The Epidemiology, Conceptual Issues & A Pragmatic Approach to Treatment

Sunil Khushalani, MD

7th November 2015

CASE EXAMPLE-1

- *63 year old white male*
- *Recurrent major depression and dysthymia*
- *Generalized anxiety*
- *Alcohol use disorder*
- *Presented with suicidal plan to cut his wrists*

CASE EXAMPLE-2

- *49 year old single female*
- *Who has been admitted to the hospital more than a dozen times*
- *With h/o suicidal behavior, aggressive behavior*

CASE EXAMPLE-2

- *She has a h/o Bipolar I disorder*
- *Eating disorder*
- *Post-traumatic Disorder*
- *Borderline Personality Disorder*

CASE EXAMPLE-2

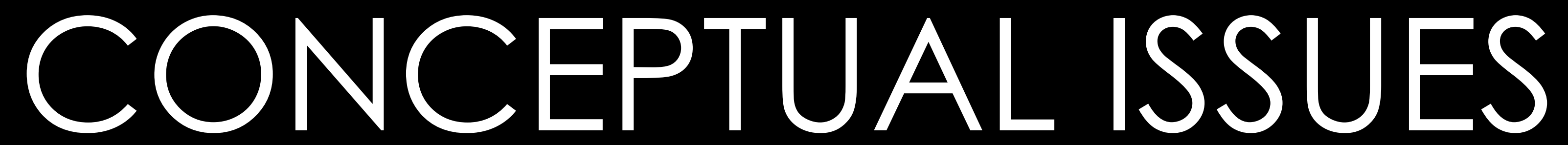
- *Chronic Pain*
- *On very high doses of opioids*
- *H/o cocaine abuse*
- *Heavy smoker*

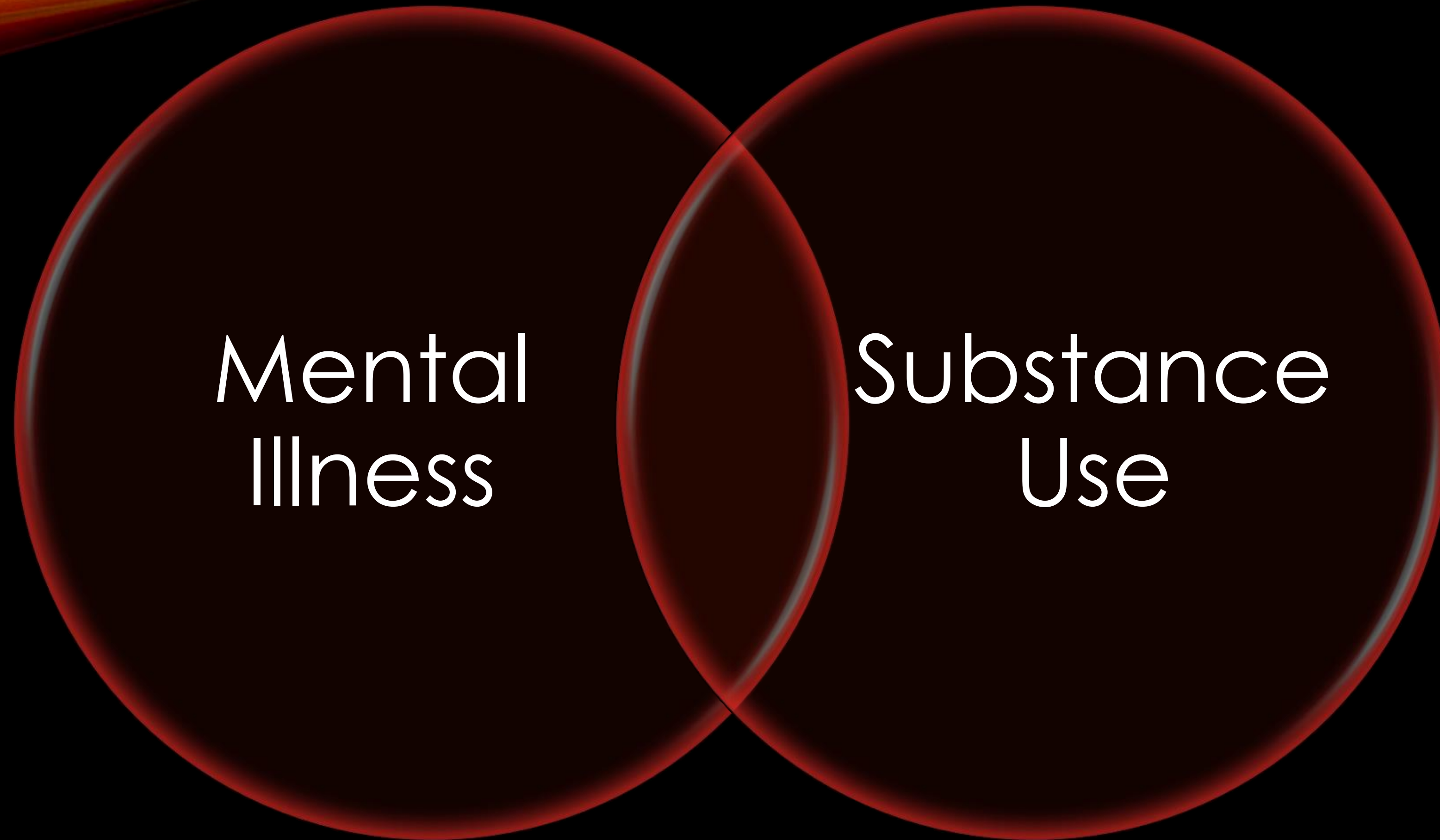
CASE EXAMPLE-3

- *36 year old male*
- *H/o schizoaffective disorder, Bipolar type*
- *Has been living on the streets*
- *H/o non-adherence to his medications*

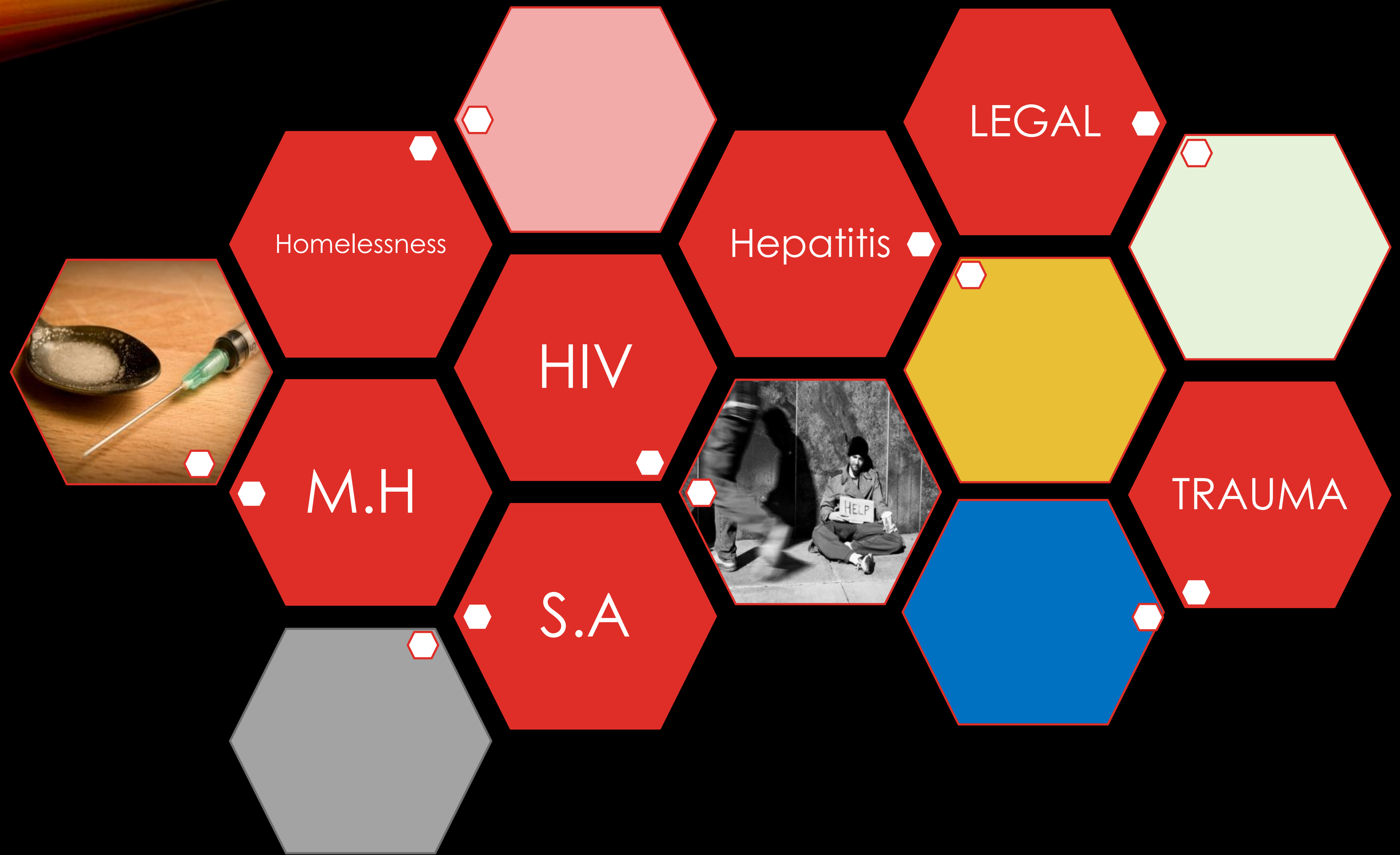
CASE EXAMPLE-3

- *Has heavy alcohol use, 4 or more times a week*
- *H/o cannabis abuse and cocaine abuse*
- *Smokes cigarettes daily*


CONCEPTUAL ISSUES



Is this the population we work with?



Or is this the population we work with?

DUAL DIAGNOSIS?

- Terms used to describe dual diagnosis
  - MICA (mentally ill chemically addicted)
  - CAMI (chemical abusing m
  - MISA (mentall
  - ally ill)
  - chemically dependent)
  - AMD (co-occurring addictive and mental disorders)
  - ACD (addiction and co-occurring disorders)

These conditions are common and complex

DUAL DIAGNOSIS?

The term 'dual diagnosis' is an 'unfortunate misnomer'

Firstly, the term has been used to describe other combination of illnesses, such as individuals with mental illness and developmental disabilities

DUAL DIAGNOSIS?

Secondly, individuals rarely experience *only* two disorders

They have "multiple interacting disabilities, psychosocial problems, and disadvantages"

