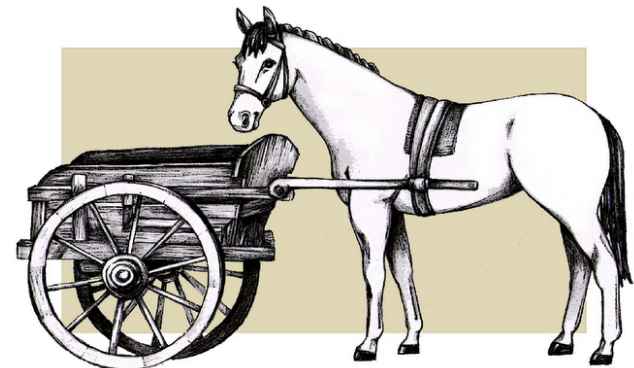


The Cart Before the Horse: Why a Disease Management Program is Incomplete Without Also Addressing Mental Health Issues

Andrew Bertagnolli, PhD
Senior Consultant Behavioral Medicine & Pain Management
Care Management Institute Kaiser Permanente
Oakland, CA

Steven Schwartz, PhD
Director of Research
HealthMedia, Inc
Ann Arbor, MI



What is Disease Management?

A system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant.

Components of Disease Management?

- Population identification processes;
- Evidence-based practice guidelines;
- Collaborative practice models;
- Patient self-management education;
- Process and outcomes measurement, evaluation, and management
- Routine reporting/feedback loop

Common Conditions Using Disease Management

- Cardiovascular Diseases
 - Diabetes
 - Coronary Heart Disease
 - Congestive Heart Failure
 - Hypertension
 - Dyslipidemia
- Pulmonary Diseases
 - Asthma
 - Chronic Obstructive Pulmonary Disease
- Pain Conditions
 - Chronic Low Back Pain
 - Headaches (Migraine, Tension)
 - Arthritis (Osteoarthritis, Rheumatoid)
 - Fibromyalgia

Tasks for Patients with Chronic Conditions

- Self-Managing the Illness
 - Taking medications
 - Monitoring the illness
- Carry on Normal Roles and Activities
- Manage the Emotional Impact of the Illness

Self-Management: What is it?

Self-management is defined as the tasks that individuals must undertake to live with one or more chronic conditions.

These tasks include having the *confidence* to deal with medical management, role management and emotional management of their conditions

Current State: Biomedical Model

Predominant Focus on Physical Processes:

- Pathology of the Illness
- Biochemistry of the Illness
- Physiology of the Illness

What's Wrong Here?

Disease Management Efforts

Mental Health Issues



Biopsychosocial Model

Predominant Focus on Complex Interaction Between:

- Biology (physiology, pathology, biochemistry)
- Psychology (thoughts, feelings, behaviors)
- Society (socioeconomics, culture, technology)

Deconstructing Psychosocial Issues


Psycho

- **Uncontrolled Psychiatric Conditions**
 - Bipolar Disorder
 - Psychotic Disorders
- **Psychological Distress**
 - Depression
 - Anxiety – chronic worry
- **Substance Use – Abuse**
 - Alcohol
 - Drugs
 - Prescription Medications

