

Nursing and Improving Outcomes in Supportive Housing

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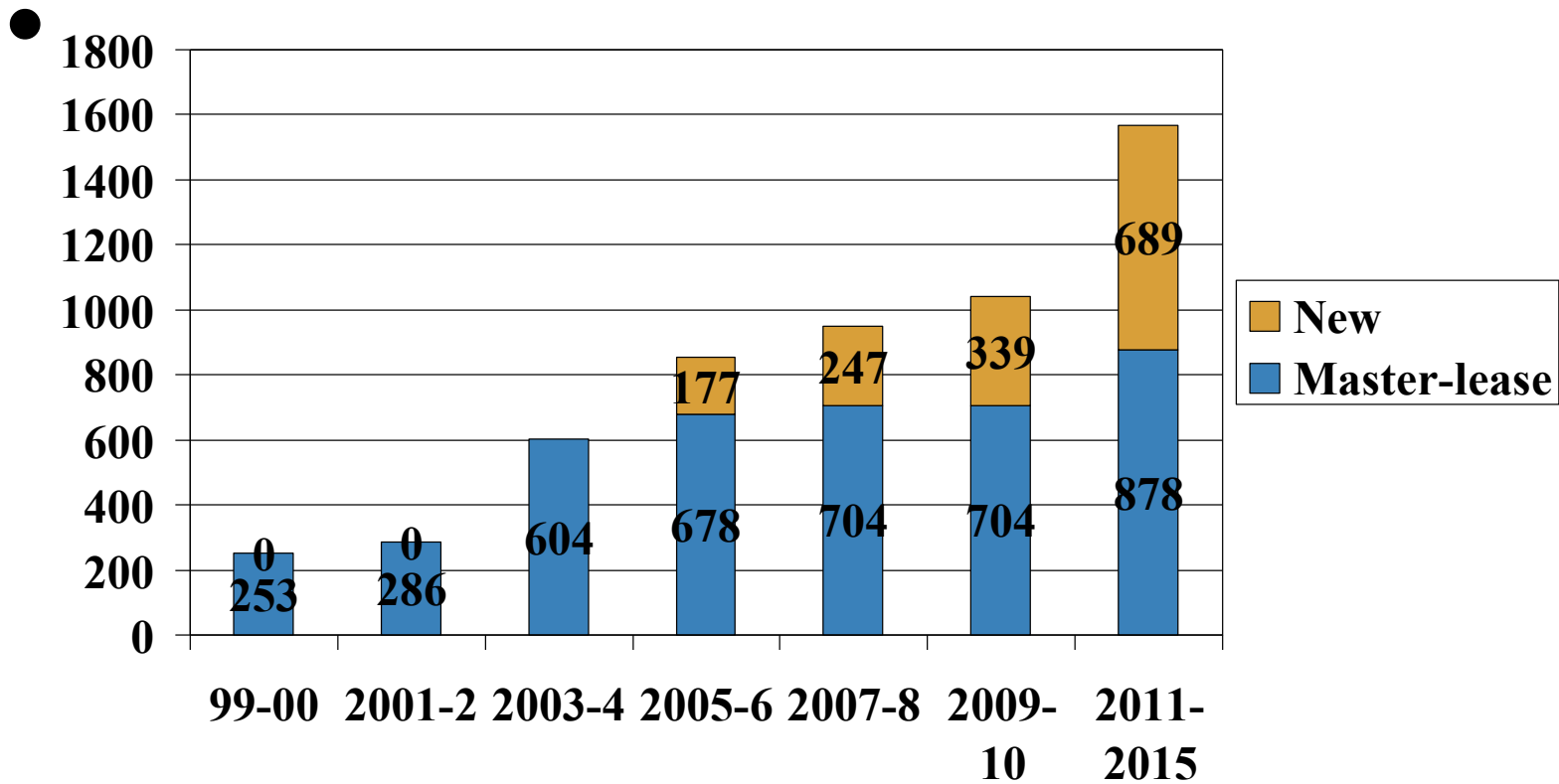
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SF Health Dept's Housing

- Direct Access to Housing- 1730 units in 43 buildings
 - 6 buildings (N=510; 33%) with nurses
- Tailor housing to the needs of an individual
- Initially SRO, now new buildings
- Priority to people with multiple disabilities
- 7.6% HIV+
- Housing first, harm reduction, supportive housing

