

# Thinking About Treatment, Process, Performance & Outcome

How Should Alberta Build On  
the Existing Performance  
Measures?

# Goals

**Albertans will have:**

- **Excellent health and function (outcomes)**
- **An efficient and responsive healthcare system (performance)**

# Parts to the Presentation

- **Part 1** – Realistic goals for managing the substance use problems in **Alberta**
- **Part 2** – How could performance management help – generally?
- **Part 3** – Using performance management to reduce **Alberta** substance use problems in School, Healthcare and Justice settings?

# 3 Facts

1 – You Can Prevent Substance **“Use”**

**50% better prevention is possible**

2 – You Can Intervene Early in emerging Substance **“Abuse”**

**Savings of \$4000/patient in healthcare**

**Important in schools too**

3 - You Can Manage Even Serious Chronic **“Addiction”**

**Continuing care model is essential**

**Important in healthcare, justice and welfare**

# Population Prevalence

In Treatment ~ 2,300,000

Serious

**3. Promote Continuing Addiction Treatment**  
Quality Indicator = Continuity Measures

**2. Identify Substance Problems – Intervene/Refer**  
Quality Indicator = Identification, Referral, Engagement

**1. Prevent/Delay Onset – Intervene/Arrest Early Use**  
Quality Indicator

Use

# Part 2

How is *Performance Management* supposed to work?

- Treatment Processes
- Performance
- Outcomes

# Parts of the Performance Model

- **Treatment** is the sum of therapeutic processes: “active ingredients”
- **Performance** is a measure of symptoms and function during treatment
- **Outcome** is a measure of symptoms and function following treatment

# How Should This Work?

- Monitoring and managing performance during treatment should produce better outcomes.
- Monitoring and managing treatment processes should produce better performance:

*But...this won't work unless it is easy, fast and sensible – people won't do it*

*You will have measures but no management*



# Laying the Foundation

**Alberta Health Service has:**

- **Developed a province-wide strategy – with clear markers for excellence**
- **Identified a comprehensive set of measures = “**performance indicators**”**
- **Created a culture of measurement**

# Data Sources for Alberta PM Framework

- Service Satisfaction Survey
- Client Satisfaction Questionnaire
- Detoxification Feedback Survey
- Client/Family Feedback
- Referral Agent Feedback
- Addiction Severity Index
- **Addiction Systems for Info. and Service Tracking**
- Client Follow-Up

# Data Sources for Alberta PM Framework (Continued)

- Provincial Survey
- Alberta Regional Mental Health Info System
- Hospital Discharge Data Base
- Ambulatory Care Data Base
- Alberta Physicians Claims Database
- Canadian Community Health Survey
- Canadian Alcohol and Drug Use Monitoring Survey
- The Alberta Youth Experience Survey (TAYES)
- Meditech – South

# Data Sources for Alberta PM Framework (Continued)

- Regional Access and Intake System
- Calls to Health Link Alberta
- Service Tracking and Outcomes Reporting System
- Mental Health Crisis Response Teams
- Health of the Nation – Outcome Scales
- Global Appraisal of Individual Needs.....

**IN SUM ~68** information sources – **54** indicators – **36** objectives. Only 6 sources used more than once



# *Can't This be Simpler?*

1. **Work backwards** – How many processes can you manage at once? Pick important issues.
2. **Understand and agree** on process-performance relationships?
3. Use **existing measures!!!**
4. **What will you do with the information** – what is possible, sensible?

# *Can't This be Simpler?*

- 5. Do NOT measure outcomes until you measure processes – results will not be interpretable*
- 6. Create a Management Dashboard – No more than 7 measures on important issues.*
- 7. Collecting/reporting measures is part of staff annual review – Performance review/correction is part of managers' annual review*

