CU College of Nursing **Proposal Justification**
Proposal for DNP (Doctor of Nursing Practice) Scholarly
Project: **Quality Improvement**

Project Title:

Project Site/Unit:

Student Name:

Student Specialty:

Faculty Advisor Name:

I.   Aim Statement for Quality Improvement (QI)
The organization/clinic/team initiating this project is …
The organization's goals/mission are …
This project will be implementing... (an intervention or a new process to… and/or adding a practice change to...) to help the organization meet a goal by…

The AIM of this QIP is:
To increase/decrease _____ from ____ to ____ by _____ (date). [*this should be a patient-centered outcome that reflects better health or outcomes of care for individual patients, or health care teams/professionals to improve care they provide*]

    Sub AIMs include [*optional*]
    To increase/decrease _____ from _____ to _____by _____ (date) [*sub-AIMs may include improved screening, satisfaction, cost or other nonclinical outcomes*].

II.   Background and Significance
Research shows that improving _____ will lead to better outcomes for patients by _____. Clinical practice guidelines recommend …. Meta-analytic reviews show …. Studies have found … Based on this literature, quality in our practice setting can be improved by …

[Focus your background section on methods for achieving the quintuple aim (better care for individuals, better health for populations, lower cost, care team well-being and health equity). The main outcome should be focused on better quality of care or health for individuals or populations – e.g., lower rates of adverse events, fewer recurrences, higher rates of survival, better quality of life. The other three components of the quintuple aim, lower cost, care team well-being, and health equity, may be secondary outcomes.]

III.   Needs Assessment and Program Design
_____ was identified as a problem by _____, based on _____.

Interprofessional team members collaborating on this project include: …

Note: consider all who this project will impact; for example, if your project involves medication management, invite a pharmacist, a clinical application analyst, data scientist or informaticist for EHR-based QI, a unit QI lead or representative, scheduling and office staff may also be appropriate). Project advisors and clinical site mentors can help you identify team members.

List name and role in this order:
    Your name (DNP Student Project Lead)
    Clinical Site Mentor Name and role in organization
    Other organization leaders name(s) and role(s) as applicable
    Other project team member name(s) and role(s)

An analysis of the various reasons that this problem exists for this population of patients within my organization revealed…
    Include a cause-and-effect analysis (Fishbone)a root cause analysis, OR a Failure Mode and Effects Analysis. If possible, it is helpful if you could also include a Driver Diagram showing the link between program goals, activities, and outcome measures as an appendix. In addition to including the analysis/diagram, please summarize it in a few sentences as well.

Other locally collected data or literature showing that this issue is a problem are …

IV.   Methodology

A. *Description of the Population to be Studied*
All eligible participants (patients, healthcare team members) seen by the organization will be included in this study. Eligibility will be determined based on …. with the following inclusion and exclusion criteria (if applicable). The organization sees a total of _____ eligible patients per year.

[If sampling will be used: "A ___% sample of eligible records was reviewed by ___. Records were selected by the following process …. Steps taken to ensure reliability of the ratings were …."]

B. *Measures and Data Collection Procedure*
[generally, DNP projects have 1-2 outcome measures, 2-3 process measures and 1-2 balancing measures]
Outcome Measures: [*these describe what happens to the patient because of the interventions that you are studying. This(these) must match your AIM and sub-AIM (if applicable) statements.*
    Measure: What you are measuring – NOT your goal /intent
    Goal: [*for categorical measures, state the goal as "improvement to xx%" (an exact number), not only "improvement by xx%" (a percentage of the starting point)*]

Definitions: *[optional, can aid understanding of the goal you are trying to achieve]*

Baseline Data: [***If baseline data are not available you should plan to collect them.]***
[If your measure is starting from 0%, discuss with your advisor to determine whether this is really the best outcome measure; changes starting from a level less than 5% tend to be statistically un-testable; on the other hand, very large, proposed changes might be unrealistic. If you do start from 0, provide justification for your proposed improvement (research, etc.)].

