



(19) **United States**

(12) **Patent Application Publication**
Thesman

(10) **Pub. No.: US 2012/0191472 A1**

(43) **Pub. Date: Jul. 26, 2012**

(54) **SYSTEM AND METHOD OF PRIORITIZING AND ADMINISTERING HEALTHCARE TO PATIENTS HAVING MULTIPLE INTEGRAL DIAGNOSES**

Publication Classification

(51) **Int. Cl.** *G06Q 50/22* (2012.01)
(52) **U.S. Cl.** 705/2

(76) Inventor: **Debra Thesman**, Garden City, NY (US)

(57) **ABSTRACT**

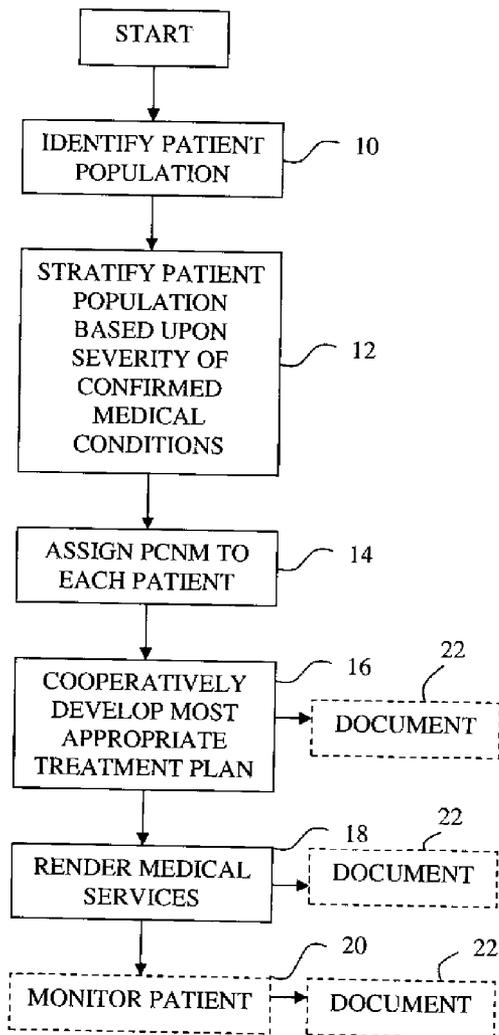
(21) Appl. No.: **13/439,565**

A method of administering healthcare to patients with multiple integral diagnoses such that the clinical outcomes and health-related quality of life of said patients are improved while medical costs are minimized. A patient population is first identified. The population is then stratified into specific levels of intervention. Each individual patient is then assigned a Priority Care Nurse Manager who serves to establish communication between the patient, the patient's Primary Care Physician, and any healthcare providers. The most appropriate treatment plan is cooperatively developed and the patient receives treatment according to the plan. The most appropriate treatment may include home care and palliative measures. The patient may appoint a Health Care Agent to make medical decisions for the patient should the patient be unable to make decisions.

(22) Filed: **Apr. 4, 2012**

Related U.S. Application Data

(63) Continuation of application No. 13/028,557, filed on Feb. 16, 2011, which is a continuation of application No. 12/618,582, filed on Nov. 13, 2009, now abandoned, which is a continuation of application No. 11/352,028, filed on Feb. 10, 2006, now abandoned.



