The Rationale for a New Clinical Prevention Approach to the Health Care Quality and Cost Problem

A Clinical Prevention Information Service White Paper
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Introduction
Clinical Prevention Information Services (CP), LLC, represents a public-private partnership between staff from the University of Wyoming (a public university) and Human Capital Management Services (a private health information services company). As such, CP is affiliated with both the University of Wyoming and HCMS, although a separate entity. The CP management team members have extensive experience and expertise in clinical prevention, health information systems and services, health professions education, and the management and evaluation of health care services delivery. Clinical Prevention services are provided using the “Health as Human Capital” approach that offers a market-based consumer-centric solution to the current health care quality and cost problem, including the current relative lack of effective prevention programs.

Background
Accelerating Costs
Companies have faced double digit increases in health care costs for the past several years (Pulley, 2006; Workforce Management, 2005). Health insurance premiums increased between 10.9% and 13.9% annually between 2000 and 2004 while inflation was 1.6% to 3.3% during that same time period. Employee wages only increased 2.2% to 4% annually during those years (Coulter, 2006). Increased health care spending by employers has contributed to the decrease in real wages as benefits have constituted a larger proportion of total compensation. The total benefits package as a percent of total compensation for US workers increased nearly three percent between 2002 and 2005 to more than 29% across all occupations. Employers are demanding services that address the growing cost and quality problems for those employees who over-utilize, as well as interventions to limit the growth of that population.

Over and Under Utilization
New technologies and medications are often cited for increased health care costs. While these do contribute to rising health care costs, the improperly aligned incentives offered by employers are also major drivers. On average, employees pay about 15% of their health insurance (Workforce Management, 2005). Given that employees are largely using monies from their employers when purchasing health care services, the incentive is to get more products and services (Freidman, 1990). Similarly, providers are not spending their patient’s money and have a financial incentive to provide more services if they are compensated under a fee for service contract. In addition, our current insurance system is biased toward reimbursement for technical services rather than cognitive and preventive services, leading to a proliferation of technical services.

These incentives often lead to a paradox of over and under utilization in employees with significant health conditions yet poor patient compliance with essential health treatments.
The overutilization occurs from the loss of consumption cost/benefit consumer control that mostly occurs when the stop-loss threshold has been reached, and leads to increased risk of adverse outcomes. The simultaneous underutilization of services refers to the underutilization of appropriate services due to the lack of risk/benefit decision support information.

In any given private or public insurance program, generally around 80% of the population accounts for about 20% of the health care costs while nearly 10% of the population are responsible for 40% of the costs, the so-called Pareto effect as shown in the above HCMS analytic figure. As expected, the high risk, high cost individuals have more office visits, diagnoses, prescriptions, and hospitalizations compared to the lower cost groups. The number of diagnoses is directly correlated to the number of unique providers seen. This high risk, high cost population is not consistent from year to year. People move into this group when a major event occurs then move out as the condition is controlled or resolved (Haltom, 2005). It is nearly impossible to predict who will move into the high risk, high cost group using insurance claims data alone.

**Solutions to Growing Health Care Costs**

Previous solutions have attempted to control growing health care cost from the supply side of the equation. These solutions included managed care, disease management, case management and utilization review.

The managed care movement has not been able to curb long-term rising health care costs. This is evident by the double digit increases in health insurance premiums companies have faced over the past five years (Coulter, 2006).
Disease management programs have not proven to be effective. The Congressional Budget Office conducted a systematic literature review and concluded that there is not enough evidence to conclude that disease management programs reduce health care costs (Congressional Budget Office, 2004). Large employers who offer multiple insurance plans have reported difficulty assessing disease management programs since the outcomes are not always well defined and employees switch plans and thus disease management programs (Haltom, 2005).

Case management and utilization review continue to add third party interventions between the provider of care and the purchaser of care, leading to increased inefficiencies and increased costs in health care delivery.

**Theoretical Framework**

*Biomedical Model vs. Health as Human Capital*

A passive participant model was developed to describe disability behavior, but it has applicability to general health care benefits. The model posits that people are objects and once their disability is objectively identified, they can go on disability until the problem is fixed then return to work. One of the inherent assumptions of the passive model is that patients and providers will not respond to incentives (Gardner, 1997).

Similarly, the traditional biomedical model often views patients as passive participants in their own health care. The health care providers are seen as the experts who objectively diagnose and prescribe treatments for diseases. This model is paternalistic, and disease focused in that the patient is treated one disease at a time often by multiple specialists who rarely view (or treat) the patient holistically.

