



Veteran Homelessness: Risk Factors and Effective Services¹

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May 21, 2013

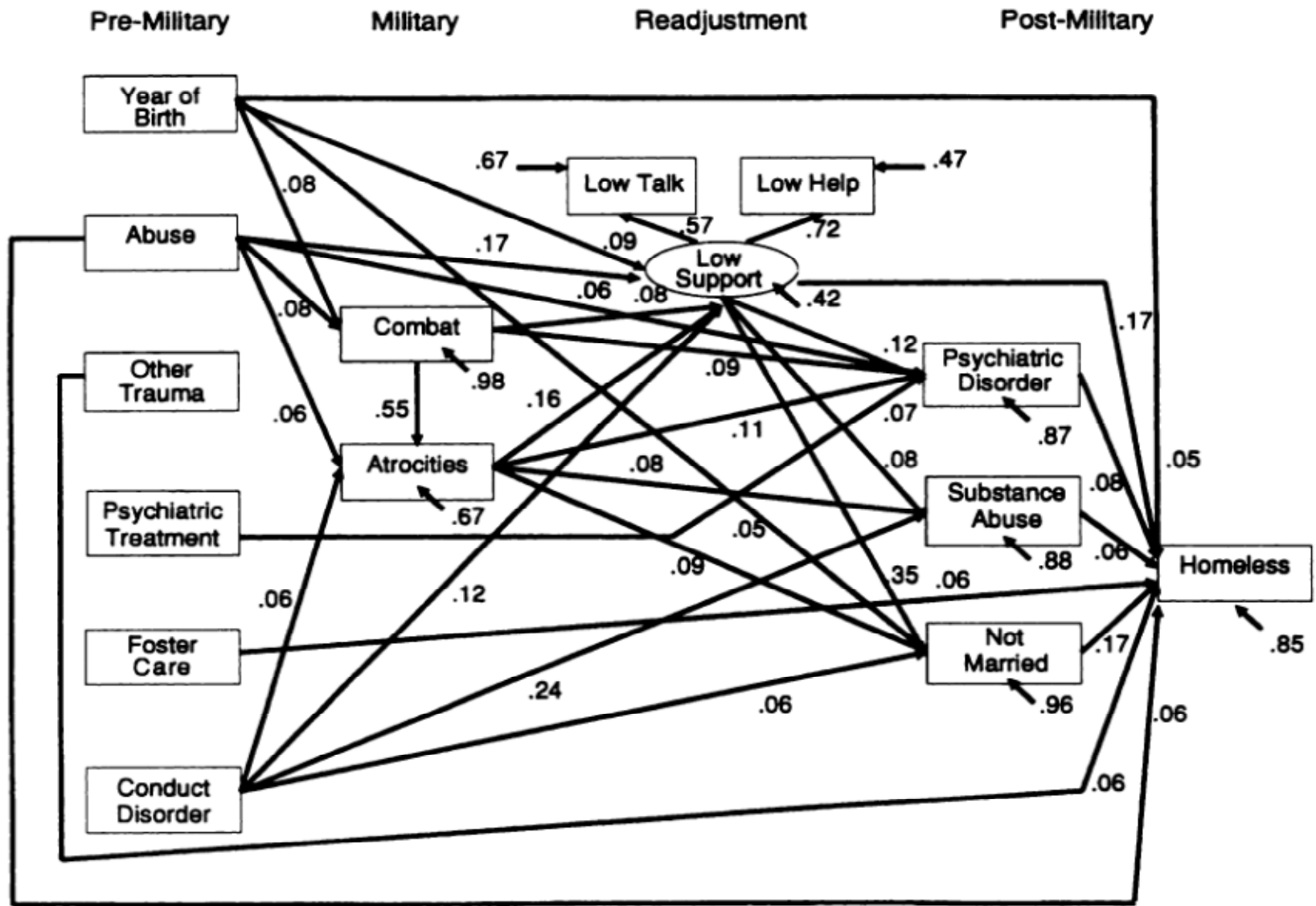
1. Based in part on "Rosenheck RA. Service Models for Assisting Homeless People with Mental Health Problems: Cost-Effectiveness and Policy Relevance in Ellen IG and O'Flaherty B (Eds.) How to House the Homeless. New York: Russell Sage Foundation, 2010."



Risk factors for Homelessness Among Veterans: Highlights

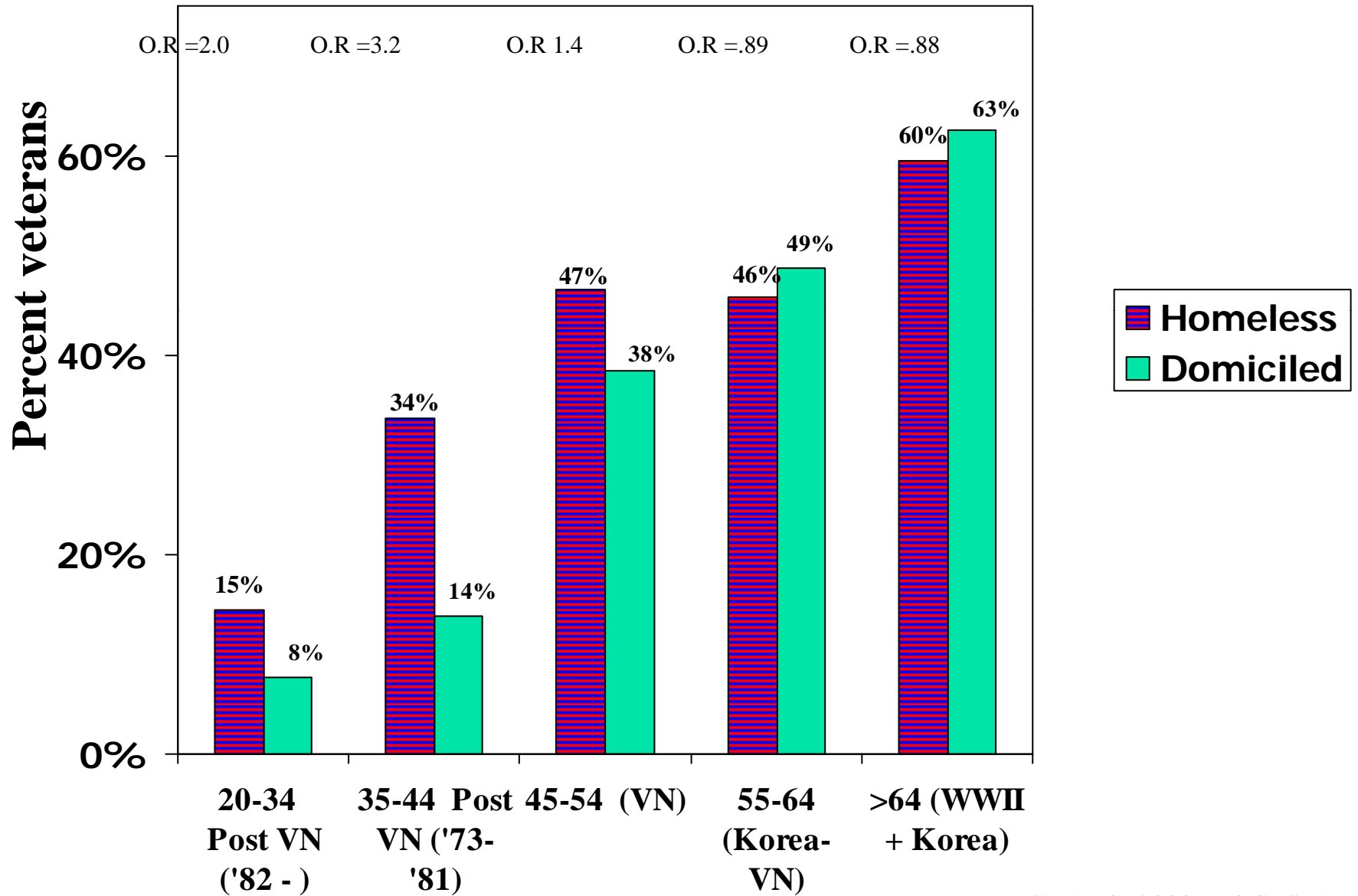
- Alcohol and Drug Abuse increase risk 2-5 times
 - stronger risk factor than mental illness alone (NCS, NESARCH, Edens et al. 2011)
- VA service connection is strongest measurable protective factor, reducing homelessness risk by 62% (greater than 50% SC) or 47% (less than 50% SC)
- OEF/OIF veterans were 65% less likely to have been homeless than other veterans
- Female veterans 3-4 times greater risk than female non-veterans

