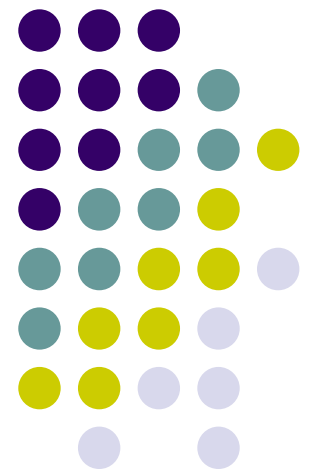


Integrated Health: Connecting Body and Mind

Diabetes and Mental Illness in a “Textured Community”

William Peabody, CEO
North Central Health Center
Detroit, Michigan

April 4, 2009





Background

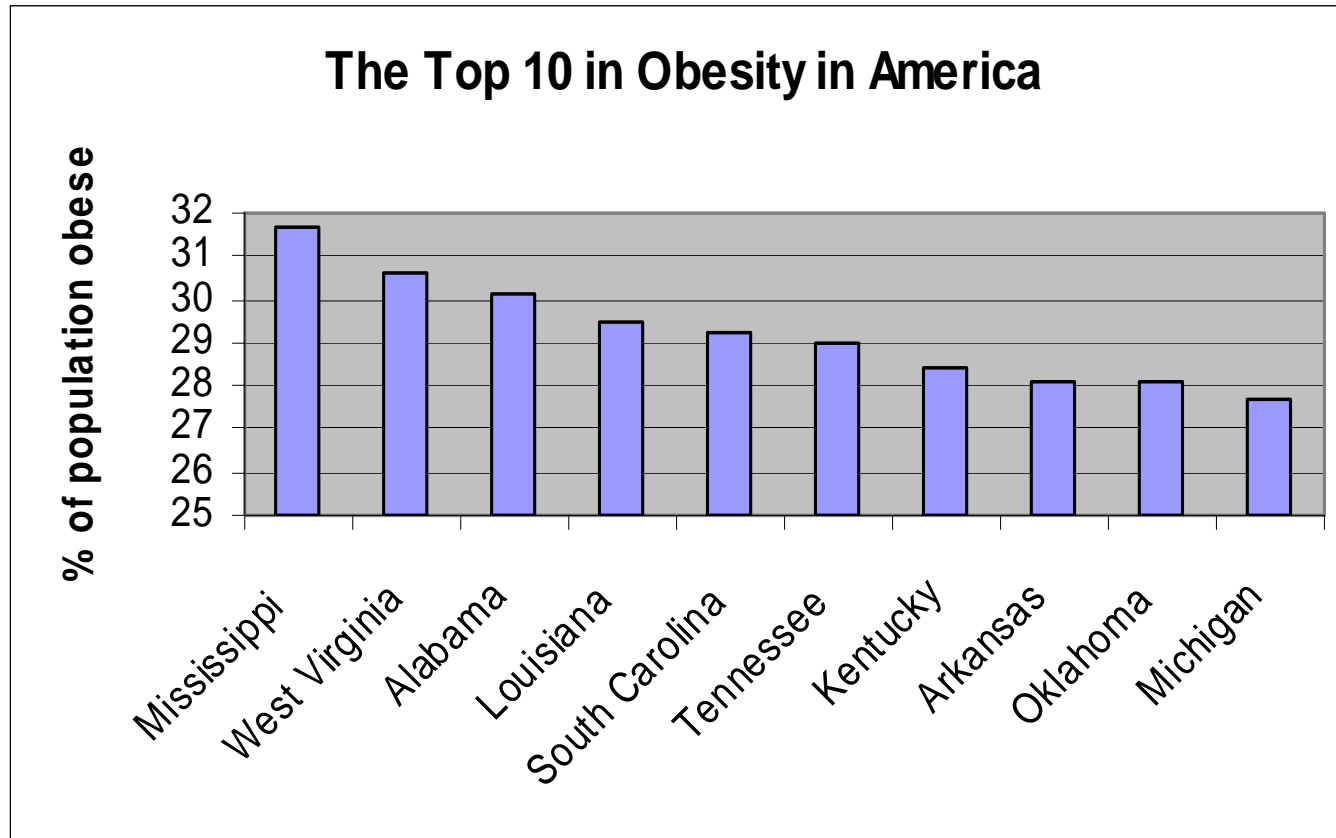
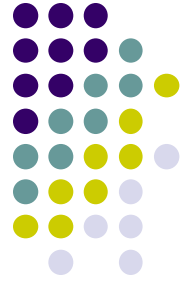
- North Central Health Center is a private, not-for-profit community mental health care provider
- Located in the City of Detroit, borders of Hamtramck and Highland Park
- Former heavy industry with bedroom neighborhoods



- High: crime, pollution (lead and mercury), abandoned homes, new ethnic groups, pit bulls, drug trade, party stores
- Low: educational level of community, employment, 2 parent homes, supermarkets, health care facilities, dentists, rec centers, libraries, computers, swimming pools



Detroit is the poorest city in the United States for cities above 250,000 population.





- 3,500 registered patients
- Typical patient profile:
 - SMI, depressed, hypertensive, overweight, nutritionally deficient, abuses drugs and alcohol, likely diabetic, no transportation, unemployed, victimized.



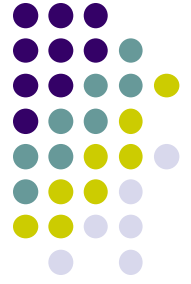
The Past

- 1946

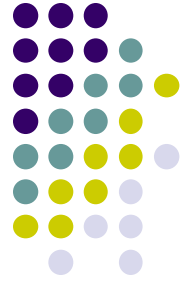
Founded by a group of psychiatrists to treat seriously mentally ill patients in an outpatient setting

- 1981

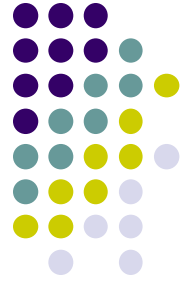
Moved to the north and central section of Detroit



- 1993
Nothing worked
- 1994
“Volunteer” Family Doctor and Nurse
- 1995-2000
Building phase



