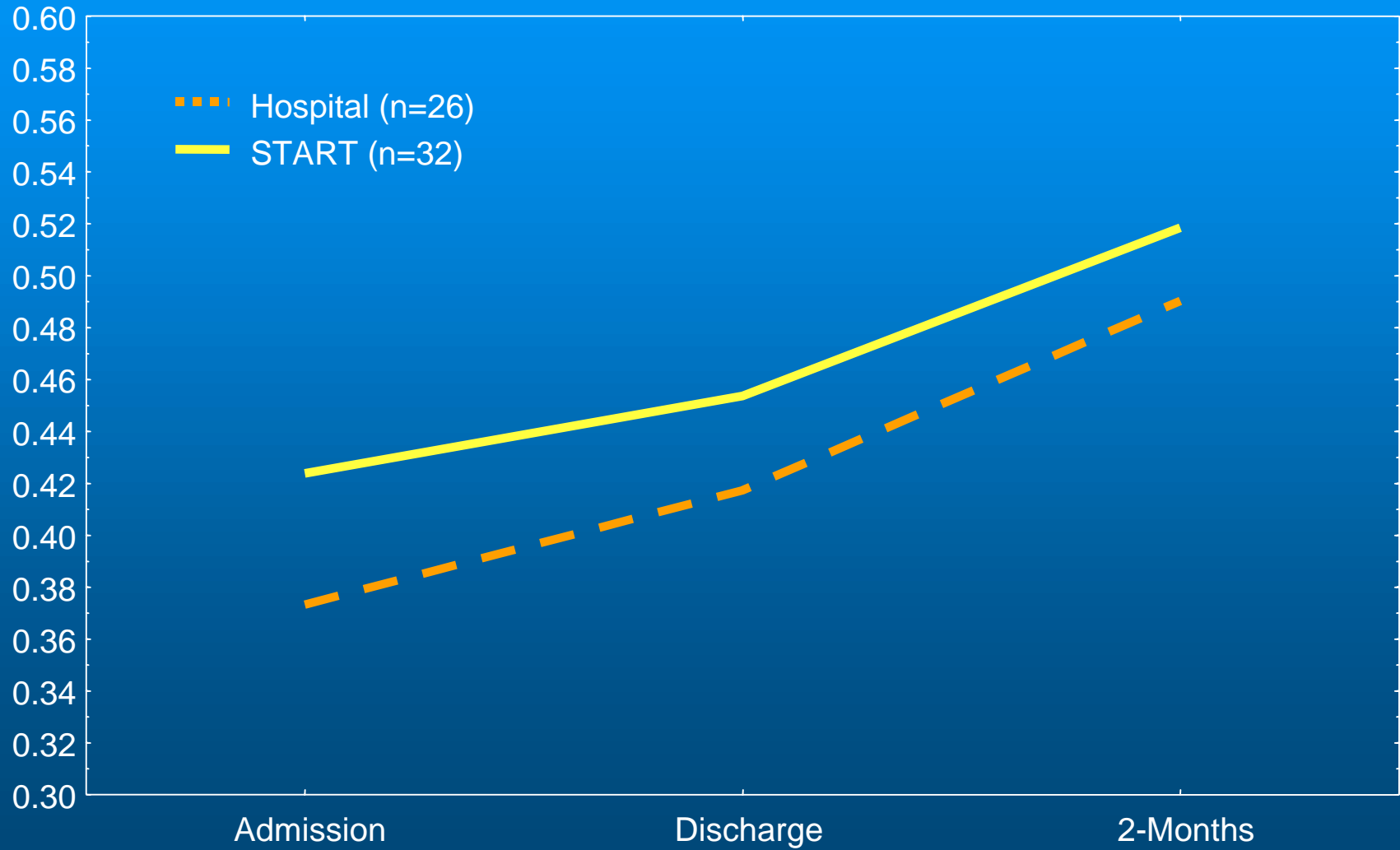
2-way: $F(2,120)=1.70$; $p<.1867$



Mean QWB Total Scores

Main effect: $F(2,112)=12.10$; $p<.000$

