Homelessness & Health: Comorbidity – At Home & Forward?

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3X MacDonald's Employee-of-the-Month

Acknowledgments

◆ **Most importantly, the persons who have experienced homeless. Special recognition of the National Drug Research Centre, UNSW, Sydney, Australia**

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Acknowledgments

Current Projects

◆ **<u>Training-Related Research & Activities</u>**
Research Training Program in Population Health Intervetion Research

◆ **<u>Homelessness & Poverty-Related Research</u>**
Supportive Housing for Persons with Serious Mental Illness & Addictions
Inner-City Inclusivity, Olympics & Health
Rural-Urban Migration, Homelessness & Health Services/Status
Health Professionals' Attitudes toward Homeless Persons
Use of Health & Social Services by Homeless Persons

◆ **<u>Health Literacy, & Literacy & Health Research</u>**
Health Literacy in School Children
Health Literacy in Street-Involved Youth

◆ **<u>Health-System Reform & Marginalized Groups</u>**
Health Regions & Nonmedical Determinants of Health
Children Living with HIV/Aids
Adolescents' Concepts of Depression & Related Help-Seeking

◆ **<u>Measuring the Health of Communities</u>**
Built Environment, Health and Health Equity
Measuring Community Capacity

Overview of Presentation

◆ **Comments on Current Homelessness**

◆ **The At Home/Chez Soi Project**

◆ **Comorbidity in the At Home Sample**

◆ **Dealing with Comorbidity in Clients with Substance Use (Addiction) and Serious Mental Illness(es)**

◆ **Closing Comments and Future Directions**

A Continuum of Absurdities

There is <u>No Role</u> for Public &
Population Health in
Addressing Homelessness

Public & Population Health is
<u>Totally Responsible</u> for
Addressing Homelessness

What is the <u>Preferred Future</u> for
Public & Population Health
in Addressing Homelessness

Questions to Consider This Morning

◆ What is the 'role' and *capacity*' of the health and housing sector(s) to address comorbidity in homeless SAMI clients?

◆ What are the **practical,** *administrative &*
policy implications of engaging health &
housing practitioners/academics
in addressing comorbidity?

◆ What is the *preferred* future for addressing comorbidity in homelessness?

The Iceberg Paradigm for Homelessness, Mental Health and Addiction

MH and Addiction
Increases the risk for
Substandard housing
Significantly!!!

As well as risk for HIV
Deviant behaviour
ER use and dying
early!!!

IDU
Stimulants
Psychosis
Mood D.
Personality D.
Severe trauma

"Absolute homeless"

Shelter

"Relative homeless"

Substandard Housing - SRO

Low Income
independent Housing

Lifetime in the US 7,6% of
The population

Appropriate treatment
Is preventing homelessness
For those clients and
Is necessary to end it

Integrated care
Institutional
ACT, ICM
Substitution, NAOMI
VAMP program

Coming from Vancouver…

◆ Special Features of our City

 ◆ A downtown core that has developed an international reputation for rampant drug use and high rates of HIV/ AIDS

 ◆ An urban aboriginal population that has serious, significant social and health challenges

 ◆ A large homeless population

 ◆ A Health Care system that has initiated controversial programs for dealing with IDU and associated problems

 ◆ Poorly coordinated mental health and addiction services

Thanks to Dr. M. Krausz

The Local Context of Homelessness

◆ **130.000** in BC meet criteria for severe addiction and mental illness; severe addicted with mental illness, who are inadequately housed - **6500-13000**

◆ DTES = 16,000 people, 5000-6000 **IDU**, 6000 stimulant users, 3000 with untreated or poorly-treated psychosis, **HIV** rate comparable to Botswana, many have multiple co-morbidities (physical, dental, mental)

◆ Overrepresentation of **aboriginal** people disconnected from their culture

◆ In a recent Hotel Survey > 2/3 of the residents had psychotic symptoms

◆ Many homeless people were clients of foster-care programs as children, a disproportionate number have long-term disabilities.

Costs of Homelessness

◆ System costs up to 6B/yr with most incurred by 10% most severe (~ $55,000 per person)

◆ **Three years, a thousand visits!** Schaulis et al. Annals of Emergency Medicine. 2001; 38:87-89

◆ **Supported housing for everyone at risk of homelessness would be expensive, we found the cost of doing nothing is even higher:**

for absolutely homeless, non-housing service costs $644.3M/year in BC

average homeless adult with addictions/mental illness costs $55,000+/yr

housing & supports would cut this by $18K per person/year ($211M) [does include costs to businesses, tourism etc.]

2007. Patterson, M. Frankish, J., McIntosh, K. & Shiell, A. Housing & Support for Adults with Severe Addictions and/or Mental Illness in British Columbia, March. Prepared for the BC Ministry of Health by The Centre for Applied Research in Mental Health and Addiction (CARMHA), March, Vancouver.

Lookout Vancouver 2007 Data

Primary Reasons for Homelessness
Lookout"s Shelters April 1, 2006 - March 31, 2007

- Evicted Accommodation
- Emotional Support
- Medical Needs
- Mental Health (no Addictions)
- Addictions (no Mental Health)
- MH & Addictions
- Behaviour
- Transient
- Robbed/Victimized
- Poverty/Housing
- Other
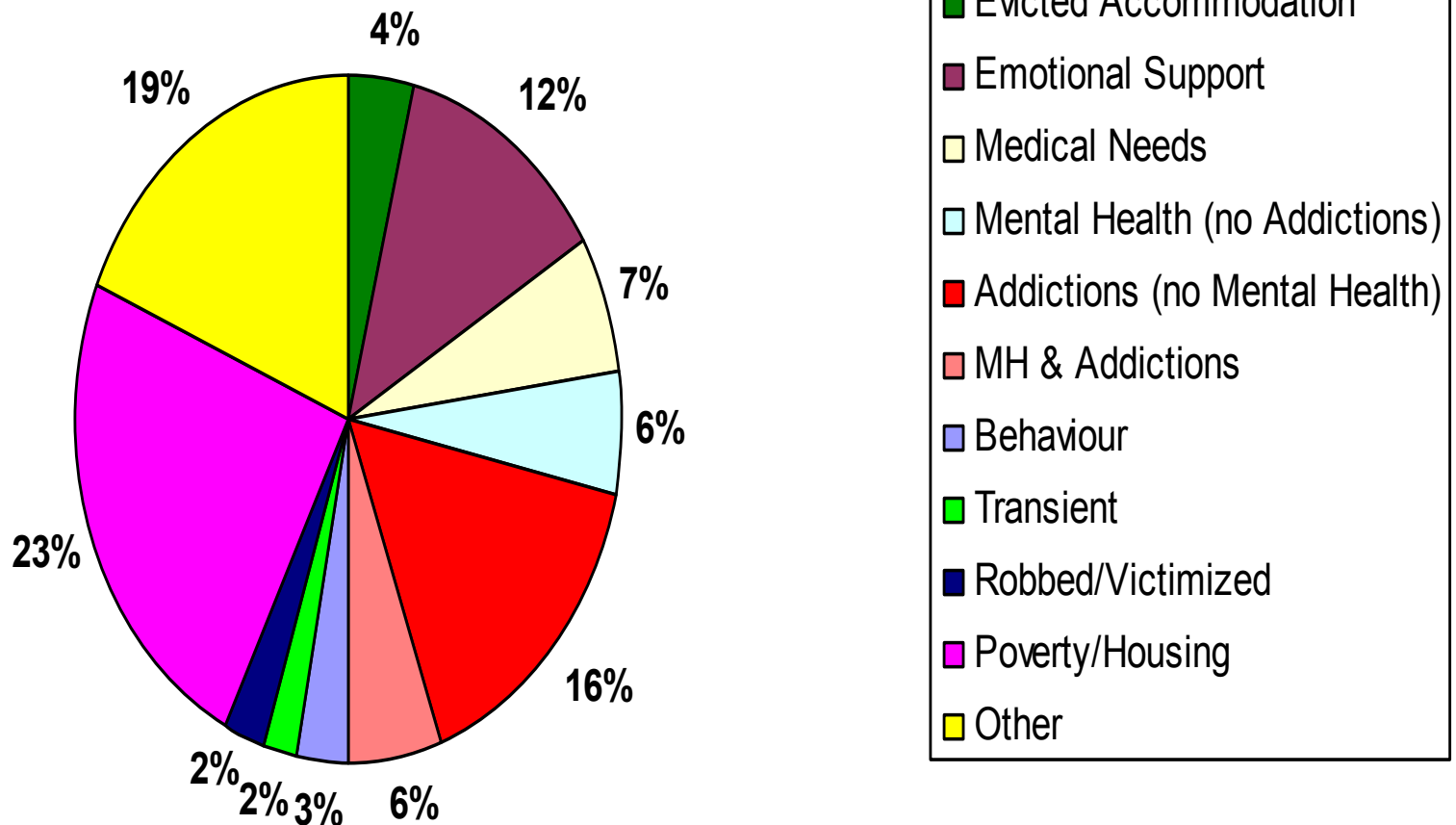
Street Youth Profile

- 63% grew up in a family that had it hard to maintain housing

- 50% reported having difficulty maintaining consistent housing

- 43% had prior involvement with Child Protection Services

- 68% come from foster care, group homes or a youth centre

- 62% had dropped out of school, 73% were not currently employed

- 22% said they did not have a positive role model in their life

- 42% described growing up in a chaotic home environment

- 24% had some form of sexual, physical or emotional abuse

- 37% said that they witnessed substance abuse in their families

- 71% had previous criminal justice system involvement

- 21% had children or were pregnant or had a pregnant partner

BC Street Youth Profile

- 63Aboriginal youth were disproportionately seen among marginalized and street-involved, and increased sharply since 2000 (from 36% to 57%).

- Gay lesbian, bisexual and questioning teens were also over-represented

- 40% had spent time in government care

- More than 1/3 of youth staying in an abandoned building, tent, car, squat or on the street, were still attending school.

- Marginalized and street youth were 3X more likely to be physically or sexually abused than youth of same age in school (AHS 2003).

- More than half of youth reported one or more mental or emotional health concerns.

Against the Odds: A profile of marginalized and street-involved youth in BC, McCreary Centre Society, 2007.

Self-Reported Trauma in BC Homeless
(M. Krausz et al, 2009)
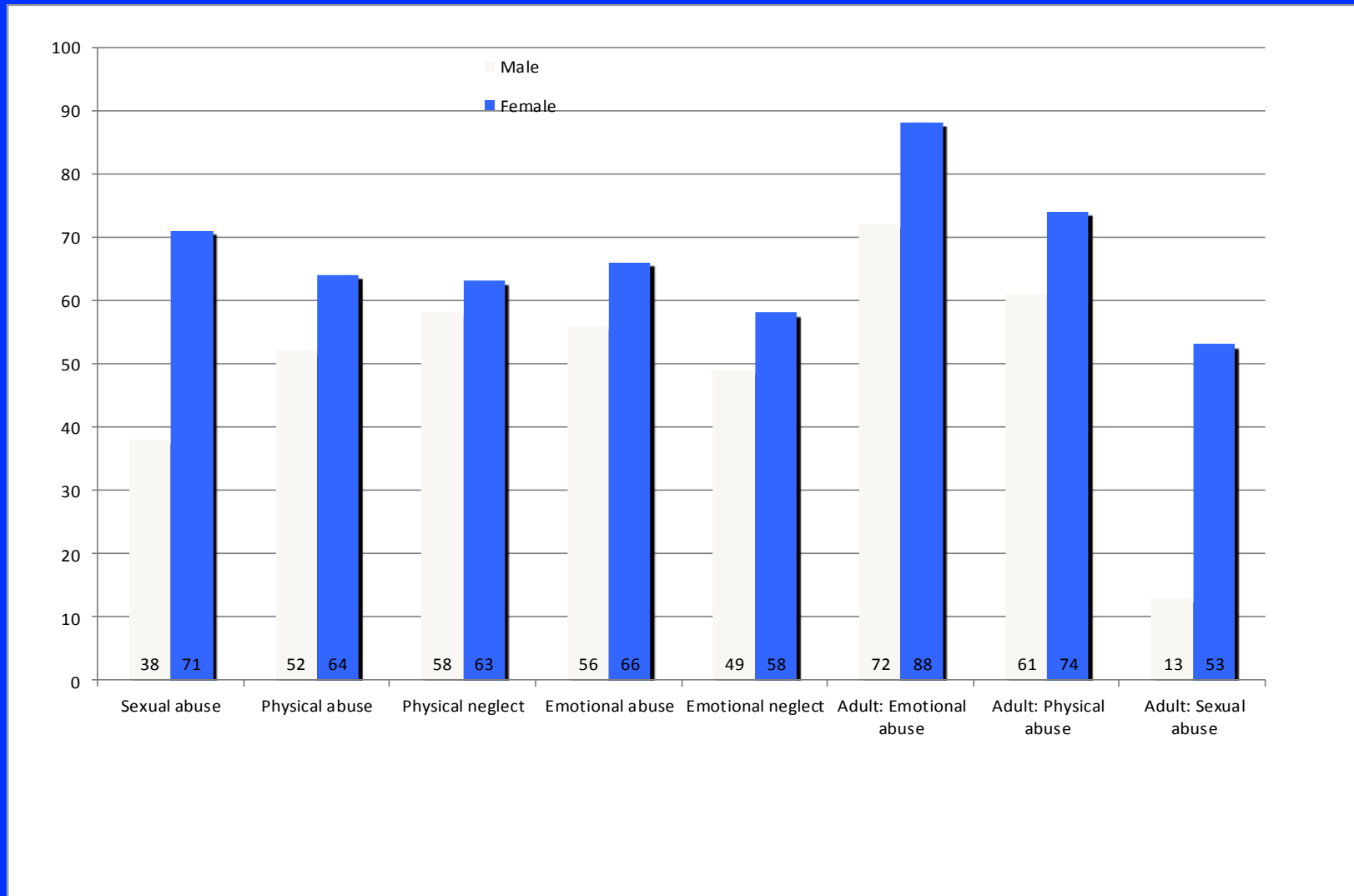
Thanks to Dr. M. Krausz