# Part 3

## Performance Management in Substance Use Disorders

- **Prevention/Early Intervention**
- **Treatment**



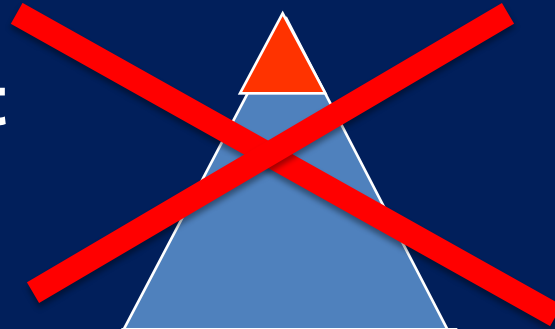
# Prevention

## Relates to:

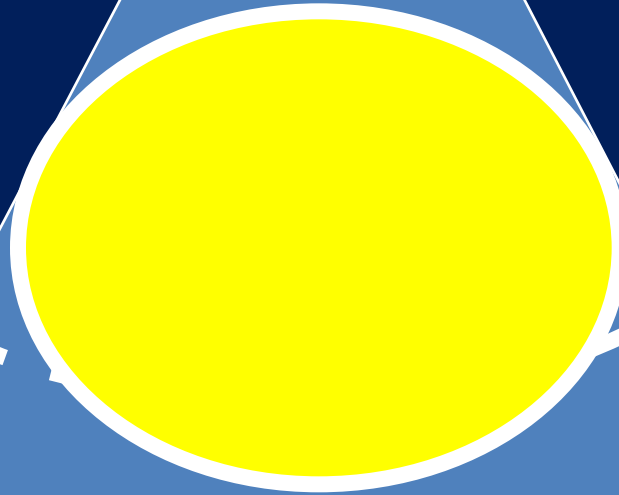
1. Alberta “Father Involvement” program
2. Alberta “Family Wellness Initiative”
3. Children’s MH Science Policy Practice Network
4. Harvard “Center on Developing Child”
5. Family Justice Training
6. Alberta “Measuring Add. & MH Problems” Report Card

