

THE ROAD TO RECOVERY: A CHRONIC DISEASE MANAGEMENT PROGRAM
PROPOSAL WITH APPLICATIONS FOR ALCOHOL USE DISORDERS

By

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A Program Proposal Submitted to the Department of Public Policy and Administration

California State University Bakersfield

In Partial Fulfillment for the Degree of

Masters of Science in Administration – Health Care Management

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By
Tamara A. Tilley
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**This thesis or project has been accepted on behalf of the Department of Public
Policy and Administration by their supervisory committee:**



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Dr. BJ Moore 6/1/11

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EXECUTIVE SUMMARY

Recent legislative efforts, including the Accountable Care Act and the Mental Health Parity Act, represent attempts to improve and integrate care delivery systems in the United States. These efforts to reduce costs while improving the quality of, and access to, physical and psychiatric health care provide us with a renewed hope for the treatment of alcohol use disorders. The treatment of alcohol use disorders is one distinct area of unmet need that may benefit from an integrated model of treatment and care.

The Chronic Disease Management model is gaining in popularity and research efforts have established its effectiveness in the treatment of chronic diseases. Standardized measures are proving effective in screening for alcohol use disorders and thereby increasing our ability to identify these individuals. Alcohol use is a risk factor that, when controlled, can reduce the impact of chronic diseases. This combined with the identification of addiction as a chronic, relapsing, progressive disease suggest a strong case for the application of a chronic disease management model under the chronic disease management model.

This paper will endeavor to conceptualize a program proposal for the treatment of AUDs under a chronic disease management program.

Chapter One

INTRODUCTION

Research in the field of alcohol abuse and addiction dating back to the early 1930s reveals many assumptions and misconceptions about the self-control and moral principles of individuals coping with addiction. This thinking leads the public to believe that the addict can change if they really wanted to, based on self-discipline.

Alcoholics Anonymous and other twelve-step programs focus on recovery based on a spiritual experience. This is not to say that spirituality does not have its place in the battle against drug and alcohol addiction, because many addicts have come to sobriety through this path, but rather that scientific advances are changing what we know about the way that alcohol works in the brain.

Science has brought us an understanding of addiction as a chronic and relapsing, neurological brain disease that begins as a choice and leads to a life of slavery. The disease characteristics include cravings, which are frequently uncontrollable and result in compulsive behaviors with potentially devastating consequences. Addiction begins with consumption, but again, over time a person's ability for complete abstinence is compromised. Alcohol and drugs affect many brain circuits, including those that involve reward and motivation, learning and memory, and inhibitory control over behavior (National Institute on Drug Abuse, 2009)

This knowledge leads us to rethink our processes in terms of treating alcohol use disorders (AUDs). In contrast to the traditional method in which an alcohol dependent person comes to treatment after hitting an overwhelming "bottom", there is a growing body of evidence that support the benefits of prevention, intervention, and assistance are not limited to waiting for

that bottom. This paper will examine strategies for reducing the incidents of alcohol abuse disorders and the benefits of intervention alternatives.

STATEMENT OF THE PROBLEM

The Path to Addiction

Contrary to the Alcoholics Anonymous opinion that addiction is a disease only diagnosed by the individual addict, we now have evidence to support a medical diagnosis. The National Institute of Alcohol Abuse and Addiction, in connection with the National Institutes of Health (NIH) (2010) define “low-risk, at-risk and heavy drinking” as follows:

Table 1 NIH Low-Risk, At-risk and Heavy Drinking Limits

<i>Low-Risk Drinking Limits</i>	Men	Women
<i>On any single day</i>	No more than 4 drinks on any day	No more than 3 drinks on any day
<i>Per week</i>	No more than 14 drinks per week	No more than 7 drinks per week
<i>At-Risk/Heavy</i>		
<i>On any single day</i>	More than 4 drinks in a day	More than 3 drinks per day
<i>Per week</i>	More than 14 drinks per week	More than 7 drinks per week

*Drinking exceptions to the above include drinking too quickly, health problems, and persons older than 65 (National Institutes of Health: U.S. Department of Health and Human Services, 2010).

In addition to the definitions listed above, the NIH reports that three out of ten Americans fall under the category of at-risk or heavy drinkers (National Institutes of Health: U.S. Department of Health and Human Services, 2010). Alcohol consumption, in smaller amounts, is well known to have a stimulating effect in the brain’s pleasure center, resulting in the high that encourages users to drink more. More alcohol causes tranquilizing and toxic effects such as poor coordination, longer reaction times, and impaired nervous system and brain abilities

(neurocognitive) abilities such as judgment, attention, mood changes, and distorted perception. But, continued excessive alcohol consumption leads to dependence and dependence is an addiction.

A National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) determined in 2001-2002 that 17.6 million Americans met the criteria for classification as persons with an AUD, and that AUDs are deemed chronic, progressive disorders and acute, episodic disorders. The National Institute on Drug Abuse (2011) estimates the overall cost to the United States, including productivity and health- and crime-based costs, to exceed \$600 billion annually. This does not include the toll on personal relationships, the deterioration of families, failures in school, domestic violence, and child abuse.

PURPOSE OF THE STUDY

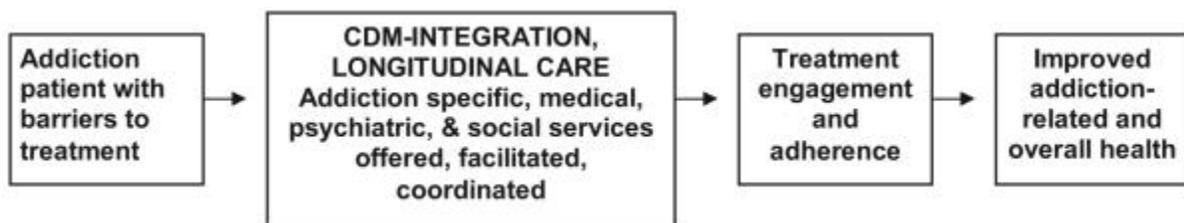
The purpose of this study is to investigate and develop a proposal for a whole body, community-based approach to reducing the frequency of abuse and addiction including “evidence-based” best practices of identification, prevention, referral, intervention and long-term recovery support system for AUDs. This evaluation will endeavor to determine the effectiveness of intervention methods including how a chronic disease management model may be applied to AUDs.

