2014 Gage Awards

Reference #	7492225
Status	Complete
Name of hospital or health system	Nassau University Medical Center- Nuhealth
Name of project	Cost Effective method of Delivering integrated health care for mental health patients in a safety net hospital
CEO name	Arthur Gianelli
CEO approval	Check here to confirm that your CEO approves of this project being submitted for a 2014 Gage Award
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Within which of the two categories does your application best align?	Population Health

1. Provide a brief description of the project. (This section should resemble an abstract for a poster presentation or an abstract for a peer reviewed journal. Include an objective, data sources, study design, findings, and conclusions.)	Background: Research (1,2) shows that safety-net hospitals, like Nassau University Medical Center(NUMC), treating patient populations that are diverse demographically with a high proportion of Medicaid and Medicare patients provide less efficacious care than non-safety net hospitals. In addition to this, the Office of Mental Health (OMH) in NY State has been advocating the integration of primary medical care in behavioral health settings. In this submission, we will describe how we implemented the above recommendation by OMH, while achieving standards of care similar to academic centers, in a safety net hospital. Objectives: This project was initiated when an internal needs assessment survey in September 2011 revealed that less than 12 percent of patients treated in the NUMC outpatient mental health clinic had received an annual physical examination. As a result, an integrated healthcare delivery project was instituted, with a two-pronged focus of providing primary care in the outpatient mental health clinic as well as educating psychiatrists regarding the national standards based on the National Quality Forum (NQF) of treatment for psychiatric conditions and identifying medical issues related to psychiatric conditions. The project was conceived as an on-going, quality of care improvement project with year-on-year goals and the first annual targeted goal identified as 85% compliance with national standards. Data source: 262 medical charts of patients being treated in our psychiatric outpatient service were randomly selected. This sample included 79 patients with a primary diagnosis of Major Depressive Disorder (MDD), 62 with a primary diagnosis of Bipolar Disorder (BP) and 121 with a primary diagnosis of Schizophrenia/Schizoaffective Disorder (SCZ). Study Design: The study team which consisted of the outpatient medical director, director of research and research assistants performed a retrospective chart review of randomly selected patients seen between December 2012 and December 2013. We identified variables related to medical conditions that are co-morbid with psychiatric conditions in order to identify how the clinic psychiatrists were taking into consideration medical conditions of their patients. We also identified several national standards in the treatment of three commonly treated psychiatric conditions: Major Depressive Disorder, Bipolar Disorder, and Schizophrenia/Schizoaffective Disorders. Findings: Our results reveal that our physicians are complying with national standards and quality indicators referred to above more than 85 percent of the time and in certain instances the compliance was above 95 percent of the time. Over the period of the study, our rate of annual physical examinations increased from 12 percent to 88 percent. Conclusions: These results show that having psychiatrists address the physical along with the psychiatric aspects of treatment improves patient outcomes. Our experience illustrates that integrating medical care in the psychiatric setting is not such an insurmountable task for resource

	poor safety net hospitals.
1A. Attachment, if applicable (Applicable examples include a peer reviewed journal article, other content published in the literature, or a presentation at a national meeting)	References.docx (14k)
2. Describe the methods use in this project. Include where, why, and how the project was accomplished.	262 randomly selected medical charts of patients being treated in the psychiatric outpatient service were obtained. This sample included 79 patients with a primary diagnosis of Major Depressive Disorder (MDD), 62 patients with a primary diagnosis of Bipolar Disorder (BP) and 121 patients with a primary diagnosis of Schizophrenia/Schizoaffective Disorder (SCZ). The project team consisted of the clinic's medical director, director of research, director of quality improvement, research fellow and research assistants. The problem was identified in September 2011 and a project plan was developed over the year to institute changes in how the psychiatric staff monitored their patients' functioning. By November 2012, the project team had identified the patients' primary care needs as well as psychiatrist training on NQF standards as the two goals for the project. One set of objectives for meeting these goals included increased education of psychiatrists through seminars, supervision and team meetings on NQF standards. The second set of objectives involved the collaboration of the outpatient clinic with NUMC's internal medicine department to have a primary care physician regularly available for physical examinations and medical concerns for our patient population. At the end of the year, a retrospective chart review was conducted for a sample of patients' charts who were being treated for at least a year in the NUMC outpatient psychiatric clinic. The project team identified several core quality standards and metrics from the NQF metrics which would be expected from a clinic for an ideal standard of care and would asses current compliance with these standards including the percentage of patients who had an annual physical examination. Research assistants who were not staff in the clinic completed a chart review of these patients for the chosen standards. No external funding was required and the project did not require additional resources beyond those already available. The evidence base for this intervention was the National Quality Forum indicators 93).The research assistants had access to the electronic record of the patients who were treated and provided a questionnaire that allowed them to record the study data. This data was then entered into statistical software (SPSS v.18) to determine the percentages of charts that were fulfilling the standards.