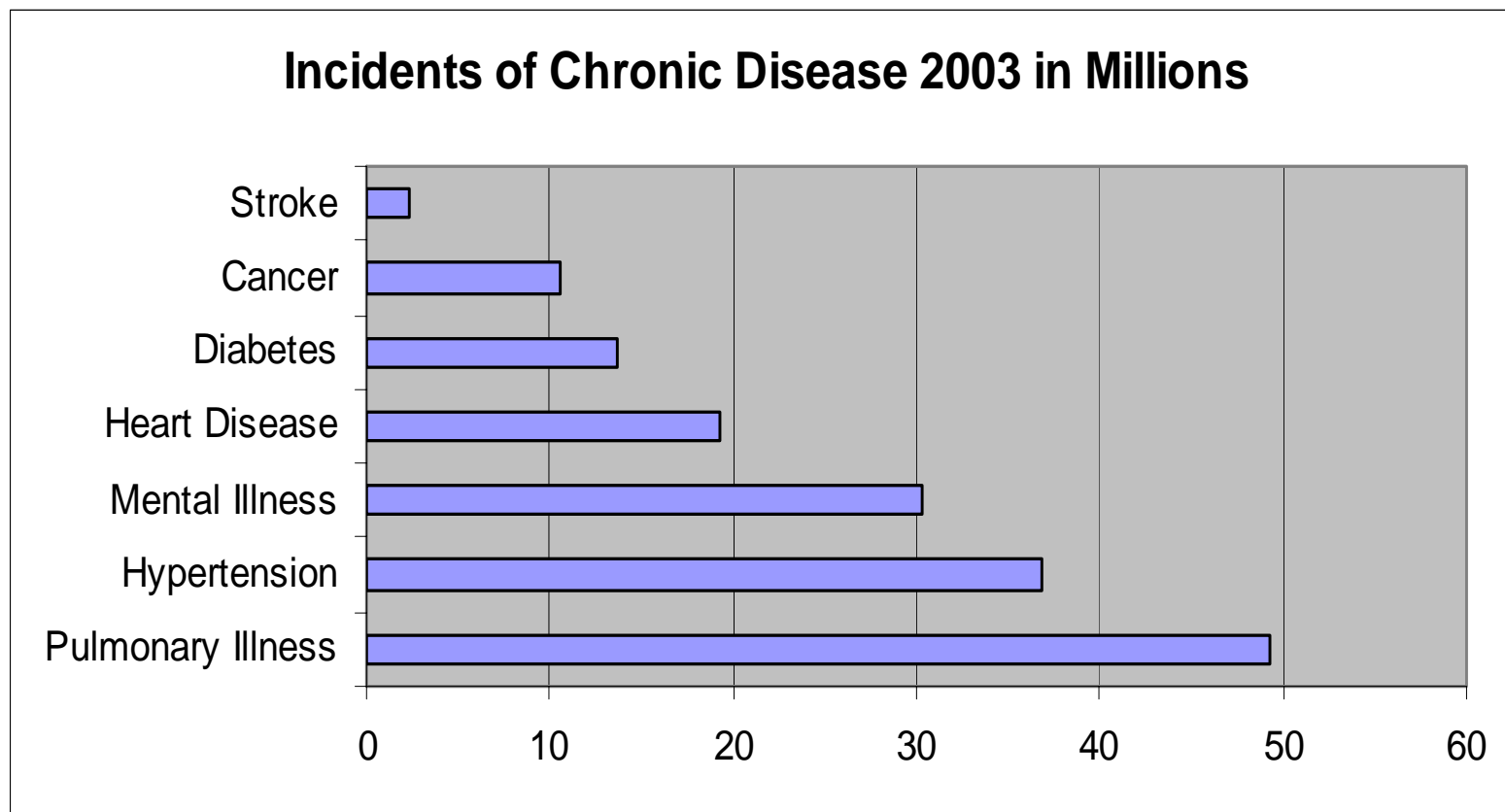
Where We Are Today



Healthcare Team

- Primary Care Physician
- Psychiatrist
- Registered and Advanced Practice Nurses
- Registered Pharmacist
- Case Managers and Clinical Counselors
- Drivers
- Peer supports