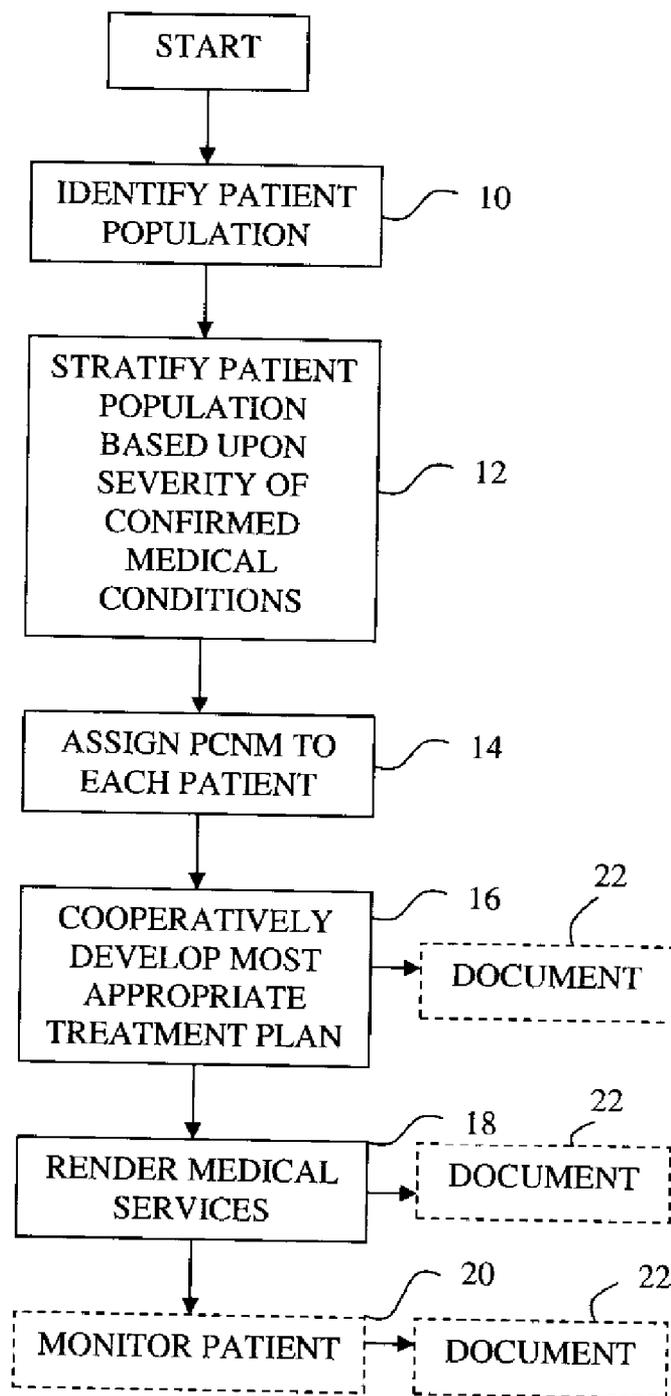


Fig. 1

SYSTEM AND METHOD OF PRIORITIZING AND ADMINISTERING HEALTHCARE TO PATIENTS HAVING MULTIPLE INTEGRAL DIAGNOSES

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application is a continuation of U.S. patent application Ser. No. 13/028,557, filed Feb. 16, 2011, entitled SYSTEM AND METHOD OF PRIORITIZING AND ADMINISTERING HEALTHCARE TO PATIENTS HAVING MULTIPLE INTEGRAL DIAGNOSES, which is a continuation of U.S. patent application Ser. No. 12/618,582, filed Nov. 13, 2009, entitled SYSTEM AND METHOD OF PRIORITIZING AND ADMINISTERING HEALTHCARE TO PATIENTS HAVING MULTIPLE INTEGRAL DIAGNOSES, which is a continuation of U.S. patent application Ser. No. 11/352,028, filed Feb. 10, 2006 entitled SYSTEM AND METHOD OF PRIORITIZING AND ADMINISTERING HEALTHCARE TO PATIENTS HAVING MULTIPLE INTEGRAL DIAGNOSES, all of the teachings of which are incorporated herein by reference.

STATEMENT RE: FEDERALLY SPONSORED RESEARCH/DEVELOPMENT

Not Applicable

BACKGROUND

[0002] The present invention is directed to systems and methods for administering healthcare resources amongst patients within a patient population. More particularly, the present invention comprises systems and methods for prioritizing treatment of patients having multiple integral diagnoses based on the severity of confirmed medical conditions.

