One-Stop Shopping for Recovery: Preliminary Results from the first Systematic Study of New England Recovery Community Centers

Recovery Webinar Series Enhancing Research Infrastructure for Recovery Community Centers (NIDA R24) May, 14 2021

RECOVERY RESEARCH INSTITUTE

MASSACHUSETTS GENERAL HOSPITAL

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

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Outline

- What are Recovery Community Centers?
- Why did they emerge and grow?
- How might they work?
- What do we know about their impact?

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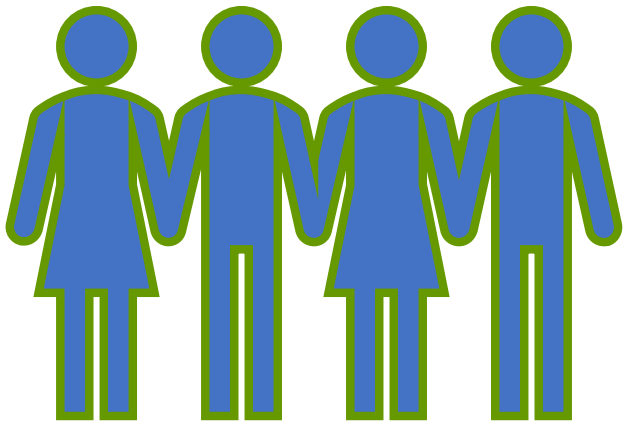
Recovery Community Centers are intended to …

- Provide locatable sources of community-based recovery peer to peer support beyond the clinical setting…

- Help individuals achieve sustained recovery by building and successfully mobilizing personal, social, environmental, and cultural resources (recovery capital)



Recovery Community Centers are NOT…

Residential centers

Sober living environments

Treatment centers

12-step clubhouses

Drop-in (clinical) centers

Principles of RCCs

Source of recovery capital at the community level

- Provide different services than formal treatment
- Offer more formal and tangible linkages to social services, employment, training and educational agencies than do mutual-help organizations

There are many pathways to recovery

- RCCs not allied with any specific recovery philosophy/model
- All and any pathway to recovery should be celebrated

RCCs may foster or provide many of the active ingredients of recovery reported by persons in recovery…(CHIME)

CONNECTION

HOPE AND OPTIMISM

POSITIVE SOCIAL IDENTITY

MEANING AND PURPOSE

EMPOWERMENT

Outline

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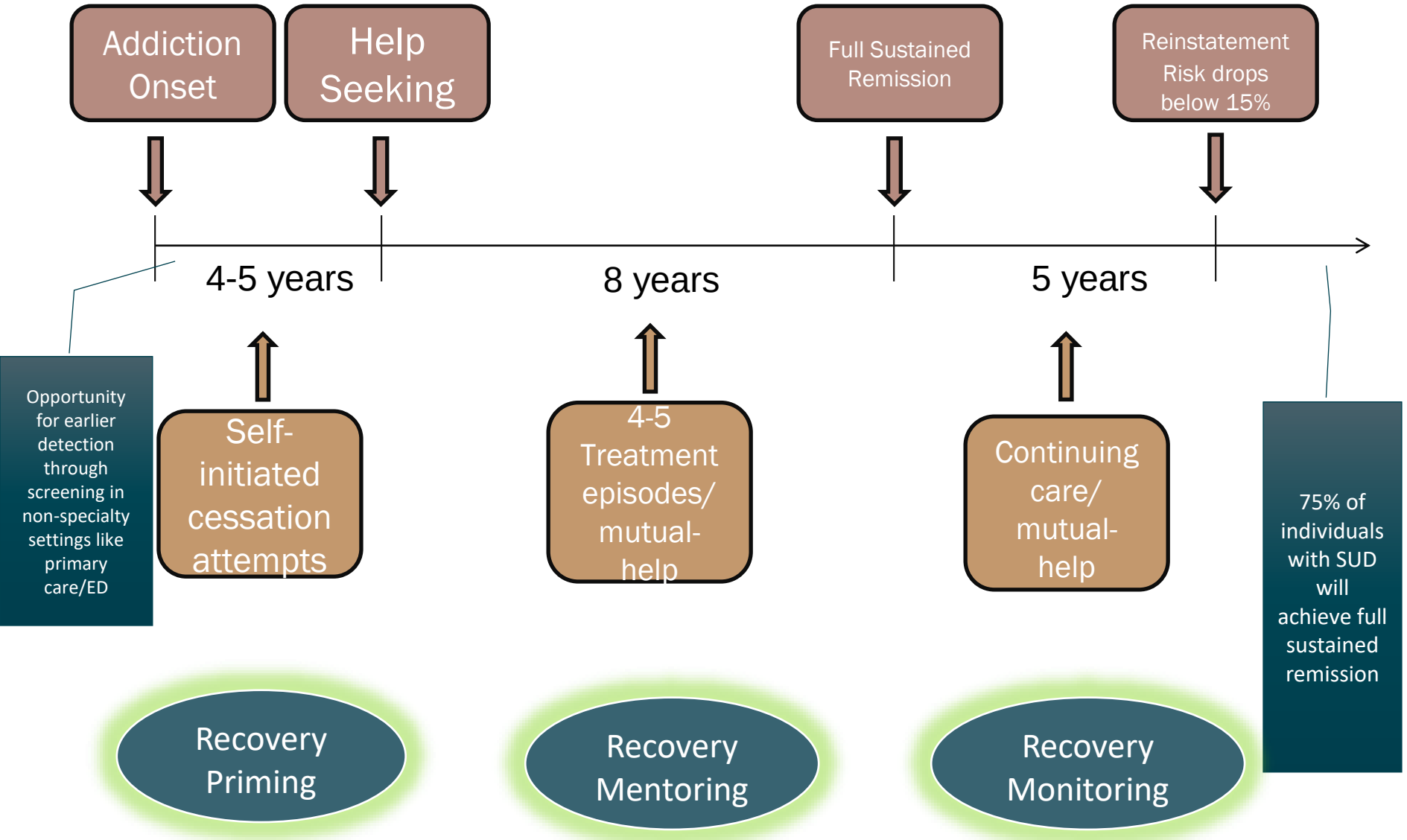
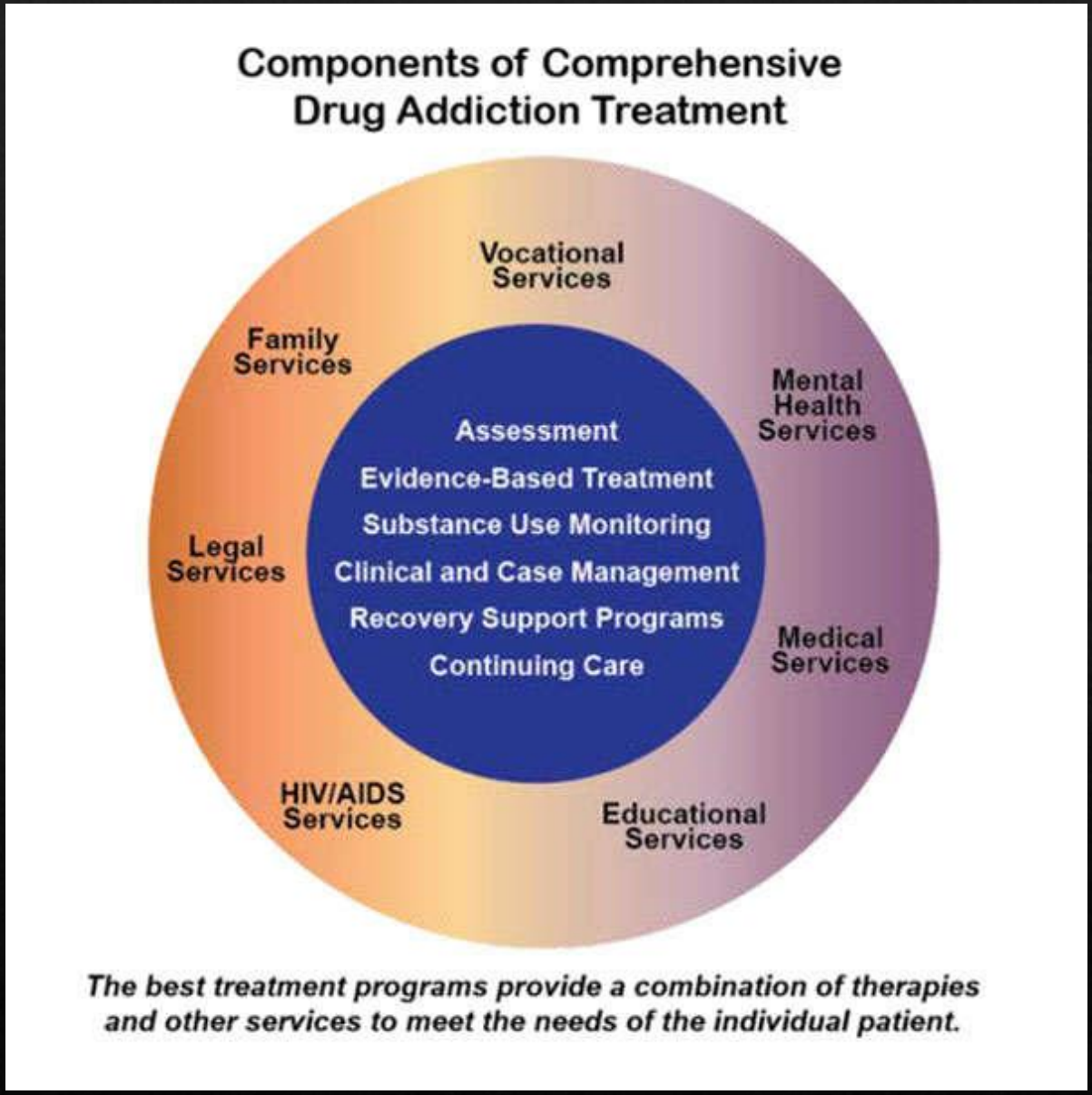
Clinical course to remission for addiction cases… can we speed this up?



50 years of Progress: Burning building analogy…

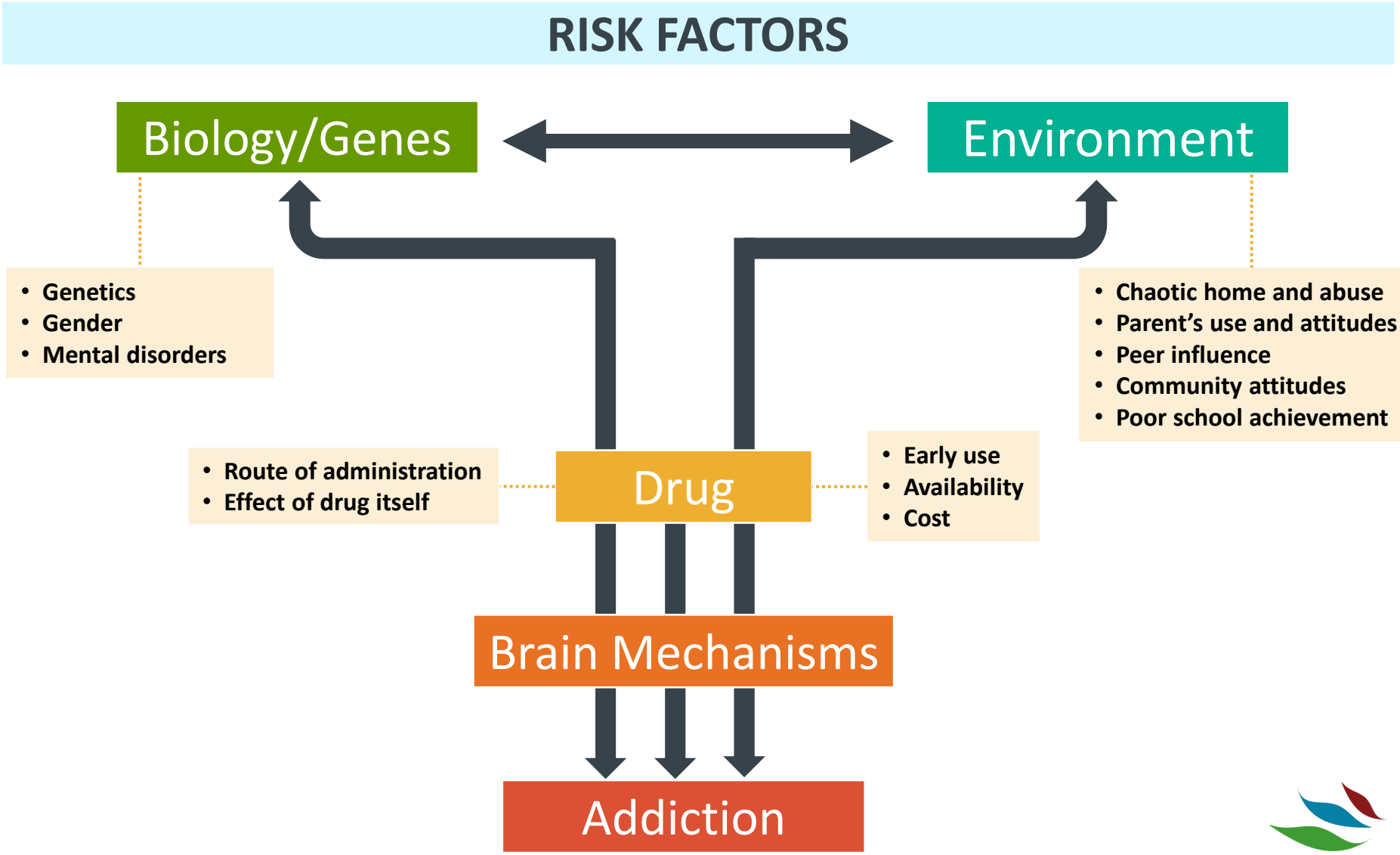
- **Putting out the fire** –addressing acute clinical pathology - good job
- **Preventing it from re-igniting** (RP) - strong emphasis, but pragmatic disconnect…
- **Architectural planning** (recovery plan) –neglected
- **Building materials (recovery capital) –**neglected
- **Granting "rebuilding permits"** - (removing barriers - neglected)

