

Moving Healthcare From **Addiction** To Substance Use Disorders

Why and How?

Parts of the Talk

1. Facts about addiction

- Prevalence, Genetics, Brain changes

2. How is addiction treated

- Treatment concepts and treatment evaluation

3. A different approach

- A new model of treatment – PHPs

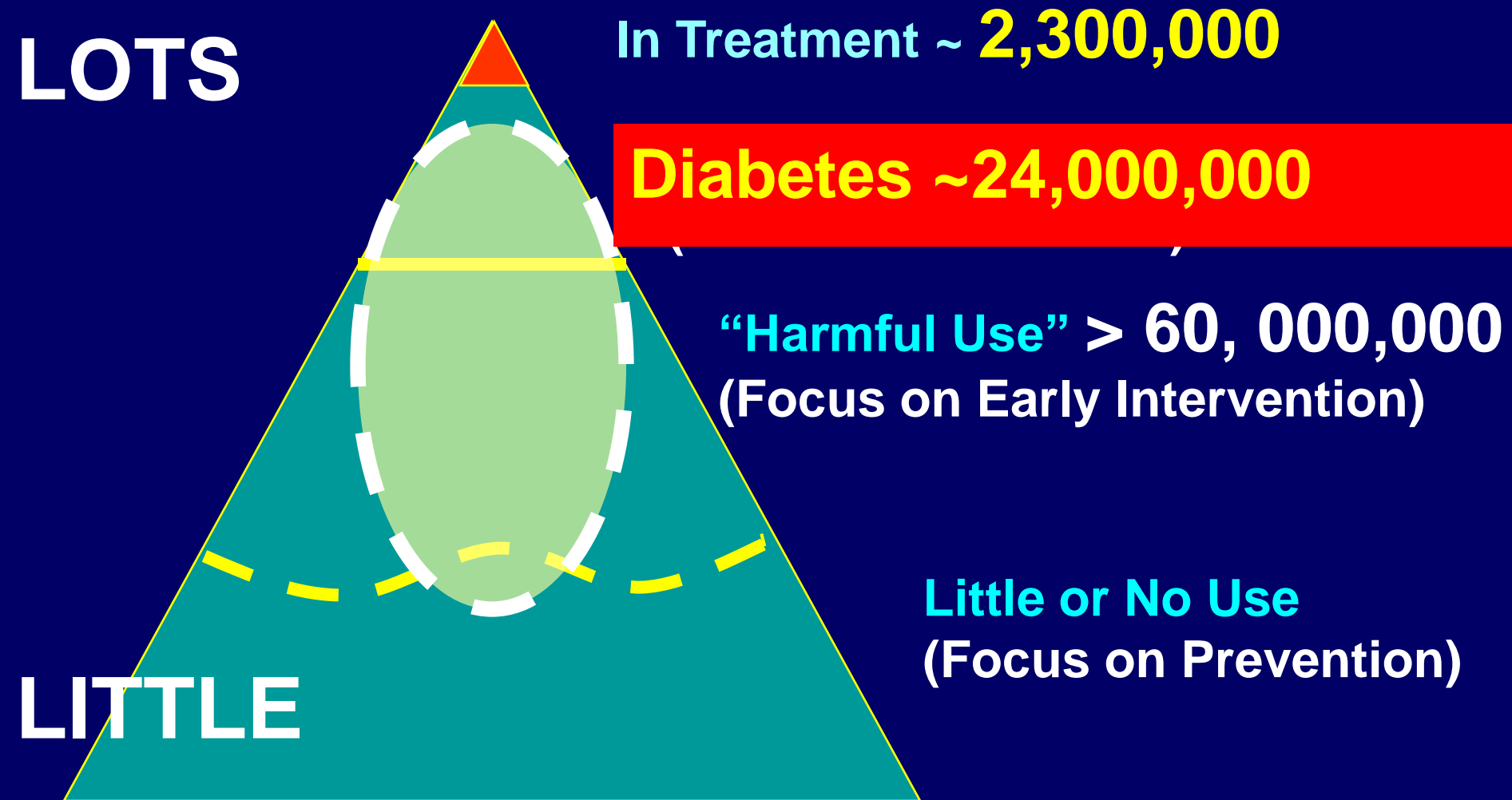
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Part I

Substance use, abuse & addiction

- Genetics
- Brain Changes

Prevalence of “Substance Use Disorders”