IMPORTANCE OF THE STUDY-APPLYING TRENDS IN HEALTHCARE TO AUDS

With the topics of healthcare and finances on the forefront of the minds of Americans, it seems reasonable to consider alcohol use disorders from the perspective of both healthcare and finances. The reaching effects on individuals, families, employers, churches, communities and the nation as a whole, combined with the associated costs and burden to the American healthcare delivery system, criminal justice systems, police and fire departments, social services and all

other support systems, make this study a subject of value to all stakeholders . There is a current push in healthcare to apply a chronic disease management (CDM) model to AUDs. This model includes a collaborative practice mode using a multidisciplinary team of providers. In contrast to the historical provision of care by mental health providers for behavioral problems and self-help programs such as Alcoholics Anonymous, physical health care providers focused on genetic problems, and the legal system overseeing criminal behavior, the CDM model of care may also involve physicians, nurses, pharmacists, dieticians, respiratory therapists, and psychologists, as well as direct patient education (University, 2004). In the field of healthcare, the Joint Commission, one of two entities with deemed status to accredit hospitals on behalf of the Centers for Medicare and Medicaid (CMS), recently defined a standardized screening method for AUDs. Healthcare in focuses on mechanisms to reduce the costs associated with providing care. These three principles provide an opportunity to progress the treatment of AUDs. This study will examine these processes with respect to AUDs. The following figure represents a visual application of the CDM model.

Figure 1 - How chronic disease management (CDM) can improve health for people with addiction.



(Saitz, Larson, LaBelle, Richardson, & Samet, 2008)

RESEARCH QUESTIONS

1. What methods of intervention are effective and what are the variables of such interventions?

-
2. How can a disease management program for AUDs improve health outcomes and reduce costs related to caring for individuals with AUDS.

Chapter Two

LITERATURE REVIEW

Alcohol use is easily linked to multiple health problems and increases the potential for violent and criminal behavior. There are multitudes of methods of intervention, and while they are not all effective all the time, there is evidence that supports their use. We are currently missing many intervention opportunities to reduce AUDs for reasons such as insufficient time in the busy doctor's office and a lack of extra training that could allow staff members to provide interventions. In addition, because the first step in an intervention begins with screening, it should be noted that while there are standard screening instruments in place, they are not regularly used. In terms of reducing the cost of care and improving health outcomes, the use of screening tools to identify individuals engaged in harmful or hazardous alcohol consumption, beginning at the primary care level are an important component of a comprehensive care model. The World Health Organization (1980, as cited in G. Chang, 2002) identified the need for effective screening methods for use before an individual experiences health and social problems, and also to promote the use of intervention in the early stages of alcohol abuse, thereby reducing the time and resources necessary for treatment. For the sake of the research, it must be understood that alcohol is a drug, and while treatments may vary depending on the drug, there remain common principles of drug addiction. All references to drug(s) within this paper include alcohol.

Interventions

Brief Interventions

Unlike alcoholism treatment and intervention, a brief intervention usually consists of a one-on-one, non-threatening conversation in which the goal is to reduce or change the drinking habits of an individual rather than complete abstinence, most frequently consisting of motivational interviewing. A brief intervention can be limited to minutes or involve up to four counseling sessions with a trained interventionist, for example, a physician, social worker, or a psychologist. The exact definition of a brief intervention is still the subject of debate; however, in meta-analysis conducted by Moyer and colleagues (2002) 34 different studies found that people with brief interventions, while treated for other conditions, showed greater reductions in alcohol use than groups who did not receive intervention (as cited in (National Institute on Alcohol Abuse and Alcoholism of the National Institute of Health, 2005). Interventionists work for a variety of individuals, including men and women, young and old; however, a brief intervention is not designed as a tool for combating alcoholism, but is well suited for people that drink in ways that are harmful.

The type of intervention depends on the patient and the severity of their problem and whether the patient has co-occurring medical or mental/psychiatric problems. Limitations of the brief intervention consist of the clinical setting, the clinician's skills, and time restraints.

A review of literature “substantiates the potential for reducing the national prevalence of substance abuse disorders (SAD) (including drugs and alcohol) through the widespread broadcasting of intervention methods (Copeland & Martin, 2004, p 111).” Methods included meta-analysis of databases, including Randomized Control Trials and adequate descriptions of sample characteristics, intervention content and data collection methods (Havard, Shakeshaft &

Sanson-Fisher, 2008). This review revealed the following themes: a) Barriers exist that limit the dissemination of intervention methods; b) While the intervention is by no means comprehensive, it is a mechanism towards reducing consumption, promoting sobriety and an adjunct to long-term recovery. It is also noted that most of the literature included a statement warranting further clinical outcome research; outcome measurements are for the most part hindered by a lack of standardization, and there are gaps in outcome measurements.

Interventions in Primary Care

At the primary care level, brief intervention is reported to have efficacy in reducing consumption; however, the research revealed under-utilization in primary care due to a lack of time, interest, financial resources, and practitioner training (Copeland & Martin, 2009). Brief intervention in the emergency department is limited and revealed inconsistent outcome measures; however, the evidence supports a claim that brief intervention in the ED is effective in reducing subsequent alcohol-related injuries (Harvard, Shakeshaft, & Sanson-Fisher, 2007). Legal barriers, such as the Uniform Accident and Sickness Policy Provision Law that allows insurance carriers to deny benefits to an intoxicated patient, prevent physicians from routine screening and intervention in the ED (Harvard, et al, 2007, p 368).

Web-based Interventions

Whitten (2009) offers further support that computer-based interventions promote abstinence as she summarizes the research funded by National Institute on Drug Abuse. The development and successful testing of three evidence-based computer therapies demonstrated improved outcomes and reduced time with a counselor (Whitten, 2009). Through the use of computer software, the participant receives cognitive-behavioral therapy reinforcing abstinence and the development of refusal skills through role-playing. The software not only improved

abstinence rates and teach life skills, but also allows the clinician to customize treatment based on feedback from the program as well as increasing patient access to treatment. Another limitation to intervention is found, or not found, in web-based informational sites. While these sites are abundant, “few interventions sites for substance related problems currently exist” (Copeland & Martin, 2004, p 111). One of the challenges of brief interventions is the varying characteristics of the individual and a reluctance to disclose information. Copeland and Martin (2004) suggest that internet based interventions not only have the ability to address these differences, but offer “24 hour access, a high level of confidentiality and flexibility of use” (p. 109). Copeland and Martin discussed the results of studies confirming that computer-based and web-based software offer a heightened level of disclosure of personal information which assists in the assessment process (as cited in Gerbert et al., 199; Turner et al., 1998). In addition, they report the use of computer-based and web-based methods prevent issues of clinician fatigue or forgetfulness, and are less costly when spread over time.

Interventions in the Criminal Justice System

In the Criminal Justice System, Lampham (2004/2005) also cites the following multiple barriers to intervention:

- No nationwide standards for the screening of offenders not incarcerated for driving while intoxicated
- Current screening instruments rely almost exclusively on self report
- There is a coercive nature to court ordered screening

The current court system continues to set the punitive measures ahead of intervention, mandating that the individual complete jail time prior to entering treatment. Due to crowding in the jails, inmates are often released early and never follow-up with treatment.