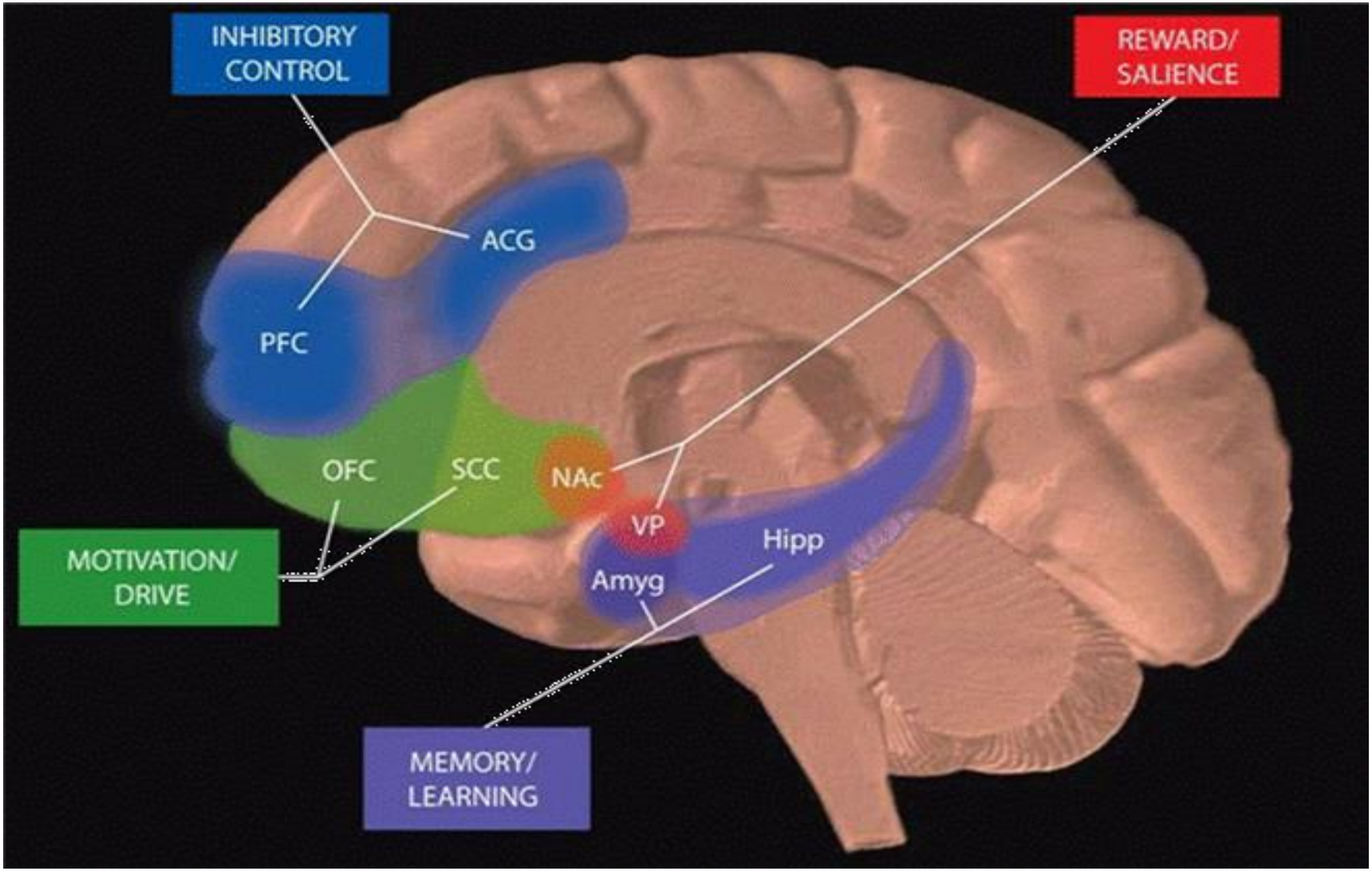
In fact, the concept of SUD "treatment" is changing…



NIH National Institute on Drug Abuse
The Science of Drug Abuse & Addiction

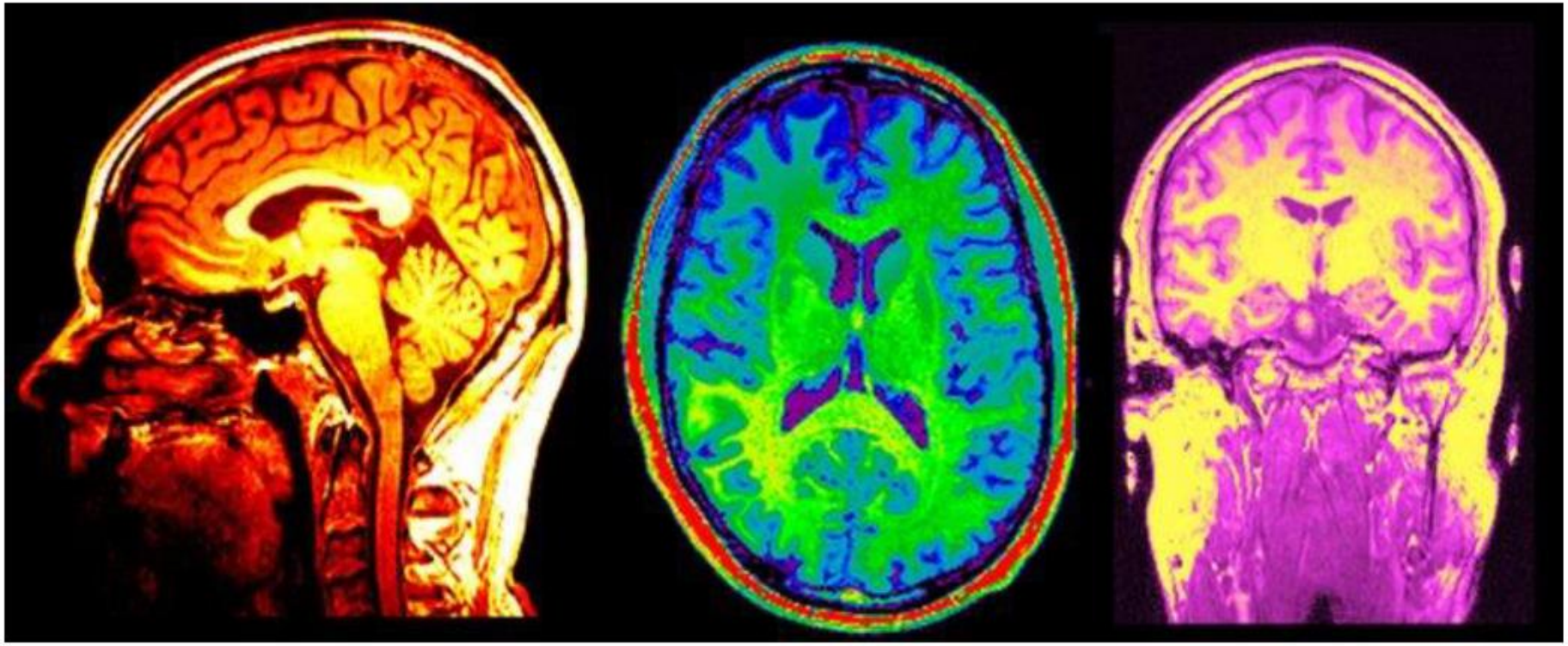
ADDICTION IS A COMPLEX DISORDER



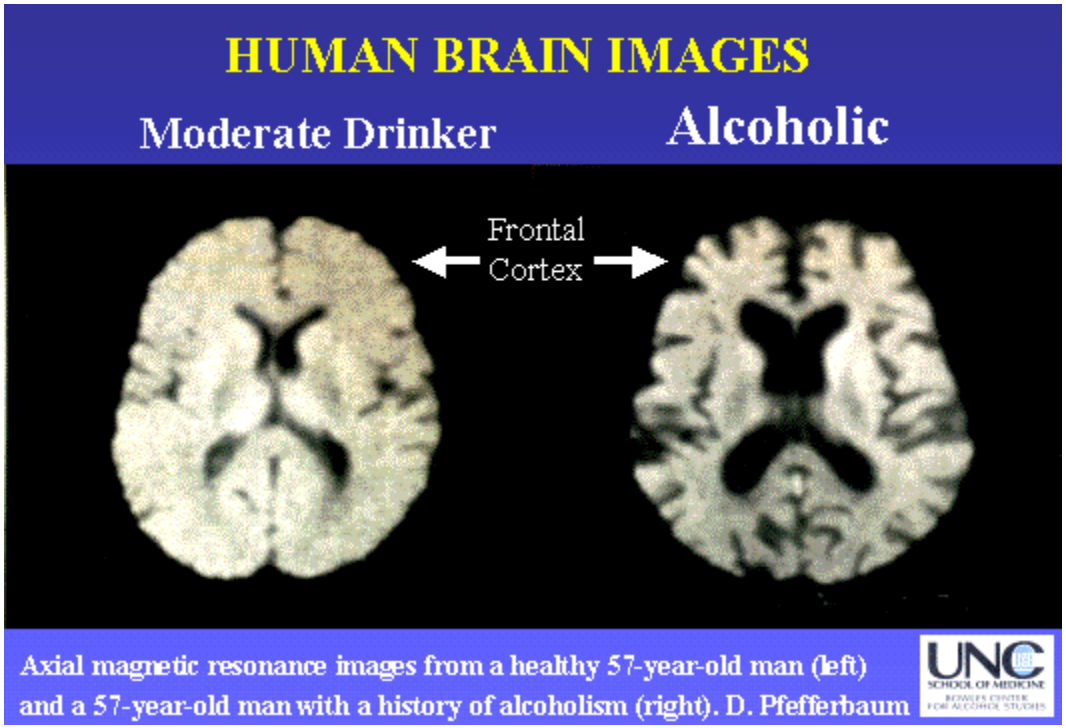


All of these brain regions must be considered in developing strategies to effectively treat addiction.

Neuroscience: Neural plasticity




Normal
43-year-old
Alcoholic
43-year-old


HUMAN BRAIN IMAGES
Moderate Drinker
Alcoholic
Frontal
Cortex
Axial magnetic resonance images from a healthy 57-year-old man (left) and a 57-year-old man with a history of alcoholism (right). D. Pfefferbaum
UNC
SCHOOL OF MEDICINE

