Project Title: Kearney Nebraska Mobile Nurse Managed Clinic (MNMC)
Comprehensive Geriatric Assessment Project (CGAP)
Organization Name: College of Nursing, University of Nebraska Medical Center, Omaha
Address: 985330 Nebraska Medical Center, Omaha, NE, 68198-5330
Project Lead and Contact: Claudia Chaperon, PhD, APRN, GNP-BC
Phone: 402.559.8928 Fax: 402.559.9666 Email: cchapero@unmc.edu
Population: Provided services to 27 complex medically ill older adults residing in rural Nebraska, their primary care provider, interdisciplinary team members, and support systems
Budget: $77,425.00
Number of Part-Time Personnel: 2 Geriatric Nurse Practitioners, 1 Geropsychiatric Nurse Practitioner, 1 bus driver

Purpose:
The purpose of this University of Nebraska Medical Center (UNMC) College of Nursing project was to achieve two essential goals: (a) the provision of comprehensive geriatric health care services to rural Kearney, Nebraska through use of our Mobile Nurse Managed Clinic (MNMC), and (b) the expansion of our Adult Gerontology Primary Care Nurse Practitioner (AGPCNP) Program that prepares primary care providers for rural Nebraska.

Objectives of the MNMC-CGAP in Kearney, NE included:

1) Provide clinical education of GNP students to increase access to comprehensive geriatric care for older adults living in rural and medically underserved patient care areas in Kearney, Nebraska.
2) Increase geriatric workforce in Kearney by education of providers and developing one new GNP job during 2012/2013.
3) Provide evidence-based Comprehensive Geriatric Assessments for older adults with outcomes indicating optimization of medications, improvement in at least one of the activities of daily living (ADLs), patient goals met, and patient/family satisfaction.

Impact
The Kearney MNMC-CGAP Project provided access to comprehensive geriatric care for elderly individuals in the Kearney area who received evidence-based comprehensive geriatric assessments and treatments that improved appropriate use of medications, mood and cognition, safety in their home, pain management, and increased function.

1) The service provided 504 Adult Gerontology APRN student clinical hours in comprehensive geriatric assessment and management of complex medically ill older adults. Students rated MNMC-CGAP clinicals as the highest possible
clinical experiences and stated that all providers should have MNMC-CGAP clinical preparation prior to serving older adults.

2) There was one new 2012/2013 position created at the Good Samaritan Hospital in Kearney NE for a GNP to provide Transitional Palliative Care services. There is a potential 2014/2015 GNP position opening at Good Samaritan to initiate a new approach to comprehensive geriatric evaluation and management for complex medically ill older adults.

3) Since January 2013, the MNMC-CGAP evaluated 27 new patients, and conducted subsequent family were 48 referrals which is a very high referral rate for a new site. Unfortunately, twenty-one patients who had been referred cancelled prior to being seen. Thus, it was impossible to reach our anticipated goal of 36 new patients in the first year. These cancellations were for a variety of reasons: physician perceived a need but patient refused, patient perceived a need but physician refused; family member or patient was hospitalized or placed in an institution negating need or ability to access the service, or patient was a no-call-no-show. The MNMC-CGAP sees 3 new patients once every month and provides follow-up services for 3 to 6 other patients. If a patient cancels shortly before a scheduled visit, there is insufficient time to replace that patient visit with another patient visit. Distance of travel to clinical site by MNMC-CGAP providers limits available dates and times for accessing new comprehensive services. Furthermore, extensive case management and interaction by phone with patient/family/providers is required for a significant amount of time (weeks) after a comprehensive geriatric assessment. Plans are in development for a new approach to comprehensive geriatric evaluation and management in Kearney.

Clinical Outcomes:

Table 1. Demographics:

<table>
<thead>
<tr>
<th>N = 27</th>
<th>Chronic Persistant Mental Illness</th>
<th>Cognition Impairmnt</th>
<th>Depression</th>
<th>GDS Improved*</th>
<th>GDS Declined*</th>
<th>MoCA Improved</th>
<th>MoCA Declined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5/27</td>
<td>19/24</td>
<td>10/27</td>
<td>4/8</td>
<td>4/8</td>
<td>4/7</td>
<td>3/7</td>
</tr>
</tbody>
</table>

