Pharmacy Residency Research Project Proposal

**Working Title of the Project**

Development of Intervention-Related Key Performance Indicators for Renal Clinical Pharmacists Using a Modified Delphi Approach

**Principal Investigator**

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**Co-Investigators**

TBD

**Research Site(s)**

Sites with Renal Clinical Pharmacists across Canada

**Background, Rationale and Significance**

Key Performance Indicators (KPIs) are quantifiable measures that reflect an organization’s growth and advancement with specific processes and outcomes. The development of KPIs for a clinical pharmacist in a specific field will serve to advance clinical pharmacy practice and ultimately improve patient care.

Chronic Kidney Disease (CKD) and End Stage Renal Disease (ESRD) are associated with an increased risk of mortality, increased rate of hospitalization and decreased life expectancy. Clinical pharmacists in a renal setting focus on the goals of preventing disease progression and managing comorbid conditions with an emphasis on evaluation and frequent monitoring of pharmacotherapy.

The medical management of pre-dialysis and dialysis patients involves complex highly variable pharmacotherapy due to the number of concomitant drugs used and comorbidities. Recently, a Canadian expert group established a suite of 8 consensus clinical pharmacy KPIs that identified key pharmacist activities including completion of admission medication reconciliation, active participation in interprofessional rounds, resolving drug therapy problems (DTPs), implementing a pharmaceutical care plan, providing inpatient disease and medication education, performing discharge medication education and counseling, performing discharge medication reconciliation, and emphasizing that pharmacists should complete all of these activities, where possible, as a bundle of pharmacist care. However, there is no national or international consensus on which therapeutic interventions that renal pharmacists provide are of most value to patients and the health system.
Specifically, it is currently not known which DTPs that renal pharmacists resolve will provide highest value. Consensus development of a suite of renal pharmacist high value DTPs across multiple renal units in the country will provide a framework that renal pharmacists will be able to use to help prioritize their clinical activities and to benchmark internally and externally which helps identify areas requiring professional practice quality improvement.

**State Your Proposed Research Question**

**Population:** National Collaborative working group. Clinical/research hospital pharmacists working with renal patients (Dialysis and non-dialysis) across Canada.

**Intervention:** Renal pharmacist KPI development using Quality Aggregate domains (Evidence base, Effectiveness, Safety, Modifiability, and Reliance of Pharmacist to perform intervention)

**Comparators:** Not Applicable

**Outcomes:** Development of clinical renal pharmacist KPIs using a systematic, evidence-based, national consensus-building process. *(Have an amount?)*

**Goals and Objectives (must have at least 1)**

**Primary Objective:** To create an evidence based consensus list of renal pharmacist KPIs that will be implemented into everyday practice.

**Proposed Research Design/Methodology**

**Study Design:** Renal pharmacist KPIs will be developed using a modified Delphi technique.

Prior to commencing the Delphi technique, a national collaborative of clinical/research renal pharmacists working in hospital/clinic settings will be created to systematically develop renal pharmacists KPIs. Collaborators will be frontline renal pharmacists, researchers and representative of all 10 Canadian Provinces. The Collaborators will be identified by William Nevers and two other investigators.

The pharmacy resident and 2 other investigators will conduct a comprehensive literature search that will focus on renal pharmacist driven clinical and patient outcomes. This will generate a list of potential KPIs that will be distributed to the collaborative group. The resident along with other investigators will develop a renal pharmacist KPI definition and selection criteria to help guide collaborators through selection process. The final candidate KPIs along with definition and selection criteria will be populated into an internet-based survey tool (Survey Monkey) and distributed to the collaborators.

The surveys will be conducted using a modified Delphi technique (anonymous used for consensus health care indicators) with three rounds of surveys. A webex teleconference will take place between rounds 2 and 3 with the goal of discussing candidate KPIs and to clarify areas of confusion. All candidate KPIs will be carried forward from the previous round and consensus will be determined only after the final round.
**FUNDING SOURCES**
None

**ANTICIPATED START DATE OF THE RESIDENCY PROJECT**
June 2015

**ANTICIPATED END DATE OF THE RESIDENCY PROJECT**
June 2016

**PROJECT SUITABILITY (FOCUS ON RESIDENCY PROJECT SUITABILITY)**
After consideration of the “FINER” criteria (Feasible, Interesting, Novel, Ethical, Relevant) I believe that the project meets all the Project Suitability Criteria—YES—