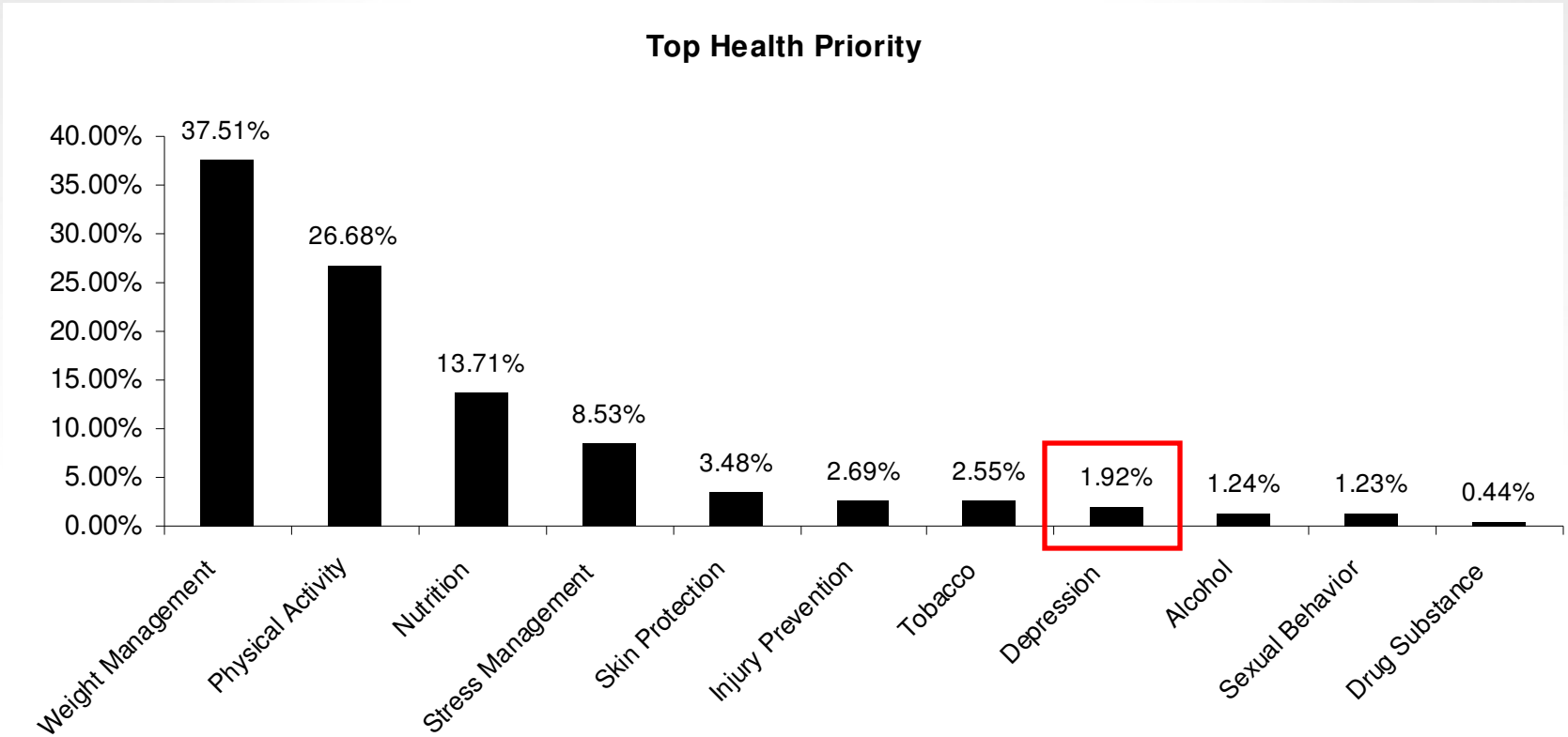
Social

- **Economic**
 - Paying for medications
 - Good food choices
- **Living Situation**
 - Homelessness
 - Dangerous neighborhoods
 - Hard to exercise
- **Lack of social support**
 - Help with ADLs
 - Emotional Support

