2014 Gage Awards

Reference #	7492137
Status	Complete
Name of hospital or health system	UC Davis Medical Center
Name of project	Depression Collaborative Care: UC Davis Medical Center Implementation
CEO name	Ann Madden Rice
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.)	Over the past 10 years, UC Davis Health System has been building a program for chronic disease management. Our chronic disease management program incorporates physician feedback. At each of our practice sites physicians identified behavioral health and depression management as the highest priority for care management. Similarly, at our teaching site for family medicine, residents identified additional training in depression management as an area for curriculum improvement. The difficulty managing populations with depression and other behavioral medicine problems is not unique to UC Davis Health System. Numerous studies have shown that the majority of patients with depression are treated by primary care physicians. Other studies suggest that nearly 50% of patients with depression may be misdiagnosed in primary care. Patients treated in primary care settings have a higher rate of treatment discontinuation and failure to reach effective treatment targets for antidepressants. Our aim was to improve the management of a population of patients with depression and build an interprofessional care team. Four practices were identified for the intervention including both academic and community clinics. There were slight differences in design between the interventions to accommodate differences between teaching and the non-teaching practices. The 1st project was completed in 3 of 14 UC Davis Primary Care Network (PCN) clinics. The 2nd project was completed in the Family Medicine Hospital-Based clinic (HBC) which is staffed by family medicine residents and faculty. Both interventions utilized the office care team to gather PHQ-9 data and incorporate it into a flow sheet in our electronic medical record. Consulting psychiatrists taught providers how to use the PHQ-9 score and evidence-based treatment protocols. Care managers followed the patient treatment adherence, offered community resources, and helped asses the response to therapy using telephonic outreach. The care coordinators communicated with the psychiatrist and primary care physician virtually and with limited face to face meetings. The project showed promising results with 266 referrals in 2012. 62% of patients in the intervention had symptoms decrease by 50%. The average depression severity for patients in the intervention was significantly reduced to a level considered to be a clinical remission. Patients showed a high level of satisfaction for our programs. 96% would recommend the program to another patient with depression. 100% were comfortable talking with the care manager by telephone. This project demonstrated effective depression population management with a care team and evidence based protocols. It also demonstrated the feasibility of providing collaborative mental healthcare in the primary care office. The success of the pilot projects has engaged our health system leadership to expand collaborative mental healthcare service to all primary care clinics. The project has also served as a

	successful model for care management and population health.
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)	131114APMpresentationOvercomingFundingBarriersSCHER.pptx (126k)

2. Describe the methods use in this project. Include where, why, and how the project was accomplished.	US Davis Health System utilized seed funding from pay for performance awards to fund two pilot projects (completed in 2012) to explore a collaborative mental healthcare model to improve depression outcomes at various UC Davis primary care clinics. The 1st project was completed in 3 of 14 UC Davis Primary Care Network (PCN) clinics. The PCN clinics are located throughout the Sacramento region, and are staffed by physicians trained in family medicine and internal medicine. The 2nd project was completed in the Family Medicine Hospital-Based clinic (HBC) which is staffed by family medicine residents and faculty. The PCN project titled “Depression Care Management” was developed by the Department of Health Management and Education at UC Davis. Three primary care clinics comprising a total of 30 physicians were selected as the pilot locations. Active patient enrollment occurred for 10 months and consisted of direct physician referrals of patients with active major depression disorder with PHQ-9 score > 10. Patients completed a Patient Health Questionnaire – 9 (PHQ-9) at enrollment and at points throughout the study, providing quantifiable measures of depression symptom severity. Project interventions used a three-pronged approach 1) physician education, 2) patient care management and education and 3) weekly case management meetings. A faculty psychiatrist provided the physician education component at four “lunch and learn” sessions per clinic. Topics included a high-yield primary care psychiatry curriculum, including diagnosis and treatment of mood disorders, psychopharmacology, along with case reviews and time for discussion at each session. Physician attendance was tracked and their attitudes and beliefs about depression treatment assessed at study initiation. Both patient and provider satisfaction was surveyed after the project ended. Two licensed clinical social workers (LCSW) provided patient education and depression care management support telephonically, as well as written educational materials via mail. LCSWs also assessed change with the Clinical Global Impression (CGI) scale. The psychiatrist and social workers met weekly to review active cases. Medication recommendations were communicated to the PCP physicians using EMR-staff messages. The family medicine (HBC) project titled “Health Options Partnership Experience” (HOPE) used a similar collaborative mental care model, utilizing a faculty psychiatrist and nurse care manager. The faculty psychiatrist for the project was a dual-trained family medicine / psychiatrist physician, who was also a teaching attending in the family medicine clinic. The psychiatrist provided weekly case management meetings with the care manager and a family resident learner. The project was advertised during two departmental grand rounds, and also during weekly clinic “huddles.” Inclusion criteria were 1) PHQ-9>10, 2) primary diagnosis of major depression 3) access to a telephone 4) and patient willingness to participate.

