Improving Care for High-cost Patients with Complex Chronic Conditions

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King's Fund

Green Ribbon Health

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Programme description

Background and objectives

Section 721 of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 authorised the development and testing of voluntary chronic care improvement programmes, now called Medicare Health Support, to improve the quality of care and life for Medicare beneficiaries living with multiple chronic illnesses. The programmes are designed to help participants adhere to their physicians' plans of care and obtain the medical care they need to reduce their health risks.

Beneficiaries who have congestive heart failure and/or diabetes have heavy self-care burdens and high risks of poor clinical and financial outcomes and they often have other co-morbidities. Commonly, beneficiaries who live with multiple chronic illnesses experience poor health outcomes, increased cost, and dissatisfaction, despite the best efforts and intentions of providers. There is evidence that self-care support, education, and co-ordination of care for people with these conditions can be effective in improving clinical outcomes, reducing overall cost, and improving participant and provider satisfaction.

This new Medicare initiative is designed to help reduce health risks, improve quality of life, and provide savings to the beneficiaries and to Medicare. Phase I Medicare Health Support (MHS) programmes are being overseen by the Centers for Medicare and Medicaid Services (CMS) and are being implemented in eight regions in the summer and autumn of 2005 by organisations that were chosen through a competitive selection process and these pilot programmes will be administered for a three year period. The US Secretary of Health and Human Services has discretion to expand Medicare Health Support to additional geographies if phase I evaluations demonstrate success.

Specifically, during phase 1, each organisation operating the MHS programme is offering support to participating Medicare beneficiaries to help:

- manage health concerns
- follow physicians' plans of care
- offer self-care guidance
- understand when to seek medical care
- prevent unnecessary hospital stays and emergency room visits.

Humana Inc. was selected to develop one of these pilots in west central and southwest Florida. Green Ribbon Health, LLC, a 50/50 limited liability corporation, was established by Humana in partnership with Pfizer Health Solutions Inc., the care management subsidiary of Pfizer Inc., to provide services under Humana's cooperative agreement with CMS.

Green Ribbon Health

Green Ribbon Health (GRH) is an organisation committed to supporting the needs of older Americans with primary conditions of heart failure and/or diabetes. The design of GRH's chronic care improvement programme reflects its principals' shared philosophy about health care system transparency, choice and independence. Traditional disease management programmes focus on data tracking and analysis, clinical protocols, and some common 'high-technology' solutions, but often ignore more personal, patient-centred, 'high-touch' approaches. Many Medicare beneficiaries have personal challenges specific to their cultural background, cognitive and psychosocial states, and environmental circumstances that require individualised coaching and assistance. Therefore, in addition to delivering traditional disease management, GRH educates beneficiaries about their conditions, supports them in taking an active role in managing their own care, and helps them to navigate our complex health care system. Doing so requires an individualised approach, a commitment to learning what motivates each patient and an emphasis on the development of informed, engaged beneficiaries and caregivers.

GRH takes a comprehensive view of beneficiary health rather than focus on their diseases or acute events. It helps beneficiaries retain the control they want over their health, their independence, their choices and their lives.

Patient engagement model

Participants receive the majority of programme intervention through a combination of telephonic support and community-based staffing to provide the mix of support required by this population. Interview, assessment, education, coaching, goal-setting, and monitoring occurs via telephone calls from personal nurses (PNs) who establish a one-to-one relationship with beneficiaries.

Green Ribbon Health uses Humana's personal nurse health coaching model, which delivers behavioural change and decision support using proven psychological technologies to increase confidence, motivation and self-efficacy. These technologies enable beneficiaries to make more informed health care decisions and successfully change their health and health-seeking behaviours. The PN communicates with patients by telephone, supported by state-of-the-art technology.

For those complex cases that require more intensive intervention, the nurses are supported by a local, on-the-ground multidisciplinary health care team that includes a geriatric clinical nurse specialist, 'mobile' social workers, nutritionists, pharmacist, and trained community health care workers. These teams interact with patients and physicians by building rapport through face-to-face interactions, facilitating community-based needs as appropriate (for example, hospital/skilled nursing, facility discharge planning, home health evaluations, education classes, transportation, meals, [illegible]E etc.) The combined efforts of the beneficiary, PN, multidisciplinary team, and local providers improve quality of care and reduce inappropriate utilisation of health care services. Primary savings are achieved through avoidance of unnecessary hospital, emergency department, and skilled nursing facility admissions, as well as reductions in complications. These are achieved through proactive beneficiary monitoring, in-person assessments, and co-ordination of care services, using current evidence-based guidelines, which will improve health behaviour and self-management skills, and yield more appropriate use of medications and diagnostic tests.