FIGURE 1. Structural Equation Model of Homelessness Among Veterans of the Vietnam War Era^a



From "Rosenheck RA and Fontana AF (1994) A Model of Homelessness Among Male Veterans of the Vietnam Generation. *American Journal of Psychiatry* 151:421-427"

Percentage of veterans among homeless and domiciled US males in 1996: by age group

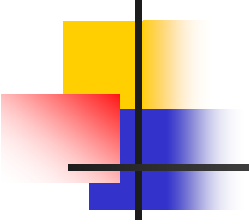


From NSHAPC, 2000 and CPS, 1996



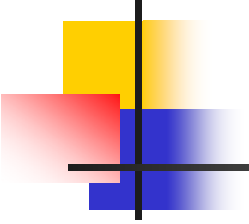
Current Family Status Among Homeless Veterans (N=43,853)

	Male	Female
Married	9.6%	8.6%
Children		
Custody	12.8%	33.3%
Living w	8.2%	27.8%



Family Relationships (N=1,493)

- One close family member 84%
- Number of close family members 6.6
- Family Support
 - Could get a loan of \$100 52.7%
 - Could get help with a ride 43.4%
 - Could get emotional support if suicidal 55.7%



Family Relationships(2)

(N=1,493)

Family of...	<u>Origin</u>	<u>Procreation</u>
One close rel.	76.2%	57.2%
Number of rels.	4.0	1.5
Support		
Loan	45.1%	18.7%
Ride	35.4%	16.4%
Emotional	48.7%	23.5%



Five Intervention Models

- 1. System Integration.
- 2. Supported housing.
- 3. Case management alone.
- 4. Benefits outreach.
- 5. Supported Employment.
- 6. Towards Social Re-integration/Recovery: Group Intensive Peer Support (GIPS)

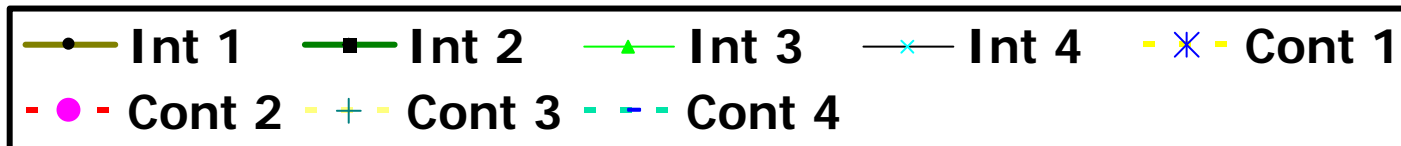
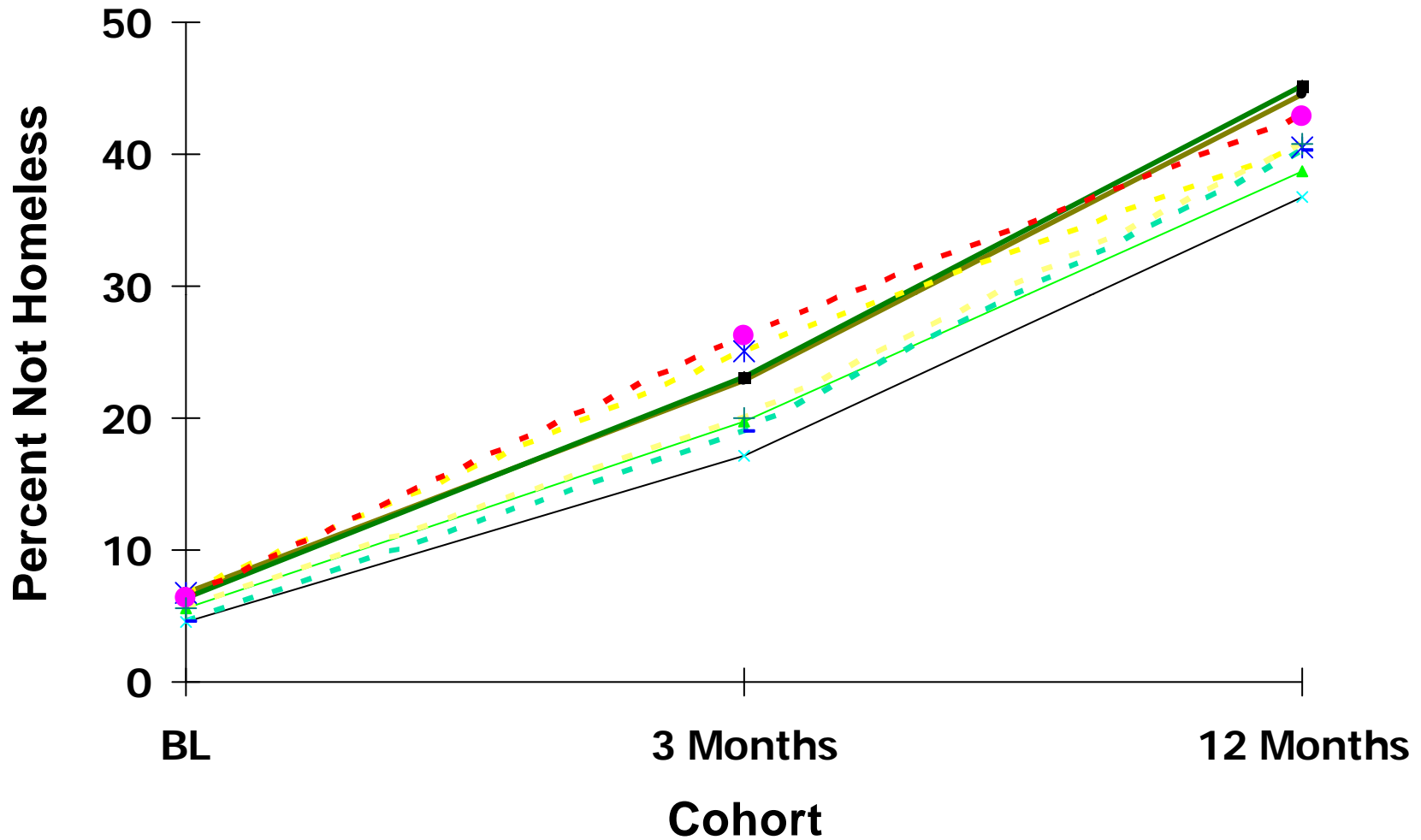