Post-acute withdrawal effects

- More stress and lowered ability to experience normal pleasures

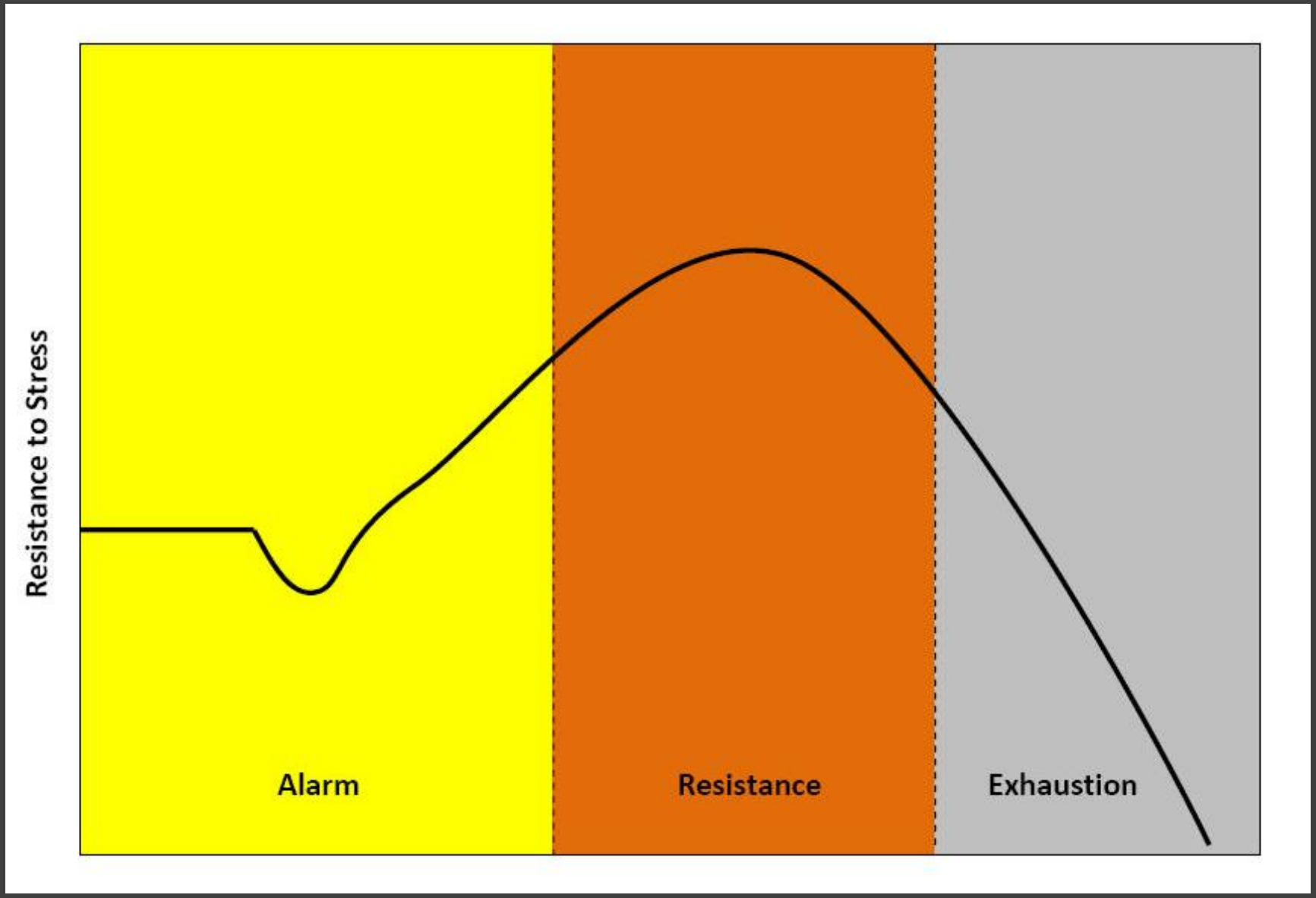
Increased sensitivity to stress via…

- Increased activity in hypothalamic-pituitary-adrenal axis (HPA-axis) and CRF/Cortisol release

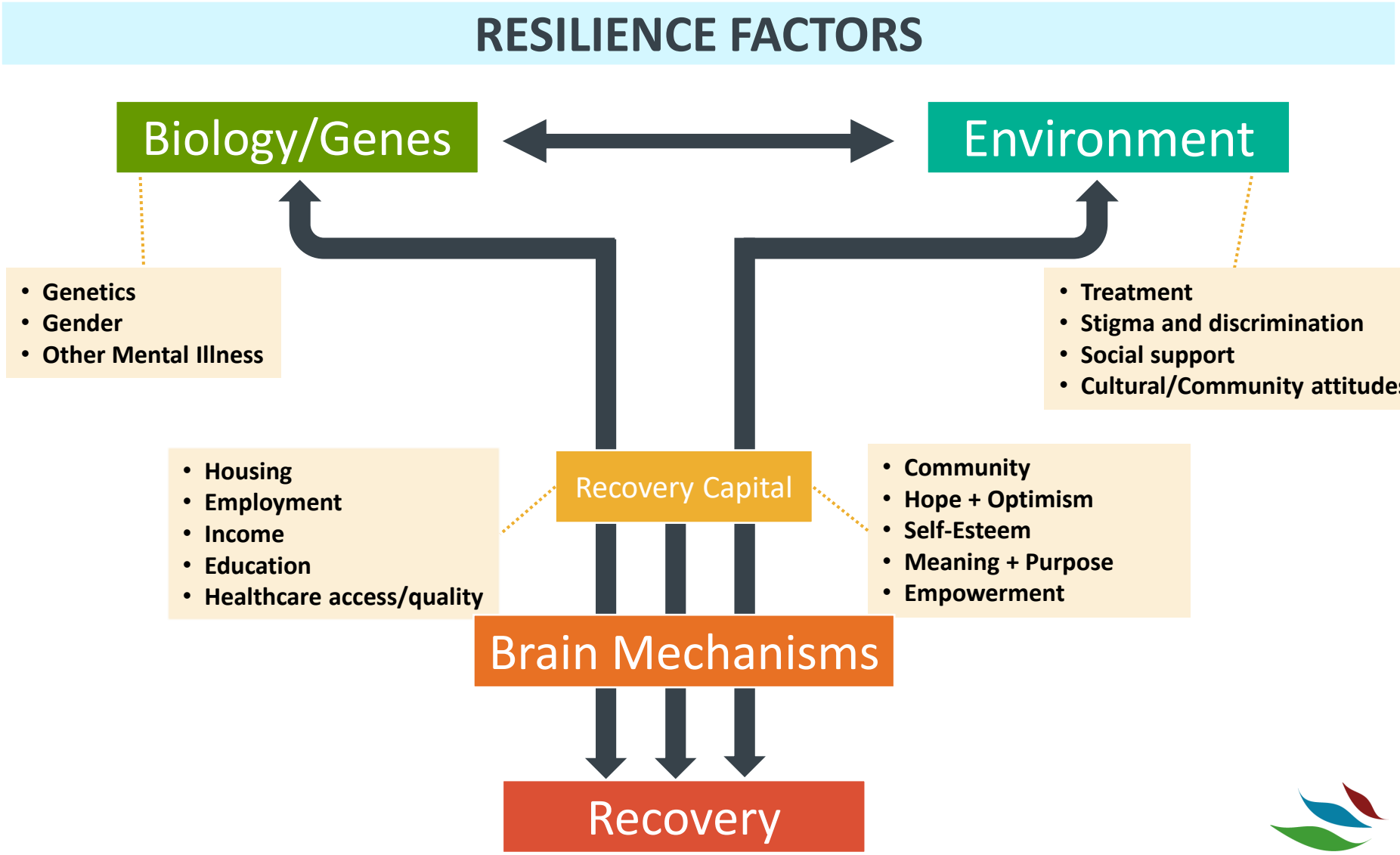
Lowered capacity to experience normal levels of reward via…

- Down-regulated dopamine D2 receptor volume increasing risk of protracted dysphoria/anhedonia and relapse risk

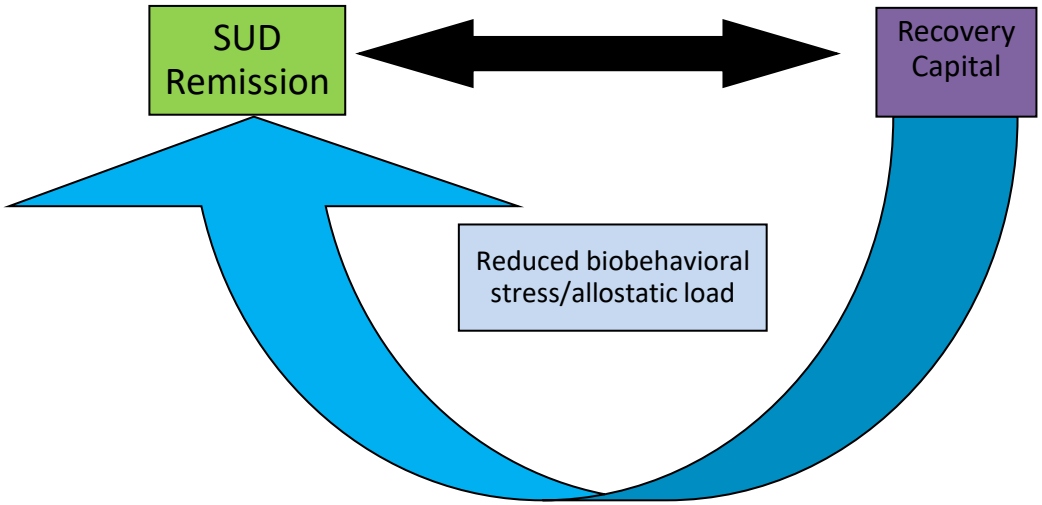
Allostasis (maintaining an organism's stability [homeostasis] through change) occurs both during the development of addiction and of recovery…



RECOVERY IS A COMPLEX PROCESS



Recovery: Dynamic Reciprocal relationship between remission and recovery capital where increases in individual and social capital reduces biobehavioral stress and enhances the chances of ongoing remission

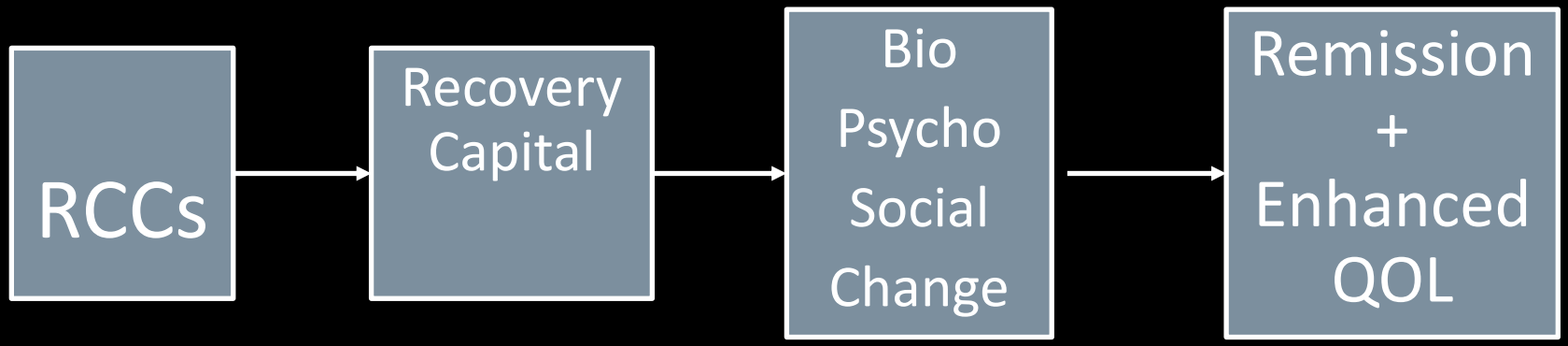


Longer remission results in greater accrual of recovery capital; in turn, greater recovery capital increases the chances of longer remission because it reduces biobehavioral stress – a major pathway to relapse. Thus, providing more recovery support will increase the chances of remission by reducing stress.

Adapted from Kelly and Hoeppner (2014).

RCCs Goal

RCCs Mechanisms



Outline

What are Recovery Community Centers?

Why did they emerge and grow?

How might they work?

What do we know about their impact?

Recovery community centers: New FIndings

Three aims…

- Survey of RCC directors and staff
- Cross-sectional survey of existing RCC participants
- Longitudinal investigation of new RCC participants

RCC Questions we need to answer…

- What are they?
- Where are they?
- Who runs them?
- Who uses them?
- How are they funded?
- What do they provide?
- How helpful are they?

INVESTIGATION OF RCCs: DIRECTORS AND STAFF INTERVIEWS

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New kid on the block: An investigation of the physical, operational, personnel, and service characteristics of recovery community centers in the United States

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ABSTRACT

Background: Professional treatment and non-professional mutual-help organizations (MHOs) play important roles in mitigating addiction relapse risk. More recently, a third tier of recovery support services has emerged that are neither treatment nor MHO that encompass an all-inclusive flexible approach combining professionals and volunteers. The most prominent of these is Recovery Community Centers (RCCs). RCC's goal is to provide an attractive central recovery hub facilitating the accrual of recovery capital by providing a variety of services (e.g., recovery coaching; medication assisted treatment [MAT] support, employment/educational linkages). Despite their growth, little is known formally about their structure and function. Greater knowledge would inform the field about their potential clinical and public health utility.

Method: On-site visits (2015–2016) to RCCs across the northeastern U.S. (K = 32) with semi-structured interviews conducted with RCC directors and online surveys with staff assessing RCCs': physicality and locality; operations and budgets; leadership and staffing; membership; and services.

Results: Physicality and locality: RCCs were mostly in urban/suburban locations (90%) with very good to excellent Walk Scores reflecting easy accessibility. Ratings of environmental quality indicated neighborhood/grounds/buildings were moderate-good attractiveness and quality. *Operations:* RCCs had been operating for an average of 8.5 years (SD = 6.2; range 1–33 years) with budgets (mostly state-funded) ranging from $17,000–$760,000/year, serving anywhere from a dozen to more than two thousand visitors/month. *Leadership and staffing:* Center directors were mostly female (55%) with primary drug histories of alcohol (62%), cocaine (19%), or opioids (19%). Most, but not all, directors (90%) and staff (84%) were in recovery. *Membership:* A large proportion of RCC visitors were male (61%), White (72%), unemployed (50%), criminal-justice system-involved (43%) and reported opioids (35%) or alcohol (33%) as their primary substance. Roughly half were in their first year of recovery (49%), but about 20% had five or more years. *Services:* RCCs reported a range of services including social/recreational (100%), mutual-help (91%), recovery coaching (77%), and employment (83%) and education (63%) assistance. Medication-assisted treatment (MAT) support (43%) and overdose reversal training (57%) were less frequently offered, despite being rated as highly important by staff.

