



KDIGO Asia-Pacific Implementation Summit on Diabetes & Blood Pressure in CKD

Scope of Work

Summit Aims

The KDIGO Asia-Pacific Implementation Summit on Diabetes & Blood Pressure in CKD aims to identify barriers in implementing two recent KDIGO clinical practice guidelines, namely the KDIGO 2021 Clinical Practice Guideline for the Management of Blood Pressure in Chronic Kidney Disease, and the KDIGO 2022 Clinical Practice Guideline for Diabetes Management in Chronic Kidney Disease. The primary focus would be on the Asia Pacific region, stratified by low-, middle- and high-income countries.

Based on the barriers identified, the Summit aims to discuss and develop a strategic framework to overcome barriers at the different socioeconomic levels to optimize implementation of the two KDIGO guidelines, which will be tailored based on differences in resource levels in the Asia Pacific region.

Meeting Structure

This Implementation Summit will be held in Kuala Lumpur, Malaysia from Saturday, January 20 to Sunday, January 21, 2024. The meeting will bring together approximately 30 experts from across the Asia Pacific region, including nephrologists, health economists, and patients. It will feature 2 breakout groups, each of which will focus on two themes relevant to the meeting. Sunita Bavanandan (Malaysia) & Angela Wang (Hong Kong) will co-chair this Summit.

On the first day of the meeting, January 20, the 2 breakout groups will tackle their first theme.

Group 1: Care Models

- i) Identify barriers in implementing guideline-directed care models for diabetes and CKD.

- ii) Develop a framework of implementation strategies applicable to countries of different resources levels in the Asia Pacific Region to overcome barriers in implementing guideline-directed care models.

Group 2: Guideline-Directed Medical Therapies

- i) Identify barriers in implementing guideline-directed medical therapies for diabetes and CKD.
- ii) Develop a framework of implementation strategies applicable to countries of different resources levels in the Asia Pacific Region to overcome barriers in implementing guideline-directed medical therapies.

On day two, January 21, the breakout groups will focus on their second themes.

Group 1: Lifestyle Interventions

- i) Identify barriers in implementing guideline-directed lifestyle intervention.
- ii) Develop a framework of implementation strategies applicable to countries of different resources levels in the Asia Pacific Region to overcome barriers in implementing guidelines directed lifestyle intervention.

Group 2: Treatment Targets and Disease Monitoring

- i) Identify barriers in meeting guidelines recommended treatment targets and kidney disease monitoring.
- ii) Develop a framework of implementation strategies applicable to countries of different resources levels in the Asia Pacific Region to overcome barriers in meeting treatment targets and in kidney disease monitoring.

Specific questions to be tackled by each group, and the corresponding guideline recommendation statement or practice point, can be found in the following section.

Theme 1 Breakout Questions

Group 1: Care Models

Comprehensive Care: Practice Point 1.1.1: Patients with diabetes and chronic kidney disease (CKD) should be treated with a comprehensive strategy to reduce risks of kidney disease progression and cardiovascular disease.

Self-Management: Recommendation 5.1.1: We recommend that a structured self-management educational program be implemented for care of people with diabetes and CKD (Figure 30) (1C).

Team-Based Integrated Care: Recommendation 5.2.1: We suggest that policymakers and institutional decision-makers implement team-based, integrated care focused on risk evaluation and patient empowerment to provide comprehensive care in patients with diabetes and CKD (2B).

Practice Point 5.2.1: Team-based integrated care, supported by decision-makers, should be delivered by physicians and nonphysician personnel (e.g., trained nurses and dieticians, pharmacists, healthcare assistants, community workers, and peer supporters) preferably with knowledge of CKD.

Discussion Questions:

1. What are the barriers in implementing team-based integrated comprehensive care model recommended by KDIGO in managing patients with diabetes and CKD?
2. What are the barriers in implementing structured self-management education programs recommended by KDIGO in people with diabetes and CKD?

Explore barriers at the different levels for Q1 and Q2 above including:

- i) healthcare financing and reimbursement policy
- ii) healthcare structure and gaps with current care model in your country
- iii) availability of a multidisciplinary professional team and integrated care
- iv) threshold and structure for referral to nephrologists from other disciplines (e.g., cardiologists, diabetologists), or primary care for the required care; may consider back referral or downgrade to PCP care once CKD is stabilized
- v) hospital or unit, healthcare professional level in setting up structured self-management program
- vi) patient engagement in self-management program
- vii) utilization of healthcare technology

3. Discuss and provide a framework of strategies to overcome barriers for countries with different resource settings, as stratified by income levels

Group 2: Guideline-Directed Medical Therapies

RAS blockade: Recommendation 1.2.1: We recommend that treatment with an angiotensin-converting enzyme inhibitor (ACEi) or an angiotensin II receptor blocker (ARB) be initiated in patients with diabetes, hypertension, and albuminuria, and that these medications be titrated to the highest approved dose that is tolerated (1B).

SGLT2-i: Recommendation 1.3.1: We recommend treating patients with type 2 diabetes (T2D), CKD, and an eGFR ≥ 20 ml/min per 1.73 m^2 with an SGLT2i (1A).