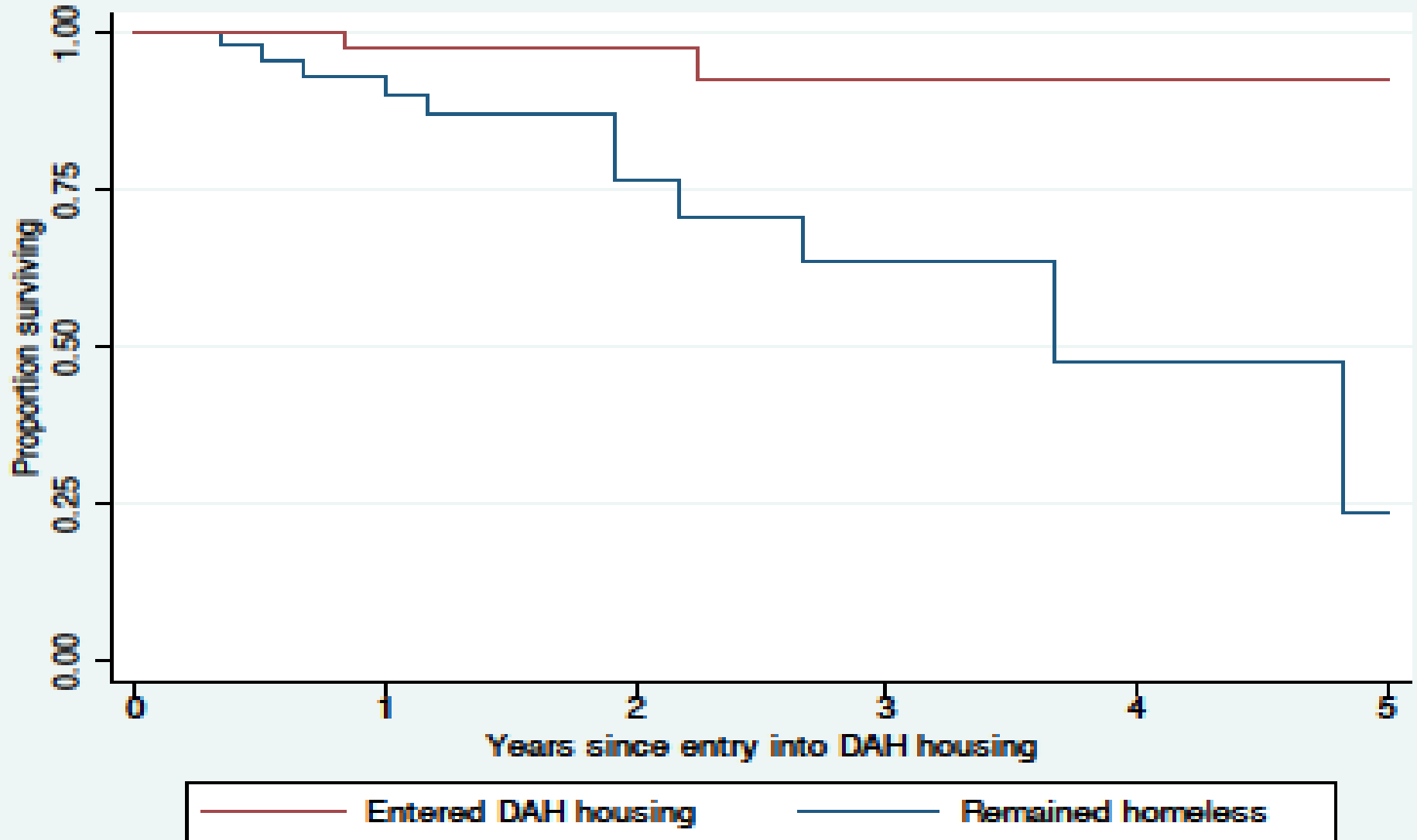
DAH Portfolio



Achieves the “Triple Aim”

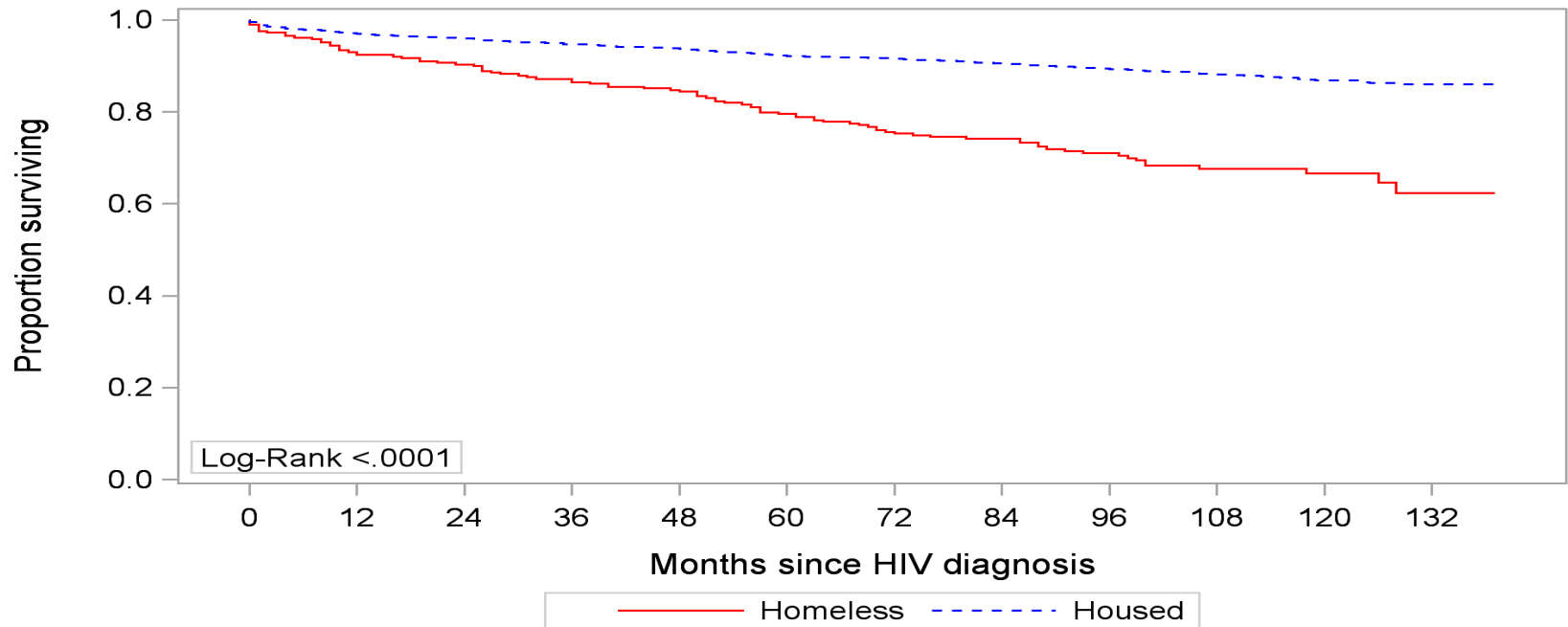
- Reduces cost
 - For high users of the healthcare system, it is cheaper to be housed than homeless
- Improves population based outcomes
 - Reduces mortality for homeless people with AIDS
- Improves patient experience
 - More self determination, improved health, better quality of life

Mortality DAH vs Regular Care 1996-2003



HIV, Homeless and Survival

Figure 2b: Persons diagnosed with HIV/AIDS, 2002-2006 (N=3,157)

