### TITLE OF PROJECT:
Provider and clinic-level determinants of blood pressure control among patients with early stage chronic kidney disease

### PRINCIPAL INVESTIGATOR INFORMATION

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<th>NAME (Last, first, middle)</th>
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<tbody>
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### GRANT REQUIREMENTS

Select the box below representing the sample and quality metric that your proposal will address.

#### CKD Stage I-III
- [ ] Received eGFR test
- [x] Most recent blood pressure <140/90 mmHg
- [ ] Received LDL cholesterol test
- [ ] Most recent LDL-C <100 mg/dL

#### CKD Stage IV-V
- [ ] Received calcium test
- [ ] Received eGFR test
- [ ] Received a hemoglobin test
- [ ] Received iPTH test
- [ ] Received lipid profile test
- [ ] Most recent blood pressure reading <140/90 mmHg
- [ ] Received phosphorus level test

#### Ischemic Vascular Disease
- [ ] Prescribed daily aspirin/antiplatelet
- [ ] Received LDL test
- [ ] Most recent LDL-C <100 mg/dL
- [ ] Most recent blood pressure <140/90 mmHg

#### Preventive Screenings
- [ ] CKD Screening—received eGFR test
- [ ] Osteoporosis Screening—received bone density screening
- [ ] Pneumococcal Vaccination—received vaccination
- [ ] Tobacco Cessation Counseling—received cessation advice
- [ ] Breast Cancer Screening—received mammogram
- [ ] Cervical Cancer Screening—received one or more screening tests

This is a QUALITY IMPROVEMENT PROJECT.
- [ ] Yes  [x] No

This is a project that will require HUMAN SUBJECTS approval.
- [x] Yes  [ ] No

If yes, do you have IRB approval?
- [ ] Yes  [ ] No  [ ] Pending

Exemption number or IRB approval date: __________________

### KEY PERSONNEL

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<thead>
<tr>
<th>Name</th>
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Sample Proposal

**Specific Aim:** Assess patient, provider, and clinic-level determinants of blood pressure control among patients with early stage (stage I-III) chronic kidney disease.

**Background & Significance:** Chronic kidney disease (CKD) is an increasingly common chronic condition (20 million people in the U.S.1) with significant long-term health consequences, including cardiovascular disease morbidity and mortality.2 Uncontrolled blood pressure is an important cardiovascular risk factor for future adverse health outcomes (myocardial infarction, stroke, worsening CKD).3 The development and targeting of strategies to optimize outcomes for patients with early stage CKD requires an understanding of patient, provider, and clinic-level determinants of cardiovascular risk factors.

**Approach:** The current investigation will include electronic health record information for patients with Stage I-III CKD in 2011 (baseline) and 2012 (reporting year) (n=1,270). Patients who have died during the measurement year will be excluded. The primary outcome variable of interest is blood pressure control (<140/90 mmHg, yes/no). Explanatory variables include the following as measured in the baseline year: sociodemographics (age, gender, marital status, race/ethnicity, language), insurance, health behavior (body mass index, tobacco use), comorbidities (as measured by 29 chronic condition indicators), and UW outpatient visits in the baseline year (primary care provider and specialist). Clinic information includes the number of MD/DOs in a patient’s clinic during the baseline year. Provider information includes the number of CKD patients in a provider’s panel eligible for the quality metric as recorded during the measurement year. The relation between patient, provider, and clinic factors and cardiovascular outcomes will be assessed with multivariable logistic regression, with results presented as odds ratios with accompanying 95% confidence intervals.

**Literature Citations:**