3. Describe the results of the project. What data was used to support improvement results?	The UC Davis PCN and HBC pilot programs were successful in implementing collaborative mental healthcare models in community and academic settings respectively. At the PCN, the number of physician referrals to the program increased from 165 in 2011 to 266 in 2012, an increase of 61% (Chart 1). Of patients referred to the programs and completed at least two PHQ-9 questionnaires, there was a significant improvement in depression severity. Patients had an average baseline depression rated in the moderate to severe range. The average final depression severity was significantly reduced and in the mild to subsyndromal ranges (Chart 2). Similarly, the percentage of patients responding to treatment as defined as at least 50% reduction in the PHQ-9 score was 62% in the HBC pilot (Chart 3). This reduction is on par with model collaborative care programs (Chart 4). Patient surveys administered by the PCN pilot program also reflect satisfaction with the collaborative care model. While the overall number of responses was small (n=25), 96% stated their depression improved as a result of the program. 87% believed they could discuss their mental health more easily with their primary care provider. 100% were comfortable talking with the care manager by phone and 96% would recommend the program.
3A. Attachment, if applicable (Only graphically displayed data such as charts will be accepted. Data should include baseline and improvement data)	ResultsCharts.pptx (133k)

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?	The successful pilot of collaborative mental health care has been recognized by our health system leadership and integrated into our model for the Patient Centered Medical Home. Reductions in our PHQ-9 scores demonstrate the effectiveness of our intervention. Improved patient and physician satisfaction highlights the importance of this teamwork. In addition, we have received data from our new Accountable Care Organization program that identifies behavioral health as a significant contributor to our total cost per patient. Collaborative mental healthcare represents an innovative example of the interdisciplinary teamwork needed to manage populations, an important function of medical homes. Based on the structure of our pilot, our ongoing model for collaborative mental healthcare will have a dedicated consulting psychiatrist connected to every primary care office. Our care coordination program will provide care managers from our Health Management and Education department. The team of psychiatrist, care manager (registered nurse or social worker) , and primary care physician will proactively manage populations of patients with depression, anxiety, and other behavioral health problems. We will utilize clinical registries to monitor progress with markers like the PHQ-9 score. In addition, we will focus on opportunities to improve the mental healthcare for patients with chronic diseases such as diabetes and congestive heart failure. We will use the cost data from our Accountable Care Project to explore the impact of Collaborative Mental Healthcare on the total cost of care. The greatest benefit Collaborative Mental Health Project may be the demonstration of a team-based model of care. Despite the successful launch of our Care Coordination program, many primary care physicians remain concerned that care management will add more tasks into their current role. The collaborative mental healthcare team demonstrates a structure that would work for other chronic illnesses: consulting specialist assisting the primary care physician with medical decisions with care managers reaching out to patients to assess response to therapy and self-care skills. EMR and registry technology allow us to utilize population data and communicate virtually. At UC Davis, we have piloted this model for congestive heart failure with excellent clinical results, and high satisfaction from providers and patients. This model of collaborative population management could be easily adopted by other organizations committed to providing better “medical homes and medical neighborhoods”. The system must commit itself to addressing the health of its population and will need data to understand how they are performing compared to national benchmarks. The group must also create an alliance between specialty departments and its primary care practices, committing to a model of shared resource and expense. Finally, the system will need to commit resource to

	developing an organized approach to care coordination and management with well qualified interprofessional team members.
5. Describe how patients, families, and if appropriate, community was included in the work.	Collaboration between patient, care team, and community was essential to the success of this pilot. Care managers played a critical role incorporating the patient voice into the ongoing structure of our project. Patient centered educational materials were created to be provided at different touch points in the intervention. The materials included an explanation of our program, how we assess symptoms (The PHQ-9 questionnaire) and self-care exercises. Care managers also worked with patients who wanted to use community mental healthcare resources in addition to their primary care team. The team visited clinics, engaged providers and elicited feedback. Clinics were sent a marketing flyer to post in patient rooms as well as a brochure for physicians to use with patients assuring confidentiality, convenience, at no cost. Following care management contact, a series of resources were mailed to patients that gave specific tools about self-care behaviors such as movement, nutrition, and education to affect wellness. Later in the telephonic relationship a "relapse tool" was sent to patients. Depression classes promoted ongoing support. At closure, an opinion survey followed; two patient quotes in response to the question "What was most helpful to you about the program?" follow: "The fact that someone reached out without me having to do it. Reaching out when someone is depressed is often difficult to do. Thanks for being there!" "Availability to talk with someone before I could make a face-to-face appt with a therapist, and also help over the phone with how to choose a therapist."
5A. Attachment, if applicable (Applicable attachments include documents created for patients, families, or community members or by them as a result of the project)	Gageawardresourcesflyer.pdf (6176k)
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