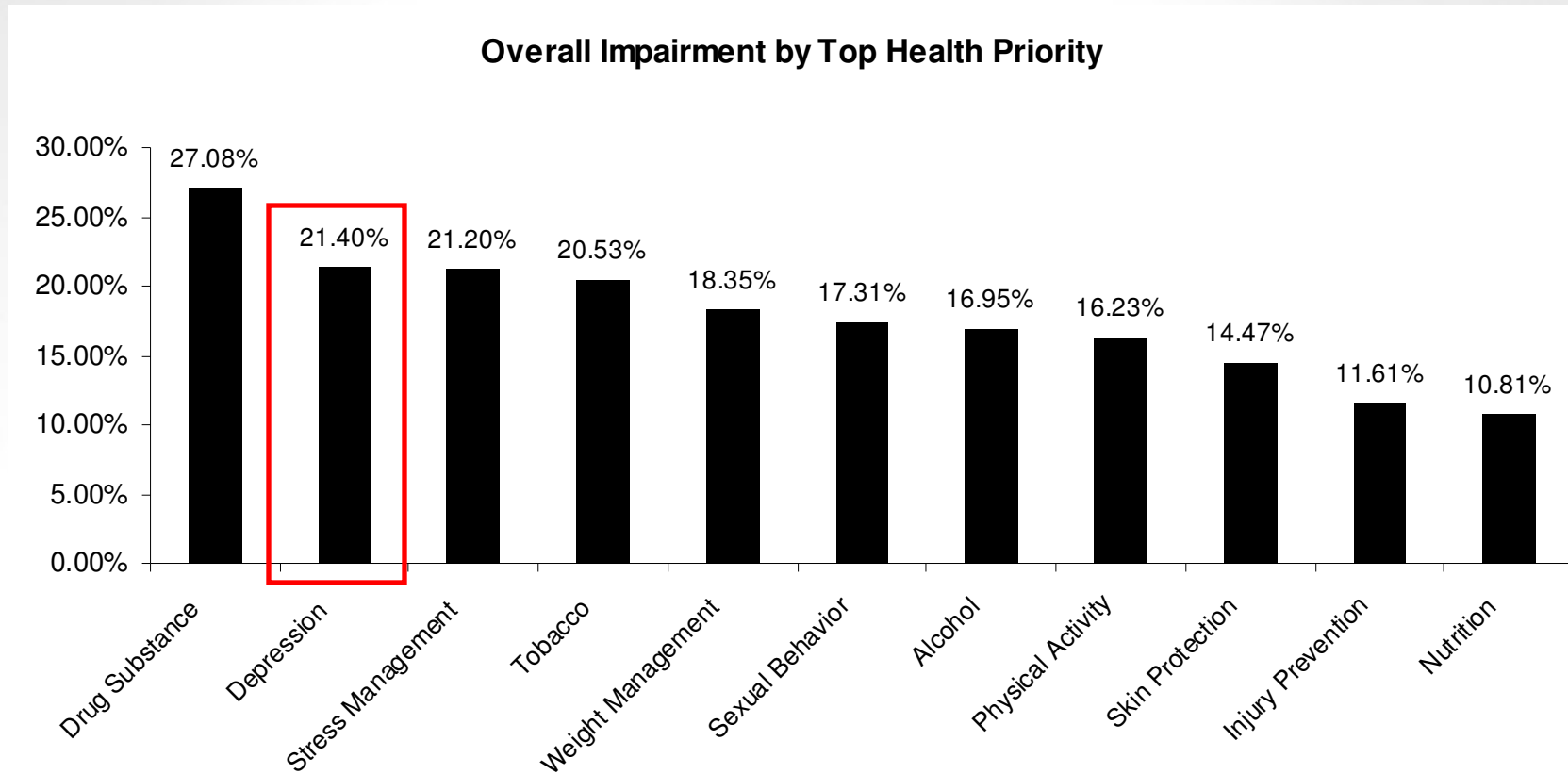
What the Evidence Tells Us

- Presenting complaints to primary care with no physical cause = 50%
- Mental health conditions 4th most expensive
 - Heart disease, cancer and trauma
- Chronic Illness + Mental Illness =  Costs
- Depressive disorders and chronic illness 20-50%
 - 50% of patients with mental illness receive care only from PCP
 - 50-60% of depression diagnoses missed in primary care