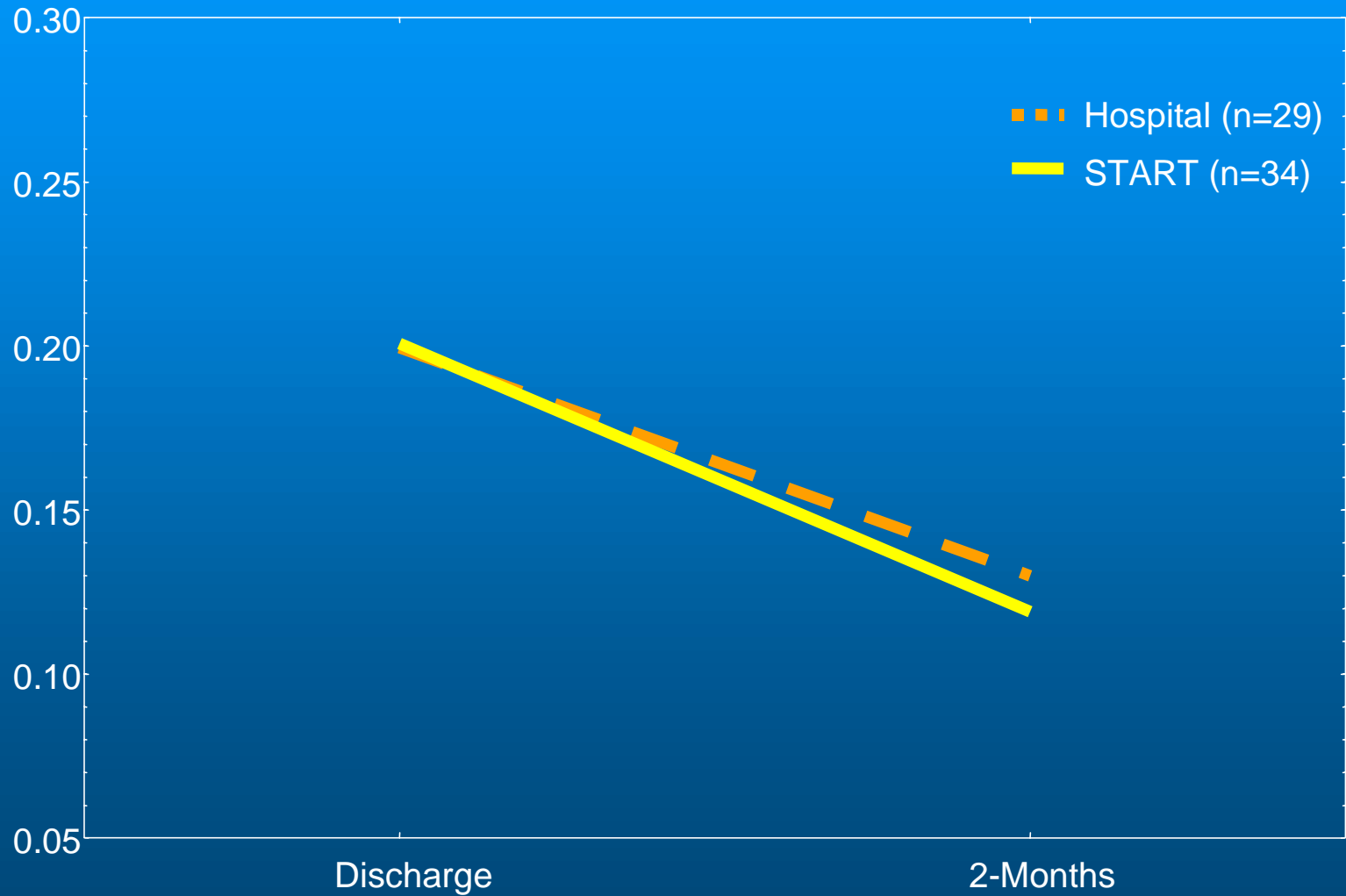
2-way: $F(2,112)=.13$; $p<.8747$



Mean ASI Alcohol Composite Scores