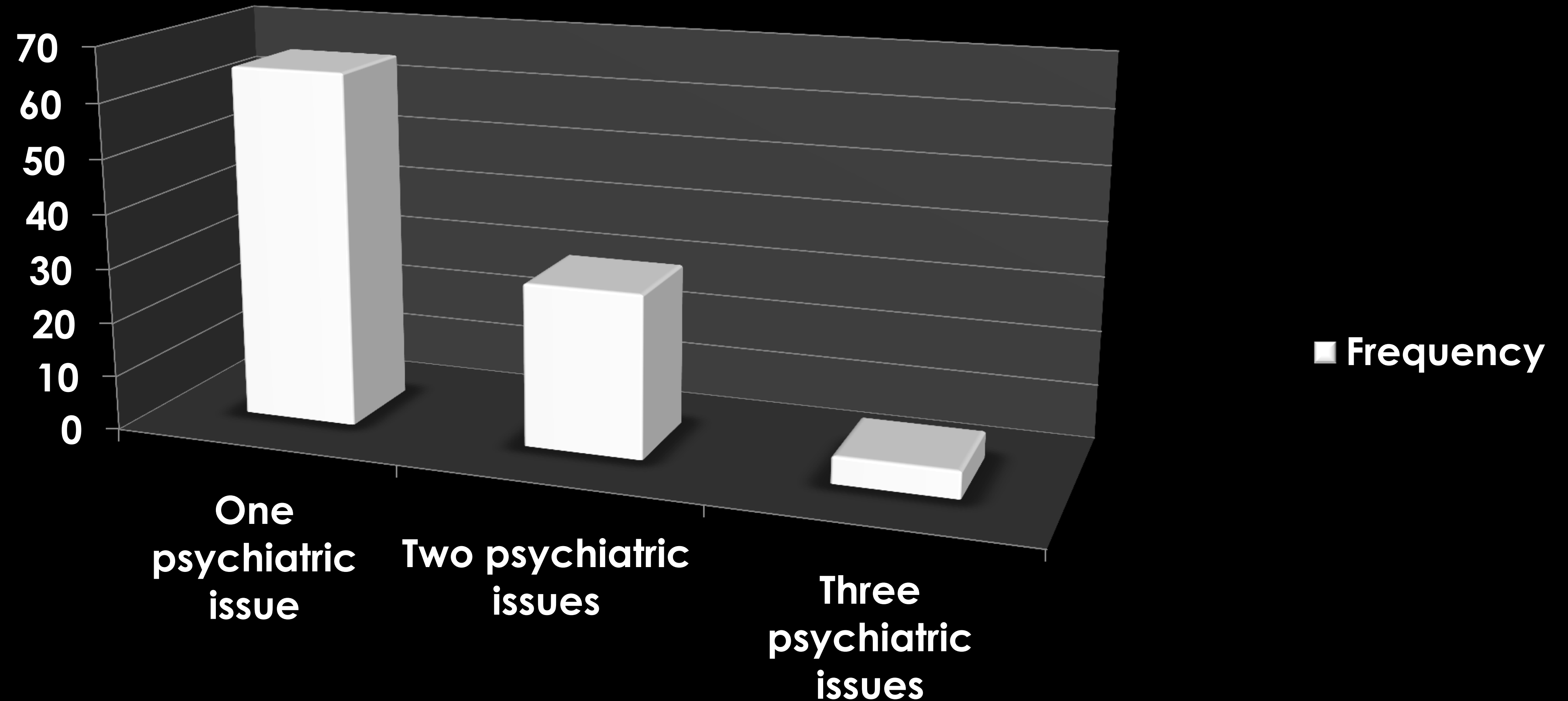
CO-OCCURRING DISORDERS

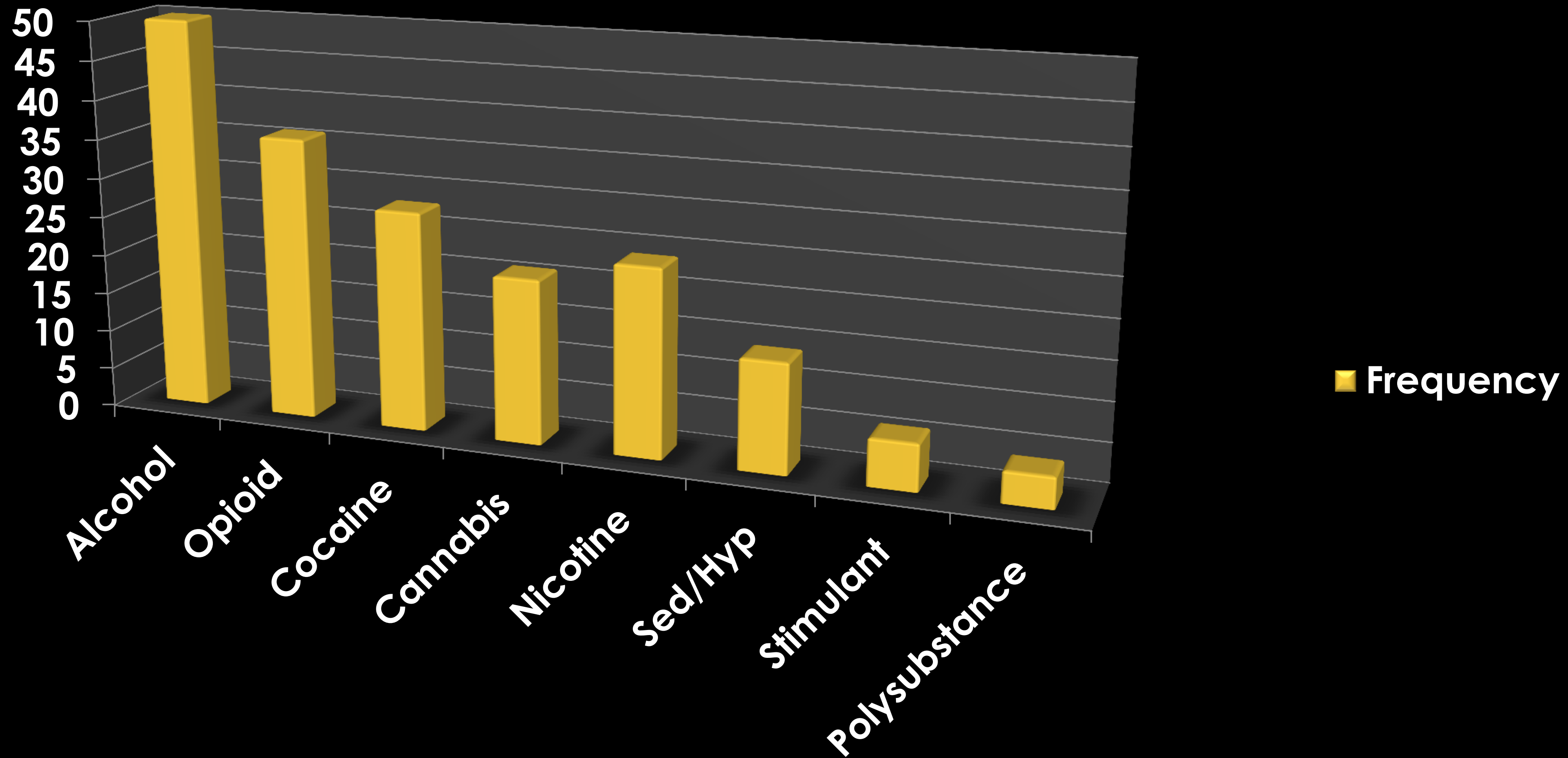
Individuals who have at least one mental disorder as well as alcohol or drug use disorder

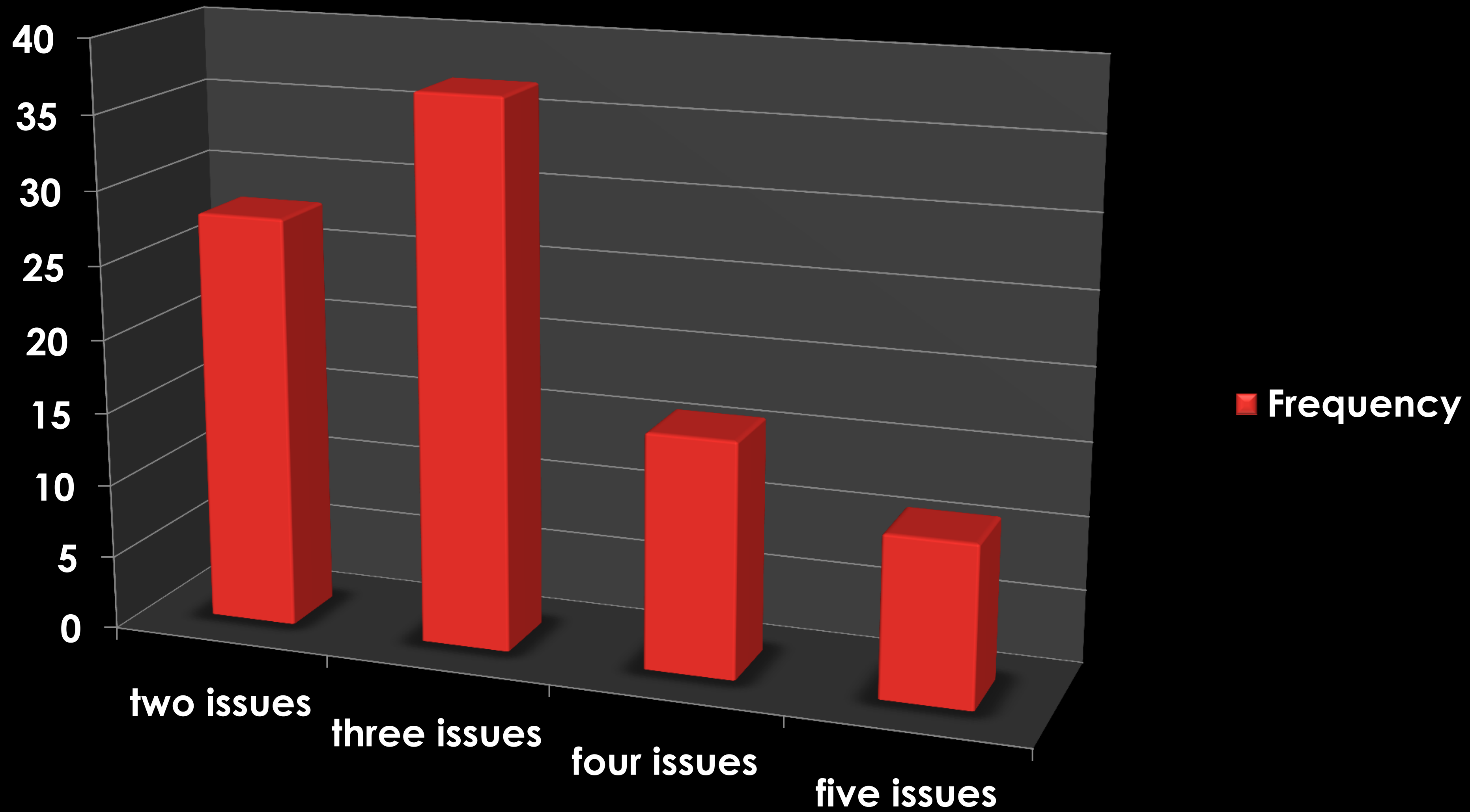
At least one disorder of each type can be diagnosed independently of the other

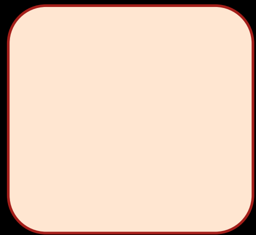
CO-OCCURRING DISORDERS

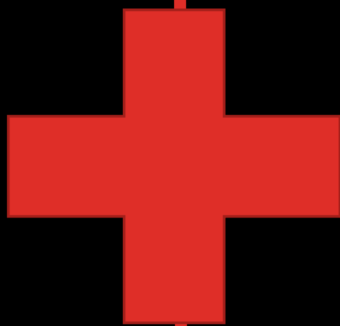
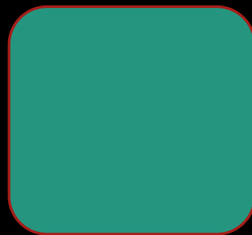
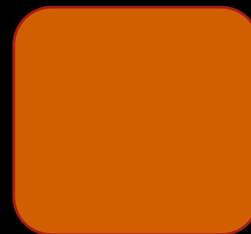
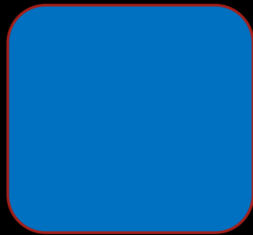
Co-occurring disorders vary by severity, chronicity, symptomatology, degree of impairment, and motivation to address the problem

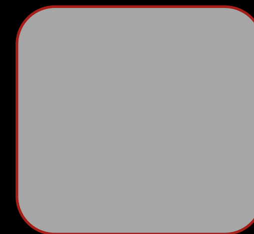

Multiple Psychiatric Issues
Axis 1 & 2
70
60
50
40
30
20
10
0
One psychiatric issue
Two psychiatric issues
Three psychiatric issues
Frequency


Substance Use
50
45
40
35
30
25
20
15
10
5
0
Alcohol
Opioid
Cocaine
Cannabis
Nicotine
Sed/Hyp
Stimulant
Polysubstance
Frequency


Mental Health plus Substance Use
40
35
30
25
20
15
10
5
0
two issues
three issues
four issues
five issues
Frequency





M.H

S.U

EPIDEMIOLOGY

CO-OCCURRING DISORDERS

How many people suffer from co-occurring disorders?

3 Generations of Epidemiologic Studies

1ST GEN: Pre World-War II- From Professional informants (likely to miss untreated cases)

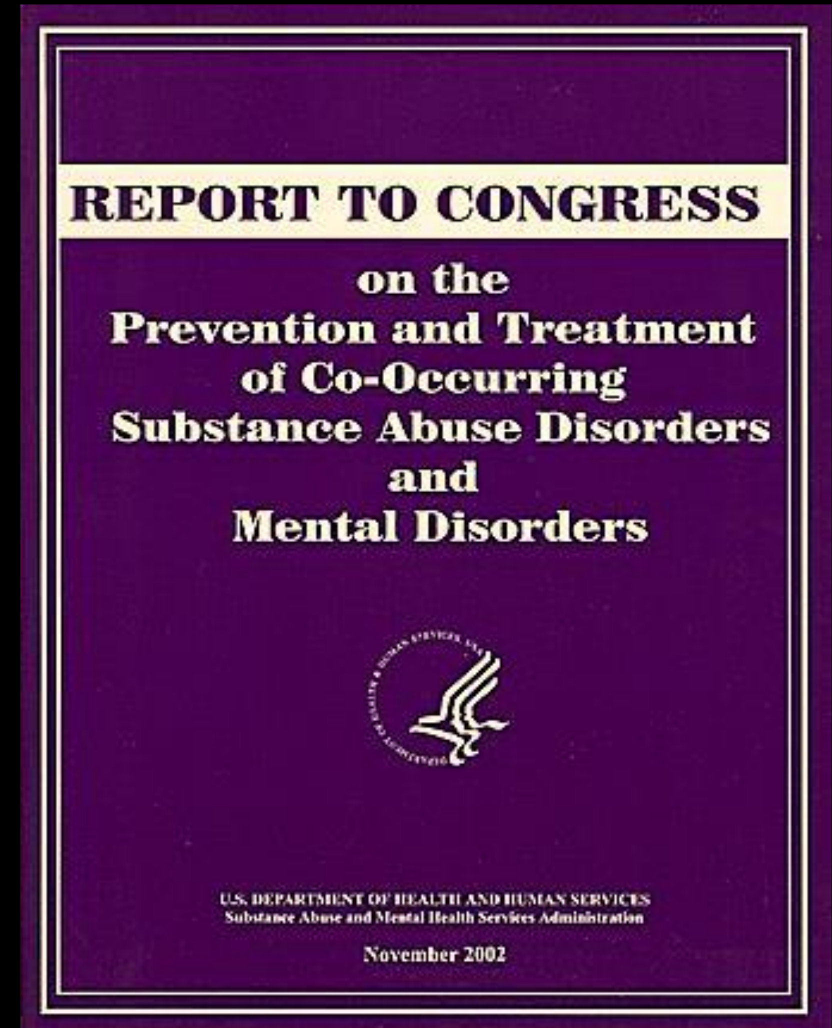
2nd GEN: Midtown Manhattan and Stirling County Studies (focus was on non-substance psychopathology)

3rd GEN: ECA survey (79-81); NCS (91-92); NCS-R (2001-2003): NESARC (Wave 1- 2001-2003), (Wave 2- five years later), (Wave 3- 2012-2013)

CO-OCCURRING DISORDERS

Common and highly complex

Affect 7 to 10 million adult Americans in any one year



CO-OCCURRING DISORDERS

According to the U.S Surgeon General report in 1999, 41-65% of individuals with a lifetime substance abuse disorder also have a lifetime history of at least one mental disorder

CO-OCCURRING DISORDERS

Also, 51% or more lifetime mental disorders also have a lifetime history of at least one substance abuse disorder

CO-OCCURRING DISORDERS

According to the National Co-morbidity Survey,

- 47% of individuals with schizophrenia also had a substance abuse disorder (4 times more than the general population)
- 61% of Individuals with Bipolar disorder also had a substance abuse disorder (5 times as likely as the general population)

CO-OCCURRING DISORDERS

Individuals with co-occurring disorders should be the expectation, not the exception in addiction and mental health treatment systems

If that is the expectation, does having separate treatment systems, make sense?

