

Background Briefing Health and Hospitals Corporation

The New York City Health and Hospitals Corporation (HHC) is taking a strongly proactive approach to caring for patients with chronic illnesses, incorporating innovations in practice, using information systems to help support care delivery and focusing on patient outcomes based on national, evidenced-based standards. Given the disparate outcomes typically seen among low income and minority populations with diabetes and heart disease, patients with these conditions have been a priority for improvement work.

HHC has been working with a framework for improving outcomes for patients with chronic illnesses. This framework, known as the Chronic Care Model (CCM), has shown that effective care of outpatients with chronic illnesses is characterized by productive interactions between activated patients (as well as their family and caregivers) and a prepared practice team; care takes place in a health care system that utilizes community resources. At the level of clinical practice, four areas (elements of the care model) influence the ability to deliver effective chronic illness care. These are self-management support, delivery system design, decision support and clinical information systems. Key project activities have been conceived around the core elements of this model. The proposed activities also fit within guidelines developed through MacArthur Foundation supported research and the Agency for Healthcare Quality and Research for integrating depression care into primary care.¹ These guidelines represent a model of care focused on a prepared primary care physician, care manager and supervising psychiatrist.

We are focusing on interventions which have been shown effective in improving patient outcomes. Our work as a system therefore is to determine which of these will work best in our health care delivery settings, with our patients, and how to implement them so they can be sustained changes in practice.

The chronic care model provides very useful framework for thinking through all the components needed to help support primary care capacity, community resources, decision support, delivery system design, clinical information systems,

¹ www.depression-primarycare.org/clinicians/re-engineering/ . Re-engineering practices: the Three Component Model (TCM).

and self management support. There is now growing literature supporting the effectiveness of using this framework to re-design chronic illness care.² The goals of the proposed project are to strengthen our primary care capacity to identify and manage depression in chronically ill patients through using the added resources to strengthen decision support, test delivery system design changes, and add depression specific enhancements to our clinical information system. The project objectives include:

- Improving physician and other primary care clinician decision making so there is greater confidence, evidence based therapeutics, and efficiency,
- Identifying sustainable ways of “extending” the primary care visit across HHC ambulatory care sites so that patients with depression receive support and interaction with the health care team in between in person visits to the clinic, and capacity to effectively manage patients can be maximized, and
- Having clinical information systems which support key aspects of a redesigned primary care model.

Having the infrastructure for beginning to measure project results based on the collaborative work. All collaborative teams are measuring their work monthly, using a standardized set of process and outcomes measures developed by faculty and staff from IHI, ICIC, HHC and based literature and BPHC experience over the past 5 years. Data for these measures are currently tracked in the chronic disease collaborative registries which are maintained by the improvement teams, and include the pilot populations of focus (100-200 patients per site). Over the course of the next 12 months, the corporation’s chronic disease registries will become web-based which will allow automated feeding of information from our clinical database. With this automation, we will be able to move to assessing care and outcomes across our full population.

Results from the first year of work showed that HHC teams were able to make significant improvement based on testing changes to practice. These included improved control of blood glucose, blood pressure and lipid levels, and increased percent of diabetic pilot population receiving eye and foot exams per national guidelines.

Complications involve huge bureaucracy with limited resources, staff resistance to change and communication barriers. Commitment from all staff drives success.

It was possible to see significant improvements within a public hospital / safety net system, where resources and openness to change are often limited. Using a

² Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. *JAMA* 2002, Oct 9; 288(14):1775-9.; Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA* 2002 Oct 16; 288(15):1909-14.

multi-faceted approach was critical; just fixing one aspect will not lead to better outcomes. Teams realizing significant improvements worked in all areas of the chronic care model.