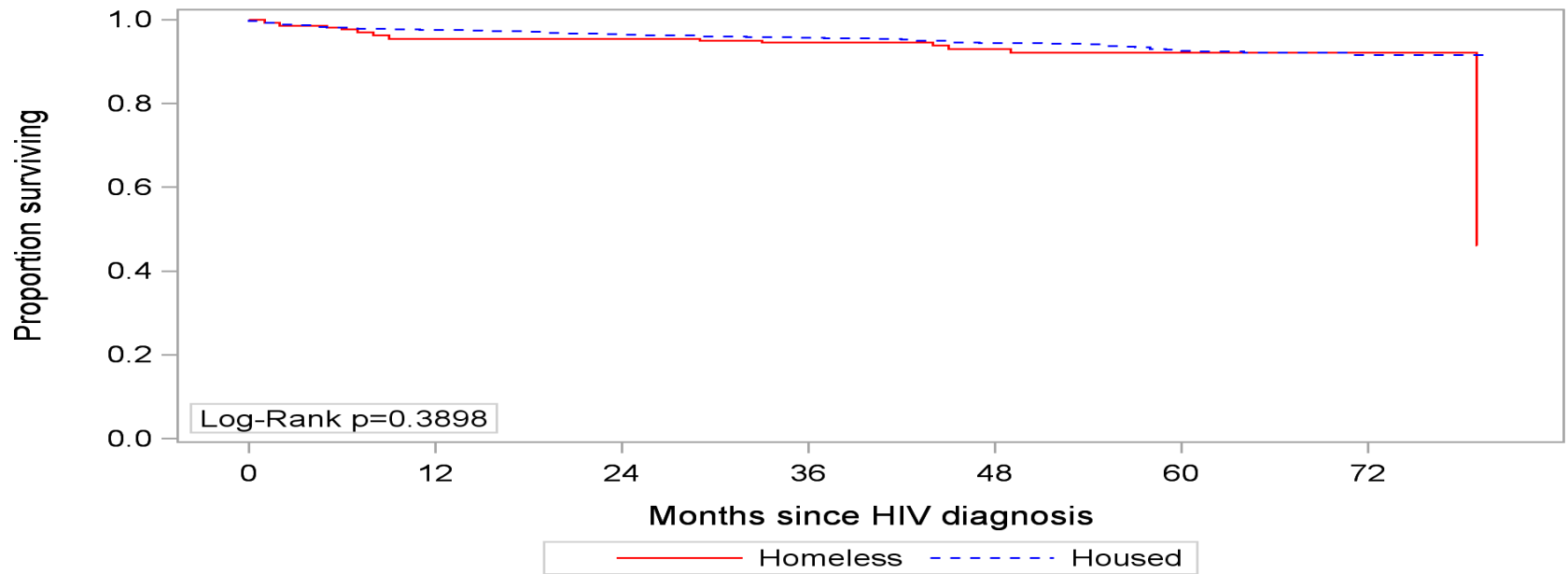


Number at risk:

Homeless	289	269	261	252	245	230	210	177	137	101	55	13
Housed	2868	2786	2753	2718	2693	2646	2534	2206	1703	1210	618	175

HIV, Homeless and Survival

Figure 2c: Persons diagnosed with HIV/AIDS, 2007-2011 (N=2,315)

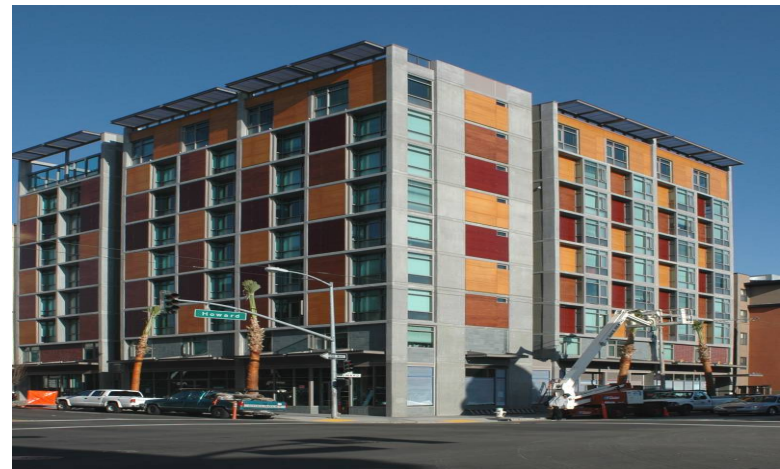


Number at risk:

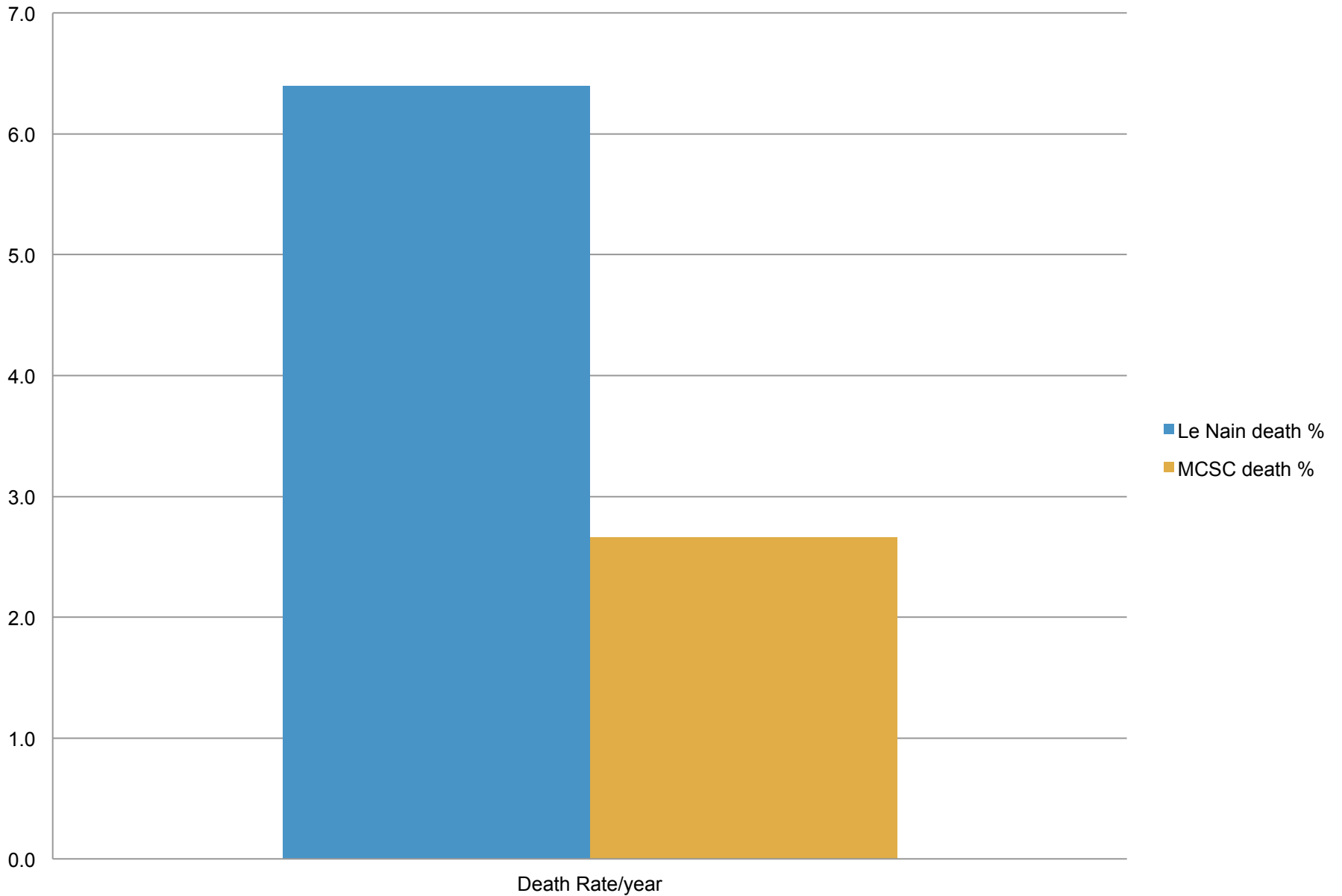
Homeless	269	251	217	166	112	54	20
Housed	2046	1945	1696	1282	915	456	142