Main effect: $F(1,61)=11.97, p<.0015$

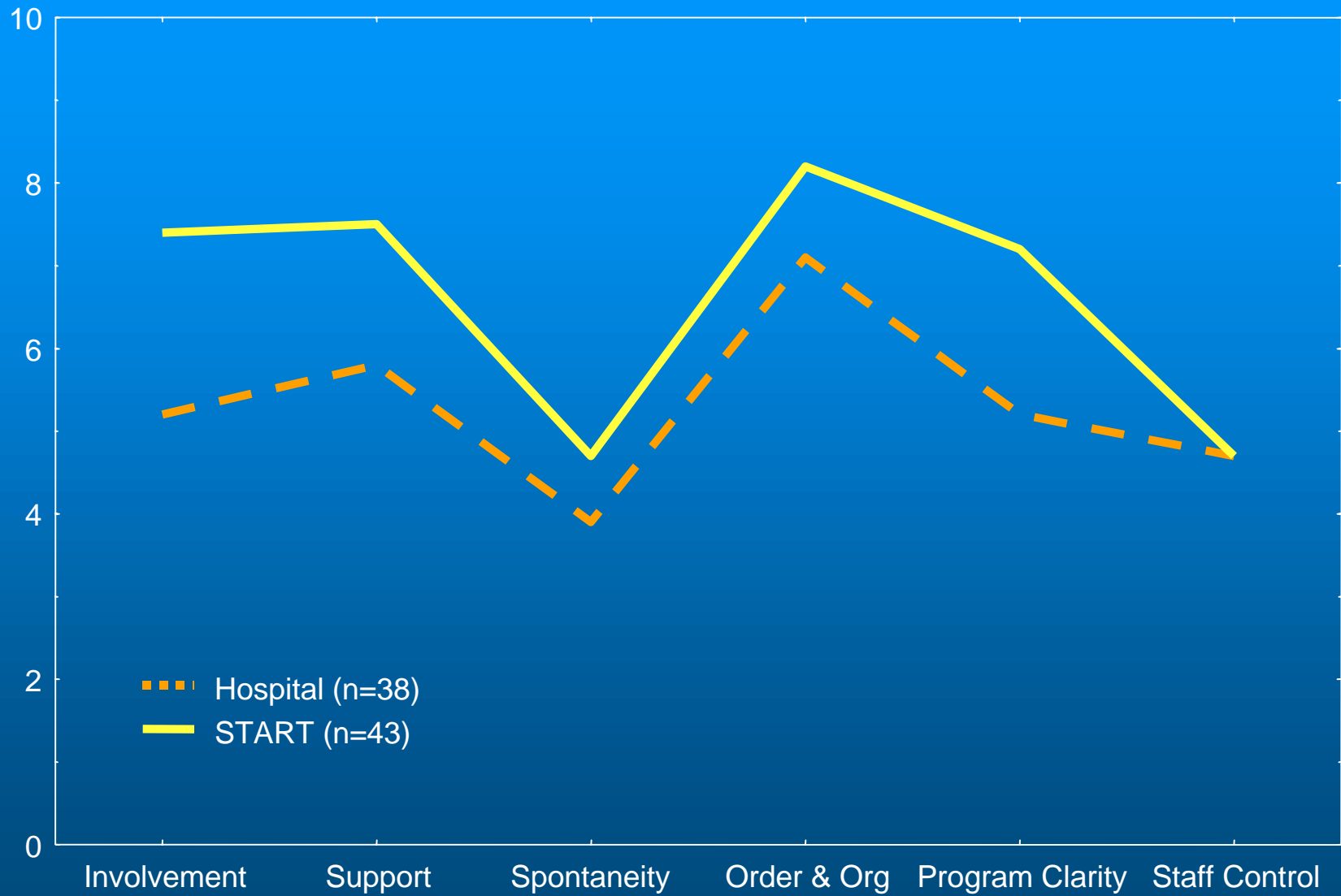
2-way: $F(1,61)=.07; p<.7901$



Preliminary Findings (Cont.)