Target population

Green Ribbon Health offers support to approximately 20,000 Medicare fee-for-service beneficiaries in selected counties of the state of Florida living with diabetes and/or congestive heart failure. These beneficiaries were identified through claims using Medicare's case classification system and were invited by Medicare to participate in the programme. Additionally, CMS has randomly selected a control group of approximately 10,000 Medicare fee-for-service beneficiaries from this same region against which quality and cost outcomes will be compared.

Participant outreach and engagement

GRH's goal was to enrol beneficiaries in an intervention group primarily through outbound calling during the programme's six-month outreach period. GRH used initial eligibility and claims history files received from CMS to create a prioritised contact list. To ensure that outreach efforts were respectful to beneficiaries, GRH deployed teams of specially trained Medicare enrolment specialists to contact all beneficiaries in the intervention group. Enrolment specialists were supported by a 24/7 triage line to help answer beneficiary health-related questions. Outreach to beneficiaries was conducted in three waves. A letter was sent to all eligible beneficiaries introducing the CCI programme, alerting them that an enrolment specialist would be contacting them, and providing a toll-free number they could call to enrol. Following this, enrolment specialists made a minimum of four attempts to enrol beneficiaries. Enrolment specialists were guided by a script that includes programme description, goals, expectations and consent request. Beneficiaries positively electing the programme received a welcome letter confirming participation and programme information. If all attempts to reach the beneficiary by the enrolment specialist were unsuccessful or the beneficiary wanted to learn more about the programme in person, they were invited by letter to a local 'enrolment' event that took place in their local geographic area. In addition, for those beneficiaries that could not be contacted by mail, the local team continues to offer enrolment telephonically and in person.

Targeting and customising interventions

GRH's goal is to match the most appropriate interventions to the participant's level of assessed need. This is guided by the use of tools such as claims-based predictive modelling, risk-stratification (using administrative and non-administrative data), validated questionnaires, condition-specific clinical guidelines, an online medication database, a proprietary framework for assessing health behaviours and motivation to change, and interactive voice recognition (IVR) technology to prompt and record critical participant self-reported information. All information collected and used is available in real time to all GRH health care staff through a common web-based disease management application and database.

Before establishing an intervention assignment for each beneficiary, GRH employs a unique risk stratification tool that merges objective claims data (for determining cost/utilisation risk) with subjective self-reported data into a two-risk variable model: domain and cost/utilisation.

Domain risk stratification

All participants contacted during the enrolment period are administered a short survey, the domain assessment tool (DAT), which covers seven domains:

- health status
- functional status
- social support
- physical environment
- psychological state
- cognitive functioning
- financial status.

The DAT integrates questions from validated instruments (for example, ACOVE **Vulnerable Elders Survey (VES-13),** PRA Plus, SPICES Tool, Morisky Compliance Scale, MCQ) to assess participant status in each domain. Domain risk is categorised as 'high' or 'low' and assigned by calculating a composite score based on participant responses to all DAT questions. In addition to the composite score, the scoring algorithms, adapted from existing validated tools, provide an individual question or domain-specific risk to assist the PN in customising the individualised care plan. All participants are screened and assessed for depression using the personal health questionnaire nine-item scale. In addition, medical history is assessed by claims and self-reported data to determine overall health risk.

Cost/utilisation risk stratification

Cost/utilisation risk for each participant is determined through a concurrent claims analysis that uses split-sample methods to identify patient characteristics that are predictive of large increases in cost/utilisation. The final predictive characteristics are those that are identified in the first 50 per cent sample and prove also to predict the high-risk patients in the second 50 per cent sample. Certain statistical quality metrics must be met before the final predictive characteristics are determined. These quality metrics are sensitivity, specificity, and positive and negative predictive values. GRH has developed an algorithm with two levels of cost/utilisation risk (high/low) for participants with diabetes and/or CHF beneficiaries. GRH will validate this claims analysis algorithm by comparing the resultant high/low risk population to the high/low risk population as defined by the HCC score.