Plaza High Utilizer Study

- 106 Chronically homeless adults
- Cost year before housing: \$3,132,856
- Cost year after housing: \$906,228
- Reduction in healthcare costs: \$2,226,568
- Cost of program:
\$1.1million/year
- Reduction in public
cost in first year:
\$1.1 million



Death rate Le Nain vs. Mission Creek 2006-2011



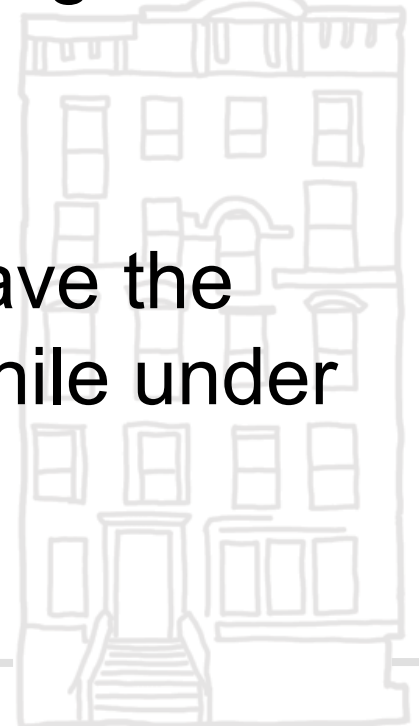
KCC Random assignment trial

- Brand new building with 174 units
- Homeless, high users of a managed care system
- Comprehensive healthcare utilization
- Randomly assigned to treatment or regular care
- Followed prospectively for 5 years
- Outcomes included: Healthcare cost, mortality, jail



Hypotheses

1. Those who live in DAH buildings with on-site nursing show a decrease in health care utilization compared to people living in non-nursing buildings.
2. Those who are the sickest will have the greatest reduction in utilization while under nursing care



Methods

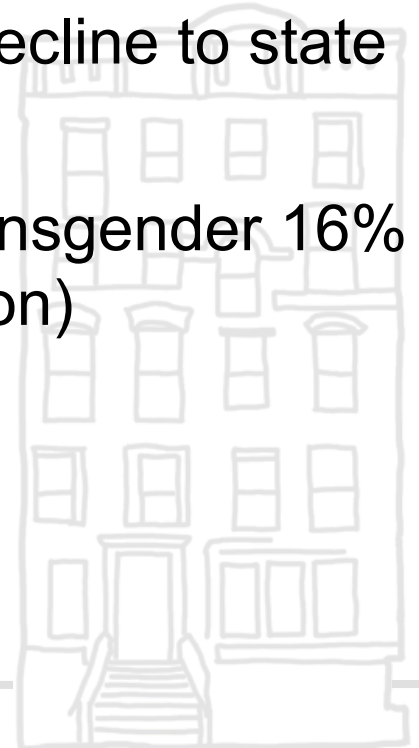
DAH cohort from 2007 - 2013 cross-matched with AIREs
(n=1,573)

- * 243 people were matched (15.4%)
 - * 26 people excluded
 - * A random sub sample of 151 was reviewed
-
- Before vs. after comparison of individuals (nest case-cohort design)
 - Comparison of buildings with nursing to those with support staff only



Cohort Demographics

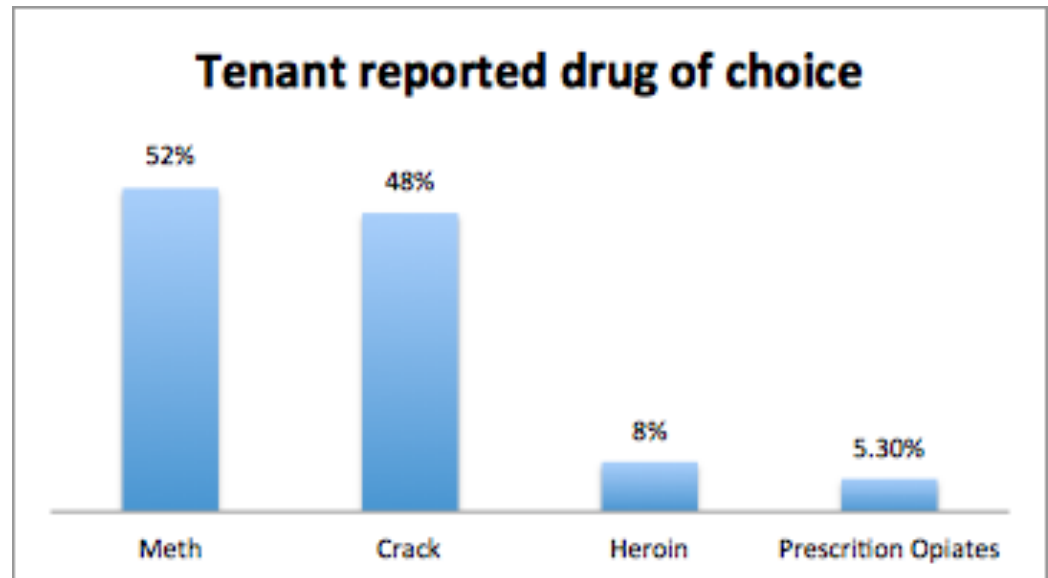
- Mean age at DAH placement is 46.9 years
- Racial composition: 37% white, 37% black, 13% hispanic, 4% other (Asian, Hawaiian, Indian), 9% decline to state
- Males comprise 70%, female 14%, and transgender 16% (71% of which are male to female transition)
- Mortality while in DAH =4 (2.6% of cohort)