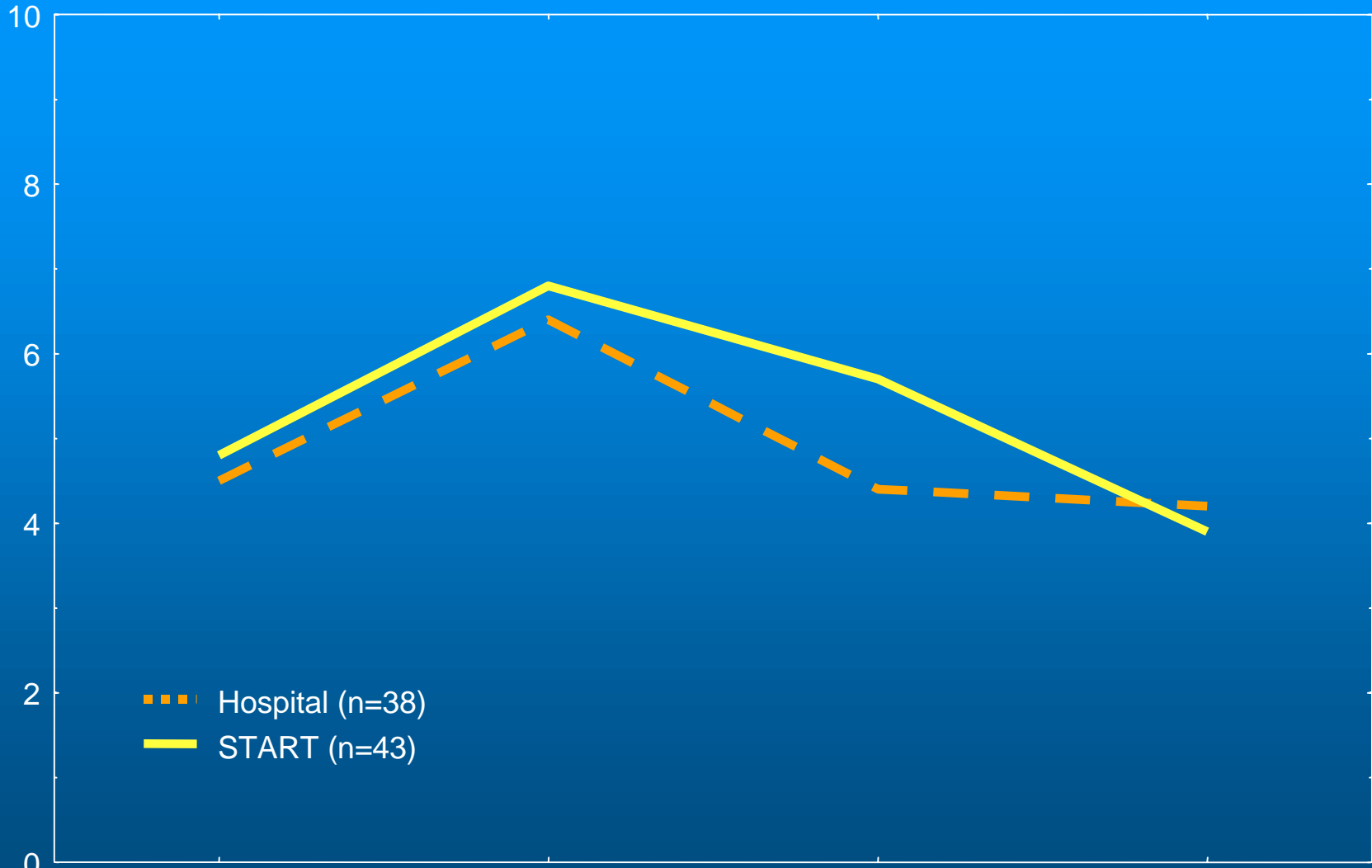
- Mean scores on 6 of the 10 Ward Atmosphere Scale subscales were significantly more favorable for START
- Both groups showed significant reductions in homelessness across admission, discharge and 2-month follow-up ($p < .05$)
- 61% of hospital and 80% of START participants who were homeless at admission were domiciled at discharge ($p = .28$)

Mean WAS Subscale Scores



F, (p)	Involvement	Support	Spontaneity	Order & Org	Program Clarity	Staff Control
	16.2 (.000)	14.0 (.000)	4.6 (.035)	5.5 (.022)	14.5 (.000)	NS

Mean WAS Subscale Scores



	Autonomy	Practical Orientation	Personal Problem Orientation	Anger Aggression
F (p)	3.77 (.056)	NS	8.64 (.04)	NS

Preliminary Findings (Cont.)