[0003] The ability to render high quality healthcare in a cost effective manner is an elusive object that many healthcare plans and providers have attempted but few have actually attained. Despite substantial efforts made by healthcare plans, health maintenance organizations (HMO), physician networks, government-sponsored health care plans and the like, there is lacking a system for facilitating healthcare treatment for patients with multiple integral diagnoses, wherein the patients' quality of life is improved while at the same time medical costs are minimized in order to be able to provide the best care to the most patients.

[0004] It is well known that patients with multiple integral diagnoses face poor clinical outcomes and a low quality of life that is further exacerbated by the patient not abiding by the prescribed treatment plan. Also, many patients with multiple integral diagnoses are not fully educated as to all of the options available to them within their medical plan coverage and accordingly do not avail themselves of all possibilities for treatment of their conditions. Furthermore, under traditional healthcare plans, different members of a patient's health care team are often unaware of each other's activities and of the patient's overall treatment plan. As such, oftentimes a patient with multiple integral diagnoses that if carefully managed would be able to vastly improve her clinical outcome and health-related quality of life suffers due to lack of maintaining a developed treatment plan, lack of education, and/or lack of healthcare team coordination. Additionally, medical costs are often wasted due to this lack of coordination and lack of

educating the patient to all possibilities for treatment causing an overall loss in funds available for treatment of the entire patient population.

[0005] For example, many patients with multiple integral diagnoses are unaware of the possibility of avoiding hospitalization and extreme life sustaining treatments. It has been assumed that the treatment of disease includes hospitalizing the patient and taking all measures necessary in order to prolong the life of the patient, irregardless of what that patient's quality of life will be. Traditional healthcare plans often do not focus on what may be the best option for the patient, or do not take the patient's desires into consideration when reaching a medical treatment plan.

[0006] As such, there is a substantial need in the art for a healthcare administration system and method that are operative to effectively and efficiently utilize healthcare resources to administer care to patients with multiple integral diagnoses. There is further a need in the art for such a system and method that serves to improve the patient's clinical outcome and quality of life while minimizing medical expenses.

BRIEF SUMMARY

[0007] The present method is directed to methods of administering healthcare to patients with multiple integral diagnoses such that the clinical outcomes and health-related quality of life of the patients are improved while medical costs are minimized. According to a preferred embodiment, a patient population is first identified which is entitled to receive such healthcare. The patient population is then stratified into specific levels of intervention. Each patient is then assigned a Priority Care Nurse Manager (PCNM). The PCNM then establishes communication between herself, the patient's Primary Care Physician (PCP), and the patient in order to cooperatively develop the most appropriate treatment plan available to the patient. Finally, the healthcare services determined by the treatment plan are rendered to the patient.

[0008] The identified patients may be actively enrolled in a Health Maintenance Organization (HMO), a governmental health program, or some similar health plan. Patients enrolled in an HMO may be commercial patients, Medicaid patients, or Medicare Advantage patients. Governmental health programs may include Medicaid and Medicare. Further, the identified patients may have ongoing needs to maintain optimal health status. These ongoing needs may include having a chronic medical condition, having a recurring medical condition, having multiple emergency room visits within the previous year, having functional or emotional impairments, having a mental or physical handicap or a developmental disability, having a terminal illness, being an organ transplant recipient, being a pain management recipient, being dependent on medical, technological support, or having multiple surgeries or hospitalization within the previous year. Alternatively, the identified patients may have a specific condition requiring continuing treatment and monitoring. These specific conditions may include HIV/AIDS, cardiovascular conditions, multiple traumas or neurological conditions, sick neonates, obstetric conditions, or malignant cancerous conditions.

[0009] The stratification into specific levels of intervention may be based upon the severity of the patients' confirmed medical conditions. The patient population may then be divided into three specific groups based upon the confirmed severity.

[0010] The PCNM may further communicate with a specialist physician, a provider of healthcare service, a patient's family member, and/or a person designated by the patient. After receiving the patient's consent, it may be determined that the most appropriate treatment plan includes not hospitalizing the patient. The treatment plan may further include maintaining the patient at her home, an assisted living facility, or a hospice facility, forgoing aggressive life-continuing treatment, and providing palliative care.