# Early Intervention

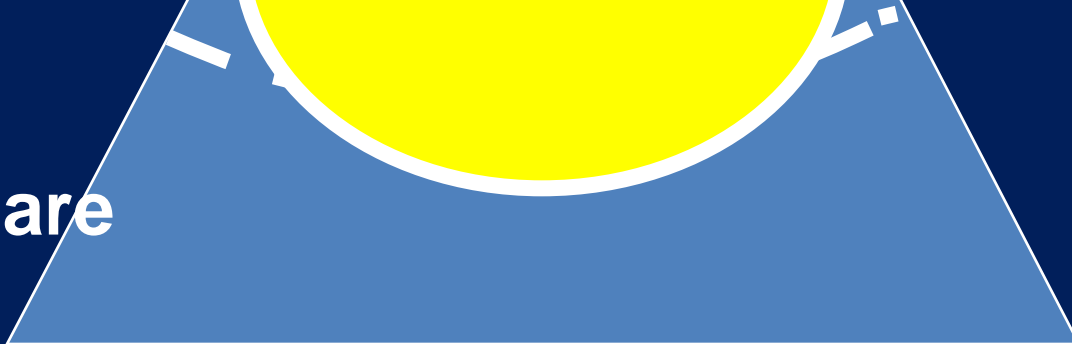
Very Frequent  
Use



Early Intervention  
~ 40,000,000



Very Rare  
Use



# *Prevention Science*

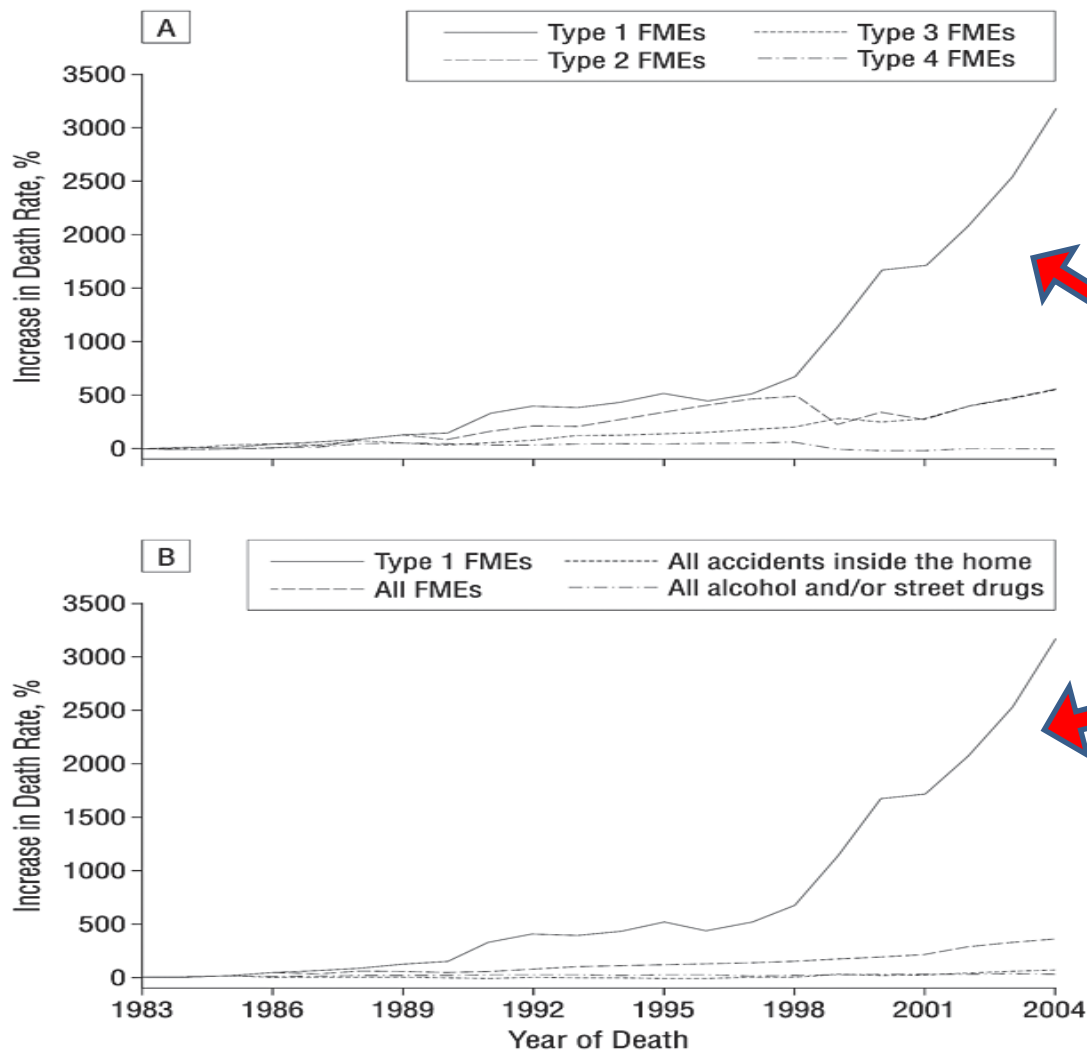
- 1. **Addiction** affects ~10% of population - has an “at-risk” period (adolescence) –has 10 yr latency*
- 2. **Substance abuse** affects ~30% population – pervasive effects in healthcare*
- 3. Screening and Brief interventions have demonstrated impact*
  - Easy, reimbursed, part of most EHRs*

# Early Intervention

## Relates to:

1. 5-Year Interdisciplinary Strategy: MH and Addiction
2. Alberta “Family Wellness Initiative”
3. Addiction Content in Professional School Curricula
  - a. Medical School Curricula – Medical Training
  - b. Nursing School Training
4. Royal Societies Synthesis Report

# Potential impact on Safety: Fatal Medical Errors



## FME Death Rate 1983 - 2004

ARCHIVES OF  
INTERNAL MEDICINE

Phillips, D. P. et al. 2008;168:1561-1566

**Alc/DrgRelated  
Fatal Errors**


# Potential impact on Care Quality

- Alcohol consumption @ ANY DOSE **accelerates tumor growth** in breast and prostate cancer.
- Alcohol @ more than 2 drinks/day **reduces treatment response** in hypertension & diabetes.
- Alcohol @ ANY DOSE within 2 hours of bed time **reduces sleep quality**
- Alcohol use @ 3 or more drinks/day produces **30 – 50% worse medication adherence**

**BUT - Simply asking the patient to reduce his/her use can improve clinical outcomes/costs.**

# Rankings of Top Preventive Services Recommended by the USPSTF

Rank	Service	Effect	ROI
1	Aspirin to prevent heart attack & stroke	4	5
2	Childhood immunizations	5	5
3	<u>Smoking screening &amp; intervention</u>	5	4
<u>4</u>	<u>Alcohol screening &amp; intervention</u>	4	5



Maciosek, *Am J Prev Med.* 2006; Solberg, *Am J Prev Med.* 2008;  
<http://www.prevent.org/content/view/43/71>

# What is SBIRT?

SBIRT identifies risky substance use to prevent addiction and **complications/costs to other diseases**.

