The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization name:
Get Real Consulting

Organization URL:
www.getrealconsulting,com

Project Name:
eHealth2go powered by IPHR

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

eHealth2go is a web-based technology geared toward minority and vulnerable patients with diabetes in the Washington, D.C. area. This technology-based clinical intervention, powered by Get Real Consulting's InstantPHR platform, aims to demonstrate that persons with diabetes, including those with low computer and or health literacy, can successfully become engaged in the use of Health IT in the form of a Personal Health Record (PHR) to keep up-to-date medication and medical history lists, perform and track self-care behaviors such as regular blood glucose (BG) testing and provide this data to healthcare providers. MedStar also aimed to demonstrate that when compared to baseline data, patients who have actively participated in the eHealth2Go PHR project will demonstrate: 1) an increase in the self-reported number and/or doses of medications prescribed for diabetes, hypertension and cholesterol management; 2) an increase in self-reported adherence to medications prescribed for control of BG, blood pressure (BP) and low-density lipoprotein cholesterol (LDL-C); 3) an increase in the percentage with (or scheduling visits for) annual eye exams and urine microalbumin checks; 4) improvement in A1C, BP and LDL-C measures; 6) reduction in hospitalizations, emergency room visits, and days missed from work; 7) satisfaction with the PHR.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

MedStar engaged with Get Real Consulting to use their InstantPHR toolbox and platform to create a user-friendly web portal based on Microsoft HealthVault that allows patients to view and manage their health record in general plus also provide specific tools to track blood sugars and blood pressure. InstantPHR is a toolbox that easily creates and customizes personal health applications. This includes patient and healthcare professional portals, disease management platforms and more. The InstantPHR toolbox is comprised of a number of health widgets, which are individually configurable and can be placed on any combination of website pages via the content management system. This configuration allows the organizations that use it to easily create and customize personal health applications such as patient, healthcare professional portals and disease management platforms as well as the ability to deploy those applications in real time to their patient populations. In the first version, the platform was used to implement a diabetes-centric application. On the home page, there are patient gauges that allow for quick viewing of latest readings and whether the readings are within healthy ranges. These readings can be customized to be displayed in a tabular, graphical or combination format. The patients can view more detailed data or add new data within the Readings pages. There are readings pages for both blood pressure and blood glucose measurements. There are also pages configured to show medical information more succinctly for medications, conditions and allergies. Users may also upload any type of file to their InstantPHR record; examples could include X-rays, PDFs, etc. In the patient profile page, users can view what target ranges for key measurements should be and also make modifications to those ranges in real time.

Please list the specific humanitarian benefits the project has yielded so far.

Fifty patients were enrolled in the initial clinical study; 29 have completed the 3-month intervention. Interim data analysis reveals that all participants, including those with low computer literacy and the elderly, have successfully established PHRs. When compared to baseline, A1C average pre-intervention was 9.3% and post-intervention was 7.7%. Average Blood Glucose was 180mg/dL pre-intervention and 151mg/dL post-intervention. Eighty-six percent of completers reported that they will continue using the PHR post-intervention. Largely due to the above substantiated results, MedStar was recently awarded a 2011 Promising Practice Award of Excellence at the 4th American Diabetes Association Disparities Forum as well as the 2011 Microsoft Health Users Group Innovation Award. Based on the success of the initial study, eHealth2Go has been made available to a broader patient cohort within MedStar's Diabetes population.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

AC, a 62-year-old African-American male with known Type 2 diabetes is referred to the Diabetes Clinic of an urban tertiary care hospital for management of uncontrolled hyperglycemia. He expressed great frustration at his sugars and blood pressure being out of control, "No matter what I do, I do not get better. I feel tired, I have no energy and I feel that I have no control over my own health." As AC began to use eHealth2Go, he felt empowered to have more say in his medical care as he reviewed his own data displayed in the PHR. He changed PCPs due to clinical inertia, and when the new PCP wanted to wait a month before making changes in BP meds, he showed her the data from his PHR and a new BP medication was added to his regimen that day. AC felt that looking at his numbers on the screen, and how many were outside of range, really opened his eyes to the relationship between what he ate/drank and what happened to his numbers. This information was so valuable to him that he would go to a friend's house regularly to update his PHR as he did not have a computer at home. He made changes to his diet and starting walking regularly. This technology collaboration has not only shown demonstrable patient outcomes, but has proven that the use of health technology can be successful, no matter the demography of the

patients. Additionally, MedStar felt that they have a better handle on the patients' health outside of their facilities' walls, making care management more efficient and impactful.