[0011] The method may further include the PCNM periodically contacting the patient. This contact may be used to determine the patient's overall status, compliance with the established treatment plan, and to identify any needed changes in the treatment plan.

[0012] The method may include documentation of all communications. All healthcare services rendered may also be documented. Finally, the results of all periodic contact with the patient may be documented.

[0013] The method may also include the patient completing a Health Care Proxy (HCP) form. The HCP form may be used to appoint a Health Care Agent (HCA) who may make medical decisions for the patient in situations where the patient is unable to make medical decisions for herself.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] These and other features and advantages of the various embodiments disclosed herein will be better understood with respect to the following description and drawings, in which like numbers refer to like parts throughout, and in which:

[0015] FIG. 1 is a flowchart depicting the steps for practicing the present invention as it relates to administering healthcare to a population of patients afflicted with multiple integral diagnoses, including the development of the most appropriate treatment plan for each patient with the aid of a Priority Care Nurse Manager.

DETAILED DESCRIPTION

[0016] The present invention is directed to methods of effectively administering healthcare to patients with multiple integral diagnoses. To this end, such patients are enrolled in a Priority Care Management Program (PCMP). The goals of the PCMP are to improve the patients' clinical outcomes and health-related quality of life, while at the same time minimizing medical costs, by increasing patient adherence to the physician established treatment plan for the management of the patient's medical conditions. The result is decreased numbers of avoidable hospitalizations, decreased numbers of hospital readmissions, decreased numbers of Emergency Room visits, decreased patient mortality, and improved patient and physician satisfaction.

[0017] According to a preferred embodiment illustrated in FIG. 1, a patient population is first identified in step 10 which will receive this healthcare. The identification of such patient population in step 10 may be achieved by identifying patients with Multiple Integral Diagnoses (MID). Such patients are identified with chronic conditions that if carefully managed will result in improved clinical outcomes and medical cost savings. This may be achieved by analyzing claims and referral utilization data to identify patients that would qualify for the program. It is contemplated that members eligible for participation in the PCMP would be actively enrolled in a Health Maintenance Organization (HMO), a governmental

health program, or some similar medical plan. In one embodiment, the PCMP would be completely voluntary and provided to the patients at no additional charge above any premiums they already pay to their individual medical plan.

[0018] Once identified in step 10, the patient population is stratified into specific levels of member interventions in step 12. This stratification is achieved by the Primary Care Physician's (PCP) and/or specialty physician's evaluation of each patient in order to determine the severity of each patient's confirmed medical condition. In a preferred embodiment, the patient population is stratified into three specific levels of member interventions based upon identified need.

[0019] Patients in the first level of case management, Low Intensity Care Management, will receive an assessment of their utilization history; a follow-up assessment with patient/caregivers regarding access to services, adherence to plan of care, safety, knowledge deficits, and outcomes; patient education concerning a review of health plan benefits, self-management skills, and awareness of signs and symptoms of impending complications; a coordinated plan of care with servicing providers; and identification of community resources offered. Patients in the second level of case management, Complex Care Management, will receive all of the focused interventions of level one along with intermittent assessments and follow-ups with patient/caregivers, physicians, and/or ancillary providers regarding access to services, adherence to plan of care, safety, knowledge deficits, and outcomes, including identification of long-term and short-term goals; individualized and comprehensive assessment and evaluation; and facilitation and coordination of safe, appropriate, high quality, cost-effective care within the patient's health plan benefit structure. Patients in the third level of case management, High Intensity Care Management, will receive all of the focused interventions of Level 1 and 2 along with frequent assessments and follow-ups with patient/caregivers regarding access to services, adherence to plan of care, safety issues, knowledge deficits, and outcomes; and focused interventions utilizing innovative possibilities to facilitate coordination of specialized needs with an emphasis on achieving optimal outcome in the most efficient, cost-effective manner.

