Mayor's Roundtable on Mental Health & Addictions
Oct 2, 2013

Severely Addicted/Mentally Ill Population: What Do We Know & Potential Outcomes

- Dr. William Honer
- Dr. Michelle Patterson

CITY OF VANCOUVER

a place of mind

Hotel STUDY

Hotel study: Team, Supporters, Sponsors

- UBC: Drs. GW MacEwan, M Krausz, G Smith, F Vila-Rodriguez, R Procyshyn, W Panenka, A Barr, D Lang, T Vertinsky, H Wong, JJ Sidhu, T Buchanan, A Jones, V Strehlau, O Leonova
- BC Centre for Disease Control: Dr. M Krajden
- Centre for Excellence in HIV/AIDS: Dr. J Montaner
- Simon Fraser University: Dr. A Thornton, H Baitz, K Gicas, C Giesbrecht
- Imperial College, London: Dr. D Nutt

PHS Community Services Society

BC Mental Health & Addiction Services
An Agency of the Provincial Health Services Authority

Canadian Institutes of Health Research
www.cihr-irsc.gc.ca

Hotel: protocol

- Recruit from SRO hotels
- Psychiatry: diagnosis, symptom severity, cognitive function
- Addictions: history of drug use, current use, high risk behaviour, urine testing
- Physical illness: neurological exam, MRI scan, virus testing, blood chemistry and hematology
- Longitudinal design: Monthly follow-up for 1-5 years: health, ability to access health care services, change in housing and ability to function

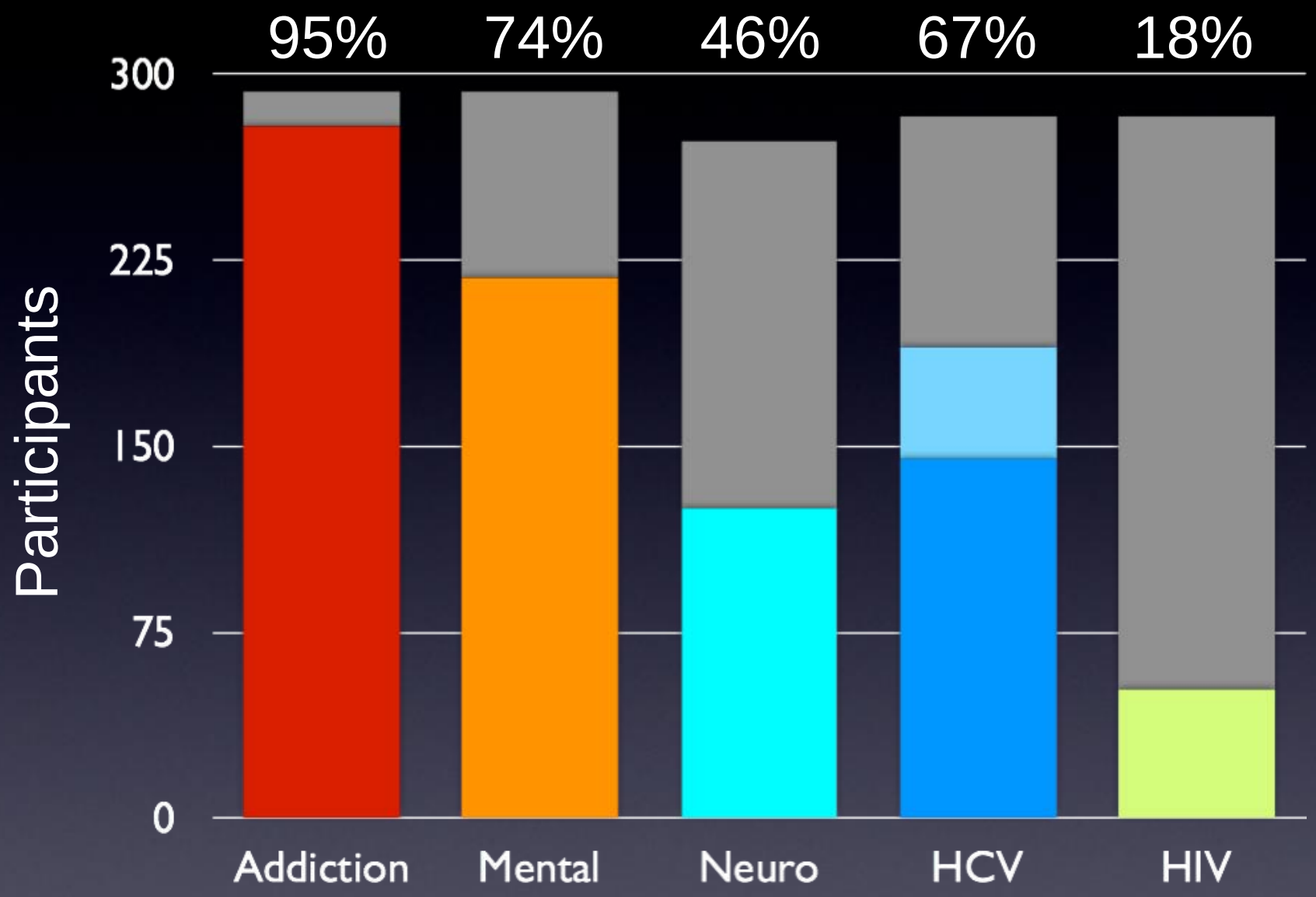
Hotel study n=293

- Housing
- Months in hotel median = 16, range 0-240
- Homelessness
- Experienced homelessness: 195/293 = 66.6%
- Time since homeless: median = 38 mon (0-452)
- “Asylum” care for mental illness
- Riverview (or similar care): 30/293 = 10.2%
- Jail
- Previously incarcerated: 71/293 = 24.2%
- Time in jail: median = 24 mon, range 0-240