Childhood Trauma Questionnaire and Suicide

Association between CTQ Measure and <u>Suicide Attempts</u>

CTQ		Suicide Attempt (No) n=295 (%)	Suicide Attempt (Yes) n=179(%)	Un-Adjusted Odds Ratio (95%CI)	Adjusted * Odds Ratio (95%CI)
Emotional Abuse	Minimal to Low	141 (47.8%)	54 (30.2%)		
	Moderate to Severe	154 (52.2%)	125 (69.8%)	2.12 (1.43-3.14)	1.92 (1.28-2.88)
Physical Abuse	Minimal to Low	152 (51.5%)	58 (32.4%)		
	Moderate to Severe	143 (48.5%)	121 (67.6%)	2.22 (1.51-3.27)	1.98 (1.32-2.97)
Sexual Abuse	Minimal to Low	168 (56.9%)	66 (36.9%)		
	Moderate to Severe	127 (43.1%)	113 (63.1%)	2.26 (1.55-3.32)	1.76 (1.17-2.66)
Emotional Neglect	Minimal to Low	159 (53.9%)	72 (40.2%)		
	Moderate to Severe	136 (46.1%)	107 (59.8%)	1.74 (1.19-2.53)	1.66 (1.12-2.45)
Physical Neglect	Minimal to Low	133 (45.1%)	56 (31.3%)		
	Moderate to Severe	162 (54.9%)	123 (68.7%)	1.8 (1.22-2.66)	1.63 (1.08-2.48)

* Adjusted by age, gender, aboriginal ethnicity and study sites

BC Homeless Survey, 2009 adapted from Bernstein et al 2003, Child Abuse & Neglect

The CEDAR Study

◆   Risk factors for trauma:

◆   at least one parent in Residential school (P 0.022).

◆   in Foster Care (P 0.001).

◆   Self harm (P 0.001).

◆   Lifetime suicidal ideation (P 0.001).

◆   Suicide attempts (P 0.001).

◆   Overdose (P 0.001).

◆   ever inject (P 0.001)

More on Vancouver Situation

- Highest **suicide** rate in the world, especially among First Nation youth and adolescents

- Very high level of early **trauma** e.g. "CEDAR study" in BC on drug using First Nation Kids found 70% of sexual abuse among females, average first abuse age 6 years.

- Extreme high levels of substance **use**, and especially stimulant use, - highest level of use among all ethnic groups

- High risk for virtually all health and social problems. Lowest life expectancy of First Nations compared to any Canadians

- Mental Health and Addiction are the most important risk factors associated with living in sub-standard housing

- In a recent Hotel Survey in the Vancouver DTES over 2 third of the residents had psychotic symptoms.

- A disproportionate number of homeless people are designated as having long-term disabilities.

Thanks to Dr. M. Krausz

Concurrent Disorders in Vancouver

- People with severe Concurrent Disorders are the most seriously ill, the most needy and the most poorly served group in Vancouver (and worldwide?)

- Greatest gap between medical needs (e.g. higher morbidity and higher mortality) and service access/utilization.

- Highest likelihood of being excluded or banned from existing health and service programs.

- Least likely to be identified in planning documents, strategic plans or position papers as being in need of service.

- **Limited Accessibility** to services for individuals with addiction and concurrent disorders.

- Lack of a **continuum of care (**limited program capacity, stove-piped programs, lengthy waiting times, inconsistent treatment philosophies)

- Lack of **integration** between addiction, mental health and physical health programs. Marginalization and **homelessness** leads to disconnection from mainstream services

Thanks to Dr. M. Krausz

National At Home/Chez Soi Project
(special thanks to Julian Somers & Michael Krausz)

- 5 sites: Vancouver, Winnipeg, Toronto, Montreal, Moncton, $130M

- 5 years: 2008-2013; Adaptive randomized controlled trial design

- Examining outcomes of different models of housing + support

- Shared methods across sites <u>and</u> Vancouver-specific components

Based on Housing First

◆ Provides immediate access to permanent housing and support services

◆ Promotes consumer choice

◆ No requirement to participate in psychiatric treatment or abstinence to obtain housing

◆ Widely evaluated and empirically supported for mental illness. Less well-established for complex Substance Use Disorders

◆ Congruent with the values of harm reduction

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Hypothesis on Homelessness and Health

◆ **Mental illness** and harmful use of psychotropic substances are significantly more prevalent among homeless individuals than in the general population

◆ They suffer **early childhood trauma** to a higher degree, have to grow up in foster care or suffer other developmental barriers

◆ Trauma and ongoing **traumatizing** experiences are an ongoing catalyst of instable living and social marginalization

◆ Despite their high needs they don't have sufficient access to **care** and may use the system in a dysfunctional way (primarily Emergency Rooms)   **adapted from Krausz, 2009**

The Study Design (Vancouver)
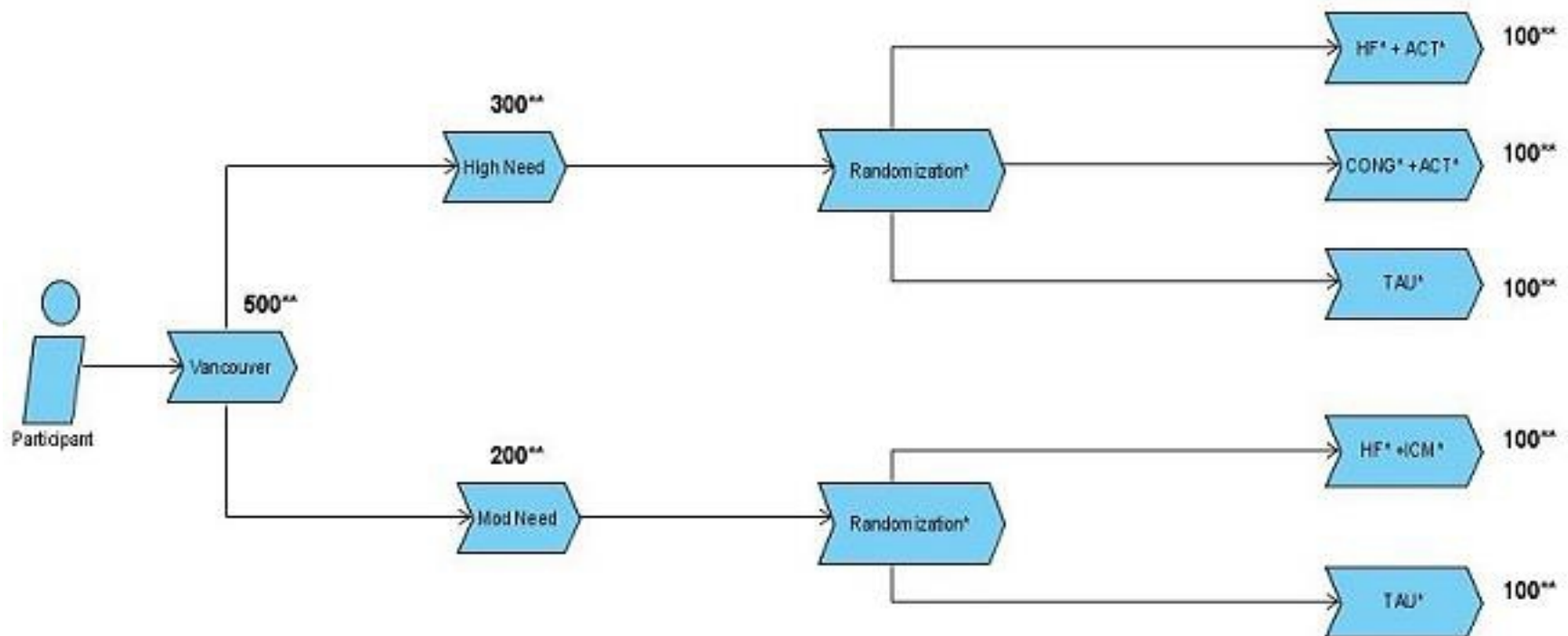
Chez Soi Clients

Chez Soi - At Home Clients
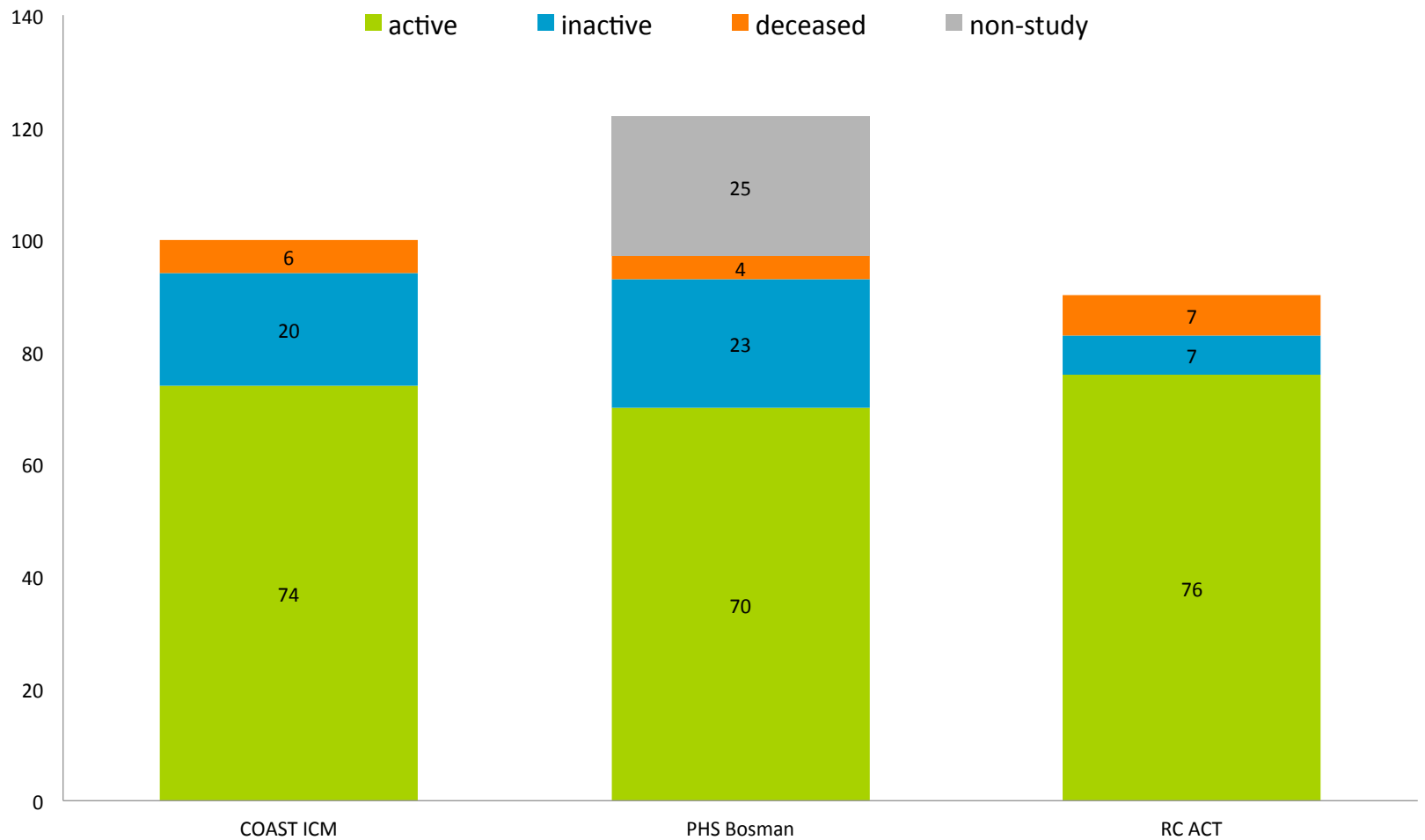
The Measurement Framework