[0020] Each patient is then assigned a Priority Care Nurse Manager (PCNM) in step 14 who will oversee the patient's individual treatment plan. The PCNM will contact the patient and/or family members to introduce the program and will then establish contact with the healthcare team treating the patient in regards to the patient's medical status and treatment plan. The healthcare team may consist of the PCP, physician specialists, and/or providers of service. In step 16, the PCNM communicates and collaborates, as is necessary, with the patient, the patient's physicians, the patient's providers, the patient's family members, and/or anyone designated by the patient in order to develop the most appropriate treatment plan that is available to the patient. The PCNM will then proceed in step 18 to coordinate and facilitate implementation of all required services. In optional step 20, the PCNM may periodically monitor the patient's overall status, adherence to the established treatment plan and any needed changes in the treatment plan in order to ensure that the patient is taking full advantage of the healthcare benefits available under the patient's health plan. All interactions involving the PCNM, any requests for services, and all healthcare services actually rendered may be documented by the PCNM in optional step 22. Priority Care Nurse Management rounds may be con-

ducted weekly in which patient files will be reviewed by senior management with the PCNM in order to determine that the optimal level of care is being used.

[0021] Patients eligible for participation in the PCMP may have ongoing needs to maintain optimal health status, including but not limited to chronic conditions; recurring medical conditions; multiple emergency room visits, surgeries, or hospitalizations in the prior year; functional or emotional impairments; mental, physical, or developmental disabilities; terminal illness; an organ transplant recipient; a pain management patient; or being dependent on medical, technological support (such as ventilator dependency). Chronic conditions may include but are not limited to asthma, congestive heart failure, chronic obstructive pulmonary disease, diabetes, and end stage renal disease.

[0022] Alternatively or additionally, patients eligible for participation in the PCMP may have specific conditions or diagnoses, including but not limited to HIV/AIDS; cardiovascular conditions; multiple trauma or neurological conditions; sick babies or neonates; obstetric conditions; or malignant cancerous conditions. HIV/AIDS may include but is not limited to HIV/AIDS with *Pneumocystis carinii* pneumonia; HIV/AIDS with Kaposi's Sarcoma; or HIV/AIDS with pneumonia from an unspecified organism. Cardiovascular conditions may include but are not limited to aortic rupture, ruptured abdominal aneurysm, diseases of the aortic or mitral valve, arrhythmias, atrial fibrillation, ventricular fibrillation, paroxysmal atrial tachycardia, premature ventricular contractions, tachycardia, bradycardia, cardiac arrest, cardiac ischemia, coronary artery disease, endocarditis, perforated heart, myocardial infarction, intractable angina, peripheral vascular disease, or cardiac bypass surgery. Multiple trauma or neurological conditions may include but are not limited to altered mental status, brain aneurysm, brain tumor, paraplegia, quadriplegia, multiple sclerosis, cerebral anoxia/hypoxemia, cerebral atherosclerosis, coma, a cerebral vascular accident or hemorrhage, a motor vehicle accident or multiple trauma, transient ischemic attacks, unconsciousness, anoxic encephalopathy, hydrocephalus, closed head injury, spinal cord injury, burns, frostbite, amputations, meningitis, Reyes Syndrome, Guillain Barre, amyotrophic lateral sclerosis (ALS), Alzheimer's disease, or primary dementia. The cerebral vascular accident or hemorrhage may include intracerebral, intracranial, subdural or unspecified incidents. A motor vehicle accident may include automobile versus motorcyclist, pedestrian versus automobile, cardiac injury including cardiac contusions, fractured skull, crush injuries, and shock. Sick babies or neonates may include but are not limited to anemic newborns, respiratory arrest (apnea newborns), premature births, birth traumas, or congenital anomalies (major or multiple). Obstetric conditions may include but are not limited to pregnancy with three or more fetuses, bleeding during pregnancy, history of problem births or sick babies, or toxemia during pregnancy which requires hospitalization. Malignant cancerous conditions may include but are not limited to unspecified cancers, brain cancers, bone metastasis, colon cancer, esophageal cancer, kidney cancer, liver cancer, lung cancer, ovarian cancer, prostate cancer, spinal cancer, stomach cancer, leukemia, lymphatic cancer, aplastic anemia, lymphoma, malignant leucopenia, unspecified metastasis, specified metastasis, myeloma, or other conditions which require chemotherapy and/or radiation therapy.