"Our consumers do not have the opportunity to separate their addiction from their mental illness, so why should we do so administratively and programmatically"

-Fred Osher , M.D

CO-OCCURRING DISORDERS

These individuals have particular difficulty seeking and receiving diagnostic and treatment services

They present significant challenges to the Nation's public health and to health policy makers as well- they are a high cost, high risk and high priority population

CO-OCCURRING DISORDERS

The difficulty is compounded by the existence of two separate service systems, one for mental health services and another for substance abuse treatment

They are excluded from many mental health programs due to substance use and from many addiction programs due to mental health issues

CO-OCCURRING DISORDERS

These two service systems differ markedly with respect to staffing, philosophy of treatment, funding sources, community political factors, types of assessments and procedures performed and treatment approaches

"Behavioral health systems have historically been organized to see people and families with co-occurring mental health and substance use disorders – and other complex needs - as misfits"

- Kenneth Minkoff, M.D.

"America's mental health service delivery system is in *shambles*."

…access problems

…individuals who are incarcerated or homeless

…a nearly total disconnect between substance abuse and mental health treatment"

The American Psychiatric Association
Presents

A Vision for the Mental Health System

April 3, 2003

Prepared by APA Task Force for a Vision for the Mental Health System

Steven S. Sharfstein, M.D., Chair
Norman A. Clemens, M.D.
Anita S. Everett, M.D.
David Fassler, M.D.
Susan L. Padrino, M.D.
Roger Peele, M.D.
Darrel A. Regier, M.D.
Michelle B. Riba, M.D.

Paul S. Appelbaum, M.D., President

CO-OCCURRING DISORDERS

If one of the co-occurring disorders goes untreated, both usually get worse and additional complications often arise

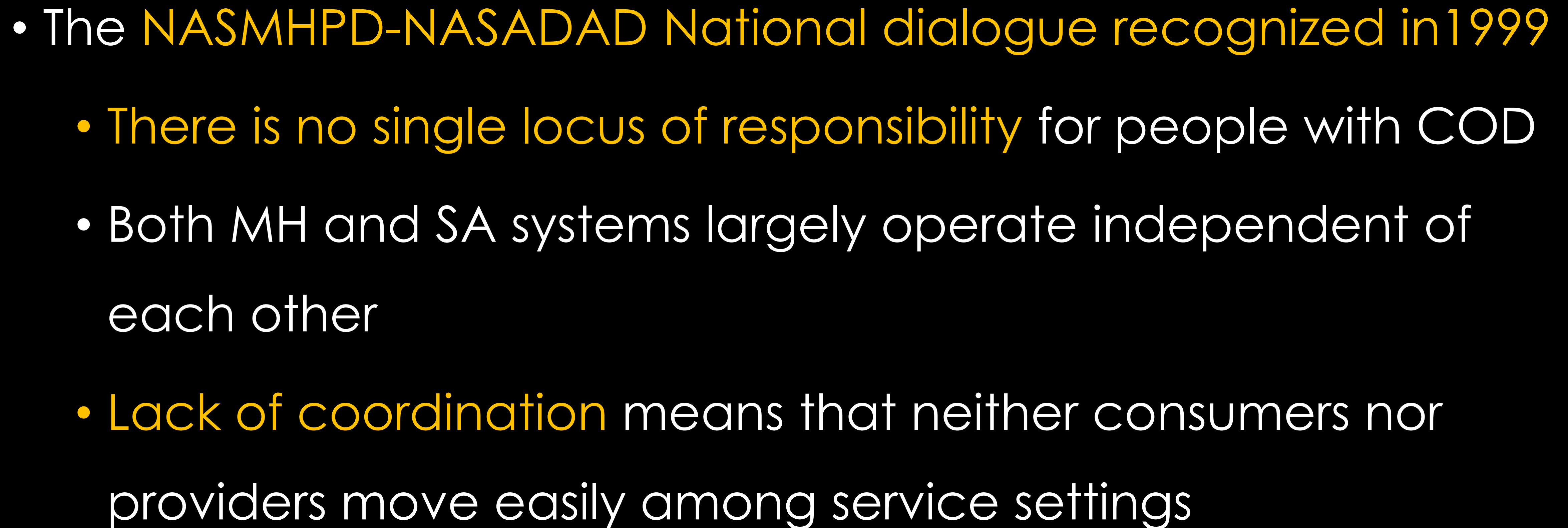
- Increased risk of relapse and hospitalizations
- Poor treatment adherence and worse outcomes
- Increased risk of suicide

- Increased burdens on family, interpersonal conflicts
- More hostility, aggression, violence
- Housing instability and homelessness

- More legal encounters
- Increase high risk behaviors- leading to HIV, Hepatitis
- Prone to victimization
- Considerable morbidity and early mortality

IMPLICATIONS

Co-occurring disorders are frequently interactive and cyclical: Substance abuse can worsen the course of psychiatric illness, and worsening psychiatric disorders can lead to increased substance abuse



• The NASMHPD-NASADAD National dialogue recognized in1999
• There is no single locus of responsibility for people with COD
• Both MH and SA systems largely operate independent of each other
• Lack of coordination means that neither consumers nor providers move easily among service settings

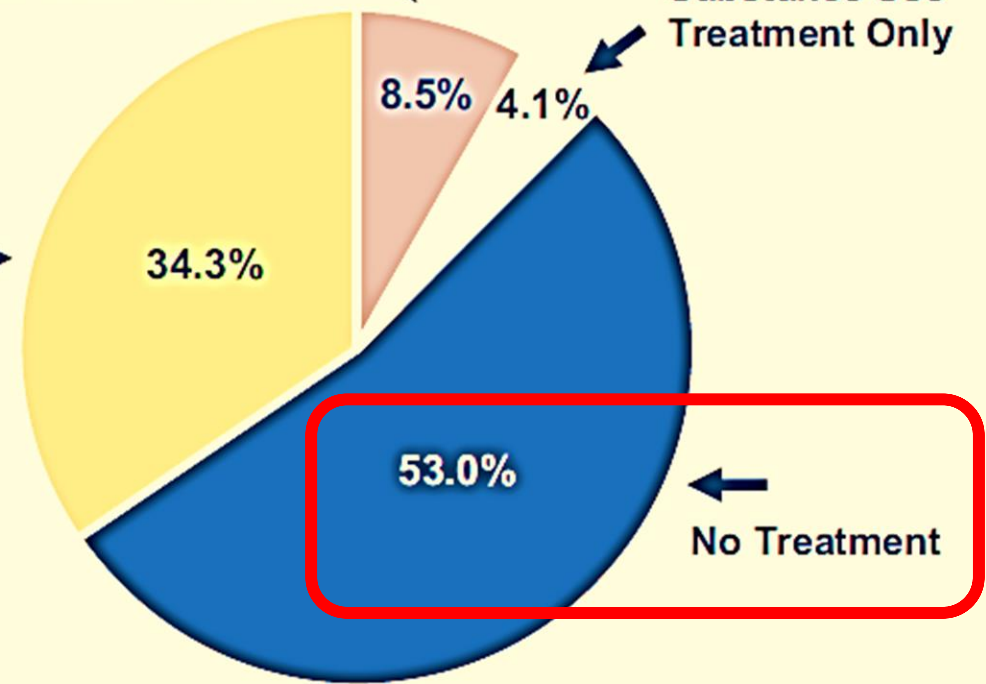


Figure 1: Past Year Treatment Among Adults Aged 18 or Older With Both Serious Psychological Distress (SPD) and a Substance Use Disorder, 2005.
Treatment for Both Mental Health and Substance Use Problems
Substance Use Treatment Only
8.5%
4.1%
Treatment Only for Mental Health Problems
34.3%
53.0%
No Treatment
5.2 Million Adults with Co-Occurring SPD and Substance Use Disorder
Source: (SAMHSA, 2006)

A PRAGMATIC
APPROACH

Substance Abuse Treatment
For Persons With
Co-Occurring Disorders

A Treatment Improvement Protocol

TIP 42

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Treatment
www.samhsa.gov

Integrated Treatment
for Dual Disorders

A GUIDE TO
EFFECTIVE
PRACTICE

KIM T. MUESER | DOUGLAS L. NOORDSY | ROBERT E. DRAKE | LINDY FOX

EVOLUTION OF TREATMENT MODELS

- Serial or Sequential
- Parallel
- Integrated

SERIAL OR SEQUENTIAL MODEL

"Ping-Pong Therapy"

- If their mental health issues are more than the S.A facility can handle many a times instead of sending the patient back they are just discharged
- In essence this becomes "No treatment"

SERIAL OR SEQUENTIAL MODEL

Many mental health professionals are not well trained to deal with addictions and vice versa

SERIAL OR SEQUENTIAL MODEL

Many mental health professionals

- Feel Ineffective
- Feel patient is resistant or unmotivated
- As long as patient is using they can't be helped
- Significant negative attributions to this population which leads to significant counter-transference issues

SERIAL OR SEQUENTIAL MODEL

Philosophical differences in the two separate systems leaves the client confused

The tough task of navigating two systems, with different appointments, different philosophies, conflicting advice, and multiple providers falls on the fragile and already challenged patient

PARALLEL MODEL

Various funding sources provide widely disparate benefits for mental health and substance abuse treatment, forcing clinicians to decide which of the disorders is primary

PARALLEL MODEL

The current state of how our health care system is designed only tends to focus on acute states leaving many aspects of care for the chronically ill unfulfilled

CO-OCCURRING DISORDERS

Despite strides in research over last 20 years, little remains known about the etiology and temporal ordering of co-occurring disorders

For this reason, many researchers and clinicians believe that both disorders must be considered as primary and treated as such

INTEGRATED MODEL

- Clinically more effective
- Better outcomes
- Has evidence base to support it

INTEGRATED MODEL

- Fiscally more sound
- Much more patient centered
- Recognizes that there is a need to make clinical decisions and interventions even in the context of diagnostic uncertainty

INTEGRATED MODEL

An integrated framework recognizes that quality evidence-based individualized care can be provided within a behavioral health delivery system using existing resources and partnerships (TIP 42)