Source: Milken Institute
Data: 2003



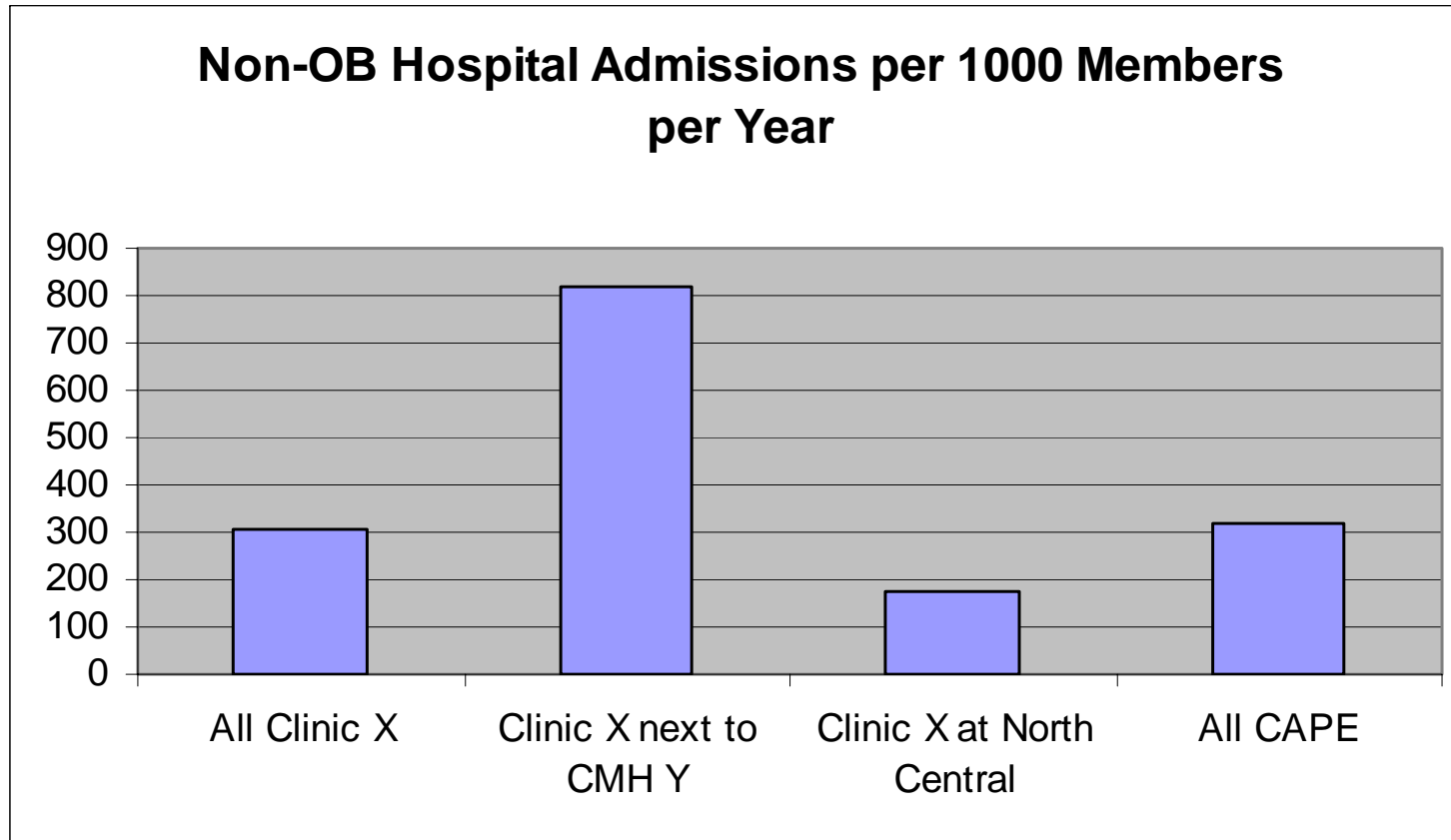
Outcome Study

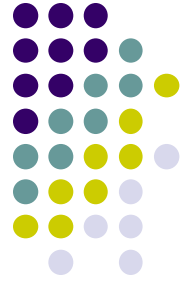


An outcome study was conducted by CAPE Health Plan that reviewed and compared data on 10,000 patients

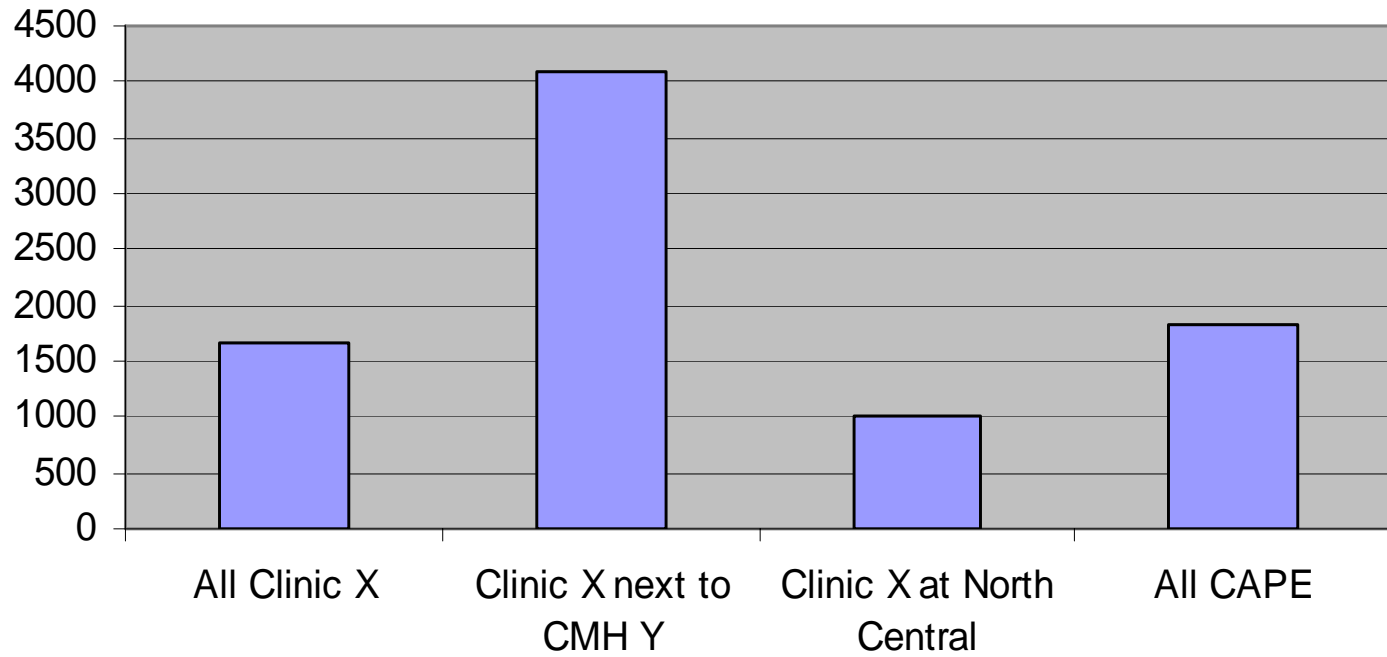
Question: Are we saving lives and saving money?