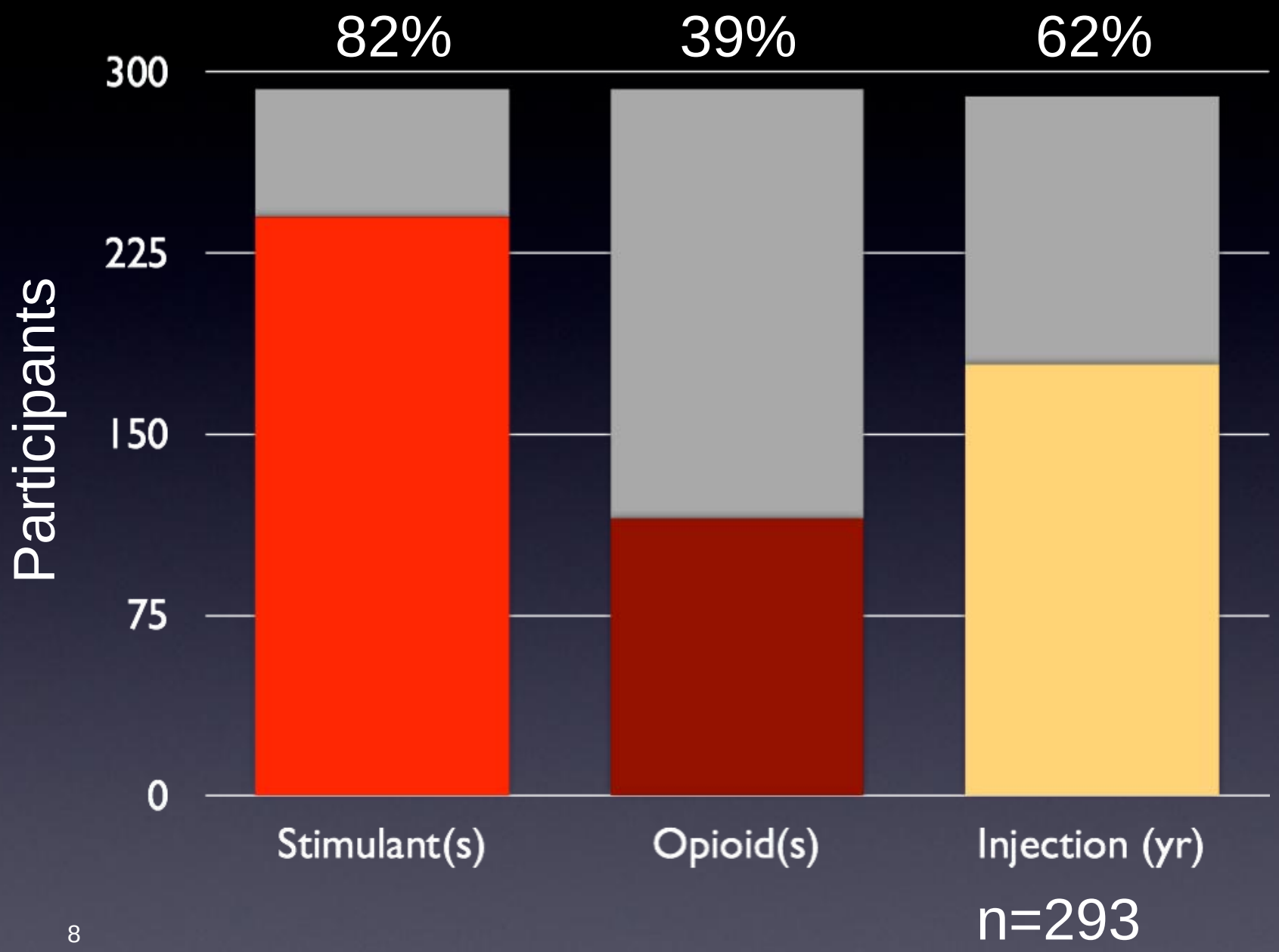
Hotel study (n=293) SROs at 1-year

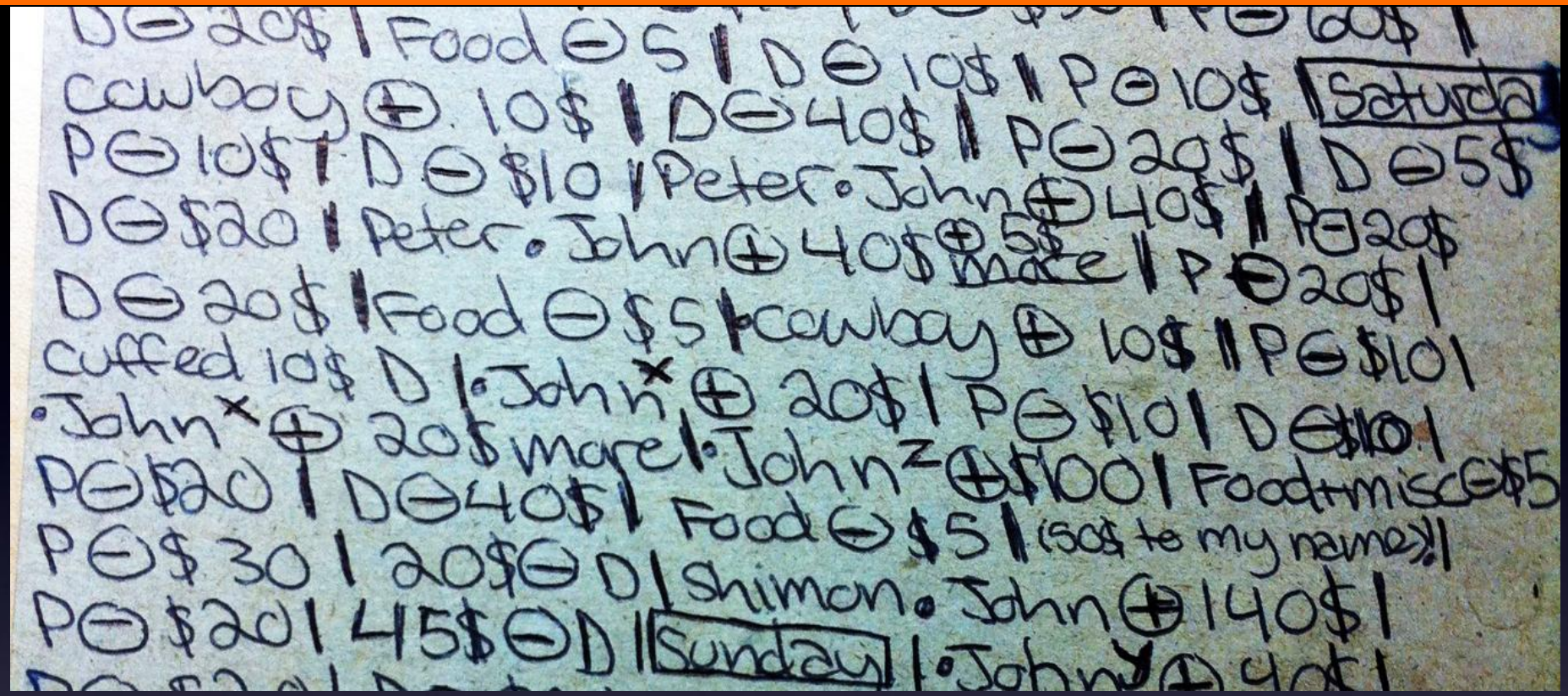
- Same SRO hotel: 150/292 = 51.4%
- Homeless: 15/292 = 5.1%

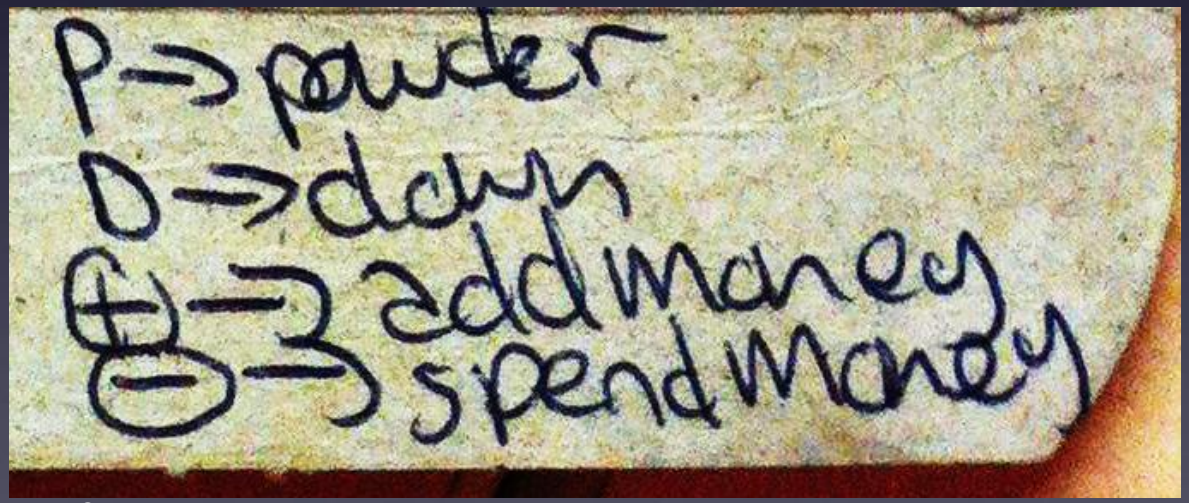
Addiction, mental and medical illness: current