An additional barrier to intervention relates to historical opinions. It is common knowledge that AUD individuals are prone to “denial”. In many instances, this denial is a

reflection of society's stigmatism towards AUDs. A historical review of public opinion by White (2008) reveals a societal influence of harm rather than healing. White describes how the political environment of America moved the treatment of alcoholics from homes, asylums and institutes and subjected them mandatory sterilization laws, penal colonies, and the back wards of psychiatric asylums. Companies that once offered Employee Assistance Programs (EAP) involving the assistance of sober employees shifted to EAP programs administered by telephone and conducted by individuals with no background of personal recovery or work in the industry (White, 2009). White further exposes our current societal negativism in which an acute care model of intervention is followed by release into a community culture of "harm rather than healing" with little or no tools for sustained abstinence in an environment outside the walls of the treatment facility.

There remains a societal opinion that associates shame, dishonor, and disgrace with individuals with AUDs. This contributes to denial. Even individuals living in sobriety are hesitant to publically acknowledge their past for fear of negative judgment; thereby, precluding them from fully engaging in peer advocacy. This profound stigmatization frequently prevents persons with AUDs from full disclosure of their condition and from seeking treatment, and leaves them fearful of punitive consequences should they acknowledge their disease. As we improve widespread discussion and public exposure to intervention methods, we increase community resources and contribute to the battle against AUDs.

Variables

Women

Although research shows that AUDs are about twice as common in men than women, women tend to be more vulnerable to the negative health effects of alcohol. Chang (2002) cites

several studies (Frezza et al., 1990; Urbano-Marquez et al., 1995; Hanna, Dufour, Elliott, Stinson & Hartford, 1992; National Institute of Alcohol abuse and Alcoholism, 1999) that indicate women absorb and metabolize alcohol differently than men, making women with AUDs at higher risk for liver disease, brain damage, heart disease, violent victimization and traffic fatalities, and breast cancer.

Adolescents

According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), (2006) teen-age alcohol users represent an unmet need in the treatment of AUDs. The NIAAA reports, in 2002, 1.4 million youth met criteria for alcohol use or dependence, but only 227 actually received treatment. Moreover, the NIAAA asserts, the available treatment is not geared to meet the needs of adolescents. They cite the following reasons:

1. Access to treatment is not easy and is not tailored to the age group.
2. Treatments are not available that do not remove them from their home and academic settings.
3. Traditional services, such as 12-step programs, are less helpful than brief interventions designed specifically for adolescents.

The NIAAA, however, does report that, while this population is often likely to have a substance disorder or psychiatric disorder (such as depression, anxiety, or conduct disorders) in addition to alcohol, this is a population of individuals that typically benefits from brief interventions in primary care, the emergency department, or school-based settings.

There are additional health risks for adolescents as well. Although their reasons for alcohol use may vary, once they start, they are at a higher risk of health problems. This age group's tendency to take risks is high and they are prone to binge drinking. Children of

alcoholics are between four and ten times more likely to become alcoholics than children with no family history of alcoholism (National Institute on Alcohol Abuse and Alcoholism, 2006). The NIAAA associates this to both genetics and brain chemistries in children of alcoholics. As Bandura's social learning theory suggests, people are very impressionable and learn from observation, often modeling their behavior after that of those they look up to and imitating their role models. This is very applicable to the vulnerable minds of adolescents.

Theory and Treatment Models

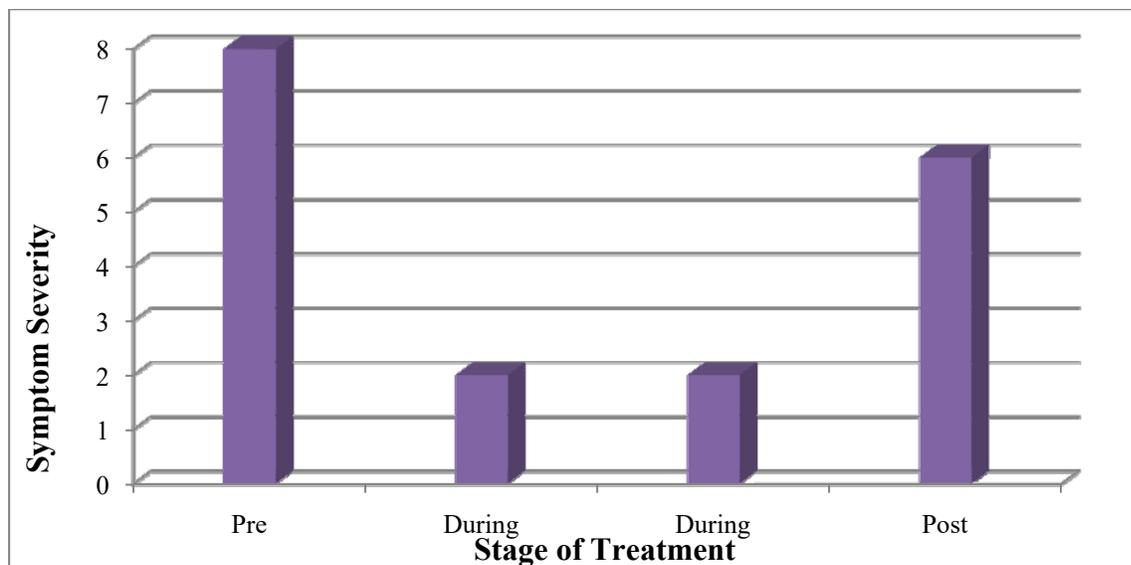
There are a variety of theories that have been and can be used in the treatment of AUDs. Most commonly applied are behavioral therapies. Cognitive-behavioral models, for instance, are based on the theory that learning processes can be developed to refocus maladaptive behavior. This method generally focuses on enhancing self-control and is usually helpful in preparing the individual to deal with potential problems and in developing coping strategies. It was previously thought that psychotherapy models of treatment were beneficial; however, this frequently resulted in the patient continuing to engage in alcohol use for years while engaged in psychotherapy.

Theory in the world of AUDs is easier described by therapy models. Some models offer intervention followed by incentives for successful abstinence, contingency management, medications, or a combination of treatment options. The 12-step model proposes acceptance of addiction as a chronic, progressive disease that the individual has no control over; that abstinence is the only alternative; surrender to a higher power; success is dependent upon the support structure of the program; and that recovery includes the participation in the 12-steps and meetings. One of the greatest shortfalls of the current system of mental health, health care, and addiction treatment is the fragmented delivery systems of the United States.

Based on scientific evidence, alcohol addiction is now considered a chronic disease process, and as such, another treatment model came into consideration. The acute care model, involving screening, brief intervention, admission, a single-point in time assessment, a short course of minimally individualized treatment and discharge followed by brief aftercare, and then termination of the relationship is now deemed to be inadequate for sustained recovery.