January 1, 2003 – March 14, 2004



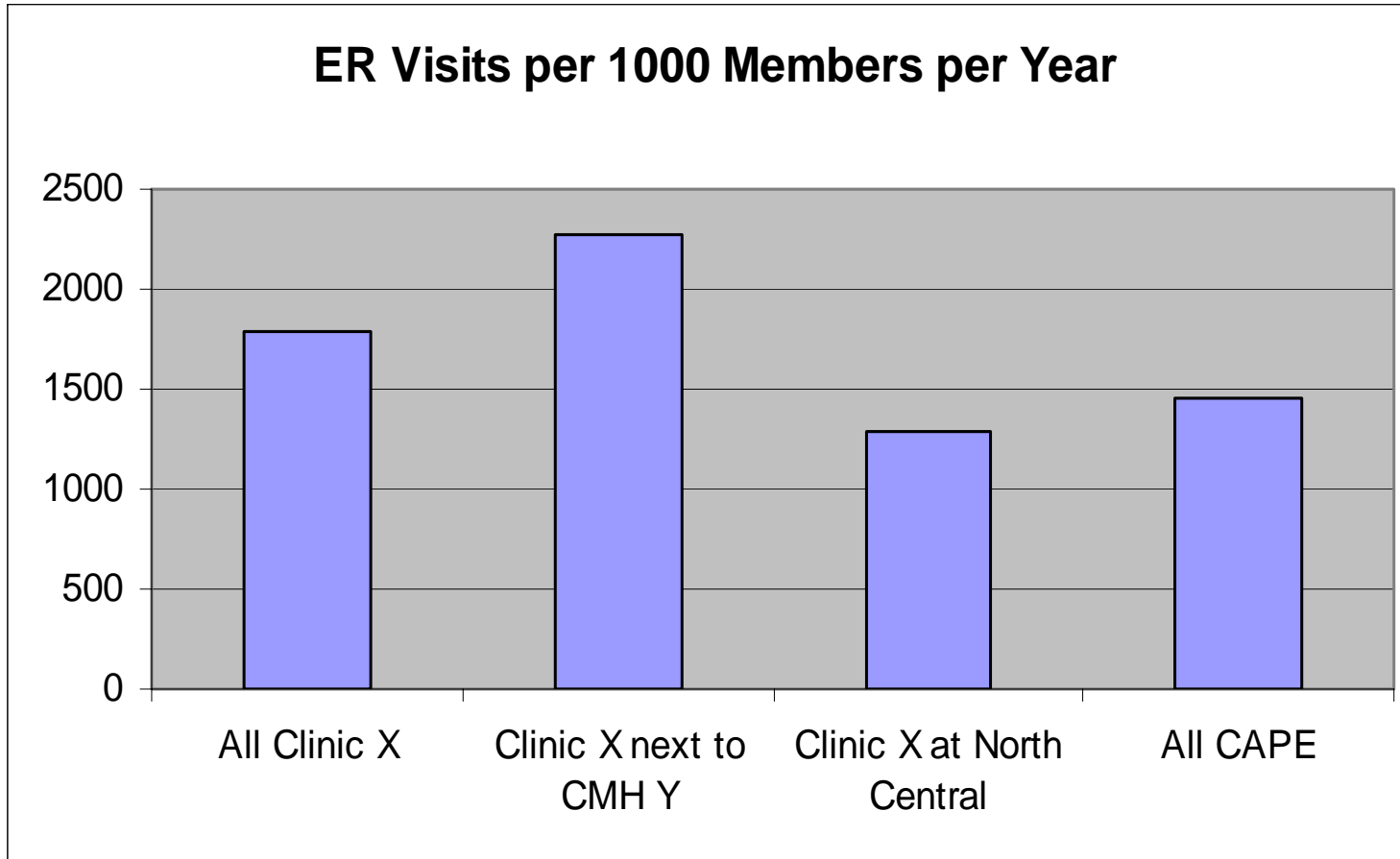


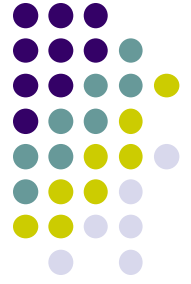
Non-OB Hospital Days per 1000 Members per Year



