

Outpatient Waiting Time Measures and Patient Satisfaction



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Wait Times are a Key Policy Focus

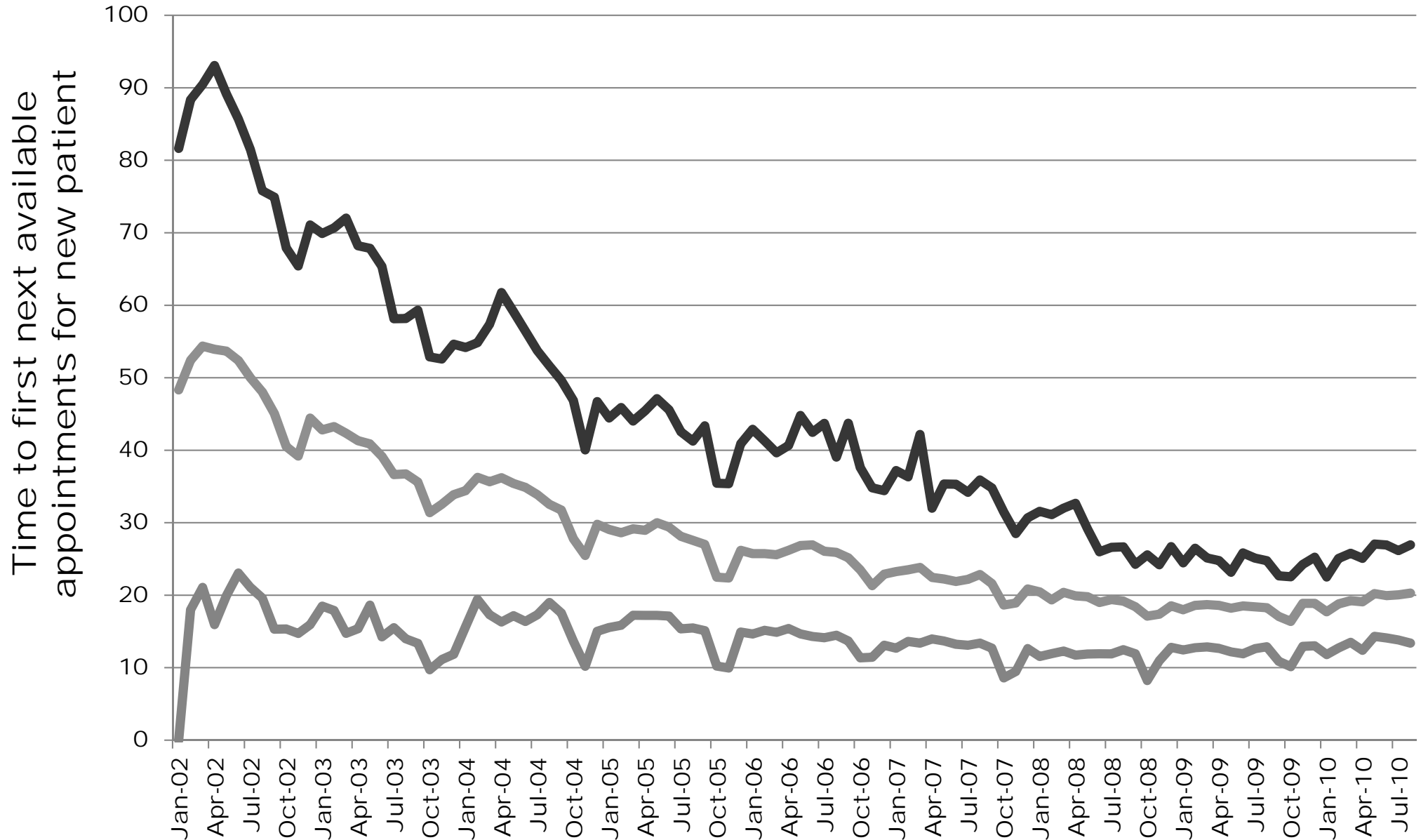
- VA has monitored wait times for over a decade
 - Before 1999, anecdotal evidence on waits
- Congress requested wait time data
- VA began systematically collecting wait time data

Interventions to Decrease Waits

- Performance measures
- Advanced Clinic Access in six target clinics
 - 2000
- Primary care panel sizes
- Limited enrollment to priority 7/8
 - 2003 to 2009

Wait Times Have Decreased

— Mean — 10% — 90%



Concerns About Waits Still Remain

- VA OIG audits wait time policies
 - Access to mental health care- April 2012
- Congressional hearings on access
 - SVAC April 2012
 - HVAC May 2012

Reliability of Wait Time Measures is Unknown

- VA has used a variety of wait time measures
- Initiatives to decrease wait times require reliable measures
 - Little research has used wait time measures to predict outcomes
- This study aims to fill this knowledge gap
 - Today focusing on patient satisfaction results
 - Future analyses focus on health outcomes

Wait Time Measures

- Capacity measures
 - First next available (FNA)
- Time stamp measures
 - Create date (CD)
 - Desired date (DD)
- Access list measures
 - Create date (CD)
 - Desired date (DD)

FNA Calculation

- New patient A requests to be seen as soon as possible on January 5, 2010
- First next available appointment is January 10, 2010
- Wait time = 5 days (O-X)



FNA Measure

- Overall supply in system
 - Patient availability/preferences not considered
- Schedulers distinguish between follow-up and urgent care appointments
 - More problematic for established vs. new patients
- Appointment type/Multiple physician profiles
 - FNA appointment type is not what patient needs
 - Cannot consult all scheduling profiles for same physician