**3-simple questions** on Tobacco, Alcohol, Other Drugs

Research shows Brief Advice produces :

- **20 – 60% reductions @ one year in 'harmful use'**
- **Decreases in health care costs \$4,000 per patient**

Can be done by **nurse, NA, Counselor, Health Educat.**



# Prevention/Brief Intervention in NYC Schools

## **Adaptation to Schools:**

Fit into education work flow, culture, ethics

## **Medical Clinic in school – separate, ethical, professional**

Develop Computer-delivered “tailored prevention messaging”  
and counseling protocol for Brief Interventions

Build in billing, progress reporting formats to self-sustain

## **Implementation Research in two schools:**

Work with parents, teachers union, admin, insurance

Iterative implementation of screening and counseling

Revise, re-test protocols – assure acceptability

## **Controlled Cost-Effectiveness Trial in Progress**

# *Performance Measures For Prevention*

## *Using existing billing records*

- 1. Penetration** - % of patients 10 – 40 who have been screened for “unhealthy substance use”
  - *By Site, Service and Setting*
- 2. Identification** - % of positively screened patients who receive a brief intervention or referral
  - *By Site, Service and Setting*

# *If performance is low*

## **1. Penetration** - *By Site, Service and Setting*

- *Examine sites/settings using PDSA techniques*
- *Consider training as last resort*

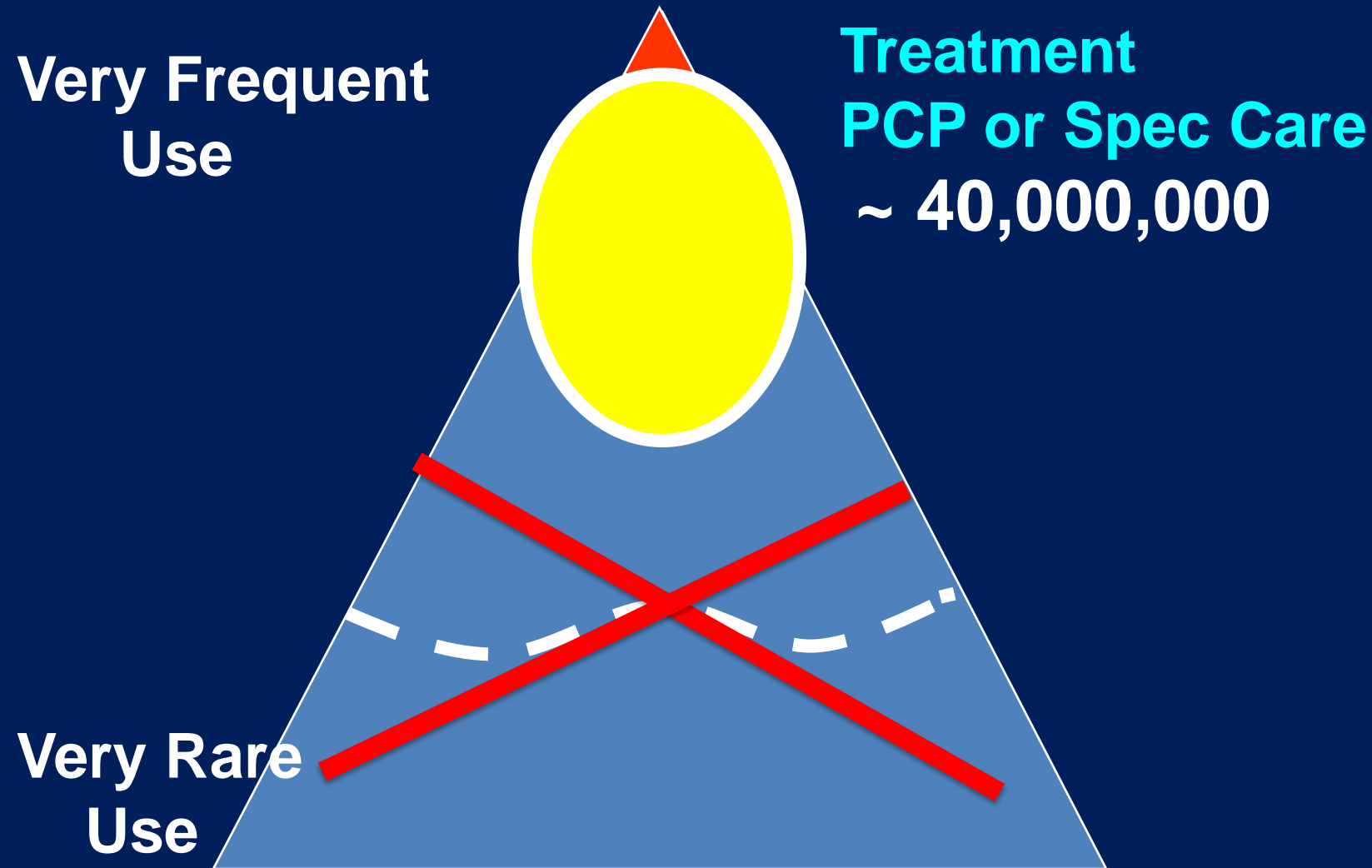
## **2. Identification** - *By Site, Service and Setting*