Addiction (as it relates to drugs in general) is considered to be a chronic disease, but more specifically it has a high relapse rate, about 60% within six months after and 45% at 12 months, even after residential treatment (National Institute on Drug Abuse, 1999). The trouble with this model is that it assumes a “cure” after treatment, which is not always the reality, and as such, many consider this a less than desirable model. Table 2 below demonstrates the typical addiction and other chronic disease outcomes after treatment under the acute care model.

Table 2 - Outcomes in the Acute Care Model



(McLellan, 2002)

Another theory that offers insight into alcohol-dependence, as documented by H. Becker, (2009), suggests, “A history of multiple detoxification/withdrawal experiences can result in

increased sensitivity to withdrawal symptoms that significantly contribute to a negative emotional state, which consequently renders dependent subjects more vulnerable to relapse.” This knowledge reinforces the need for post-detoxification treatment.

While the evidence supports the successful use of the previously mentioned treatment models, results of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), sponsored by the U.S. Department of Health and Human Services, National Institutes of Health, NIAA, as cited by Haskins (2008), reveals a 75% spontaneous improvement rate. The study (2001-2002 and 2004-2005), a representative sample of the U.S. non-institutionalized population 18 years of age and older, found 17.6 million Americans met AUD criteria; however, “only 25% of these people were still classified as dependent in the year before the NESARC interview (G. Haskins, 2008). What the study also found is agreement with other studies that AUDs are not only “acute, episodic disorders”, but also “chronic, progressive disorders”.

Filling in the Gap: A Whole Body Approach with a Multidisciplinary Team

In an environment of increasing costs for healthcare, chronic conditions are a focus of much attention. It is well known that people with chronic conditions generally use more health care services and frequency require hospitalization, a primary driver of health care expenditures. The current trend in health care is the use of a chronic disease management model. The model is based on the assumption that when patients receive adequate education and follow-up after discharge, their likelihood of a readmission is reduced. In a proactive manner, prior to hospitalization, the same techniques assist in preventing exacerbation of the condition. This model is adapted as a means to improve quality, and thereby, reduce unnecessary health care utilization and expenditure; furthermore, it is intended to improve the individual’s quality of life.

The Patient Protection and Affordable Care Act of 2010 (Affordable Care Act) now authorizes an annual wellness visit (for Medicare beneficiaries) and specifies that a health risk assessment be included as a part of that visit. Furthermore, it specifies a requirement to identify chronic disease for the purpose of developing prevention programs and to improve chronic disease management. And finally, the Mental Health Parity Legislation now requires health insurers to provide the same level of coverage for the treatment of mental illnesses as they do for physical illnesses.

It is now theoretical possible to apply a chronic disease management model for the screening, identifying, prevention, treatment, and long-term management of AUDs (Saitz, Larson, LaBelle, Richardson, & Samet, 2008). The following program proposal, based on the model, offers a multidisciplinary approach to closing the gap of missed opportunities in the reduction of AUDs and their co-morbidities (accompanying disease processes related to the AUD) while reducing the cost of care and improving outcomes. This model is specific to patients with a dependence on alcohol; however, with the adoption of this model and the integrated delivery approach, individuals at risk alcohol abuse may benefit from the program.

Evaluating Success

Dennis, et al. (2005), Dennis, Foss, Scott (2007), and McLellan (2000), offer guidelines for evaluating success in CDM, recommending that success should not be measured by abstinence alone, but should include improvements in family life, employment, and decreased involvement with law enforcement and the justice system. And, as recommended by Stanford (2008), evaluating success in addiction treatment should be “held to the same standards of treatment success for other chronic diseases, such as diabetes, hypertension, and asthma, where relapse and noncompliance with therapy and medication are common”.

SUMMARY

Screening for untreated alcohol problems followed by brief interventions is useful in a variety of settings. Brief interventions have potential as a cost-effective mechanism to reduce harmful consumption. So much so, that the Centers for Medicare and Medicaid approved a Healthcare Common Procedure Coding System (HCPCS) levels specifically for brief interventions in the emergency department setting, and the American Medical Association adopted Evaluation and Management (CPT E&M) billing codes for physicians with reimbursement values consistent with counseling procedures. The key benefit of screening and the brief intervention is their ability to identify untreated alcohol use disorders, refer the individual for further assistance and potentially initiate treatment. The research results strongly confirms the use of routine, periodic screening and brief intervention in emergency, inpatient, and ambulatory health care settings for all adults and adolescents receiving general medical care or services. Furthermore, screening and brief interventions become a stepping-stone to the doorway of treatment for alcohol addiction as a chronic disease.

Chapter Three

THE CARE MODEL

Chronic diseases, such as addiction, cause or contribute to other medical conditions or death. The result in health care costs taxes a system already on overload. The same holds true for the country's medical, mental and behavioral health care systems. Care for chronic conditions had traditionally been provided under an acute care model. Because chronic diseases such as alcohol addiction are also relapsing conditions, the CDM model is built on a rationale for extended case monitoring. Indeed, much of the research supports the use of a protocol using a low-intensity long-term, or "case monitoring" approach (Stout, Rubin, & Zwick, 1999). As we search for the balance between programs, alternatives, interventions, and the best use of scarce resources, quality health care with a social perspective, CDM attempts to address all of these concerns in the battle against AUDs.

A chronic disease, simply put, is a disease that lasts a long time, usually at least three months or, perhaps, years. Individuals with chronic diseases utilize more health care services, including primary care, emergency care, inpatient hospital visits, and prescription medications. This, combined with a global population that is living longer, increases the number of individuals with chronic diseases. The leading chronic diseases include arthritis, cardiovascular diseases (such as heart attacks and strokes), asthma, AIDS, heart disease, cancer, diabetes, epilepsy and seizures, Alzheimer's disease, kidney disease and obesity. Alcohol addiction is not only a chronic disease, but excessive alcohol consumption is one of the four health risk behaviors that contribute to chronic diseases, and one that may be changed or modified to improve chronic disease outcomes. In addition, medical and psychiatric co-morbidities are extremely common in individuals with AUDs. These factors all contribute to the cost of care. Common psychiatric

comorbidities include mood disorders, depression, panic and anxiety disorders, as well as schizophrenia. Medical comorbidities include, but are not limited to, hepatitis, cirrhosis, liver disease, heart muscle disease, dementia, eating disorders, and pancreatitis.

How Does This Relate to the Problem Definition?

Saitz, et al., (2008) support the conclusion of many that a CDM approach is needed because existing systems are fragmented, do not always use effective methods, and offer limited access to addiction treatment and primary medical care, including the fact that services are not always available when needed. CDM incorporates strong linkage between systems of care (for example, mental and medical health care, social services, legal, nutritional and family counseling), case management, and known effective treatment components.