Previous Research

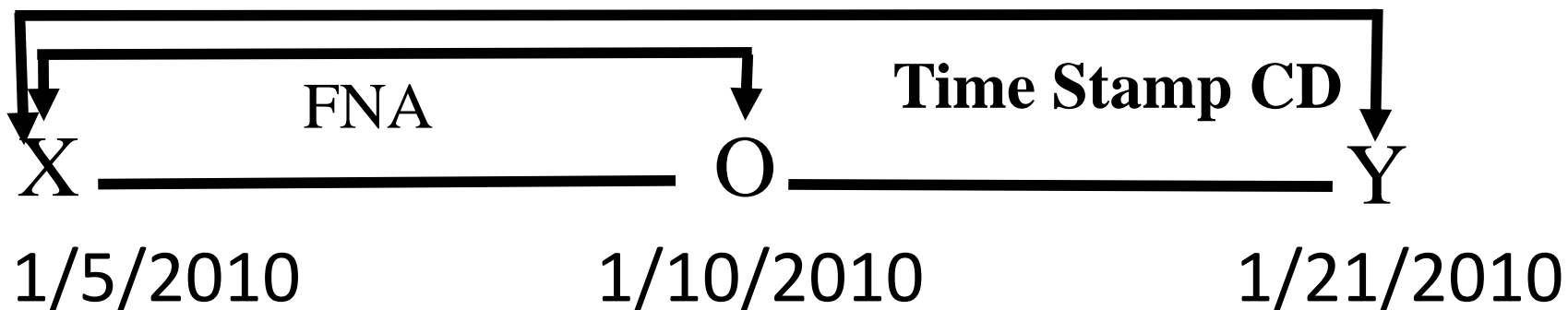
- Veterans visiting VA facilities with longer FNA have poorer health outcomes
- Mortality, preventable hospitalization for geriatric veterans
- Mortality, preventable hospitalization, AMI, stroke, HbA1c
 - Veterans with diabetes
 - Veterans over age 70 and with greater comorbidities

FNA Measure Limitations

- Patient availability/preferences not considered
- VA managers explored other options

Create Date Time Stamp Calculation

- New patient A requests to be seen as soon as possible on January 5, 2010
- Cannot take January 10, 2010 appointment
- Appointment is scheduled for January 21, 2010
- Wait time= 16 days (Y-X)



Create Date (CD) Time Stamp Measure

- Little information required of scheduling clerks
- Based on completed appointments
 - Excludes no-shows, cancellations
- Use of recall systems versus scheduling follow-up appointments right away
 - Influences wait time
 - More problematic for established versus new patients

Desired Date (DD) Time Stamp Measure

- In 2010, VA shifted to desired date measure
- Not influenced by use of recall systems
- Takes into account patient preferences

Desired Date (DD) Time Stamp Measure

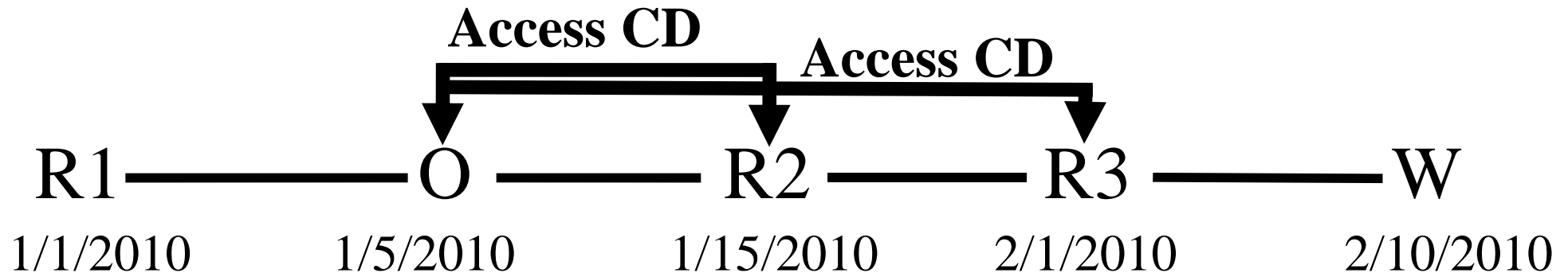
- Schedulers must correctly enter desired date
 - Original DD kept when negotiating appointment
 - E.g. May 1st versus May 5th
- Extensive training of schedulers
 - Implemented in 2010
 - Audits find date is entered correctly 90% of the time

Prospective Access Measures

- Time stamp measures are retrospective
 - Only includes completed appointments
 - Patient no-shows not included
 - Cancellations that are not rescheduled not included
- Access list measures are prospective
 - Calculate waits off of pending appointments
 - Includes no-shows and cancellations

Access List Create Date Calculation

- New patient A requests an appt ASAP on January 5, 2010
- Appointment is scheduled for February 10, 2010
- Bi-monthly report dates (1 and 15th of each month)
- Appointment is not eligible for calculation until CD is equal to or before report date
- 1/1/2010 report- appt. not included
- 1/15/2010 report- Wait time = 10 days (R2-O)
- 2/1/2010 report- Wait time = 26 days (R3-O)