Once each participant is assigned a cost/utilisation and domain risk category, the programme assigns a mutually exclusive intervention status: monitoring, prevention, or high impact**.** In addition to programme stratification and intervention assignment using cost/utilisation and domain risk, beneficiaries are also screened for frailty through a process of claims data re-analysis using programme-specific algorithms for target conditions and procedures.

Because beneficiaries present with multiple co-morbid conditions, participants are screened for these medical conditions using different methods. PHS's web-based patient management tool called InformaCare utilises a claims-based stratification methodology to consider co-morbid conditions when stratifying participants by risk. The DAT screens for physical limitations, cognitive dysfunction, mental health issues and medication adherence problems. Other conditions not routinely identified through claims analysis that are assessed by GRH include participant self-reported falls and mobility problems, pain, nutrition issues and wound care.

Intervention model

Once a participant has been assessed and appropriately stratified, programme interventions are initiated. GRH has designed an intervention model of care that builds upon the personal interaction between PNs, on-the-ground multidisciplinary team, providers and participant or caregiver and integrates technology-based information systems to support evidence-based practice.

For participants in the low-intensity intervention level, the PN works with participants telephonically unless problems are identified that suggest more intensive services are needed. For more complex cases (prevention or high-impact stratification level), the PN is supported by the local multidisciplinary team (nurse care managers, social workers, geriatric case managers, nutritionists, pharmacists and community health workers) who meet with the participant at home, in a nursing facility or hospital, or in the physician's or other health care practitioner's office. When indicated, community-based field care managers – trained social workers or nurses – deliver programme interventions in the individual's place of residence and/or in the community. Also contributing to the team is a community health worker – a layperson who may have similar health problems as programme participants and resides in the local area. CHWs are trained in group facilitation and the Stamford chronic disease self-management programme (CDSMP). The role of the CHW is to provide group education through an approved curriculum, to reinforce the participant-specific teaching and coaching provided by licensed personnel, and to serve as a caring and informed advocate.

The field team provides on-site beneficiary assessments and guidance toward development of physician approved care plans. These include home health assessments and special assessments of mental status, nutrition, medical management and functional status of beneficiaries in nursing homes. Team members work collaboratively in 'pods' – geographically proximate staffing clusters that operate under the direction of the PN coach – to help assure that beneficiaries are treated in the most appropriate setting. In addition, all participants have access to a registered dietician for nutritional counselling, and a 24/7-nurse line for after-hour support.

The office-based PN serves as the primary care manager, co-ordinates field-based services, and serves as the physician point-of-contact for participant status reports and medical orders. The availability of this PN, with current participant information from his/her participant contacts as well as those of field personnel, provides physicians the ability to more closely monitor and respond to participant changes between office visits. The office-based PN is also the primary point of contact for participants.

The appropriateness of the intervention is assessed by the PN using professional judgment and supported by the software platform, InformaCare's embedded evidence-based guidelines. Examples of interventions include self-care education, use of monitoring technologies, end-of-life education and care, bereavement counselling for family members, co-ordination of community services, and use of laboratory self-testing kits.

The PN uses evidence-based guidelines along with feedback from the clinical team and providers to develop individualised care plans for the participant or caregiver. The care plan takes into account co-morbidities, participant health status, site of care and holistic domains. The PN communicates care plan information and participant status updates to providers through electronic or written reports. The local health care team provides on-site physician communication when appropriate.

The frequency of GRH interventions and resources is initially determined by risk stratum. All participants receive a minimum of five PN contacts during the first quarter regardless of risk level. Medium-risk beneficiaries are reassessed at least once every 45 days and high-risk within 30 days, but most beneficiaries are receiving one to two contacts per month. Beneficiaries positively screened for depression (running at close to half of those screened) receive weekly contact and a psychiatric evaluation if recommended by the treating physician. Beneficiaries may be reassigned to a different intervention level based on findings from scheduled reassessments, incorporating claims history, acute events (for example, hospital, emergency department or nursing facility admission) and the PN clinical judgment.

Preventive services

Preventive services are a crucial care component for all participants. For services that are time-based (for example, annual, seasonal), system-generated reminders are provided to the PN to help facilitate communication between beneficiaries and providers. Beneficiaries also receive information on community services and resources such as influenza vaccinations and diabetes preventive services. In addition, GRH uses an innovative voice application technology (VAT) system, powered by ZA technology, to deliver customised preventive health reminder messages to beneficiaries and collect self-reported health information (for example, weight, glucose) relative to their condition.