Conclusions: RCCs are easily accessible, attractive, mostly state-funded, recovery support hubs providing an array of services to individuals in various recovery stages. They appear to play a valued role in facilitating the accrual of social, employment, housing, and other recovery capital. Research is needed to understand the relative lack of opioid-specific support and to determine their broader impact in initiating and sustaining remission and cost-effectiveness.

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AIM, DESIGN, MEASURES

‘New Kid On The Block’:

STUDY DESIGN: Cross sectional study across 32 RCCs

PARTICIPANTS: 30 directors interviewed, 59 staff members completed online survey

AIMS WERE TO DETERMINE:

I. **Physicality and locality**: Structural characteristics , attractiveness, location
II. **Operations and Budgets**: Years in operation, how they are funded and staffed
III. **Leadership and Staffing**: Who is running RCCs?
IV. **Membership**: Who is using RCCs?
V. **Services Provided**: Perceived importance to recovery as rated by center staff.
VI. Correlational associations among **center characteristics and usage of centers**

MEASURES INCLUDE:

- Environmental rating scale
- Walk score
- Survey of Structures and Operations
- Demographics
- Substance Use History
- Employment History
- Member characteristics
- Referral source
- Services provided

RCCs have emerged as the second most common source of recovery community support

Physicality and Locality

Physicality and locality of recovery community centers (N = 32).

Observation	Mean/%	(*SD*)/(n)	range
Site location attractiveness (*neighborhood, grounds, buildings*)[a]	1.5	(0.6)	0.3–2.5
Number of types of rooms (i.e., *1–5, reception, common, group, hallways, staff office*)[b]	4.5	(0.7)	3–5
Quality of the RCC interior space[c]			
Noise level	2.2	(0.6)	1–3
Odors	2.1	(0.5)	0.8–3
Illumination	2.4	(0.4)	1.8–3
Cleanliness of walls and floors	2.1	(0.6)	1–3
Condition of walls and floors	2.0	(0.6)	0.8–3
Condition of furniture	1.9	(0.6)	0.8–3
Window area	1.5	(0.6)	0–3
View from windows (attractiveness)	1.2	(0.6)	0–2.8
Total score for the quality of the RCC interior space	1.9	(0.4)	1.3–2.8
Overall study-staff rated appeal			
Recommendability/referrability	2.5	(0.5)	1.5–3
Attractiveness of the program	2.3	(0.7)	1–3
Accessibility (*in Walk Scores, %*)			
Extremely walkable	18.8	(6)	
Very walkable	62.5	(20)	
Somewhat walkable	6.3	(2)	
Car-dependent	12.5	(4)	
Catchment area (in %)[d]			
Rural	26.7	(8)	
Suburban	26.7	(8)	
Urban	63.3	(19)	

Operations and Budgets

Operations of recovery community centers as reported by center directors (n = 29).

	M (*SD*)/% (*n*)	Median	Range
Operation			
Years in operation	8.5 (6.2)	9	1–33
Open weekends and weekdays	71.9% (23)	–	–
Hours of operation per week	54.1 (19.9)	56.3	6–94
Total annual budget (in $)[a]	$215,104 ($156,672)	$148,200	$16,956–$760,591
Personnel/salaries costs			
% of centers covering personnel costs[b]	93.1% (27)	–	–
if yes, average amount spent on salaries[c]	$129,288 ($112,697)	$88,032	$15,000–$557,541
Facilities costs			
% of centers covering facilities costs[c]	100% (24)	–	–
If yes, average amount spent[c]	$30,033 ($18,498)	$25,250	$8475–$96,217
Staff[d] (*in number of*)			
Paid staff	3.9 (2.7)	3	0–12
Volunteer staff	3.0 (5.8)	0	0–19
Full time staff	2.4 (2)	2	0–8
Part time staff	3.4 (4.8)	2	0–20
Staff hired in the last 6 months[e]	1.1 (1.2)	1	0–4
Staff who left the center in the last 6 months[e]	0.6 (0.9)	0	0–3
Staff who have < 2 years with center[e]	2.7 (2.8)	1.5	0–12
Staff who have 2–5 years with center[e]	1.6 (1.7)	1	0–7
Staff who have > 5 years with center[e]	1.1 (2.2)	0	0–11
Service user visits[f]			
Monthly visits from unique service users	252.6 (416.0)	125	13–2200
Monthly visits from service users in total	1366.2 (1127.3)	1050	113–5250
Hours a service user spends at center per visit	2.4 (1.1)	2	1–5
Service users per day	46 (37.1)	34	6–175
New service users per month	26.5 (33.0)	16.5	3–150

Leadership and Staffing

Director and staff characteristics of recovery community centers: demographics, substance use history, and employment history.

Characteristic	Directors	Staff
	$n = 30$[a]	$n = 59$[b]
	M (*SD*)/% (*n*)	*M* (*SD*)/% (*n*)
Demographics		
Age	55.1 (8.7)	48.7 (13.8)
Female[c]	53.3% (16)	69.0% (40)
Race		
White	86.7% (26)	86.4% (51)
Black or African American	13.3% (4)	10.2% (6)
Other	6+	3.4% (2)
Ethnicity Latino or Hispanic (% yes)	3.3% (1)	10.71% (6)
Education		
High school diploma/GED or less	6.7% (2)	8.5% (5)
Any college (bachelors or some college)	26.7% (8)	49.2% (29)
Graduate degree (e.g., masters, doctorate)	33.3% (10)	16.9% (10)
Other professional degree (e.g., LADC)/ Associates	33.3% (10)	25.4% (15)
Certification in addiction field		
Currently certified or licensed	40% (12)	19.0% (11)
Not certified or licensed in addiction	50% (15)	75.9% (44)
Previously certified or licensed, not current	10% (3)	5.1% (3)
Substance use history		
In recovery	90.0% (27)	84.2% (48)
Years in recovery[c]	18.6 (10)	10.2 (8.3)
Primary substance		
Alcohol	61.6% (16)	39.1% (18)
Opioids	19.2% (5)	37.0% (17)
Cocaine	19.2% (5)	19.6% (9)
Amphetamines & Methamphetamines	0% (0)	0% (0)
Cannabis	0% (0)	2.2% (1)
Other	0% (0)	2.2% (1)
Secondary substance		
Alcohol	27.2% (6)	27.8% (10)
Opioids	0% (0)	22.2% (8)
Cocaine	22.7% (5)	22.2% (8)
Amphetamines & Methamphetamines	4.6% (1)	0% (0)
Cannabis	36.4% (8)	19.4% (7)
Other	9.1% (2)	8.3% (3)
Employment history		
Years worked at current position	3.8 (4.3)	1.9 (1.7)
Years worked at center	5.2 (4.9)	3 (2.1)
Years worked in addiction treatment and recovery field	13.5 (8.4)	6.9 (7.7)
Specialist in addictions (% yes)	–	69.5% (41)
Employment		
Paid, full-time (35+ h weekly)	–	39.3% (22)
Paid, part-time (under 35 h weekly)	–	33.9% (19)
Unpaid, full-time (35+ h weekly)	–	0% (0)
Unpaid, part-time (under 35 h weekly)	–	26.8% (15)

Membership

Service user characteristics of recovery community centers: demographics, substance use history, and referral source as reported by directors.

Characteristic of RCC service user		Reported by RCC directors	
		n = 30	
		M % (*SD*)	Range of %
Demographics			
Age	Under 18	2.3 (4.5)	0–20
	18–24	20.3 (13.4)	0–50
	25–59	65.0 (16.3)	40–99
	60 +	12.3 (11.3)	0–50
	Not reported	0.2 (0.9)	0–5
Female[a]		39.3 (13.4)	3–70
Race	White	72.0 (30.7)	10–100
	Black or African American	15.8 (22.9)	0–80
	More than one race	7.2 (10.7)	0–41
	Other	2.0 (2.6)	0–10
	Not reported	3.0 (11.2)	0–58
Hispanic or Latino		8.4 (11.5)	0–58
Education[b]	High school diploma/GED or less	75.8 (16.5)	1–95
	Bachelor's	9.8 (10.7)	0–50
	Graduate degree	3.1 (5.3)	0–18
	Other professional degree (e.g., technical, associates)	10.7 (11.7)	0–56
	No reported	0.6 (2.1)	
Employment	Employed or student, full time	29.5 (21.9)	0–75
	Employed, part time	20.5 (15.2)	0–80
	Unemployed	50.0 (26.2)	10–100
Current legal involvement	Not currently involved	56.6 (24.1)	15–96
	Currently involved	42.7 (24.1)	4–85
Substance use history[c]			
Years in recovery	0–6 months	31.4 (21.5)	4–99
	6 months–1 year	17.5 (9.3)	1–40
	1–5 years	27.1 (15.2)	0–50
	5 + years	19.8 (18.9)	0–61
	Actively using	4.5 (7.9)	0–27
Primary substance	Alcohol	32.9 (20.3)	2–80
	Opioids	35.4 (30.8)	0–92
	Cocaine/crack	7.9 (12.2)	0–60
	Amphetamines & Methamphetamines	0.6 (1.7)	0–8
	Cannabis	4.8 (7.9)	0–30
	Other	3.1 (4.7)	0–17
	No drug problem	2.0 (3.0)	0–10
Referral source			
Treatment		24.3 (17.6)	0–75
Criminal justice		15.9 (14.2)	0–60
Shelters		6.4 (8.5)	0–36
Self-referred (e.g., word of mouth, walk-in)		44.5 (26.1)	0–100
Recovery residences		3.7 (11.1)	0–50
Other (e.g., mutual help organization, family, college)		5.1 (7.7)	0–28
Not reported		0.1 (0.8)	0–4

RESULTS: Referral Source

'New Kid On The Block'