- *Examine sites/settings using PDSA techniques*
- *Consider fit of intervention into setting*
- *Consider attractiveness of “next steps” in process*

# Treatment

1. **Addiction is a chronic illness**
2. **Integrate/harmonize management of addiction into CCM model**

# Abuse/Addiction Treatment



# GOOD OLD FASHIONED REHAB

Substance Abusing Patient

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

The diagram is a vertical flowchart. At the top is a white rectangular box with a black border containing the text 'Substance Abusing Patient'. A white arrow points downwards from the bottom center of this box to a blue rectangular box with a white border containing the text 'Treatment'. Another white arrow points downwards from the bottom center of the blue box to a white rectangular box with a black border containing the text 'Non-Substance Abusing Patient'.

Treatment

Non-Substance Abusing Patient

# Continuity of Healthcare

```
graph TD; A[Screen  
Intervene  
Monitor  
Refer] --> B[Stabilize  
Motivate/Medicate  
Self-Mgmt/Refer]; B --> C[Re-Intervene  
Monitor/Support]; C --> A;
```

**Screen**  
**Intervene**  
**Monitor**  
**Refer**

**Stabilize**  
**Motivate/Medicate**  
**Self-Mgmt/Refer**

**Re-Intervene**  
**Monitor/Support**

# *Chronic Care Science*

- 1. Chronic illnesses **don't have cures** – but they can be managed*
- 2. Goal is “disease control” thru self-management*
  - **Clinical measures can be performance indicators***
- 3. Care is NOT formulaic – requires management*
  - **Clinical measures can guide care management***



# *Performance Measures In Treatment*

- 3. Engagement** - % of diagnosed “addicted” patients who \*actively participate\* in OPT care for at least 60 days
  - By gender, age, drug of choice, site
  
- 4. Disease Control** - % of engaged patients who achieve at least 8 weeks of \*disease control\*
  - By gender, age, drug of choice, site

# *If performance is low*

## **3. Engagement** - *By gender, age, drug, site*

- *Use PDSA & Patient Satisfaction to examine attractiveness of care*
- *Consider telephone counseling*
- *Consider the effectiveness of clinical processes*

## **3. Disease Control** - *By gender, age, drug, site*

- *Consider the effectiveness of clinical processes*
- *Share with clinical staff – develop new protocols*