Communication with beneficiaries

Communication between the programme and the beneficiaries it serves are multi-faceted. PNs communicate with beneficiaries primarily through out-bound and in-bound telephone calls. Participants who have internet access are able to communicate with their PN through secure messaging in InformaCare and access GRH*'s* online health library and programme-specific health information links. Group education and support sessions are facilitated by members of the multidisciplinary team or trained community health workers. Other communication methods such as DVDs that help address cultural, language and literacy barriers to care are also used for delivering educational messages.

Environment and political context

A number of factors in the evolution of the US health system, and, more specifically, the evolution of Medicare policy have led to the particular manifestation of the GRH project.

Thirty years of research in health services research, well documented in a series of reports by the Institute of Medicine of the National Academy of Sciences, has led to a widespread belief that US health care is rife with over-use (over-provision of ineffective care), under-use (under-provision of effective care) and misuse (the provision of inappropriate or the mis-provision of appropriate care). The *Dartmouth Atlas* of 1999 documented wide variations and significant under-use of necessary services provided to Medicare beneficiaries. Then in late 2003, a major ND study (based on a review of medical record documentation for hundreds of performance measures) showed that recommended care – care identified as effective by physician-developed clinical practice guidelines – is only being delivered about half the time.

Meanwhile, the consumer and physician backlash against managed care led to a significant shift in review priorities by private insurance plans. Private sector health plans have moved away from the individual case review programmes that dominated the 1990s, turning instead to 'disease management' programmes. These have evolved from disease-specific programmes to population health management systems today, targeted through sophisticated risk stratification and tiered interventions based on severity. These programmes are designed to address some of the care co-ordination, continuity, communication, and transition management problems that continue to plague the fragmented fee-for-service delivery system that fails to create incentives for physicians to manage care over time.

Medicare itself significantly changed its approach to medical review over a dozen years ago. After 20 years of individual case review, which had never yielded the savings expected through prevention of 'over-use,' in 1991 CMS adopted a radically different approach. The 'health care quality improvement programme' represented a major shift not only in process but also in programme goals. Rather than focus narrowly on financial savings to the Medicare programme, the Health Care Financing Administration (as CMS was then called) addressed itself to quality improvement and positioned itself as an agent of change in the US delivery system. Recognising the health burden created by the under-use of effective services, HCFA/CMS focused on increasing the use of effective services and the adoption of practices that would yield safer health systems.

About five years ago, CMS began aggressively to use its demonstration authority to pilot new approaches to management of chronic care, beginning with disease management systems like those developed in the private sector. Because these disease management systems are essentially external to the delivery system, CMS has added specific programme requirements for physician outreach in its demonstration programmes. The next generation of demonstrations will focus on payment innovations that will create incentives intrinsic to the delivery system to adopt longitudinal care management systems.

The fragmented delivery system in the US, and the implicit bias in the Medicare benefit towards acute care, have created obstacles to proper longitudinal care management. Medicare data are limited by virtue of the Medicare benefit, requiring the additional screening and surveying to better target and customise services.

Financial arrangements

GRH proposed to CMS a capitated, per participant per month (PPPM) fee to be paid on a monthly basis for the entire intervention group less those who decline during the outreach period, and on a monthly basis for those participating for the remainder of the programme. As per CMS requirements, GRH guaranteed a net savings of 5 per cent of Medicare's fees for the entire intervention group regardless of beneficiary participation in the intervention. This guarantee was in the form of 100 per cent of GRH's fees being at risk on 5 per cent net savings. GRH is not sharing any percentage of the net savings above 5 per cent.

Quality improvement

GRH has developed projections for improvements from year to year in the intervention group and as compared with the control group. The quality categories include projected improvement rates for co-morbid conditions, heart failure measures, diabetes measures and preventive measures. GRH collects its output quality and process information for purposes of programme evaluation from a variety of sources. Clinical information is obtained directly from laboratories, providers, hospitals and skilled nursing facilities, participant or caregiver self-report and use of laboratory self-testing kits. Participants or caregivers, providers and GRH local staff all have the ability to enter information online into the InformaCare patient management tool. Prior to the 2006 implementation of the Medicare drug benefit, prescription data was captured through pharmacy records (with participant consent), provider reporting (for example, electronic prescribing, [illegible]R) and participant or caregiver self-reports. Pharmacy information for dual eligible participants is obtained from the state.