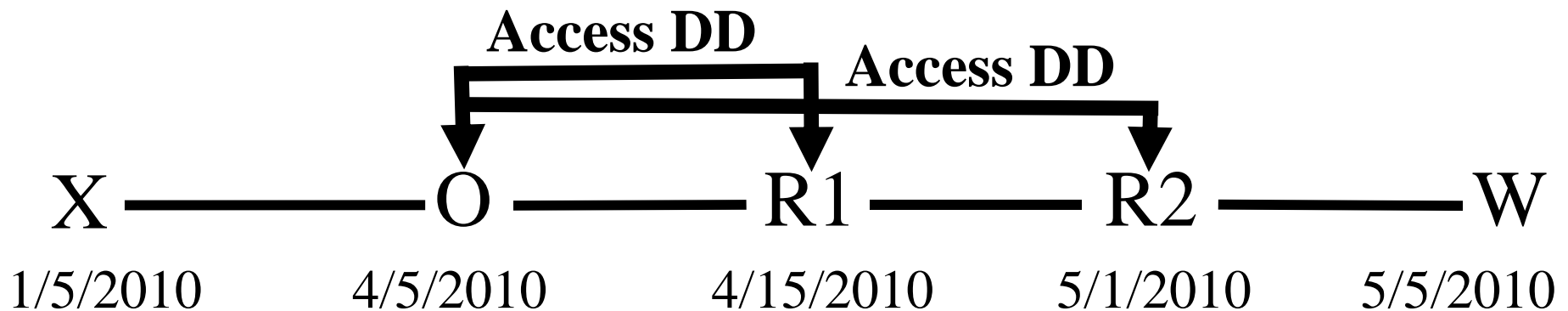


Access List CD Measure

- Performance measure is percent of appts. that have less than a 14 day wait
 - We average waits to match other measures
- Influenced by how follow-up appts. are scheduled (e.g. recall systems)

Access List Desired Date Calculation

- Established Patient B requests an April 5, 2010 follow-up appointment on January 5, 2010
- Appointment is scheduled for May 5, 2010
- Report dates are 1st and 15th of each month
- 4/15/2010 report- Wait time= 10 days (R1-O)
- 5/1/2010 report- Wait time= 25 days (R2-O)

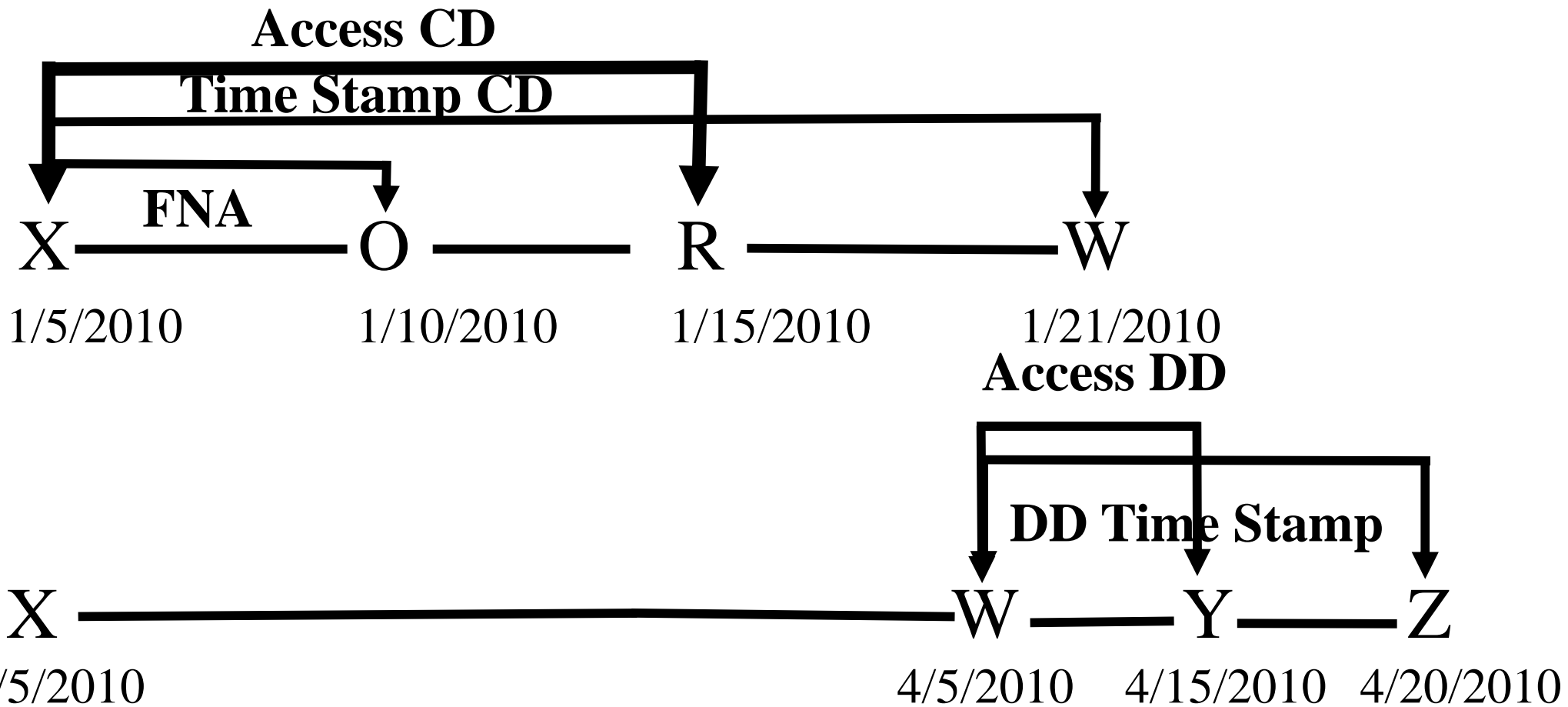


Access List DD Measure

- Performance measure is percent of appts. that have less than a 14 day wait
 - We average waits to match other measures
- Schedulers must correctly enter DD

Summary of Wait Time Measures

- New versus established patients
- Time Stamp Retrospective
- FNA-Access Prospective



Research Question

- How well do alternative measures of wait times predict patient satisfaction?