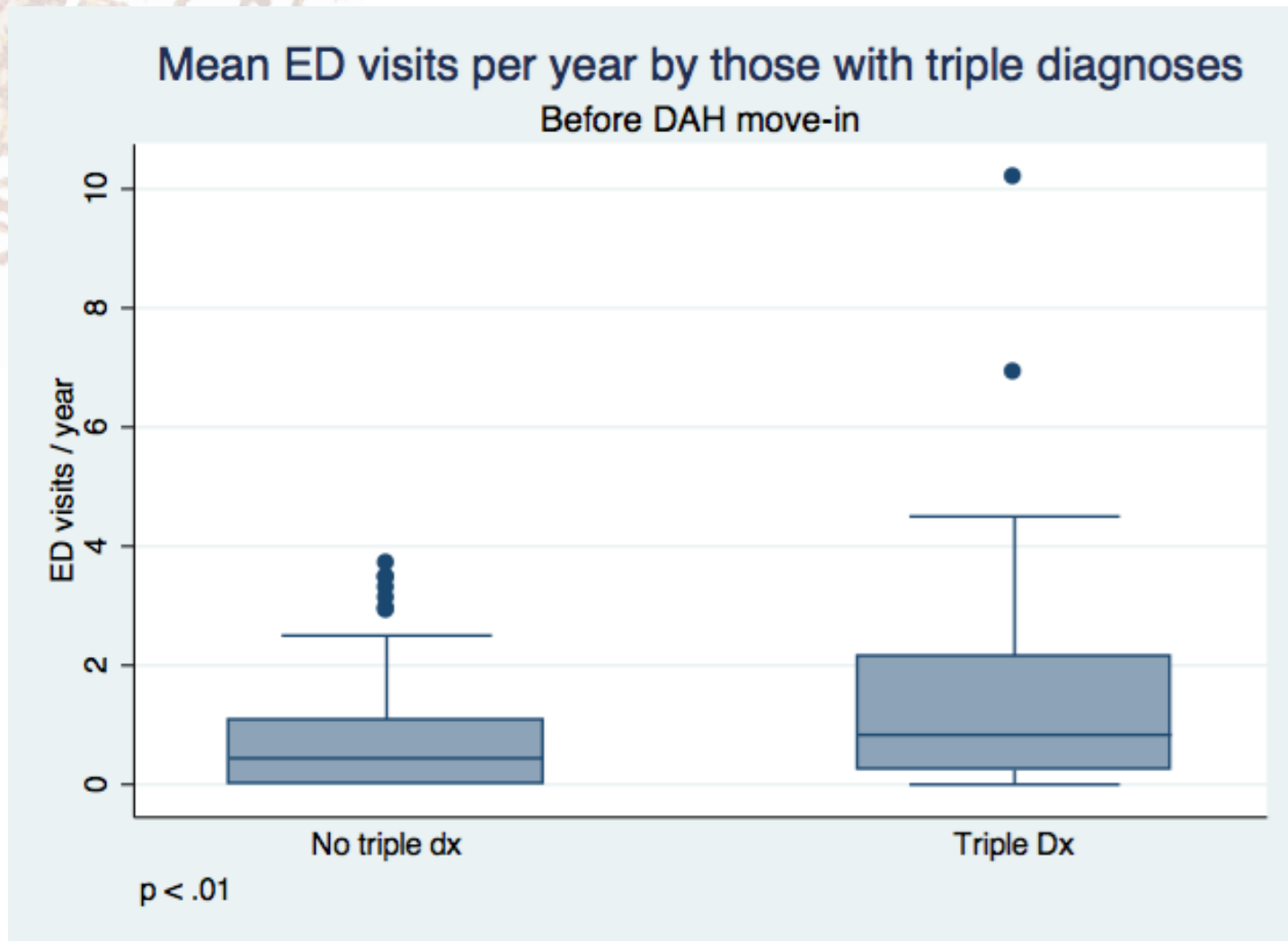
Substance Abuse Demographics

Those with *any* substance use in their history = 112 (74%)

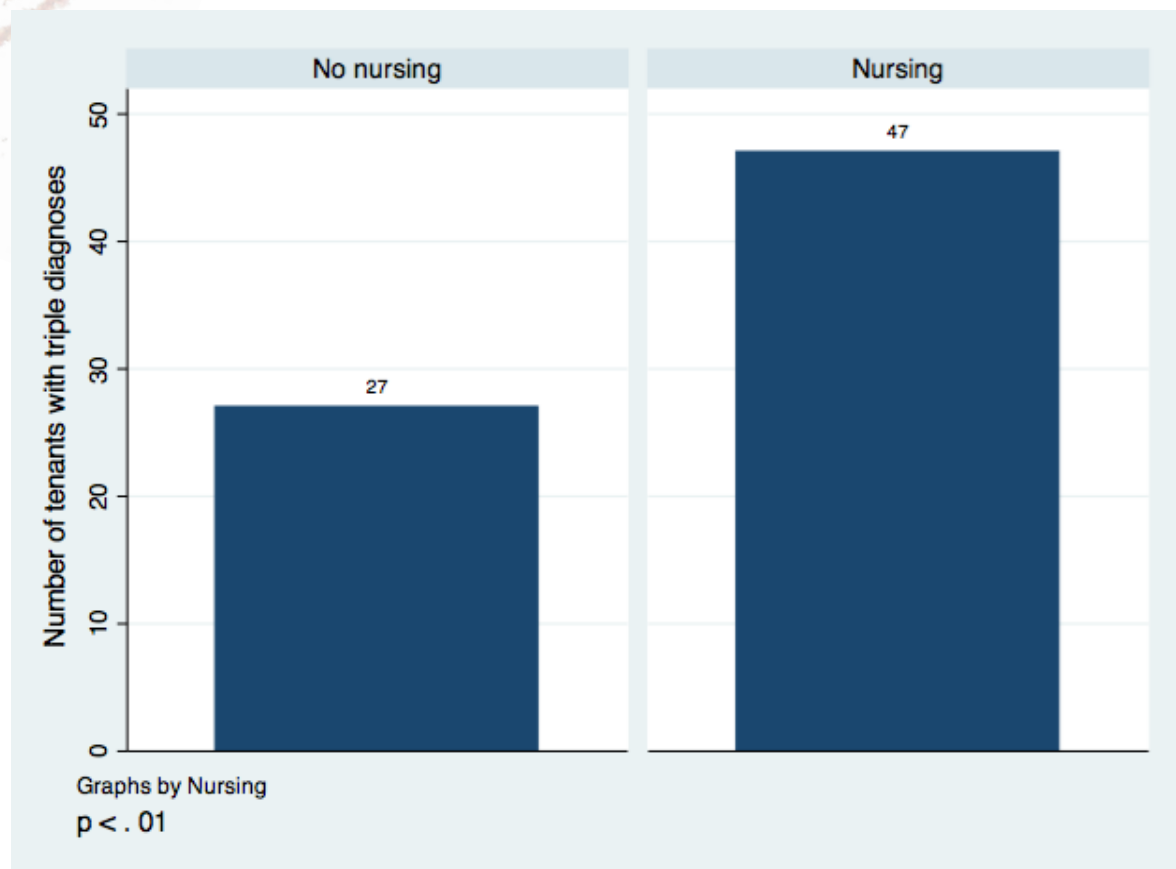
- Alcohol = (34%)
- Stimulants = (56%)
- Opiates = (23%)
- Opiates on methadone maintenance = (4%)
- Other substance use pattern = (9%)