Outcome Domain	Related Concepts
Housing	Stability, Choice, Perceived Quality
Health Status	Mental Health/Addictions, Physical, Cognitive Impairment
Functioning	General Community Functioning, Perceived Recovery, Community Integration
Quality of Life	Generic quality of life (health status), Condition-specific quality of life
Vocational Employment/	General status re: work, including income and sources
Health, Social and Justice Service Use	Healthcare access, Healthcare use, Social services use, Justice services use
Victimization	Victimization, property and person

The Administration Protocol

Measure	Time Point (Mos)								
	BL	3	6	9	12	15	18*	21	24
Screening Interview MINI International Neuropsychiatric Interview	X								
Demographics	X								
Housing, Vocational, Service Use History	X								
Physical Health Status Comorbid Conditions	X								
Residential Time Line Follow Back Vocational Time Line Follow Back		X	X	X	X	X	X	X	X
Modified Colorado Symptom Index GAIN-Substance Problem Scale	X		X		X		X		X
EQ-5D SF-12 Quality of Life Interview - 20 incl. Social Support and Food Security	X		X		X		X		X
Recovery Assessment Scale	X								X
Community Integration Scale	X		X		X		X		X
Health, Social, Justice Service Use	X		X		X		X		X
Perceived Housing Quality and Landlord Relations			X		X		X X		X
Working Alliance Inventory			X		X		X		X
Cognitive Impairment			X						
Service Satisfaction Scale -10									X

The At Home/Chez Soi trial protocol: a pragmatic, multi-site, randomised controlled trial of a Housing First intervention for homeless individuals with mental illness in five Canadian cities

Paula N Goering,[1] David L Streiner,[2,3] Carol Adair,[4] Tim Aubry,[5] Jayne Barker,[6] Jino Distasio,[7] Stephen W Hwang,[8] Janina Komaroff,[9] Eric Latimer,[10] Julian Somers,[11] Denise M Zabkiewicz[12]

ABSTRACT
Introduction: Housing First is a complex housing and support intervention for homeless individuals with mental health problems. It has a sufficient knowledge base and interest to warrant a test of wide-scale implementation in various settings. This protocol describes the quantitative design of a Canadian five city, $110 million demonstration

ARTICLE SUMMARY

Article focus
- An evaluation of the cost-effectiveness of Housing First in comparison to treatment as usual for homeless adults with mental illness in five Canadian cities with a 2-year follow-up.
- Primary outcomes include housing stability,

Trial Registration # - ISRCTN42520374

Levels of 'Need' in At Home Project

◆ **<u>High </u>Needs:** High Needs: 1) <62 Multnomah Community Ability Scale (MCAS); AND 2) A Mini International Neuropsychiatric Interview (MINI) diagnosis of current psychotic or bipolar disorder OR observations of psychotic disorder by referral source; AND 3) One of: a) Two or more hospitalizations for mental illness in any one year in last five years OR b) Co-morbid substance use OR c) Recent arrest or incarceration (or don't know or declined to answer).

◆ All other eligible participants were considered **Moderate Needs**. Moderate Needs who self-identified membership in an Ethno-Racial group were given a choice to participate in a regular ICM program or an Ethno-racial focused ICM program, as long as space was available in both groups.

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Comparisons of Comorbid Conditions in 'At Home' Participants by Need Level

	Overall	HN	MN	P value
	N (%)	N (%)	N (%)	
Mental disorders				
Psychotic Disorder/Schizophrenia	263 (53)	211 (71)	52 (26)	**<0.001**
Major Depressive Episode	199 (40)	95 (32)	104 (52)	**<0.001**
Post Traumatic Stress Disorder (PTSD)	129 (26)	63 (21)	66 (33)	**0.003**
Mood disorder with psychotic feature	97 (19)	68 (23)	29 (14)	**0.021**
Substance Dependence	288 (58)	183 (62)	105 (52)	**0.043**
Three or more mental disorders	114 (25)	78 (28)	36 (20)	**0.032**
Physical illness				
Asthma	103 (21)	50 (17)	53 (26)	**0.009**
HIV/AIDS	43 (9)	18 (6)	25 (12)	**0.012**
Stroke	27 (5)	19 (6)	18 (9)	**0.016**
Alzheimer's disease or dementia	287 (58)	157 (53)	118 (59)	**0.037**
Foot problems	189 (38)	115 (39)	130 (65)	**0.007**
Multiple (≥ 2) physical illness	344 (69)	189 (64)	171 (86)	**0.032**
Multiple (≥ 3) physical illness			155 (78)	**0.001**
Substance use				
Use of Amphetamine	205 (45)	133 (47)	72 (42)	**0.035**

Prevalence of Concurrent Disorders in 'At Home' (n=497) by Housing First Status

	All (N=497)	Housing First (N=297)	TAU (N=200)	P value
	N (%)	N (%)	N (%)	
Psychosis and multiple (≥ 2) physical illness	197 (40)	117 (39)	80 (40)	0.892
Multiple (≥ 2) mental disorders and multiple (≥ 2) physical illness	216 (44)	113 (38)	73 (36)	0.727
Substance dependence and multiple (≥ 2) physical illness	243 (49)	143 (48)	100 (50)	0.685
Daily substance use and multiple (≥ 2) physical illness	128 (26)	77 (26)	51 (25)	0.915
Daily drug use and multiple (≥ 2) physical illness	114 (23)	71 (24)	43 (21)	0.532
IDU and multiple (≥ 2) physical illness	79 (16)	47 (16)	32 (16)	0.958
Poly drug (≥ 2) use (no alcohol) and multiple (≥ 2) physical illness	166 (34)	96 (32)	70 (35)	0.535

Prevalence of Concurrent Disorders in At Home by Need and Housing First Status

	High Need (N=297)				Moderate Need (N=200)		
	CONG	ACT	TAU	P value	ICM	TAU	P value
	(n=107)	(n=90)	(n=100)		(n=100)	(n=100)	
	N (%)	N (%)	N (%)		N (%)	N (%)	
Psychosis and multiple (≥ 2) physical illness	60 (56)	41 (46)	57 (57)	0.218	16 (16)	23 (23)	0.212
Multiple (≥ 2) mental disorders and multiple (≥ 2) physical illness	35 (33)	34 (38)	30 (30)	0.517	44 (44)	43 (43)	0.887
Substance dependence and multiple (≥ 2) physical illness	53 (49)	42 (47)	52 (52)	0.764	48 (48)	48 (48)	1
Daily substance use and multiple (≥ 2) physical illness	32 (30)	17 (19)	30 (30)	0.14	28 (28)	21 (21)	0.25
Daily drug use and multiple (≥ 2) physical illness	29 (27)	16 (18)	26 (26)	0.259	26 (26)	17 (17)	0.121
IDU and multiple (≥ 2) physical illness	16 (15)	14 (16)	17 (17)	0.919	17 (17)	15 (15)	0.7
Poly drug (≥ 2) use (no alcohol) and multiple (≥ 2) physical illness	38 (35)	24 (27)	36 (36)	0.309	34 (34)	34 (34)	1

Comparisons of Comorbid Conditions in 'At Home' Participants by Study Arms

	High Need (n=297)				Moderate Need (n=200)		
	CONG (n=107)	ACT	TAU		ICM	TAU	
	N (%)	(n=90)	(n=100)	P value	(n=100)	(n=100)	P value
		N (%)	N (%)		N (%)	N (%)	
Physical illness							
Blood-borne infectious diseases	12 (11)	2 (2)	4 (4)	0.025*	16 (16)	9 (9)	0.134
Epilepsy or seizure	9 (8)	1 (1)	3 (3)	0.039*	7 (7)	5 (5)	0.552
Presence of any physical illness	4 (4)	1 (1)	9 (9)	0.036*	0 (0)	4 (4)	**0.058***

Documented Mental illness (n=367)

Variables	Overall N (%)	HN N (%)	MN N (%)
Psychotic Disorder (Schizophrenia)	196 (53)	167 (69)	29 (23)
Major Depressive Episode	94 (26)	35 (14)	59 (47)
PTSD	46 (12)	19 (8)	27 (22)
Manic or Hypo-manic Episode	73 (20)	47 (19)	26 (21)
Panic Disorder	8 (2)	3 (1)	5 (4)
Mood disorder with psychotic feature	21 (6)	15 (6)	6 (5)
Two or more mental disorders	72 (20)	42 (17)	30 (24)

Variables with highlights indicate significant differences between HN and MN

Factors Associated with Not Seeing a Service Provider (n=497)

|	UOR (95% CI)	AOR (95% CI)
Age at enrolment	1.02 (1.00, 1.04)	1.02 (0.99, 1.05)
Age of first homelessness	1.02 (1.00, 1.03)	1.01 (0.98, 1.03)
High need	2.46 (1.53, 3.98)	**2.70 (1.47, 4.97)**
Absolutely homeless	2.23 (1.22, 4.09)	**2.37 (1.22, 4.62)**
Psychotic Disorder	2.25 (1.44, 3.53)	1.29 (0.67, 2.49)
Mental disorders (less severe form)	0.61 (0.40, 0.94)	1.40 (0.80, 2.44)
Mental disorders (severe form)	2.34 (1.34, 4.11)	1.03 (0.45, 2.34)
Substance dependence	0.59 (0.38, 0.90)	1.02 (0.57, 1.83)
Suicidality	0.48 (0.29, 0.78)	0.62 (0.34, 1.12)
Use of alcohol	0.52 (0.33, 0.81)	**0.43 (0.26, 0.72)**
Use of cocaine-crack base	0.42 (0.24, 0.72)	0.56 (0.29, 1.07)
Blood-borne infectious diseases (Hep. C/Hep. B/HIV)	0.39 (0.23, 0.67)	0.61 (0.33, 1.10)
Have a regular GP/FD	0.48 (0.31, 0.74)	**0.50 (0.31, 0.81)**

Quantitative Longitudinal Results

◆   Interventions arms were associated with higher housing stability and lower crisis & institutional service use than Treatment-as-Usual (TAU)

◆   Interventions combined were associated with significantly lower offences in post-randomization period compared to TAU

◆   Significantly lower ER admissions in intervention arms compared to TAU

◆   Significant improvement of quality of life score (QoLI20) over time (at 12 months) in interventions among all participants compared to TAU.

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Percentage of past year spent in Stable Housing