Non-steroidal MRA: Recommendation 1.4.1: We suggest a nonsteroidal mineralocorticoid receptor antagonist with proven kidney or cardiovascular benefit for patients with T2D, an eGFR ≥ 25 ml/min per 1.73 m^2 , normal serum potassium concentration, and albuminuria (≥ 30 mg/g [≥ 3 mg/mmol]) despite maximum tolerated dose of RAS inhibitor (RASi) (2A).

GLP1 agonist: Recommendation 4.2.1: In patients with T2D and CKD who have not achieved individualized glycemic targets despite use of metformin and SGLT2i treatment, or who are unable to use those medications, we recommend a long-acting GLP-1 RA (1B).

Discussion Questions

1. What are the barriers in implementing the 4 pillars of guideline-directed medical therapies in KDIGO Guidelines for diabetes and CKD?
 - i) Optimization of RAS blockade
 - ii) SGLT2-I in T2D, CKD and eGFR ≥ 20
 - iii) Add on nsMRA in T2, CKD and eGFR ≥ 25 with maximum tolerated dose of RASi
 - iv) Long-acting GLP1 agonist

Explore barriers, as stratified by income levels, in implementing the 4 pillars of guideline-directed medical therapies including:

- I) availability of drugs
- II) country healthcare financing and drugs reimbursement policy
- III) current care model and prescribing model (primary care and specialist care)
- IV) healthcare professionals' (include endocrinologists, cardiologists, nephrologists) awareness of KDIGO CPG

- V) prioritization of patients at different CKD stages in prescribing guidelines directed medical therapy in face of budget constraints
2. Discuss and provide a framework of strategies to overcome barriers for countries with different resource settings, as stratified by income levels (e.g., improving adherence via polypills)

Theme 2 Breakout Questions

Group 1: Lifestyle Intervention

Protein intake: Recommendation 3.1.1: We suggest maintaining a protein intake of 0.8 g protein/kg (weight)/d for those with diabetes and CKD not treated with dialysis (2C).

Dietary habit: Practice Point 3.1.1: Patients with diabetes and CKD should consume an individualized diet high in vegetables, fruits, whole grains, fiber, legumes, plant-based proteins, unsaturated fats, and nuts; and lower in processed meats, refined carbohydrates, and sweetened beverages.

Salt Intake: Recommendation 3.1.2: We suggest that sodium intake be < 2g of sodium per day (or <90 mmol of sodium per day, or <5g of sodium chloride per day) in patients with diabetes and CKD (2C).

Physical activity: Recommendation 3.2.1: We recommend that patients with diabetes and CKD be advised to undertake moderate-intensity physical activity for a cumulative duration of at least 150 minutes per week, or to a level compatible with their cardiovascular and physical tolerance (1D).

Smoking cessation: Recommendation 1.5.1: We recommend advising patients with diabetes and CKD who use tobacco to quit using tobacco products (1D).

Discussion Questions

1. What are the barriers in implementing the above lifestyle intervention strategies as recommended by the KDIGO in diabetes and CKD guideline?
 - i) Healthy dietary pattern
 - ii) Salt restriction
 - iii) Protein restriction
 - iv) Smoking cessation
 - v) Physical activity

Explore barriers, as stratified by income levels, in implementing the different lifestyle intervention strategies in your countries including:

- i) Country or society level, any salt policy, food labelling, etc
 - ii) Hospital level
 - iii) Healthcare professional level (multidisciplinary team and allied health professionals, primary care versus specialist care)
 - iv) Patient level
2. Discuss and provide a framework of strategies to overcome barriers for countries with different resource settings, as stratified by income levels

Group 2: Treatment Targets and Kidney Disease Monitoring

Glycemic control: Recommendation 2.2.1: We recommend an individualized HbA1c target ranging from 6.5% to 8% in patients with diabetes and CKD not treated by dialysis. (1C)

Blood pressure measurement: Recommendation 1.1: We recommend standardized office BP measurement in preference to routine office BP measurement for the management of high BP in adults (1B).

Recommendation 1.2: We suggest that out-of-office BP measurements with ambulatory BP monitoring (ABPM) or home BP monitoring (HBPM) be used to complement standardized office BP readings for the management of high BP (2B).

Blood Pressure Target: Recommendation 3.1.1: We suggest that adults with high BP and CKD be treated with a target systolic blood pressure (SBP) of <120mmHg when tolerated, using standardized office BP measurements. (2B)

Target Screening of diabetes patients with annual testing for albuminuria for early detection of CKD

Regular monitoring of diabetes CKD patients with albuminuria testing

Discussion Questions

1. What are the barriers in implementing KDIGO HbA1c targets and systolic BP targets in adults with diabetes, high BP and CKD?
2. What are the barriers in implementing standardized office BP measurement to manage high BP in patients with diabetes and CKD?

3. What are the barriers in performing ambulatory BP or home BP monitoring in order to complement standardized office BP readings?
4. What are the barriers in implementing: i) albuminuria screening in diabetes patients for early detection of kidney disease, ii) albuminuria testing for monitoring in patients with diabetes and CKD?

Explore barriers at the different levels:

- i) Government policy
 - ii) Healthcare system and reimbursement (microalbuminuria)
 - iii) Hospital level
 - iv) Primary care physicians and different specialties' (including nephrologists) practice
 - v) Patient level
5. Discuss and provide a framework of strategies to overcome barriers for countries with different resource settings, as stratified by income levels.