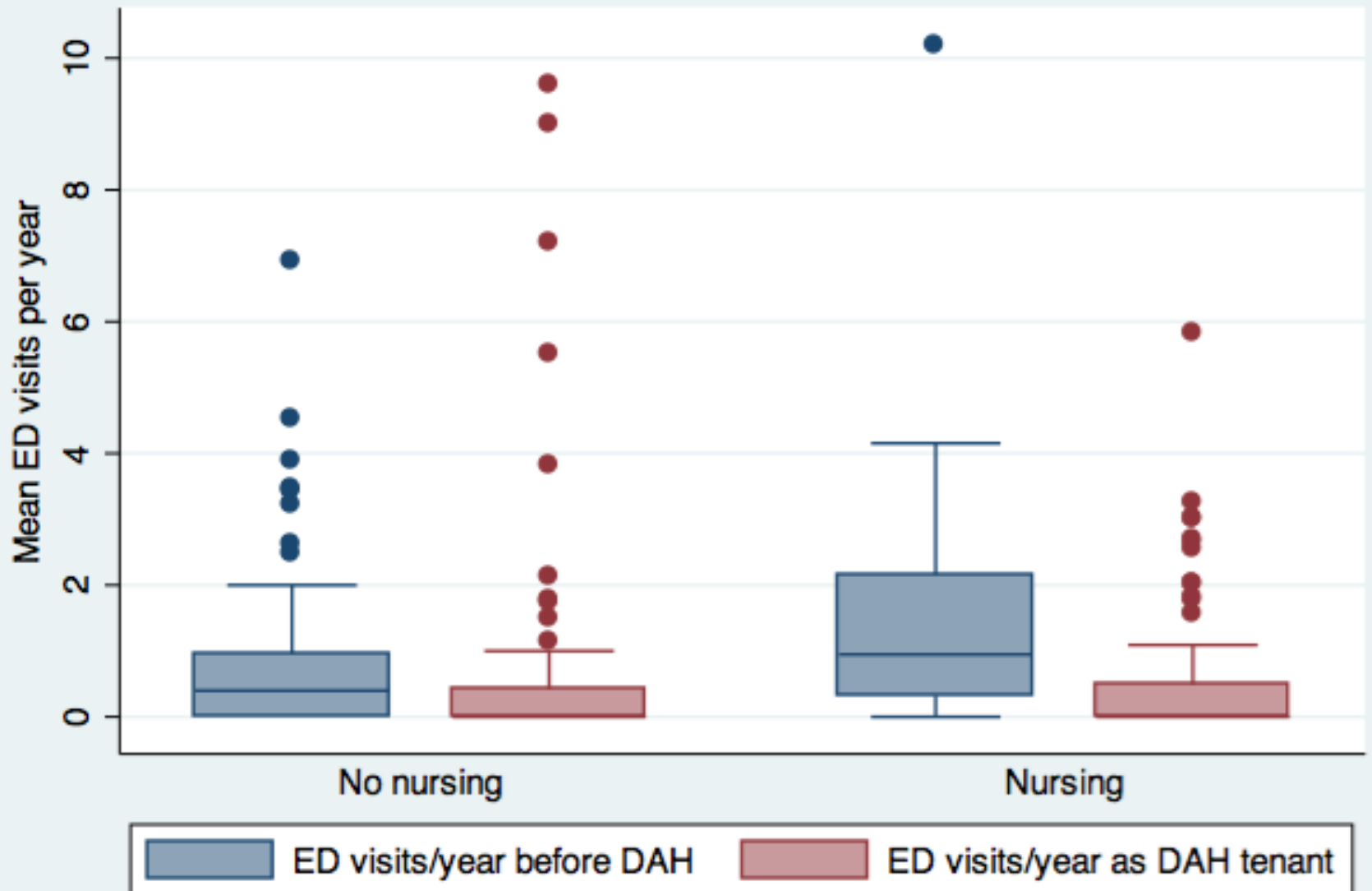
No Triple Diagnosis (N=77) vs. Triple Diagnosis (N=74)