PROGRAM PROPOSAL

This proposal will focus on a CDM program designed for implementation under the Accountable Care Organization organized by Ridgecrest Regional Hospital (RRH). More specifically, delivery of the program will fall under the RRH ACO and may incorporate the resources of RRH. Due to the limitations of program delivery in the rural area of Ridgecrest, such as a shortage of physicians, limited access to specialty providers, the distance between Ridgecrest and other accessible care providers, and the limited service area consisting of a population of approximately 35,000-40,000 people, this program will serve, not only as a model for AUDs, but as a foundation for a comprehensive chronic disease management program within the community, expanding where ever possible to the diseases prevalent in the community. However, for the purposes of this proposal, the program information will be limited to the treatment of AUDs and their associated co-morbidities.

Mission

The mission of this program is to engage the patient as an active member of their care team, working in partnership with their families, caregivers, health professionals, and community to improve their quality of life. Further, it is the mission of this program to improve the quality of care and of the individual's ability to self-manage their disease, while reducing costs within the health system of the RRH ACO.

Goals and Measurable Objectives for Each Goal

In addition to the following operational measures, all goals and objectives shall meet with the strategic goals and objectives of the RRH ACO.

Operational Measures

Griffith and White (2010) recommend the following performance measurement for community health activity, including chronic disease management programs. Program measures should include benchmarking, goal setting, and continuous improvement

1. ***Demand-Both need and demand should be measured.*** Need may be estimated by population subgroup so that unmet needs can be identified as Opportunities For Improvements (OFIs). Need is measure by the incidence or prevalence of the specific condition, such as hospital admissions, emergency room visits, as arrests for driving under influence, excessive alcohol use, and addiction. Statistics for these conditions may be drawn from national or regional surveys and databases and are used in the planning model to forecast local values and chronic diseases can be individually forecast. The need for these services may also be influenced by income, cultural attitudes, and family support.
2. ***Costs-Resource consumption-quantities and cost of resources used-is handled as for any other team.*** High demand for these services minimizes costs.
3. ***Human Resources-Human resources status is measured by surveys, turnover rates, absenteeism rates, vacancy rates, and safety, as with other healthcare teams.***
4. ***Output, productivity, and quality-Output is measured as usual, in numbers of clients served and counts of services delivered.*** The target population must be measured. Clients per 1,000 members of the target population are an important indicator of market penetration. For example, an AUD program would track the number of participating adults and adolescents as a fraction of the number in the community. Productivity may be measured as cost per service or cost case or patient. Cost per case is the product of cost per service times the number of services per client, with the number of services

identified as an element of effectiveness. Quality measurements should include outcomes measures and process measures linked by evidence to those outcomes.

5. **Patient Satisfaction**-*Customer satisfaction is usually obtained by survey, as it is in acute services.* In addition to the standardized satisfaction surveying used by the entity (Hospital Consumer Assessment of Healthcare Providers and Systems also known as HCAHPS), family satisfaction and referring physician satisfaction may also be appropriate.

Program Description

The disease management program must be based on evidence-based strategies, manage the population of the RRH ACO, anticipate and manage co-morbidities, help providers adhere to evidence-based strategies and engage patients in their own case management, and measure outcomes and focus on continuous quality improvement. With the patient's chronic disease as a priority, this program will focus on AUDs and their associated co-morbidities with explicit care plans.

Organization

The effort to improve care should be woven into the fabric of the program and aligned with a quality improvement system. The RRH ACO senior leadership must identify the effort to improve chronic and preventive care as important work, and translate that into clear goals reflected in the health center's policies, procedures, business plan, and financial planning. The entire organization must be engaged in the improvement effort. Senior leaders and clinician champions are visible and committed members of the team, and give personnel the resources and support they need to pursue it.

Medical Leadership

Medical Leadership should include representatives from primary care, specialist (relevant to the disease), and RRH Medical Staff leadership. Responsibilities of medical leadership will include:

- Identification and reviewing provider issues, concerns, recommendations, including clinical practice guidelines relevant to the disease management (DM) program
- Recommend, initiate, and assist in providing professional education to other team members
- Periodic review of DM program and outcomes
- Attend meetings of the leadership group
- Oversee of the quality improvement plan/process

A key component of the program is cooperation and communication between providers. Second, the consultation, referral and practice guidelines specific to the disease must be shared and standardized throughout the network.

Self-Management Support

Perhaps the most critical component of the CDM program is self-management support. Rather than being told what to do, efforts to educate the patient must be individualized, delivered in a culturally appropriate manner and motivational. Patients have a central role in determining their care, and need encouragement towards a sense of responsibility for their own health. Self-management support includes routine assessment and feedback; patient participation (collaborative care); behavior change; and psychosocial support.

Decision Support

Treatment decisions need to be based on explicit, proven guidelines supported by at least one defining study. The organization may creatively integrate explicit, proven guidelines into the day-to-day practice of the primary care providers in an accessible and easy-to-use manner. Providers and team members receive ongoing education, and primary care clinicians stay in the loop when a patient is referred to a specialist.

Clinical Information System

Electronic medical records, a patient registry, and monitoring of outcomes make a clinical information system a necessary component of this program. The registry is an information system that can track individual patients as well as populations of patients. The registry is the base for integration of the elements of the program and is used by the entire care team. (*Note: The Bureau of Primary Health Care is offering an electronic registry that health centers can use, if they so choose. The registry may be accessed on the Health Disparities Collaborative's website.*)

Community

Community resources such as social case management, legal, and financial assistance are needed to support or expand the ACO and program's care. As such, a comprehensive list of community resources must be available to the team.

Principles of Drug Addiction Treatment

The National Institute on Drug Abuse (NIDA), (2009) published the following research-based principles of effective treatment for drug addiction. These principles may be incorporated into the program model.

Figure 2 – Effective Treatment for Drug Addiction

1. Addiction is a complex but treatable disease that affects brain function and behavior.
2. No single treatment is appropriate for everyone.
3. Treatment needs to be readily available.
4. Effective treatment attends to multiple needs of the individual, not just his or her drug abuse.
5. Remaining in treatment for an adequate period of time is critical.
6. Counseling-individual and/or group-and other behavioral therapies are the most commonly used forms of drug abuse treatment
7. Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.
8. An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs.
9. Many drug-addicted individuals also have other mental disorders.
10. Medically assisted detoxification is only the first state of addiction treatment and by itself does little to change long-term drug abuse.
11. Treatment does not need to be voluntary to be effective.
12. Drug use during treatment must be monitored continuously, as lapses during treatment do occur.
13. Treatment programs should assess patients for the presence of HIV/AIDS, Hepatitis B and C, tuberculosis, and other infectious diseases as well as provide targeted risk-reduction counseling to help patients modify or change behaviors that place them at risk of contracting or spreading infectious diseases.