KP Succeed - Top Health Priority

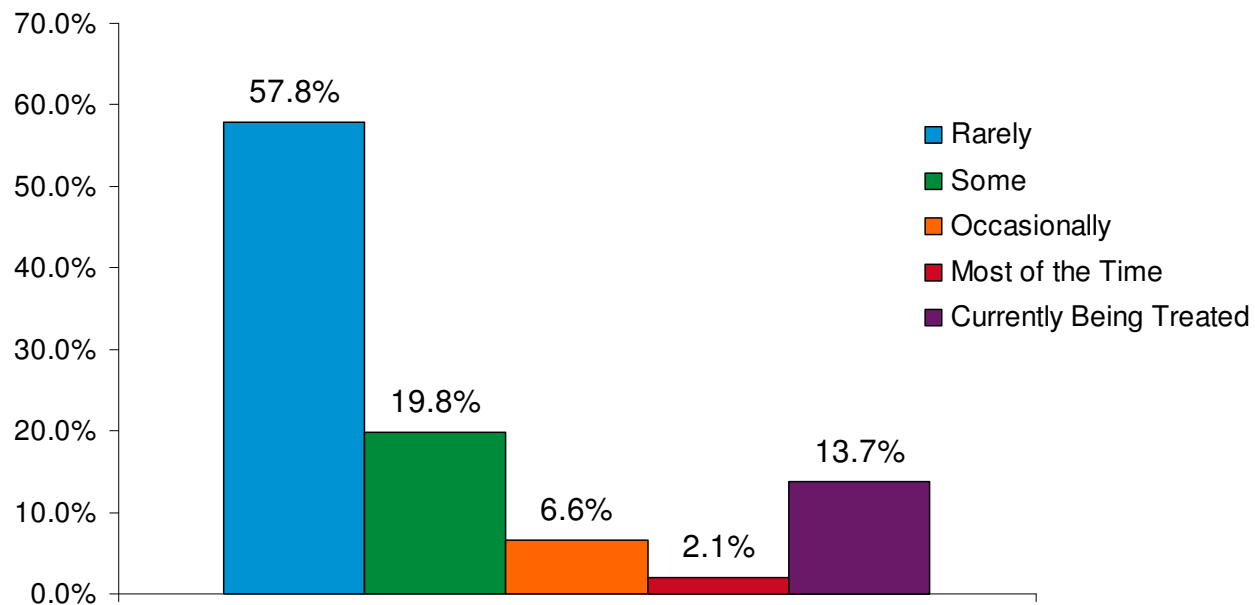
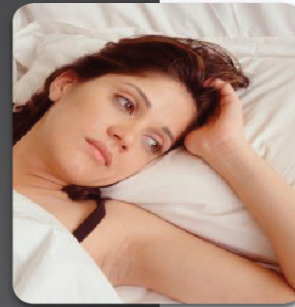


KP Succeed – Overall Impairment by Top Health Priority



Depression Prevalence

42.2% reported feeling depressed or are currently being treated for depression



KP Care for Your Health - Depression

- **29.0%** have been diagnosed with depression
- **8.7%** need the most help with depression
- **56.9%** felt depressed some - all of the time during the past week
- **19.3%** had a depression scale score of 6 or lower **IS2**
- **30.3%** were receiving treatment from a health care provider for depression
- **16.8%** were not confident that they would know where/how to get help if they were depressed
- **23.2%** were not confident that they could find a caring professional to talk with if they were depressed

Slide 15

IS2

depression scale score is calculated from 5 depression items (depressed, hopeful, crying, dislike, happy), 0-10 scale with higher score indicating healthy. I am not sure if it is compatible with CES-D score.

ISG Support, 5/6/2009

KP Care for Your Diabetes

- Participants N=5,013
- 2008 Apr – 2009 Jan

KP Care for Your Diabetes - Depression

➤ **21.6%**

➤ felt depressed about having diabetes

18.3%

Have been diagnosed with depression

How Mental Health Compromises Care

- Influence on Health Behaviors
- Decreased adherence to lifestyle and pharmacological recommendations
- Direct Physiological Reactions
 - When emotional distress is uncontrollable and not adaptively dealt with physiologic changes occur:
 - Respiratory
 - Cardiac
 - Endocrine
 - Gastro-intestinal
 - Immune
- Non-pharmacological interventions:
 - Traditional focus – diet & medication adherence
 - Limited focus on emotional issues

How Mental Health Compromises Care

Spotlight on Diabetes

- Impact on diabetes complications
 - Retinopathy, nephropathy, neuropathy, sexual dysfunction and macrovascular complications
- 3 times more likely to be non-adherent to treatment recommendations
 - Even sub-clinical levels of depression can contribute to non-adherence
- Demonstrated non-adherence to
 - hypoglycemic, antihypertensive, lipid-lowering medications
 - self-monitoring of blood glucose
 - dietary recommendations
 - higher BMI
 - increased tobacco use
 - Less strong relationship to foot care

How Mental Health Compromises Care

Spotlight on Diabetes

- More negative attitudes to insulin therapy
- Persistently higher HbA1c levels over time
- More likely to have missed medical appointments
- More likely to report dissatisfaction with their healthcare providers
- Increased mortality (36-38%) than in nondepressed diabetics in Medicare population