System Integration: The ACCESS Program

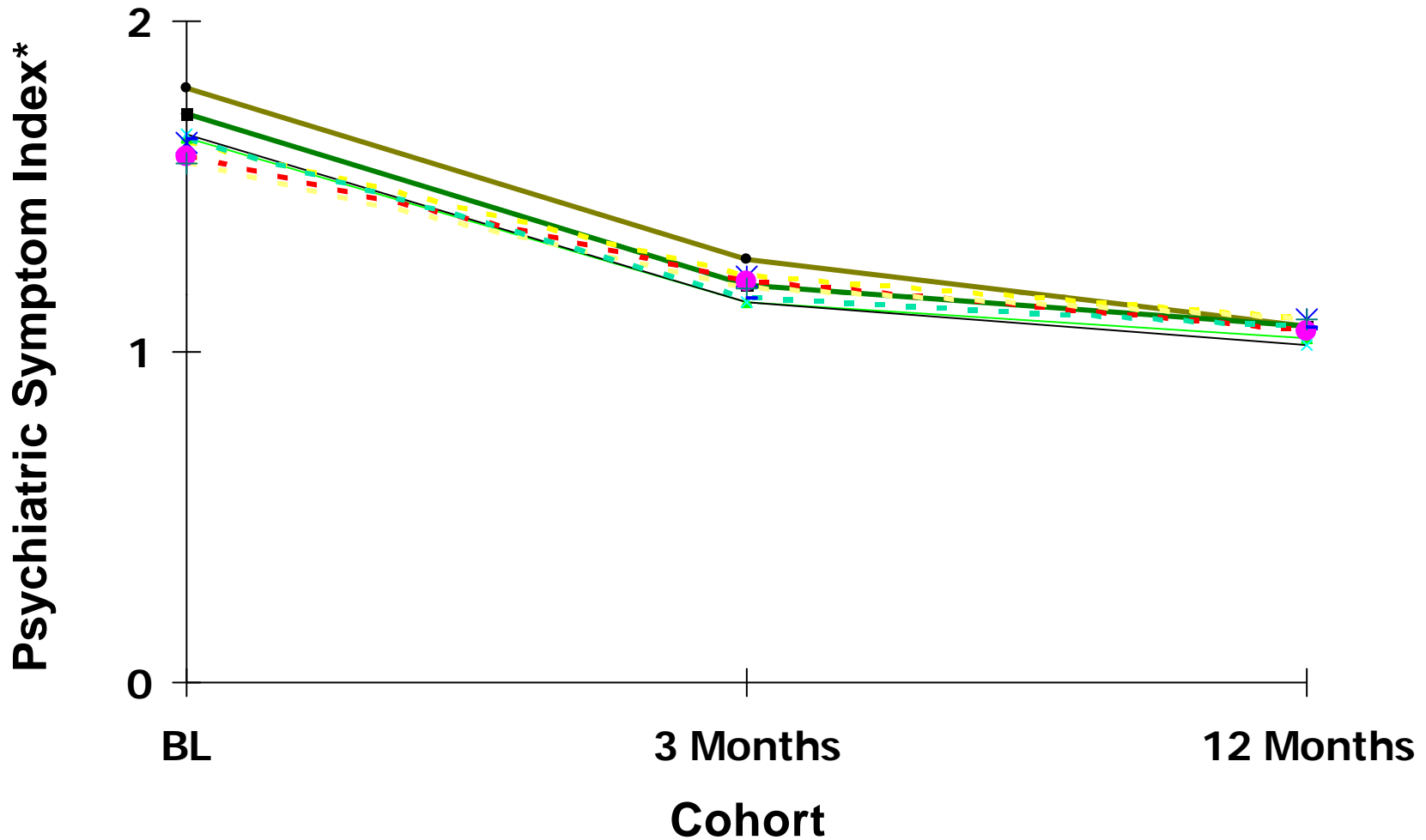
- “System fragmentation is the problem”
- 18 site demonstration of efforts to integrate homeless service systems
- 7,000 homeless people with serious mental illness in 4 annual cohorts followed for 12 months.
- 9 sites received \$150,00 and technical assistance to improve system integration
- Other 9 sites did not

From “Rosenheck RA, Lam J, Morrissey JP, Calloway M, Marilyn Stolar, Randolph F, Blasinsky M, Johnsen, M, Steadman H, Cocozza J, Dennis DD, Goldman HH. Do Efforts to Improve Service Systems Integration Enhance Outcomes for Homeless Persons with Serious Mental Illness? Evidence from the ACCESS Program. Psychiatric Services. 2002;53(8):958-966.

ACCESS Outcomes By Systems Integration Site Assignment and by Annual Cohort: Exited From Homelessness for 30 Days



OUTCOMES BY SYSTEMS INTEGRATION ASSIGNMENT AND BY COHORT: PSYCHIATRIC SYMPTOMS*



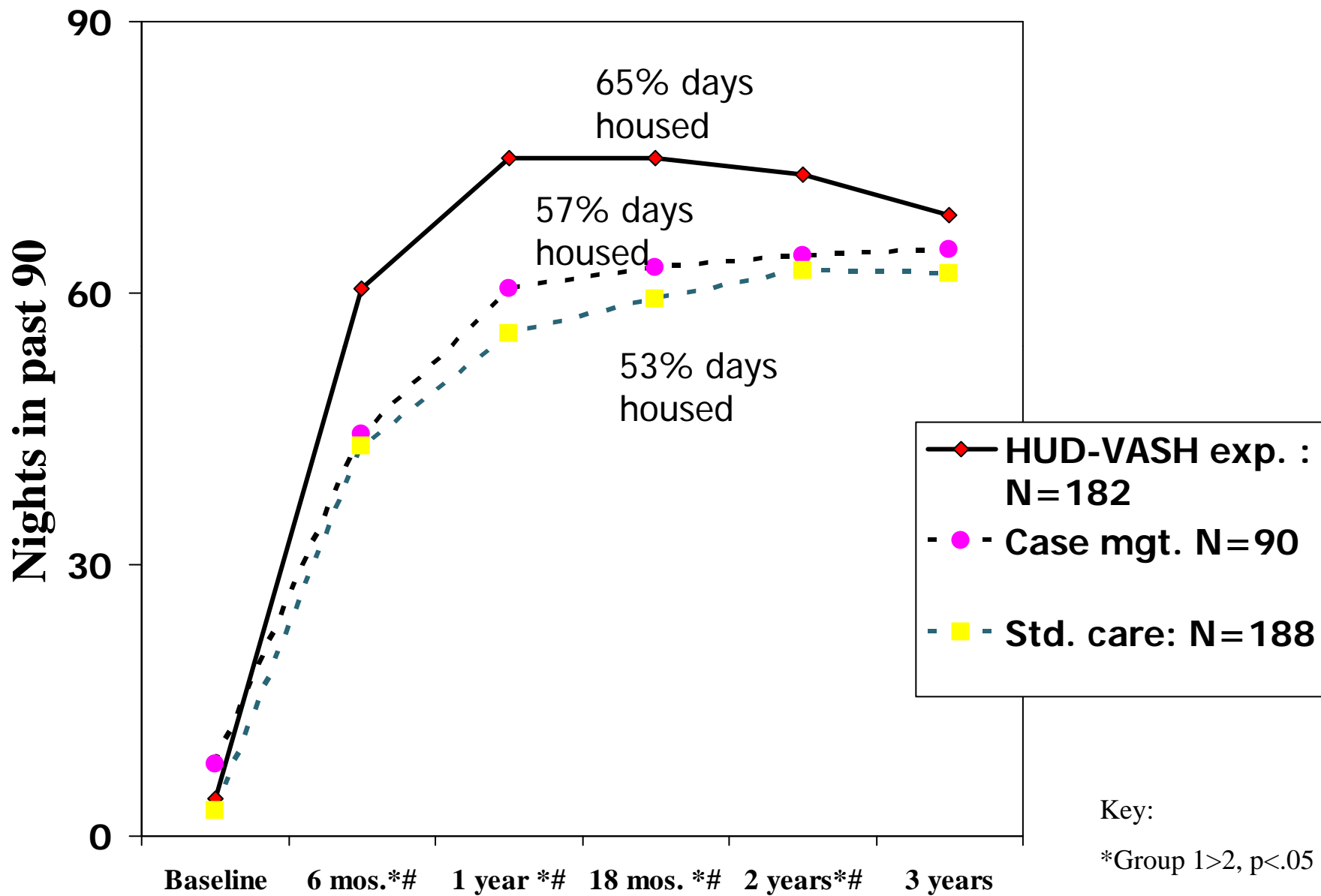


Supported Housing: HUD-VA Supported Housing

- Combines case management and Section 8 vouchers
- Experimental study of three groups:
 - HUD-VASH
 - Case management only
 - Standard VA care