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

October 31, 2014

Dear Stakeholders,

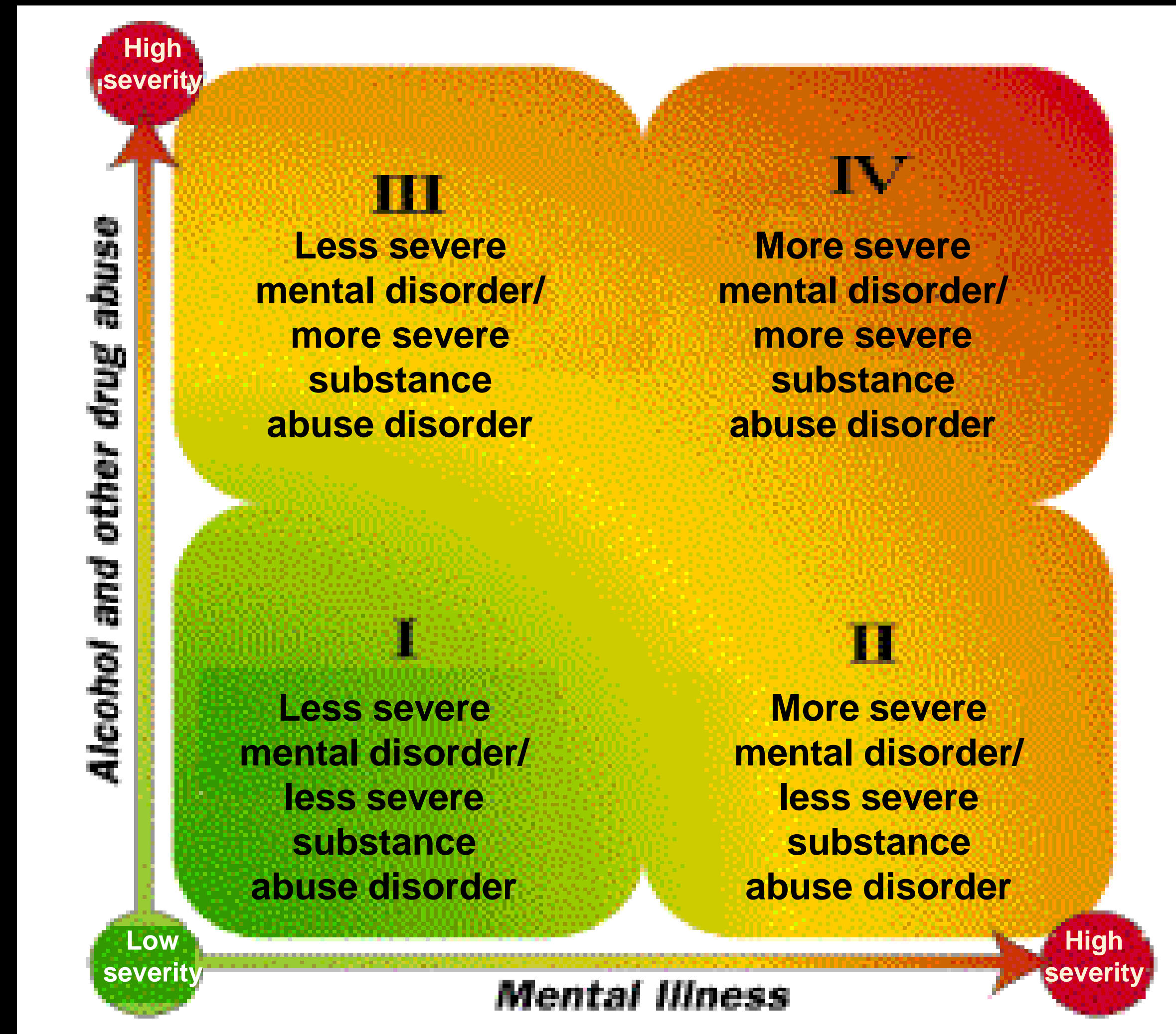
I am writing to provide you with an update on the Department of Health and Mental Hygiene's (DHMH) ongoing efforts to integrate the State's mental health and substance use disorder services and systems.

DHMH is on track to implement an integrated system

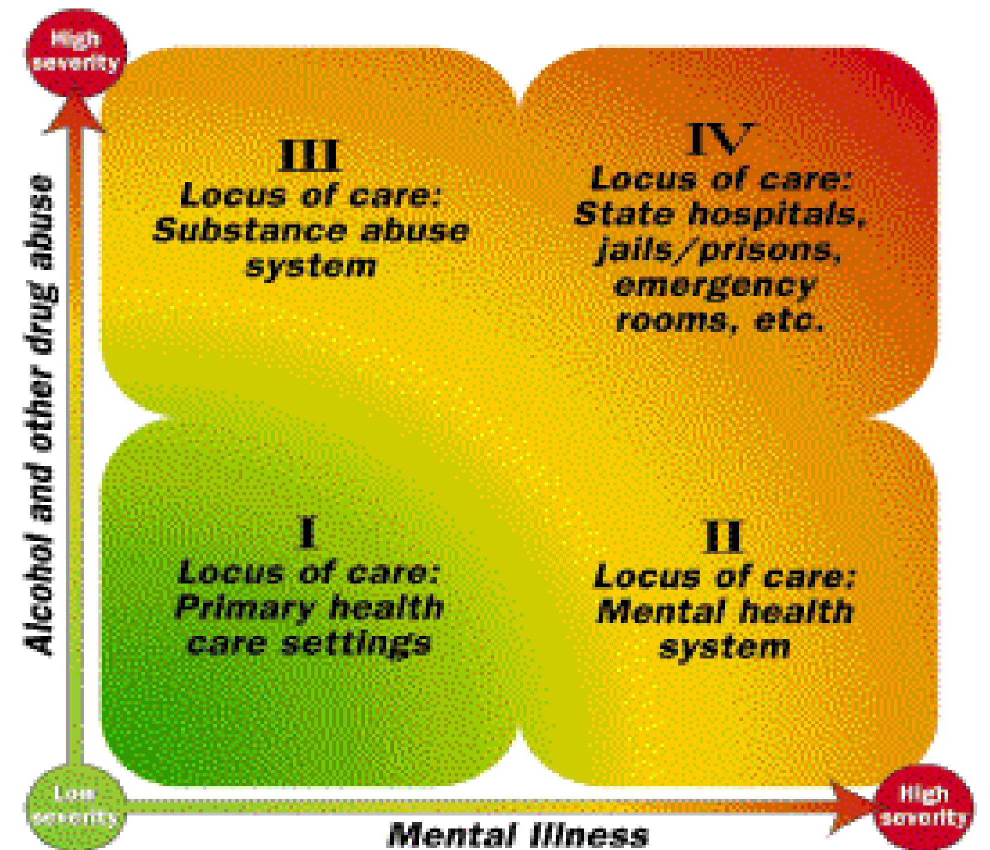
…alth and substance use services. This contract was unanimously …ic Works, and DHMH is on track to implement an integrated system

on January 1, 2015.

The Four Quadrant Framework for Co-Occurring Disorders



The four-quadrant conceptual framework is meant to guide systems integration and resource allocation in treating Individuals with co-occurring disorders



Mental Health/Substance Abuse Severity Quadrants

		Mental Health Severity	
		Low	High
Substance Abuse Severity	High	QIII $n = 40$	QIV $n = 80$
	Low	QI $n = 84$	QII $n = 39$

- Study participants classified into 4 mutually exclusive groups, defined by high or low severity on mental health and substance abuse disorders
- Because mental health and substance abuse are highly correlated, the low-low and high-high categories are the largest
- Gabriel R unpub '04

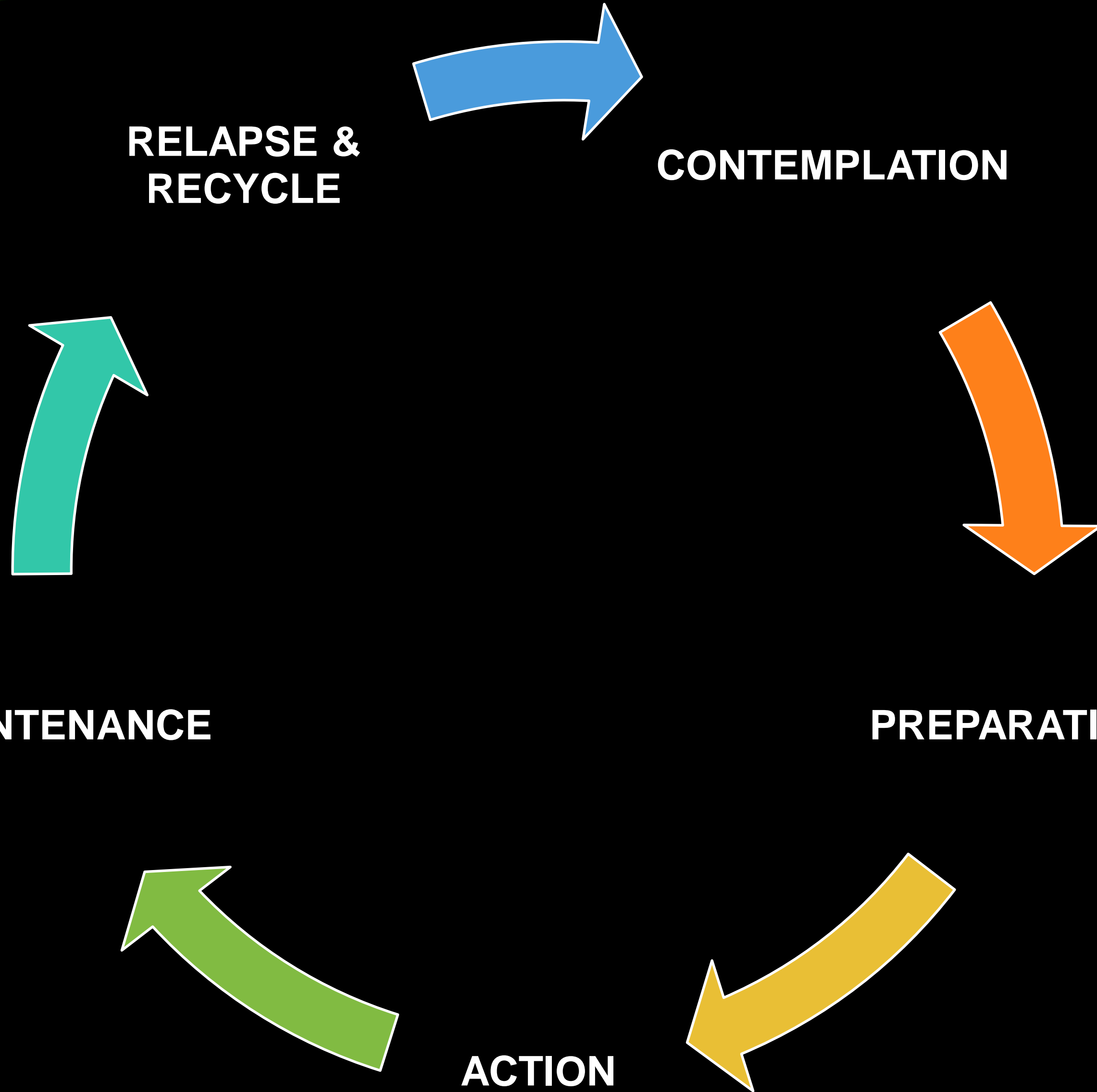
CO-OCCURRING DISORDERS

Low MH in an acute psych ER might be High MH in an Addictions Outpatient clinic

Low Addiction in a Methadone program might be High Addiction in a primary care clinic

STAGES OF TREAMENT

STAGES OF CHANGE



Engagement

Persuasion

Active Treatment

Relapse Prevention

DEFINITION

Patient does not have regular contact with clinician

GOAL

To establish a working alliance with the patient

EXAMPLES OF CLINICAL INTERVENTIONS

Outreach

Practical Assistance (food, clothing, housing, benefits, transportation)

Crisis Intervention

Support and assistance to social networks

EXAMPLES OF CLINICAL INTERVENTIONS

Stabilization of psychiatric symptoms

Advocating in legal situations

Family meetings

Close Monitoring

Persuasion

DEFINITION

Patient has regular contact with clinician, but does not want to work on reduction substance use

GOAL

To develop the client's awareness that substance use is a problem and increase motivation