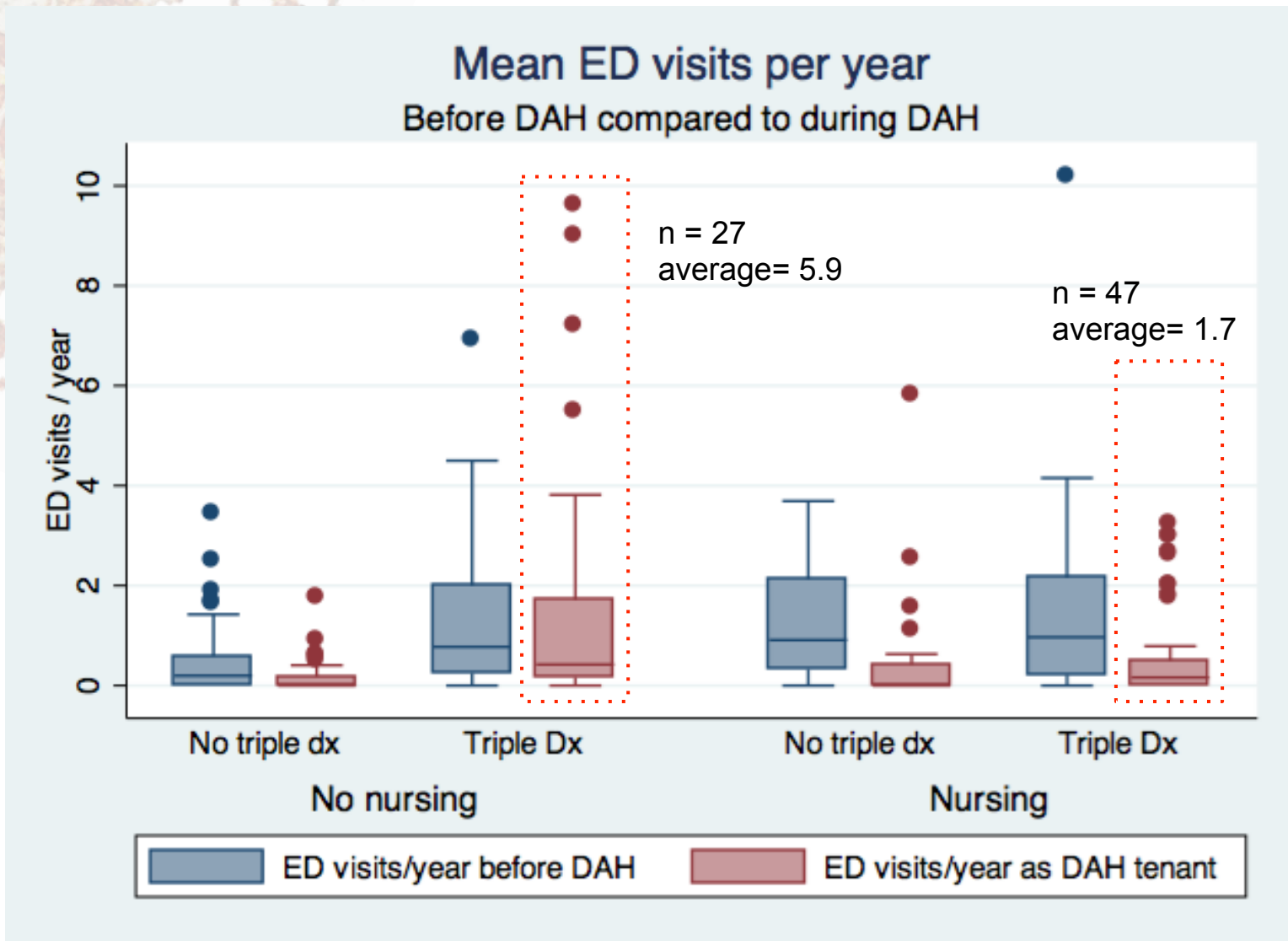
Triple Dx: nurse vs. no nurse



Mean ED visits/year before and during DAH by on-site nursing



A difference of **4.2 ED visits** per person per year



Cost difference

An ED visit = \$540

Yearly reduction in ED visits = 4.2

For 100 people, the cost reduction in ED visits is \$226,800

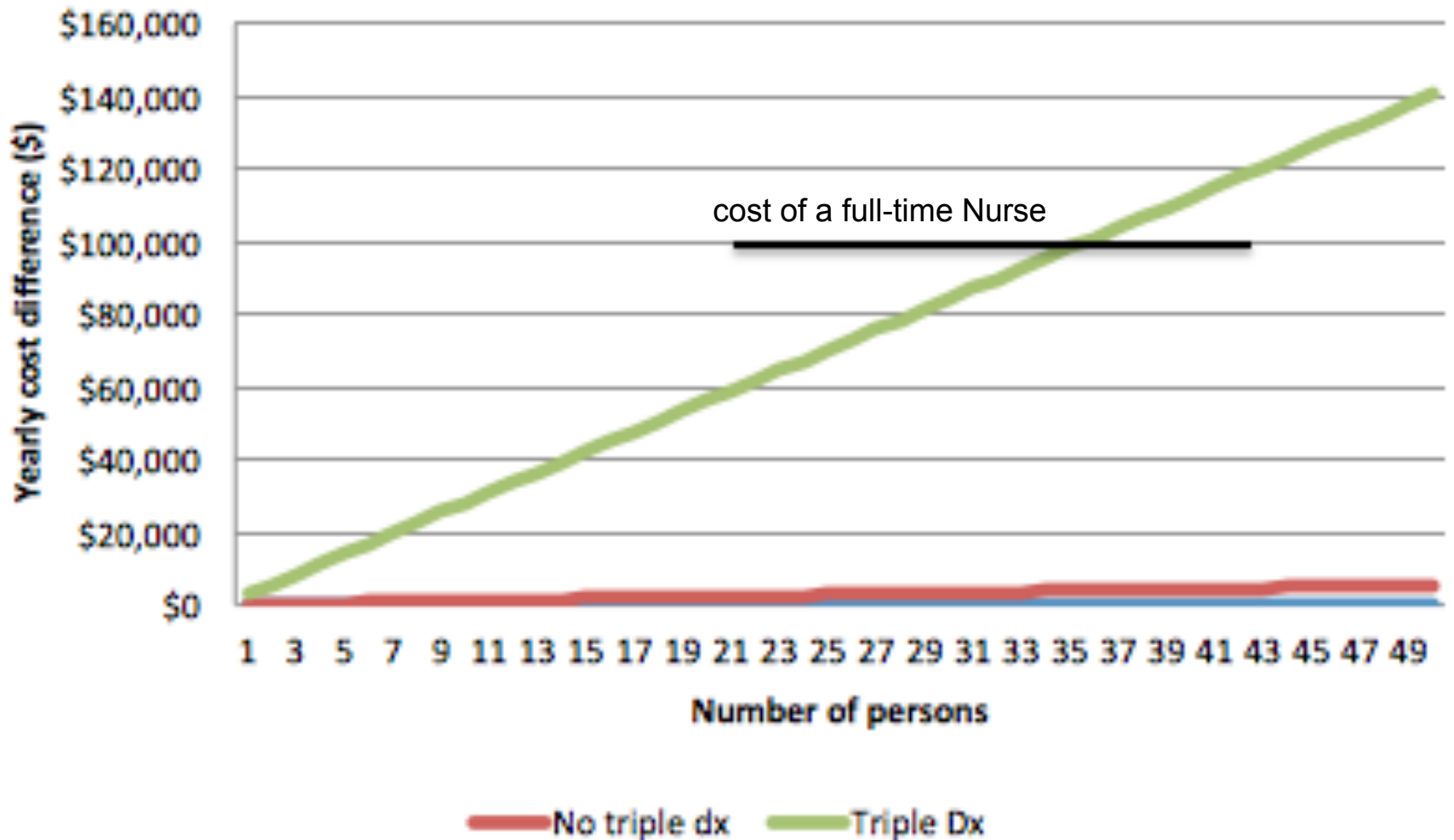
A full time Nurse costs \$100,000

The net cost reduction is \$126,800 / year for 100 people

= 1,268\$ per person per year

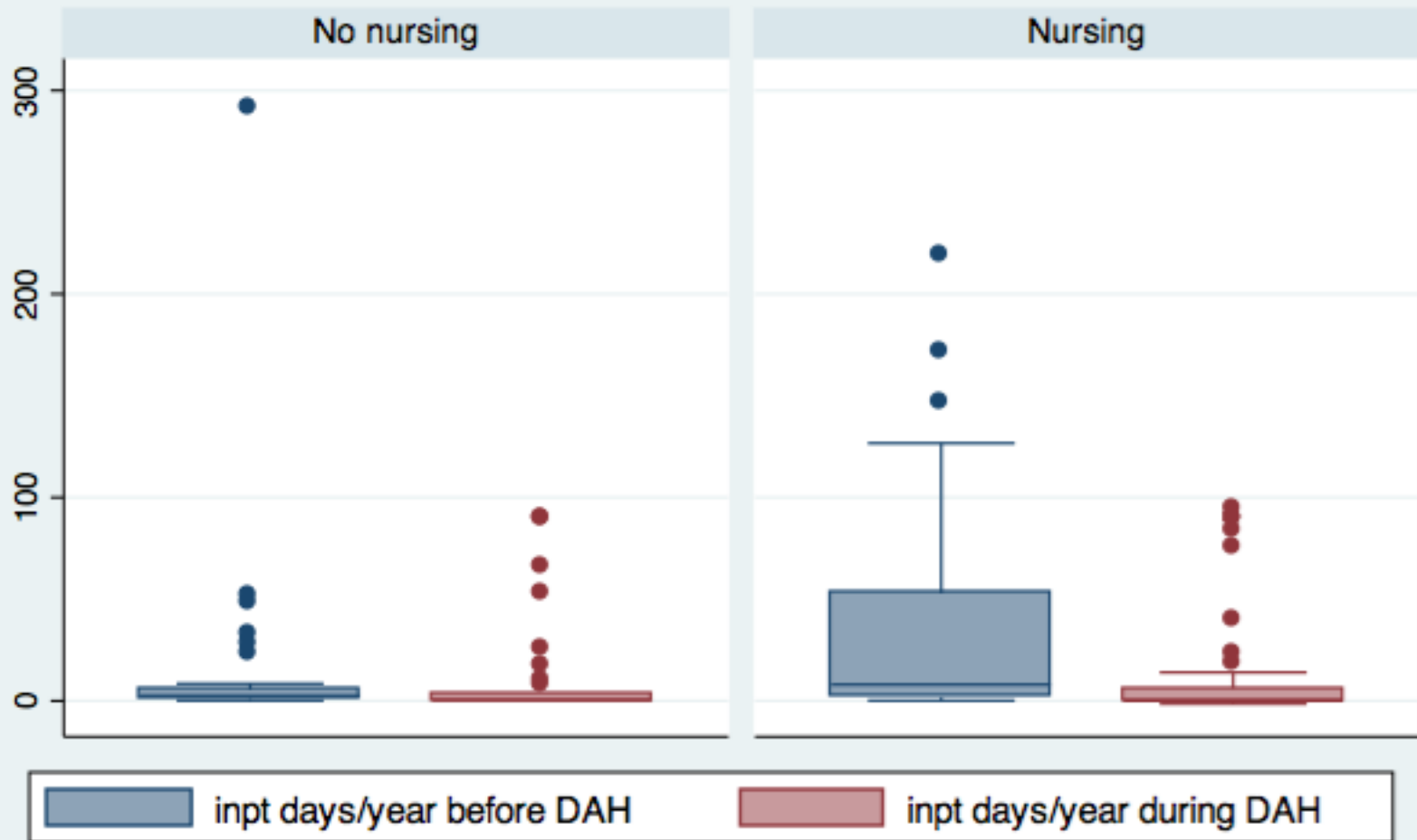


Yearly cost savings per person on ED visits in buildings with Nursing (USD\$)



Yearly inpatient days before and after DAH

Nursing sites compared to non-nursing sites



Graphs by Nursing

Role of the Nurse in Supportive Housing

**Adrienne Wynacht, RN
Kelly Cullen Community**

**Vernon Sanders, RN
Polk Geary Senior Housing**

**San Francisco Department of Public Health
Housing and Urban Health**

Role of the Nurse in Supportive Housing

DIRECT NURSING CARE

- TRIAGE
- Ongoing Clinical Assessment
- Symptom Management
- First Aid/ Wound Care

Role of the Nurse in Supportive Housing

NURSING CASE MANAGEMENT

- Coordination of care/ Real-time Point Person
- System Navigation/ Liaison
- Transitional Care
 - Hospital Discharge, transitioning *from* higher level of care, transitioning *to* higher level of care, end-of-life
- On-site Clinical Resource

Role of the Nurse in Supportive Housing

CHRONIC DISEASE MANAGEMENT

- Highly Individualized
- Medication Adherence Support/ Management
- Patient Education



GlaxoSmithKline

NDC 0173-0720-20

Flovent® HFA 220 mcg

(fluticasone propionate 220 mcg)
Inhalation Aerosol

For oral inhalation use. See package insert for complete information.
Attention: Do not use if you are using another inhaler.
"Patient Information" insert is located inside the canister.
See prescription label for complete information.

Rx only

**Albuterol Sulfate
Inhalation Solution
0.083%***

2.5 mg* / 3 mL

*Potency expressed as albuterol,
equivalent to 3 mg albuterol sulfate.

FOR ORAL INHALATION ONLY