How Mental Health Compromises Care

Spotlight on Heart Failure

- 85% of HF patients have depressive symptoms
 - 17% Major Depressive Disorder
 - 21% Minor Depression
 - Decreased perception of health status
 - Decreased functional ability
- 49% of patients admitted for HF had an emotional event preceding event
- Depressed HF patients
 - Less likely to:
 - Receive coronary & cardiac interventions
 - Be referred to disease management programs
 - More likely to have:
 - Longer LOHS
 - Higher post-discharge mortality

How Mental Health Compromises Care

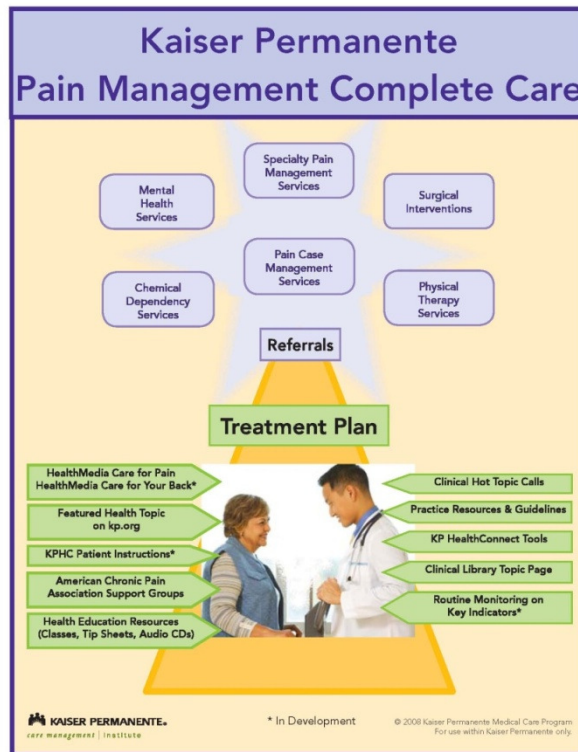
Spotlight on Heart Disease

- 23% of CAD patients have depressive symptoms
 - 13% Major Depressive Disorder
 - Higher among inpatients
 - Independent of age, severity of disease and gender
- Decreased Adherence to:
 - Medication regimens
 - Dietary recommendations
 - Exercise recommendations
 - Smoking cessation recommendations
- Proposed biologic mechanisms
 - Increasing platelet adhesiveness
- CAD + Depression = 2 fold greater risk of:
 - Cardiac death, myocardial infarction, cardiac arrest & nonelective revascularization