Surveys on Patient Satisfaction

- Access is a key component of satisfaction
- Difficult to judge technical quality
- Patients focus on practical aspects of their healthcare experience

Satisfaction Data

- 2010 Survey of Healthcare Experiences of Patients (SHEP)
 - Managed by Office of Quality and Performance
 - Modeled after Consumer Assessment of Healthcare Providers and Systems
- Simple random sample of patients with completed appointments each month
- Visit date of appointment is recorded
- n=221,924 people

Access Satisfaction Measures

- 1) Appt. as soon as wanted (Timely appt.)
- 2) Ease of getting test or treatment in last 12 months? (Treatment access)
- 3) Ease of accessing specialist visit (Specialist access)
 - Asked for the last 12 months
 - Most recent visit is likely in mind
 - Coded as Always/Usually vs. Sometimes/Never

General Satisfaction Measures

4) Rate VA health care in last 12 months (VA rating)

- On a scale of 1 (worst) to 10 (best)
- 9 or 10 versus ≤ 8

5) Satisfaction with VA at recent visit (satisfied)

- Likert scale 1 (least) to 7 (most) of satisfaction
- 6 or 7 versus ≤ 5

Analyses

- Logistic regression predicting satisfaction
- Wait time measures
 - High volume clinic stops
 - Patient/provider interactions
 - All major medical sub-specialties
 - Facility level monthly averages (including Access measures)
 - Matched to visit date when respondent was selected for sample
 - Quartiles

Analyses Continued

- Risk adjustors from SHEP
 - Sex
 - Race
 - Age
 - Education
 - Health care utilization
 - Health status

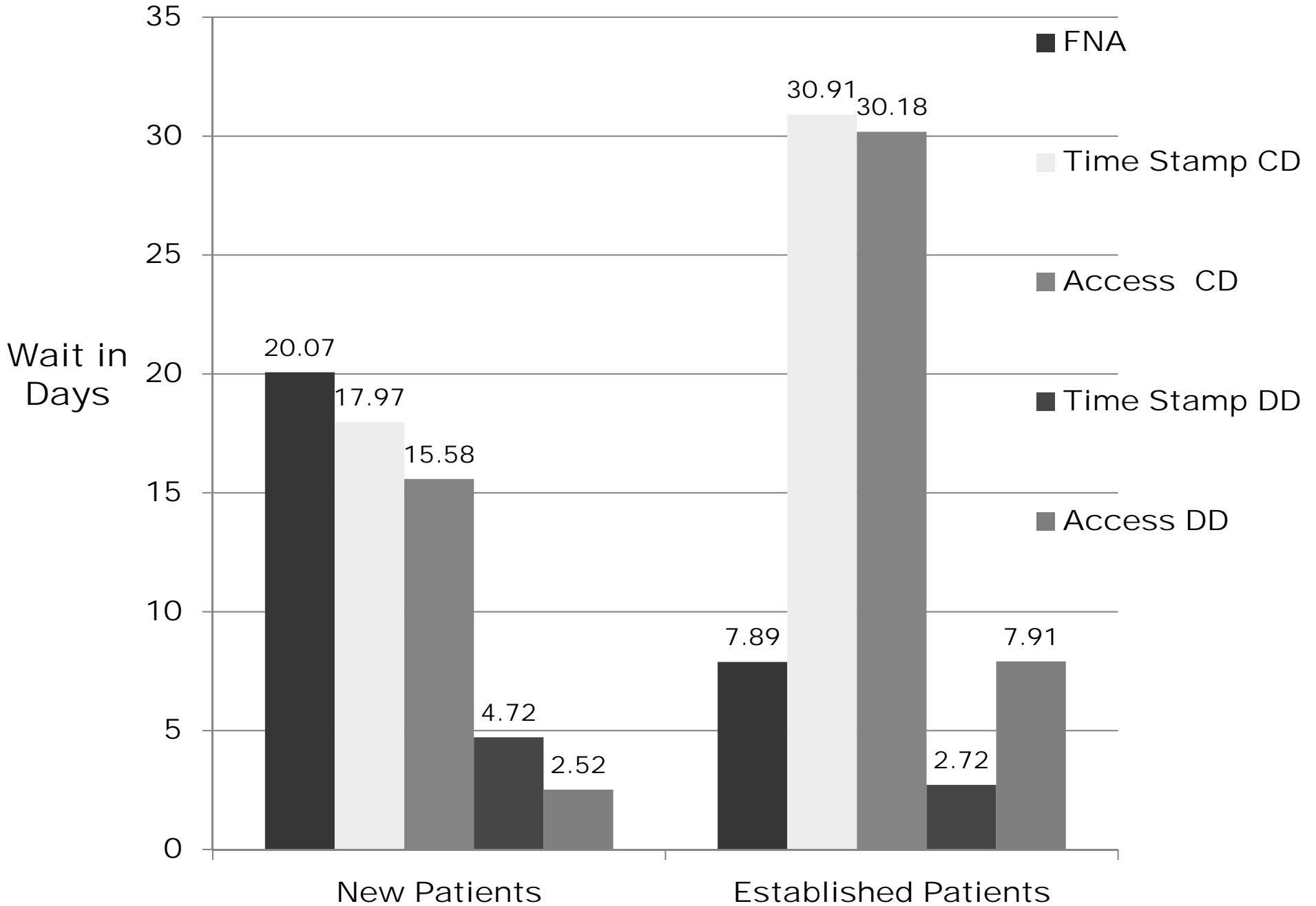
Descriptive Statistics of Sample

Demographics	Mean or %
Age	67
Male	95%
Had some college	53%
White	79%
Black	10%
Hispanic	5%
Other	6%
>=5 visits to a doctor's office in last 12 months	31%
Excellent/very good self-reported health status in last 12 months	25%