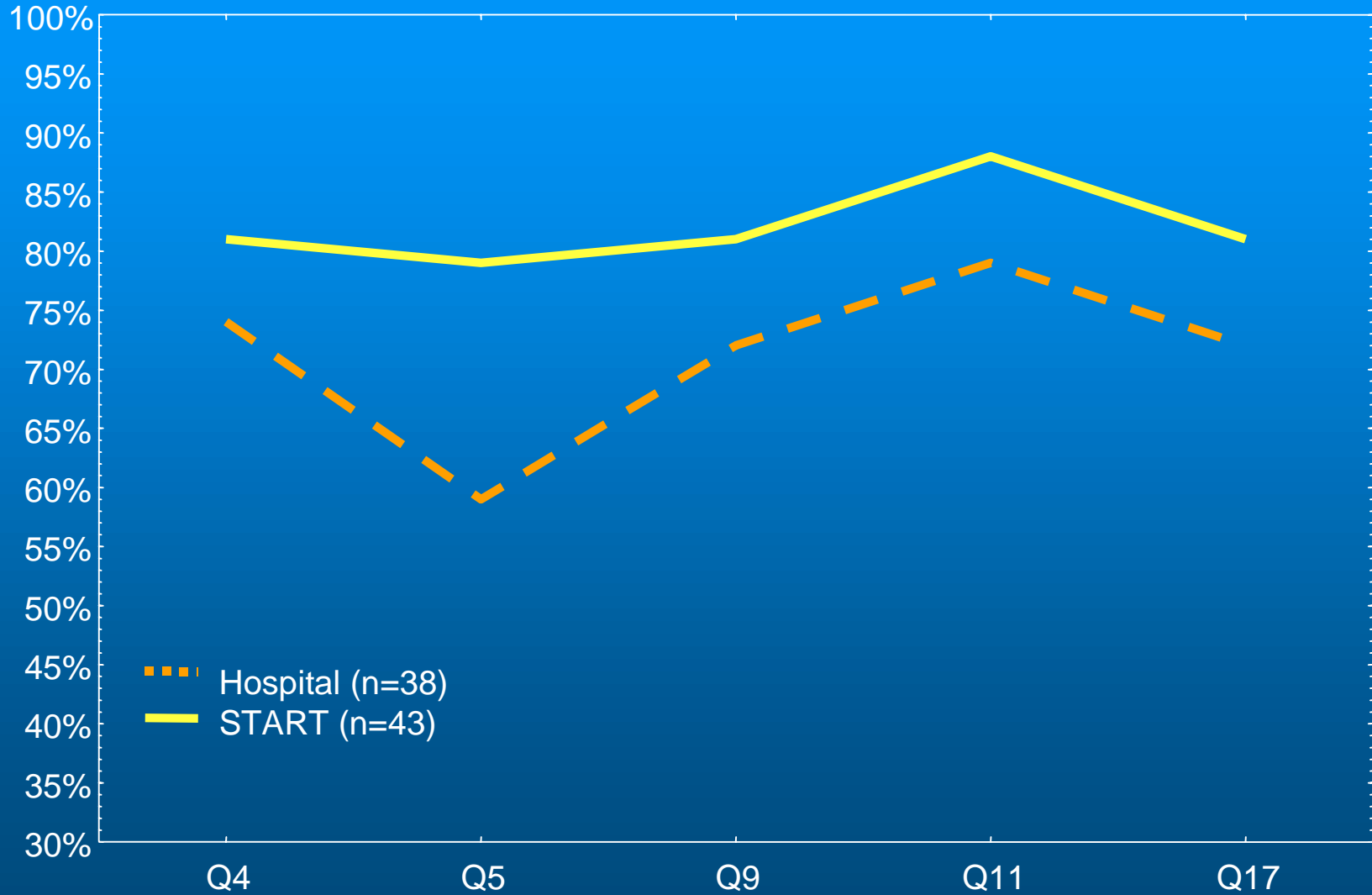
- 71% of participants (62) had concomitant substance-related diagnoses
- At the 2-month FU, 91% of START and 72% of hospital participants reported taking medication as prescribed ($p=.065$)
- Mean episode costs for the index episode were significantly lower for START (START = \$2,592, Hospital = \$6,712; $p<.000$)

Preliminary Findings (Cont.)

- 6-month hospital readmission rates were 34% for the hospital group and 16% for the START group ($p=.075$).
- Combining 6-month hospital and START readmissions yielded more similar rates between the groups (hospital = 34%, START = 27%).
- 60-day combined readmission rates were similar (hospital = 22%, START = 24%).

POC Questions with Largest Differences

Proportion of Favorable Responses



Mann Whitney (P) 624 (.04)

521 (.003)

623 (.05)

642 (.07)

*

* Q17 = score data: ANOVA, F=3.5 p<.06

Limitations

- Participants' status at follow-up may not be attributable to factors associated with acute care treatment
- Unavailability of beds for randomization resulted in lower than expected sample size

Limitations (Cont.)

- Higher incidence of substance abuse than found among the general public mental health population
- Participants are 95% male
- No confirmation of self-report data on key measures such as living situation and employment status



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