(National Institute on Drug Abuse, 2009)

Chapter Four

DELIVERY MODEL

An enactment of the delivery model begins with patient identification through screening, an initial intervention with a trained office nurse to assess screening results, education about treatment options, assessment of readiness or willingness to engage in treatment, and arrange follow-up (Saitz, Larson, LaBelle, Richardson, & Samet, 2008). On-site service delivery (integrated and coordinated care) is preferable, but may not be realistic in all instances, in which case, referral agreements, followed by planned visits, use of nonphysicians in multidisciplinary team, patient reminders, and a collaboration of addiction, medical and psychiatric physicians complete the picture.

The delivery of patient care requires not only determining what care is needed, but clarifying roles and tasks to ensure the patient gets the care; making sure that all the clinicians who take care of a patient have centralized, up-to-date information about the patient's status; and making follow-up a part of standard procedure. In a well-designed delivery system, clinicians plan visits well in advance, based on the patient's needs and self-management goals. During "group visits," patients see their clinician and meet with other patients with similar health problems. Nonphysician staff are cross-trained to provide care via standing orders (e.g., making referrals, ordering labs, doing foot exams, even changing insulin doses under protocol). Saitz, et al (2008) recommend the use of telephone calls for the purposes of assessment of systems, treatments, calls to patients who discontinue treatments, and appointment assistance, including primary care follow-up visits.

Program Theory

Treatment of AUDs under the CDM model begins with the disease theory that alcoholism is a life-long, chronic, progressive, and relapsing disease. The proposed program design involves principles of motivation and learning theories as a method of patient education delivery, an understanding of chronic diseases, prevention, screening, intervention, care and treatment, integration of delivery models, case management and follow-up. As previously touched-upon, the motivational and learning theories of self-management include self-efficacy, such as the basis of Bandura's Social Cognitive Theory. Under Bandura's theory, the patient is taught how to repeat successes, observe how others accomplish their successes, are persuaded by peers, identify their stress triggers and learn how to handle stress (mastery and vicarious experience, social persuasion, and physiological factors). The use of the Transtheoretical Model or the Stages of Change Model of behavior change may assist the care facilitator with training efforts and techniques.

The proposed Chronic Disease Management for Addiction focuses on an expanded model for the delivery of care, as described by Saitz, et al (2009), of "patient-centered care, integrated, and coordinated primary medical and specialty care; patient and clinician education; explicit evidence-based care plans; and expert care availability, incorporating mental health and specialty addiction care."

CDM programs were originally developed and implemented by health plans. Many states operate CDMS under their Medicaid programs. Many health plans contract with vendors, also known as disease management organizations (Center on an Aging Society: Georgetown University, 2004).

Credit is given to Dr. Edward Wagner, Director of the MacColl Institute for Healthcare Innovation for developing the Chronic Care Model in 1998 as a method towards improving care for chronic illnesses. Figure 2 demonstrates the doctor's model for chronic disease management.

As previously discussed, the acute care or tradition model of care involves a short course of minimally individualized treatment and discharge followed by brief aftercare, and then termination of the relationship. As seen below, the end result is typically a less than satisfactory long-term outcome and often results in a second round of treatment. It is commonly known in the treatment community for AUDs that the first attempt at sustained sobriety is usually unsuccessful.

Resources

Possible resources for the program may include social support, access to fitness programs, the internet, chronic disease management software, electronic health record, registry, patient education material, coaching training, clinical decision making software, and staffing.

Staffing

In conjunction with the multidisciplinary team, staffing should include a nurse clinical care manager with disease-specific skills to coordinate referrals, communicate with caregivers, and proactively follow patients, an educational nurse, and a social worker to assist with access community resources. It should be stressed that the inclusion of nurse practitioners or physician assistance in the primary care delivery model, wherever indicated, is a key component of cost reduction in this model.

Budget Narrative

Because this is an untested delivery model, it is difficult to determine costs related to the program. Under the umbrella of the RRH ACO, staffing for the program may be minimized by

economies of scale, but may see increases over time depending on the success of the program and the number of patient referrals. Particular cost concerns focus on training and software requirements. RRH is close to reaching “meaningful use” of its electronic health record (EHR), as per the federal definition of meaningful use, and integrates well with practitioners within the ACO. The ACO’s EHR platform is designed and supported by McKesson, a widely used and reputable company in the industry. Although an estimation of cost was requested, it is unavailable at this time. A discussion with the chief executive officer of RRH determined that the McKesson “CareEnhance” Clinical Management Software offered by McKesson is an integral component of the hospital’s ACO program.

Additional expenditures related to training and staff education related to the motivational and coaching methods affiliated with the model are not substantial; however, will be a necessity of the program.

Evaluation Plan

The Health Disparities Collaborative (2002) recommend the following model for accelerating improvement in the program:

While the Care Model describes what elements must be in place in a system of care for people with chronic illness...The Improvement Model defines how to test and implement changes in a fast and efficient way. The Improvement Model consists of three fundamental questions and a Plan-Do-Study-Act cycle to test and implement changes in real work settings.

Setting Goals

A goal is a written statement summarizing what your health center’s team hopes to achieve. It helps to focus on specific actions to implement the Care Model, to define which patients and providers will participate, and to include time-specific, measurable goals.

Defining Measures

Measures play an important role in your efforts to improve care: They tell you whether a change you make actually leads to improvement. Measurement should be designed to accelerate improvement, not slow it down. Be sure to integrate measurement into the daily routine. You want just enough measurement to answer the question, and no more.

Testing Changes

All improvement requires changes, but not all changes result in improvement. It is therefore important to identify promising changes.

Challenges to the Model

Patient participation and compliance present challenges in traditional care programs and these challenges remain under the CDM model (Center on an Aging Society: Georgetown University, 2004). The current CDM models mostly involve management by an entity outside of the patient's primary care structure. One of the challenges currently facing the promotion of this model is how to effectively involve the patient in primary care and the primary care physician in the role of managing chronic diseases. The reimbursement system for primary care must include incentives for the physician to engage in interactions with their patients that incorporate the components of CDM, and further physicians in primary care must be trained in the various evidence-based models of delivery relevant to each type of chronic disease, including addiction and in the context of this paper, AUDs. This is compounded by the nation-wide shortage of physicians and the attraction for many physicians to become specialized and the shortage of psychiatrists. Expanding the traditional role of the physician places an added burden on the already taxed provider, making disease management programs delivered by an outside entity more desirable.

Although the efforts of this research were unable to quantify the costs for development and implementation of CDM, most indications are that it requires significant resources (National Eye Institute: National Institute of Health, n.d.). Ultimately, the evidence for CDM in general projects reduced long-term costs of care as does the investment in treatment of AUDs.