Addiction: current



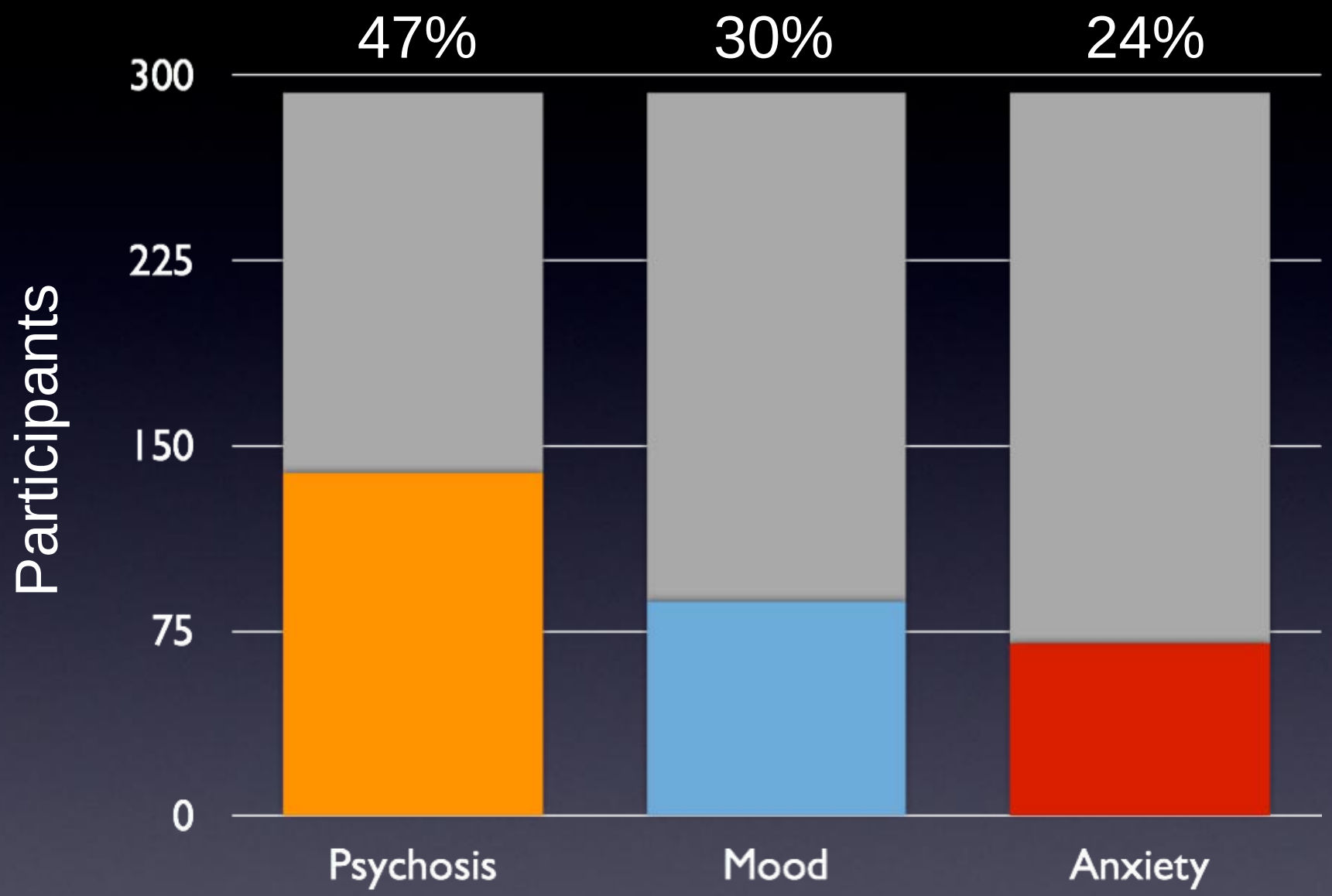

D⊖20$ | Food⊖5 | D⊖10$ | P⊖10$ | Saturda
cowboy⊕ 10$ | D⊖40$ | P⊖20$ | D⊖5$
P⊖10$ | D⊖$10 | Peter. John⊕40$ | P⊖20$
D⊖$20 | Peter. John⊕40$⊕5$ mare | P⊖20$ |
D⊖20$ | Food⊖$5 | cowboy⊕ 10$ | P⊖$10 |
cuffed 10$ D | John x⊕ 20$ | P⊖$10 | D⊖$10 |
John x⊕ 20$ mare | John z⊕$100 | Food+misc⊖$5
P⊖$20 | D⊖40$ | Food⊖$5 | (50$ to my name) |
P⊖$30 | 20$⊖D | shimon. John⊕140$ |
P⊖$20 | 45$⊖D | Sunday | John y⊕ 40$ |