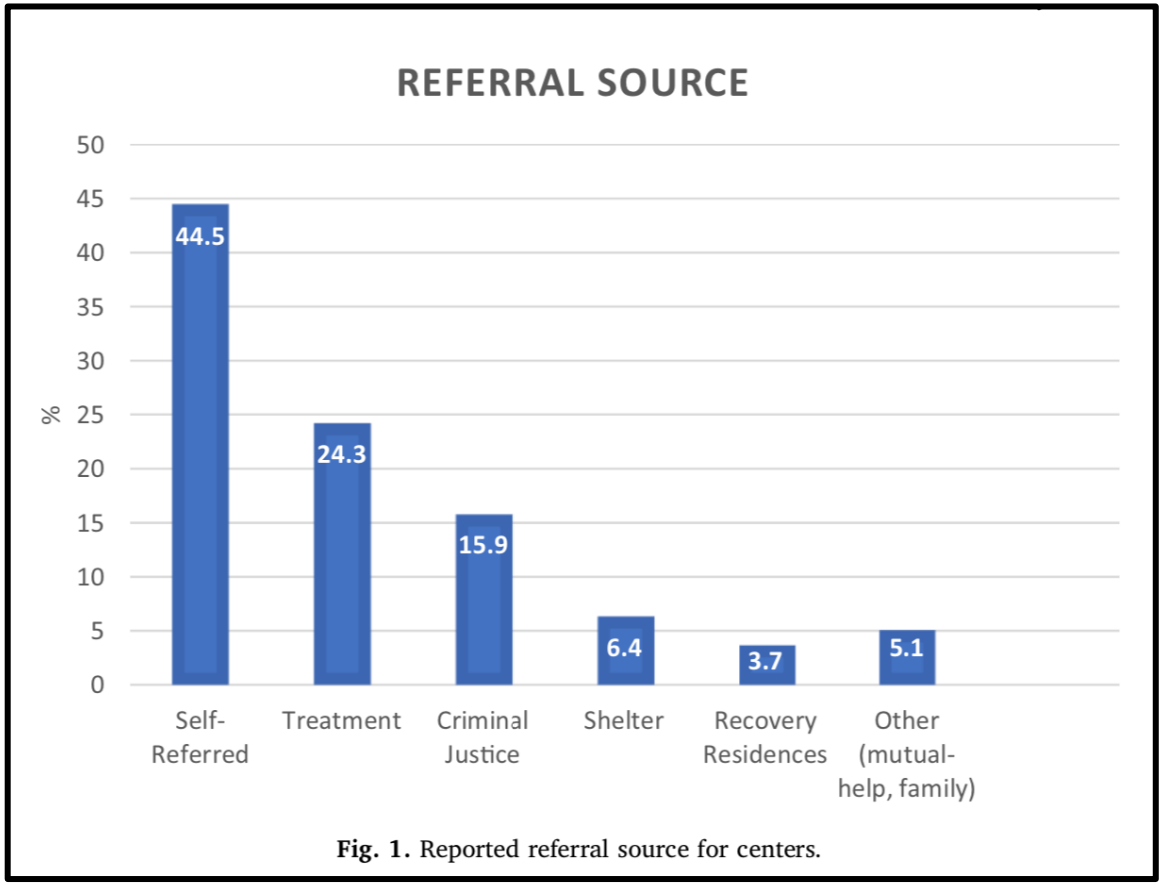
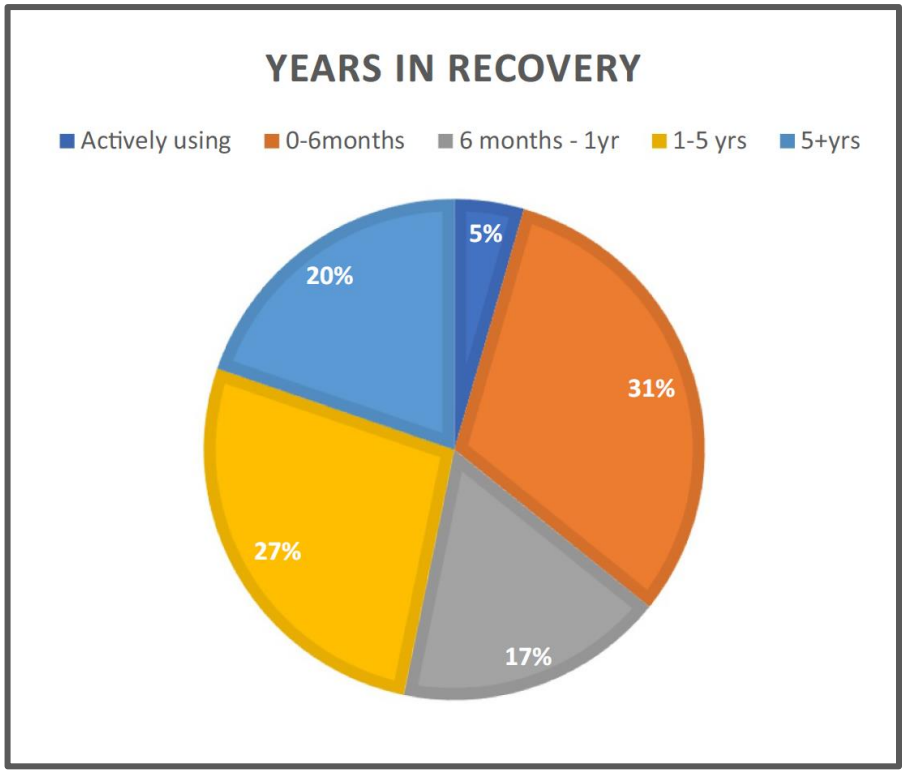
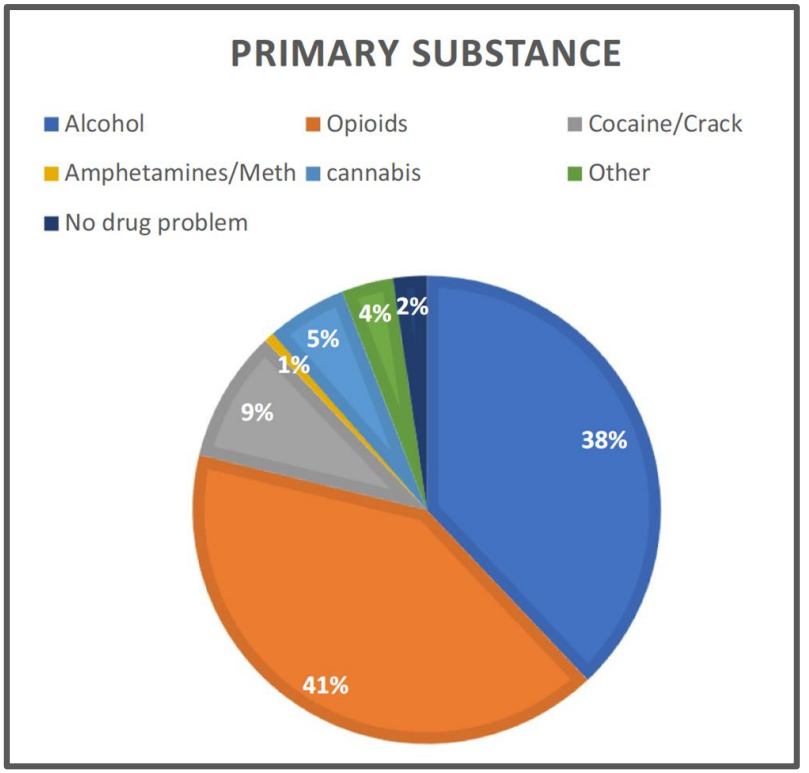


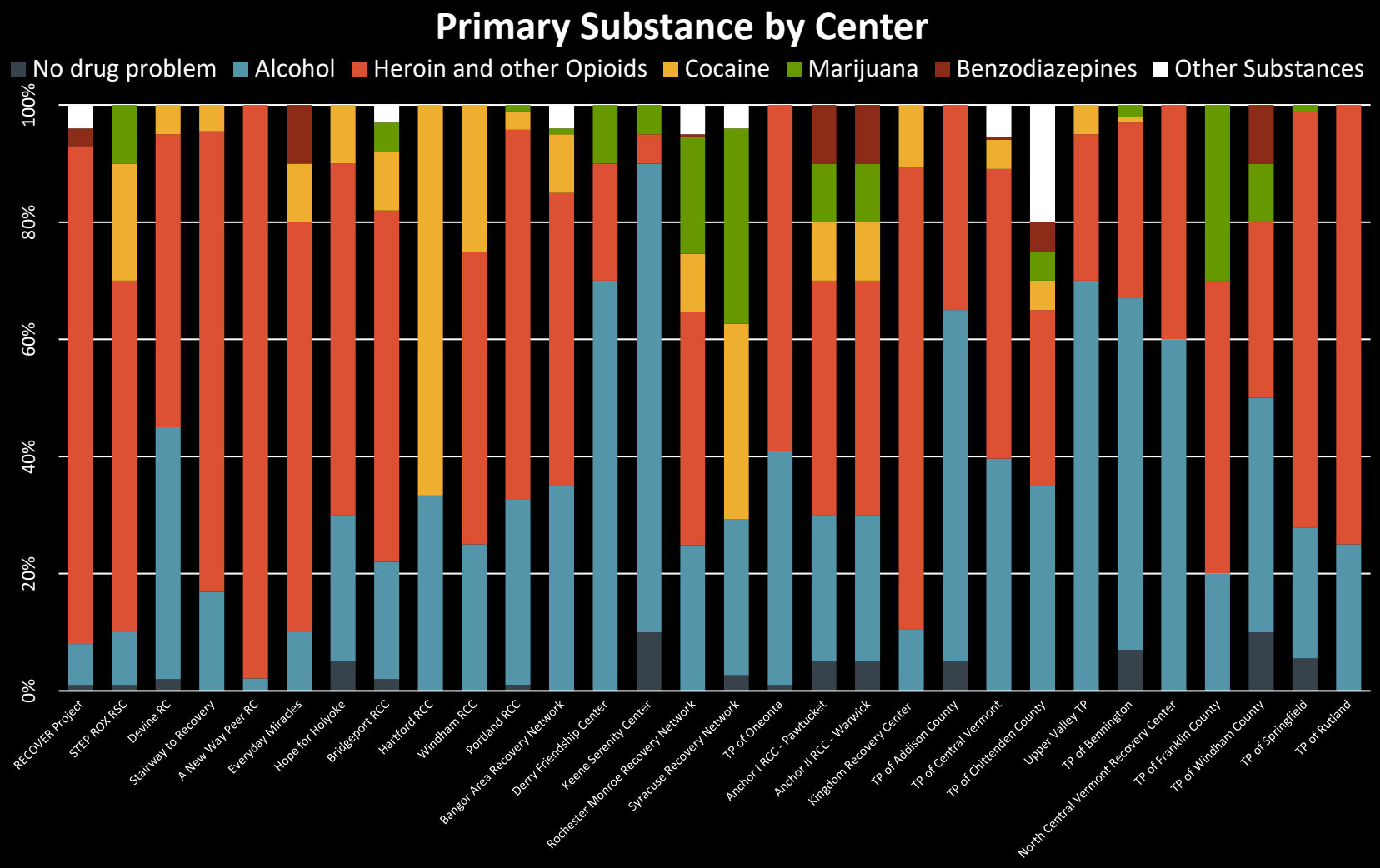
Fig. 1. Reported referral source for centers.

RESULTS

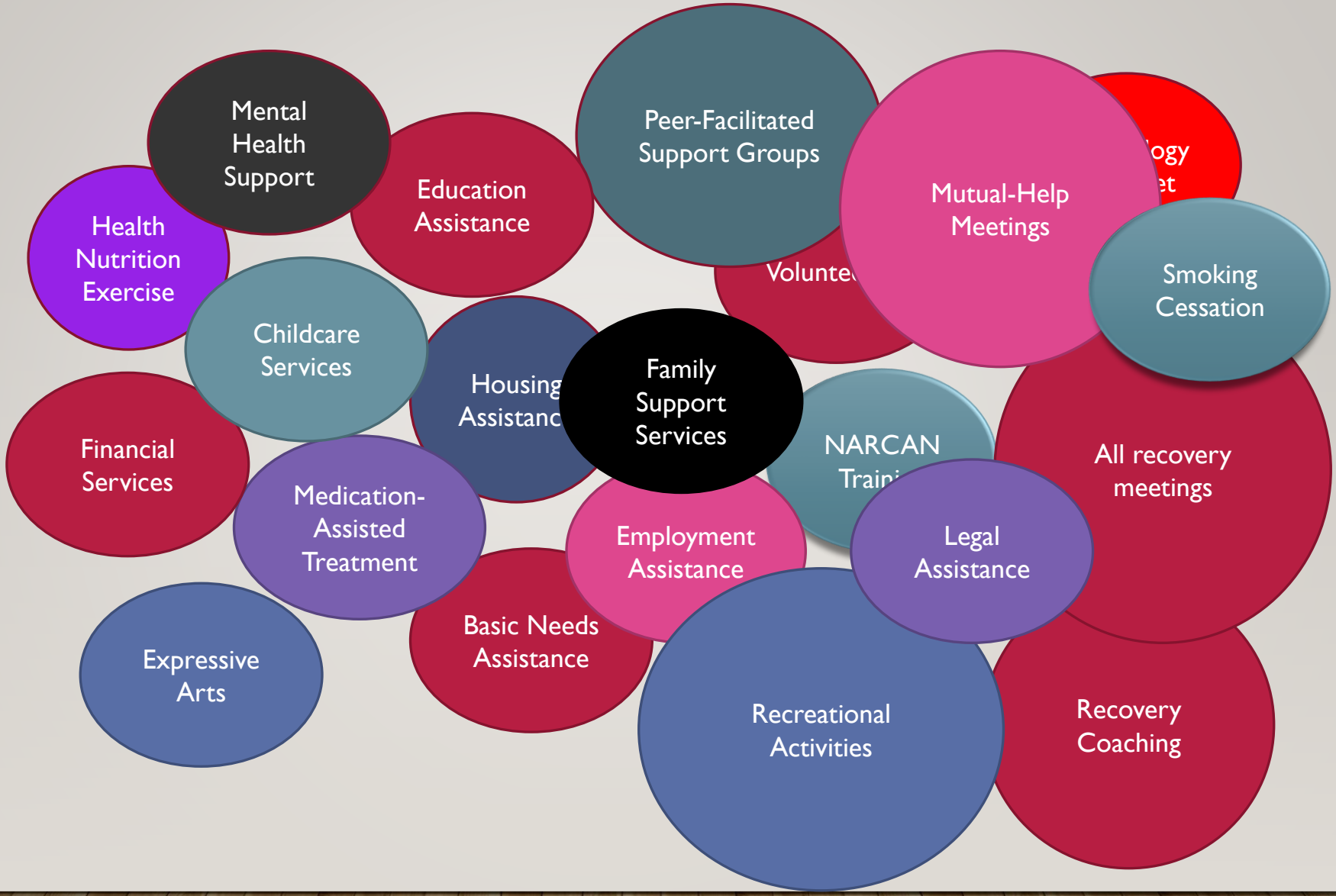
‘New Kid On The Block’






Primary Substance by Center
No drug problem
Alcohol
Heroin and other Opioids
Cocaine
Marijuana
Benzodiazepines
Other Substances
100%
80%
60%
40%
20%
0%
RECOVER Project
STEP ROX RSC
Devine RC
Stairway to Recovery
A New Way Peer RC
Everyday Miracles
Hope for Holyoke
Bridgeport RCC
Hartford RCC
Windham RCC
Portland RCC
Bangor Area Recovery Network
Derry Friendship Center
Keene Serenity Center
Rochester Monroe Recovery Network
Syracuse Recovery Network
TP of Oneonta
Anchor I RCC - Pawtucket
Anchor II RCC - Warwick
Kingdom Recovery Center
TP of Addison County
TP of Central Vermont
TP of Chittenden County
Upper Valley TP
TP of Bennington
North Central Vermont Recovery Center
TP of Franklin County
TP of Windham County
TP of Springfield
TP of Rutland

SERVICES PROVIDED



Services Provided

Services offered by RCCs and their perceived importance rated by RCC staff.