3. Describe the results of the project. What data was used to support improvement results?	The results revealed a big improvement with regard to the metric that triggered this study: percentage of patients with annual physical exams. It was found that as a result of this intervention, 88% of clinic patients had an annual physical exam completed. This was a 66% improvement from baseline data. The results also showed that for MDD patients, 99% were treated with antidepressants and 95% stayed on an antidepressant for a new episode for at least 12 weeks. Additionally, 98% stayed on the antidepressant medication for at least 6 months (which included new episodes and older episodes). All MDD patients were assessed for alcohol and substance abuse at initial assessment. For BP patients, 89% were prescribed a mood stabilizer at least once, 98% were assessed for alcohol and substance abuse at initial assessment, all were assessed for suicide risk at the initial assessment and 98% of the BP patients' charts included a level of functioning assessment within 12 weeks of initial treatment. Of those BP patients who were prescribed lithium, 70% had blood labs that included at least one creatinine test at the earliest lithium prescription. 90% also had a lithium test at the earliest lithium prescription and 60% had a thyroid function test. For the SCZ patients, 16% were also diagnosed with diabetes and 82% of those patients' charts showed their blood labs included LDL-C and HbA1c tests. All charts were found to include documentation of all of the patients' current medication which included medications not prescribed by the psychiatrist and also any "over-the-counter" medications. We did not experience many barriers to the intervention. These improvements were the result of the intervention and increased focus on national standard indicators. The results also revealed that the psychiatrists' adherence rates with the identified national standards and quality indicators were 85% percent on average with a significant proportion of the individuals scoring at or above 95% rates.

4. Describe what happened as a result of the project. Was the improvement related to the intervention? Can the project be duplicated by other organizations?	As a result of this project, patients treated in the NUMC outpatient psychiatry clinic have received more comprehensive care. The dual goals pursued were to ensure a sharper focus from the clinic psychiatrists in being more mindful of monitoring the patients' medical as well as psychiatric functioning in a more comprehensive way, as well as providing integrated health care to the highly vulnerable population of a safety-net hospital. The interventions of the project resulted in an improvement in compliance with physical exams from 12% at baseline to 88% a year after the start of the intervention. The changes instituted regarding the compliance with national standards on a number of metrics related to psychiatric care, were directly related to education, increased monitoring and the addition of part-time primary care physicians to the clinic. Several reasons enhance the likelihood of duplicating this intervention by other organizations. Firstly, this intervention and subsequent monitoring was not cost prohibitive. The primary care physician was able to bill under their own clinic code, being a part of the same hospital system. If there are free standing clinics, they could use their clinical staff to help with a similar level of engagement and reach out to local community primary care doctors to create collaborative contracts for the primary care intervention. Because many of the patients seen in NUMC's psychiatric outpatient clinic are of low SES and also functioning at a fairly impaired level, this active engagement by their psychiatrist was key in their following up with medicine appointments outside of those explicitly monitored in this study. Anecdotally, we found that many of our clinic patients not only were completing annual physical exams but also following up with getting breast exams and getting their blood labs drawn on a regular basis. In addition, this study also increased the collaboration between psychiatry and internal medicine which is important for continuity of care and to better understand how each uniquely treats the patient but also ensures that the patients' care is comprehensive. The results of this project have been well received by the leadership of the departments and hospital and the project is currently under review for setting future goals. The possible paths for the future implementation of this project are likely to include further integration with outcome measures such as emergency department visits, number of days hospitalized, medication management as well as self-reported scales of satisfaction with the quality of care. The success of the first annual implementation of this project has emboldened the Department of Psychiatry to continue seeking innovative yet cost-effective solutions to better serve the integrated health care needs of its patients.

5. Describe how patients, families, and if appropriate, community was included in the work.	As a result of this intervention and study patients were engaged in an active manner by their treating psychiatrist about their medical conditions both related to their psychiatric condition, treatment or whether it was preexisting. As an extension of the culture change, the trained psychiatrists became more aware of the social barriers to accessing primary care and were able to educated patients and their families more comprehensively about primary care issues. Being aware that the average psychiatric patient dies approximately 20 years earlier than their counterparts (4) made the families and patients more engaged in their care. Separate from the study methodology, as a part of the culture change in the clinic, we also instituted a NAMI group to actively involve the patients and their families. This in turn led to a better understanding of the family situations of our patients that led to poor compliance of both mental and physical care.
Last Update	2013-12-15 22:48:17
Start Time	2013-12-15 21:40:25
Finish Time	2013-12-15 22:48:17