Equivalent to 0.5 mL albuterol sulfate 0.5%* diluted to 3 mL with normal saline.

Each mL contains 1 mg albuterol sulfate, equivalent to 0.83 mg albuterol, in an aqueous solution containing sodium chloride and sulfuric acid to adjust pH between 3 and 5. Contains no preservatives.

Please consult your physician before use. Do not exceed recommended dosage.

Usual Dosage: See package insert.
Protect from light. Store between 2° and 25°C (36° and 77°F).

Discard if solution becomes discolored.
(Note: Albuterol Sulfate Inhalation Solution is a clear, colorless to light yellow solution.)

Attention Pharmacist: Detach "Patient's Instructions For Use" from package insert and dispense with solution.

SEE BACK OF POUCH FOR INSTRUCTIONS FOR USE.

Rx Only

STERILE

25 x 3 mL Unit-Dose Vials

NDC 0597-0075-41

SPIRIVA® HandiHaler®

(tiotropium bromide inhalation powder)

**Do Not Swallow Spiriva Capsules.
For Use With HandiHaler Only.**

FOR ORAL INHALATION ONLY

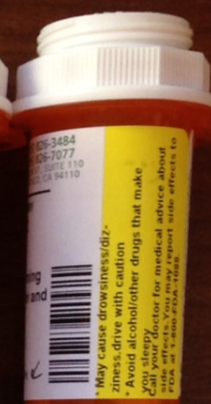
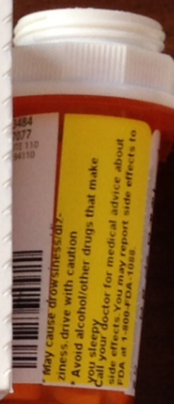
18 mcg (as tiotropium) per capsule

Rx only

Patients: Before use, please read Patient Information and Instructions for Use



Boehringer
Ingelheim



SUN

TUE

WED

THU

FRI

SAT



Role of the Nurse in Supportive Housing

CASE STUDY

- 44 yo
- MEDICAL: CD4<100, CVA, white matter disease
- PSYCH: schizophrenia (doc), delusional
- SOCIAL/BEHAV: SA, DD, illiterate

Role of the Nurse in Supportive Housing

CASE STUDY- NURSING PLAN

- Medication maintenance
- Health maintenance goals
- Coordination of care
- Escorts to appointments
- On demand healthcare
- Trusted advisor

CASE STUDY

- 65 yo AA male
- MED: glaucoma, DM2, HTN, FTT, CRF
- Psych: Depression
- Social/Behav: cocaine now in remission, blind 2/2 and refusing ed referral, forensic history

CASE STUDY

Role of RN Relationship in Pt Care

- Med management
- Triage
- Enhanced ability for follow-up
- Coordination and alliance with providers

Role of the Nurse in Supportive Housing

CARE FOR THE CAREGIVER

- Stressful environment
- Healthy boundaries
- Find unique opportunities for support

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