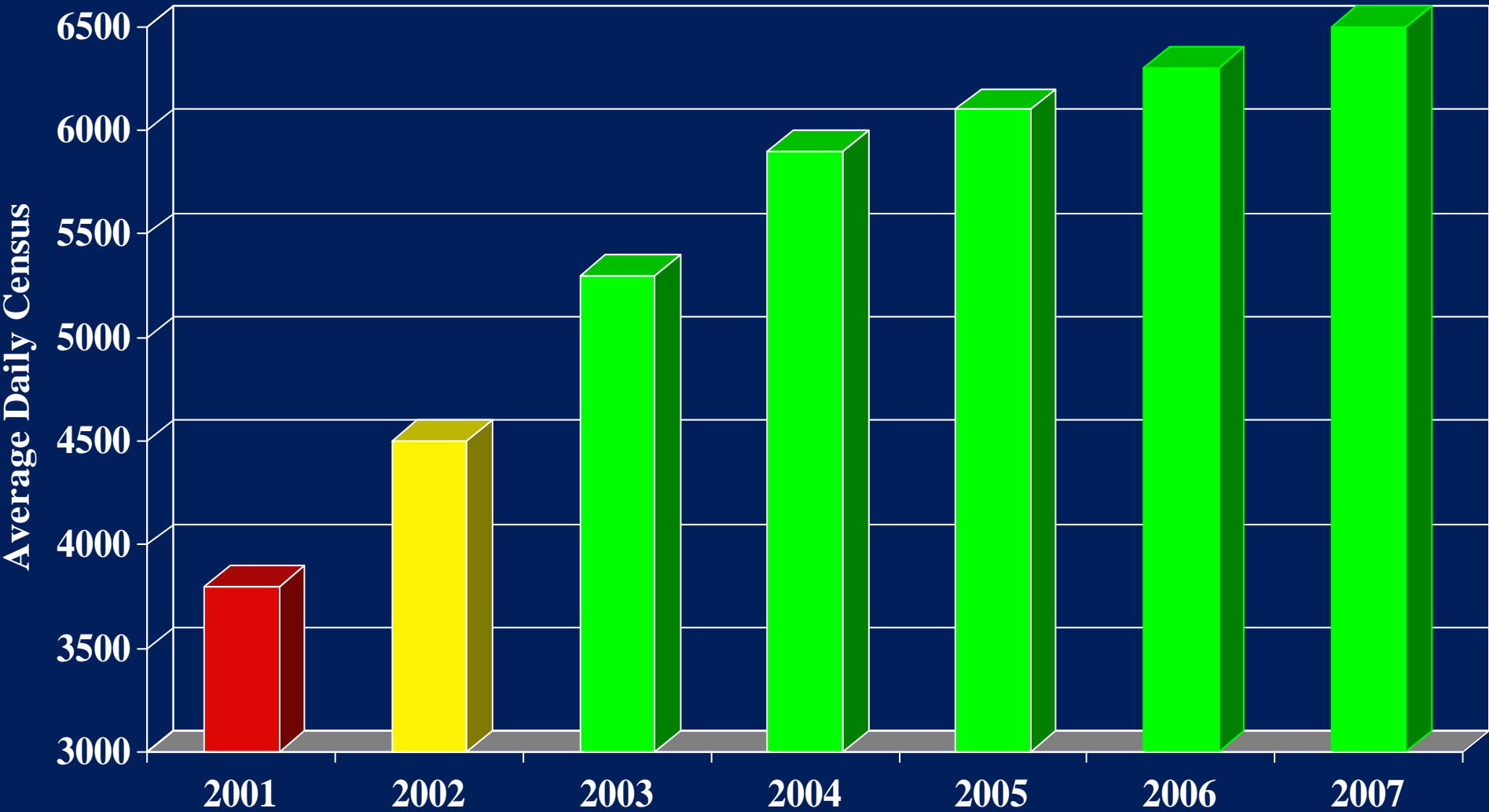
# Delaware's Efforts In Performance Contracting