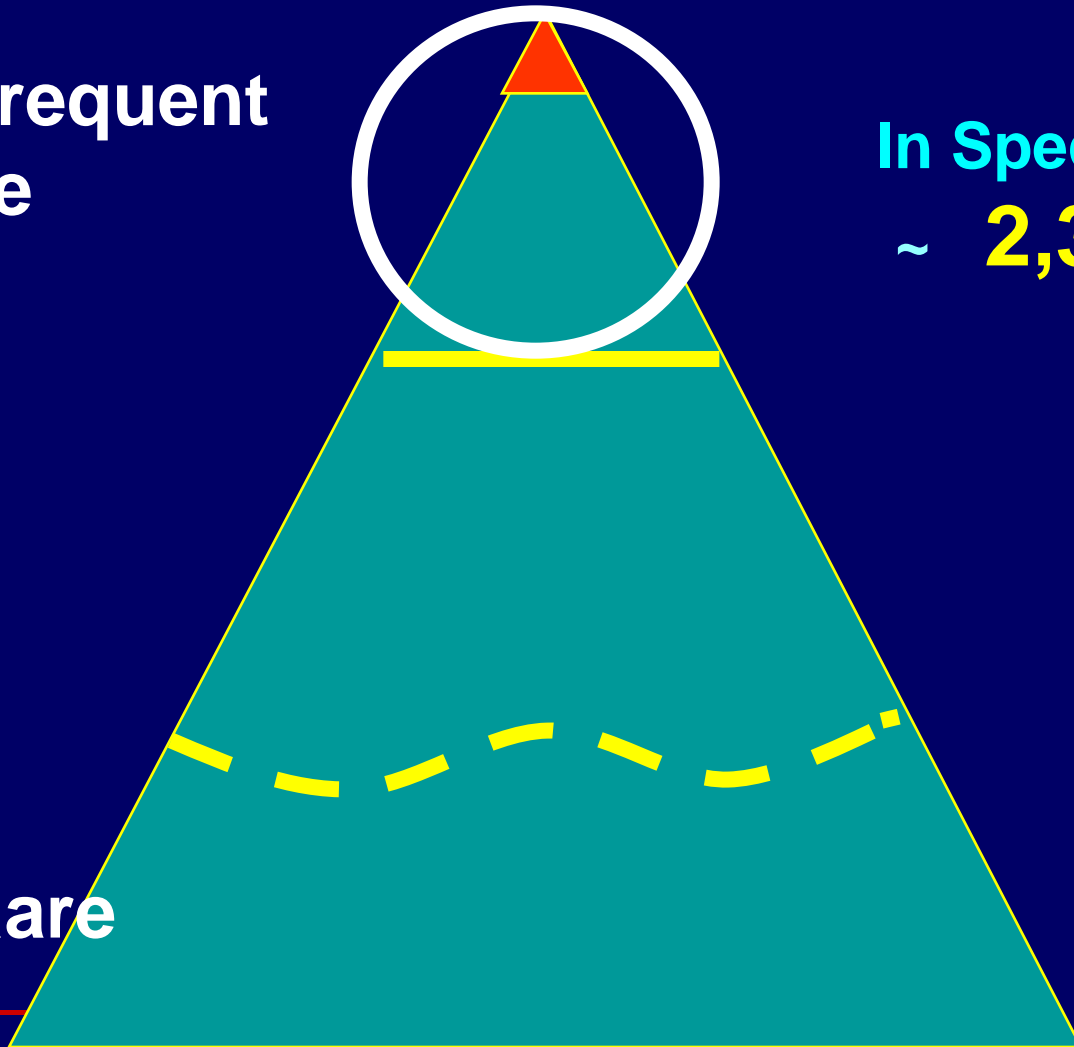
Biology of Addiction

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Very Frequent
Use

In Specialty Treat.
~ **2,300,000**

Very Rare
Use



Genetic Heritability in Three Chronic Medical Illnesses

Hypertension

Diabetes

Asthma

Heritability Estimates

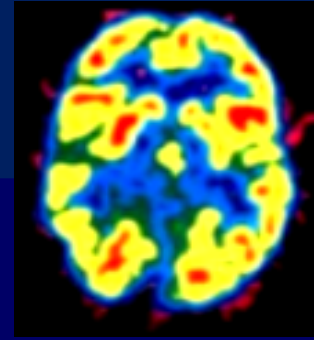
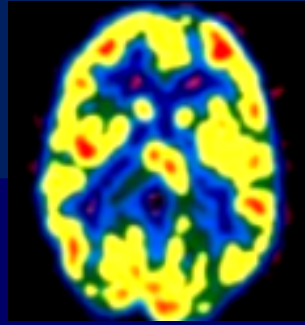
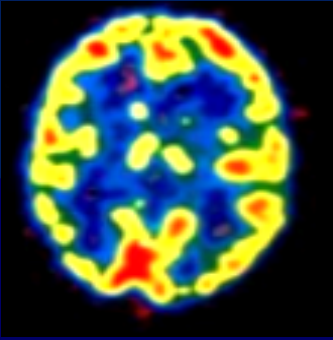
Twin Studies

Eye Color	1.00
ASTHMA (adult only)	.35 - .70
DIABETES (insulin dep)	.70 - .95 (males)
HYPERTENSION	.25 - .50 (males)
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ALCOHOL (dependence)	.55 - .65 (males)
OPIATE (dependence)	.35 - .50 (males)
COCAINE (dependence)	.40 - .55 (males)

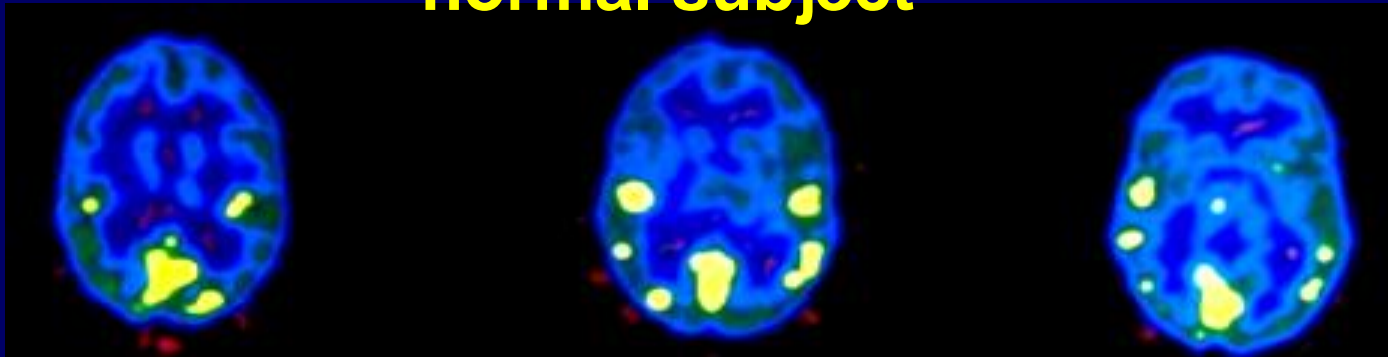
Addiction Produces Lasting Brain Changes