Service	% offered (30 centers)[a]		Perceived importance[b] (55 staff)	
	%	(n)	Mean	(*SD*)
Support group meetings				
"All recovery" meetings	60.0	(18)	6.3	(1.3)
Mutual-help groups by known organizations (e.g., Alcoholics Anonymous)	96.7	(29)	6.6	(0.7)
Other peer-facilitated recovery support groups (e.g., relapse prevention groups)	76.7	(23)	6.6	(0.7)
Mental health support (e.g., dual diagnosis support groups)	36.7	(11)	6.1	(1.0)
Recovery coaching (and/or case management)	76.7	(23)	6.2	(1.4)
Opioid and/or harm reduction services				
Medication-assisted treatment (MAT) support (e.g., Pathway Guide, MARS group)	43.3	(13)	5.9	(1.6)
NARCAN training and/or distribution	56.7	(17)	6.3	(1.2)
Provision of access to technology/internet (e.g., use of center computers, printers, fax)	46.7	(14)	5.6	(1.4)
Assistance with basic needs and social services				
Basic needs assistance (e.g., access to food, clothing, transportation)	43.3	(13)	5.8	(1.2)
Childcare services	10.0	(3)	4.8	(1.6)
Education assistance	63.3	(19)	5.6	(1.3)
Employment assistance (e.g., job or computer skills, resume writing, CORI support)	83.3	(25)	5.9	(1.2)
Family support services (e.g., family/parent education or support groups)	86.7	(26)	6.1	(1.1)
Financial services	23.3	(7)	5.1	(1.6)
Health insurance education	36.7	(11)	5.2	(1.4)
Housing assistance	70.0	(21)	5.9	(1.3)
Legal assistance	16.7	(5)	5.0	(1.8)
Assistance with health behaviors				
Health, exercise, and nutrition programs (e.g., yoga, meditation, fitness classes)	83.3	(25)	5.7	(1.3)
Smoking cessation support	53.3	(16)	5.0	(1.7)
Facilitation of substance-free recreational activities				
Recreational/social activities (e.g., substance free social events)	100.0	(30)	6.3	(1.0)
Expressive arts (e.g., arts/craft groups, music, poetry)	53.3	(16)	5.4	(1.3)

RESULTS

‘New Kid On The Block’

- Mostly in urban/suburban locations, have moderate-good attractiveness/ quality and are fairly quickly accessible
- Operating for an average of **8.5 years** with a dozen to more than two thousand visitors/month
- Center directors were mostly **female** with primary drug histories of alcohol , cocaine, or opioids.
  - Most, but not all, directors and staff were in recovery.

- RCC **visitors:** Male, White, unemployed, criminal-justice system-involved
- RCCs reported a **range of services** including
  - Social/Recreational
  - Mutual-Help
  - Recovery Coaching
  - Employment and Education Assistance
  - Medication-assisted treatment (MAT) support and overdose reversal training were less frequently offered, despite their high ratings by staff

CROSS-SECTIONAL ANALYSIS OF EXISTING RCC PARTICIPANTS

ALCOHOLISM: CLINICAL AND EXPERIMENTAL RESEARCH

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One-Stop Shopping for Recovery: An Investigation of Participant Characteristics and Benefits Derived From U.S. Recovery Community Centers

John F. Kelly, Robert L. Stout, Leonard A. Jason, Nilofar Fallah-Sohy, Lauren A. Hoffman, and Bettina B. Hoeppner

Background: Recovery community centers (RCCs) are the "new kid on the block" in providing addiction recovery services, adding a third tier to the 2 existing tiers of formal treatment and mutual-help organizations (MHOs). RCCs are intended to be recovery hubs facilitating "one-stop shopping" in the accrual of recovery capital (e.g., recovery coaching; employment/educational linkages). Despite their growth, little is known about who uses RCCs, what they use, and how use relates to improvements in functioning and quality of life. Greater knowledge would inform the field about RCC's potential clinical and public health utility.

Methods: Online survey conducted with participants ($N = 336$) attending RCCs ($k = 31$) in the northeastern United States. Substance use history, services used, and derived benefits (e.g., quality of life) were assessed. Systematic regression modeling tested a priori theorized relationships among variables.

Results: RCC members ($n = 336$) were on average 41.1 ± 12.4 years of age, 50% female, predominantly White (78.6%), with high school or lower education (48.8%), and limited income (45.2% < $10,000 past-year household income). Most had either a primary opioid (32.7%) or alcohol (26.8%) problem. Just under half (48.5%) reported a lifetime psychiatric diagnosis. Participants had been attending RCCs for 2.6 ± 3.4 years, with many attending <1 year (35.4%). Most commonly used aspects were the socially oriented mutual-help/peer groups and volunteering, but technological assistance and employment assistance were also common. Conceptual model testing found RCCs associated with increased recovery capital, but not social support; both of these theorized proximal outcomes, however, were related to improvements in psychological distress, self-esteem, and quality of life.

Conclusions: RCCs are utilized by an array of individuals with few resources and primary opioid or alcohol histories. Whereas strong social supportive elements were common and highly rated, RCCs appear to play a more unique role not provided either by formal treatment or by MHOs in facilitating the acquisition of recovery capital and thereby enhancing functioning and quality of life.

Key Words: Recovery Community Centers, Recovery, Addiction, Support Services, Recovery Coaching, Addiction, Substance Use Disorder.

PROFESSIONAL TREATMENT SERVICES often play a vital role in addressing substance use disorders in the United States and around the world. Such clinical services can provide life-saving medically managed detoxification and stabilization as well as deliver medications and psychosocial interventions that can alleviate cravings and help prevent relapse. Extending the framework and benefits of these professional treatment efforts, peer-led mutual-help organizations (MHOs), such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), SMART Recovery, and many others are commonly used to provide additional long-term free recovery support over time in the communities in which people live (Bøg et al., 2017; Kelly, 2017; Kelly et al., 2017a). Adding to these resources in recent years has been a new dimension of recovery support services that are neither professional treatment nor MHOs. These new services (e.g., recovery community centers [RCCs], recovery residences, recovery coaching, recovery high schools, and collegiate recovery programs; Kelly et al., in press; White et al., 2012, 2012) combine voluntary, peer-led initiatives, with professional activities, and are intended to provide flexible community-based options to address the psychosocial barriers to sustained remission (White et al., 2012, 2012).

RCCs are one of the most common of these new additions

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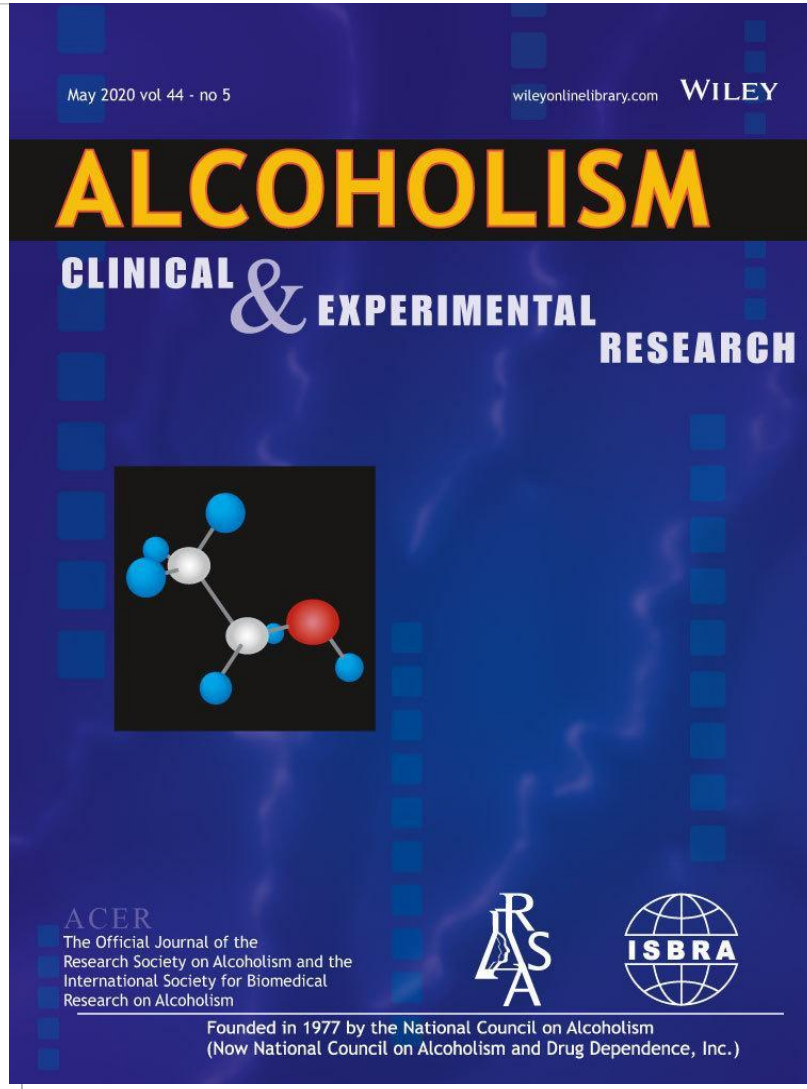


AIMS

'One-Stop Shopping For Recovery'

I. **Assess** demographic, substance use, mental health, and recovery experience characteristics of active participants across almost 3 dozen RCCs in the northeastern United States

I. **Examine** the types of available services used by RCC members across RCCs and describe how helpful members found them

I. **Investigate** the relationship between the extent of RCC exposure and length of time in recovery and the associations among RCC exposure and measures of recovery capital and social support and how these constructs may be related to other indices of quality of life and functioning, and psychological and emotional well-being

Little is known about who uses RCCs, types and helpfulness of services used, effect on recovery capital and effect on quality of life

Kelly JF, Stout RL, Jason LA, Fallah-Soy N, Hoffman LA, Hoeppner BB. One Stop-Shopping for Recovery: An Investigation of Participant Characteristics and Benefits Derived From U.S. Recovery Community Centers

METHODS

'One-Stop Shopping For Recovery'

DESIGN:

- Cross-sectional
- Survey

PARTICIPANTS:

- N=336 RCC members
- Across 31 New England RCCS

MEASURES INCLUDE:

- Demographics
- Recovery
- Substance Use
- Mental Health
- RCC Experience
- RCC Services
- RCC Appraisals
- Recovery Assets
- Quality of Life

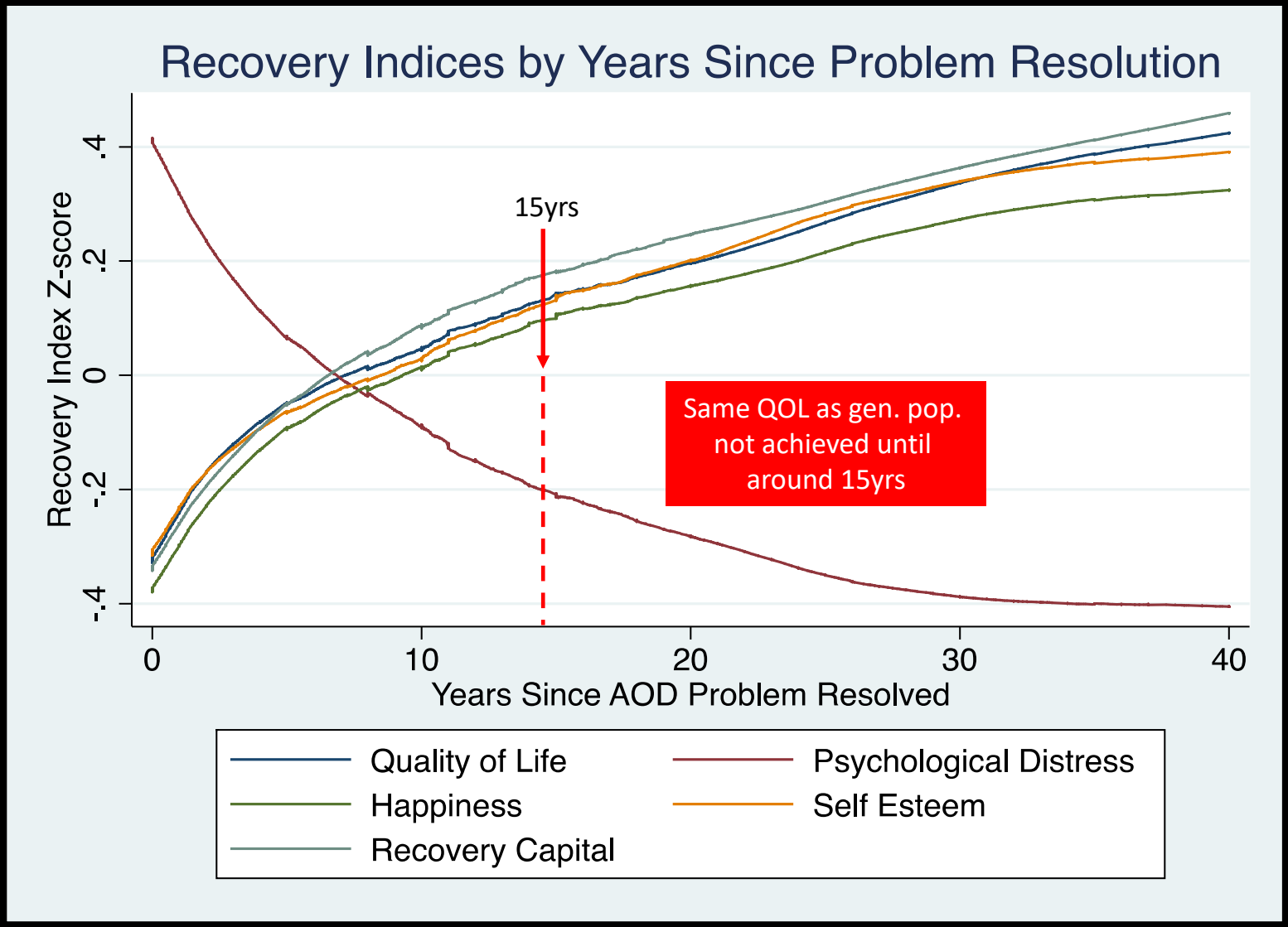
Cross-Sectional Results of Current RCC members (N=336)