Error Bars: 95% CI
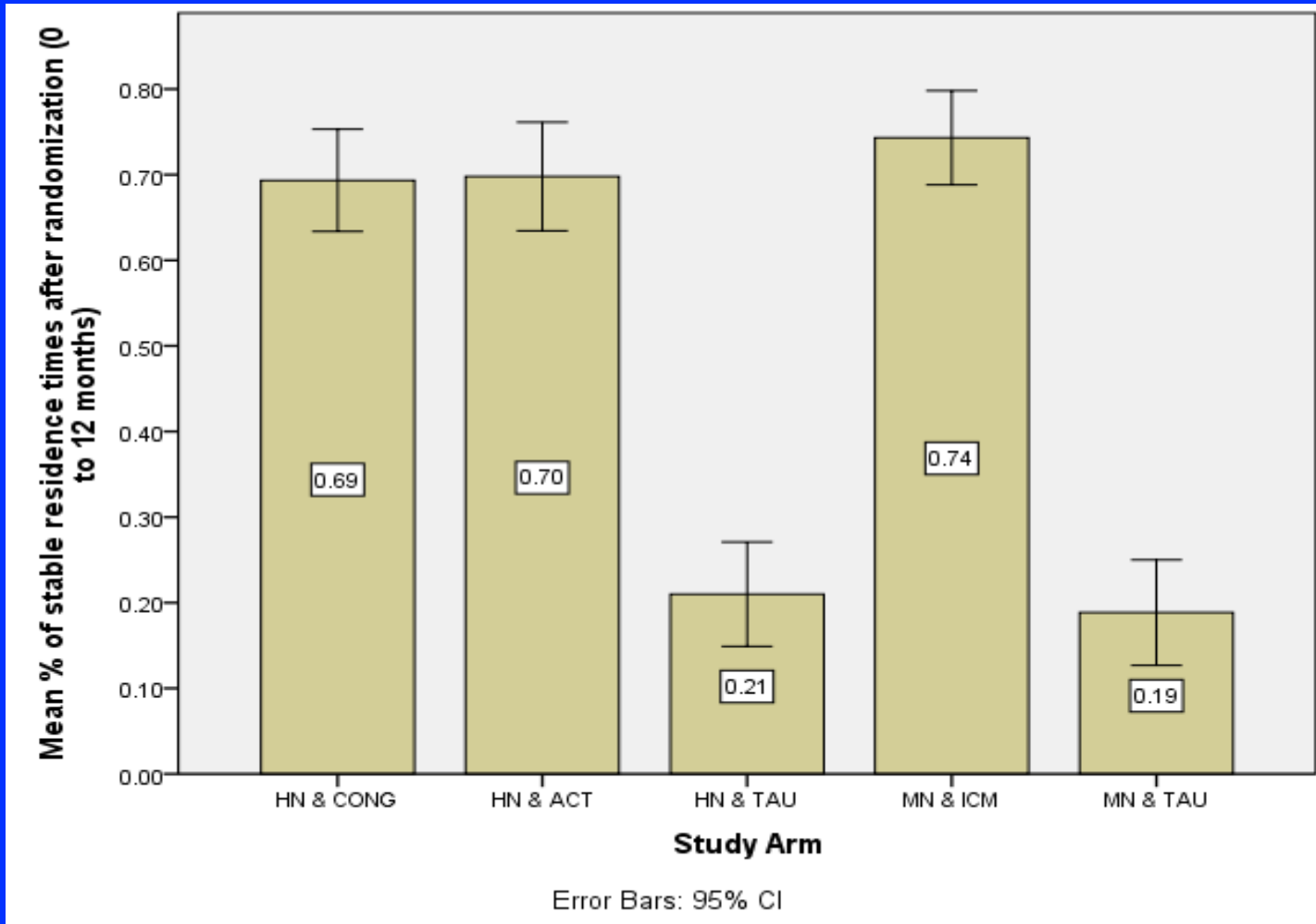
Visits per Year 12 months PRE-POST Study Enrolment for All Participants
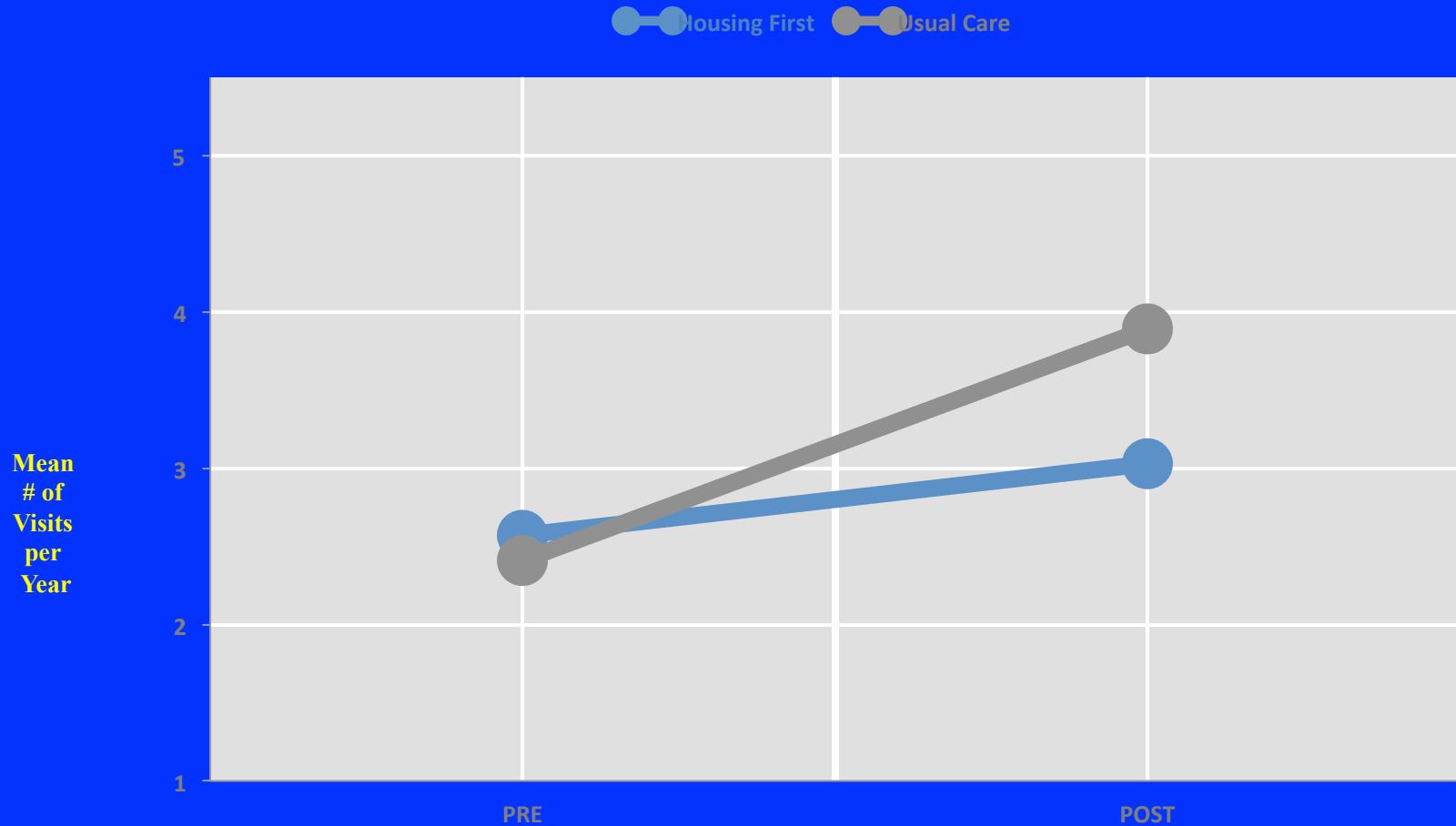
From: Tan de Bibiana, J. (2012) Masters Thesis UBC

Summary of Main Vancouver Findings

- 78% were absolutely homeless 22% were precariously housed.
- first experience of homelessness ~ 30 years old, and for 3 years of their lives
- Psychotic disorder was most prevalent mental illness 53%
- 52% met criteria for 2 or more mental health problems or illnesses
- 81% reported $\geq$ 2 physical illnesses
- 37% had learning difficulties; 65% had head injuries
- 58% reported substance dependence; 29% reported daily illicit drug use
- TAU visits ED 7X/yr.; HF = 3.5/year
- HF reported higher use of outpatient services and lower use of acute services
- Significant and meaningful improvements in community functioning and quality of life were observed among HF participants.
- HF intervention cost $28,282 per year for HN and $15,952 for MN
- $10 invested in HF services saved $8.55 for HN
- For MN, the intervention did not result in any offset, low costs $1.67 for $ investment

Thorny Issues

- Randomization issues
- Involving consumers in all aspects of the project
- Landlord/tenant issues
- Recruitment rates/project timelines
- Interface between research and service
- Managing critical incidents i.e. client deaths/suicide
- Keeping participants engaged i.e. discharge a last resort
- Sustainability/transition planning
- Breaking down silos in service systems
- Ethical challenges/dilemmas

Our Participants' Complex Lives

- 2148 (1158 HF/990 TAU)

- Average age - early 40s

- 32% women, 22% Aboriginal, 25% other ethnic groups

- Total time homeless nearly 5 years; 40% first episode before age 25

- ALL 1 or more mental health issue + 67% substance-use related issues

- > 90% at least one chronic physical health problem

36% some type of justice system involvement past 6 months

- Hidden disability - 40% learning problem, 60% 1+ TBI w/lost consciousness •
Hidden trauma - 62% emotional and 55% physical abuse in childhood
- Current Distress - 30-40% victimized past 6m/ 36% mod to high suicide risk

Housing Stability

HF: 73% days

TAU: 32% days
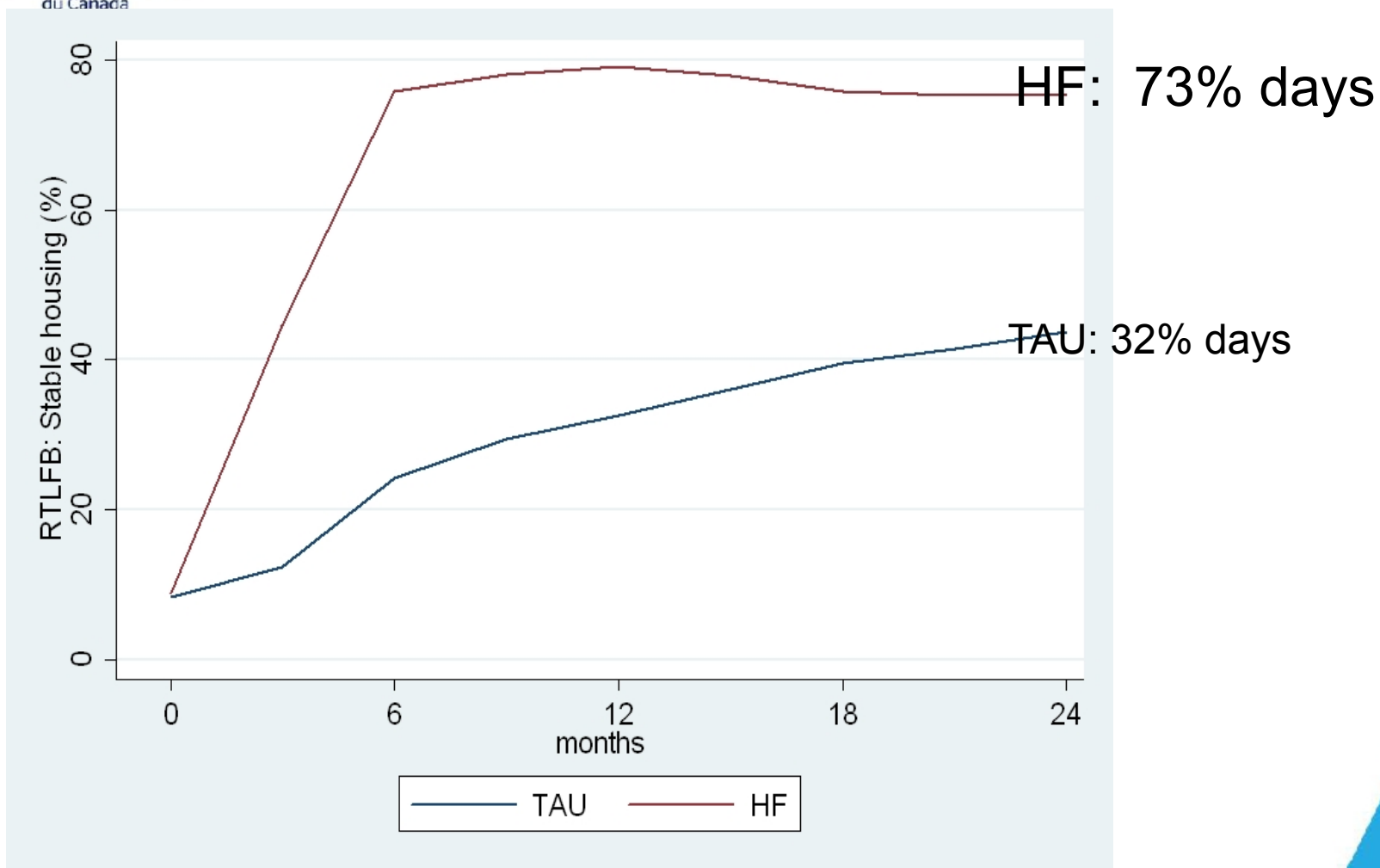
Preliminary analysis of days in stable housing by group and event using mixed effects/ordered LR models with adjustment for age, sex, ethnicity. p<.0001. Analysis for publication will use HLM. Stable housing was defined as living in one's own room, apt, or house, or w/ family, with an expected duration of ≥ 6 months and/or tenancy rights.