MRI and fMRI Imaging

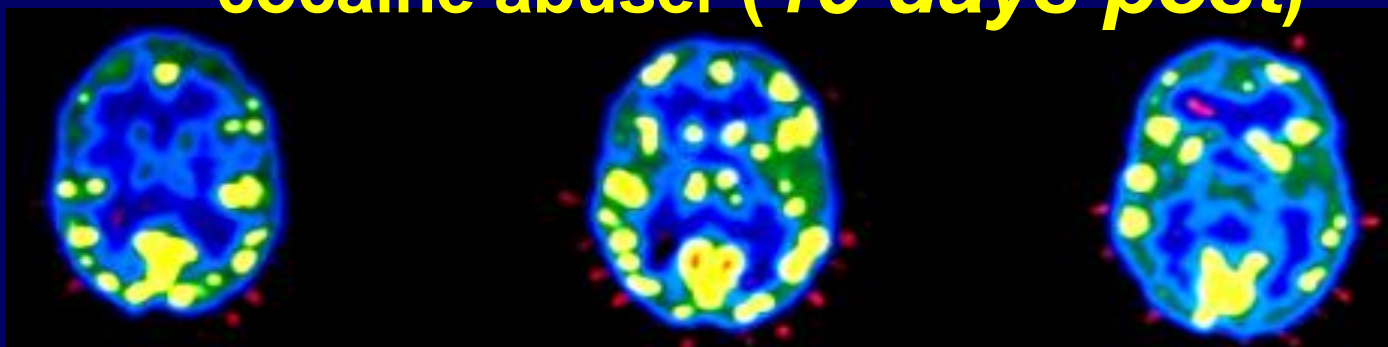
Cocaine Abuse and Brain Glucose Metabolism



normal subject



cocaine abuser (10 days post)



cocaine abuser (100 days post)

Addiction Produces Lasting Brain Changes

**But these changes will
eventually go away ...**

Right??



Laboratory Studies of Drug Craving

Role of Classical Conditioning

People, Places & Things
Associated with Drug Use –

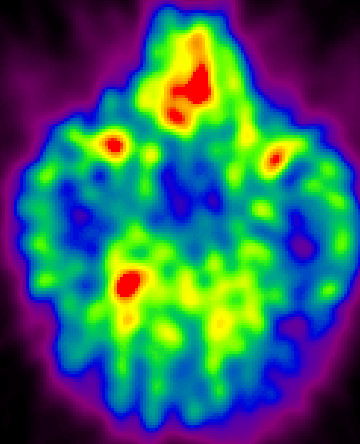
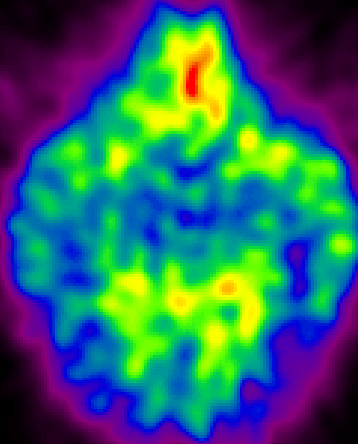
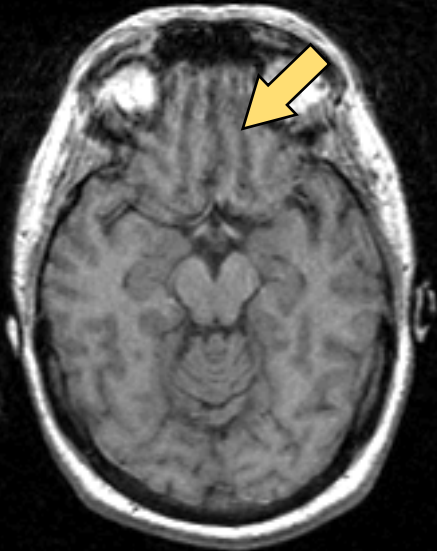
Produce Craving and Withdrawal
Years after stopping use.