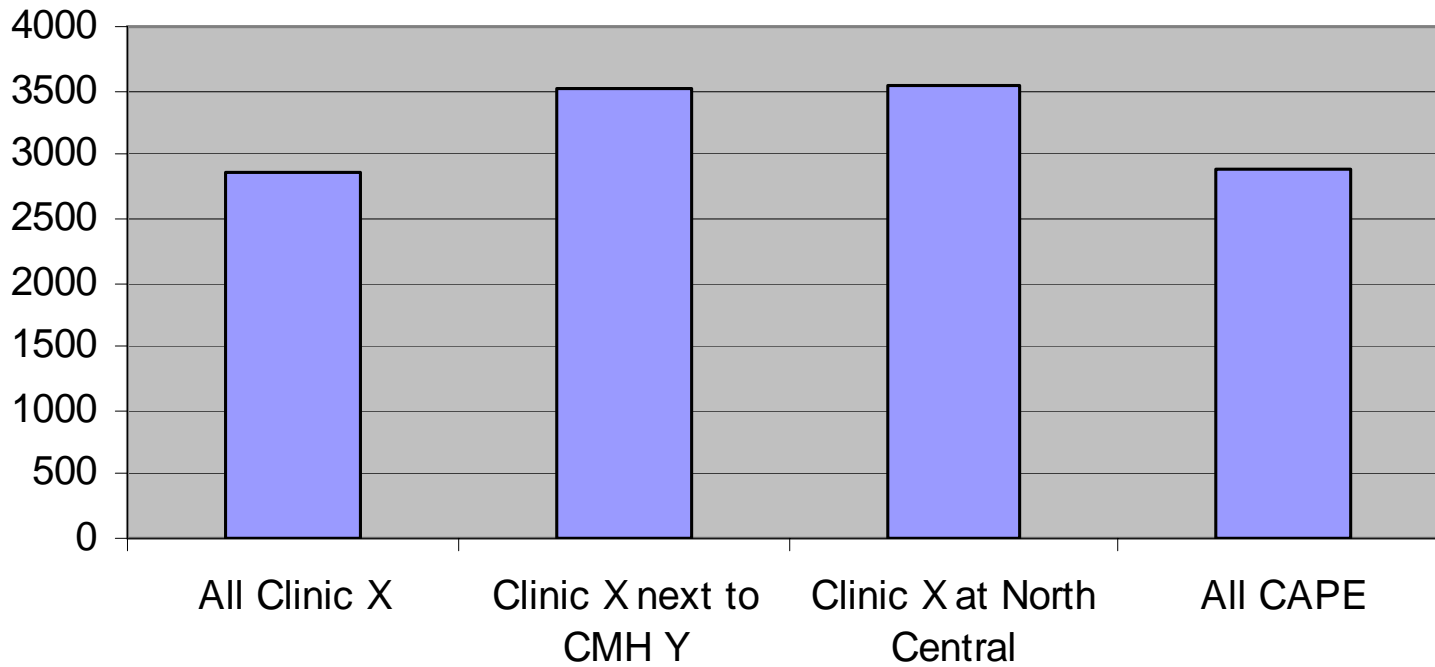


ER Visits per 1000 Members per Year



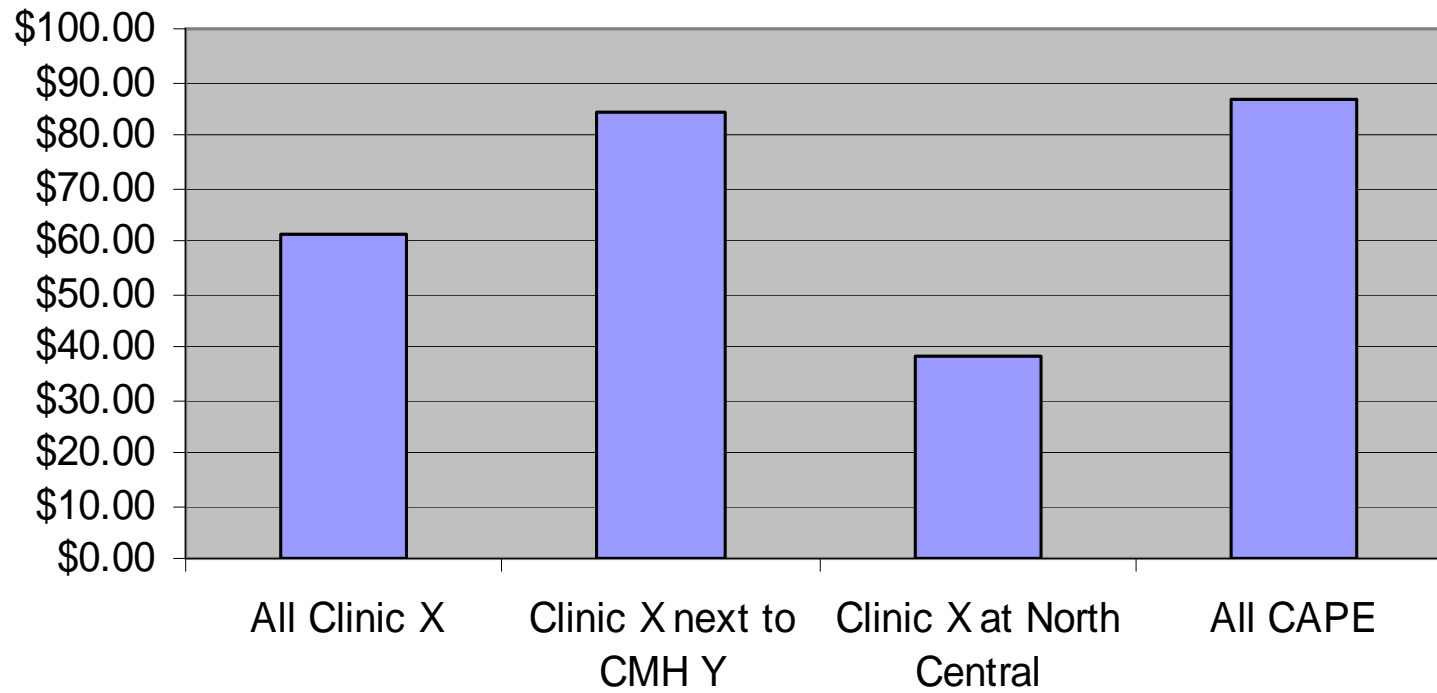


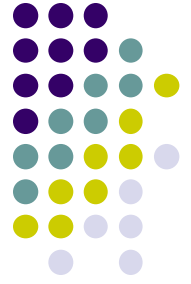
Office Visits per 1000 Members per Year





Pharmacy Costs per Member per Month





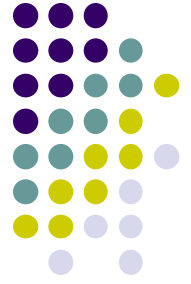
How did we do this?

- Constructed a facility to the planned treatment
- Trial and error initiatives
- Weekly all staff meetings
- Recruited cross-trained Registered Nurses



How did we do this?

- Restricted access to pharmaceutical representatives and use of sample medications
- Targeted health initiatives such as
 - Undiagnosed heart disease
 - Diabetes
 - Hypertension
 - PAP's
 - Obesity



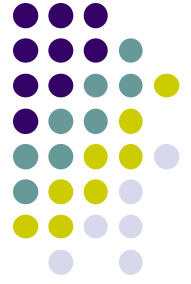
How did we do this?

- Modified the home based programs to stress serious co-morbidities
- Modified staff expectations, assignments and payroll
- Established “almost real-time” communications systems



How did we do this?

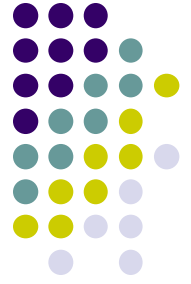
- Expanded treatment modalities
 - Group medical visits
 - Health change and maintenance groups
 - Use of the pharmacy as an additional level of control
 - Monitoring all healthcare procedures—case managers attend hospital and physician visits



Integrated care

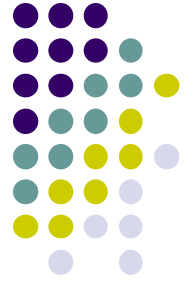
- Co-location does not ensure integrated collaborative care
 - May only produce parallel practice
- Establish a culture and philosophy of care that considers physical and psychiatric needs, personal goals, and community issues

Disease Pathways and Links



- New York Times
June 12, 2006

“Among the mentally ill, roughly one in every five appear to develop diabetes — about double the rate of the general population. This is a little-recognized surge, but one that is jolting mental health professionals”



Archives of Internal Medicine, December 2005.

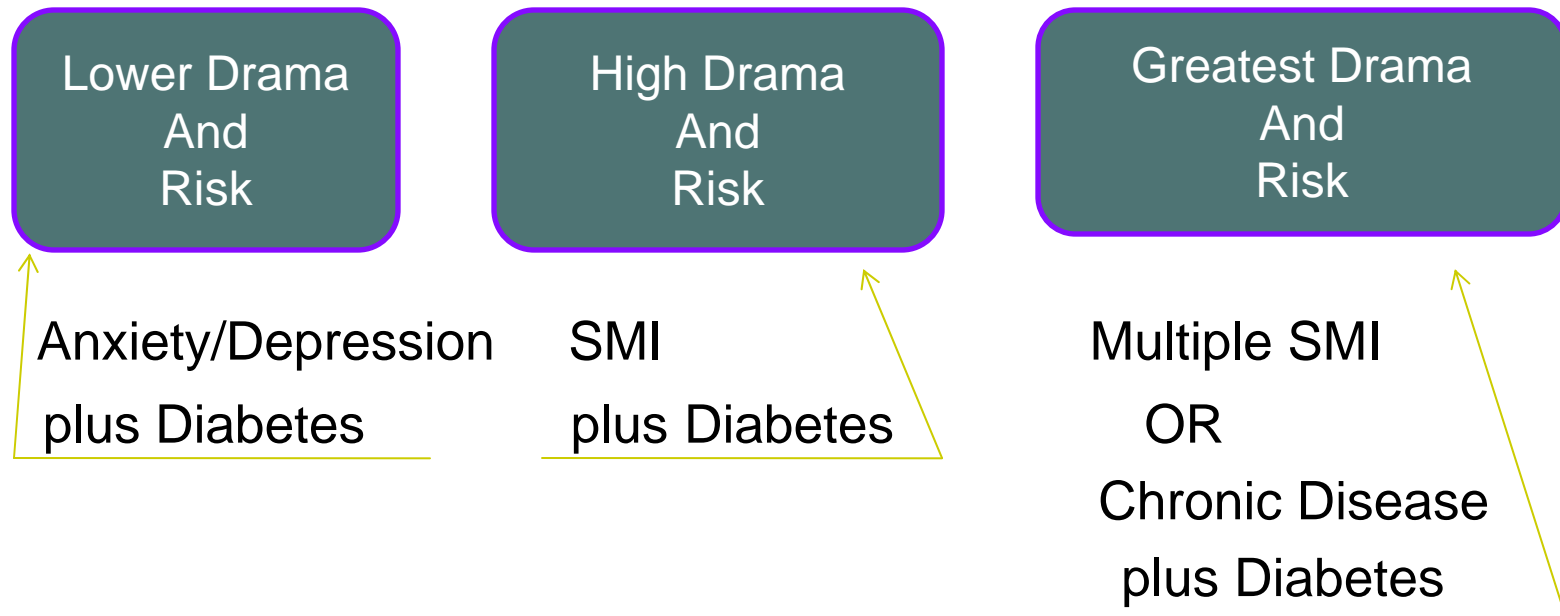
“Diabetics with mental health conditions are less likely to receive optimum diabetes care”

24 percent more likely not to have had hemoglobin A1c testing,
24 percent more likely not to have had their low-density cholesterol tested,
5 percent more likely not to have had an eye exam,
32 percent more likely to have poor control over blood sugar levels.