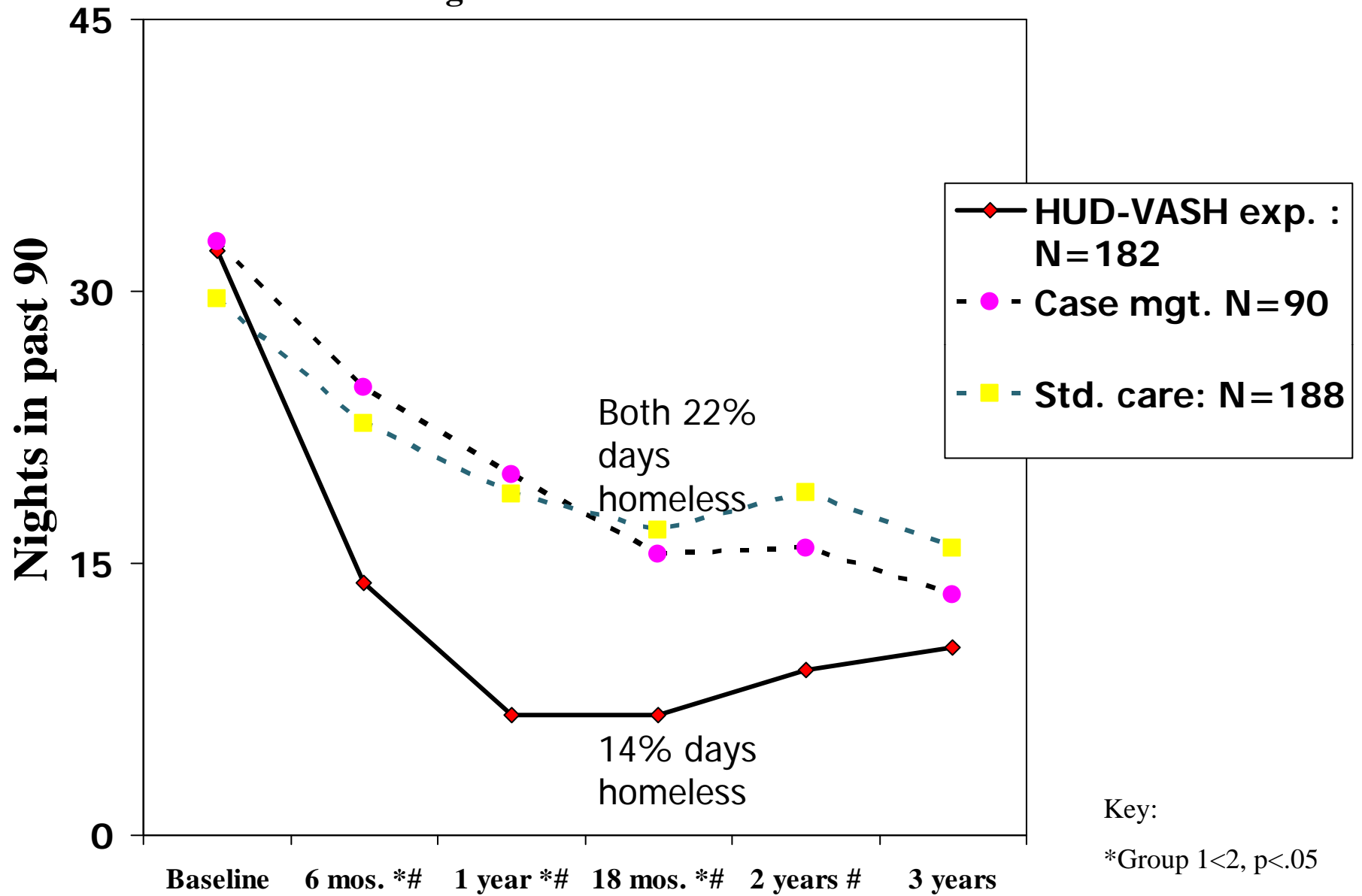
Rosenheck RA, KasproW W, Frisman LK, Liu-Mares W. Cost-effectiveness of Supported Housing for Homeless Persons with Mental Illness. Archives of General Psychiatry 2003;60: 940-951.

Days housed in past 90: HUD VASH Experimental Evaluation



Key:
*Group 1>2, p<.05
#Group 1>3, p<.05

Outcomes in the HUD-VA Supported Housing Program: Nights Homeless in Past 90



Key:

*Group 1 < 2, p < .05

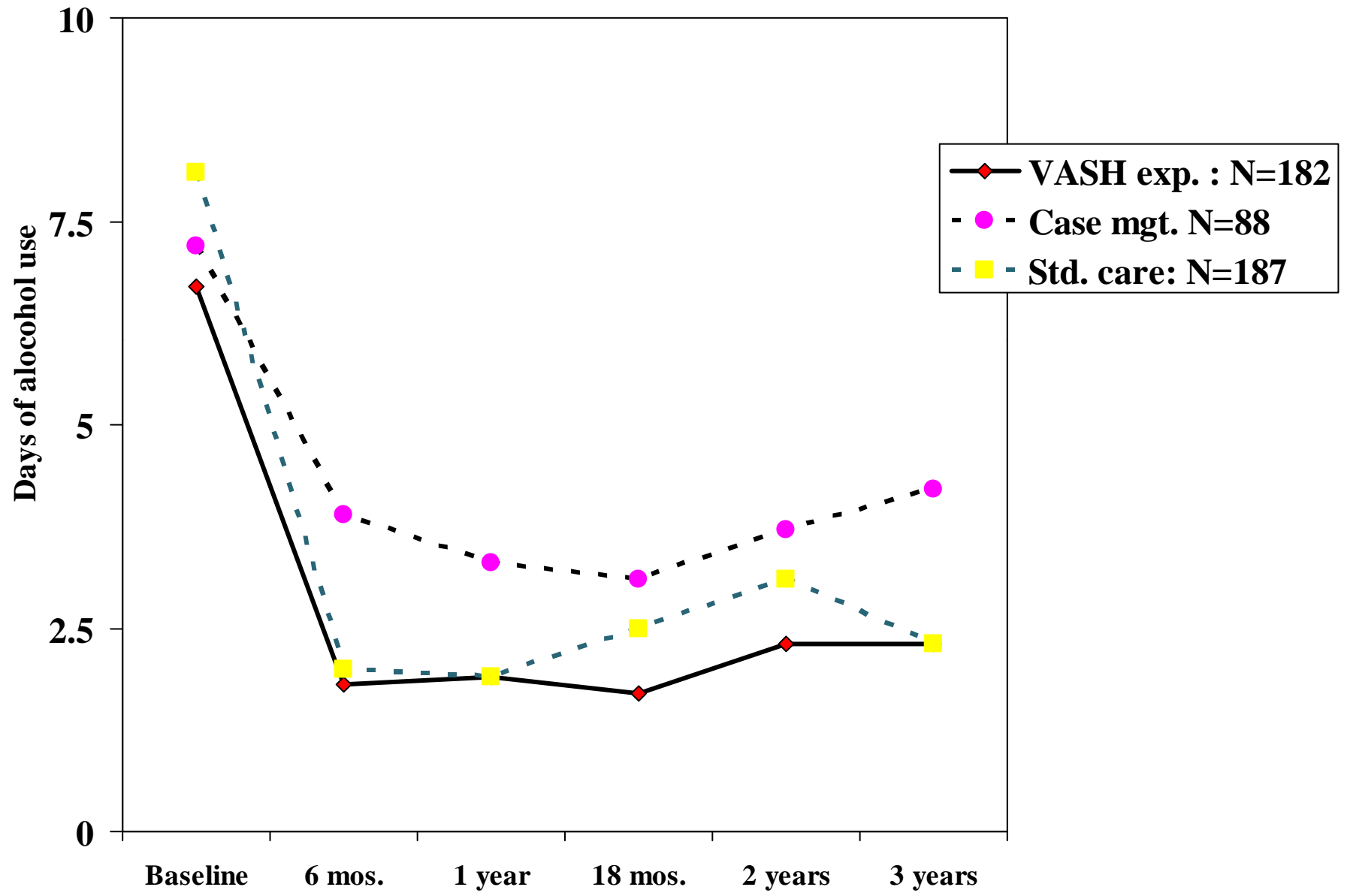
#Group 1 < 3, p < .05



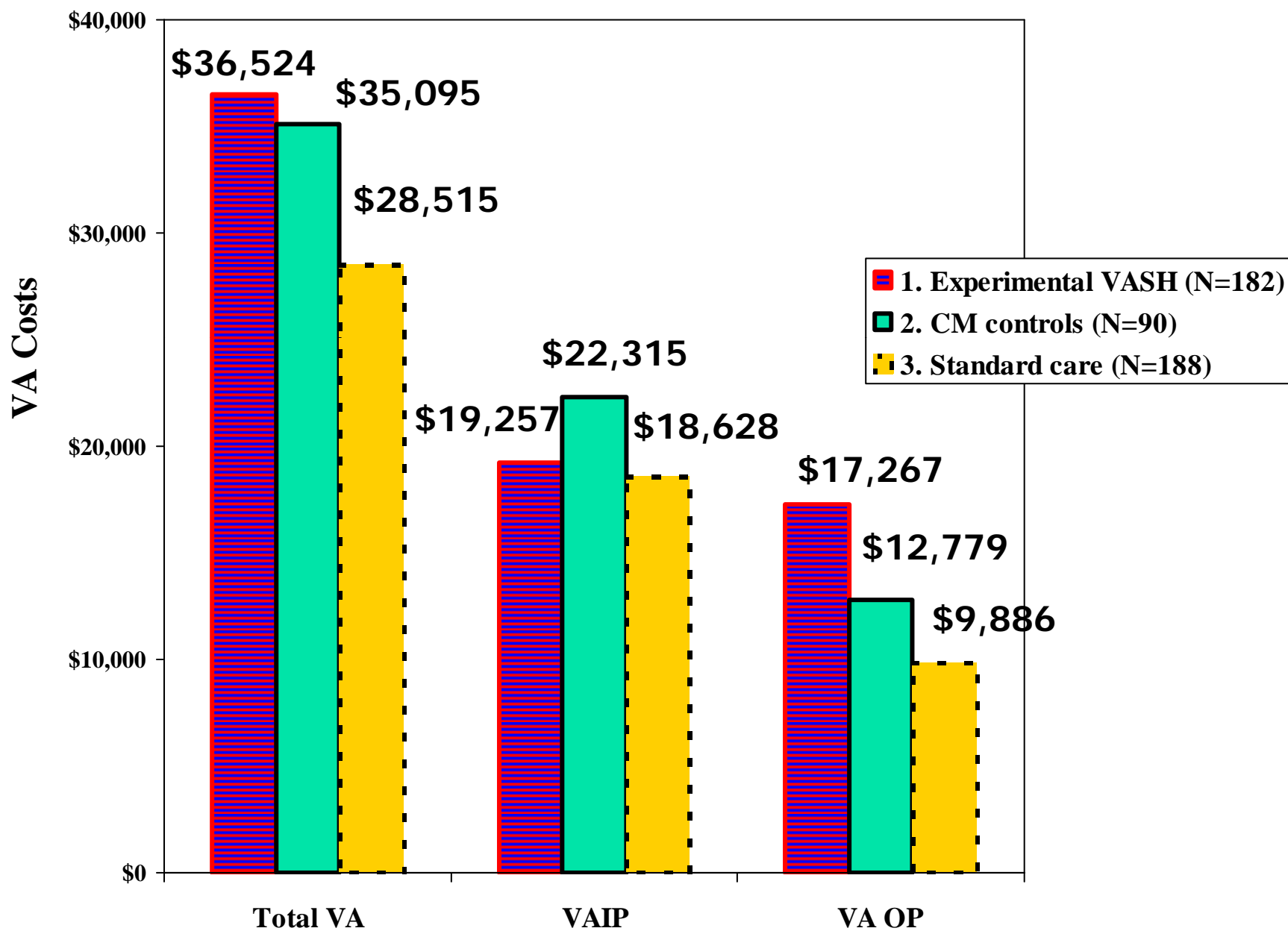
Other HUD-VASH Benefits

- Superior therapeutic alliance
- More social support
- Reduced alcohol and drug use

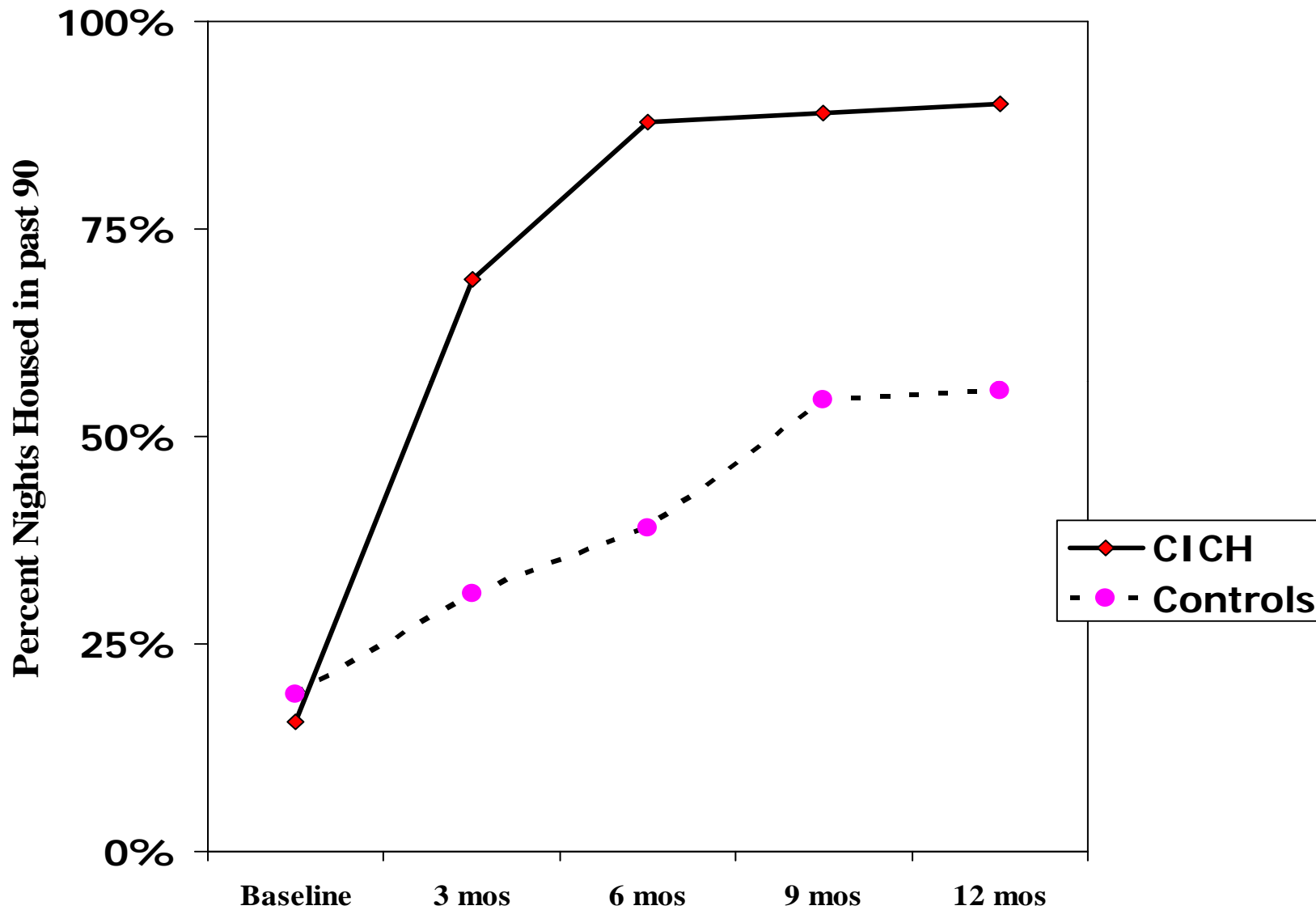
Outcomes in the HUD-VA Supported Housing Program: Days of Alcohol Use in past 30 days



Three-year VA health care costs by treatment group.