Chapter 5

CONCLUSIONS

Although there is a lack of research to substantiate the benefits of this model as it relates to the treatment of AUDs, the evidence strongly favors integrating linkages between systems of care. This investigation located no existing delivery of this model; however, CDM has proven itself effective in the treatment of other chronic diseases. Research conducted by Bodenheimer, Wagner and Samet (2008) concludes:

“Substance dependence is associated with significant medical illness and cost consequences, the evidence regarding CDM for medical illnesses also is relevant. Chronic disease management for heart failure, diabetes, arthritis and asthma, in randomized, controlled studies and in systematic reviews of more than 100 trials leads to clinical and functional improvement, decreased hospitalizations, treatment adherence, and patient satisfaction. Health systems adopting these programs report improved outcomes.”

Saitz, et. al., (2008) explain that medical and psychiatric comorbidities are the rule rather than the exception in the treatment of AUDs. In addition, alcohol use is one of four controllable risk factors in the treatment of other chronic diseases can make a difference in outcomes.

Unfortunately, the integrated Chronic Disease Management model of care is still gaining momentum in the United States and several sources indicate that start-up costs can be expensive and this type of program is typically promoted by large entities such as the Kaiser group and other health insurance providers, including Medicaid in many states. More specifically, there a variety of combinations efforts to improve the care of individuals with chronic and complex conditions, including the Chronic Care Model, organized care management processes and

disease management programs (Luck, Parkerton, & Hagigi, 2007). In many cases, programs are still in pilot studies and organized with grant funds, program design tools for implementation are offered by Medicaid in many states and Medicare demonstrations. Plainly there is no consensus in the design, set-up, and application of CDM.

The arrival of Healthcare Reform, or the Reconciliation Act of 2010 and the Affordable Care Act, calls for many changes in the healthcare delivery systems. Beginning with the Medical Home, the concept promotes primary care in a “medical home” setting, serving as the foundation for the Accountable Care Organization (ACO). The ACO concept set for start-up in 2012 encourages providers to meet quality criteria and implement cost saving programs. In turn, Medicare and Medicaid will increase the reimbursement incentives to providers achieving certain defined criteria. The ACO is an organization led by a provider with members of the organization sharing decision-making and managing a full range of care. The organization is held accountable for costs and quality of care for their defined population. The ACO may consist of large integrated delivery systems, physician-hospital groups, multispecialty practice groups, group physician practices and health center networks.

These changes will hopefully create a closer integration within the delivery systems and particularly between physicians and other health care entities, such as hospitals and health centers. The prior model of health care delivery system often encouraged an “us and them mentality”. For example, in the hospital setting reimbursement restrictions encourage the entity to cautiously monitor the patient’s length of stay, testing and other factors tied to the cost of providing care. Medicare’s diagnosis related grouping payments provide the hospital with a set fee, while the physician still bills daily for their services. The two forms of reimbursement often

work counter-productively to each other. The ACO model promotes collaboration between community providers.

Given potential of CDM for reducing the cost of care, and the science supporting this model, it seems inevitable that this model will soon be widely accepted and that addiction treatment will easily fall into this model of care, beginning with the primary care physician as an integral part of the longitudinal delivery of care. The World Health Organization (WHO) recommends a delivery model focused around the patient, also commonly referred to patient-centered care, and the joining of communities to improve outcomes for patients with chronic conditions (World Health Organization, 2005). Research conducted by WHO also indicates that primary care physicians using change behavior strategies are effective in increasing the level of patient motivation in dealing with chronic conditions.

A better solution than developing a model specific for Alcohol Use Disorders or addiction is a beginning through the Accountable Care Organization in its drive for improved health, quality care, and reduced costs. The Accountable Care Organizations could begin with that top five percent of the population that spends about half of the total health care costs in the United States, according to the Agency for Healthcare Research and Quality (2006), focus on that group within the ACO's service area, include standardized screening for AUDs in the ACOs delivery model of care, consistently across all aspects of delivery (including primary care and hospitalizations, for example) and begin there with the CDM program focused on those patients. While this voluntary new plan does offer incentives, it is urban oriented and as such the potential benefits may not be realized in rural areas. An inexpensive, yet effective referral to Alcoholics Anonymous, included in the program of care individualized for the patient included with the other components of CDM. As a CDM program develops within the organization, it will be able

to become more specialized over time for each different type of chronic disease and ultimately will include AUDs.