Patient Issues

- Non-homogenous

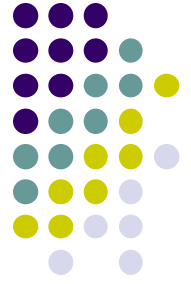




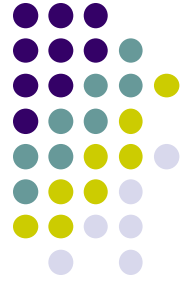
Those at High Risk

- Schizophrenia
- Schizoaffective Disorder
- Bi-Polar Disorder
- Substance Abuse and Addiction
- Personality Disorders

Those at Lower Risk



- Patients with Anxiety and Depression



Those at Greatest Risk

- Patients with multiple SMI diagnoses
- Patients with SMI plus multiple physical illnesses

Quick Study 2007-2009



- 16 patients from lower risk and high risk groups
v 13 patients from greatest risk group.
- All patients acknowledged dx of diabetes
- All patients had basic diabetes education
- Greatest risk group participated in intensive group therapy, other groups did not

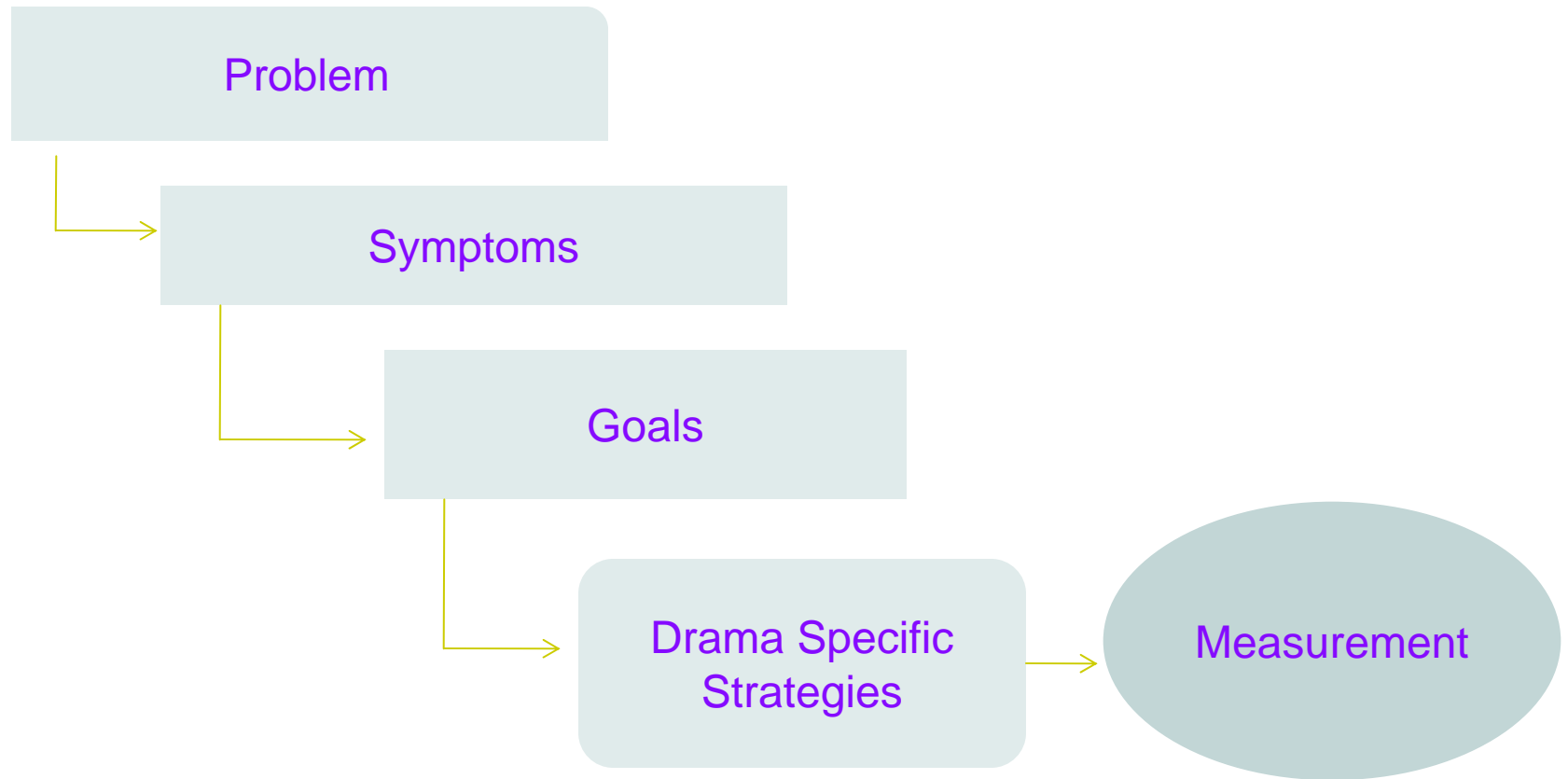
Quick Study 2007 - 2009



Outcome

Patients who were identified at greatest risk (SMI plus diabetes plus another co-occurring illness) had 5% better Hemoglobin A1c scores than the control group. Average scores <6.2 in the greatest risk group.