EXAMPLES OF CLINICAL INTERVENTIONS

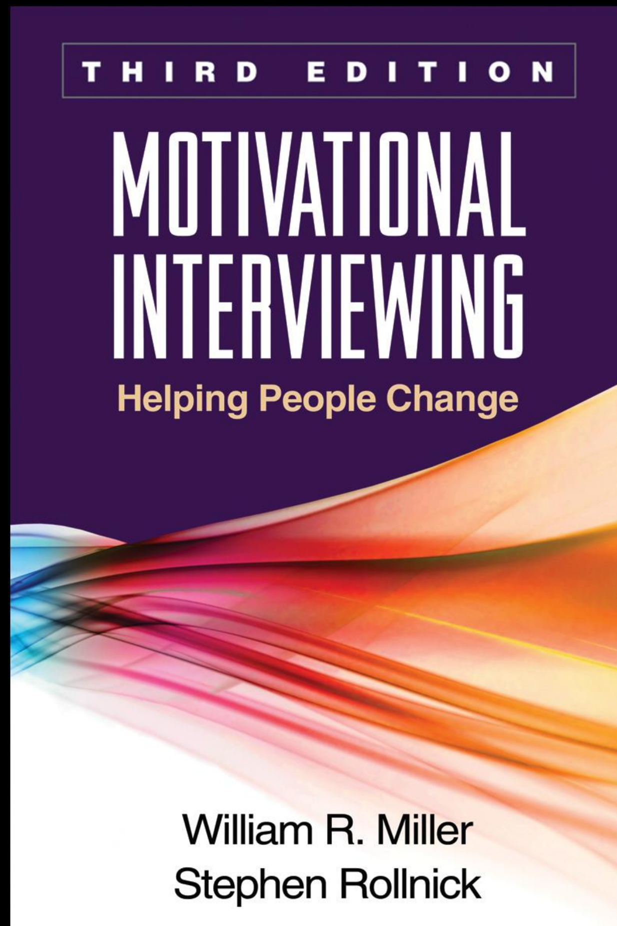
Persuasion

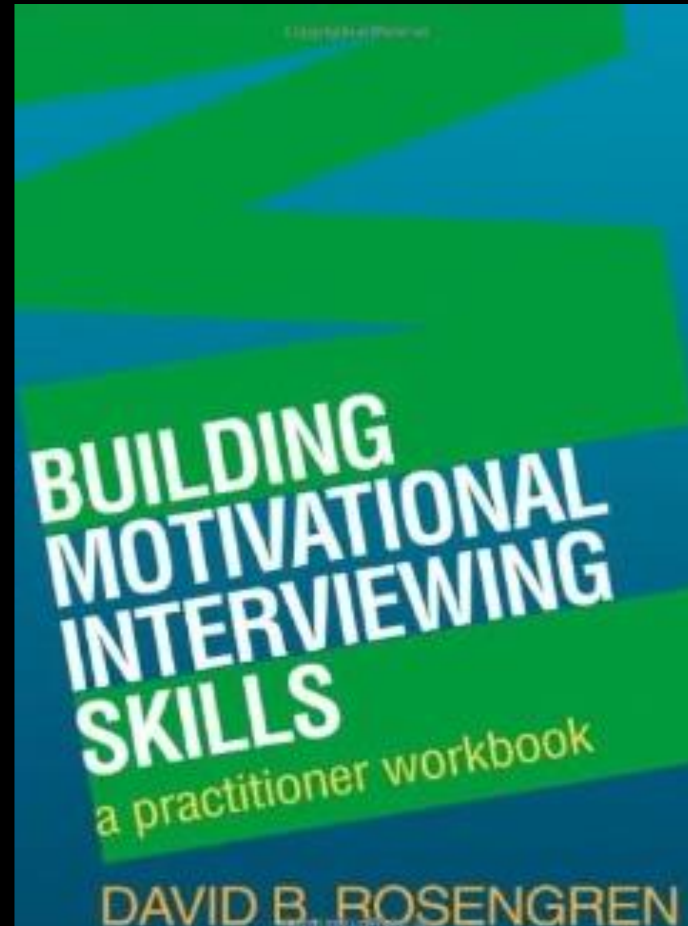
Individual and Family Education

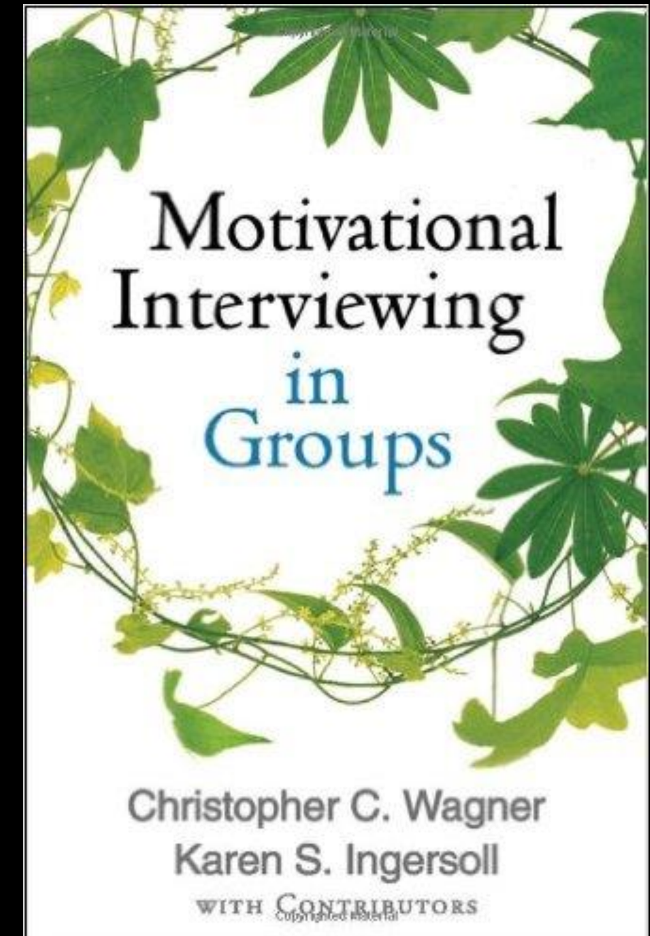
Peer groups

Social skills training (to address
non-substance-related conditions)

Motivational Interviewing


THIRD EDITION
MOTIVATIONAL INTERVIEWING
Helping People Change
William R. Miller
Stephen Rollnick


BUILDING MOTIVATIONAL INTERVIEWING SKILLS
a practitioner workbook
DAVID B. ROSENGREN


Motivational Interviewing in Groups
Christopher C. Wagner
Karen S. Ingersoll
WITH CONTRIBUTORS

EXAMPLES OF CLINICAL INTERVENTIONS

Persuasion

Structured Activity (supported employment, volunteering, hobbies etc.,)

Sampling constructive activities (social & recreational)

Medications to treat psychiatric disorders

Active Treatment

DEFINITION

Patient is motivated to reduce substance abuse, at least for a month, but less than 6 months

GOAL

To help the patient further reduce substance use and, if possible, attain abstinence

EXAMPLES OF CLINICAL INTERVENTIONS

Self Help Groups (12 step, Smart Recovery)

Cognitive-Behavioral counseling

Psychoeducation

Coping Skills

Social skills to address substance-related conditions

EXAMPLES OF CLINICAL INTERVENTIONS

Stress Management

Medications to support abstinence

Safe ‘dry’ housing

Substituting Activities (work, sports)

Relapse Prevention

DEFINITION

Patient has not experienced problems related substance use for at least 6 months

GOAL

To maintain awareness that relapse can happen, and to extend recovery to other areas (e.g., social relationships and work)

EXAMPLES OF CLINICAL INTERVENTIONS

Continuous Care Groups (Active treatment
or Relapse Prevention)

Independent Housing

Self Help Groups (12 step, Smart Recovery)

Social skills groups to address other areas

Relapse Prevention

EXAMPLES OF CLINICAL INTERVENTIONS

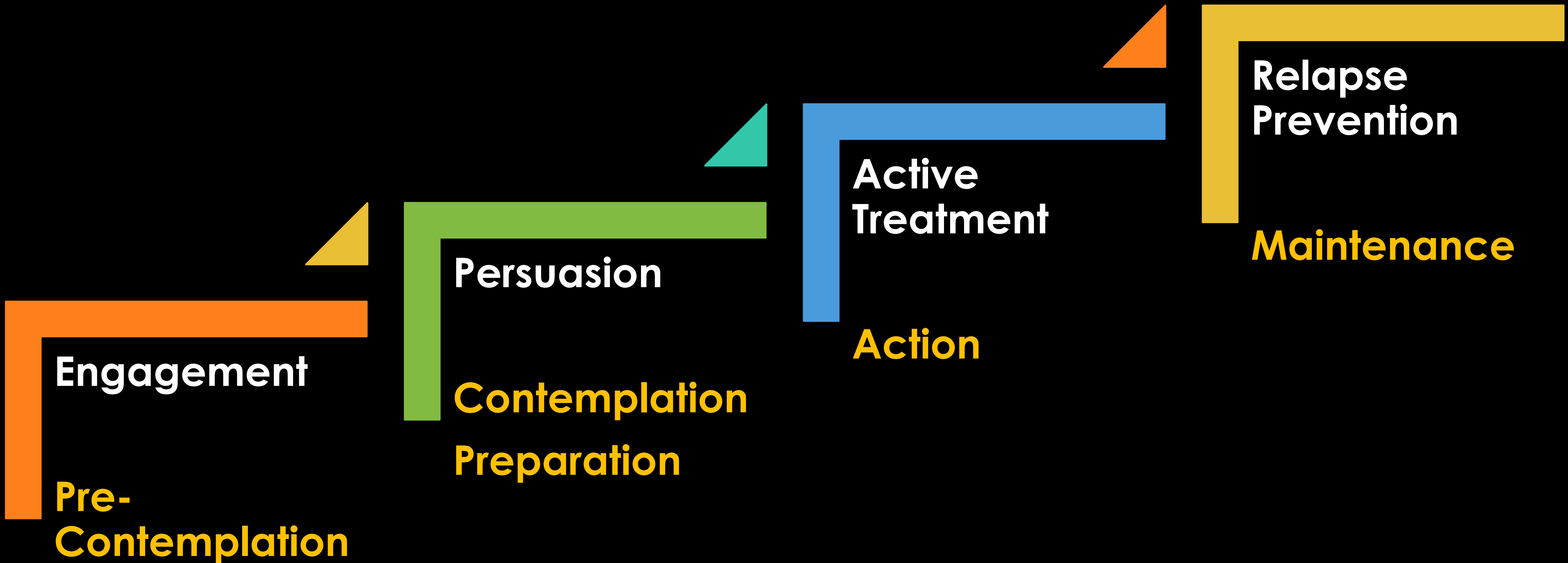
Becoming a role model for others

Family problem solving

Lifestyle improvements

Expanding involvement in employment

Relapse Prevention


Engagement
Pre-
Contemplation
Persuasion
Contemplation
Preparation
Active
Treatment
Action
Relapse
Prevention
Maintenance

ASSESSMENT

Detection

Classification

Functional Assessment

Functional Analysis

Treatment Planning

Cast a wide net, assume substance use is likely

Explore past use before current use

Use lab tests to screen

If use is detected, discuss negative consequences

Detection

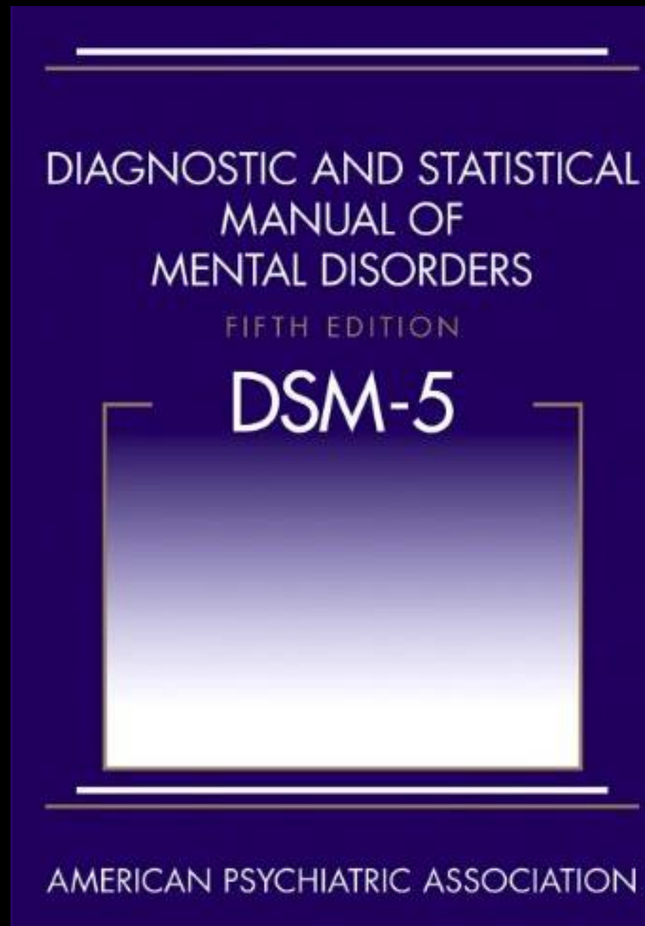
A SAMPLE FROM
OUR CO-OCCURRING DISORDERS
PARTIAL HOSPITALIZATION PROGRAM

270 of the 393 samples submitted were positive
146 were positive for cannabinoids
116 were positive for benzodiazepines
35 were positive for opiates
12 were positive for cocaine

CO-OCCURRING DISORDERS

Presence of severe mental illness may create additional vulnerability so that even small amounts of psychoactive substances may have adverse consequences for individuals with schizophrenia and other brain disorders