Nights in Shelters
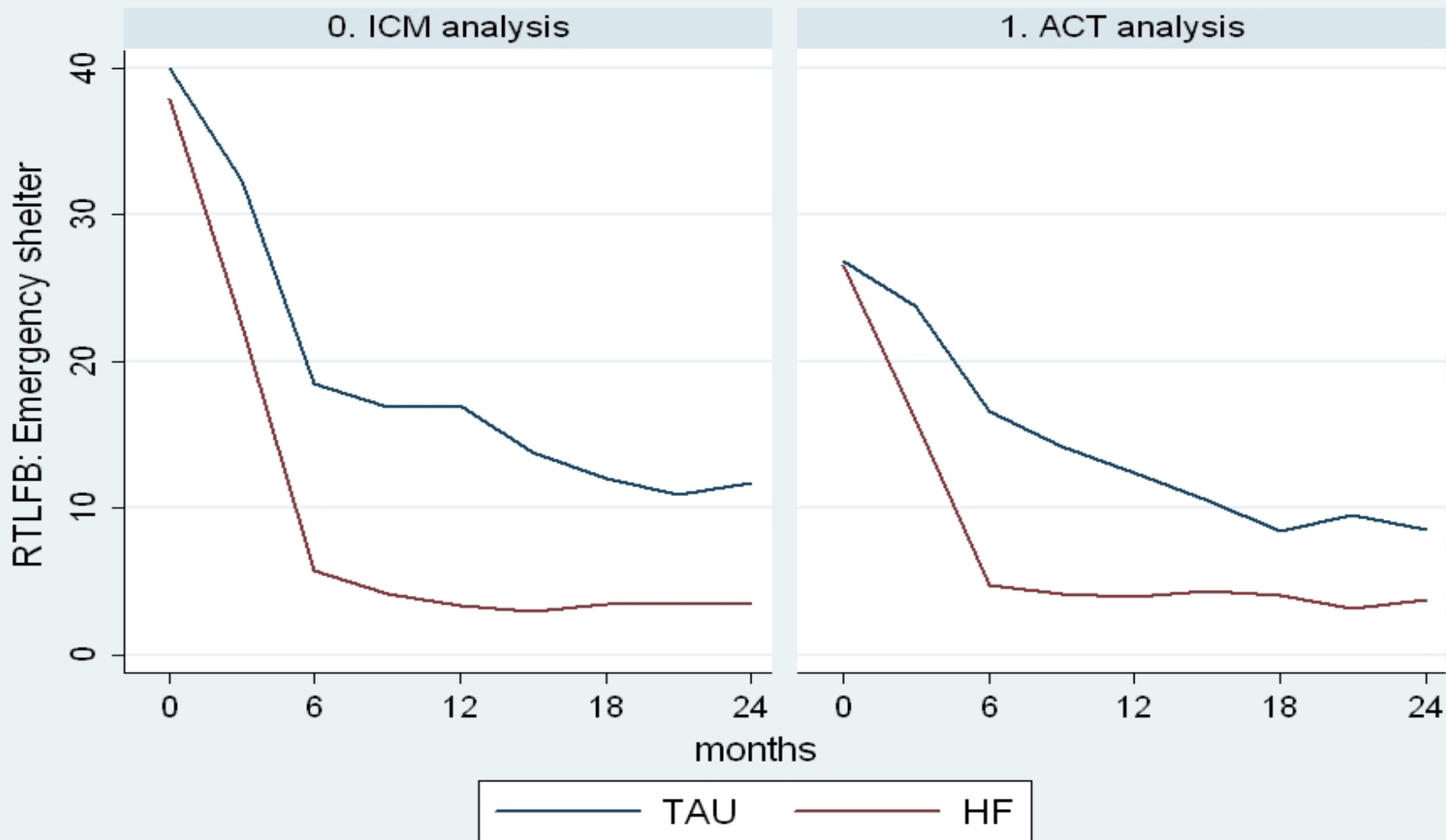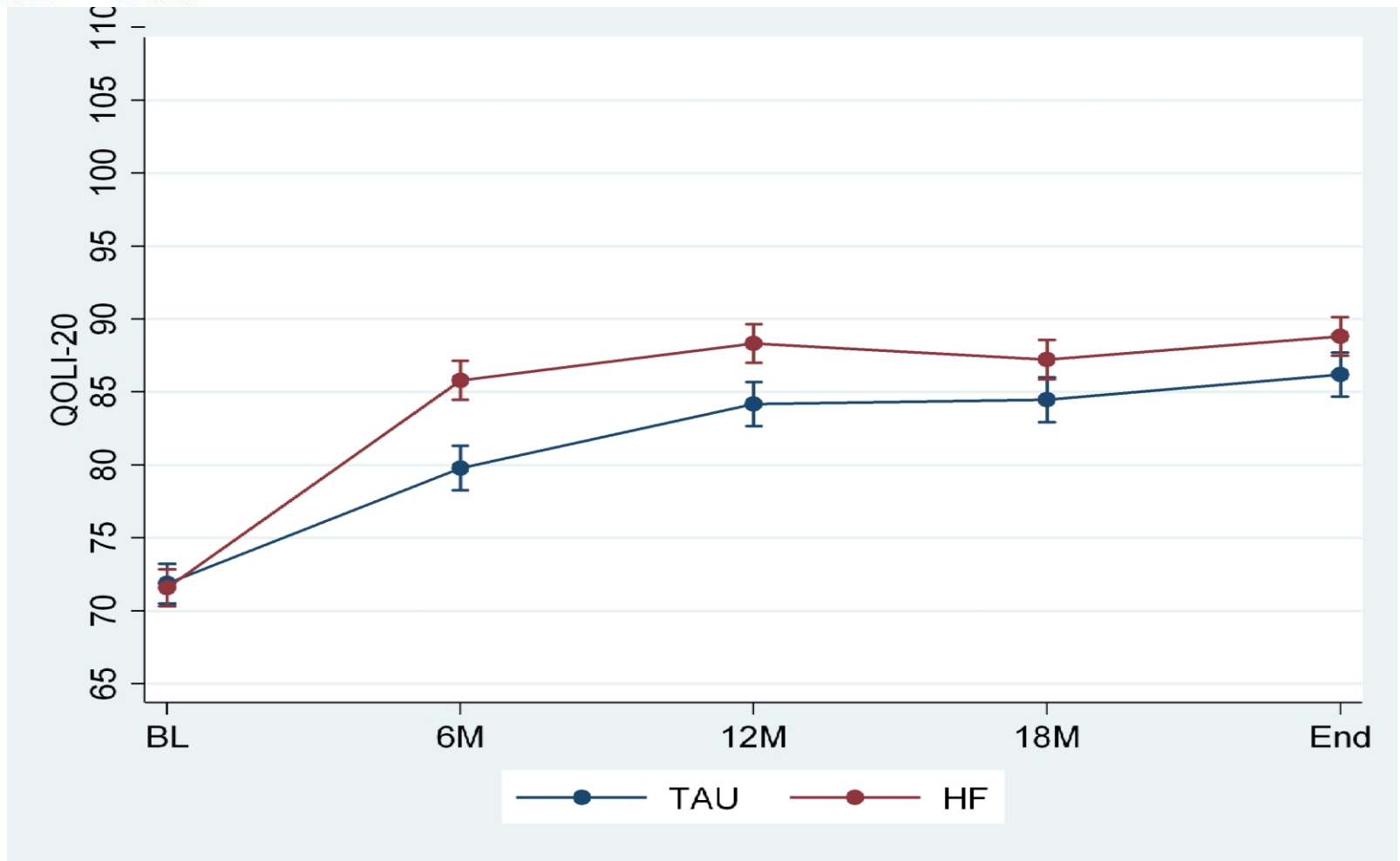

Graphs by analysis_type

Community Functioning
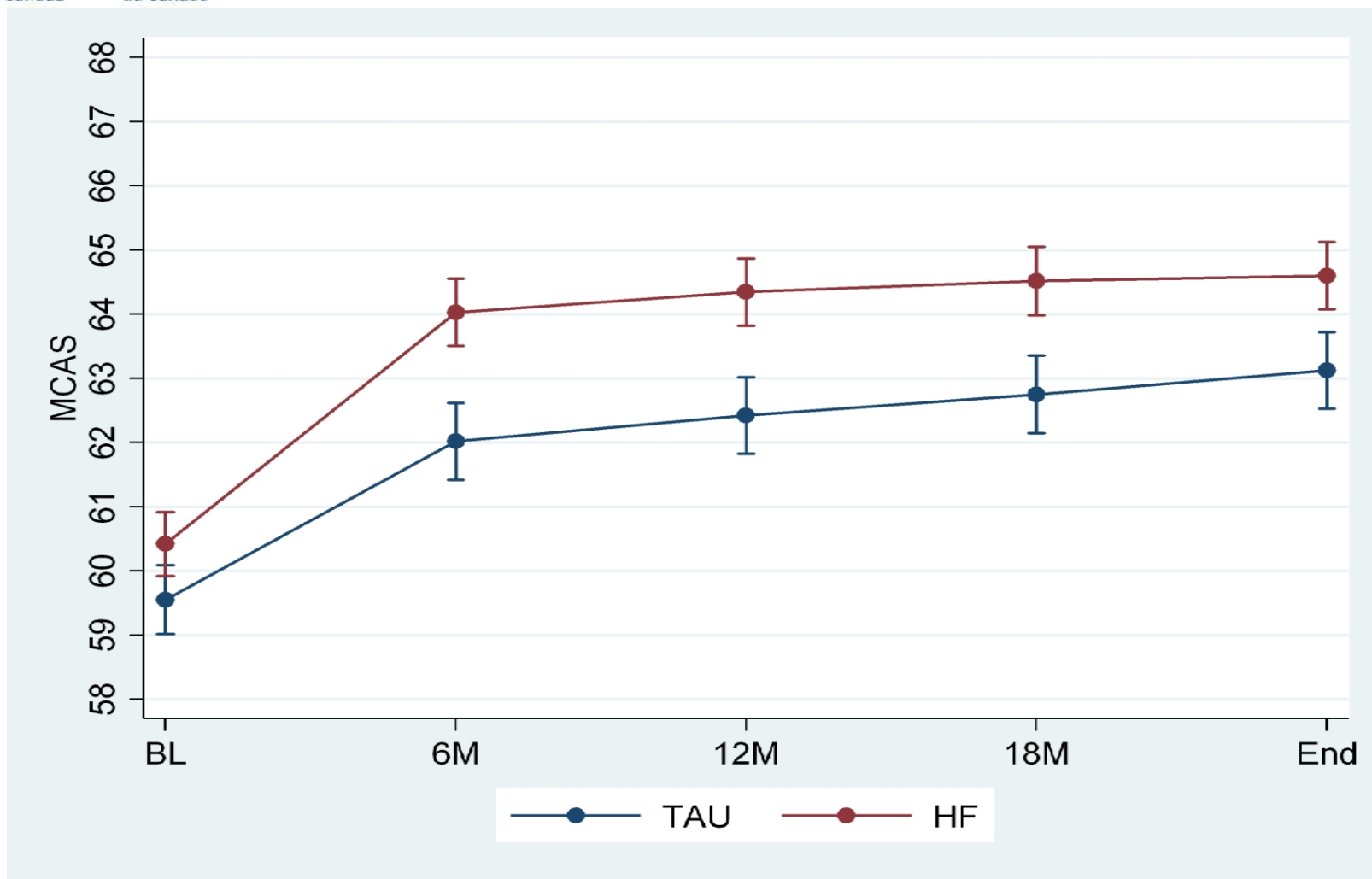
Preliminary analysis of observer-rated MCAS total score using mixed effects MLR group x event adjusting for age, sex, ethnicity. $p < .004$ for average post-BL difference. Analysis for publication will use HLM.

Quality of Life

Preliminary analysis of self-report Qoli-20 total score using mixed effects MLR group x event adjusting for age, sex, ethnicity. p<.001 For average post-BL difference. Analysis for publication will use HLM
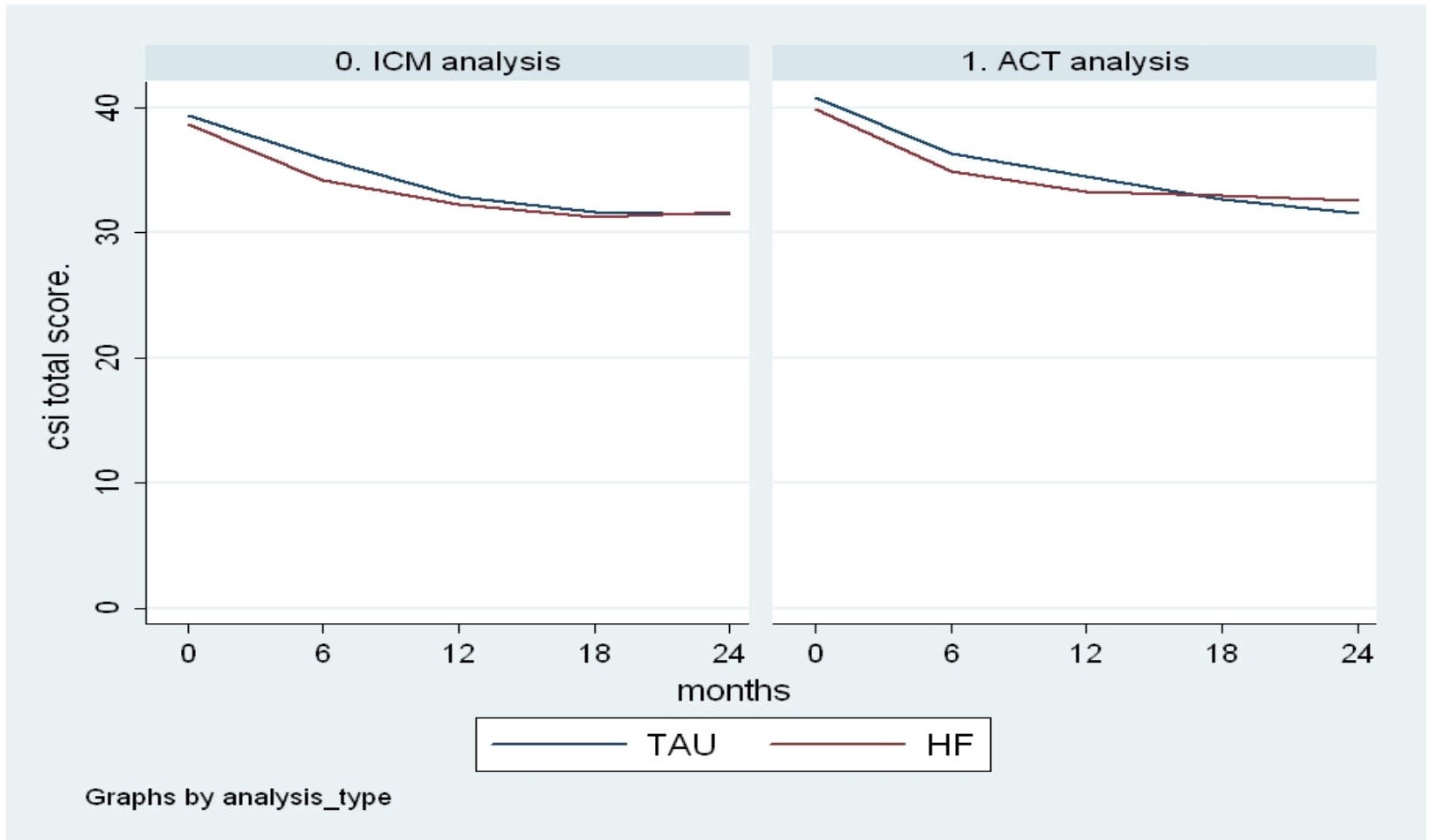
Mental Illness Symptoms

Graphs by analysis_type

Other Outcomes*

- Both groups improved on substance-use related problems

- Both groups maintained physical health

- Health and justice service use (e.g. ER, hospitalizations, police contacts, arrests, incarcerations) being examined using self-report and administrative data - some very interesting patterns of change!