Clinical Pathways



The Universe vs “The Hood”



Goals Universe

Know meds and administration

Understand testing frequency

Establish a sick day plan

Develop a foot care plan

One to One Learning model

Personal responsibility

Success= feeling of wellbeing

Goals in the Hood

Decrease anger and paranoia

Understand safety issues

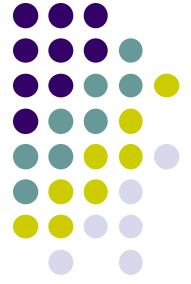
Establish camaraderie

Develop trust

Group learning model

Peer pressure

Success= immediate reward

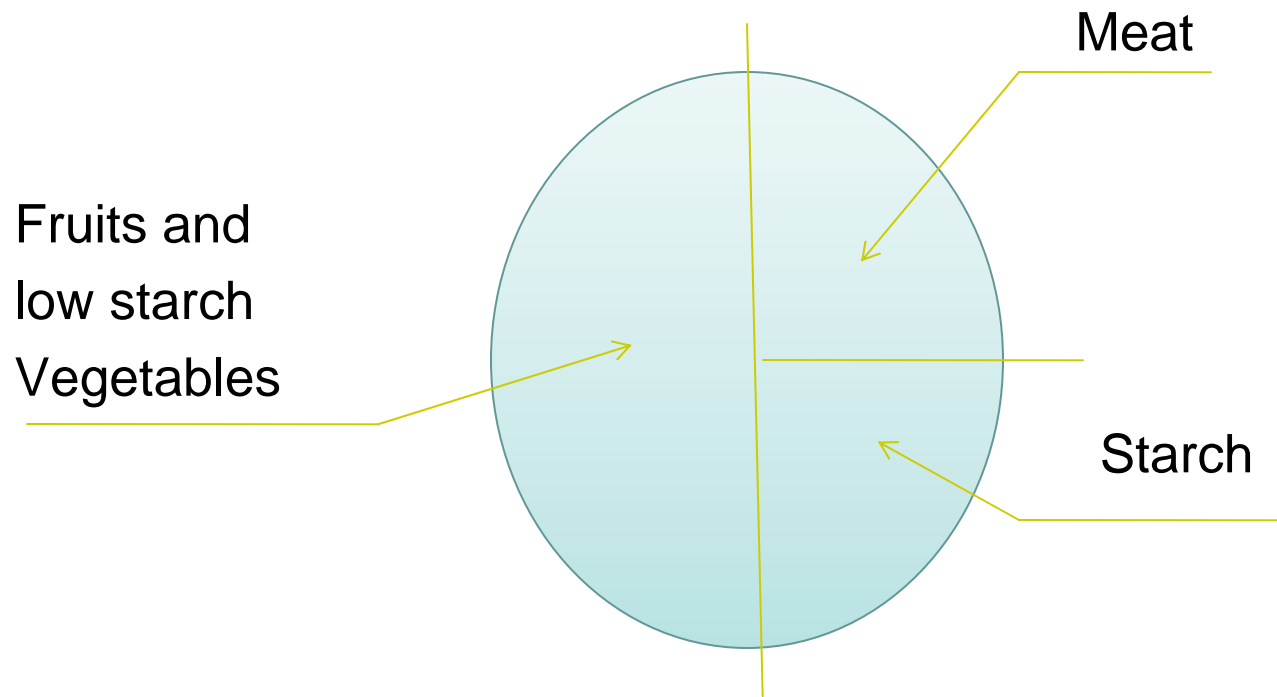
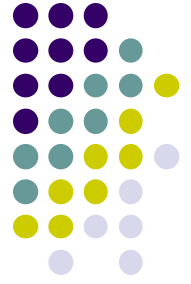


The Universe vs “The Hood”

Factors in Developing Strategies

1. Literacy
 2. Math ability
 3. Poverty
 4. Accessibility
 5. Support systems
 6. Co-occurring diseases
- Motivation
→ and
Adherence
-
- A yellow rectangular box encloses the list of six factors. A yellow arrow points from the right side of the box to the text 'Motivation and Adherence'.

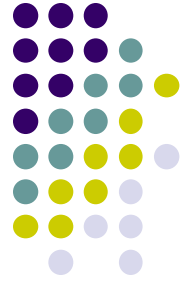
Plate Loading



Examples of Strategies Locale Specific



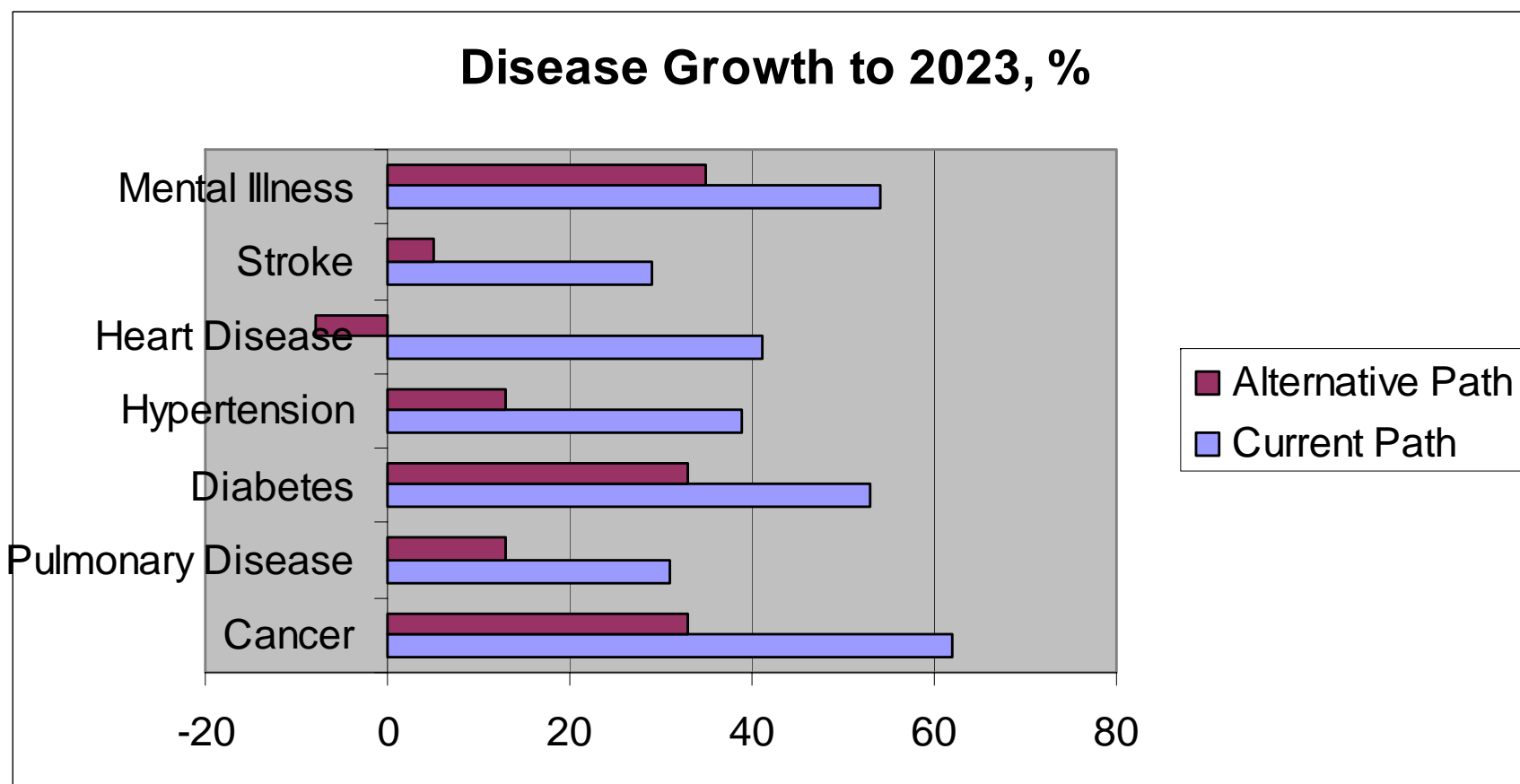
- Start
 - 2 random blood sugar readings >200 on non-consecutive days
- Termination
 - Commitment to 1 meeting/week x 2 months
 - generally produces long term participation