-Robert Drake, M.D



Determine which diagnoses apply

Tap multiple sources of information

Classification

Gather information across various domains of functioning

Assess range of needs

Identify their strengths

Functional Assessment

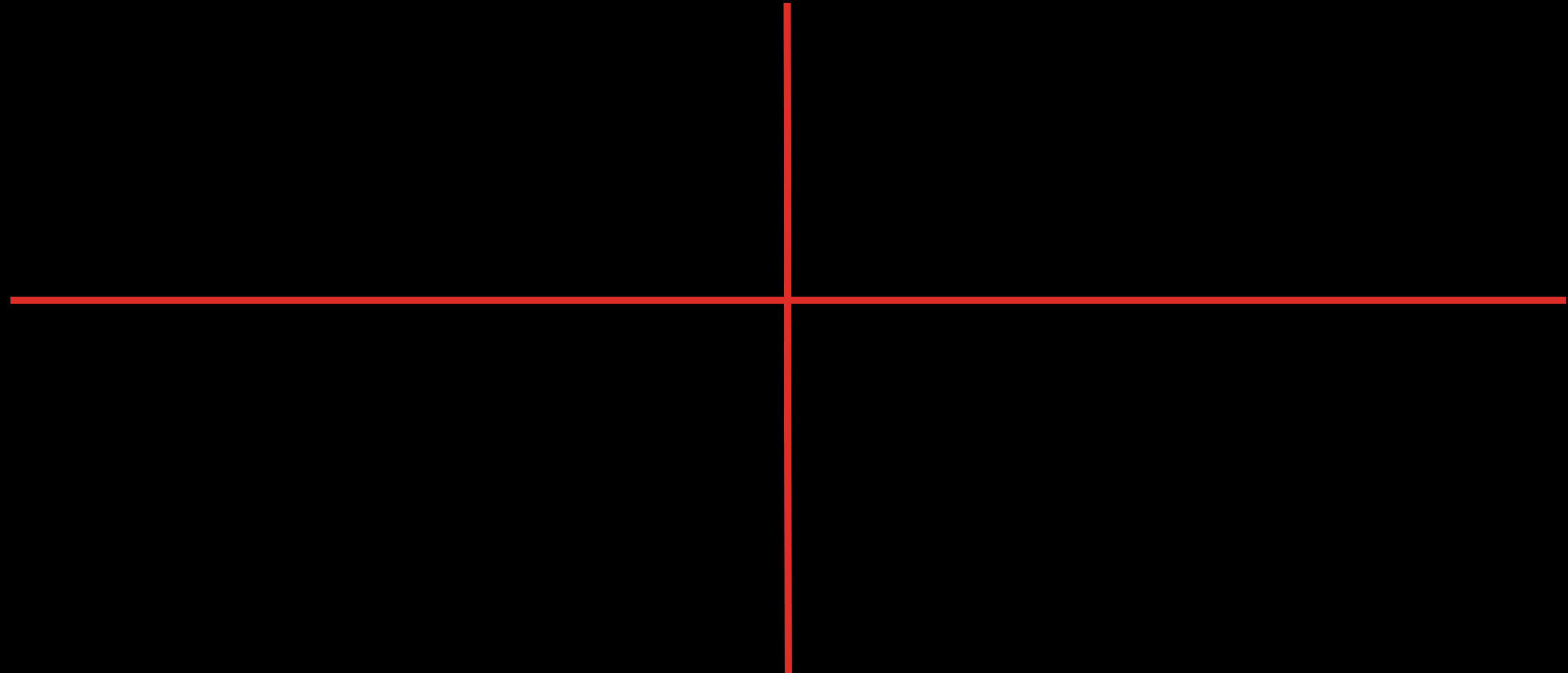
Identify factors that maintain substance use,

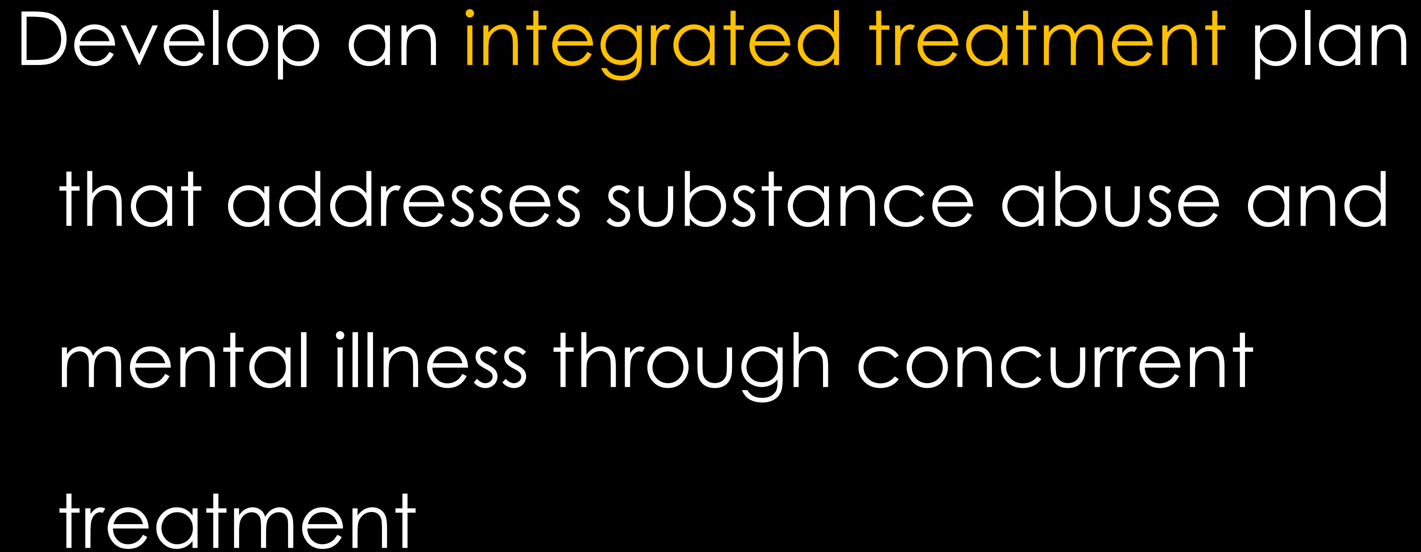
interfere with sobriety or pose a risk of relapse

Functional Analysis

PAYOFF MATRIX

	Using Substances	Not Using Substances
Advantages		
Disadvantages		





Evaluate patient's goals &
motivation to deal with various issues

Treatment Planning

PSYCHOPHARMACOLOGICAL
PRINCIPLES

PSYCHOPHARMACOLOGY

Patients with persistent psychiatric syndromes do respond to medications, but their substance abuse does not automatically improve

PSYCHOPHARMACOLOGY

The most serious concerns

- Medication non-adherence
- Substance-medication interactions
- Potential for some meds to be abused

PSYCHOPHARMACOLOGY

The most common difficulty is that physicians fail to identify and appreciate comorbid substance use disorders and the related non-adherence to medications

PSYCHOPHARMACOLOGY

Some guidelines

- Use medications with low-abuse potential
- Use medications with low-lethality in overdose
- Dispense limited amounts of medications
- Consider medications specific for the treatment of addiction

PSYCHOPHARMACOLOGY

Patients with severe or persistent psychiatric symptoms, such as psychosis, mania, may require pharmacological treatment for those symptoms, regardless of presumed cause or regardless of continued use

PSYCHOPHARMACOLOGY

Distinguishing the effects of substances from psychiatric illness can be difficult or impossible

Do not wait for diagnostic certainty. It is ok to work with a presumptive diagnosis which can be re-evaluated periodically

PSYCHOPHARMACOLOGY

If one needs to consider stopping medication treatment, one can try slow tapering of medications after 6-24 months of sustained remission of symptoms, with careful monitoring and observation

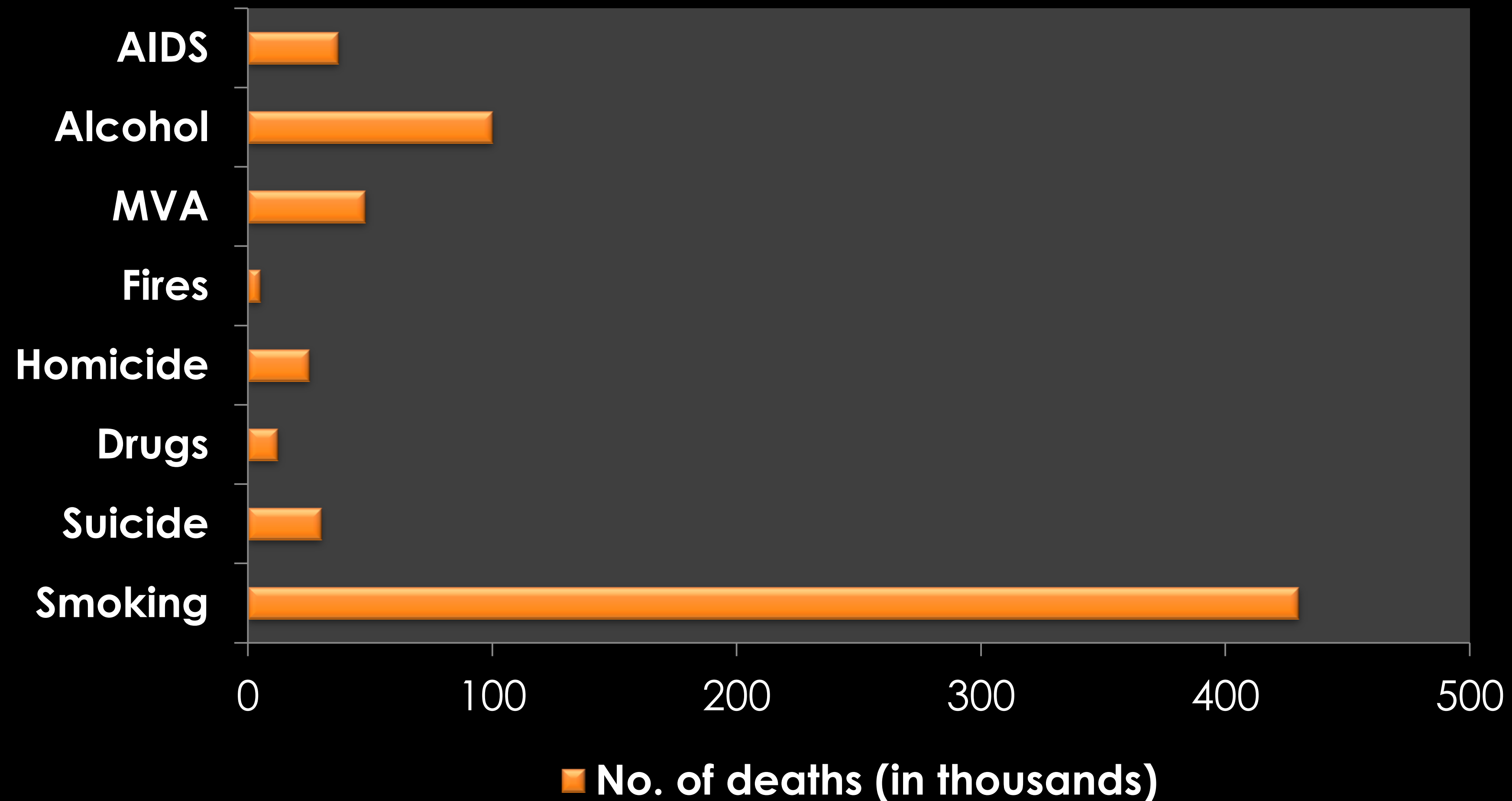
PSYCHOPHARMACOLOGY

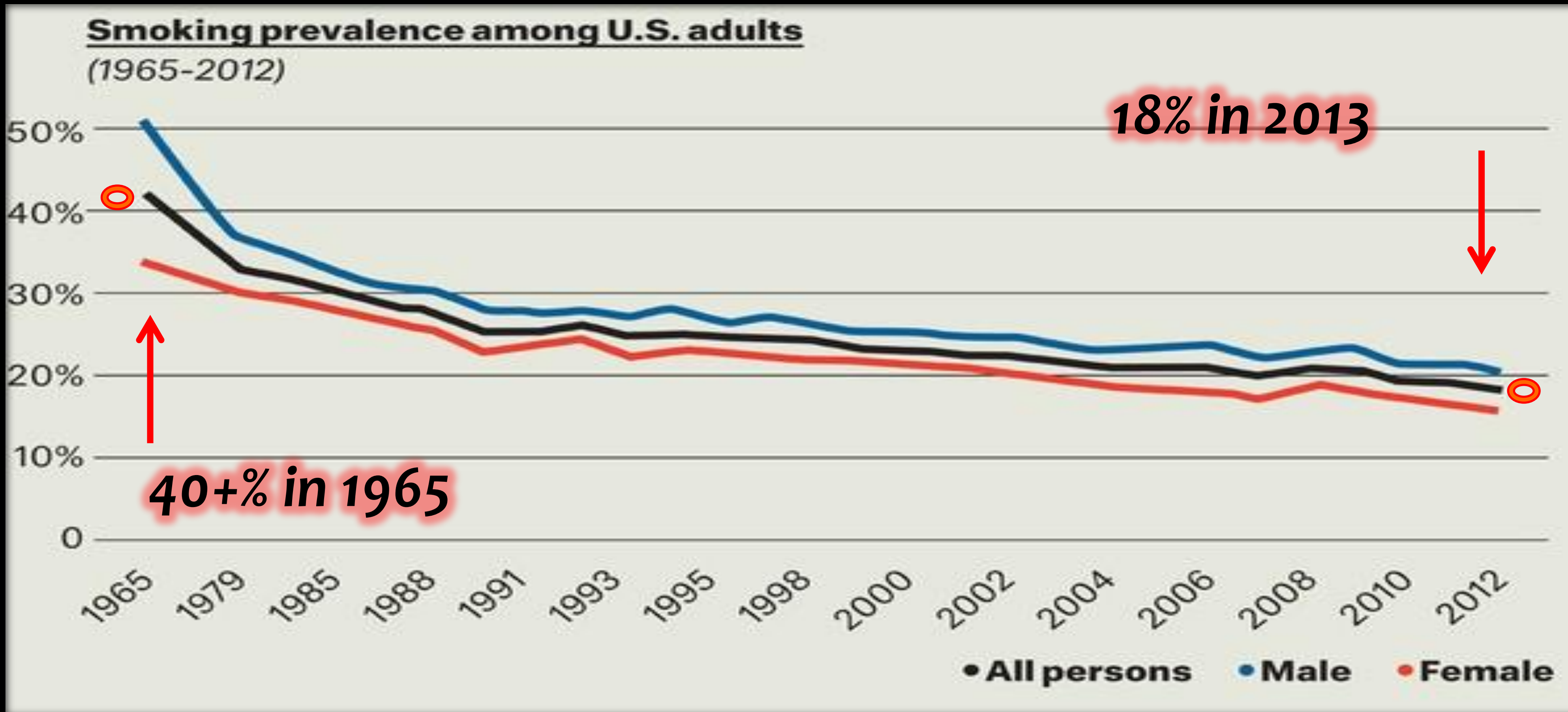
Medication is generally discontinued only when a patient has experienced a sustained remission of symptoms, and when psychosocial functioning is no longer impaired, usually in the context of sustained remission of substance use