P⇒powder
D⇒down
⊕⇒addmoney
⊖⇒spendmoney

Income and addiction

n=293

Mental illness: current

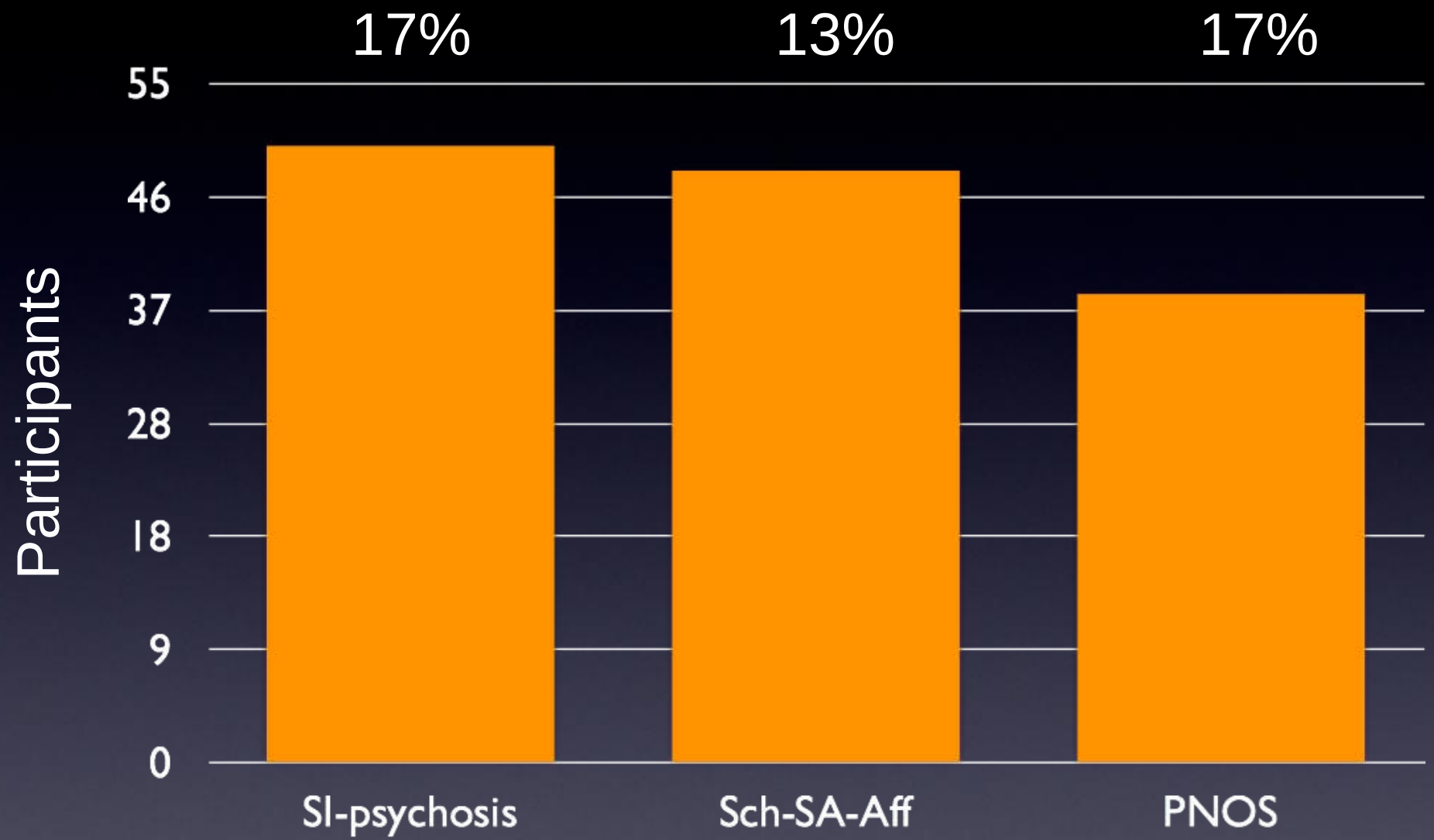


n=293

Psychosis

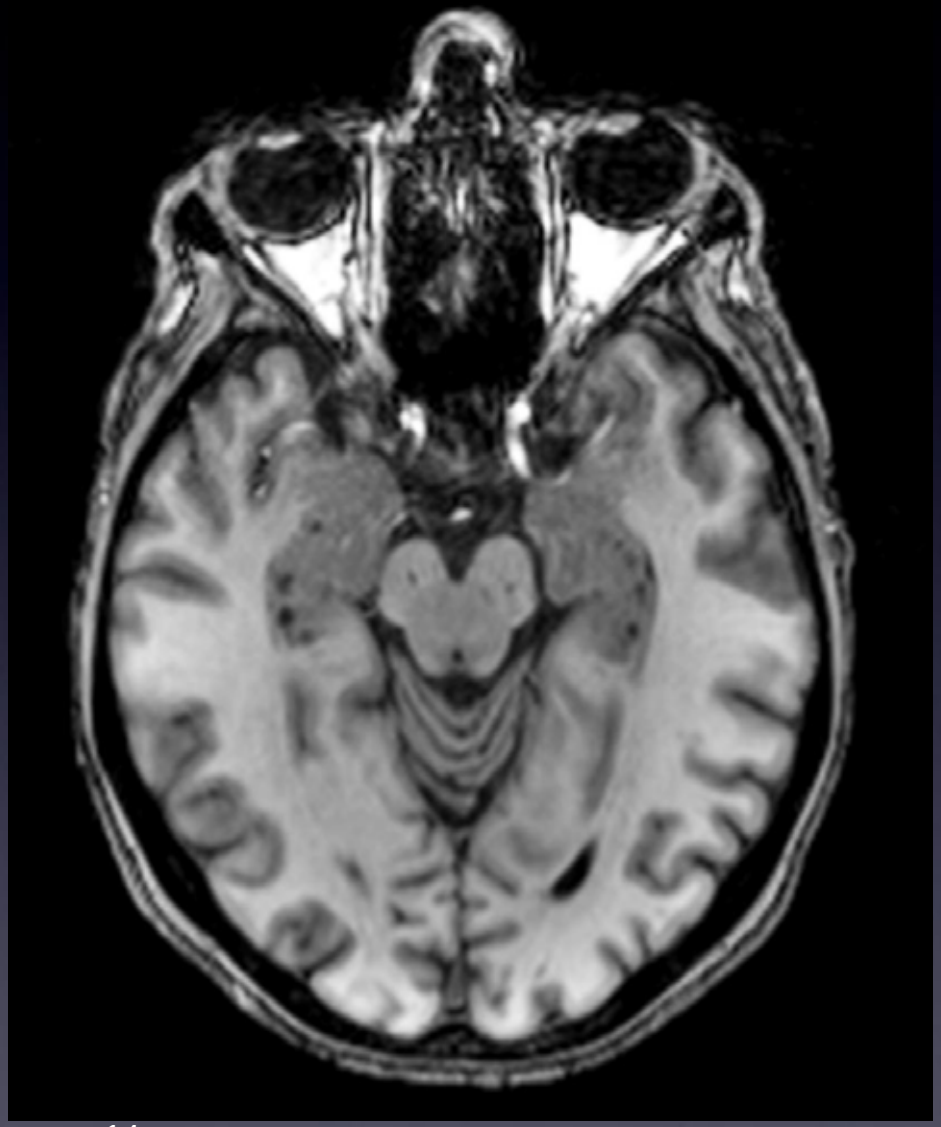
- “. . . the individual incorrectly evaluates the accuracy of his or her perceptions and thoughts and makes incorrect inferences about external reality, even in the face of contrary evidence.”
- Hallucinations: perceptual experiences in the absence of a stimulus (hearing voices)
- Delusions: firmly fixed, false beliefs that are unchanged by any rational argument or evidence (paranoia, special powers or mission)

Psychosis diagnoses (47% of participants)



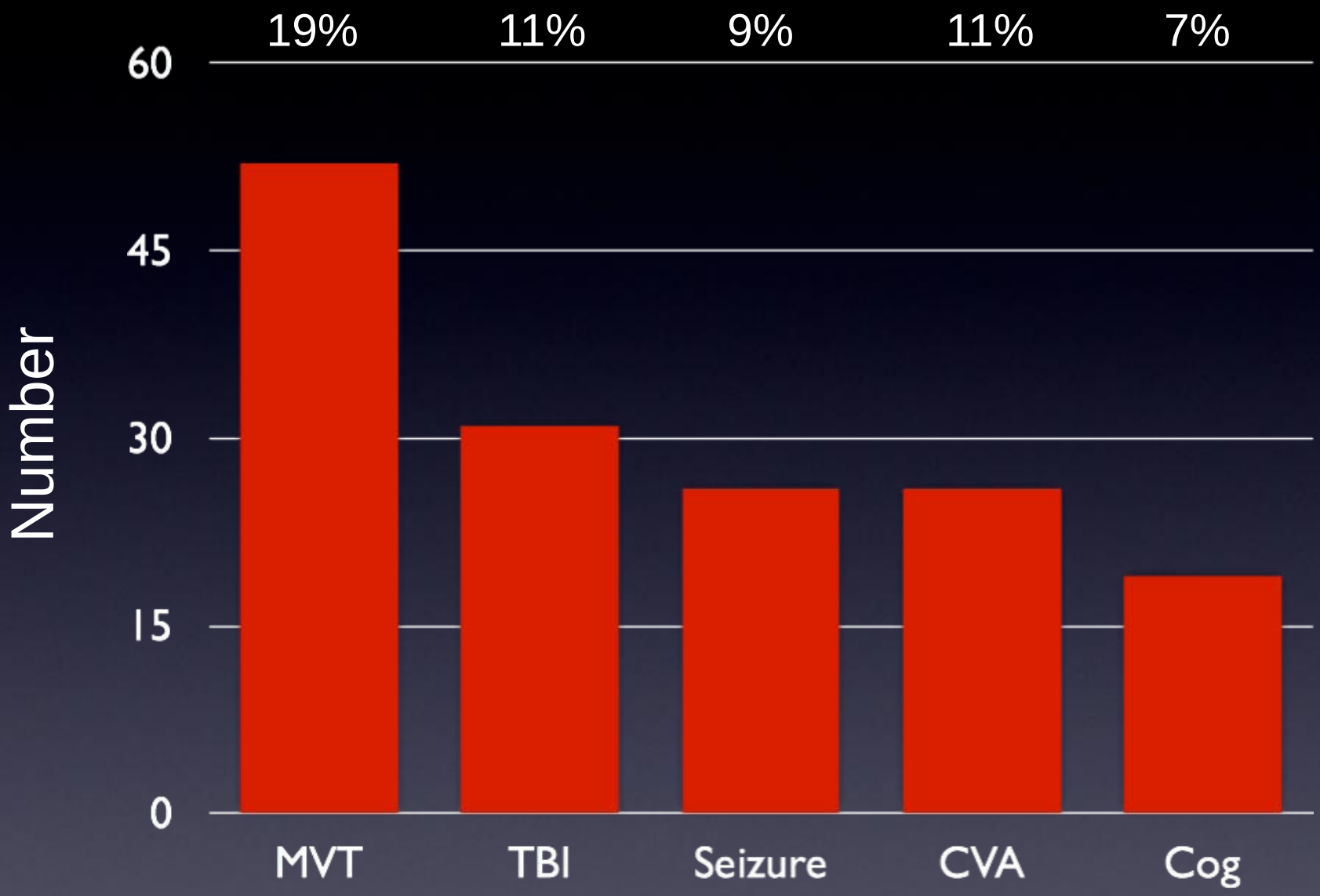
Current n = 293
(Diagnoses of psychotic illness on BECED-II)