Example: Chronic Pain Management

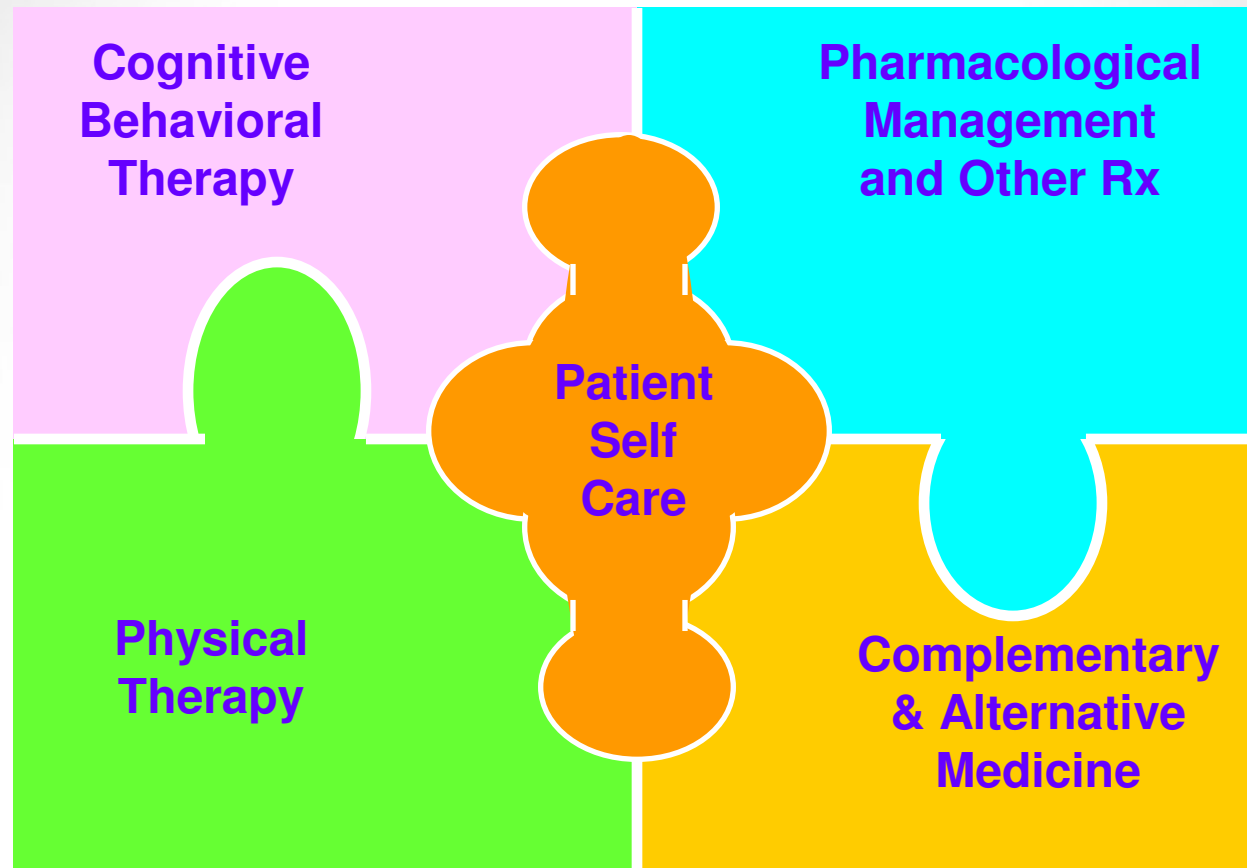
Complete Care

- Evidence-Based
- Patient-Centered
- Multi-Disciplinary
- Complete Continuum
- Emphasis on Self-Management