PSYCHOPHARMACOLOGY

This rarely occurs; when it does, it tends to be in individuals with fairly recent onset of a psychiatric disorder, precipitated or complicated by substance use

THE DEADLIEST & MOST UNDERTREATED CO-MORBIDITY





"Data from the National Health Interview Survey"

THE DEADLIEST & MOST UNDERTREATED CO-MORBIDITY

The percentage of patients on our co-occurring disorders inpatient unit that smoked were a staggering 81%

SMOKERLYZER

Breath Carbon Monoxide Monitor (It measures CO which is a measure of blood carboxyhaemoglobin (%COHb)

Audio visually motivational

Instant feedback to patients which can facilitate the conversation about quitting

PSYCHOTROPIC MEDICATIONS:

POTENTIAL RISKS AND INTERACTIONS IN PATIENTS WITH CO-OCCURRING DISORDERS

CONVENTIONAL ANTIPSYCHOTICS

Risk of hyperpyrexia in combination with stimulants

Smoking can reduce blood levels (also true for clozapine, olanzapine)

Prolongation of QTc interval, could interact with cardiac effects of cocaine

ATYPICAL ANTIPSYCHOTICS

Risk of respiratory depression when combing clozapine, opioids and benzodiazepines

Alcohol can increase sedative effects of Clozapine

ANTIDEPRESSANTS

Venlafaxine can raise BP, as does alcohol use
and withdrawal

Bupropion can reduce seizure threshold, if combined with
cocaine or alcohol withdrawal

ANTIDEPRESSANTS

Chronic alcohol use can induce metabolism and reduce TCA levels

TCAs can have additive cardiotoxicity with cocaine

ANTIDEPRESSANTS

Tyramine levels in alcohol can raise BP and cause hypertensive crises in patients with MAOIs

Potentiation of sympathomimetic effects of stimulants- causing hypertension or hyperpyrexia

Possible in combination with Valproic Acid, Carbamazepine, Antabuse, Naltrexone

Benzodiazepines

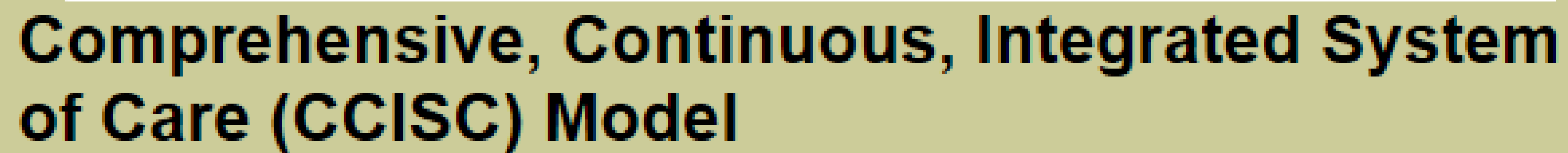
Stimulants

Antiparkinsonian medications

Carisoprodol (soma)

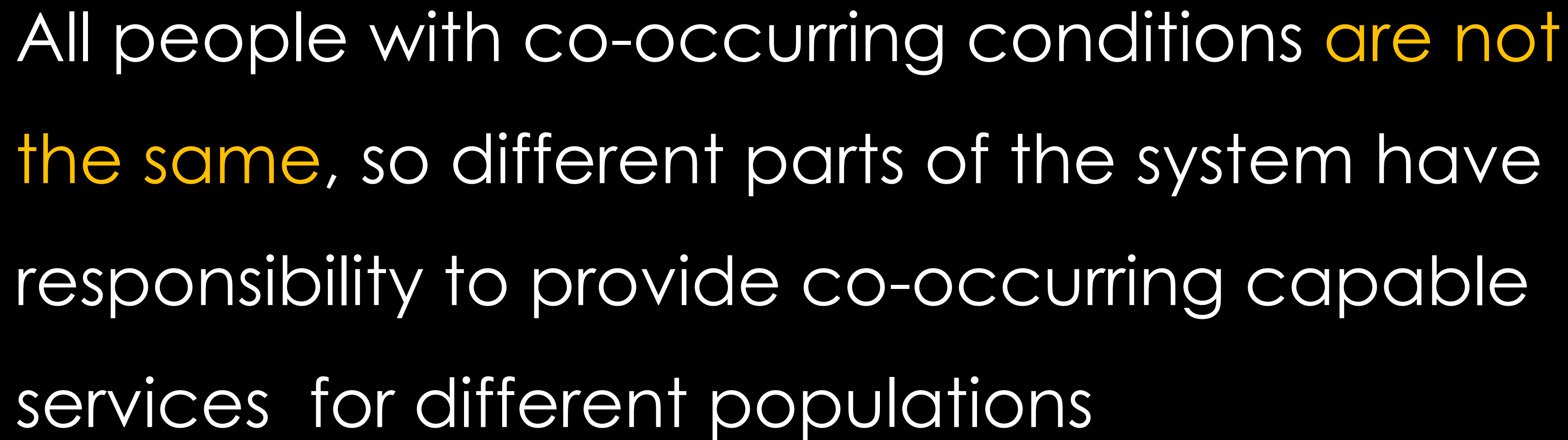
Sedative-hypnotics like Zolpidem

Promethazine (Phenergan)



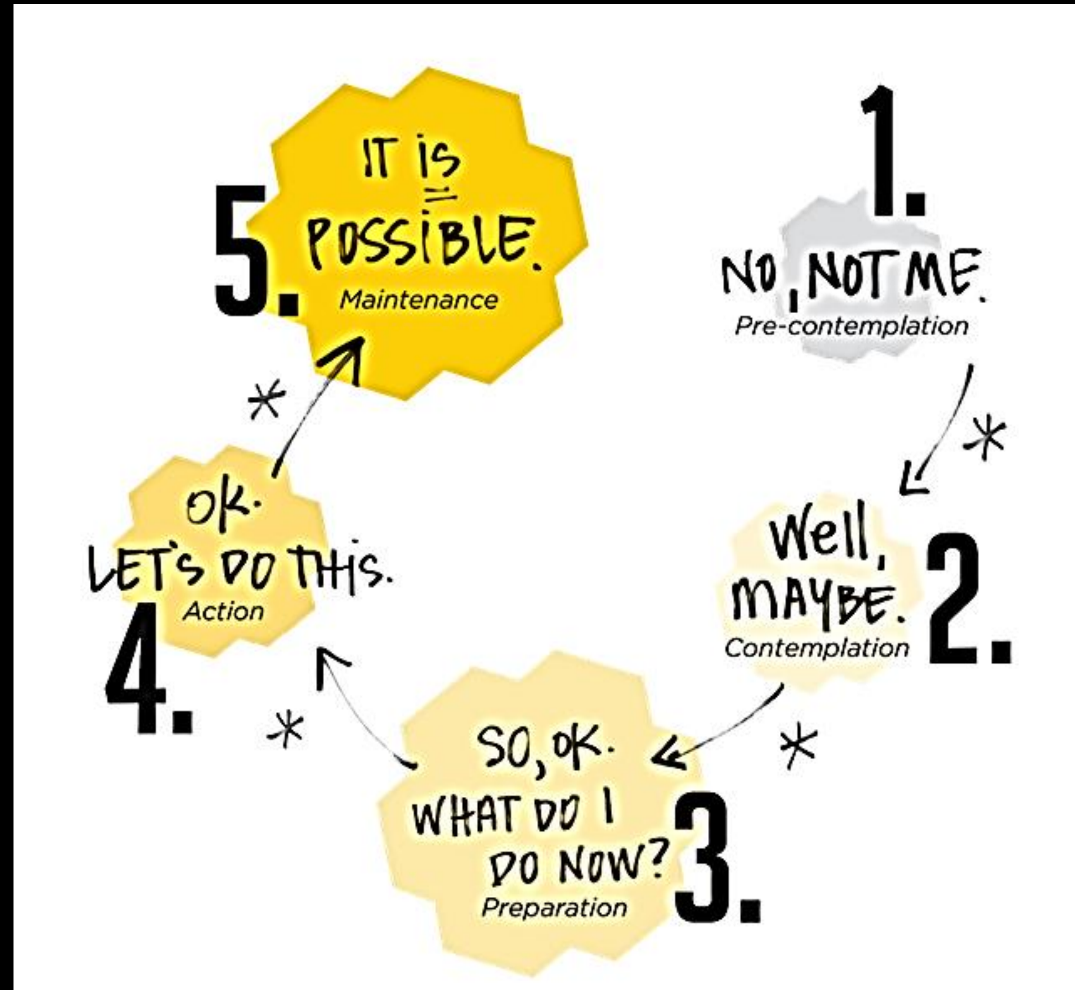
Kenneth Minkoff, M.D.

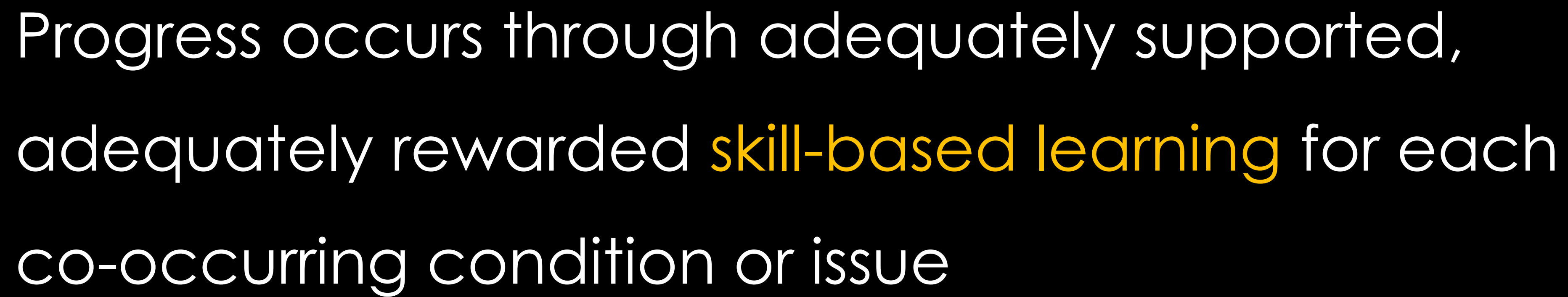
The foundation of a recovery partnership is an empathic, hopeful, integrated, strength-based relationship


All people with co-occurring conditions are not the same, so different parts of the system have responsibility to provide co-occurring capable services for different populations

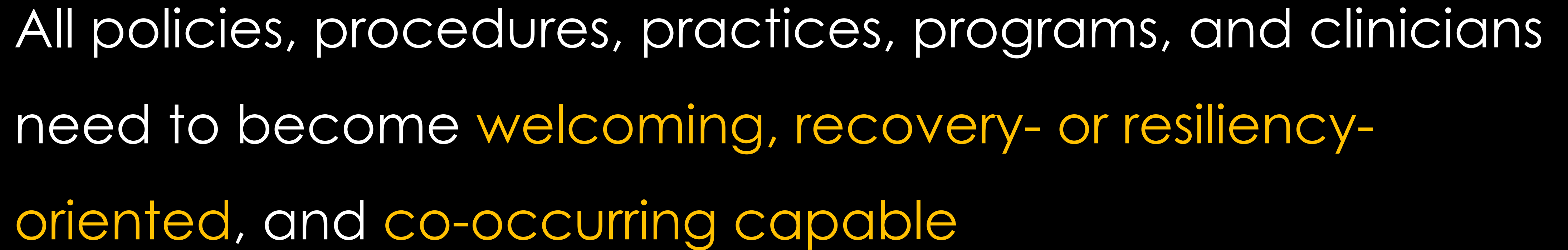
When co-occurring issues and conditions co-exist, each issue or condition is considered to be primary

Recovery involves moving through stages of change and phases of recovery for each co-occurring condition or issue




Progress occurs through adequately supported, adequately rewarded skill-based learning for each co-occurring condition or issue

Recovery plans, interventions, and outcomes must be individualized. Consequently, there is no one correct co-occurring program or intervention for everyone