Descriptive Statistics of Satisfaction Measures

Satisfaction Measure	%
Timely visit Always/Usually vs. Sometimes/Never	83
Treatment access Always/Usually vs. Sometimes/Never	85
Specialist access Always/Usually vs. Sometimes/Never	82
VA rating in last 12 months 9 or 10 versus <9	78
VA satisfaction at most recent visit 6 or 7 versus <6	82

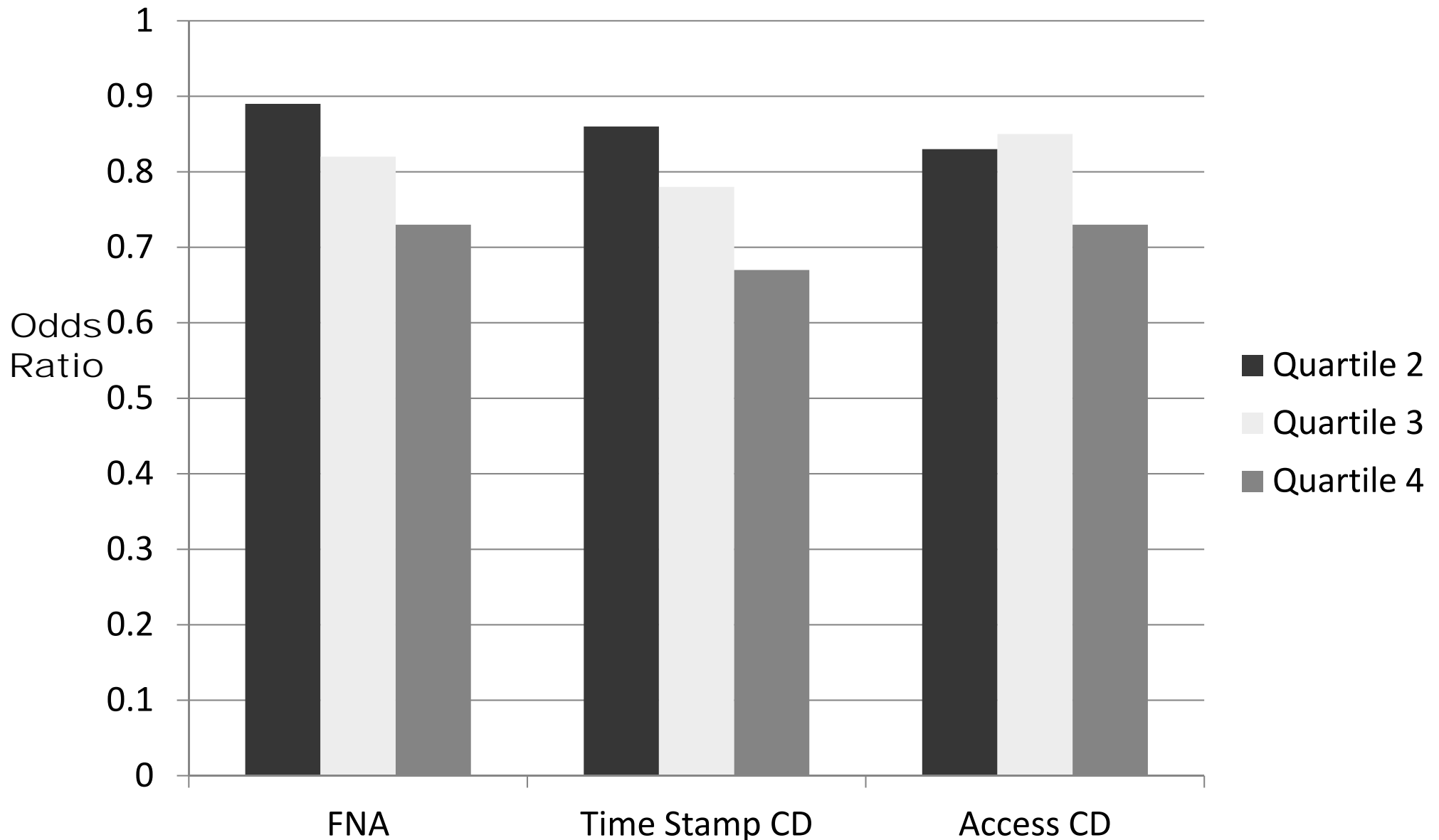
Mean Wait Times



New Patient Results

- How well do alternative measures of wait times predict patient satisfaction?
 - Longer waits predict lower satisfaction