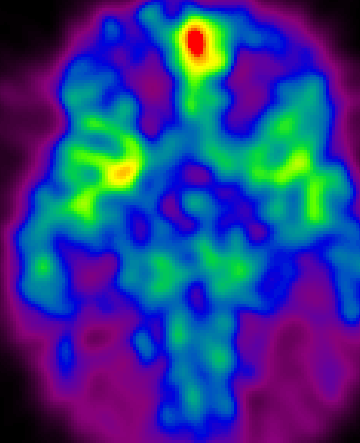
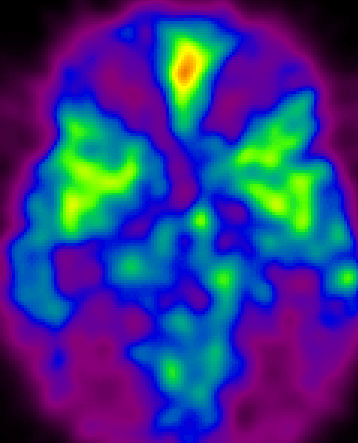
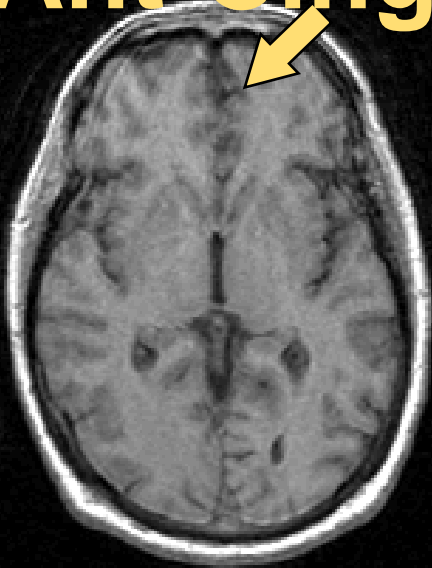
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Nature Video

Opiate Video



Ant-Cing



POINTS

1. **Drug *use* is not the same as Drug *addiction***
2. ***Substance use* is due largely to availability**
3. ***Addiction* is due to use, genetics, and resulting, long lasting brain changes:**
4. **Thus most addictions are chronic illnesses**

OK – So what?