Brain structure



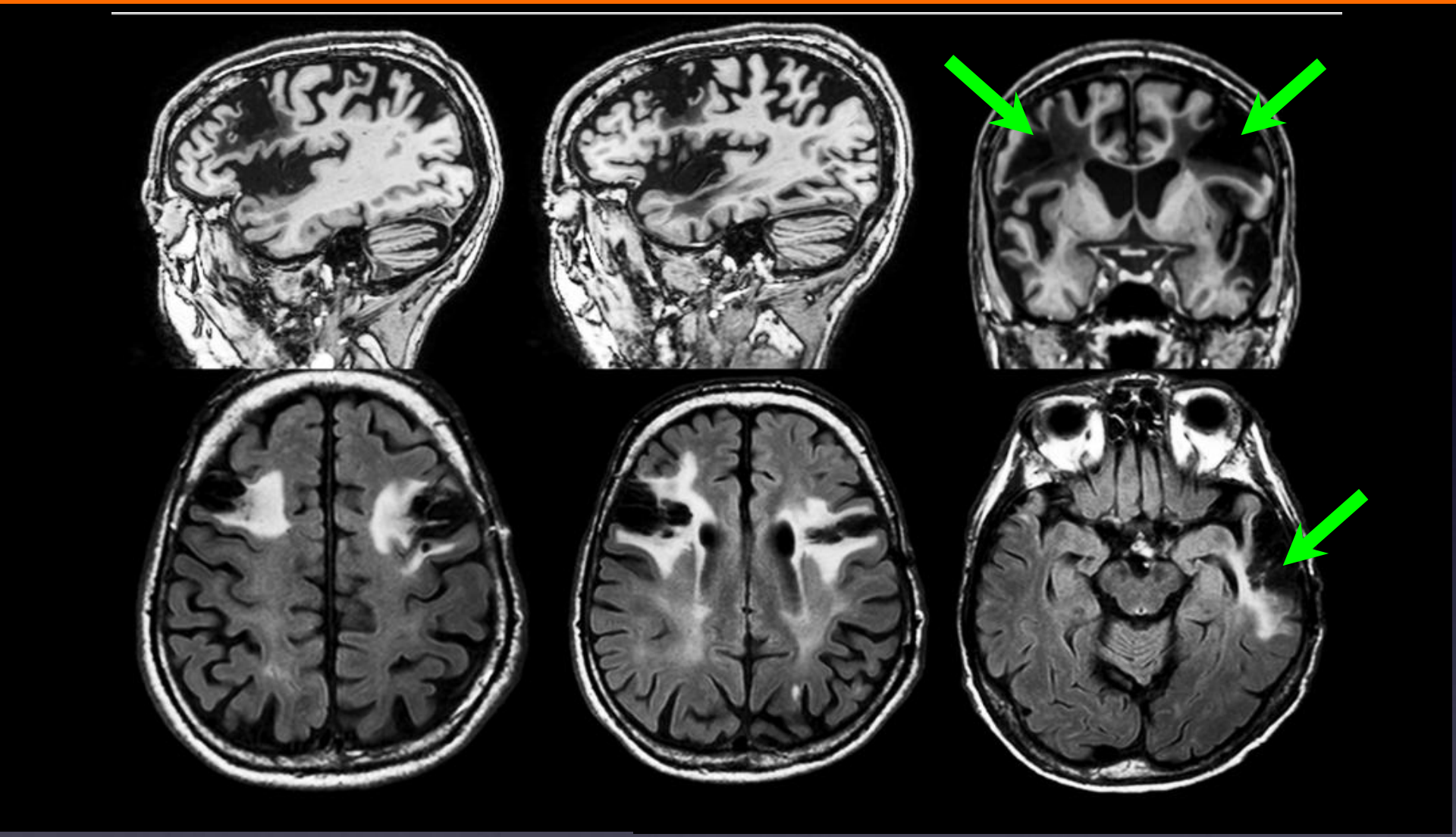
Brain function

Current neurological disorder (46% of participants)



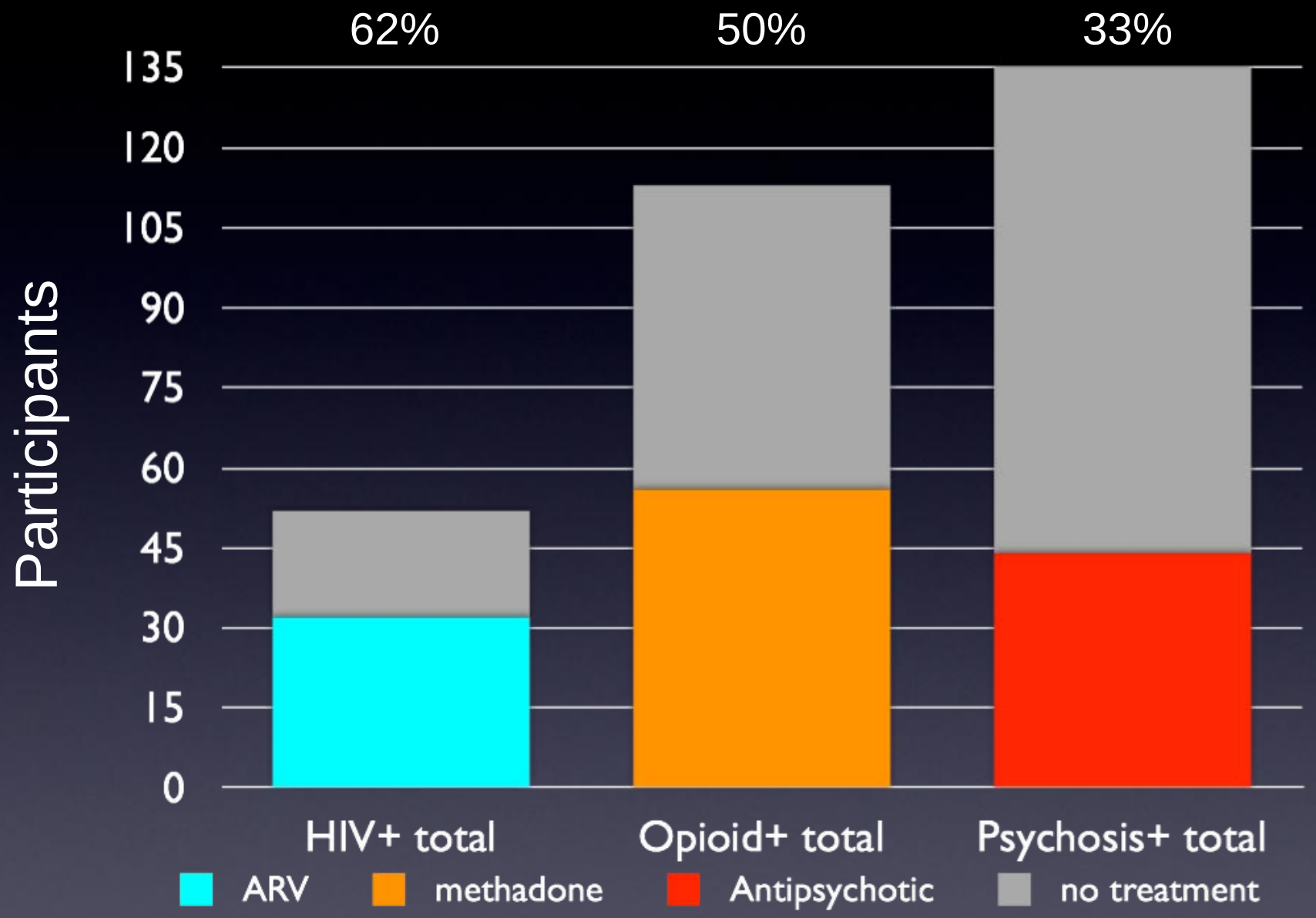
n=232-293 Sept, 2012

Bilat FL, left TL infarction and encephalomalacia



male 53 yr (HIV+, MVA, seizures, cognitive impairment, crack, heroin, past alcohol, past depression)

Treatment for three primary illnesses



Mortality in the cohort (n = 293)

Expected number of deaths over 2 yr for Canadians same age and gender

Actual number of deaths

Standardized mortality ratio = 4.8
(95% CI = 2.9 - 8.0)