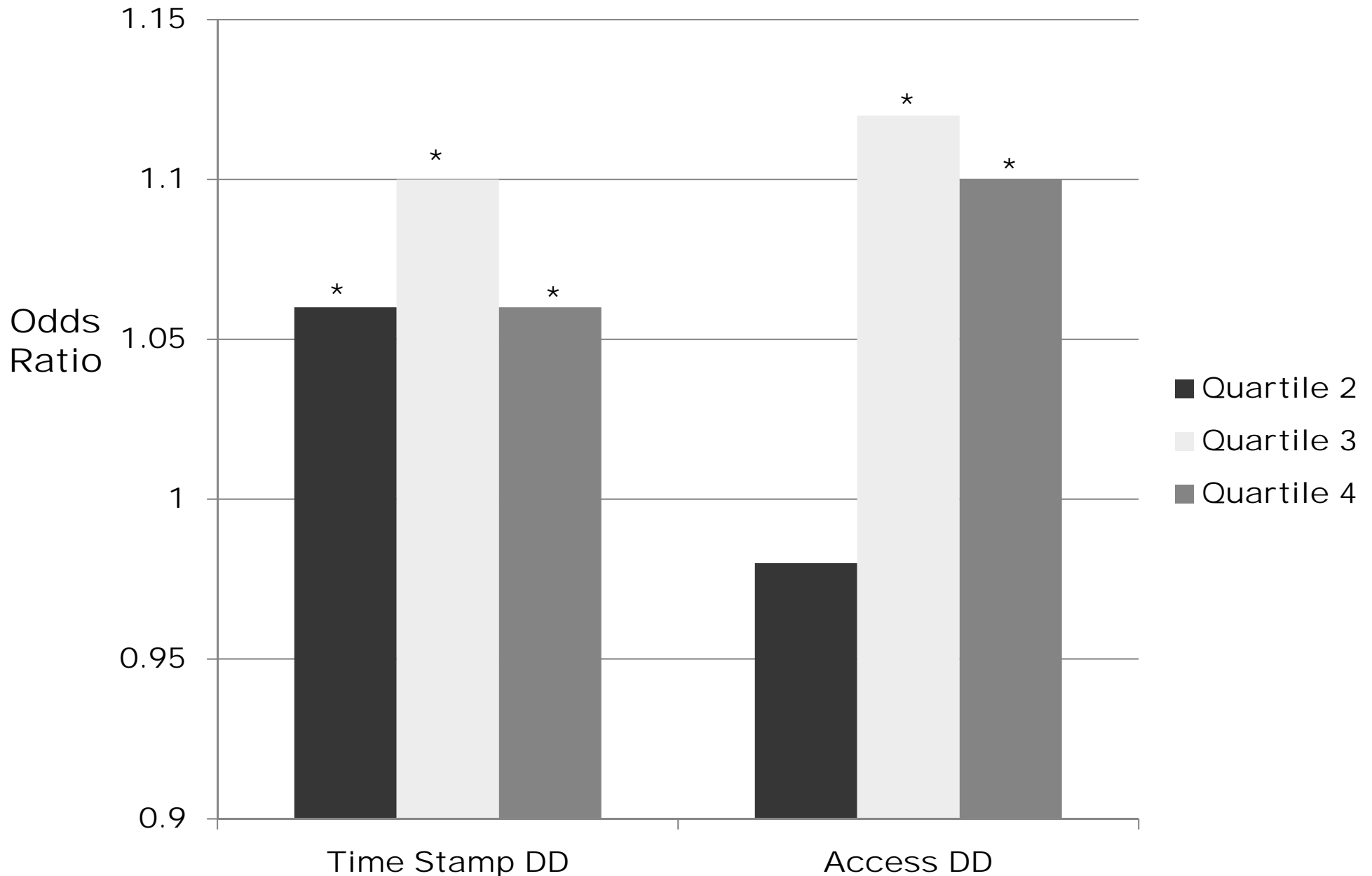
New Patient FNA/CD Timely Visit*



***Everything is significant at $P < 0.05$**

Reference group is VA facilities in quartile 1

New Patient DD Timely Visit*



***Significant at $P < 0.05$ in wrong direction**
Reference group is VA facilities in quartile 1

New Patient Waits Predicting Satisfaction

Measure	Timely Appt.	Treatment Access	Specialist Access	VA rating	VA satisfaction
FNA (ref=Q1)					
Q2	0.89*	0.93*	0.93*	0.95*	0.95*
Q3	0.82*	0.84*	0.84*	0.92*	0.91*
Q4	0.73*	0.73*	0.74*	0.86*	0.85*
Time Stamp CD (ref=Q1)					
Q2	0.86*	0.87*	0.86*	0.96*	0.94*
Q3	0.78*	0.80*	0.81*	0.91*	0.90*
Q4	0.67*	0.65*	0.67*	0.83*	0.82*
Access CD (ref=Q1)					
Q2	0.83*	0.84*	0.86*	0.93*	0.93*
Q3	0.85*	0.84*	0.85*	0.93*	0.91*
Q4	0.73*	0.72*	0.72*	0.89*	0.86*

Numbers are odds ratio from logistic regression.

* Significant at $P \leq 0.05$

New Patient Waits Predicting Satisfaction

Measure	Timely Appt.	Treatment Access	Specialist Access	VA rating	VA satisfaction
Time Stamp DD (ref=Q1)					
Q2	1.06*	1.01	1.05*	1.00	1.01
Q3	1.10*	1.06*	1.10*	0.98	1.01
Q4	1.06*	1.02	1.07*	1.01	1.02
Access DD (ref=Q1)					
Q2	0.98	0.97	0.98	0.94*	0.96*
Q3	1.12*	1.09*	1.11*	1.00	1.03
Q4	1.10*	1.06*	1.11*	1.00	1.03

Numbers are odds ratio from logistic regression.