Part II

Contemporary

Addiction Treatment

- Treatment Concepts
- Treatment Evaluation
- Contrast with rest of medicine

Conceptual Approach to Addiction

**A “Bad Habit” not an Illness
Leads to a Special Approach**

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A Nice Simple Rehab Model

Substance Abusing Patient

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graph TD; A[Substance Abusing Patient] --> B[Treatment]; B --> C[Non-Substance Abusing Patient]
```

Treatment

Non-Substance Abusing Patient

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ASSUMPTIONS

- Some fixed amount or duration of treatment will resolve the problem
- Clinical efforts put toward **correctly placing** patients and getting them to **complete** treatment
- Evaluation of effectiveness should occur following completion
 - **Poor outcome means failure**

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Studies show few differences between...

- **Brief and Intensive Treatments**
- **Inpatient and Outpatient Treatments**
- **Conceptually Different Treatments**
- **“Matched” and “Mismatched” Trt.**
- **Gender or Culturally Oriented Trt.**

How Do Treatments For Other Illnesses Work?

Chronic Illness &
Continuing Care

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A Continuing Care Model

Primary Care

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graph LR; A[Primary Care] --> B[Specialty Care]; B --> C[Primary Continuing Care];
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Specialty Care

Primary
Continuing Care

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In Chronic Illnesses....

1 — There is no Cure - the effects of treatment do not last very long after care stops

2 — Patients who are out of contact are at elevated risk for relapse:

Retention is essential

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In Chronic Illnesses....

3 – Early, intensive stages prepare patients for less intensive care:

– ultimately **Self-Management**

4 - Evaluation is a clinical duty:

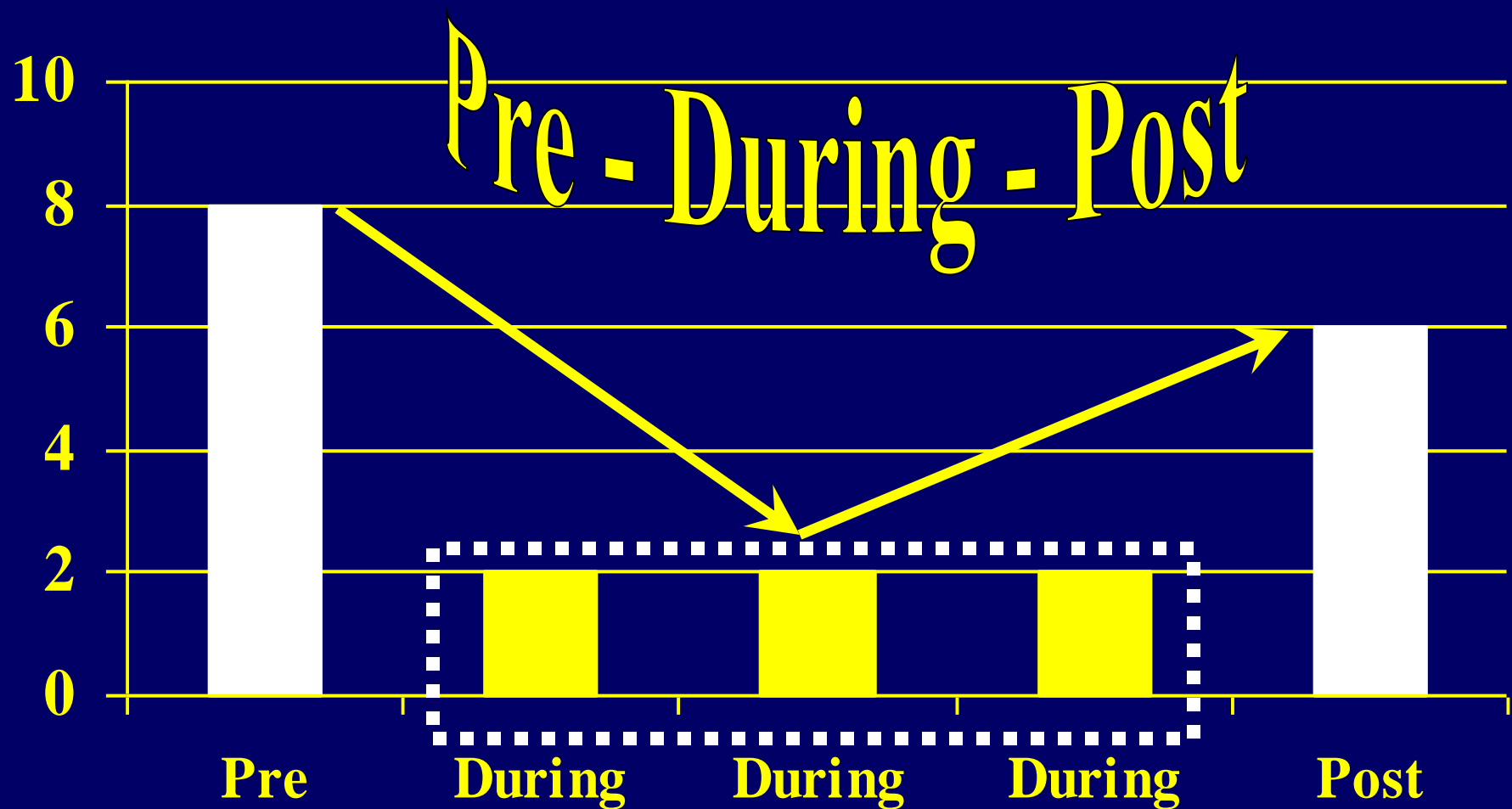
Good function = continue care

Poor function = change care

Treatment Evaluation

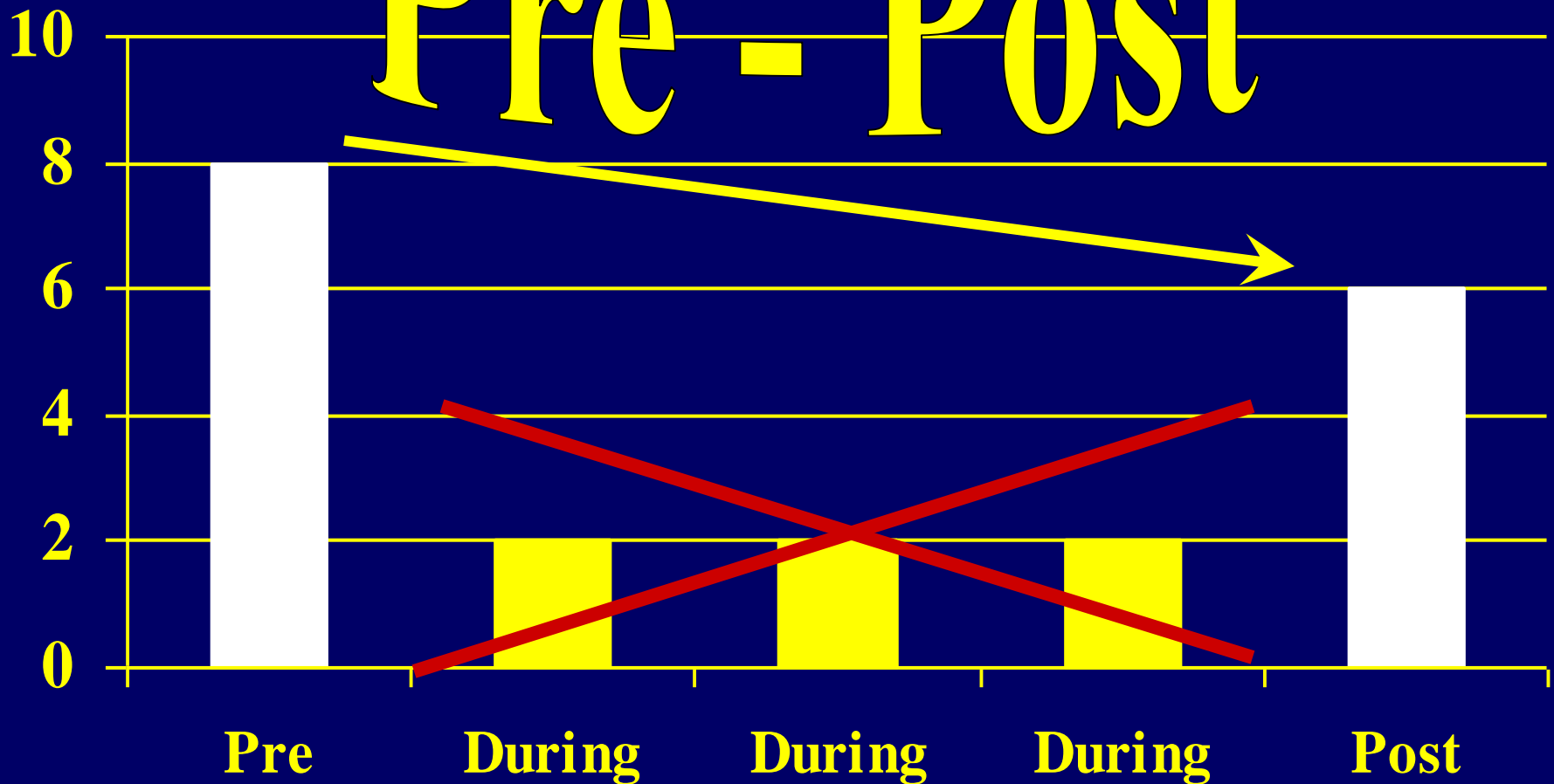
**The treatment premises
Lead to the evaluation model**

Outcome In Hypertension



Outcome In Addiction

Pre - Post



Maybe this is
why...

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Studies show few differences between...

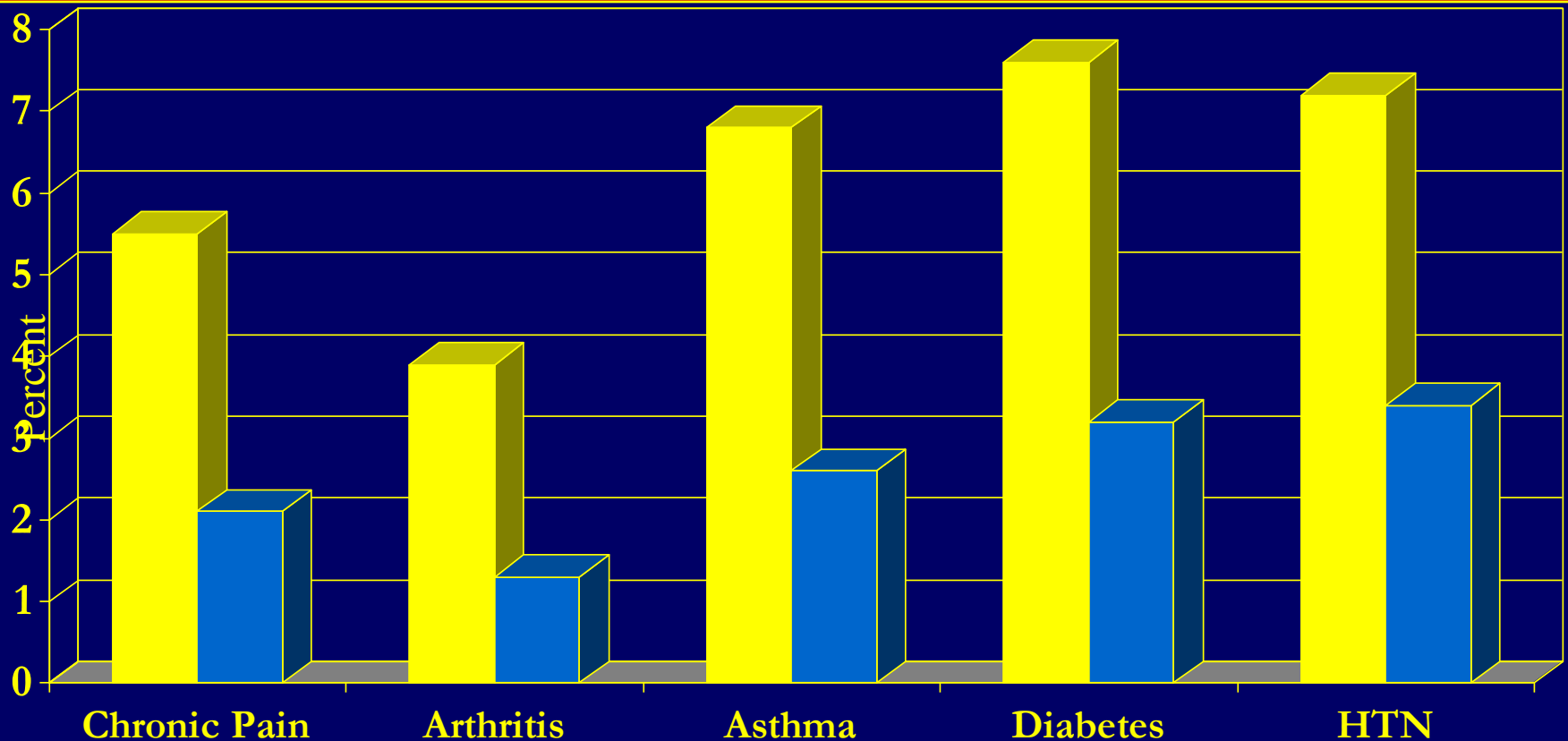
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Part III

Why Physicians Should Treat Substance Use Disorders

**Improving Treatment
Of Most Chronic Illnesses**

Disorders with Higher Prevalence Among Substance Abusers



Weisner et al. Arch Intern Med. 2006.

Substance abusing patients = 747
Matched controls = 3,690

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PRISM Systematic Reviews

Diabetes:

- Howard et al. *Ann Intern Med.*

Hypertension:

- McFadden et al. *Am J Hypertens.*

Chronic pain:

- Martell et al. *Ann Intern Med.*