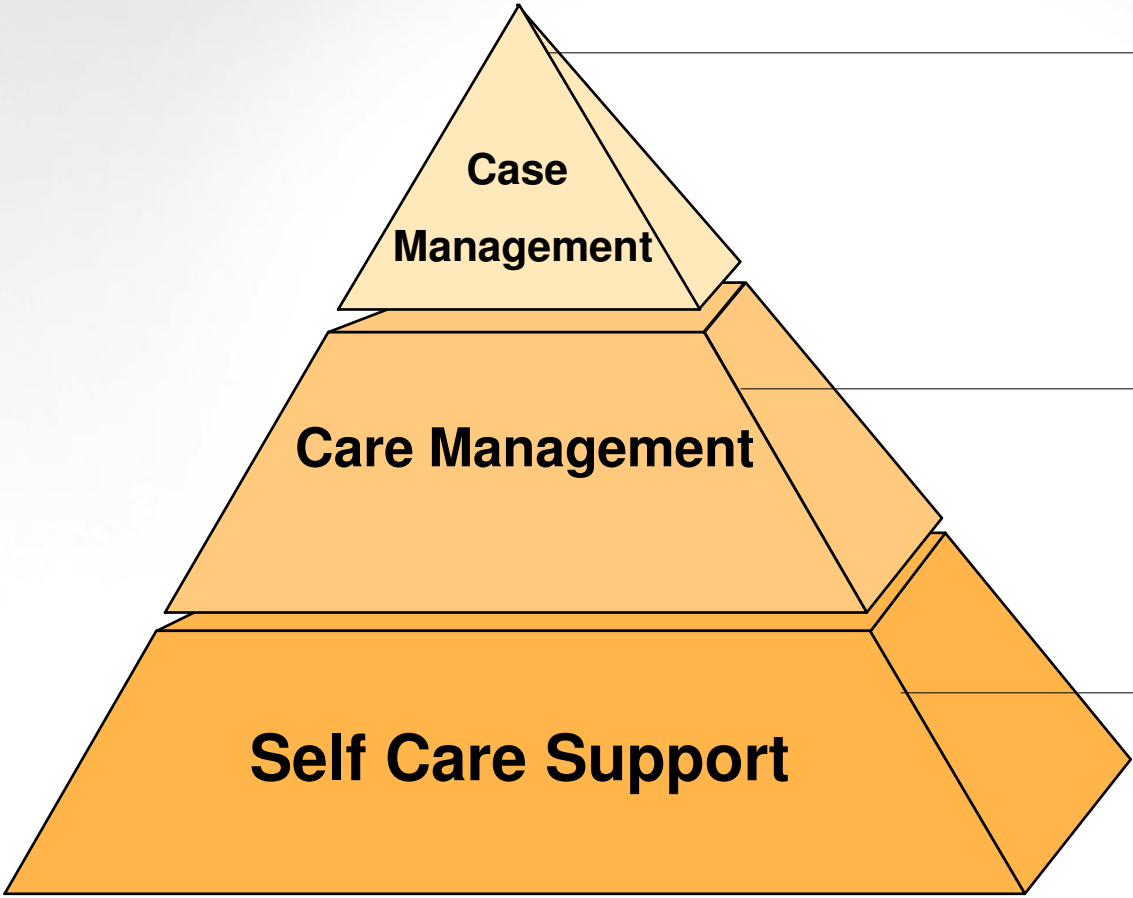


Model for Chronic Pain Management

CMI Clinical Practice Guidelines (2003)



Chronic Pain Population Management: Conceptual Design



LEVEL 3

Moderate to severe depression, anxiety symptoms, severe deterioration of functioning in most areas, severe physical impairment and deconditioning, overuse of pain and/or sedative hypnotic mediations with habituation.