Performance Contracting

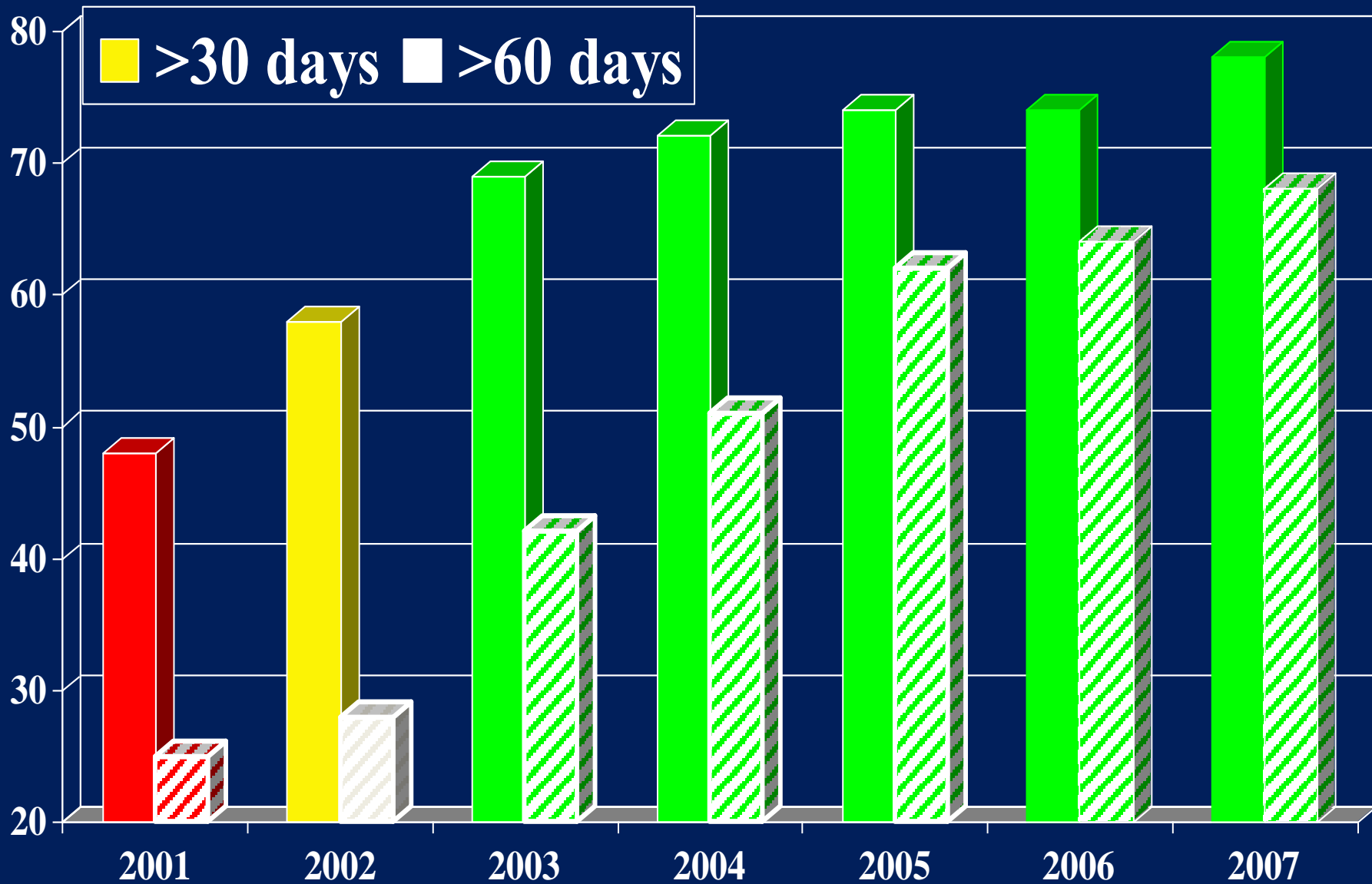
# Delaware's Performance Based Contracting

- 2002 Budget – 90% of 2001 Budget
- Opportunity to Make 106%
- Two Criteria:
  - 80% Utilization/Occupancy
  - Active Participation
- Audit for accuracy and access