Breast cancer:

- Terry et al. *Ann Epidemiol.*

Sleep:

- Dinges et al. *JAMA*
- • • • • • • • • •

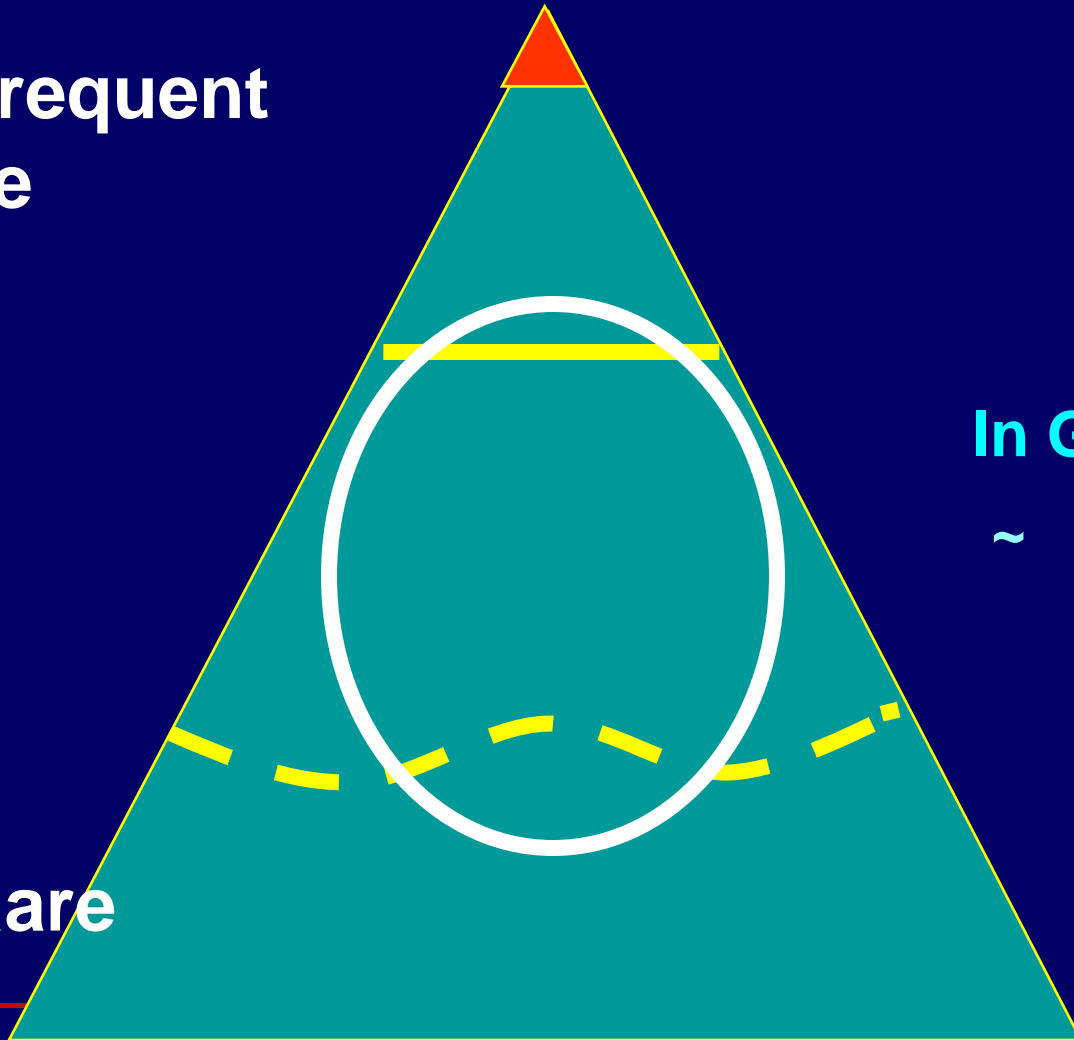
Brief

Intervention

Intervening in Substance Use Dis.

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Very Frequent
Use



In General Pop.
~ 60,000,000

Very Rare
Use

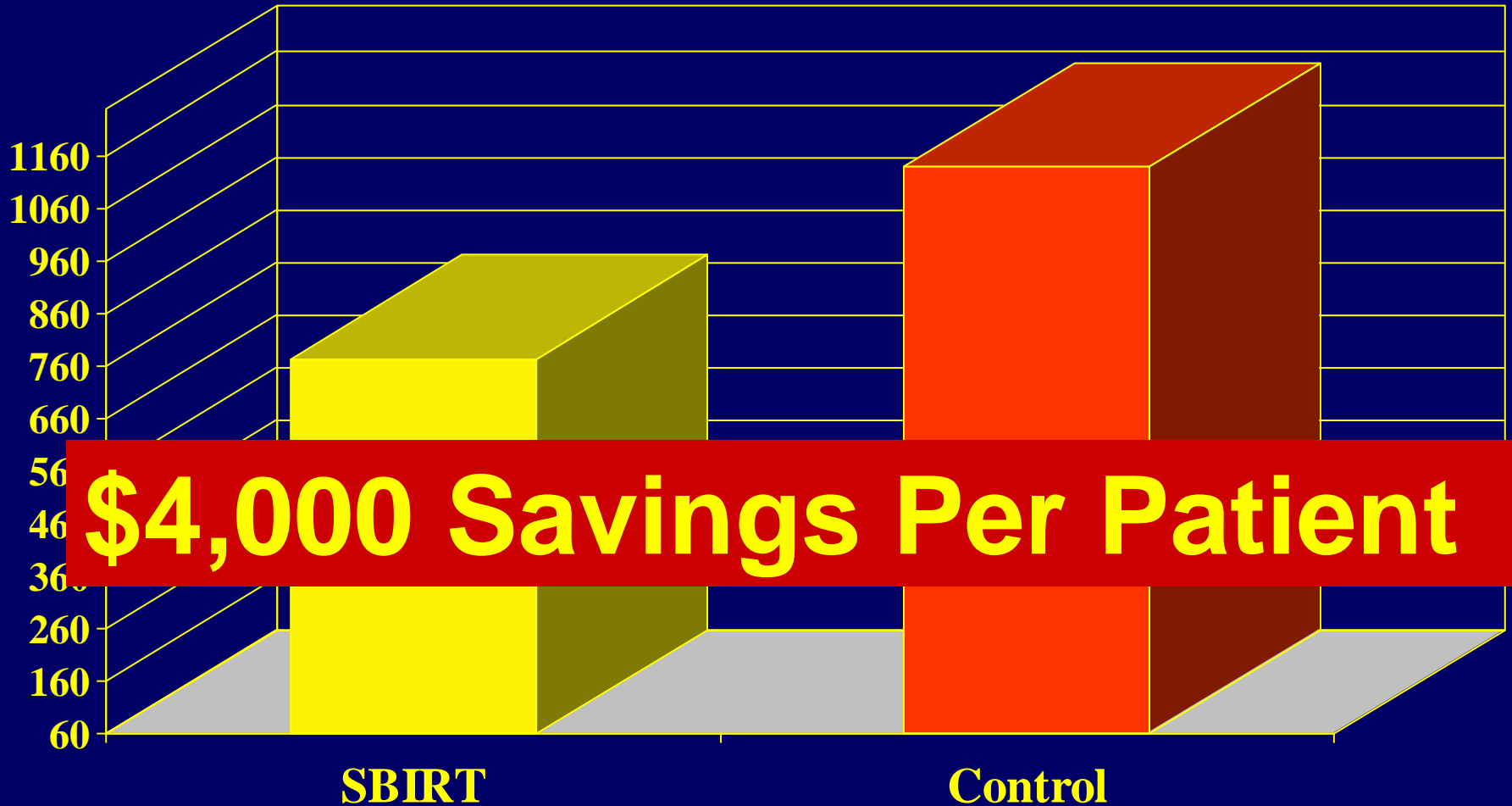
Major Advances in Brief Interventions

- “Harmful substance use” is accurately identified with **2 – 3 questions**.
 - Prevalence rates of **20 – 50%** in healthcare
 - **60%** of all ER admissions (10 million/yr)
- Brief counseling (**5 – 10 minutes**) produces lasting changes & savings

Washington's Screening Brief Intervention & Treatment Evaluation

- **SBIRT in 9 Emergency Depts.**
- **Case Control Study of 1557 pts**
 - **Matched group – got ER care but no BI**
- **Measured healthcare utilization and costs for one year**

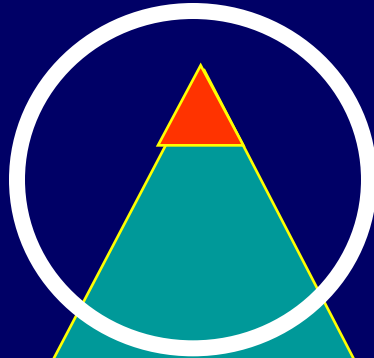
Medicaid Costs Following SBIRT in Washington State



Addiction Treatment

A New Model of Treatment

Addiction Treatment



**Very Frequent
Use**

**In Specialty Treat.
~ 2,300,000**

**Very Rare
Use**

Physician Health Plans

- **49** PHPs
 - All authorized by state licensing boards
 - Most treat many types of health professionals
- **Do NOT provide treatment**
 - Assess, Intervene, Evaluate, Refer, Monitor, Report and Advocate
 - All under authority of Board

DuPont et al., 2008, (in review).

Evaluation and Contracting

- **Phase 1 - Evaluation (1 – 2 mos.)**