[0023] It is contemplated by this invention that in some situations the most appropriate level of care for a patient

identified in step 16 may be to avoid hospitalization. In this regard, the present invention may include the utilization of a Do Not Resuscitate (DNR) order and/or a Do Not Hospitalize (DNH) order. It is human nature to want to send a sick person to the hospital; however, that may not always be in the best interest of the patient. That does not mean that the patient receives no care; rather, the focus of the care is on providing relief from uncomfortable symptoms while at the same time not unnecessarily prolonging what will be a short, painful remainder of life. In some cases, the best possible care determined in step 16 may include maintaining the patient at home, in an assisted living facility, an inpatient skilled nursing facility, or a hospice facility. In such cases, all efforts will be made to keep the patient free of pain and allow for a peaceful end.

[0024] Additionally, the present invention may include the utilization of a living will and/or a Health Care Proxy (HCP). As used herein, a living will means a document in which the patient identifies the types of treatment the patient does and does not desire in the case that the patient can no longer speak for herself. As used herein, an HCP is a document wherein a patient designates a Health Care Agent (HCA) who will make medical decisions for the patient in the case that the patient is no longer capable of making her own health care decisions. For the purposes of this invention, a patient is no longer capable of making their own medical decisions when the treating doctor determines that the patient is no longer able to make such decisions and another healthcare professional agrees that this is true. The HCA should be at least eighteen years old, made aware of the patient's wishes, and agree to respect and follow those wishes. A preferred HCA would be someone who knows the patient very well, cares about the patient, is capable of making difficult decisions, and is likely to be nearby when decisions need to be made. Depending on each patient's individual situation a spouse or family member may be the best choice, or they may be too emotionally involved to be the best choice. Regardless of whom the patient appoints as her HCA, it should not be the patient's health care provider, an employee of the patient's healthcare provider, or serving as an HCA for 10 or more people unless he or she is your spouse or close relative.

[0025] The HCP is revocable by the patient at any time by destroying all copies, informing his doctor or family that he wishes to cancel or change his HCA, or writing the word "Revoked" across the name of each agent he wants to cancel and signing that page. The HCP may also include an expiration date after which it is no longer valid. The HCA can make all medical decisions for the patient, or the patient may define in the HCP which decisions may be made by the HCA. The patient may also include specific instructions in the HCP regarding certain medical treatments, if so desired. These treatments may include, but are not limited to the following items: artificial respiration, artificial nutrition and hydration, cardiopulmonary resuscitation (CPR), antipsychotic medication, electric shock therapy, antibiotics, surgical procedures, dialysis, transplantations, blood transfusions, abortion, and sterilization. For example, an HCP may include directions that the patient does not want to be in pain so that the doctor should deliver enough medicine to relieve the pain even if the result is making the patient drowsier or sleepier than would otherwise be the case; whether the patient does not want anything done or omitted with the intention of taking your life; or that you want to be offered food and fluids only by mouth and kept clean and warm. The HCA must follow all directions made by the patient. Certain benefits of appointing

an HCA include allowing the agent to make health care decisions on the patient's behalf as the patient would want them decided, choosing one person to make the decisions because the patient believes that person would make the best decisions, and choosing one person to make the decisions in order to avoid conflict or confusion between family members. An alternative HCA may also be appointed in the HCP should the primary HCA be unavailable, unable, or unwilling to make a decision. Also, the HCP may include the patient's organ and tissue donation wishes, including whether donations may be used for transplantation, research, and/or educational purposes. However, the lack of donation instructions in an HCP will not be taken to mean that the patient does not want to be an organ/tissue donor.