Outcomes in the CICH Supported Housing Program: Percent Nights Housed in Past 90



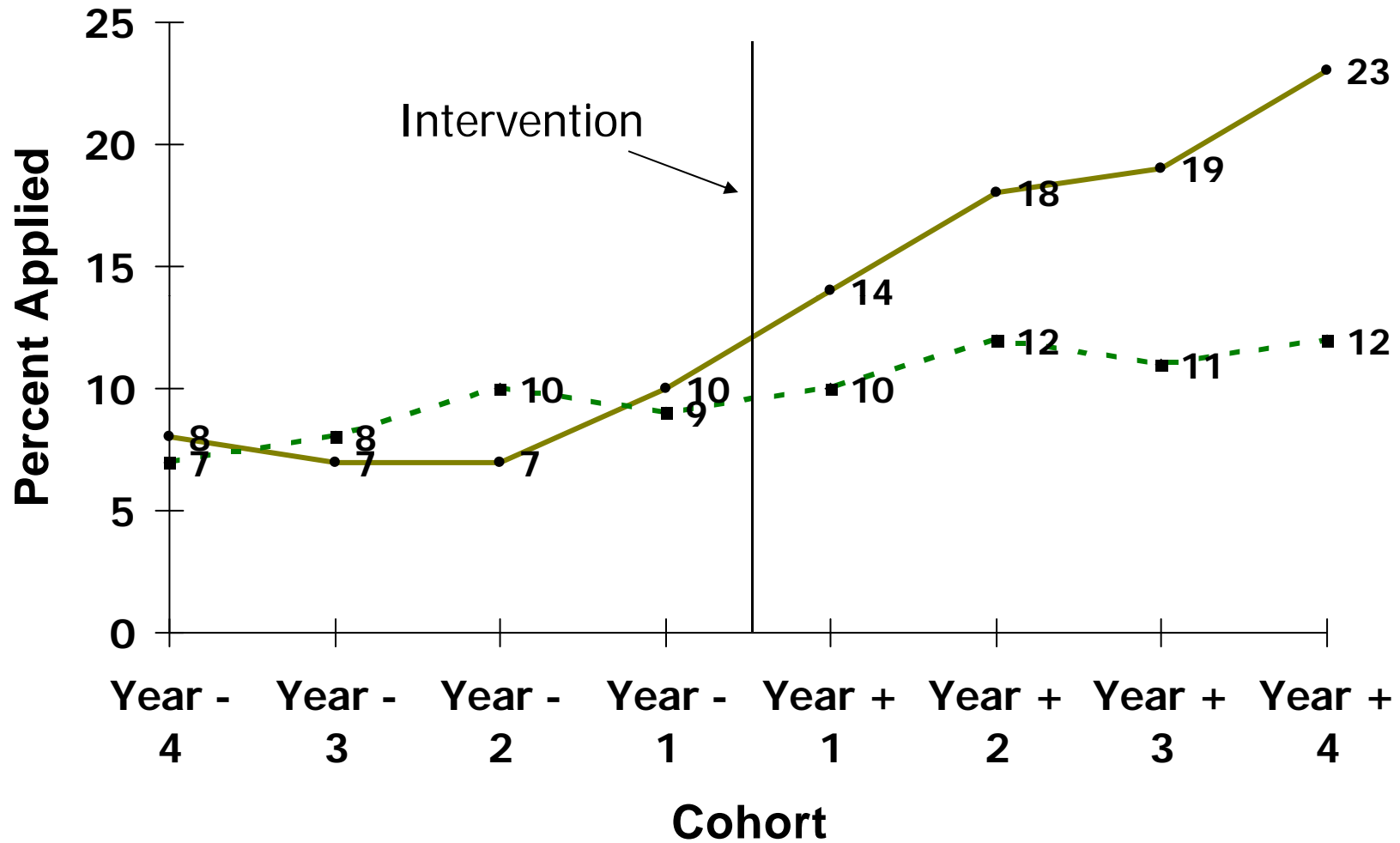
Mares AS, Rosenheck RA. A Comparison of Treatment Outcomes among Chronically Homelessness Adults Receiving Comprehensive Housing and Health Care Services Versus Usual Local Care. *Administration and Policy in Mental Health and Mental Health Services Research* 2011; 38 (6):459-475



Benefits Outreach

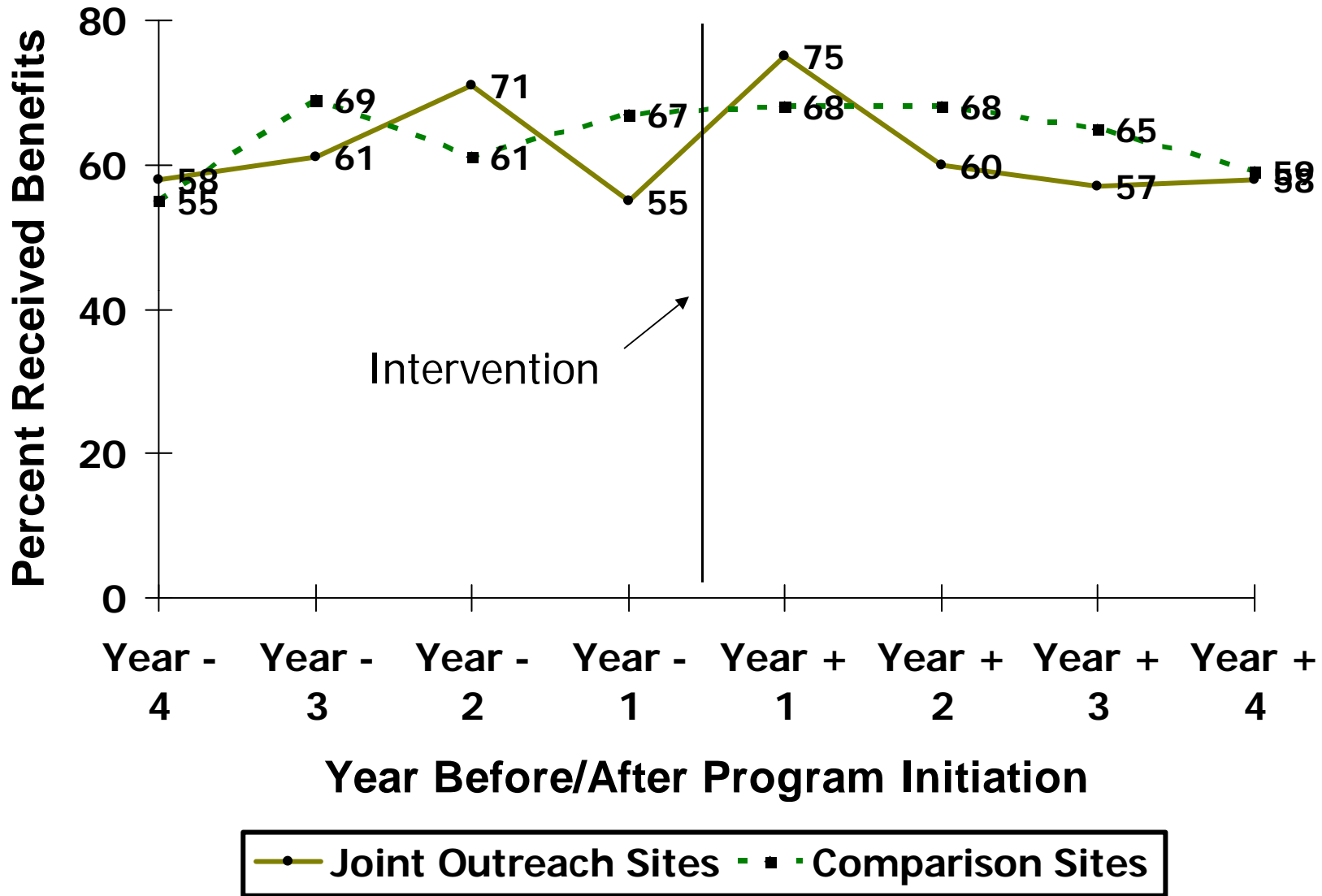
- VA-VBA initiatives: 70% pensions
- Joint VA-SSA Benefits Outreach
- Linked SSA disability specialists and VA case managers and medical evaluators
- Compared Joint outreach sites and other VA homeless programs using VA and SSA administrative data over a 4 year period before and after program implementation.
- Program Cost \$1,700-\$3,200/ additional awardee