- **Age/gender**: Mean age = 41 (SD 12.4); 50% women
- **Sexual Minority Status**: 23% LGBTQ
- **Race/Ethnicity**: Predominantly White (78.6%); 11% Hispanic
- **Education:** high school or lower education (48.8%)
- **Income**: 45.2% <$10,000 past-year household income
- **Primary Substance**: Most had either primary opioid (32.7%) or alcohol (26.8%); also some cocaine (13.7%)
- **Psychiatric Diagnosis** (Lifetime): Just under half (48.5%)
- **Prior SUD treatment**: 72%

Cross-Sectional Survey (N=366) - RCC Experiences

	Total	
	Mean/%	(SD/*n*)
RCC experience		
Referral source		
Family and friends	44.0	(148)
SUD treatment (detox, inpatient, outpatient)	14.6	(49)
Housing and social services (e.g., sober living, shelter, including DSS)	13.7	(46)
RCC outreach (e.g., street outreach, Internet, pamphlets, community event, and ads)	11.6	(39)
Health care (PCP, ED)	5.4	(18)
Other (e.g., employer, 12-step, church, and academic)	8.9	(30)
Length of RCC attendance (in years)	2.6	(3.4)
Less than a year	35.4	(119)
1 to 5 years	49.1	(165)
5+ years	14.0	(47)
Percent days attended RCC in past 90 days (in mean, SD)	45.5	(32.1)
Length of typical RCC visit (in hours)	3.1	(2.7)
RCC appraisal		
RCC's helpfulness to recovery	6.2	(1.2)
RCC's helpfulness to QOL	6.1	(1.2)
RCC's sense of community (in mean, SD)		
Self (identity and importance to self)	5.3	(1.0)
Membership (social relationships)	5.2	(1.0)
Entity (a group's organization and purpose)	5.3	(1.0)
Recovery assets		
Recovery capital (BARC; 10 items, 1- to 6-point scale)	5.0	(0.9)
Social support for recovery (CEST-SS; 9 items, 1- to 6-point scale)	4.8	(1.0)
Quality of life (QOL) (in mean, SD)		
Quality of Life (EUROHIS-QOL; 8 items, 1- to 5-point scale)	3.8	(0.7)
Self-esteem (1 item, 1- to 10-point scale)	6.5	(2.3)
Psychological distress (Kessler-6, 6 items, 0- to 4-point scale)	2.0	(0.8)

Of note, QOL in this sample was half a SD higher than in NRS study despite shorter time in recovery in this sample….



Kelly et al (2018) *Alcoholism: Clinical and Experimental Research*

RESULTS

'One-Stop Shopping For Recovery'

Table 2. RCC Services Used and Their Perceived Helpfulness

	Used service		Rated helpfulness	
RCC service	%	(*n*)	Mean	(SD)
All recovery meetings	64.9	(218)	6.1	(1.2)
Mutual-help groups	58.6	(197)	6.1	(1.3)
Peer-facilitated recovery support groups	54.2	(182)	6.1	(1.2)
Opportunity to volunteer/give back to the center	44.3	(149)	6.6	(0.8)
Recreational/social activities	40.8	(137)	6.2	(1.1)
Recovery coaching	37.8	(127)	6.3	(1.2)
Technology/Internet access	27.1	(91)	6.5	(0.9)
Employment assistance	26.5	(89)	5.9	(1.5)
Recovery advocacy outreach and opportunities	24.1	(81)	6.5	(0.9)
NARCAN training and/or distribution	21.1	(71)	6.4	(1.0)
Health, exercise, and nutrition programs	17.0	(57)	6.1	(1.1)
Basic needs assistance	16.4	(55)	6.4	(1.2)
Housing assistance	15.2	(51)	5.8	(1.4)
Medication-assisted treatment	14.9	(50)	5.3	(1.4)
Expressive arts	14.9	(50)	6.2	(1.1)
Education assistance	13.1	(44)	5.8	(1.4)
Mental health support	12.8	(43)	5.9	(1.4)
Family support services	8.0	(27)	6.4	(1.1)
Smoking cessation support	7.7	(26)	5.7	(1.7)
Legal assistance	7.4	(25)	5.6	(1.8)
Health insurance education	5.7	(19)	5.4	(1.5)
Financial services	3.9	(13)	5.2	(2.0)
Childcare services	0.9	(3)	7.0	(0.0)

Helpfulness rated on a 1- to 7-point scale, where 1 = "Not at All Helpful" and 7 = "Extremely Helpful"; only participants who indicated using a service were asked to rate it.

Most commonly used services at RCCs

Rated Helpfulness of Services Used by Members

RCCs are utilized by an array of individuals with few resources and primary opioid or alcohol histories.

Kelly JF, Stout RL, Jason LA, Fallah-Soy N, Hoffman LA, Hoeppner BB. One Stop-Shopping for Recovery: An Investigation of Participant Characteristics and Benefits Derived From U.S. Recovery Community Centers

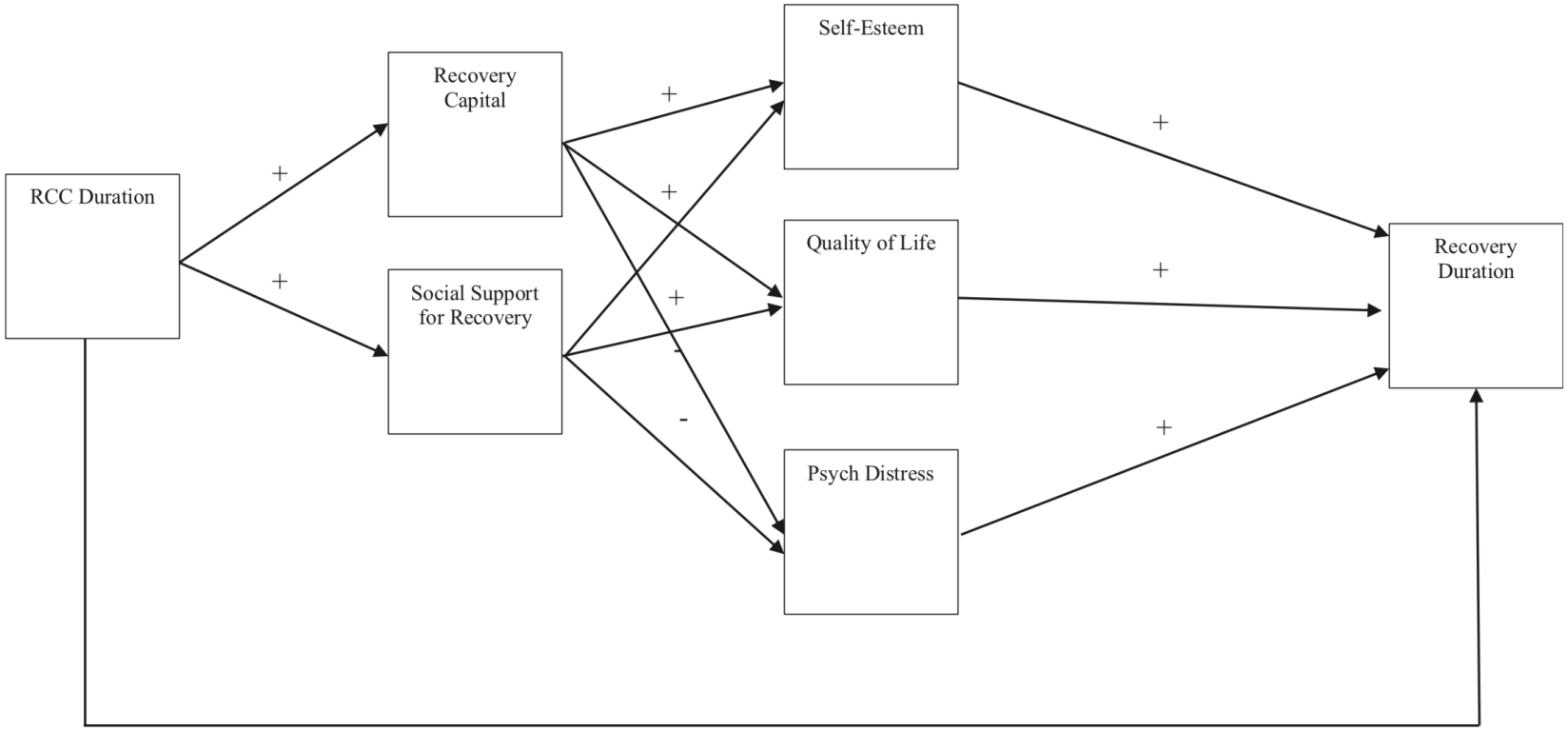
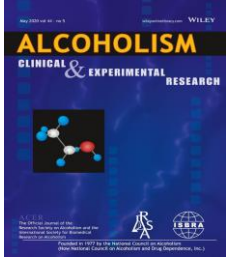


Fig. 1. Conceptual model of the theorized relationships among RCC duration and length of recovery with anticipated intermediate variables. Note: "+" = theorized positive association among linked variables; "−" = theorized negative association among linked variables.