* Significant at $P \leq 0.05$

* Significant in wrong direction

New Patient Results

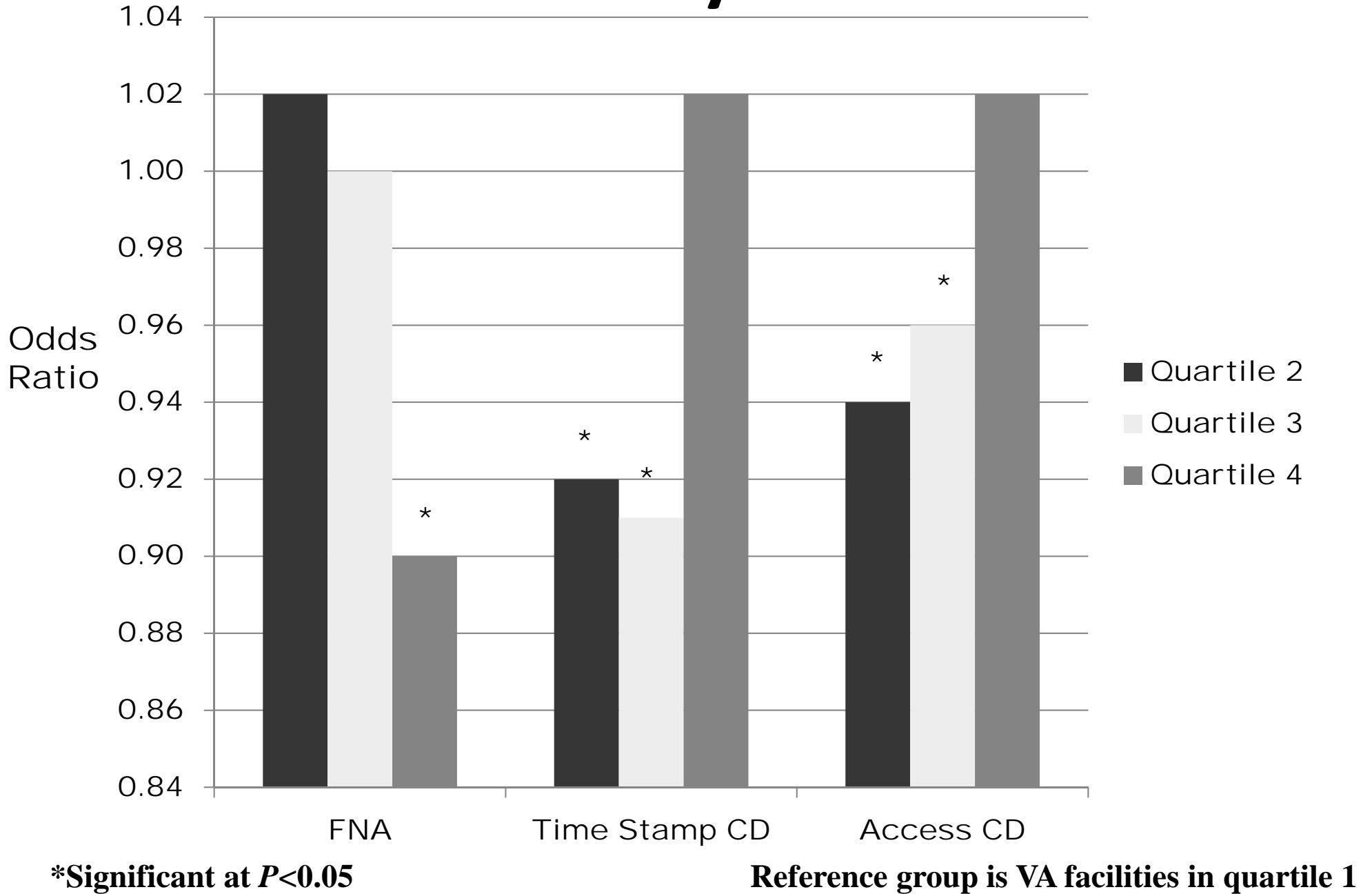
- FNA and create date measures are most reliable
 - Predict all 5 satisfaction measures
- New patients want to be seen as soon as possible
 - Date an appointment request was originally made is reliable