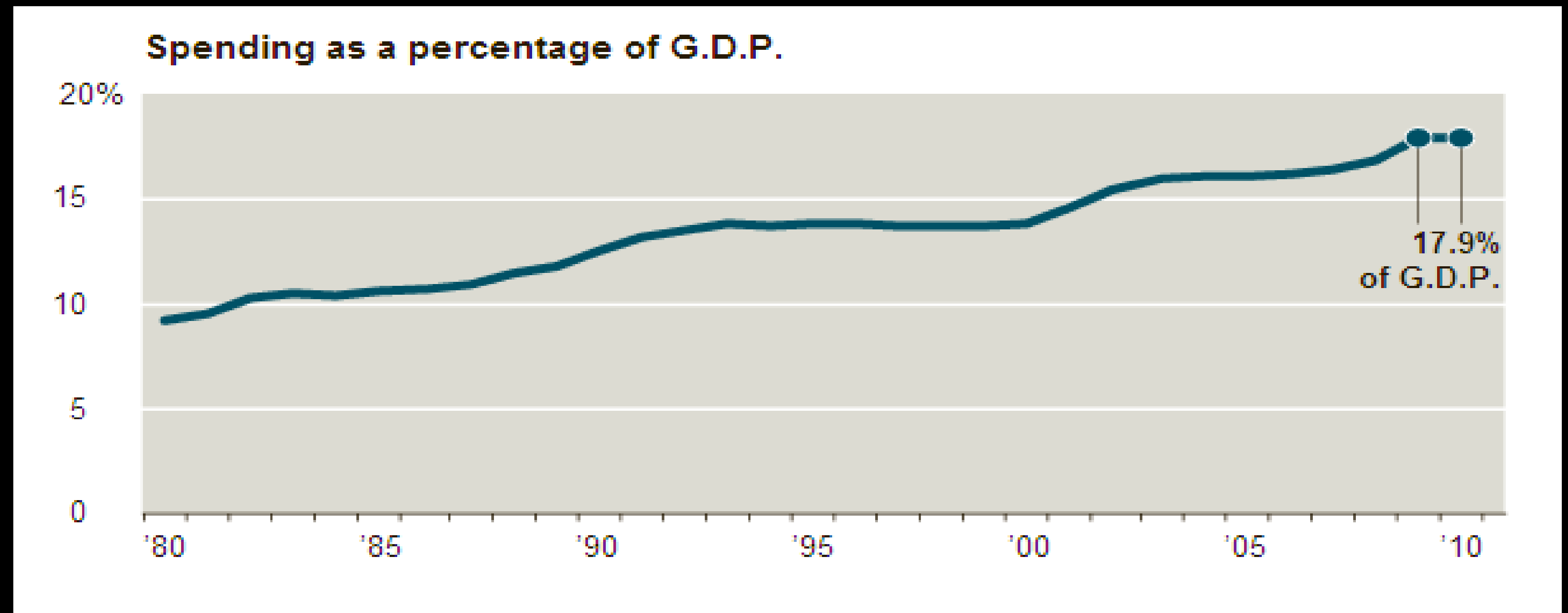

All policies, procedures, practices, programs, and clinicians need to become welcoming, recovery- or resiliency-oriented, and co-occurring capable

INTEGRATED MODEL

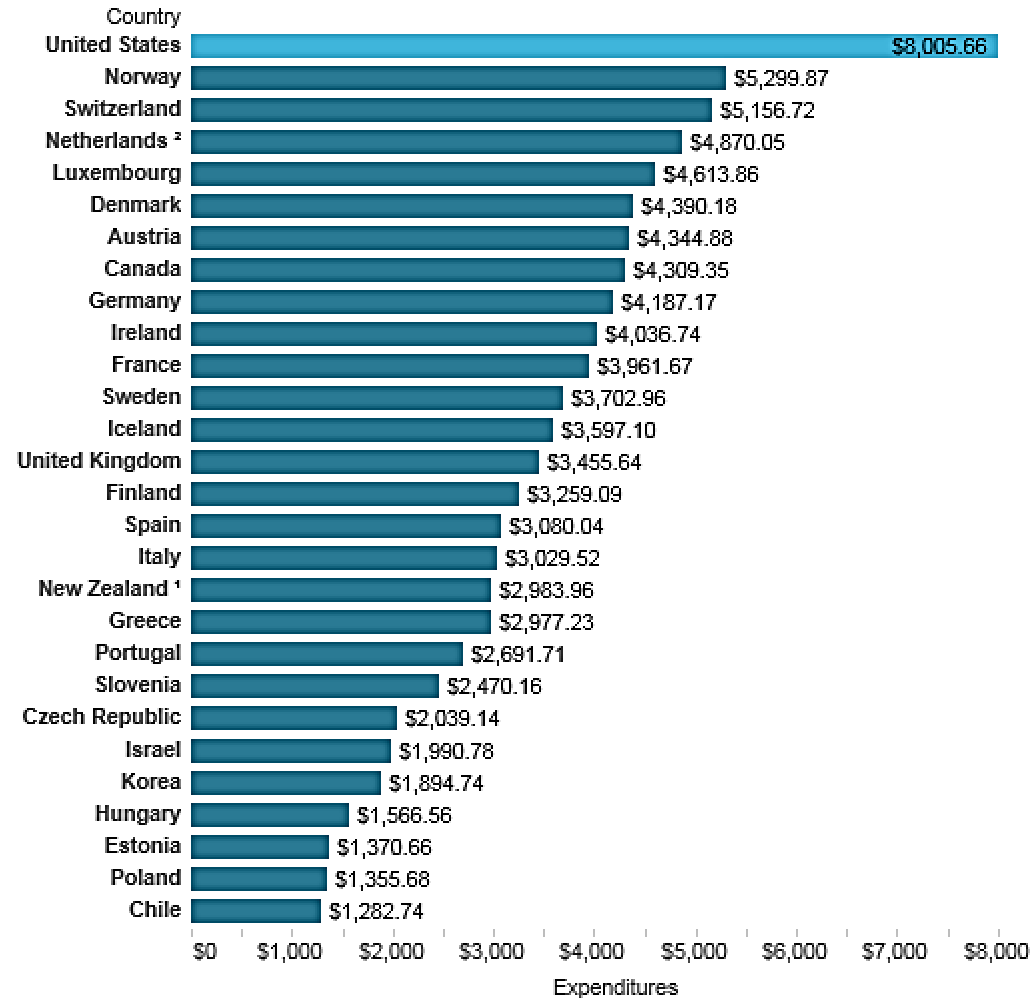
Each provider with the healthcare delivery system has a responsibility to address the range of client needs wherever and whenever a client presents for care

(CSAT 2000a)

THERE SHOULD BE NO “WRONG DOOR”



- New York Times , 04-28-12


Per Capita Health Expenditures:
U.S. and Selected Countries, 2010
Country
United States $8,005.66
Norway $5,299.87
Switzerland $5,156.72
Netherlands ² $4,870.05
Luxembourg $4,613.86
Denmark $4,390.18
Austria $4,344.88
Canada $4,309.35
Germany $4,187.17
Ireland $4,036.74
France $3,961.67
Sweden $3,702.96
Iceland $3,597.10
United Kingdom $3,455.64
Finland $3,259.09
Spain $3,080.04
Italy $3,029.52
New Zealand ¹ $2,983.96
Greece $2,977.23
Portugal $2,691.71
Slovenia $2,470.16
Czech Republic $2,039.14
Israel $1,990.78
Korea $1,894.74
Hungary $1,566.56
Estonia $1,370.66
Poland $1,355.68
Chile $1,282.74
$0 $1,000 $2,000 $3,000 $4,000 $5,000 $6,000 $7,000 $8,000
Expenditures

According to CMS our National Healthcare Expenditure (NHE) is projected to hit $3.207 trillion this year. 2015 looks to be the first year healthcare spending will reach $10,000 per person

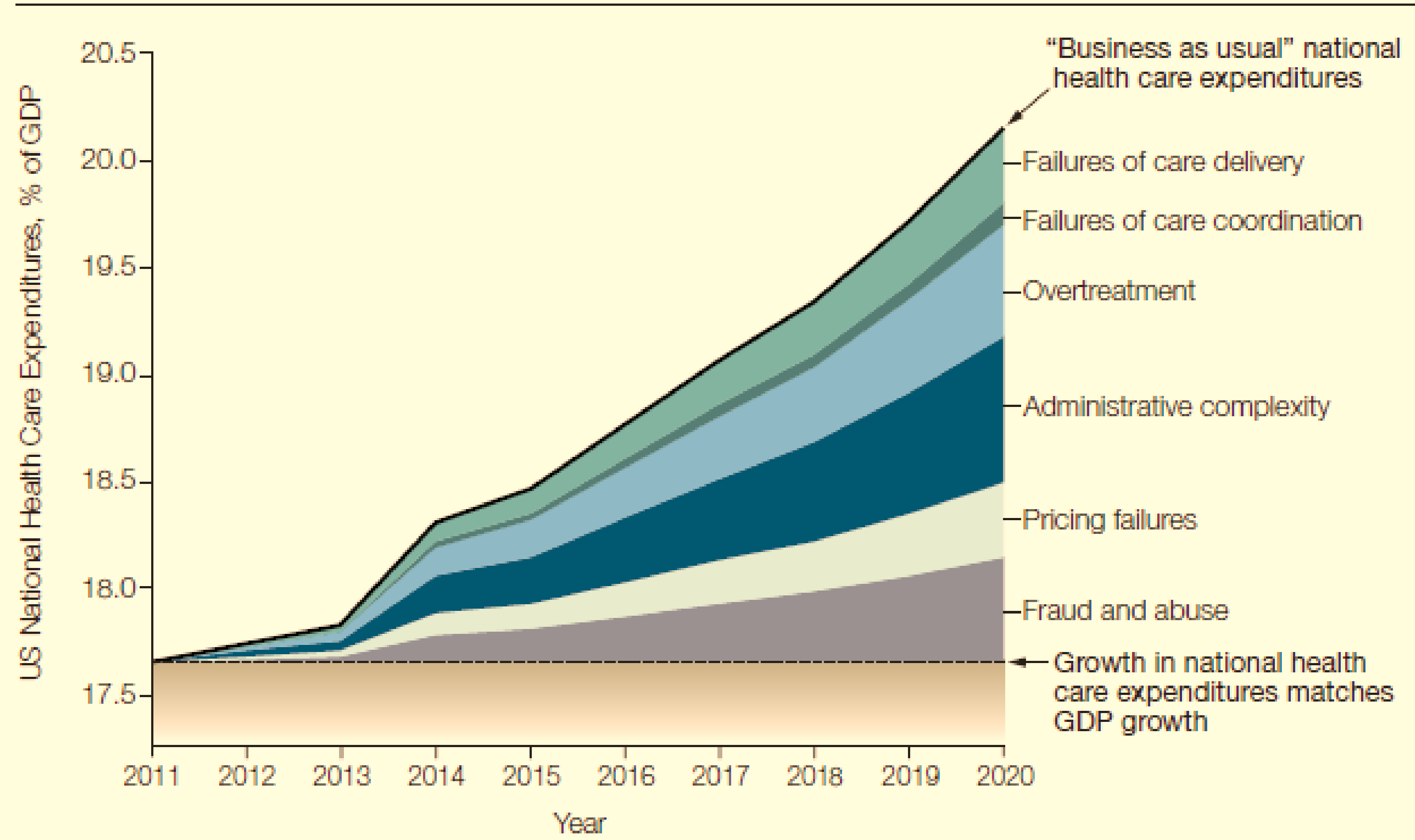
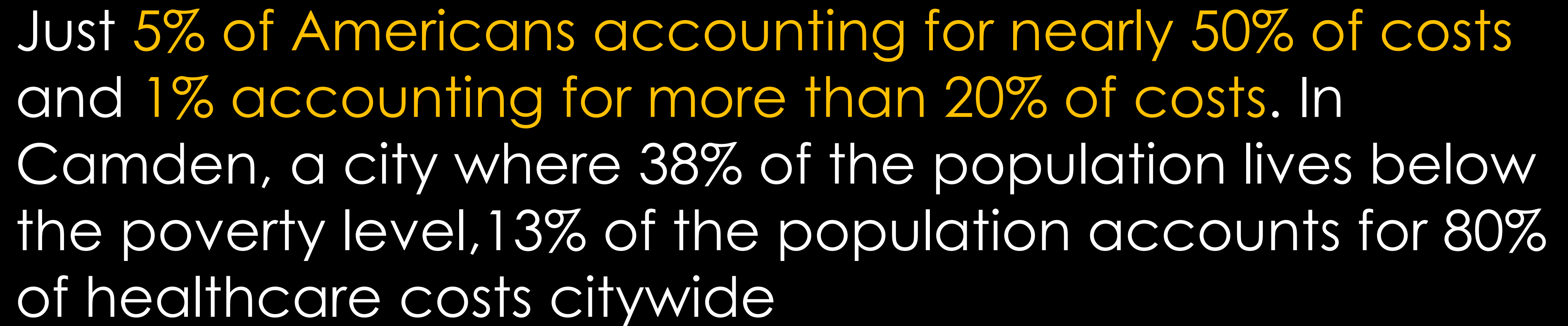


Figure. Proposed "Wedges" Model for US Health Care, With Theoretical Spending Reduction Targets for 6 Categories of Waste
US National Health Care Expenditures, % of GDP
20.5
20.0
19.5
19.0
18.5
18.0
17.5
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
Year
"Business as usual" national health care expenditures
Failures of care delivery
Failures of care coordination
Overtreatment
Administrative complexity
Pricing failures
Fraud and abuse
Growth in national health care expenditures matches GDP growth


Just 5% of Americans accounting for nearly 50% of costs and 1% accounting for more than 20% of costs. In Camden, a city where 38% of the population lives below the poverty level,13% of the population accounts for 80% of healthcare costs citywide

Camden
Coalition
of Healthcare Providers

Welcome to the Hotspotting Data Toolkit
Created with support from the Commonwealth Fund

HOTSPOTTING