Additional information such as participant screening, assessments and surveys is captured and entered in InformaCare through PN telephone interactions, direct participant or caregiver entry online, or through in-person assessments conducted by the local GRH multidisciplinary team.

GRH based its quality improvement projections on both principals' past experience with similar DM programmes and on an extensive review of the relevant literature. Performance baselines were derived from various data sources, primarily the Florida Medicare HEDIS dataset (data years 1999–2002) and the Florida CDC dataset for individuals age 65 and over.

Patient safety

From a patient safety perspective, GRH's InformaCare system tracks the output data described above and provides reporting mechanisms for review of clinical, laboratory and self-reported outcomes, pharmaceutical usage and staff productivity. The platform also generates reports that evaluate beneficiaries' progress toward better health behaviours, reduction in disease symptoms and severity and adherence with their care plans. These reports are used by PNs and their teams for on-going care management and are communicated to providers on a regular basis.

Process and quality improvements

GRH continuously works to improve the care and services provided through the programme. Provider satisfaction, patient satisfaction, ongoing personal nurse training and coaching, and bi-weekly programme staff meetings ensure improved outreach strategies and operational efficiencies.

Role of health and social care professionals

Interaction with treating clinicians

Provider involvement is recognised as critical in developing and implementing effective care plans for individual participants. Strategies to integrate physicians into the GRH programme include establishment of early and ongoing relationships with key physician groups, and conducting in-person meetings with individual physicians and medical groups. GRH provides continuing medical education (CME) programmes addressing evidence-based guidelines (for example, diabetes, congestive heart failure (CHF), cardiovascular disease (CVD), chronic obstructive pulmonary disease (COPD), mental health), training programmes such as assessing care of vulnerable elderly (ACOVE), older adult sensitivity training (OAST), cultural competency and health literacy training.

GRH facilitates communication and exchange of information between the PN, the participant and their providers. PNs educate participants on how to prepare for and communicate directly with a physician. Participants also receive a health record card to facilitate communications with their providers regarding standards of care relative to their disease state (for example: annual frequency of foot/eye examinations, glycosalated haemoglobin HbA1c/low-density lipoprotein collection/values etc. for the diabetic. PNs also attempt to contact the treating physician directly regarding significant changes in the participant’s condition. The information management system generates reports on clinical findings, medications, diet, physical activity, progress toward goals, and messages related to guidelines that can be faxed or mailed depending on the physician’s preference. Also, GRH field personnel schedule in-person meetings with providers to provide updates. Providers can also communicate directly with the PN through the InformaCare platform online secure text-messaging feature.

Local hospital partners

GRH is partnering with several large hospitals in the service regions. Tampa General and BayCare Health System in Tampa are the focal points in their respective markets. They provide access to physicians and community support services and provide physical space and infrastructure to support educational classes and other direct contact with physicians, participants, PNs, discharge planners and other members of the care team.

Physician partners

Physician awareness, engagement and support of GRH are critical to its success. Recognising that physicians vary in their receptivity to DM programmes, GRH uses a variety of strategies to engage physicians to participate in the programme. In advance of creating the GRH operating entity, Humana and PHS outlined strategic working relationships with local clinics to collaboratively establish referral, oversight, quality improvement, data sharing, and process of care protocols and evaluation programmes. Physicians are also encouraged to use InformaCare to track participants’ progress in the programme. At a more basic level, GRH distributes educational materials which describe the programme and specifically outline both physician and participant advantages to programme participation.

GRH co-ordinates meetings with physicians, sponsors CME courses on evidence-based guidelines and clinical interventions, presents information at physician group meetings, and has established an on-going physician outreach workgroup comprised of all stakeholders.

Community-based organisation partners

GRH’s approach to DM and personal behaviour modification involves close collaboration with local community resources, capitalising on its principals’ existent and strong community ties and collaborations. A key benefit of working closely with community groups is to strengthen GRH’s understanding of the demographics of the area and to effectively address cultural and ethnic differences in the community in order to provide culturally and linguistically appropriate services and support to diverse populations. Further, community organisations serve as an extension of the care model because they reinforce patients' independence as they transition from intensive support from personal nurses to more active self-management over time. Some of the community organisations supporting the programme include the local chapters of the American Diabetes Association, American Lung Association and United Way.