- Mortality being examined using Vital Stats data

* Publications forthcoming by Sareen, Smith, Hwang, Crocker, Nicholls, Roy etc.

Cost Analysis*

Overall

- HF cost $17,735 per person per year on average (22k vs.15k) •
Every $10 invested saved an average of $6.81 ($9 vs. 3.5) •
ACT cost more to deliver but also saved more

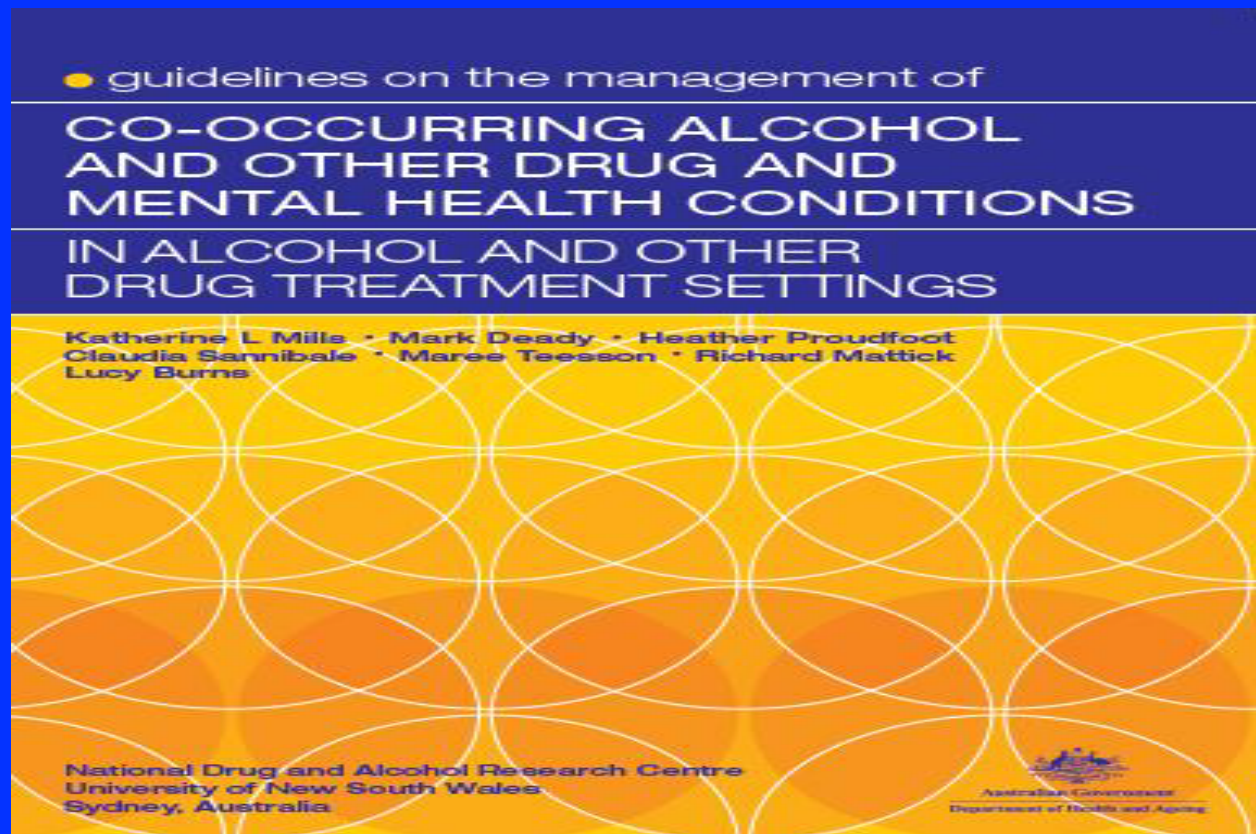## 10% Highest Pre-study Service Users

- HF cost $19,582 per person per year on average •
Every $10 invested in HF saved an average of $21.72

* Comprehensive cost-consequence analysis - societal perspective
*Latimer E. et al. publications forthcoming

Foundation Reference for Today's Workshop

guidelines on the management of

CO-OCCURRING ALCOHOL AND OTHER DRUG AND MENTAL HEALTH CONDITIONS

IN ALCOHOL AND OTHER DRUG TREATMENT SETTINGS

Katherine L Mills · Mark Deady · Heather Proudfoot
Claudia Sannibale · Maree Teesson · Richard Mattick
Lucy Burns

National Drug and Alcohol Research Centre
University of New South Wales
Sydney, Australia

Australian Government
Department of Health and Ageing

Available at NDARC website:

http://ndarc.med.unsw.edu.au/comorbidity

Overview of Workshop

◆ What is Comorbidity?

◆ How Common is Comorbidity?

◆ Guiding Principles

◆ Classification of Disorders

◆ Identifying Comorbidity

◆ Managing Comorbidity

◆ Treating Comorbidity

◆ Referral and Discharge Planning

Purpose of Guidelines

◆ Increase Alcohol & Other Drugs (AOD) workers' knowledge and awareness of mental health conditions

◆ Improve confidence and skills of AOD workers working with clients with comorbid mental health conditions

◆ Provide guiding principles for working with clients with comorbid mental health conditions

◆ Improve AOD workers' ability to identify mental health conditions

Purpose of Guidelines (2)

◆ Provide practical information on the management of comorbid mental health conditions

◆ Provide information regarding the treatment of comorbid mental health conditions

◆ Provide information regarding referral processes

◆ Provide resources that may be used to facilitate all of the above

Why Guidelines?

◆ AOD workforce development reviews have identified need

◆ Management of co-occurring mental health conditions has been described as "the single most important issue (for AOD sector)… a matter akin to blood-borne viruses in the 1980s" (Saunders and Robinson 2002)

Scope of Guidelines

◆ Not expected all AOD workers will address comorbid conditions to same extent due to variety of roles

◆ At minimum, all AOD workers should be "comorbidity informed":

- ◆ Knowledgeable about symptoms of common MH conditions
- ◆ How to manage these symptoms

What is Comorbidity?

◆ In this context - co-occurrence of an AOD use disorder with any other mental health condition

◆ "mental health condition" refers to both diagnosable disorder (DSM-IV-TR criteria) and *symptoms* of disorders while not meeting criteria for a *diagnosis* of a disorder

Why Does Comorbidity Occur?

◆ Presence of mental health condition may lead to an AOD use disorder, or vice versa (known as the direct causal hypothesis)

◆ Indirect causal relationship

◆ Factors common to both the AOD and mental health condition, increasing the likelihood that they will co-occur

Explaining Comorbidity

Direct causal hypothesis

AOD use → Mental health condition

Mental health condition → AOD use

Indirect causal hypothesis

AOD use → Intermediary factors → Mental health condition

Mental health condition → Intermediary factors → AOD use
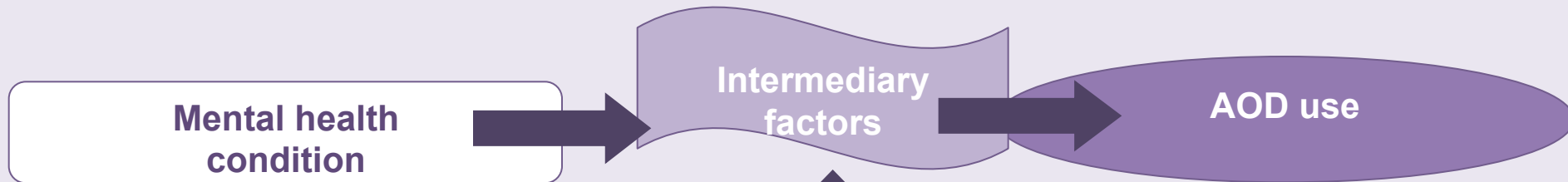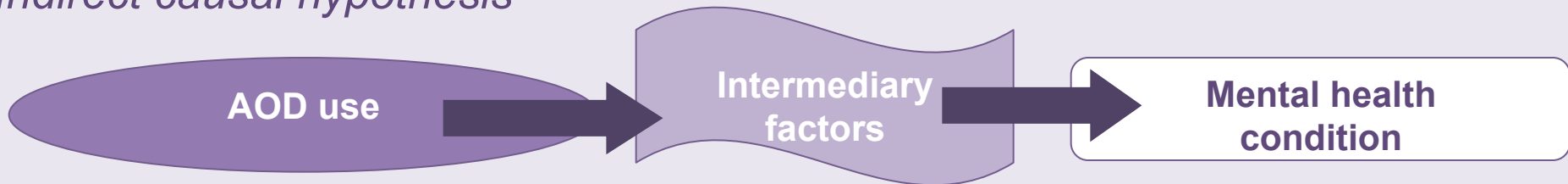
Common factors hypothesis

AOD use ← Common factors → Mental health condition

Does Causality Matter?

◆ In past, focus on establishing order of onset of conditions to identify primary disorder

◆ Evidence regarding typical order of onset of disorders is not consistent

◆ Once comorbid conditions established most likely that relationship is one of mutual influence rather than clear causal pathway

◆ Irrespective of order, strategies for managing conditions are same

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Mutual Influence of AOD and MH
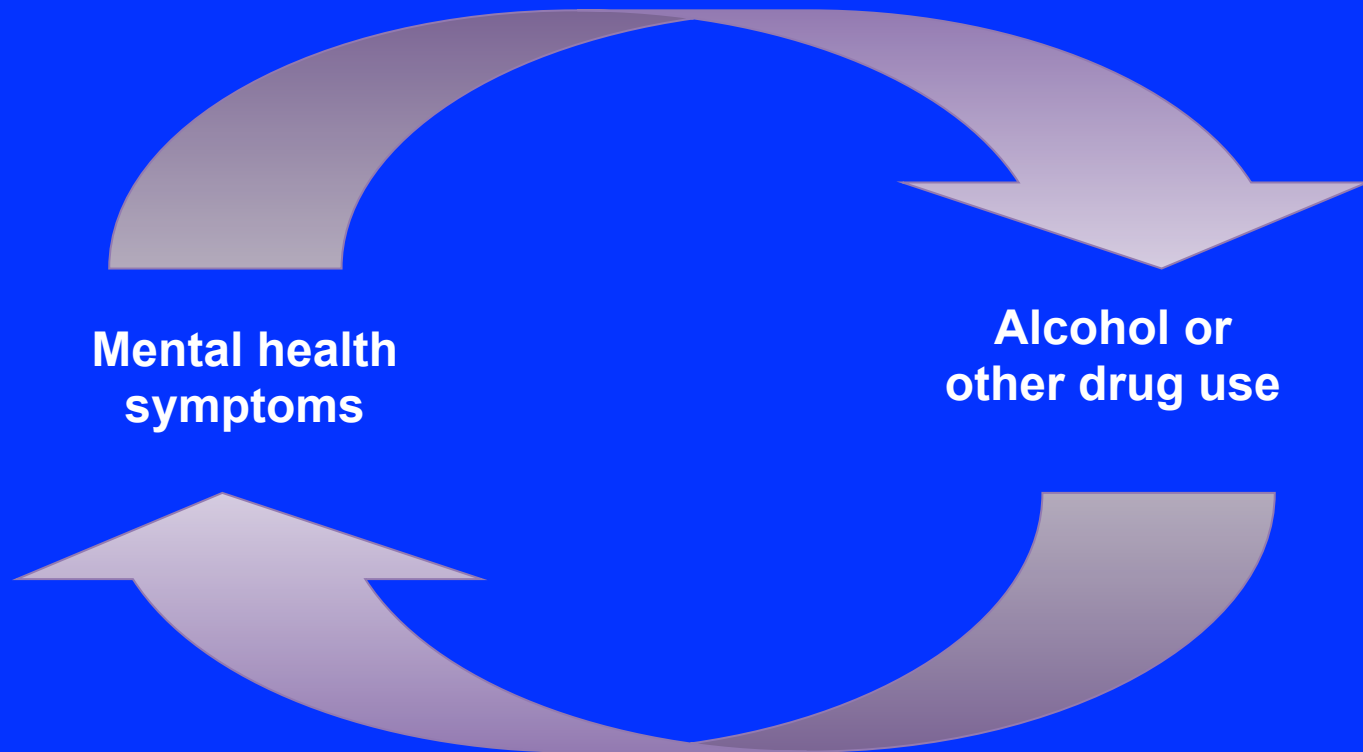
Prevalence of Comorbidity