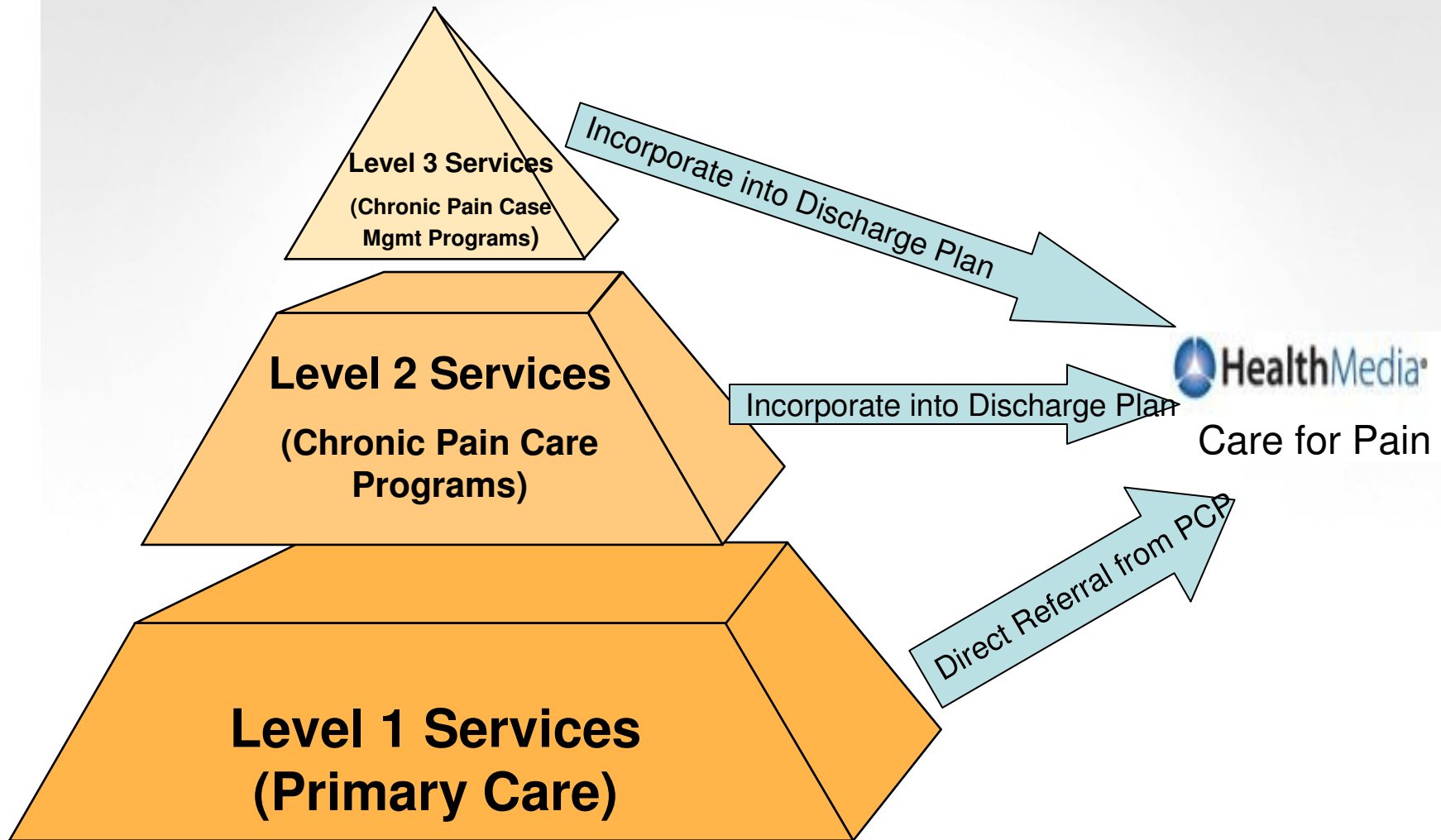
LEVEL 2

Mild to moderate depression, anxiety symptoms, deteriorating functioning in most areas, moderate physical impairment and deconditioning, increasing use of pain and/or sedative hypnotic mediations.

LEVEL 1

Absent to mild depression, anxiety symptoms, adequate functioning in most areas, absent or minimal physical impairment, minimal or no current use of pain and/or sedative hypnotic mediations.

Care Pathway Including CFP



KP Care for Your Health - Pain

- Participants N=6,822 (2006 Nov – 2009 May)

- **41.5%** have been diagnosed with at least one chronic pain condition
 - Back Pain 29.1%
 - Migraine 14.0%
 - Osteoarthritis 15.5%
 - Fibromyalgia 11.2%
 - Rheumatoid Arthritis 5.3%
 - Other chronic pain conditions 2.6%

- **26.6%** need the most help with their chronic pain condition
 - Back Pain 8.6%
 - Migraine 2.8%
 - Osteoarthritis 5.6%
 - Fibromyalgia 5.8%
 - Rheumatoid Arthritis 2.9%
 - Other chronic pain conditions 0.9%

- Average pain rating in the past 2 weeks = **4.5** / 10
 - Rating 6 or above **43.7%**
 - Rating 8 or above **20.0%**

The Population

Demographics

- 75% Female
- 51 years of age (13.5)
- 72% Caucasian, 9% African American, 9% Hispanic
- 46% Married, 23.5% Single
- 21% Professionals, 18% Clerical, 32% Not Working

Pain & Mood

Mood Screening

- 54% felt Depressed in the Last Week
- Lower Self Reported Quality of Life ($p < .0001$)
- Lower Self Reported Quality of Health ($p < .0001$)

The Impact of Mood on the Pain Experience

- Trend Toward Greater Productivity Impairment ($p=.1$)
- No Difference in Pain Intensity
- Trend Toward Greater Pain Unpleasantness ($p=.09$)
- Intensity/Unpleasantness Correlate with Productivity Impairment ($p<.0001$)
- No Differences in Self Reported Utilization

KP Care for Your Back

- Participants N=3,796
- 2008 Dec – 2009 Jan

KP Care for Your Back - Depression

19.4%

Have been diagnosed with depression

- **41.5%**
- Felt anxious, irritable, or depressed caused by back pain

KP Care for Your Back - Insomnia

- **33.4%**
- Lost sleep due to back pain

KP Care for Your Back - Other Pain Conditions

- **18.3%** have been diagnosed with Joint Pain
- **16.4%** have been diagnosed with Osteoarthritis
- **4.4%** have been diagnosed with Rheumatoid arthritis
- **3.1%** have been diagnosed with Fibromyalgia

Questions & Comments?



Andrew Bertagnolli, PhD
Senior Consultant – Behavioral Medicine & Pain Management
Kaiser Permanente - Care Management Institute
1 Kaiser Plaza, 16th Floor
Oakland, CA 94612
(510) 271-5771
andrew.bertagnolli@kp.org