SSA-VA Joint Outreach: Rates of Application for Benefits (N=34,431)

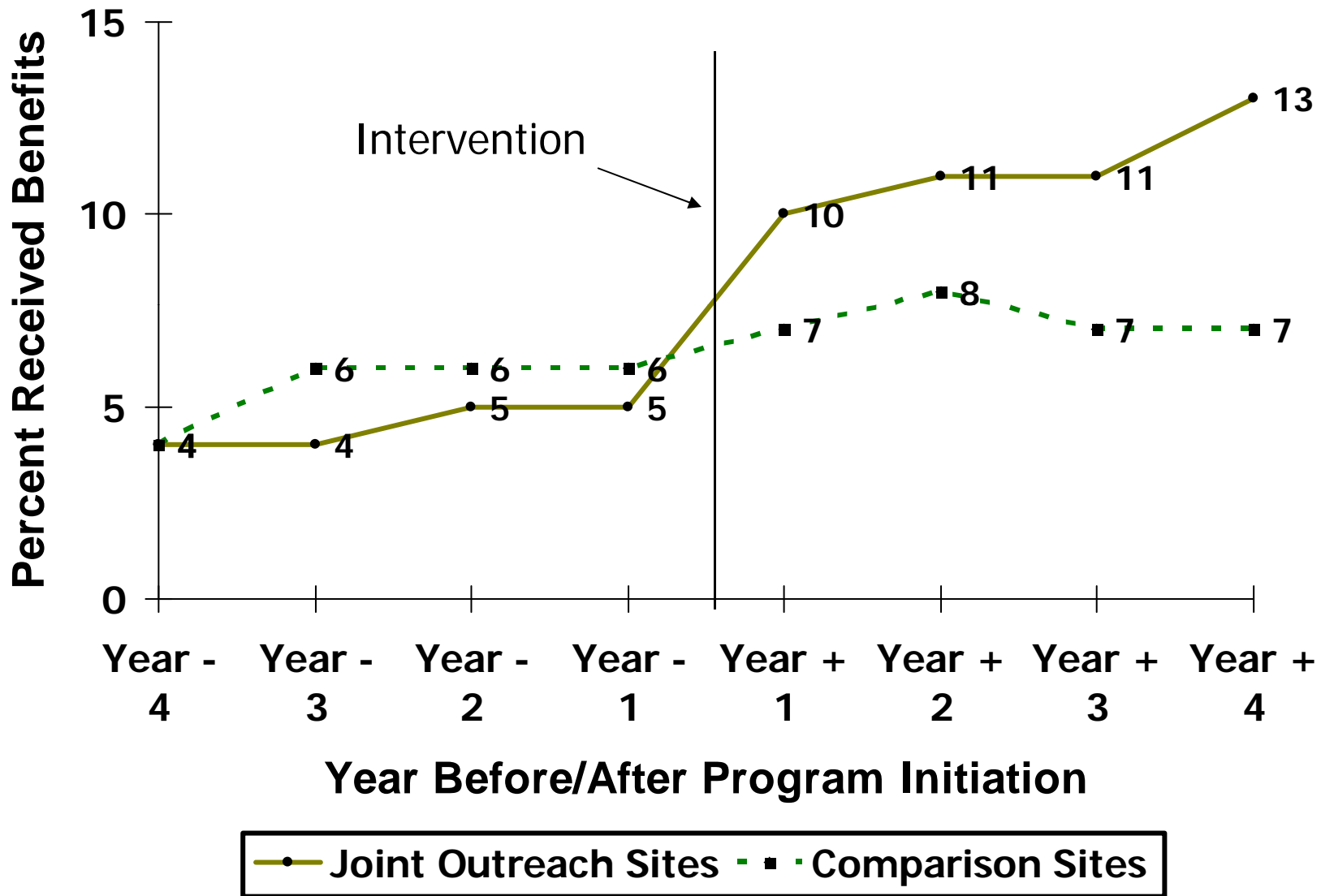


—●— Joint Outreach Sites - ■ - Comparison Sites

SSA-VA Joint Outreach: Rates of Award Among Applicants (N=3,952)



SSA-VA Joint Outreach: Rates of Award Among All Outreach Veterans (N=34,431)

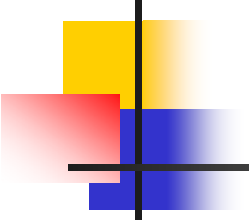




SSA-VA Outreach: Client Outcomes (Subsample) (1)

- Conducted baseline assessment just before benefits decision (N=173).
- Of those interviewed and followed-up 29 % (n=50) received benefits, 71% (n=123) did not.
- Compared 3-month outcomes among recipients and non-recipients.
- Total monthly income \$735 vs. \$458 ($p < .001$)
- No difference in psychiatric, substance abuse, or medical status at baseline OR follow-up.

SSA-VA Outreach: Client Outcomes (2)



	<u>Benefits</u>	<u>No benefits</u>
■ Days homeless	9.4	17.0 ns
■ Quality of Life	3.0	2.7 **
■ Wants to work	2.9	3.2 **
■ Days worked	2.3	5.8 *