Communications/IT and data analysis support for the service

State of the art technology captures, catalogues, and makes information useable. The clinical expertise and training of PNs are maximised through the decision-support tool, InformaCare, used by PNs, physicians, clinicians and patients. The platform combines nationally recognised, evidence-based clinical guidelines with a sophisticated clinical-rules engine and adds the connectivity of the internet to improve the co-ordination of care for patients with chronic conditions. InformaCare assists PNs by integrating patient assessments, clinical indicators, contact frequency, utilisation data and physician treatment plans with evidence-based clinical protocols to develop individualised care plans.

One of the unique aspects of the PN intervention model is a customised section of the application specifically addressing the patient's conviction and confidence to change, allowing the nurse to assess, record and monitor the patient's success in achieving their goals and objectives over time. The interactive grid automates a 'tactics' list that allows the nurse to choose an appropriate 'tactic'.

Several strategies are used to engage physicians in the adoption of decision support tools and health information technology. First, by partnering with physician groups, the role of information technology such as integrated electronic medical records is demonstrated; second, GRH is engaging other individual physicians and physician groups through e-mail alerts and paper-based decision-support reporting. Third, through the InformaCare platform, GRH can support physicians to develop their own electronic disease registries for quality improvement reporting. Finally, personal biometric devices such as weight scales are distributed to participants at highest risk for complications related to their condition and non-adherence to their care plan, working with their physician as part of the device implementation.

Outputs and evaluation of outcomes

In addition to the quality output metrics and outcomes described in Section [illegible] this document, GRH will evaluate cost and utilisation outcomes including projected savings and utilisation rates for intervention group members overall, facilities (hospital, emergency room, skilled nursing facility and home health), durable medical equipment, and prescription drugs. GRH anticipates savings (net of fees) for the population it manages of approximately $55 Million for CMS for the three-year time period.

Preliminary results

Preliminary results of the GRH interventions are not yet available. As GRH is nearing the end of the six-month enrolment period, it can be reported that participation rates initially estimated to reach 65 per cent were surpassed. GRH interventions have begun and three anecdotes that illustrate how the programme works are shared below.

Anecdotal result 1: successful suicide intervention teamwork

Joann Kerr, PN, received a warm transfer from the GRH enrolment centre. As Joann began explaining the programme to the female client, she realised that the client was speaking very slowly and was still in bed at two o'clock in the afternoon. Picking up on these clues, Joann began to question Suzie (not her real name) about her feelings. The client expressed increasing signs of severe depression. As Joann continued with the PHQ and asked the client if she had thought about harming herself, Suzie said that she had.

Joann then asked if she'd thought about harming herself recently. When Suzie responded she had, Joann signalled to a nurse, Tammi, in a neighbouring cubicle. Tammie alerted the coach, Kathaleen (an experienced mental health nurse), who began monitoring the call with Joann. Joann persuaded Suzie to phone a friend who soon came over to stay with the client. Joann stayed on the phone with the client until the friend arrived. Since the client lived in the Sarasota office region, that pod was notified and a nurse was dispatched to the client's home.

As it turned out, Suzie had a history of depression. Her physician was notified and she was promptly treated by her physician who prescribed appropriate medication. A follow-up call by Joann a few days later revealed that Suzie was responding favourably to new treatment and feeling much better. Suzie continues to be followed by the Sarasota nurse, Debbie Steckloff, who keeps Joann updated on her progress by emails. While Joann Kerr spearheaded the successful suicide intervention, teamwork from the Fort Myers and Sarasota pods brought it to a successful conclusion.

Anecdotal result 2: successful diabetes intervention

Upon contacting a participant with CHF and diabetes for the first time, the PN noted a fasting blood sugar of 547 along with a history of major depression. The participant, BB, did not have enough money to purchase her insulin or anti-depressant medications. She was taking her insulins, Humalog, Lantus and Regular every two days to save it. With the participant's permission, the PN phoned BB's physician to inform them of the high blood sugar values and depression status.

The PN called BB back to tell her that her physician recommended that BB go to the emergency room but she refused, stating she would receive too many bills. Tearfully, BB said that nobody cared for her and that she would be better off dead. The PN assured her that she was on her side and would fight for her health care rights. The PN then phoned the physician's assistant on-call for her physician group, who then contacted the participant. BB still refused to go to the emergency room. BB was instructed to take her insulin. In follow-up the PN learned this resulted in a decrease in her blood sugar to 433. This was her last 40 U of Humalog. The PN told BB that she could get her medications using the letter from Medicare Part D until her insurance card arrived. The PN reviewed the signs and symptoms of diabetic ketoacidosis and the participant agreed to go to the emergency room if they occurred. She also agreed to go to her primary care physician in the morning.