Mortality

- No suicides
- 5 related to drug overdoses
  - Cocaine
  - Cocaine, morphine, methadone, MA
  - Cocaine, opioids
  - Cocaine, methadone
  - Cocaine, morphine, MA
- 10 related to physical illness
  - Acute subdural hematoma
  - Pneumonia
  - Subarachnoid hemorrhage
  - Uremia, AIDS, renal cancer
  - Lung cancer
  - Multiple organ failure, sepsis
  - Acute myelogenous leukemia
  - Sepsis, pneumonia, ulcer, HIV
  - Cryptococcal septicemia, liver failure
  - Pneumonia

Thoughts

- There is no simple cause and effect in this crisis
- There are risk and protective factors, poor and good outcomes
- Comprehensive, multidisciplinary assessment is needed to help individualize care and housing for better health
- Providing better choices for health, requires understanding of problems and capabilities
- Improving our service delivery requires assessment over time, to see what works and what does not

Vancouver At Home Study:

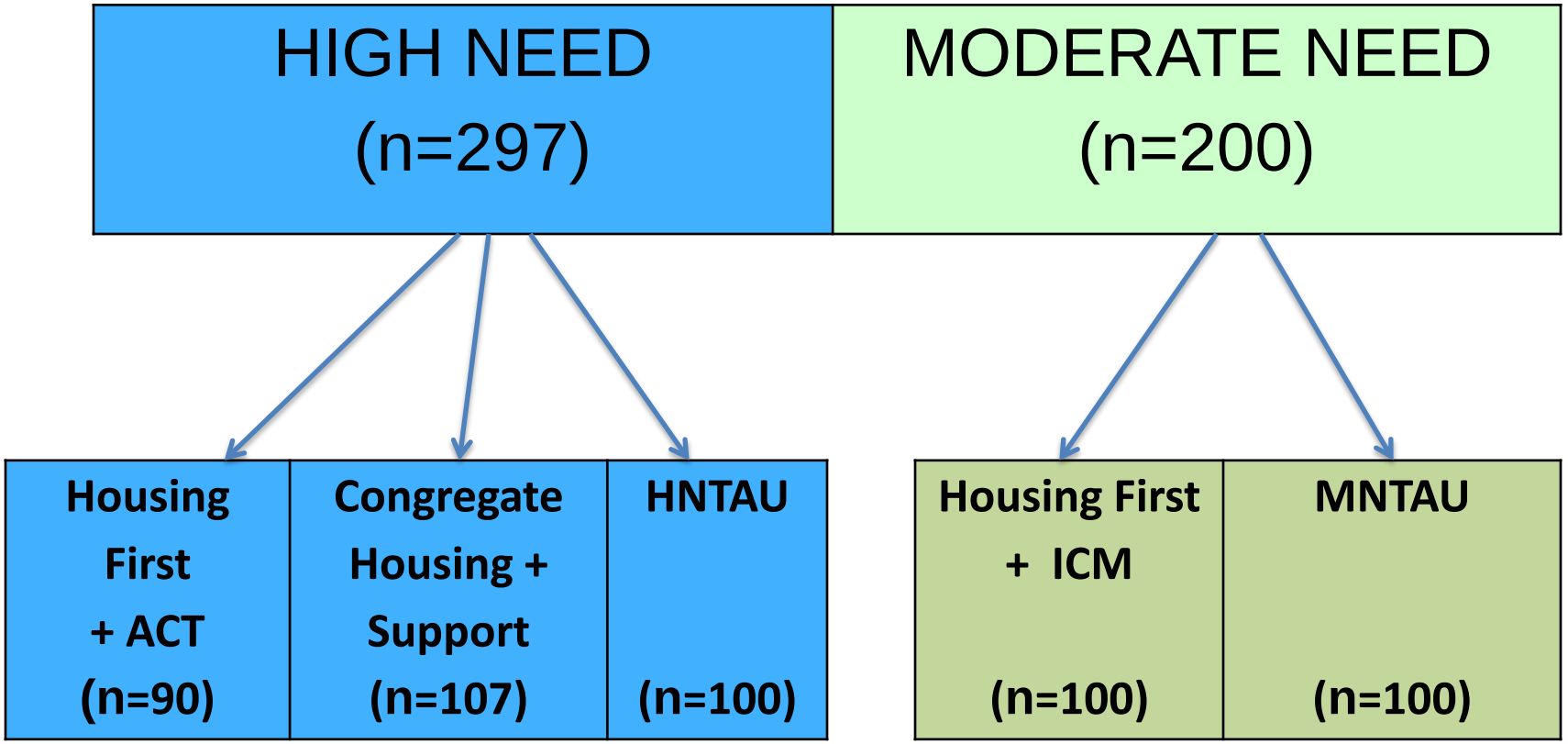
Randomized Controlled Trials of Housing First for Homeless Adults with Mental Illness

Michelle Patterson

Lead Investigator:
Julian Somers

SFU
SIMON FRASER UNIVERSITY
THINKING OF THE WORLD

Random Assignment



ACT = Assertive Community Treatment
TAU = Treatment as Usual

ICM = Intensive Case Management

Somers, Patterson, Moniruzzaman et al. (under review). Trials.

Baseline Demographics

	Per Cent
Absolutely homeless	78
Male	73
Caucasian	57
Aboriginal	15
Incomplete High School	56
Age at enrollment (mean)	41 years

Duration of Homelessness

Age first homeless (mean)	30 years
First homeless before age 25	44%
Lifetime duration (mean)	5 years
Longest single episode >1 yr	50%
Lifetime duration >3 yr	49%

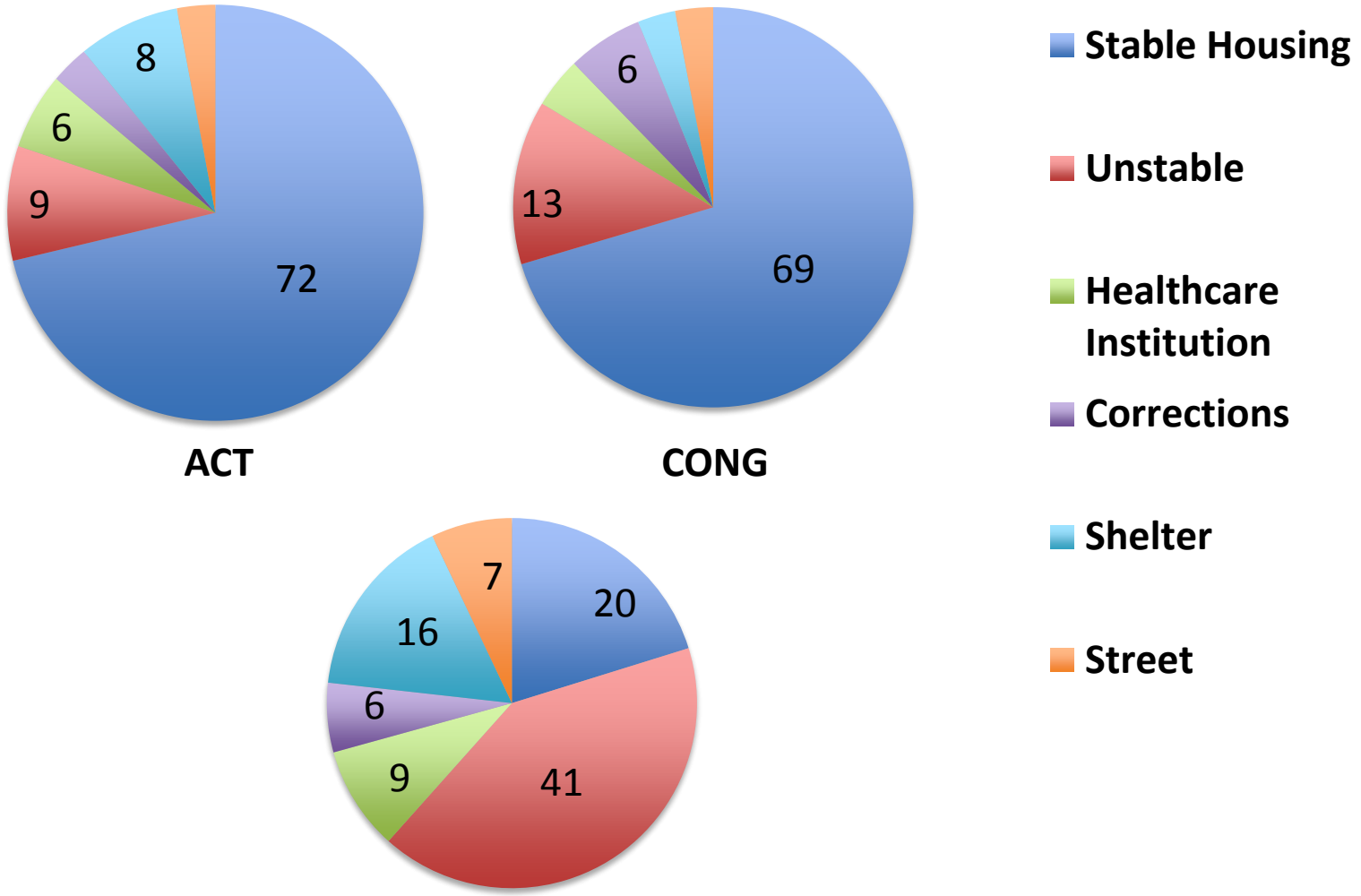
Patterson, Somers & Moniruzzaman (2011). Mental Health & Substance Use.