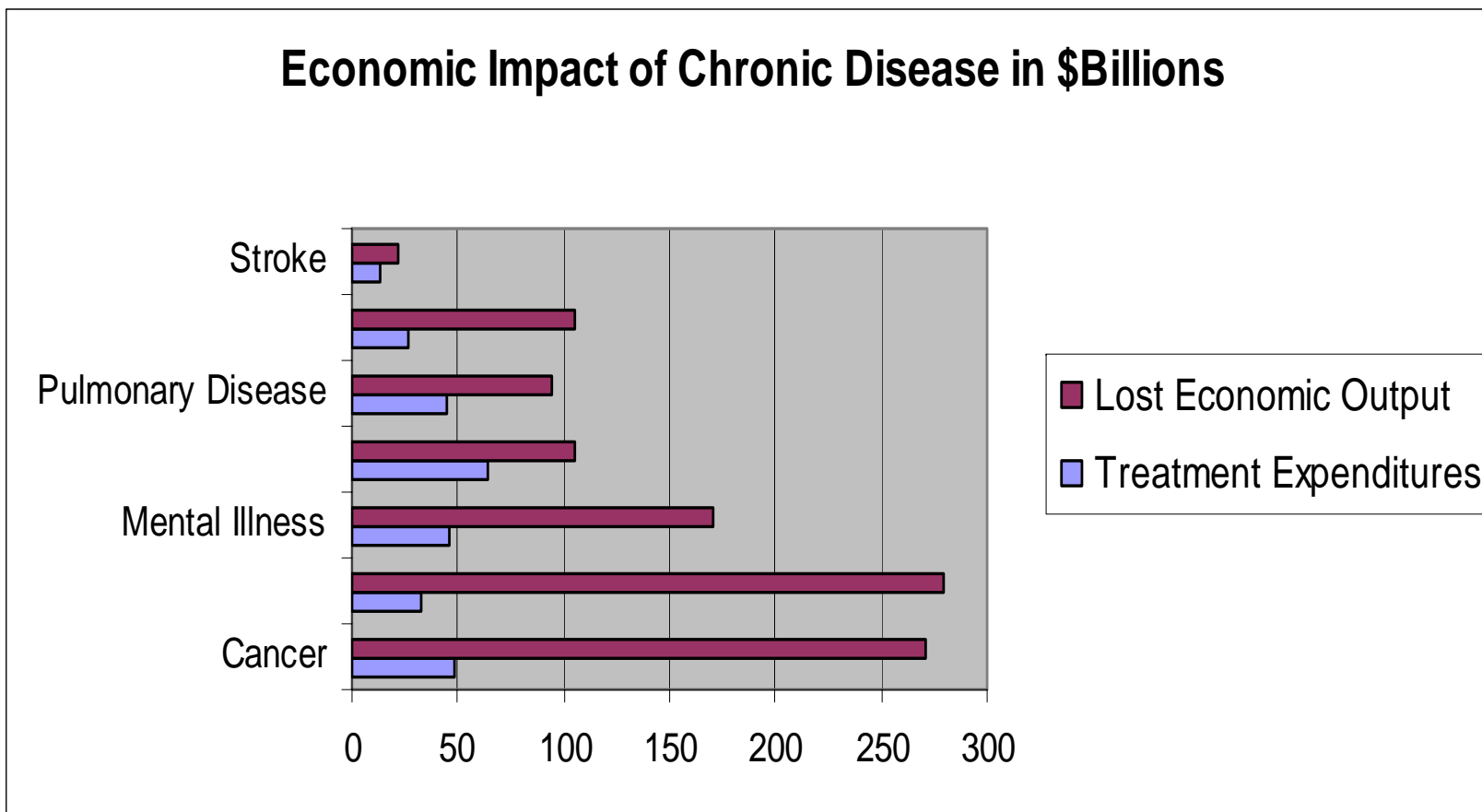
The Future or

Who put the bumps on this path?

Source: Drug Benefit Trends, Dec 2007
Data: 2003 Milken Institute



Source: Drug Benefit Trends, Dec 2007
Data: 2003 Milken Institute





What is the “Current Path?”

- Separation of mind and body in policy
- Lack of parity in process and product
- Focus on pathology and disease
- Seeking “the thing” that works for everyone all the time



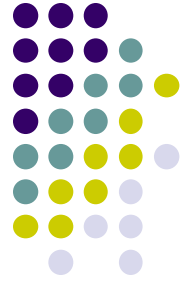
- Support process outcome measures in lieu of product outcomes
- Maintain/increase access barriers
- Maintain/increase system created stigma
- Maintain enrollment in the pill generation

What is the “Alternative Path?”

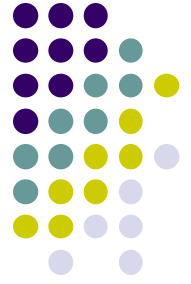


- Decrease incidents of obesity
- Increase physical activity
- Improve air quality, smoking reduction
- Improve knowledge and ability to make health-decisions
- Open access to HEALTH strategies

Socio-economic factors in the treatment/recovery process



- Literacy
- Math skills
- Poverty
- Accessibility
- Support systems
- Co-occurring disease complexity



“Medical needs of the mentally ill are least likely to fall through the cracks when psychiatrists and primary care doctors practice in the same facility, but integrated clinics are quite rare.”

Chris Koyanagi
Policy Director
Bazelon Center for Mental Health Law