



Effective Health Care Clinical Decision Support Systems for Chronic Kidney Disease Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Clinical decision support systems for chronic kidney disease (CKD) was found to be addressed by a 2011 systematic review titled *Use of clinical decision support systems for kidney-related drug prescribing: a systematic review*. This review covers most of the nominator's interests, and a review on clinical decision support systems and non-pharmacological care is not feasible due to a lack of data. Given that the existing report covers this nomination, no further activity will be undertaken on this topic.
 - Tawadrous D, Shariff SZ, Haynes RB, et al. Use of clinical decision support systems for kidney-related drug prescribing: a systematic review. *American Journal of Kidney Diseases* 2011; 58(6): 903-914. PMID: 21944664.

Topic Description

Nominator: Organization

Nomination Summary: The nominator is interested in the comparative effectiveness of clinical decision support systems in improving the clinical care and outcomes of patients with CKD. This includes questions related to interventions focused on enhancing the delivery of guideline concordant care, slowing CKD progression, reducing CKD complications, and enhancing patient safety (e.g., reducing drug-drug interactions, inappropriate prescribing of nephrotoxins, inadequate monitoring of potentially nephrotoxic medications, failure to identify acute kidney injury risk factors, and inappropriate diagnostic testing (contrast dye)).

Staff-Generated PICO

Population(s): Patients with or at risk for CKD, including adults, children, elderly, obese, African-Americans, disparity populations

Intervention(s): Clinical decision support systems

Comparator(s): Usual care, clinical decision support systems

Outcome(s): Measures of CKD progression (e.g., estimated glomerular filtration rate, creatinine, albuminuria, incidence of end stage renal disease, other measurements of disease status and progression); control of complications and comorbidities; and rates of prescribing errors

Setting: Outpatient, inpatient, primary care, specialist, or pharmacy

Key Questions from Nominator: None

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- Topic was found to be addressed by a 2011 systematic review by Tawadrous and colleagues titled *Use of clinical decision support systems for kidney-related drug prescribing: a systematic review*. This review synthesized studies evaluating the effectiveness of clinical decision support systems in reducing kidney-related drug prescribing errors and/or improving patients' clinical outcomes.