Mental Disorders & Service Use

	Per Cent
Mental disorder (severe)	73
Mental disorder (less severe)	53
2 or more mental disorders	48
Substance dependence	58
Daily substance use	25
Poly-substance use	38
ER visit (past 6 months)	58
3 or more ER visits	22
Arrested (past 6 months)	36

In the year after enrollment, where were participants living?

Living Situation: mean % of Year 1

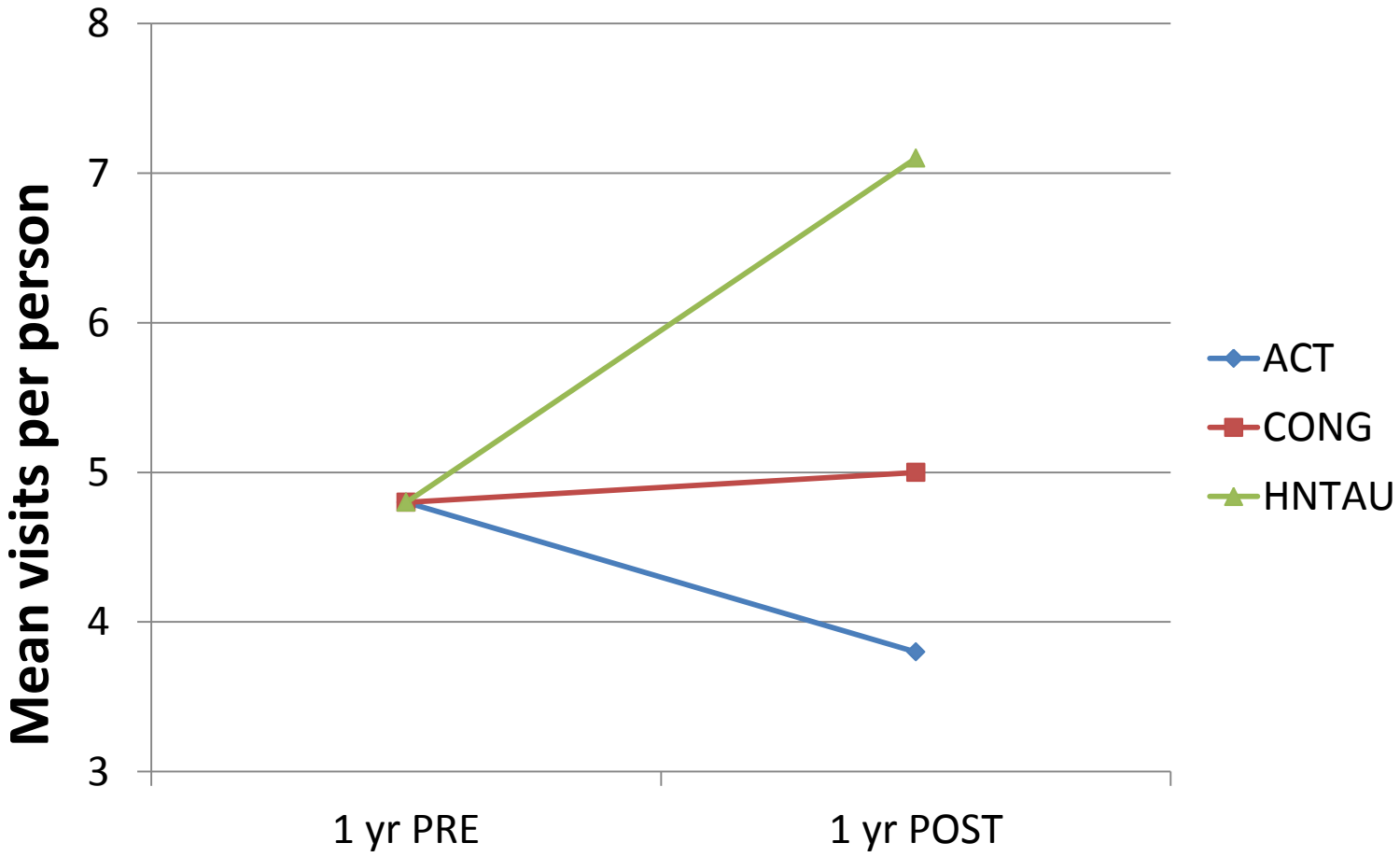


Stable Housing by Substance Dependence

Substance Dependence	YES (n=279)	NO (n=199)
	% Days in Stable Housing	% Days in Stable Housing
Housing First	72	71
TAU	19	20

Palepu, Patterson, Moniruzzaman et al. (in press). American Journal of Public Health.

Emergency Room Visits



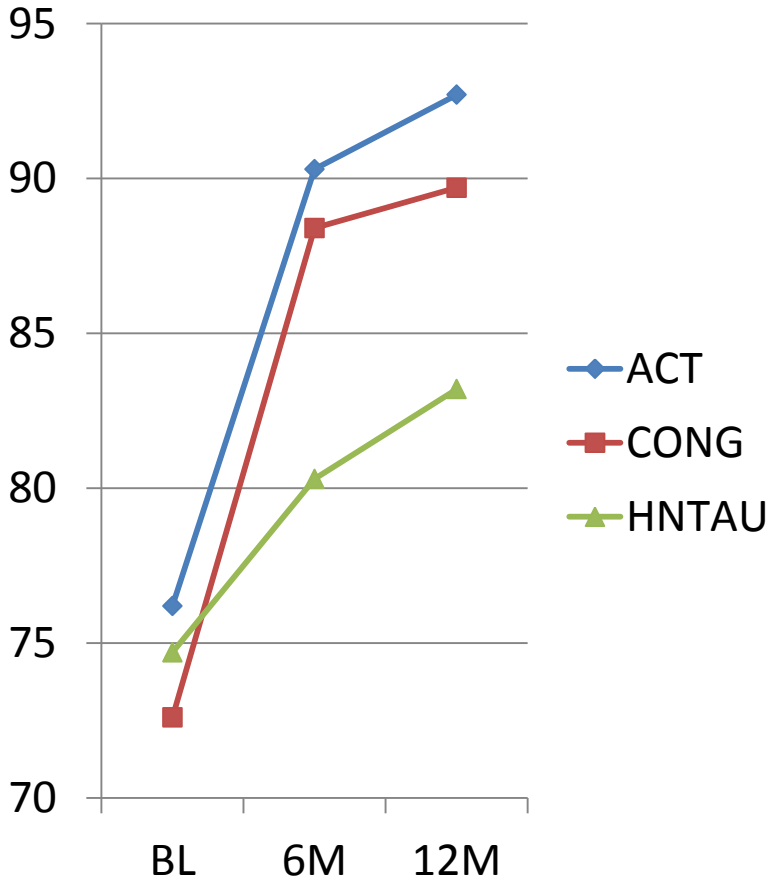
Rusolillo, Somers, Moniruzzaman et al. (under review). Intl J Housing Policy.