[0026] The above description is given by way of example, and not limitation. Given the above disclosure, one skilled in the art could devise variations that are within the scope and spirit of the invention disclosed herein. For example, it is contemplated that invention as disclosed herein could readily be used and integrated within those systems and methods disclosed in pending U.S. patent application Ser. No. 10/615,640, filed Jun. 8, 2003, entitled HEALTHCARE ADMINISTRATION METHOD; U.S. patent application Ser. No. 10/679,178, filed Oct. 3, 2003, entitled HEALTHCARE ADMINISTRATION METHOD HAVING QUALITY ASSURANCE and U.S. patent application Ser. No. 11/063,268, filed Feb. 22, 2005, entitled SYSTEMS AND METHODS FOR ASSESSING AND OPTIMIZING HEALTHCARE ADMINISTRATION, the teachings of all of which are expressly incorporated herein by reference. Further, the various features of the embodiments disclosed herein can be used alone, or in varying combinations with each other and are not intended to be limited to the specific combination described herein. Thus, the scope of the claims is not to be limited by the illustrated embodiments.

What is claimed is:

- 1. A method of administering healthcare to patients with multiple integral diagnoses such that the clinical outcomes and health-related quality of life of said patients are improved while medical costs are minimized, the method comprising:
 - a) identifying a patient population entitled to receive said healthcare;
 - b) stratifying the patient population identified in step a) into specific levels of intervention;
 - c) assigning a Priority Care Nurse Manager (PCNM) to each patient in said population;
 - d) establishing communication between the PCNM, the patient's Primary Care Physician (PCP), and the patient to cooperatively develop the most appropriate treatment plan that is available to the patient; and
 - e) rendering healthcare services according to the treatment plan developed in step d) to the patient.

2. The method of claim 1 wherein said patients identified in step a) are actively enrolled in a Health Maintenance Organization (HMO), Medicare, or Medicaid.

3. The method of claim 1 wherein said patients identified in step a) have ongoing needs to maintain optimal health status.

4. The method of claim 3 wherein said patients have a condition selected from the group consisting of a chronic medical condition; a recurring medical condition; multiple emergency room visits in the previous year; functional or emotional impairments; a mental or physical handicap or a developmental disability; a terminal illness; an organ transplant; a pain management recipient; dependency on medical, technological support; and multiple surgeries or hospitalization in the previous year.

5. The method of claim 1 wherein said patients identified in step a) have a specific condition requiring continuing treatment and monitoring.

6. The method of claim 5 wherein said patients have a condition selected from the group consisting of HIV/AIDS; cardiovascular conditions; multiple trauma or neurological conditions; sick neonates; obstetric conditions; and malignant cancer conditions.

7. The method of claim 1 wherein the stratification in step b) is based upon the severity of confirmed medical conditions of said patients.

8. The method of claim 7 wherein the patient population is divided into three specific groups.

9. The method of claim 1, wherein step d) further includes communication with one or more of the people selected from the group consisting of a specialist physician, a provider of healthcare service, a patient's family member, and a patient's designee.

10. The method of claim 1 wherein, upon the patient's consent, the most appropriate treatment plan determined in step d) includes not hospitalizing the patient.

11. The method of claim 10 wherein the treatment plan comprises maintaining the patient at home, an assisted living facility, or a hospice facility; forgoing aggressive life-continuing treatment; and providing palliative care.

12. The method of claim 1 further comprising the step:

f) the PCNM periodically monitoring said patient's overall status, adherence to the established treatment plan, and identifying any needed changes in the treatment plan.

13. The method of claim 12 further comprising the step:

g) documenting all communications in step d), documenting all healthcare services rendered in step e), and documenting the results of all monitorings in step f).

14. The method of claim 1 further comprising the step:

h) said patient completing a Health Care Proxy, in which a Health Care Agent is appointed to make medical decisions for said patient when said patient is unable to make said medical decisions.

* * * * *