◆ 2007 Australian National Survey of Mental Health and Wellbeing (NSMHWB):

- ◆ 1 in 5 Australian adults had anxiety, mood or substance use disorder in the past year

- ◆ 35% of individuals with a substance use disorder (31% of men and 44% of women) have at least one co-occurring affective or anxiety disorder

Prevalence (cont)

◆ Mental illness among individuals in AOD treatment ranges from 51-84% (Brems and Johnson 1997)

◆ Most common are mood, anxiety and personality disorders

◆ Rates of trauma exposure and PTSD high among people with AOD use disorders

◆ Increase in psychosis among AOD clients with increasing use of methamphetamine

Homeless Persons

- Higher rates of comorbidity

- Up to 3 x more likely to have mental disorder

- Reduced access to services and resources

- Inconsistent involvement with services

- Lower levels of literacy

- Need to meet immediate needs

Gender

◆ Patterns of comorbidity and needs of men and women differ

◆ Issues of stigma, DV and childcare with women

◆ Men less forthcoming in seeking treatment

◆ May need gender specific services, particularly family-oriented for women

◆ Men may need more concrete, action-oriented approach

Trauma exposure & PTSD among Australians with AOD use disorders
(Mills et al. 2006)
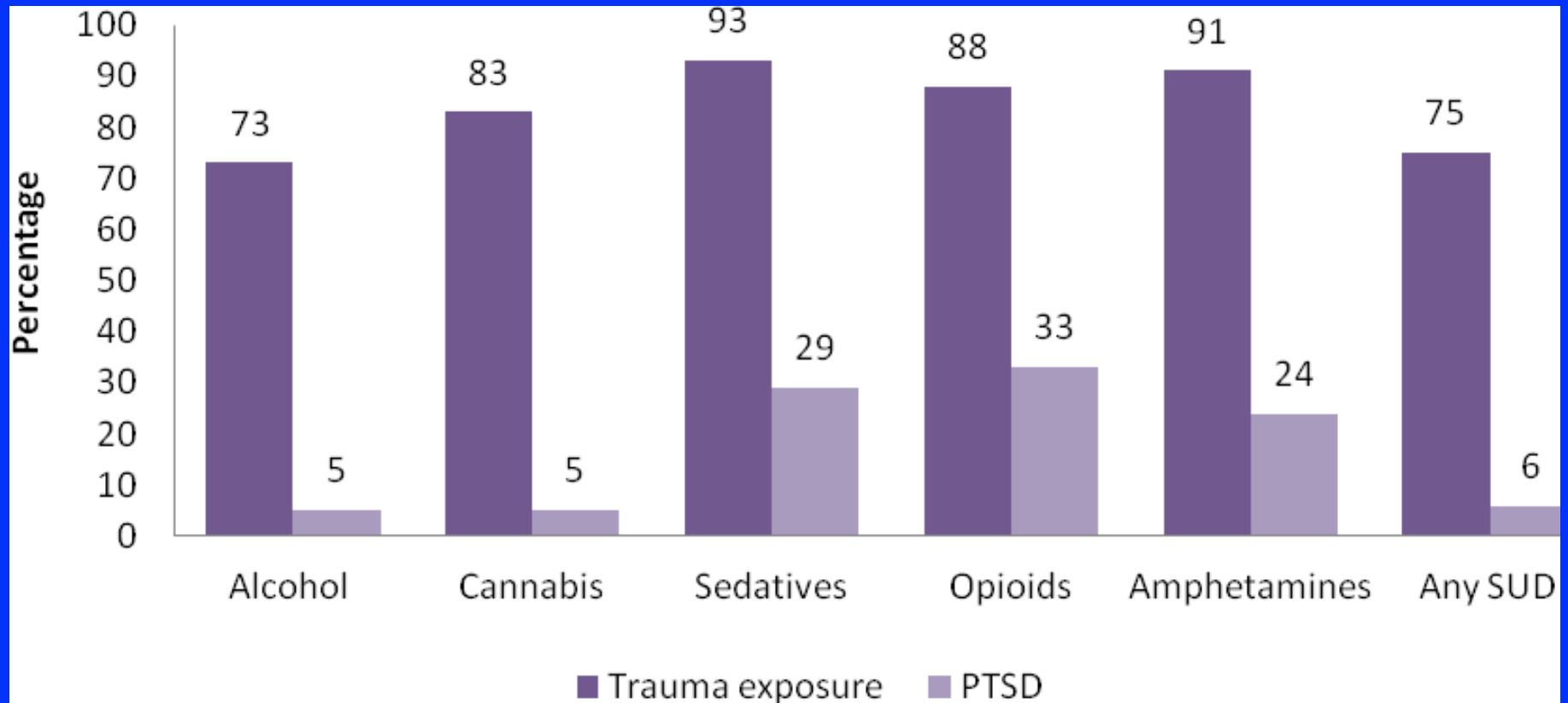
At Home Study – Self-Reported Learning Disability

◆ Age at enrolment 0.001*

◆ Educational attainment (≤grade 8) <0.001*

◆ Duration of homelessness Total lifetime (>3 years) <0.001*

◆ Age of first homelessness (<25 years) 0.001*

◆ Overall health (poor or fair) 0.026**

◆ Each multivariable model was controlled for age (continuous measure), age of first homelessness (continuous measure), gender, ethnicity (Aboriginals, Caucasian, other), marital status (Single vs other) and language spoken in childhood home (English vs other)

Patterson, Moniruzzaman, Frankish, Somers (2012) Missed opportunities: childhood learning disabilities as early indicators of risk among homeless adults with mental illness in Vancouver, BC. BMJ Open 2012;2:e001586. .

Analyses of Self-Reported Learning Disability

◆ Comparisons of categorical data between participants who did or did not report a learning problem or disability were conducted using Pearson's χ2 or Fisher's exact test.

◆ Comparisons of numeric variables (eg, age at enrolment) between groups were conducted using the Student's t test and Wilcoxon's rank-sum test.

◆ Univariate and multivariable logistic regression analyses were used to model the independent associations between childhood LD and a series of a priori outcome variables. Outcome variables that were significant at the p≤0.10 level were considered for univariate and multivariable logistic regression analyses.

◆ Each variable was modelled in both univariate and multivariate settings using childhood LD as an independent risk factor and the same set of controlling variables (age at enrolment, age of first homelessness, gender, ethnicity, marital status and language spoken in the childhood home).

◆ Both unadjusted OR (UOR) and adjusted OR (AOR) and 95% CI are reported and all p values are two sided. SPSS-19 was used to conduct these analyses. Missing values ranged from 0% to 4% and were excluded from the analyses.

Learning Disability Questions

◆ LD were assessed using questions, focusing on childhood:

Do you think you had a learning problem or LD?' and

Did anyone ever tell you that you have a learning problem or LD?'

◆ Only participants who responded positively to both questions were included in the analysis.

◆ 497 participants at baseline 36% thought they had a learning problem or disability in childhood, 37% reported being told they had a LD and 27% responded positively to both indicators of childhood LD.

At Home Study – Self-Reported Learning Disability

Reported Mental disorders (past month)

- Major depressive episode   0.015*
- Manic or hypomanic episode   0.072**
- Panic disorder   0.002*
- Alcohol dependence   0.023*
- Two or more mental disorders   0.001***
- High suicidality   0.010**
- Migraine   0.001***
- Epilepsy or seizures   0.006*
- Blood-borne infectious diseases   0.008*
- Head injury   0.001***
- Two or more physical conditions   0.056**

At Home Study – Self-Reported Learning Disability

Substance Use and Service Use (past month)

- IV drug use   0.003*
- Daily substance use (including alcohol)   0.002*
- Daily drug use (no alcohol)   0.001***
- Daily hard drug use (no alcohol, no marijuana) 0.009*
- Polysubstance use (no alcohol)   0.050*
- Age first drunk (<14 years)   0.007*
- Age of first drug use (<14 years)   0.001***
- Shop-lifting   0.001***

- Seen by psychiatrist   0.013*
- Addiction counselor   0.084**
- Talked with a health/social service provider   0.002*
- Multiple ER visits (three or more)   0.058**
- Multiple arrests (two or more)   0.044*

At Home Study – Self-Reported Learning Disability

Adjusted Odds Ratios

- Age of first homelessness (<25 years)   1.96
- Lifetime duration of homelessness (>3 years)   2.11
- Education level (grade 8 or less)   2.38
- Major depressive episode   1.64
- Panic disorder   2.02
- Alcohol dependence   1.67
- Two or more mental disorders   2.10
- High suicidality   1.89
- Blood-borne infectious diseases   1.76
- Migraine   2.57
- Seizures   2.11
- Multiple physical illness   1.71
- Overall health (fair/poor)   1.57
- History of head injury   2.33
- IV drug use   2.07

Harms associated with comorbidity
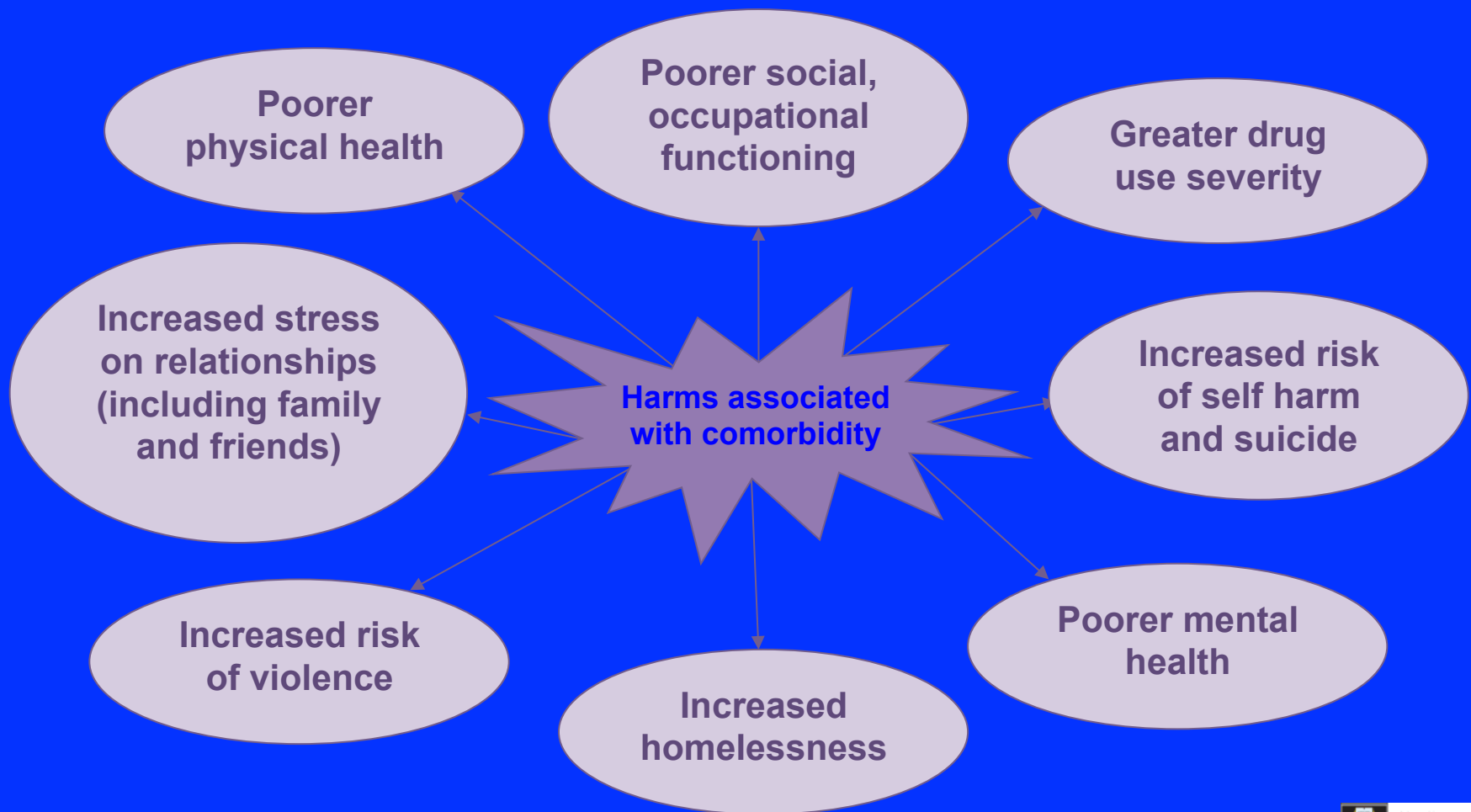
Impact on AOD Treatment