The Health as Human Capital Model (Gardner, 1989) is based on the idea that every person has inherent skills and capabilities that they use to pursue goals, and objectives that meet their needs and contribute to their perceived happiness. People are able to enhance and refine these skills and capabilities to the extent that their health, education, opportunities, and personal goals allow. These skills and capabilities contribute to satisfying employment that provides financial resources to support their lifestyle and contribute to their perceived happiness.

Using the human capital approach, new strategies must be developed focusing on the demand side of the equation. Clinical Prevention Information Services, LLC (CP) was developed to address this need. CP believes that the solution to health care’s quality and cost problem lies in engaging consumers in their own health, including health care utilization decisions. Well informed and empowered consumers will demand quality and efficiency from the health care system as they have done in other markets. We believe better informed consumers can make better decisions about their health care utilization and their well being. However, this will not happen on a large scale unless consumers have access to unbiased information to assist with understanding their health and health care needs, leading them to informed decision making.
Clinical Prevention Information Services – What Is It?
Clinical Prevention Information Services (CP) provides personal, high level health professional consultation to individuals and families to facilitate them in taking ownership of their health and health care. Ownership means that decisions and actions regarding health and health care truly rest with the individual and family, whether it involves daily meal planning, adherence to medications, or decisions about a surgical intervention. The current health care system is so complex that it is easy to get lost in the maze of treatment options and care settings, leading to disjointed, often ineffective care of illnesses and an absence of an emphasis on health as experienced by the individual or family. For example, even consumers who are in the first and least expensive quintile for use of health care services average three diagnoses per person, more than two providers per person, more than three prescriptions per person and receive an average of more than four tests or procedures yearly (Gardner, 2006). This level of care is often both ineffective and disjointed (GAO), and costs the individual and family in terms of their own human capital and costs employers in terms of increasing health benefit costs and decreases in productivity. The Clinical Prevention Information Service addresses this concern by providing individuals and families with unbiased information about the health care system, health risks and clinical management of disease in order to support them in making fully informed decisions and actions in relation to their health and health care. Clinical Prevention Specialists with years of experience negotiating the health care system will work with individuals and their families to identify their personal health goals and possible needs. They assist individuals and families in taking control of their own health through decision making about aspects of their care such as use of preventive services, frequency and types of direct service care for chronic or acute conditions, and access and use of health promotion resources and activities.

As an example, one modality for promoting control over health care is the compiling of one’s own health record. Clinical Prevention Specialists may assist a family to identify the information they need and want, understand their rights to that information and support them in acquiring that information, and assist them to understand it. Once individuals and families begin to maintain their own health records, they are able to identify and manage fragmentation and lack of communication regarding their health care such as redundant lab tests or lack of follow-up on abnormal findings. In doing so, they gain ownership of their health and their use of health care services.

Clinical Prevention Information Services Best Practices
The differences between CP and other traditional services are many. These differences can be summarized by the four foundations of CP: 1) client driven and implemented; 2) personal service based on an established on-going relationship; 3) focus on high need individuals with health promotion and disease prevention information; and 4) use of highly qualified expert consultation.

1) Client Driven and Implemented. While many traditional services state that they are focused on the individual and family, instead they focus on managing the services given to that individual or family. Traditional services actually tell their clients when they should see a health care provider, take control of health care by acting as a gate-keeper, and mail out general ‘patient’ education materials directed at health habits identified by them as needing change. In contrast, CP will start with
individual and family concerns, needs or questions, providing meaningful useable information that the patient or family requests that can facilitate individuals and families in establishing personal goals for their own health and health care. These goals will reflect the individual or family’s life and community, rather than organizational goals of an outside source. CP will assist an individual and family, and will guide and provide skill building resources, but the actual health actions will come from the individual or family. The goal of CP is to ‘work with’ rather than to ‘do for’ those using the service.

2) Personal Service Based on an Established Relationship. In order to provide client driven and implemented services, CP will develop personal on-going professional relationships with individuals and families. Clinical Prevention Specialists are not looking for ‘labels’ such as Diabetic or Schizophrenic in order to understand health needs. Rather they seek to know the individual and family, their experiences, situations, knowledge and goals in order to directly assist them in maximizing health as defined by that individual or family. This type of service requires regular contact, rather than episodic or single episode contact related to urgent or acute needs. Therefore, the first objective of the Clinical Prevention Specialist will be establishing a relationship with the individual and family, which includes mutual understanding of skills and commitment on the specialist’s part and individual or family views, identified needs and concerns. History of specific diseases will become a focus only as it is recognized or identified by the individual or family as relevant to an overall understanding of their health.