# Utilization



# % Attending



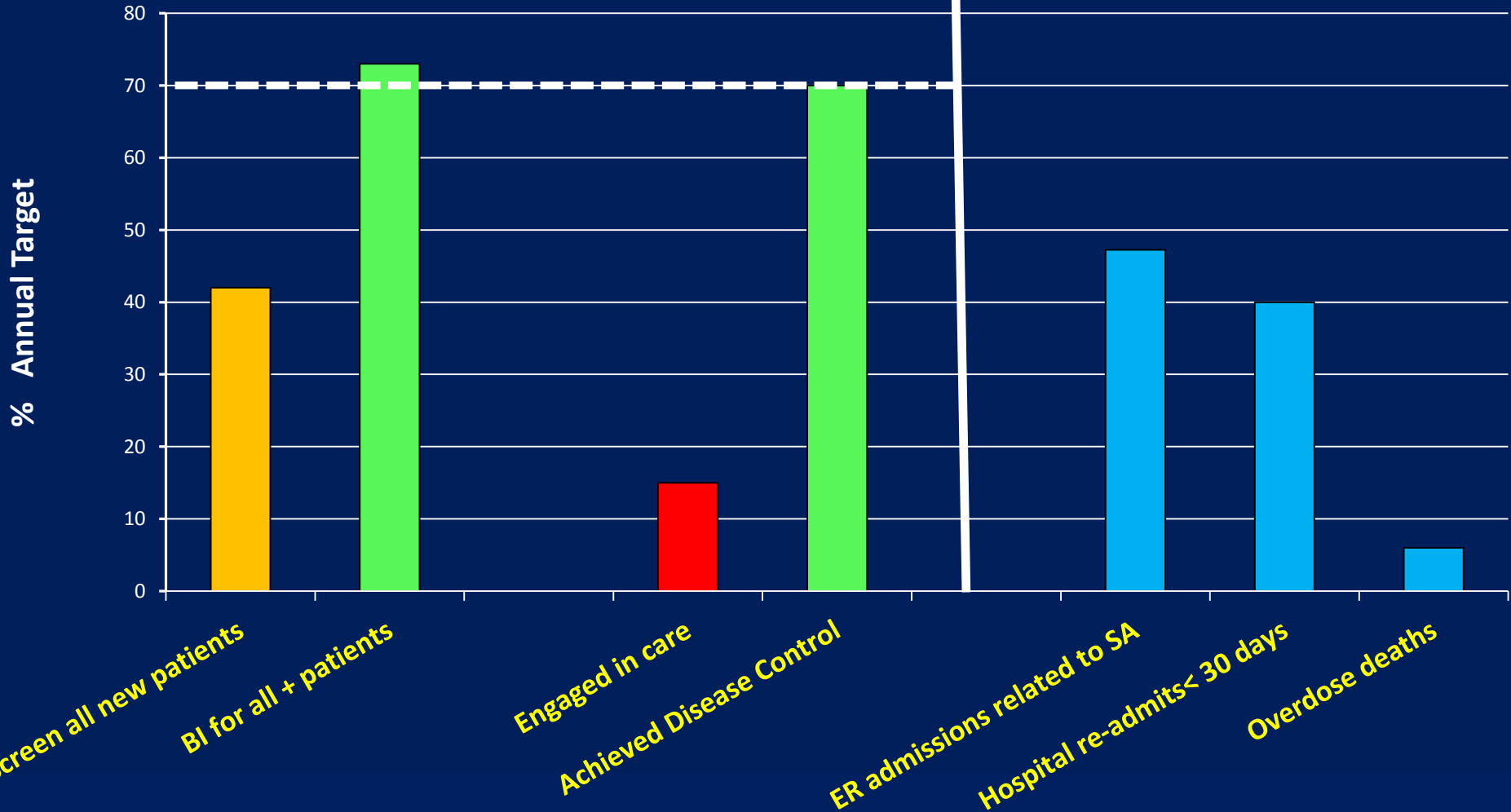
# CONCLUSIONS

- Substance use problems **CAN** be managed
  - Extreme value to healthcare, justice, welfare
- Most performance measures comport well with the rest of healthcare and pop. health
- **Alberta is poised to create better system:**
  - Integration – Beh Health & Gen Med
  - Evidence informed policies

# A Simple Performance Dashboard

## Alberta Performance Indicators

## Critical Health Indicators





**Thank You**