*p < .001

There was a lot of within group variability impacting outcome evaluations. The patients accessing comprehensive geriatric services did not appear to be a consistent cohort suitable for measuring outcomes. For example, there were 5 persons with chronic persistent mental illness, 5 people who were ultra-intelligent, and 5 persons who had severe end stage dementia. These diverse types of patients do not respond to treatment in the same manner or using similar measurable indicators and so are not comparable. Thus, the 8 persons who were medicated for depressed mood and who received cognitive behavioral therapy from the geropsychiatric nurse practitioner, were variable in their response. Those with severe depression responded so tremendously the effect on group benefit was skewed. Also, there were about 5 people who accessed
comprehensive geriatric services to enhance their successful aging. These persons had large numbers of medications but only had about 1 prescription drug on average. The PharmD on staff helped to discern if the herbals and vitamins were safe and appropriate for these high functioning individuals. These people were retired professionals, college faculty, etc. and they did not have dementia so their scores needed to be removed from cognitive analyses. And their high medication usage was misleading because it was mostly vitamins and other supplements. Rather than improve memory, these individuals were seeking the ultimate comprehensive geriatric assessment for healthy lifestyle planning. Finally, several of the participants had severe dementia and we included their scores where they were able to perform. However, 5 persons with end-stage dementia lacked capacity to reliably answer correctly to questions on screening tools. This is the reason for missing data and confusing results.

Overall, each person’s number of medications was decreased by 3.725 medications on average, the dosage of medications was decreased on 1.3 medications per person on average, and 0.615 potentially inappropriate medications per person on average were eliminated. These changes were accomplished in collaboration with providers, patients and their families. This was not always an easy change to sell but much good was accomplished.

Additional surveys of participant and provider satisfaction are still pending. There are 2 family conferences and 3 follow-up visits in process. Final results will be shared at the meeting on February 4, 2014.

**Student Outcomes:**

Students were grateful for this clinical experience that was designed to enhance their learning of comprehensive geriatric evaluation and management of common geriatric syndromes in older rural adults. The variability of types of patients was a huge asset for education of students. The students were able to see that older persons can age well with healthy lifestyles, be active in their communities well into their 90s. At the same time, in contrast, the students evaluated rural sub-populations who had been mentally ill most of their lives requiring specialized mental health and gerontological expertise for their comprehensive geriatric service needs. Finally, the students were able to learn how to assess, diagnose, and treat many common geriatric syndromes, especially the different types of dementias, which corresponded with topics they were learning about in class.

Preliminary student satisfaction results indicated that they appreciated the close supervision by expert faculty that allowed them to safely perform the examination and management of such complex medically ill older adults. The students were so inspired that 3 students are pursuing further advanced training either to become a geropsychiatric nurse practitioner or to pursue the Doctorate of Nursing Practice. One student accessing education on the MNMC-CGAP was a doctoral student and she was so inspired she chose the area of research of
medication optimization in rural older adults as her dissertation topic. These future leaders plan to move rural older adult health care needs to the forefront of excellence in rural scholarly activities.

One rural Kearney student who benefited from many clinical hours on the Kearney MNMC-CGAP is seriously considering becoming the next GNP Lead for Phase II of this project in the Kearney area. Additional student satisfaction data is in process and will be available on February 4th.

**Grant Activity**

**Mentoring of Rural UNMC College of Nursing Faculty**

Nancy Meier, MSN, APRN, P/MH NP-BC, and GNP-BC (Scottsbluff Faculty)

Ms. Meier was a new addition of faculty to the WIN grant beginning in Spring 2013. She is an experienced GNP-BC with specialization in dementia screening and has a certification in psychometric testing for dementia patients. In addition, she was a recent graduate a Adult Psychiatric Nurse Practitioner degree. Her contributions to the comprehensive geropsychiatric needs of patients on the MNMC-CGAP cannot be easily given adequate praise in this short report. Her participation on the WIN also made it possible for her to participate in graduate education for the first time. She excelled in all activities she provided for the WIN grant.

Ms. Meier was able to receive her APRN prescriptive practice collaborative agreement as part of the WIN grant. And provided prescriptive practice orders and cognitive behavioral therapy for all patients with mental health needs.

She is currently completing a grant to pursue solutions for geropsychiatric health needs in Scottsbluff and Kearney. This grant is a Robert Wood Johnson Foundation 2014 Executive Nurse Fellow Program award. The program’s focus is to enhance current leadership activities and professional development. Based on data from the WIN grant, Ms. Meier's focus will be to develop a practice model for geropsychiatric and gerontologic nursing to improve and determine best practices for rural health in Kearney and Scottsbluff. Ms. Meier has extensive background as an entrepreneur in several businesses, including the Dementia Assessment Center in Gering. Her focus for leadership in this new award will be as liaison and educational adjunct to community leaders and programs for improving health care for rural communities in both gerontology and gero-psych healthcare. The award is $25,000 over 3 years and will be submitted in January, 2014.