3) Health Promotion and Disease Prevention Focused. CP views the “Health as Human Capital” that each person wants to maximize in order to have a successful, happy and productive life. Health then is personally defined and understood within one’s life and community and is not necessarily driven or reflected in the diagnosis of a particular disease. Clinical Prevention Specialists can and will provide useable information about specific diseases such as diabetes or arthritis, but the focus of the clinical service will be on promoting health and functionality and preventing disease, rather than on managing a specific condition. If an individual has a disease such as diabetes, the goal will be to understand how the individual experiences life with that disease, and what kind of knowledge or skills CP can provide to make that experience driven by decisions made by the individual. In all cases, the emphasis will be on encouraging, improving and maintaining the decision making capabilities experienced by the individual or family.

4) Highly Qualified Expert Clinicians. Clinical Prevention Specialists are graduate prepared clinical nurse leaders and expert clinical pharmacists. These providers not only have a basic knowledge about health and illness required in their profession, but have experience and expertise in the realities of the health care system, consumer choice as well as high levels of skills in communication and working in partnership with families. Leaders in clinical nursing bring a breadth of knowledge, a professional emphasis on health as something more than lack of illness, and a well established commitment to caring. In addition, they are knowledgeable about resources, family and community health and systems of care. Given the high level of pharmacologic intervention within the health care system, the services provided by
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CP also will include clinical pharmacists to assure usable information to support decision making by individuals and families. The individual and family will have an opportunity to work closely with these experienced clinical pharmacists whenever needed in order to maximize their health.

**Summary.** Clinical Prevention Information Services offers an entirely new set of services to promote the “Health as Human Capital” of participants. These services are controlled and driven by the consumers of the service, entail a personal and ongoing relationship between our providers and consumers, focus on health and disease prevention for a high quality of life rather than management of disease or illness, and use highly educated and experienced nurses and pharmacists. The service will lead to participants implementing continuous management and control of factors affecting their health including their use of health services; rather than an episodic crisis driven focus on illness management. The emphasis will be on providing decision support and education to provide knowledge and skills in order to empower participants to directly and effectively interact with providers and the health care system.

**What Evidence Is There To Support The CP Service?**

No one research study has combined all the components of CP; however, every aspect of the service is grounded in evidence-based clinical research. Use of expert clinical nurses to provide care has been supported in a number of studies. For example, a random clinical trial has shown that a nurse-directed multidisciplinary intervention with patients experiencing heart failure decreased readmissions and costs in this special population (Rich et al., 1995). A quasi-experimental study found that nurse-directed patient education improved quality of life and function of people with heart failure (Kutzle & Reiner, 2006). Similarly, pharmacist care that is ‘patient-focused’ has consistently been shown to improve clinical outcomes (Mehta, Rodis, Nahata & Bennett, 2005).

The participant centered and controlled approach to health promotion and health care epitomized in CP is based on results from many studies. As an example, a systematic review of nine random clinical trials indicated that failure to participate in exercise programs is reported to be related to practical problems in daily life, reflecting the failure of most systems to work within and consider the life of participants (Gidlow, 2005). Burke & Fair (2003) describe skills identified as essential for promoting behavior change in patients based upon recommendations from the Council on Cardiovascular Nursing Subcommittee which emphasize relationship building and consideration of attitudes and beliefs of patients. While these recommendations still reflect an expectation of ‘patient adherence’, they clearly identify that communication and relationships are an essential aspect of providing preventive care. Similarly, Dibben and Lean (2003) present evidence from empirical studies that trust relationships between providers, in this case physicians, and patients is essential for ‘compliance’ in patients with chronic diseases. A study of nurse care with clients with chronic mental illness also identified that building a trusting relationship was the essential component in effective care (Yamashita, Forchuk & Mound, 2005). Lastly, the importance of relevant useful information and support for decisions in order to promote effective self-management of health conditions has been empirically supported in a number of settings including a large clinical trial with parents and children seen in the emergency room for
asthma problems (Porter, Forbes, Feldman & Goldman, 2006). CP incorporates findings from these and many more studies into one clinical prevention service in order to facilitate effective ownership by individuals and families of their health and health care.

**What Should You Expect As A Return On The Investment Into CP Services?**

In the short term, services delivered through CP will lead to participant driven decision-making about health and health care. These decisions will include use of health care services in a manner congruent with individual and family identified quality of life and actual health and health care needs. For some this may lead initially to an increase in use of services if they have health goals and needs that require services within the health care system. For others it may lead to an initial decrease in use of services if they have been over using services because of failures in meeting their health goals and needs. Over time, the CP Services will lead to more effective and efficient use of health services and therefore to a long term decrease costs related to provision of those services. Equally important, as individuals and families increase their skills and control of their health and health care, their quality of life and productivity will increase. Thus the long term return on the investment into CP Services will yield a substantial increase in the human capital of the participants.

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