 - Evaluate/diagnose referred physician
 - Explain PHP and Contract
- **Result is signed contract**
 - 3 – 5 years in duration
 - Protection from immediate adverse actions
 - Monitoring with report to Board – 4 yrs

Treatment and Monitoring

- **Phase 2 – ~1 yr**

- Selected residential treatment **30 – 90 days**
- Referral to IOP or OP **~ 6 months**
 - **Return to practice** ~ month 3
- Aftercare program **~ 3-6 months**

- **Phase 3 – 4 yrs**

- AA attendance - Caduceus Society meetings
- Family Therapy

- **Urine Drug Screenings - throughout**

- Weekly - monthly (random during weekdays)
- Worksite visits

Results During Contract

**904 Physicians
Consecutively Enrolled into
16 state Physician Health Programs**

Completed

448 - No Longer Being Monitored

67 - Completed but monitored voluntarily

515 (57%)

Continuers

132 - Still being monitored

132 (15%)

Non-Completers

85 –Voluntarily stopped / Retired

48 – Failed, License Revoked

22 - Died (6 suicides)

102 –Transferred/Moved

257 (28%)

Results *Through* Five Years

No Positive Urine Over
5 Years

78%

Results Through Five Years

Second Positive Urine
After One Slip

26%

Results After Five Years

Revoked License

Completers 2%

Continuers 11%

Non-Completers 32%

Concluding Points

- 1. Drug “Addiction” treatment will become integrated into healthcare.**
- 2. Care for “Substance Use Disorders” will involve different patients, providers, and methods**
- 3. Model is Patient Centered Medical Home – diabetes example**

Thank You