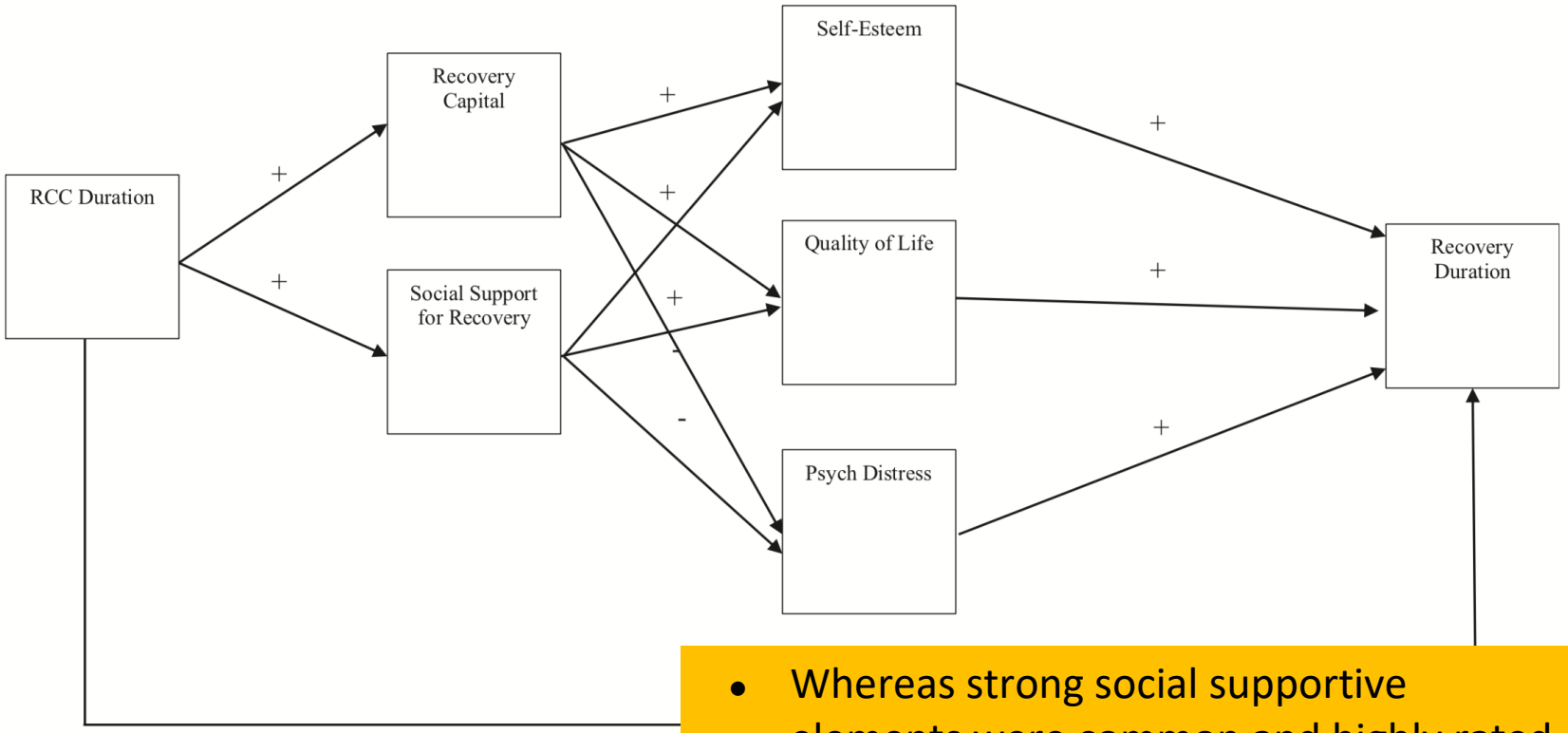
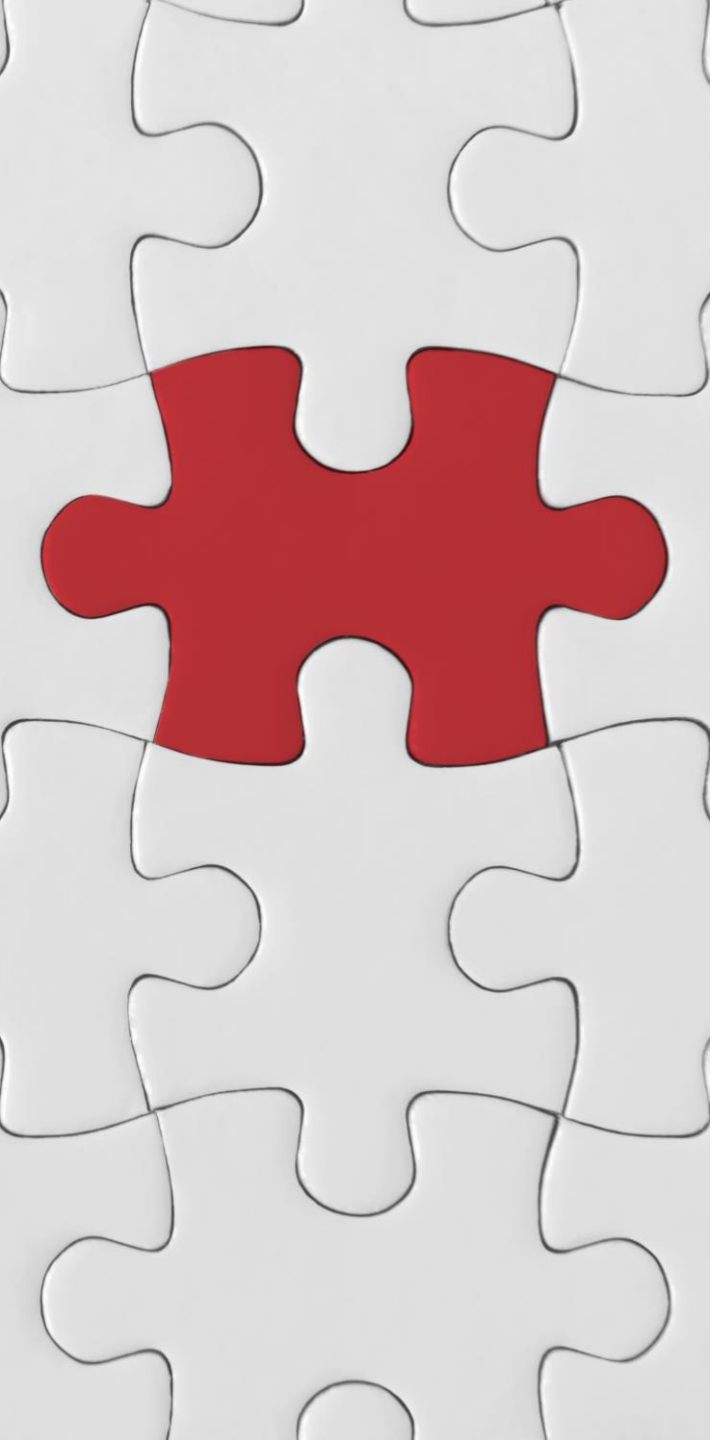


Fig. 1. Conceptual model of the theorized relationships among
"+" = theorized positive association among linked variables; "–" =
ote:

- Whereas strong social supportive elements were common and highly rated, **RCCs appear to play a more unique role not provided either by formal treatment or by MHOs** in facilitating the acquisition of recovery capital and thereby enhancing functioning and quality of life.


LONGITUDINAL
ANALYSIS OF NEW
RCC PARTICIPANTS



Results: Longitudinal Analysis of New Participants

- **New RCC participants** were either **in or seeking** recovery and were:
  - Mostly young- to middle-aged
  - Racially diverse
  - Single
  - Unemployed
  - Adult men and women
  - With low education and income
  - Suffering from primary opioid or alcohol use disorder
  - History of comorbid mental health problems
  - Prior professional and mutual-help organization participation.
- Reflects high clinical severity and few resources - indicative of a need to provide the kinds of recovery-specific support and infrastructures that RCCs are shown to possess (Haberle et al., 2014; Kelly, Fallah-Sohy, et al., 2020; Valentine, 2011).

PREDICTORS OF RCC ENGAGEMENT

Among new RCC attendees, sig. predictors of engagement were: how accessible the RCC was (in travel time); higher QOL (but was 1 SD lower than gen. pop; Hispanic ethnicity; prior outpt tx

Approx. 60% FOLLOWED UP

Table 2 - Predictors of RCC Engagement (n=275 included, n=138 with known outcome)

Type of Variable	Univariate				Multivariable [b]			
Variable	OR	95% CI		p	aOR	95% CI		p
…phics								
	1.02	(1.00, 1.05)		0.11				
…er (female vs. male) [a]	1.65	(0.73, 3.74)		0.22				
…l orientation (any vs. heterosexual)	0.74	(0.51, 1.07)		0.11				
…(Black vs. White) [a]	1.19	(0.70, 2.04)		0.52				
…ity (Hispanic vs. not)	1.83	(1.11, 3.00)	*	0.02	2.32	(1.28, 4.19)	**	0.006
…tion (ref = High school or less)								
…me college or other degree	1.40	(0.84, 2.32)		0.19				
… or higher	0.91	(0.48, 1.72)		0.77				
…e (ref = Less than $10,000)								
…0,000 to $49,999	0.93	(0.48, 1.82)		0.84				
…0,000 or more	0.99	(0.30, 3.21)		0.98				
…ility of the RCC								
…of transportation (walks there vs. not)	0.75	(0.54, 1.04)		0.08	0.58	(0.38, 0.89)	*	0.015
…o get there (within 15min vs. more)	1.41	(1.01, 1.95)	*	0.04	1.67	(1.11, 2.52)	*	0.016
…ce Use								
…ery stage (seeking vs. in recovery)	0.72	(0.42, 1.24)		0.23				
…y substance (opioid vs. other)	0.80	(0.59, 1.07)		0.14				
…ubstance use (3+ vs. 1-2 substances)	1.29	(0.89, 1.86)		0.18				
Tobacco use (current vs. not)	0.96	(0.70, 1.30)		0.77				
Baseline Levels of Substance Use Outcomes								
Abstinent from all substances (in %, n)	1.25	(0.71, 2.18)		0.43				
Length of abstinence (1+ month vs. less)	1.29	(0.93, 1.78)		0.13				
Problem-free for 90 days (no days drunk, etc.)	1.15	(0.78, 1.69)		0.47				
Mental Health								
Quality of Life								
Quality of Life (EUROHIS-QOL)	1.63	(1.08, 2.46)	*	0.02	2.09	(1.16, 3.77)	*	0.015
Self-esteem (1 item, 1-10 scale)	1.11	(0.99, 1.25)		0.08	1.03	(0.88, 1.22)		0.705
Psychological distress (Kessler-6)	0.82	(0.59, 1.14)		0.24				
Addiction and Recovery Services Use								
Outpatient addiction treatment	1.31	(0.97, 1.76)		0.08	1.60	(1.11, 2.32)	*	0.013
Alcohol/drug detoxification	1.18	(0.83, 1.68)		0.36				

RCC participation for new attendees was associated with increases in length of abstinence, decreases in substance-related problems, and significant improvements in QOL, self-esteem, and decreases in psychological distress

Table 4 - RCC outcomes 3 months after starting at the RCC		Baseline all (n=275)		Baseline retained (n=138)		3-Month retained (n=138)		Change (n=275)			
		M/%	(SD/n)	M/%	(SD/n)	M/%	(SD/n)	b	95% CI	p	
Substance Use											
	Abstinent from all substances (in %, n) [a]	88.7	(244)	91.3	(126)	91.3	(126)	0.14	(-0.42, 0.69)	0.63	
	Length of abstinence (1+ month vs. less) [a]	64.4	(177)	65.2	(90)	75.4	(104)	0.49	(0.10, 0.87)	0.01	*
	Problem-free for 90 days (no days drunk, high, interferred) [a]	38.9	(107)	46.4	(64)	65.2	(90)	0.97	(0.57, 1.37)	<.0001	**
Recovery Assets											
	Recovery Capital (BARC 10 items, 1-6 scale)	4.8	(1.0)	4.9	(0.9)	4.9	(0.9)	0.00	(-0.14, 0.14)	1.00	
	Social support for recovery (CEST-SS; 9 items, 1-6 scale)	4.8	(1.0)	5.0	(0.9)	4.9	(1.0)	0.01	(-0.15, 0.17)	0.90	
Quality of Life (QoL) (in mean, SD)											
	Quality of Life (EUROHIS-QOL; 8 items, 1-5 scale)	3.4	(0.8)	3.5	(0.7)	3.6	(0.8)	0.14	(0.03, 0.24)	0.01	*
	Self-esteem (1 item, 1-10 scale)	6.2	(2.8)	6.4	(2.8)	6.7	(2.6)	0.41	(0.04, 0.77)	0.03	*
	Psychological distress (Kessler-6, 6 items, 0-4 scale)	2.3	(1.0)	2.2	(0.9)	2.0	(1.0)	-0.22	(-0.37, -0.07)	0.00	**

Note: M = mean, SD = standard deviation, b = estimate of TIME (ref=baseline); model includes significant predictors of 3-month within-window survey completion (i.e., mode of transportation to RCC, travel time to RCC, has utilized outpatient treatment, level of perceived social support for recovery) as covariates and models participants as nested within sites; all n=275 included in repeated measures model; ** p < 0.01; [a] = binary distribution modeled using GENMOD

?

?

Could be due to the fact that “new” RCC attendees could be either seeking or in recovery. So, many might have already accrued some of these aspects of social support and elements of recovery capital and were attending the RCCs for other reasons…

Important Research Design Limitations to Consider…

- **Largely cross-sectional without comparison groups-** estimates reflect those who are currently participating and cannot speak to relative benefit nor discontinuation/dissatisfaction with RCCs – future longitudinal, comparative research needed
- A lot was covered in this study with few resources (R21); **more detailed investigation and engagement with current members** (via more in-depth in-person interviews etc) may lead to higher follow-ups (in longitudinal work) and **enhanced data accuracy/quality**
- **Quantity of RCCs has expanded rapidly during the past several years**; observed **estimates here may have changed with increased availability and accessibility and changing standards and norms** as RCCs benefit from their own accumulating experiences and adapt services/practices to better engage/meet needs of potential participants

Summary and Implications

This first systematic study of RCCs in one US region (New England and NY state) suggests some consistent/inconsistent preliminary findings reflecting themes of who uses RCCs, to what degree, and the types and degree of benefit…

- Findings from RCC Director report, cross-sectional survey of existing members, and short-term longitudinal study of new RCC members suggest individuals with primary opioid and alcohol histories, who have few resources and more severe clinical histories utilize RCCs; one in five are **young adult**; about one quarter identify as **sexual minority**; **Hispanic** ethnicity predicts engagement; about **50-60% current smokers; many in early recovery but substantial proportion use RCCs in first 5 yrs of recovery…**

- A **large variety of services** are **offered** and **utilized** and **highly valued** among current attendees; mutual-support groups, volunteer opportunities, utilized and highly valued; other aspects such as technology, family support; NARCAN training highly valued but offered less frequently…

- **Preliminary empirical support** from cross-sectional survey (with lengthier duration of RCC participation) … **for the idea that RCCs may uniquely provide access to recovery capital than in turn may enhance quality of life/funx, self-esteem, decrease distress and that these benefits in turn, help facilitate continued remission and strengthen recovery**

- Some discrepancies observed among new members, however, who, while showing benefits in reducing SUD problems and increasing continuous abstinence and QOL/Self-esteem, and decreases in distress, did not show increases in recovery capital and social support…

In sum, RCCs may foster or provide many of the reported active ingredients of recovery…(CHIME)

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HOPE AND OPTIMISM

POSITIVE SOCIAL IDENTITY

MEANING AND PURPOSE

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