* $p < .05$

** $p < .01$

*** $p < .001$

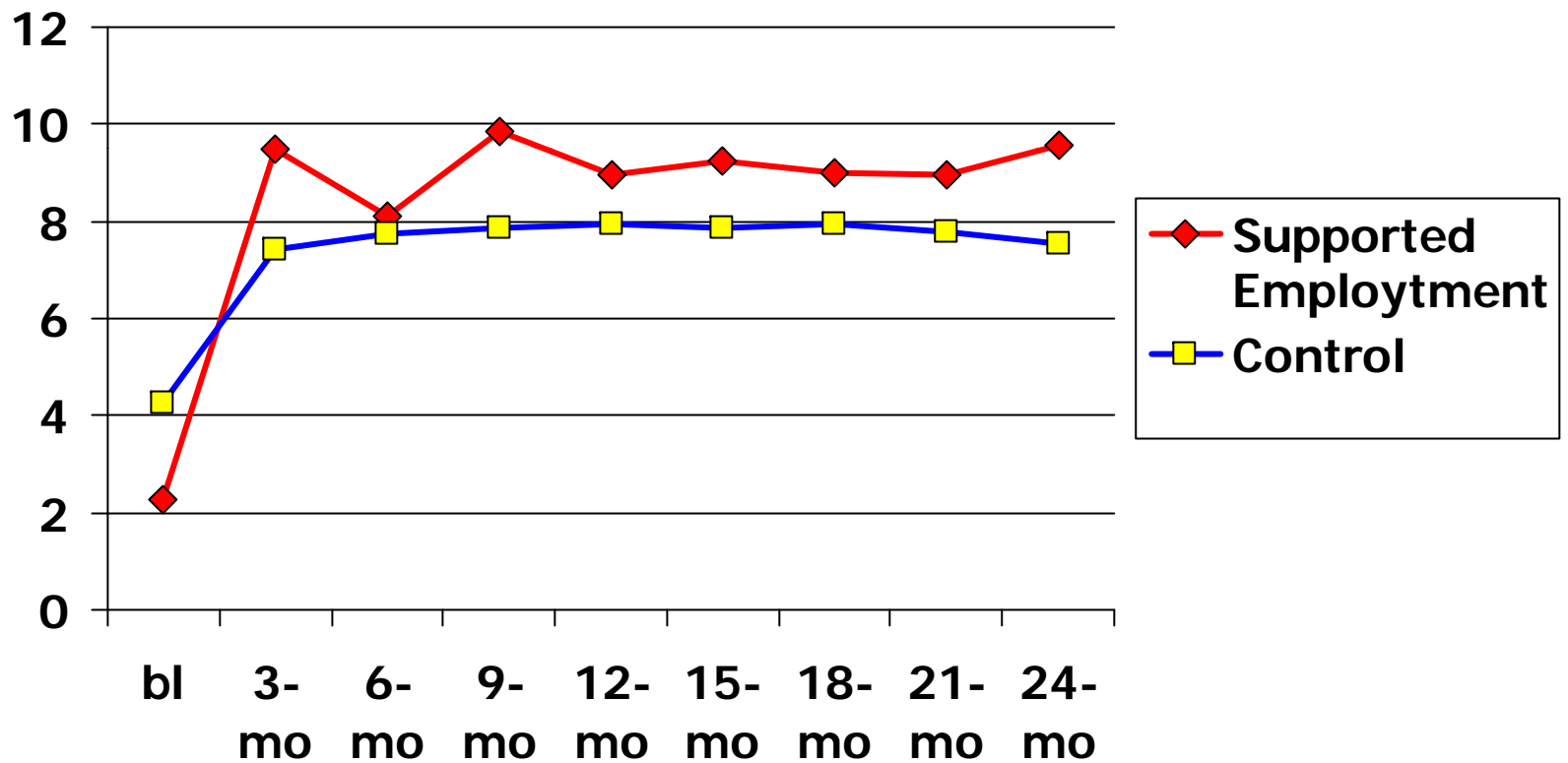


Supported Employment

- Employment specialists work directly with clients to identify, obtain and retain employment.
- Pre-post intervention cohort design at 9 VA sites
- Phase 1: before intervention (N=308)
- Phase 2: after intervention (N=322)
- Employment Specialist Cost=\$2,063/ client
- Less productivity of \$1,299 = \$764/client/year

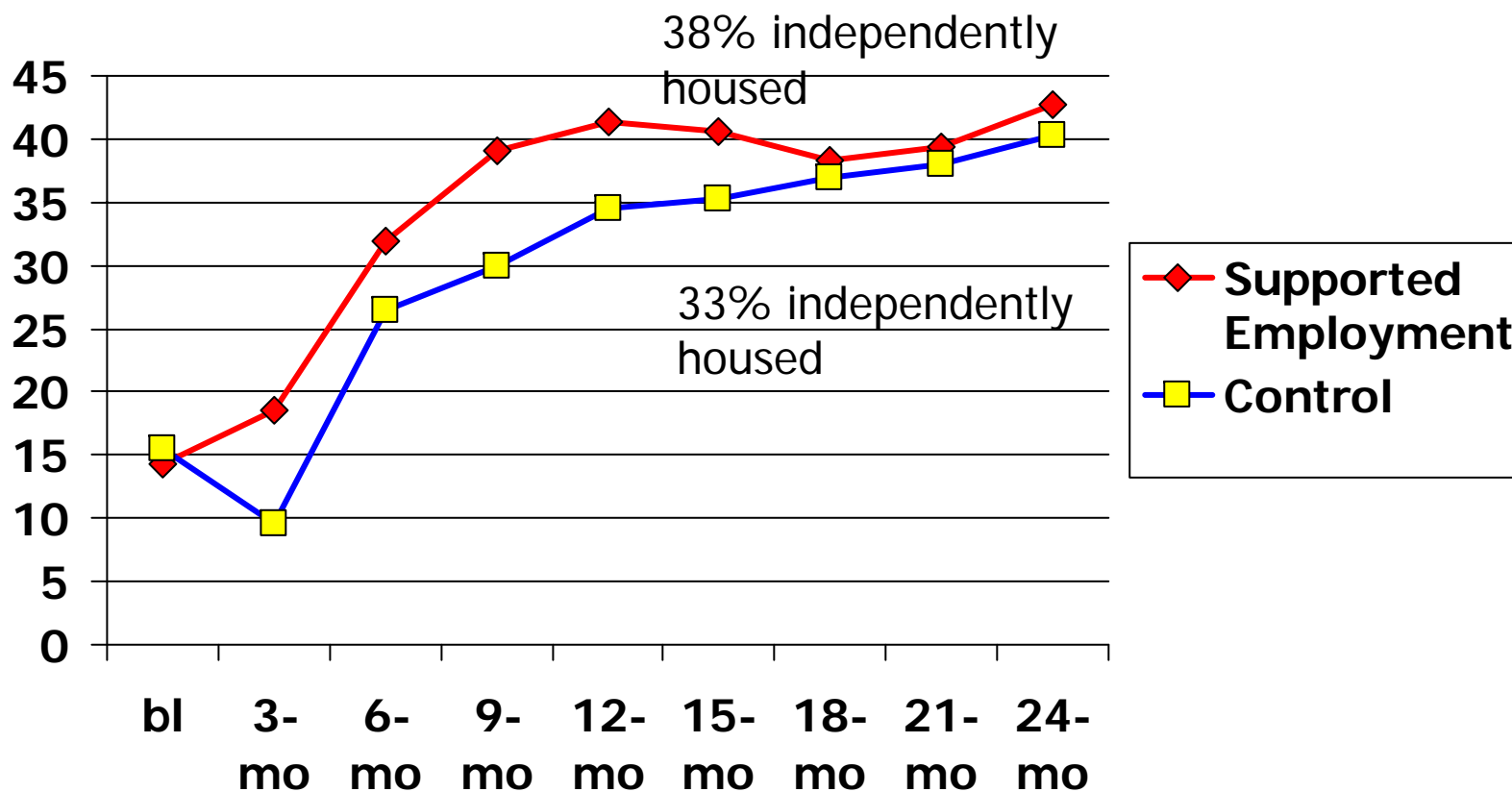
Rosenheck RA and Mares AS. Implementation of Supported Employment for Homeless Veterans with Psychiatric or Addiction Disorders: Two-Year Outcomes. *Psychiatric Services* 2007; 58: 315-324.

Days Competitive Employment in Supported Employment (Least Square Means)



Days Housed in past 90 (Independent)

(Least Square Means)



Conclusions from Research (1)



- Diverse intervention models are effective in reducing homelessness among people with mental illness.
- Effect sizes are typically modest in magnitude and primarily center in one outcome domain (i.e. housing, symptoms, income, or employment).
- Limited Social reintegration/recovery

Conclusions from Research (2)



- Program costs can be substantial (\$2,000-\$9,000/client/year) and are entirely offset by savings only when high-cost, high-risk populations are targeted, or when the duration of treatment is limited. i.e. there is a cost-effectiveness generalizability tradeoff
- Progress is incremental: Cost-effective, generalizable ways to end homelessness among people with mental health problems have yet to emerge.