Process Measures: [*these describe what you do, how you monitor your intervention.]*

Measure: What you are measuring – NOT your goal /intent

Goal: [*for categorical measures, state the goal as "improvement to xx%" (an exact number), not only "improvement by xx%" (a percentage of the starting point)*]

Definitions: *[optional, can aid understanding of the goal you are trying to achieve]*

Baseline Data: *[see notes above, however, since many processes may be new as a result of your project, some baselines for process measures will be 0.]*

Balancing Measures: [*these describe any potential adverse effects or unintended consequences of the project, such as an increase in rehospitalizations after a program to create a more efficient discharge procedure, or if the project is focused on a new screening tool, perhaps other screening tools are being done less often because of the added new tool, or perhaps extension fo clinical visit time to the point that patient throughput is diminished). Not every project requires balancing measures, but for most you can think of potential unintended consequences that you want to measure so that you can be sure you avoided them*]

Measure: What you are measuring – NOT your goal /intent

Goal: [*for balancing measures, the goal is no change from baseline – e.g., "maintain at xx%" -- indicating that the outcome didn't get <u>worse</u>*]

Baseline Data: *[see notes above]*

Data Collection Process and Data Security Plan: [*e.g., an existing report in an EMR, a newly created report in an EMR, manual chart abstraction (by whom, how long does it take), questionnaires, etc.; please be as specific as possible*] Data will be stored in … [*e.g., Microsoft Excel, SPSS*]

***C*. Plans for** *PDSA cycles and potential EBP Intervention*
The following PDSA cycles and potential interventions, based on the literature, will be used to achieve the goals of this project …

[By definition, a PDSA cycle is iterative and uses what you have learned in one cycle to inform the next cycle. List a few **possible** *interventions here that may be part of your QIP.*

*These might be designed to address different barriers identified on a Fishbone diagram. **This is not the final list of all possible interventions, just a starting point for subsequent PDSA cycles**. QI projects are expected to achieve some outcome, so it is expected that if an initial intervention does not succeed, you will return to the interprofessional team, consider the data, and design new or implement evidence-based interventions that either make the first intervention more effective or replace it with another one. As you progress, be sure not to just jump from one intervention to the next; work to make each intervention as effective as it can be or determine why it did not work to refine your further quality improvement efforts.]*

D. Potential Scientific Problems
[*Describe potential problems specific to your project and possible solutions to overcome the barriers (e.g., barriers in collecting data, implementing changes, obtaining cooperation, coping with shifts in organizational priorities and personnel, financial limitations, etc., and how to potentially overcome them). The goal of this section is to help the DNP Project Approval Board determine whether the project is likely to succeed in reaching its goals, given the time and the resources available, or whether modifications are recommended to increase the chances that you will have a successful project outcome*].

E. Data Analysis Plan
Outcome and process measures will be tracked with … [*e.g., a table, a run or control chart*]. Data points will be added to these charts … [*with what frequency? For QI, data are usually tabulated monthly or quarterly].*
Pre-post intervention data will be analyzed using … [*e.g., IHI rules for identifying systematic variability on control charts, Fisher's exact test, chi-square or McNemar test, an independent or dependent t-test*].
Descriptive statistics will be reported including … [*e.g., frequencies, means, odds ratio effect size measures. If you are using changes in proportions, Chi Square or McNemar test will be normally used; if you are using data on a scale rather than percentages, report changes as mean and standard deviation (t-tests), not as percentages, and use the appropriate power calculator for t-tests].*

Please schedule a consultation with the Statistical Support team at CU Nursing in the Center for Nursing Inquiry about what type of analysis to use for various types of data before submitting your proposal. Information as to scheduling this is provided in DNP coursework in Canvas.

V.   Summarize Knowledge to be Gained
[*sample language for QI*]: This is a quality improvement project designed to improve local practices in comparison to the best available form of care. Knowledge to be gained involves the implementation of existing evidence-based clinical practices, and is not generalizable; however, may be disseminated to other care settings that face similar problems in implementing and maintaining clinical best practices.

VI. References (citations: Follow APA (American Psychological Association) guidelines and formatting)

Additional appendices that MAY be included:

- Other RCA: Fishbone diagram or SWOT analysis
- Baseline data documentation
- Other visual depictions or documents specific to project justification