



KDIGO Controversies Conference on Improving CKD Quality of Care: Trends and Perspectives - Breakout Group Questions -

Breakout Session 1: Diagnosis and Prognosis

Group 1: Measures of Glomerular and Tubular Function

1. What factors should be considered when choosing between GFR estimating equations? What factors should be considered when selecting a marker for estimating GFR, e.g., serum creatinine versus cystatin?
2. What factors should be considered when assessing how frequently to measure albuminuria in clinical practice?
3. What factors should be considered when deciding whether to order measures of tubular function in clinical practice and/or when choosing between available markers?

Group 2: Diagnosis and Classification

1. Should GFR and/or albuminuria thresholds for diagnosis or staging of CKD be stratified according to patient characteristics other than age or sex?
2. How should patients be stratified according to parameters that are specific for the underlying kidney disease? How should changes in albuminuria be addressed?
3. How can risk prediction guide individualized clinical care and treatment planning?
 - a. Which endpoints should we focus on: time to dialysis, the number of years of dialysis, likelihood of access-related issues, or others?
 - b. How should we combine or weigh cardiovascular risks versus kidney related outcomes versus survival?
 - c. How can we best integrate risk prediction into patient communication?

Group 3: Innovative Diagnostics

1. What novel diagnostic tools can improve the quality of CKD diagnosis and monitoring?
2. Can innovative renal imaging procedures enhance the quality of clinical care delivered for CKD?
3. What additional information is needed to utilize innovative renal imaging procedures to enhance the quality of CKD care?
4. Can measures of inflammation, fibrosis and, vasculopathy enhance quality of CKD diagnosis and clinical decision making?
5. What is the perspective for the utilization of kidney biopsies in the future?

Breakout Session 2: Disease Modification and Complication Management

Group 1: Models of Care

1. What is the optimal model of CKD care?
 - a. What is the best model of care for CKD patients within primary care practices?
 - b. What is the best model of care for CKD patients after nephrology referral?
 - c. How should (a) and (b) vary by severity of CKD, or the presence of complications?
2. Can routine measurement of patient reported outcome measures (PROMs) be used to improve care for patients with CKD?
 - a. What PROMs are important to patients? (e.g., fatigue, frailty, cognitive impairment, mood disorders, others?)
 - b. Which of these PROMs can be feasibly measured in clinical practice?
 - c. What is known and not known about how to improve these outcomes?
 - d. Given (a)-(c), which PROMs are attractive candidates for measurement in clinical practice, and what knowledge gaps remain before this could be recommended?

Group 2: Individualized Pharmacotherapy

1. What information is needed to prioritize disease-modifying medications to maximize the quality of care?
2. Should drugs be combined if a positive benefit-to-risk ratio has been established individually but not in combination, and if so, for which patients?
3. What are the enablers and barriers for implementation of individualized pharmacotherapy in clinical practice to optimize quality of care in different resource settings?
4. What areas of research remain unanswered to address challenges to implementation of individualized pharmacotherapy across different resource settings?

Group 3: Polypharmacy

1. What is the impact of polypharmacy on CKD progression, cardiovascular outcomes, and patient-centered outcomes?
2. Is there evidence that reducing polypharmacy in patients with CKD can improve the quality of care delivered and/or patient outcomes?
3. What commonly used medications (or combination of medications) can be safely discontinued because they are known to have limited or no benefit or have been shown to cause harm in patients with CKD?
4. How does the prevalence and impact of polypharmacy differ by age, sex, or other patient characteristics?
5. What tools are needed for clinicians to safely address polypharmacy (including the practice of deprescribing)?