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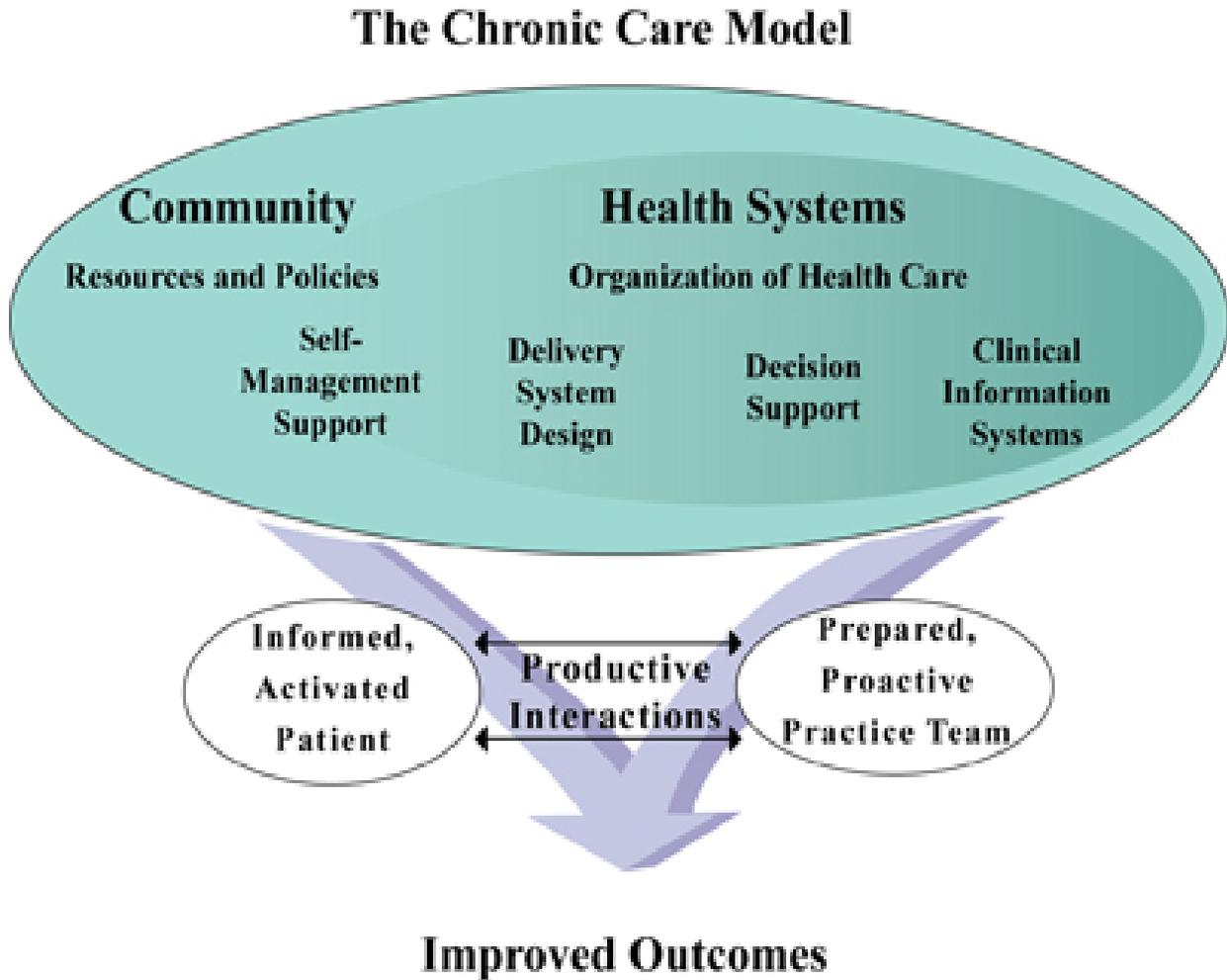
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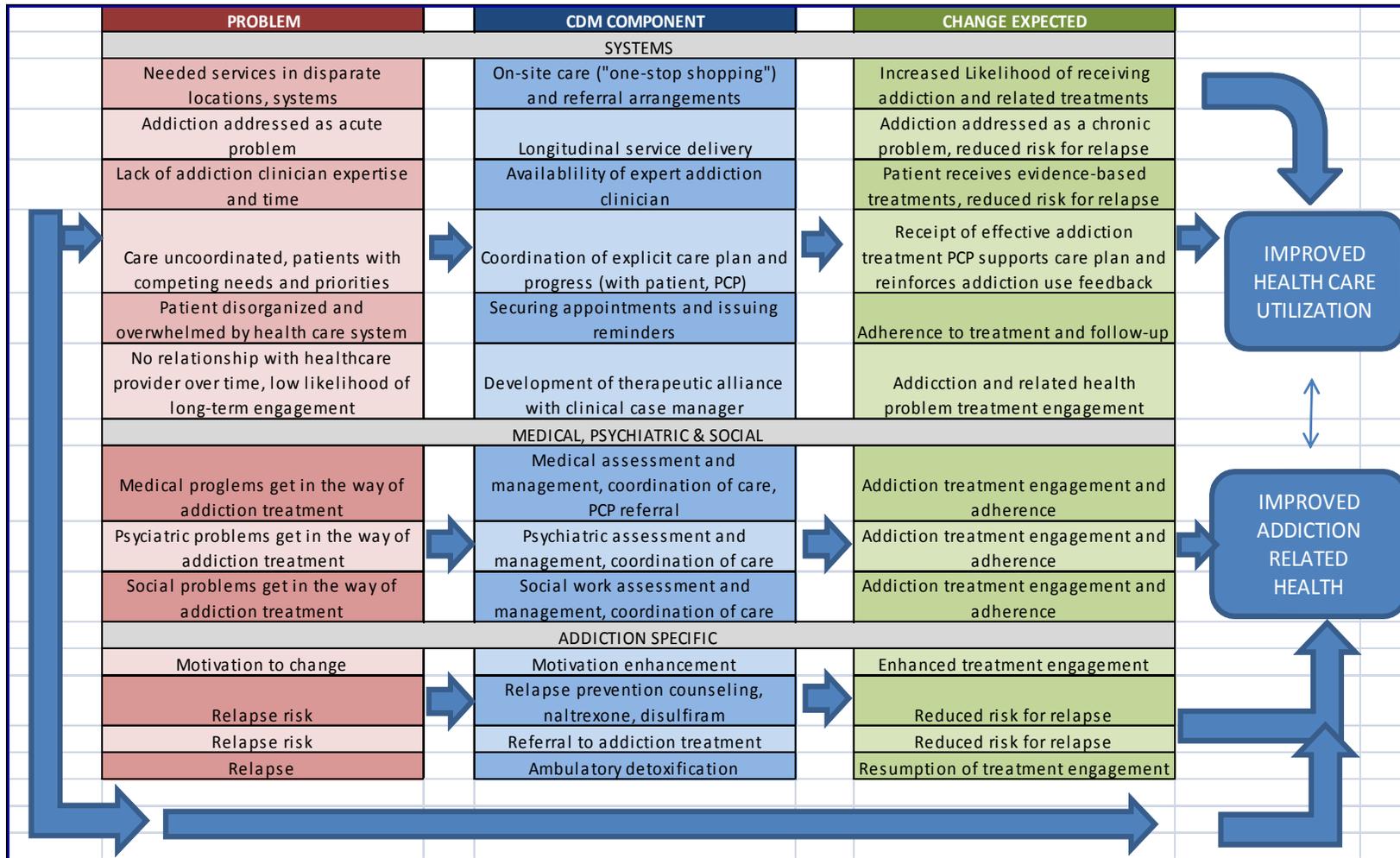
Figure 3 – The Chronic Care Model



Developed by The MacColl Institute
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(Institute for Healthcare Improvement, n.d.)

Figure 4 -How chronic disease management (CDM) components address specific problems to lead to improved health.



(Saitz, Larson, LaBelle, Richardson, & Samet, 2008)



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cc: Paul Newberry, IRB Chair
R. Steven Daniels, Public Policy & Administration Department

From: Steve Suter, Research Ethics Review Coordinator

Subject: Protocol 11-57: Not Human Subjects Research

Thank you for bringing your protocol, "The Road to Recovery" to the attention of the IRB/HSR. On the form "Is My Project Human Subjects Research?" you indicated the following:

I want to interview, survey, systematically observe, or collect other data from human subjects, for example, students in the educational setting. **NO**

I want to access data about specific persons that have already been collected by others [such as test scores or demographic information]. Those data can be linked to specific persons [regardless of whether I will link data and persons in my research or reveal anyone's identities]. **NO**

Given this, your proposed project will not constitute human subjects research. Therefore, it does not fall within the purview of the CSUB IRB/HSR. Good luck with your project.

If you have any questions, or there are any changes that might bring these activities within the purview of the IRB/HSR, please notify me immediately at 654-2373. Thank you.

Steve Suter

Steve Suter, University Research Ethics Review Coordinator