In addition, Ms. Meier is exploring along with several other faculty on the rural College of Nursing Campuses, the Rural Futures Institute RFI 2014 Teaching and Engagement grant. The education proposal focuses on improving the future of rural communities through economic development, and community capacity. The WIN grant data is a shining precedent that shows her ability to participate in
development in community partnerships leading to increased geriatric capacity in primary care. She also has many awards including a past award from the Hartford Foundation for teaching gerontological evidence-based practice to undergraduate nurses. This grant will be submitted in January of this year. If this additional grant goes forward, Ms. Meier’s focus would be to:

1. Collaborate with rural communities, UNMC divisions and medical facilities to improve the gerontological care and mental health care to older adults in rural communities.
2. To provide sites for interdisciplinary care and undergraduate and graduate training to enhance the clinical experiences of the students thereby expanding the gerontology and mental health care and experiences to rural communities throughout the state.
3. Create partnerships with local communities, health care networks and University programs to enhance the curricular goals and objectives to include rural gerontology and mental health care to older adults.
4. Utilize the Tele-health system throughout the state to maximize the ability to reach all older adults in need of mental health care.

WIN Mentoring of UNMC College of Nursing Faculty
Rachel Fortney, MSN, APRN, GNP-BC (Omaha Faculty)

Ms. Fortney was a new addition of faculty to the WIN grant beginning in Spring 2013. She was a new graduate GNP-BC. She was able to receive her collaborative agreement and prescriptive licensure because she was a part of the WIN funded MNMC-CGAP. Her contributions to the comprehensive geriatric needs of patients and students on the MNMC-CGAP cannot be easily given adequate praise in this short report. Ms. Fortney was a native of Kearney prior to graduating from the UNMC Program for Gerontological Nursing in August 2012. She has contributed significantly to all aspects of the project as the GNP-Lead. Her excellent organizational skills and quick mind for learning the program made it possible to overcome all obstacles and lead to wonderful outcomes accomplished this year.

In addition, Ms. Fortney is now completing her first year in the Doctorate of Practice Program here at UNMC College of Nursing. Her Doctoral Capstone Project will flow from the excellent beginning in practice provided by the WIN grant. Her project will explore a process for assessing palliative care needs in vulnerable poor adults.

WIN Mentoring of UNMC College of Nursing Doctoral Nursing Education
Marcia Shade, MS, BSN, RN (Omaha, Doctoral Student)

Mrs. Shade is an outstanding fulltime doctoral student at UNMC College of Nursing who had expressed a strong desire to create a program of research
about older rural adults. She told the story of her grandmother who had been overmedicated and eventually lost her independence. Mrs. Shade was sure with better understanding and evidence for better practice, that nurses in rural settings could prevent serious adverse drug events due to potentially inappropriate medication usage. She participated in literature review and critique of the manuscript that Dr. Chaperon is about to submit, GNP-Led Rural Mobile Nurse Managed *Medication Optimization in Older Adults*. She was allowed one shadow experience to observe the process of comprehensive geriatric evaluation and management of complex medically ill older adult on the MNMC-CGAP. These experiences and mentoring from Dr. Chaperon have led this outstanding individual to achieve beyond her wildest dreams.

She has submitted her first manuscript towards her requirements for the Doctorate of Philosophy Degree. This manuscript was quickly accepted for publication:


*In addition, Mrs Shade has had a poster accepted that has the same time for the prestigious meeting, Midwest Nursing Research Society to be disseminated in April 2014.*

*Finally, Mrs. Shade will submit a Hartford Foundation Grant in early January for the 2014 Patricia G. Archbold Predoctoral Scholar Award. Dr. Chaperon will be the Gerontology Expert Mentor. Without the support of people like the Women Investing in Nebraska, opportunities and support for predoctoral academic research would not have been possible for this student. She has a contract to perform her first pilot study in rural Nebraska and this may be extended into the Kearney areas as she unfolds her final project in the Fall 2014.*

**Obstacles to Success of the WIN Kearney MNMC-CGAP**

1. Loss of Gerontology Faculty at UNMC College of Nursing Spring 2013.
   a. Overcome by commitment and hard work
   b. New faculty trained and very greatly improved final outcomes
2. Difficulty in getting meetings and referrals from Kearney Clinic our sponsors
   a. Rita Weber, MSN, GCNS acting as liaison to improve communication
   b. Impromptu meetings with Dr. Chaperon, Rachel Fortney, and physician champion Dr. Schaeffer in December netted our goal of meeting with individual physicians and finally ample referrals.
3. Numerous cancellations by patients decreasing our total number of patients. MNMC-CGAP site visits were increased to 2 per month from May through December.

4. Successful transition to sustained comprehensive geriatric services in Kearney would require a lasting partnership between Good Samaritan Hospital and UNMC College of Nursing.
   a. Meeting with Carol Wahl on December 17th, indicated a positive good will towards Good Samaritan providing financial support and housing for a new model of Geriatric Evaluation and Management (GEM) Services at Good Samaritan Hospital in Kearney.
   b. Meetings with prospective GNP graduates and other potential partners towards achieving the sustained services are in process. Looks like a bright future for this program in Kearney.