Established Patient Results

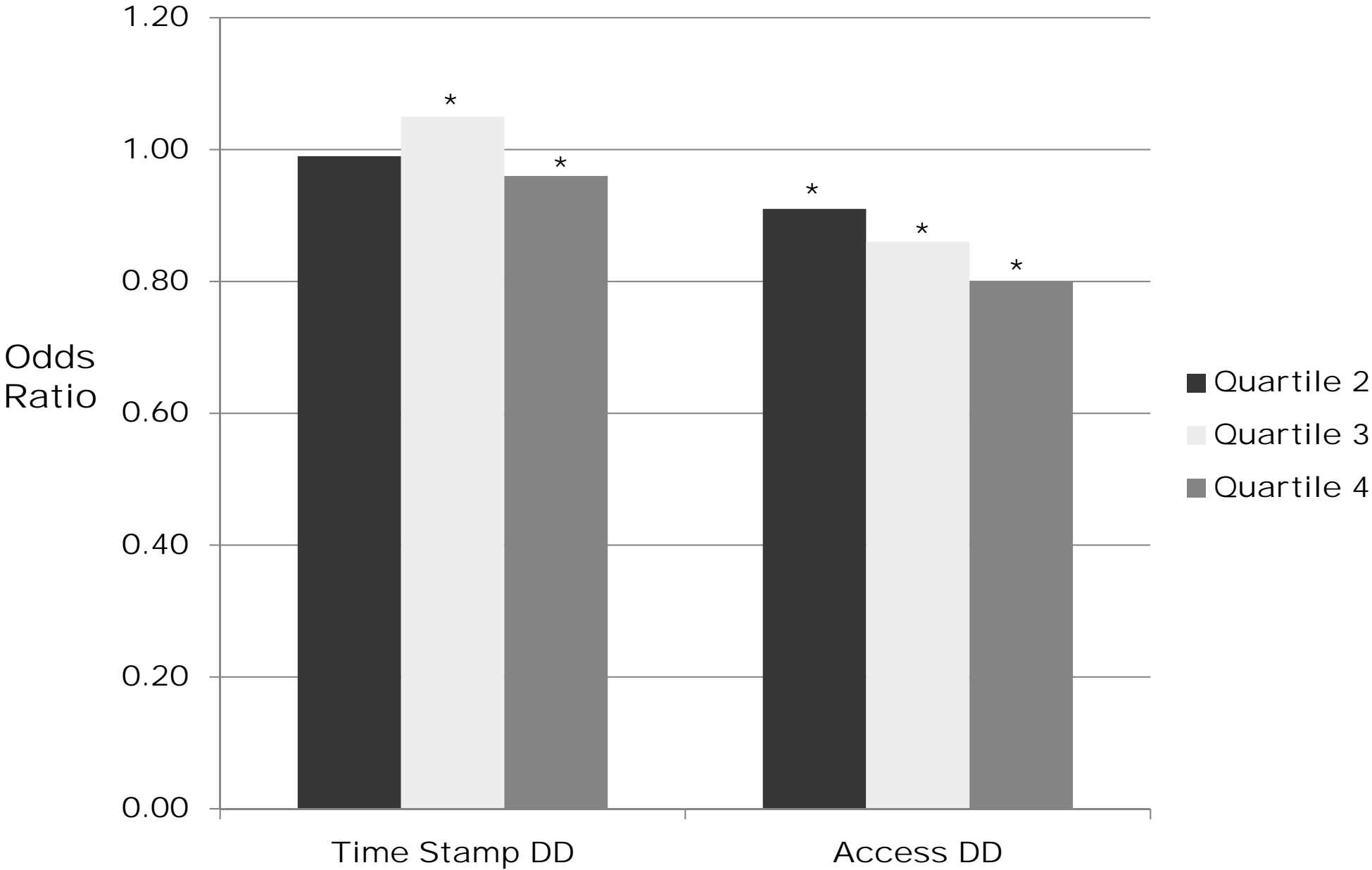
- How well do alternative measures of wait times predict patient satisfaction?
 - Longer waits predict lower satisfaction

Established Patient FNA/CD

Timely Visit



Established Patient DD Timely Visit



***Significant at $P < 0.05$**

***Significant in wrong direction at $P < 0.05$**

Reference group is VA facilities in quartile 1

Established Patient Waits Predicting Satisfaction

Measure	Timely Appt.	Treatment Access	Specialist Access	VA rating	VA satisfaction
FNA (ref=Q1)					
Q2	1.02	0.99	1.01	0.97	0.99
Q3	1.00	1.02	1.03	0.95*	0.98
Q4	0.90*	0.90*	0.90*	0.90*	0.93*
Time Stamp CD (ref=Q1)					
Q2	0.92*	0.90*	0.94*	0.96*	0.99
Q3	0.91*	0.87*	0.89*	0.94*	0.93*
Q4	1.02	0.96*	0.99	1.07*	1.02
Access CD (ref=Q1)					
Q2	0.94*	0.93*	0.94*	0.94*	0.98
Q3	0.96*	0.95*	0.93*	0.98	0.98
Q4	1.02	0.98	0.97	0.95*	1.01

Numbers are odds ratio from logistic regression.

*Significant at $P \leq 0.05$ *Significant in the wrong direction

Established Patient Waits Predicting Satisfaction

Measure	Timely Appt.	Treatment Access	Specialist Access	VA rating	VA satisfaction
Time Stamp DD (ref=Q1)					
Q2	0.99	0.97	0.98	0.94*	0.97*
Q3	1.05*	1.03	1.02	0.98	1.00
Q4	0.96*	0.94*	0.97	0.95*	0.97
Access DD (ref=Q1)					
Q2	0.91*	0.90*	0.88*	0.94*	0.92*
Q3	0.86*	0.86*	0.83*	0.86*	0.87*
Q4	0.80*	0.77*	0.76*	0.86*	0.84*

Numbers are odds ratio from logistic regression.

*Significant at $P \leq 0.05$

*Significant in wrong direction

Established Patient Results

- Access list desired date is most reliable
 - Includes no-shows/cancellations
 - More accurate measure of supply in system
- DD reflects established patient preferences versus FNA/CD measures

Policy Implications

- Multiple wait time measures needed
 - New versus established patients
- New patients want to be seen right away
 - Change in health status
 - Appointment request dates are reliable
 - Capacity and create date measures

Policy Implications Continued

- Established patients may not prioritize wait times
 - Continuity of care
 - Convenient time
- VA is a leader in recognizing new versus established patient complexity
- Future work will predict health outcomes

Questions or Comments?

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Resources

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