◆ Comorbidity has the impact adversely on AOD treatment

◆ However, studies have shown that clients with comorbidity can benefit from AOD treatment as much as those without

◆ Therefore, the presence of comorbidity should not be viewed as an insurmountable barrier to AOD treatment

Guiding Principles

◆ First, do no harm

◆ Work within your capacity

◆ Engage in ongoing professional development

◆ Recognise that management of comorbidity is part of AOD workers' core business

◆ Provide equity of access to care

◆ Adopt a "no wrong door policy"c

Guiding Principles (2)

◆ Recognise comorbidity is common - routine screening for comorbid conditions

◆ Conduct ongoing monitoring of symptoms and assessment of client outcomes

◆ Adopt holistic approach

◆ Adopt client-centred approach

◆ Emphasise collaborative nature of treatment

◆ Have realistic expectations

Guiding Principles (3)

◆ Express confidence in effectiveness of treatment

◆ Adopt non-judgemental attitude

◆ Adopt non-confrontational approach

◆ Involve families and carers in treatment

◆ Consult and collaborate with other health care providers

◆ Ensure continuity of care

"No Wrong Door"

◆ "Is premised on principle that every door in health care system should be the 'right' door

◆ Each provider has responsibility to address range of client needs wherever and whenever a client presents for care

◆ When clients appear at a facility not qualified to provide some type of service, those clients should carefully be guided to appropriate, cooperating facilities, with follow-up by staff to ensure clients receive proper care"

Paving The Way Protocol 2006

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Identifying Comorbidity

◆ Routine screening/assessment as part of case formulation

◆ Consider range of aspects in process of case formulation, not only AOD and mental health issues

◆ Assessment should occur subsequent to period of abstinence, or at least when not withdrawing or intoxicated

◆ Multiple assessments needed throughout treatment as symptoms may change over time

Case Formulation

◆ Involves gathering information regarding factors relevant to treatment planning, formulating an hypothesis re how factors fit together to form the current presentation

◆ Primary goal of AOD treatment services is to address clients' AOD use. However, in order to do so effectively, AOD workers must take into account broad range of issues clients present with.

Case Formulation Process
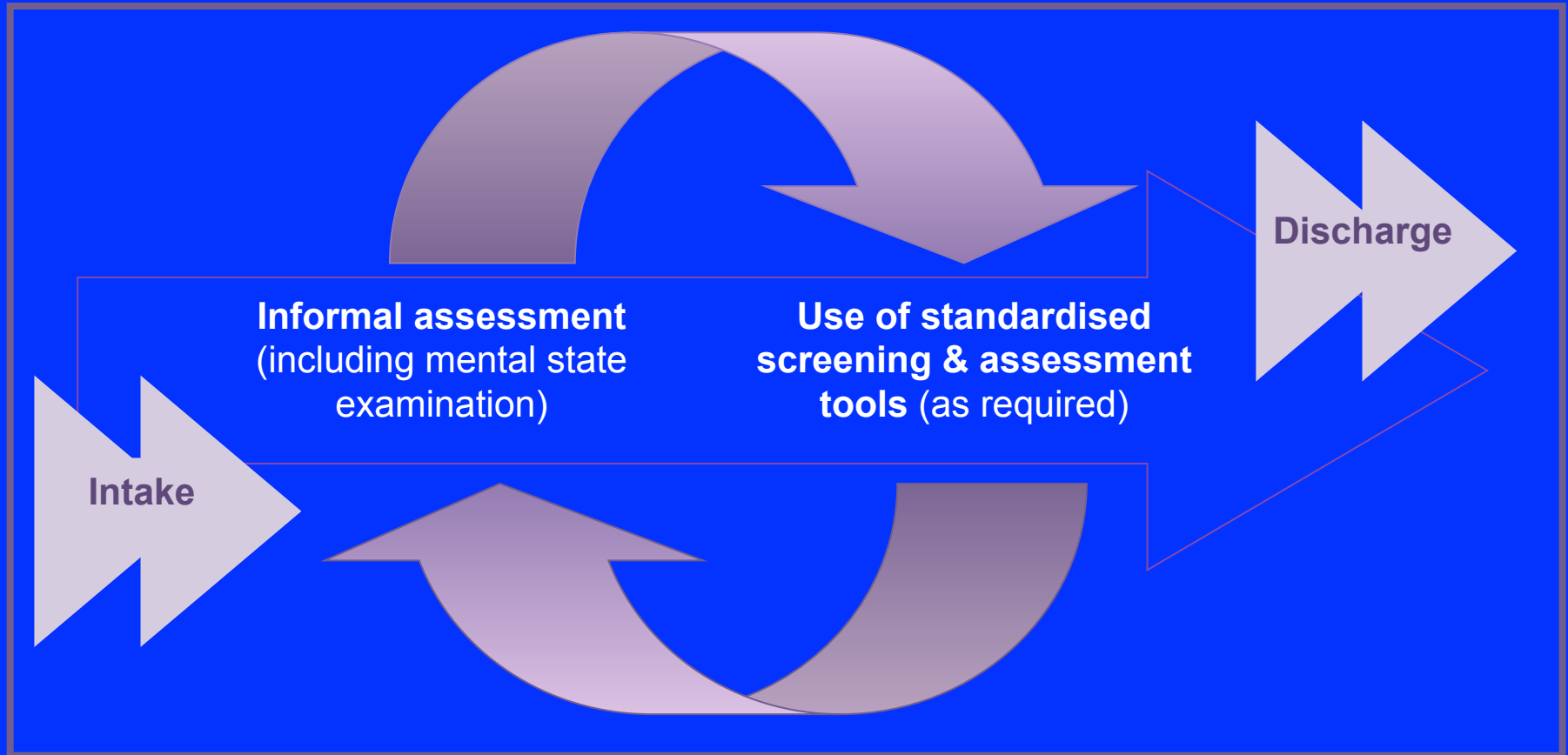
Informal Assessment

- Mental state
- Source of referral and current health care providers
- Presenting issues
- AOD use history
- Current situation
- Personal, medical and family history

- Trauma history
- Psychiatric history
- Risk assessment
- Criminal history
- Strengths and weaknesses
- Readiness for change

Mental State Assessment

◆ Standardized approach to assessing current mental state

◆ Based on what see, hear, perceive in present, not history/past

◆ Very useful method for communicating with mental health and other services

◆ Useful baseline assessment

Mental State Assessment Components

◆ Appearance

◆ Behaviour

◆ Speech and language

◆ Mood and affect

◆ Thought content

◆ Perception

◆ Cognition

◆ Insight and judgement.

Psychiatric History

◆ If client has experienced mental health symptoms or diagnosis in past, ask about timing of symptoms:

- ◆ When did symptoms start (prior to AOD use)?

- ◆ Only occur when intoxicated or withdrawing?

- ◆ Have symptoms continued after period of abstinence (approximately 1 month)?

- ◆ Do symptoms change when client stops using substances?

- ◆ Family history of particular mental health condition?

Trauma History

◆ Raising issue of trauma is important. However needs to carried out in sensitive manner and NOT pursued if client does not wish to discuss history of trauma

◆ Before conducting trauma assessment workers should seek training and supervision in dealing with trauma responses

◆ Workers who have experienced trauma need to take particular care

Risk Assessment

◆ Includes suicidal thoughts/attempts, self-harm, DV, homicidal thoughts/attempts, and child welfare

◆ When risk perceived as alarming, other services may need to be enlisted (eg: police, ambulance, crisis teams)

◆ Also include evaluation of safety re sexual practices, injecting practices and other high-risk behaviours

Readiness for Change

◆ Assessment of readiness for change regarding AOD and/or mental health conditions is an important component of assessment and case formulation

◆ See IMAT, tool for assessing motivation regarding AOD treatment and psychiatric treatment (Appendix I in Guidelines)

Feedback

◆ Following assessment it is important to interpret the results for client in a manner that the client can understand (i.e. not just numerical test scores)

- ◆ Focus first on strengths

- ◆ Gently and tactfully outline client's difficulties

- ◆ Focus on the pattern of results rather than just an overall score

- ◆ Pull assessment results together and offer hope by discussing treatment plan

Management vs Treatment

◆ Management of symptoms of mental illness to allow AOD treatment to continue with minimal disruption to retain clients in treatment

◆ Treatment refers to evidence-based practice for working with comorbidity

◆ Suggested treatments may be beyond scope of some AOD workers – awareness only

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Managing Comorbidity

◆ Comorbid mental health symptoms can be managed and controlled whilst the client undergoes AOD treatment

◆ Consider whole person (from psychological, physical and socio-demographic perspectives) when managing symptoms of comorbid mental conditions

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Managing Comorbidity

◆ Suicide risk should be monitored throughout treatment

◆ Motivational enhancement, simple CBT-based strategies, relaxation and grounding techniques can be useful in managing AOD use as well as mental health conditions

◆ Symptoms of trauma, grief, loss can be managed through anxiety management strategies and open discussion with client

◆ When dealing with more challenging clients ensure safe environment, set clear boundaries and place strong emphasis on engagement and rapport building

Treatment of Comorbidity

◆ Good treatment requires a therapeutic alliance which includes client choice (including not to be involved in treatment)

◆ Some interventions are designed for treatment of specific comorbidities; however, interventions are not well researched

◆ In absence of research on comorbid disorders, recommended to use most effective treatments for each disorder

◆ Both psychosocial and pharmacological interventions have been found to have some benefit in treatment of comorbidities

◆ When pharmacotherapy is used, this should be accompanied by supportive psychosocial interventions

Models of Care

◆ Sequential treatment

◆ Parallel treatment

◆ Integrated treatment

◆ Stepped care

Motivational Interviewing with Co-occurring Disorders

◆ Increasing research base for applying MI with clients with co-existing disorders

◆ "Spirit" of MI can be useful for engaging clients to address both MH and AOD concerns

◆ Principles and strategies for using MI detailed in Appendix D of Comorbidity Guidelines

Cognitive Behavioural Techniques

◆ Evidence-based treatment approach used in both AOD and MH settings

◆ Particularly useful for managing symptoms of anxiety and depression

◆ Underpinnings of Relapse Prevention in both AOD and MH contexts

◆ See Appendix Q of Comorbidity Guidelines for an overview of techniques for using

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Other Treatment Approaches

◆ Psychosocial groups

◆ Self-help groups

◆ Mindfulness training

◆ Contingency management.

Medications

◆ Medications form part of evidence-based practice in treatment of mental health concerns.

◆ Stabilizing on appropriate medications and continued use whilst in AOD treatment can be essential to successful outcome for both AOD and MH

Key Points for Referral and Discharge Planning

◆ Develop links with range of local services and engage them in clients' treatment where appropriate

◆ Important to obtain client consent and to practise assertive follow-up

◆ Active referral is preferred process when referring clients with comorbidity

◆ Discharge planning in close consultation with client is integral to treatment process

Services for Consultation

Referral Processes

◆ Passive Referral

◆ Facilitated Referral

◆ Active Referral

Discharge Planning

◆ Process of equipping clients with skills and contacts to continue progress of treatment and prevent relapse

◆ Prepare clients for cessation of treatment

◆ Involve clients in discharge planning

◆ Link clients with other support services

◆ Communicate with relevant services

◆ Document discharge plan in client records

Factors to Consider in Discharge Planning

◆ Stability of accommodation

◆ Social support

◆ Family and carer involvement (with client's permission)

◆ Relapse prevention and lapse management strategies

Cultural and Contextual Factors

◆ Cultural background

◆ Age

◆ Gender

◆ Sexual orientation

◆ Stability of accommodation

◆ Remote location

◆ Level of coercion into treatment

Potential Implications of Dealing with Comorbidity and Homelessness

◆ Redirection of resources

◆ Need to adopt new or different roles

◆ New stakeholders from diverse sectors

◆ New forms of management

◆ New or refocused functions to address new targets

◆ New foci for evaluation

◆ May need to develop new capacities & skills

Key Actions - Report on Housing for Persons with Mental Illness & Addiction

- Supported housing (housing with on- or off-site support)
- Housing First (permanent, independent without time limits for treatment)
- Multidisciplinary treatment teams (ACT, intensive case management)
- Low Barrier Housing (transitional, congregate housing, no requirements)
- Harm reduction facilities
- Integrated mental health and addiction services
- New affordable housing (subsidize land, waive fees, taxes, rent supplements)
- Preserve existing affordable housing (no net loss)
- Homeless services information system
- Regional and provincial distribution of services
- Fast-track to Income Assistance for homeless people
- Discharge policies and practices
- Provincial Mental Health and Addictions strategy

What We Need to Succeed in Addressing Homelessness

- ◆ Public support & political will
- ◆ Targeted resources & resourced targets
- ◆ Supportive binding, legislation
- ◆ Policy & practice 'champions'
- ◆ A supportive philosophy
- ◆ A cultural & policy framework
- ◆ Organizational/governance infrastructure
- ◆ Trained staff/improved education
- ◆ Remuneration of services/personnel
- ◆ Evidence-based practice based on practice-based evidence

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