When the PN called the doctor's office to also confirm the visit, she learned from the office staff that during her visit, BB said that she had not showered since 31 October 2005. It was now 11 January 2006. BB called her personal nurse a day later to thank her for giving her life and informed the PN that her blood sugar was 164. She said she went to the pharmacist who promptly filled her prescriptions for insulin and depression. This had lifted her spirits enough for her to take a shower for the first time in over two months. The conversation ended with the participant telling her personal nurse that she 'had inspired' her to start taking control over her own life.

Anecdotal result 3: PN and navigation within the health care system

In a conversation with SB, her PN found out she was having symptoms of an upper respiratory infection. SB could not see the doctor because it was weeks before an appointment was available. She said if she had an appointment she probably would not go because she did not feel well enough to endure the long wait in the office to be seen. Even her daughter who is an registered nurse could not convince her to go.

After speaking with her PN, SB finally agreed not to go to the emergency room and to go to the doctor if the PN helped her. The nurse promptly called the physician's office and arranged an appointment for that day. She informed the physician office staff how poorly SB was feeling and asked that she be seen as quickly as possible once she got there. Later the participant called the nurse back to thank her. She was placed on antibiotic therapy and was feeling much better. The influence of her PN saved SB the inconvenience of long hours waiting in an emergency room or walk-in clinic, and got her started on the treatment she needed before her condition became worse.

Final comments

The demonstration programme to which GRH is a response was conceived to respond specifically to faults in the US system about which there is wide agreement: widespread under-use of effective care (as codified in clinical practice guidelines); poor co-ordination of care over time or continuity between sites of care; and generally poor handling of chronic disease. The US system is tremendously fragmented, with no clear lines of clinical accountability for managing any individual’s care, particularly in the fee-for-service world of conventional Medicare services.

The current health care system is locked into a kind of dance whose cadence is set by:

- the amount and kinds of care we pay for
- the nature and tenure of the relationships that underlie the financing of health care for many people
- the passivity fostered by a system that promotes a model of patients and beneficiaries rather than consumers.

Current reimbursement schemes fail to incorporate mechanisms that capture and track, let alone adjust for outcomes. Provider business models have become reliant upon these schemes and will continue to deliver care consistent with them unless there are major changes.

The US insurance and payment systems present serious obstacles to the development of innovative and cost-effective services. Our coverage policies and our payment policies are inflexible and we tend to cover and pay for discrete ‘services’ rather than episodes of care. We need to be able to experiment with new ways of bundling services for payment in order to create the right kind of implicit incentives for organising care effectively and managing resources efficiently.

Also at work is the current US business model for employer-financed health care. The nearly bi-annual churning aspect of employers severely bounds the tenure and type of relationships that can be built with consumers. It constrains the time, ability and willingness of many entities to address health issues that are, for our most pressing chronic and longer term in nature. When dealing with complex chronic disease, where the path to improvement is sustained behaviour change, we have to take a long view.

Finally and most crucially to transforming our system is the perspective of the person themselves, the very purpose for which the system exists. To change it, we need to create the means for a shift – from passive to active, from patient to consumer. The biggest obstacle to successful ‘management’ of complex chronic disease is the medical model that divorces health care from everyday life. Practice guideline and ‘evidence-based care’ movements are care-centred, do not encourage innovation and include little, if any, focus on health behaviour and how to influence it – which is essential to successful improvement of chronic disease. The physician-centred model of health care delivery that dominates the US health system has a poor track record of dealing with behaviourally sensitive health conditions. James Prochaska, founder of the trans-theoretical model of health behaviour change, likes to say that the ‘action’ model of behaviour change that dominates our health system today is ‘perfectly designed to create frustrated doctors and noncompliant patients’. Our medical model treats patients like inert objects, rather than engage them as the psychologically complex, environmentally sensitive, interactive human beings that they are.

What we need is more awareness and understanding of what motivates people to change and a more integrative approach to behaviour change that meets people where they are and appeals to them as people, not as patients. This runs counter to the conventional view that we need more integration with physicians as manager/guides to better health. Rather, this view would de-medicalise health: it would reduce our expectation that extrinsic forces will ‘change’ consumer behaviour, and find ways to reach the intrinsic desires, values, and preferences of patients that are the key to sustainable behaviour change.