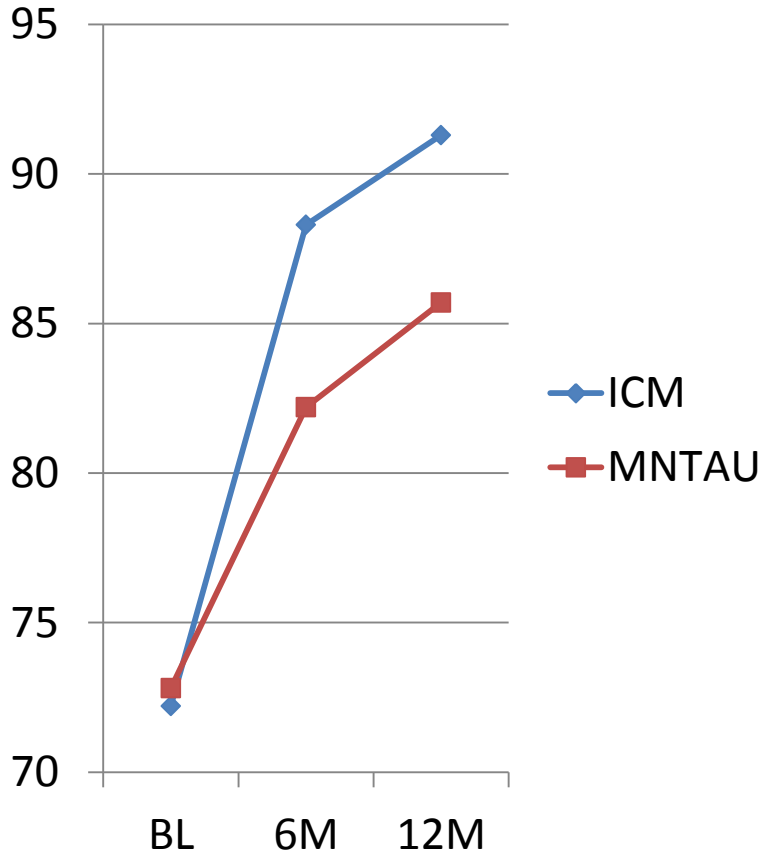
Re-offending

- High Needs only
- 67% with criminal justice history (BC)
- 8.07 convictions per person over 10 yrs.
- Most common – property offences
- Up to 2 years post (compared to HNTAU):
  - ACT: **71% fewer**
  - CONG: **45% fewer**

Somers, Rezansoff, Moniruzzaman et al. (2013). PLOS-One.

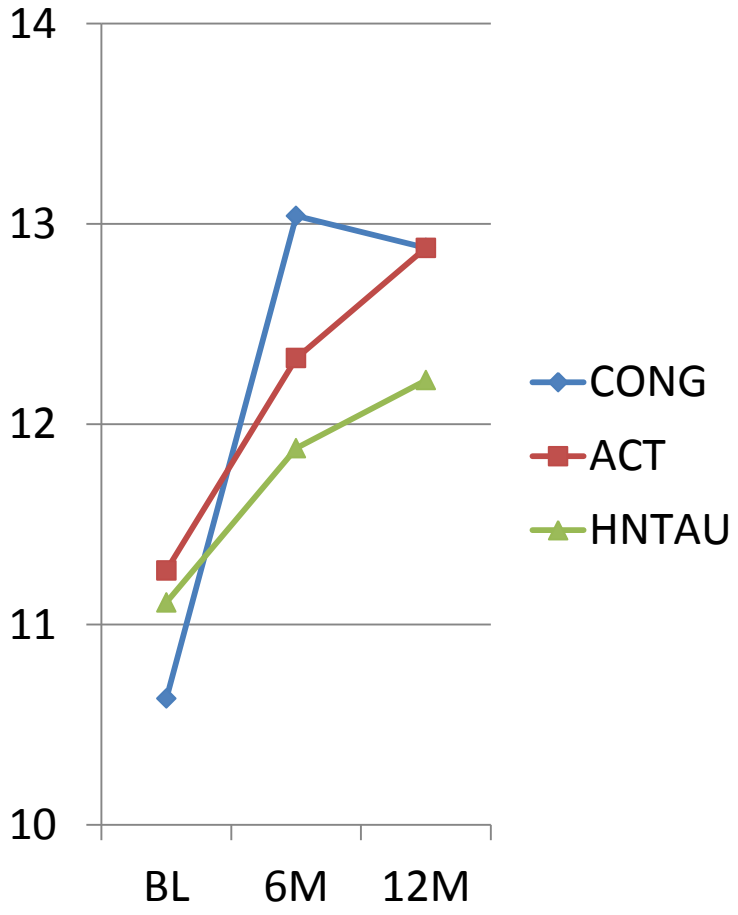
Quality of Life

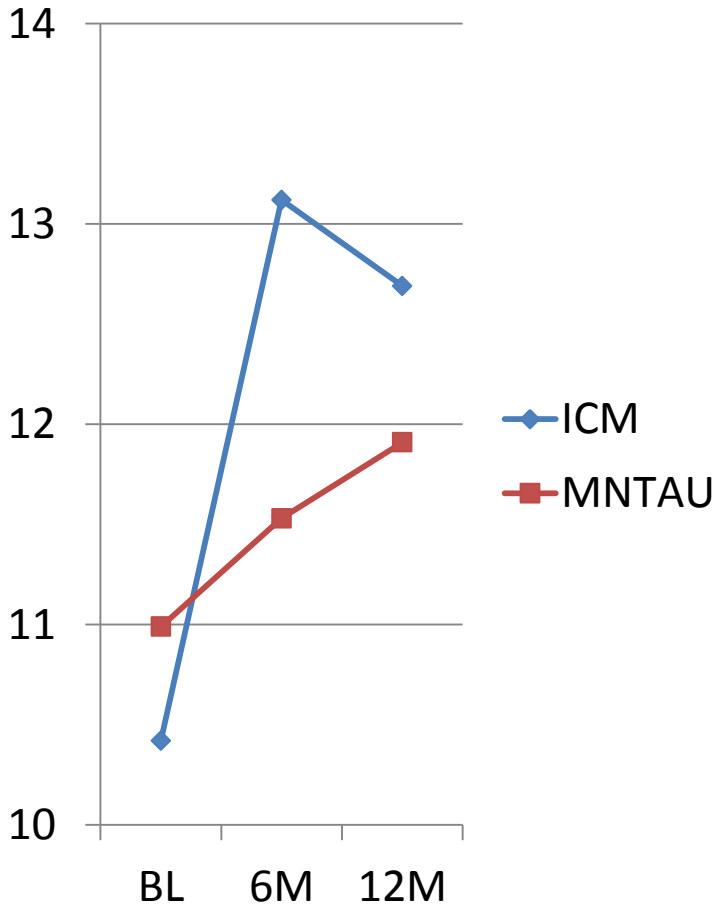




Patterson, Moniruzzaman, Palepu et al. (2013). Social Psychiatry & Psychiatric Epidemiology.

Community Integration





Patterson, Moniruzzaman & Somers (under review). Community Mental Health Journal.

Recovery Trajectories (Narrative interviews at 0 & 18 mo)

	Positive	Negative	Mixed	Neutral
Housing First (n=28)	17	0	9	2
TAU (n=15)	3	5	2	5

Patterson, Rezansoff, Currie & Somers. (2013). BMJ Open.

Conclusions

Housing First results in a number of benefits to individuals & society:

- Good quality housing; range of neighbourhoods
- Intensive & high quality supports
- Re-housing after evictions & planned moves
- Choice
- Need for social and vocational opportunities

HF is an important part of an array of housing & support services.