WHAT IS IT AND WHY IS IT IMPORTANT?

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DISCLOSURES

KDIGO: Co-Chair (travel, lodging, food)
Scientific Advisor: Akebia, AstraZeneca, Bayer, Janssen, Relypsy, Vifor (honoraria; travel, lodging, food)
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OBJECTIVE

To improve the awareness and understanding of KDIGO’s global activities

What is KDIGO and Why Does It Exist - History, mission, structure

Current Activities
- Controversies Conferences - Recent examples and key learnings
- Clinical Practice Guidelines - Current activities and innovations
- Implementation Activities - From global science to local practice

Challenges and Vision Forward
Kidney Disease: Improving Global Outcomes

GLOBAL SCIENCE
LOCAL CHANGE
Clinical Practice Guidelines in Nephrology began in 1995
Under the umbrella of the US National Kidney Foundation (NKF)
DOQI – K/DOQI - Produced guidelines through 2002

Concept of Global Clinical Practice Guidelines explored in 2003 & 2004
Concept included forming a new global organization
KDIGO was launched in 2004
Incorporated in Belgium as a non-profit foundation
Continued to be managed by NKF under a service contract

KDIGO grew through 2012 when it became independent
KDIGO became self governed and self financed
Led by active volunteers and a small staff
Over 1,000 clinicians and scientists have participated

KDIGO is funded by many sources, is transparent and financially stable
No funding directly from industry for guidelines or guideline updates
Funding is sought for general support, conferences, and implementation activities
KDIGO MISSION

Improving the care and outcomes of patients with kidney disease worldwide through the development and implementation of global clinical practice guidelines.
2019 KDIGO L EADERSHIP

Michel Jadoul, Belgium
Wolfgang Winkelmayer, USA
Mustafa Arici, Turkey
Tara Chang, USA
John Davis, CEO, USA
John Gill, Canada
Morgan Grams, USA
Fan Fan Hou, China
Kunitoshi Iseki, Japan
Magdalena Madero, Mexico
Jolanta Malyszko, Poland
Ikechi Okpechi, South Africa
Rukshana Shroff, UK
Laura Sola, Uruguay
Paul Stevens, Secretary-Treasurer, UK
Marcello Tonelli, Methods Chair, Canada
Suzanne Watnick, USA
Angela Webster, Australia
David Wheeler, UK
Christina Wyatt, USA

Executive Committee Members: KDIGO Co-Chairs:
KDIGO AIMS TO

- Translate scientific advances into useful and practical clinical practice recommendations and observations.

- Maintain and enhance its brand representing trusted and usable global scientific information.

- Make the global science available and understandable to clinicians around the world.

- Implement its work through local and regional programs taking into account cultural, economic, language, regulatory and environmental issues.

- Adapt, simplify, prioritize and validate recommendations and observations for clinicians’ use in everyday practice.
KDIGO’s Agenda

- Clinical Practice Guidelines
  - KDIGO’s core mission = Development, vetting, dissemination, and implementation of Guidelines

- Guideline Updates
  - Evidence based, not time based, streamlined process makes quicker updates possible

- Controversies Conferences
  - Conferences that examine significant topics in nephrology and related disciplines that are not fully resolved. Over 40 so far. Each results in a published Conference Report, usually in *Kidney International*. Often a Controversies Conference will prompt development of a guideline.

- Implementation Summits
  - Gathers KOL’s from a country or region to discuss barriers and opportunities for implementation of KDIGO recommendations

- Implementation Conferences
  - Usually done through invitations from local nephrology societies

- Educational Tools
  - Variety of formats, languages, electronic or print, resource driven
KDIGO GUIDELINES

Hepatitis C  April 2008
Mineral Bone Disorder  July 2009
Transplant Recipient  Oct 2009
Acute Kidney Injury  March 2012

Glomerulonephritis  June 2012
Anemia  August 2012
Blood Pressure in CKD  November 2012
Diagnosis and Management of CKD  January 2013

Lipid Management  November 2013
CKD-MBD Update  July 2017
Living Kidney Donors  August 2017
Hepatitis C Update  October 2018
KDIGO ACTIVITIES

• Clinical Practice Guidelines
  • Bone and Mineral Metabolism Update - 2017
  • Hepatitis C and CKD (“Update”) - 2018
  • Transplant Candidate Selection - 2019
  • Blood Pressure and CKD Update - 2020
  • Glomerular Diseases Update - 2020
  • Diabetes Guideline - 2020

• Controversies Conferences
  • CKD – CVD Series
    • Arrhythmias - 2016
    • Heart Failure - 2017
    • Coronary Artery Disease - 2018
    • Central & Peripheral Arterial Disease - 2020
  • Potassium Management - 2018
  • Anemia Series - #1 Dec 2019; #2 Dec 2020
  • Dialysis Series
    • Dialysis Initiation - 2018
    • Blood Pressure and Dialysis - 2019
    • Home Dialysis - 2020
    • Symptom-Based Complications in Dialysis - 2021
  • Acute Kidney Injury - 2019
  • Early Identification & Intervention - 2019
KDIGO Implementation Activities

Examples from the 2017 CKD-MBD Guideline Update
CKD-MBD GUIDELINE UPDATE: IMPLEMENTATION TOOLS

- CKD-MBD Quick Reference Guide

http://kdigo.org/guidelines/ckd-mbd/
CKD-MBD GUIDELINE UPDATE: IMPLEMENTATION TOOLS

• CKD-MBD Guideline Update Video

http://kdigo.org/guidelines/ckd-mbd/
SUMMARY OF 2017 KDIGO CKD-MBD GUIDELINE RECOMMENDATIONS


NOTE: The 2009 CKD-MBD Guideline Chapter 2 and provide the Introduction and Methodological Approach, respectively; therefore, guideline recommendations begin from Chapter 3. Updated Recommendations are Denoted in Boxes.

This educational tool was supported by an independent educational grant from SANOFI.

http://kdigo.org/guidelines/ckd-mbd/
CKD-MBD GUIDELINE UPDATE: IMPLEMENTATION TOOLS

• 2017 CKD-MBD Guideline Update Speaker’s Guide

http://kdigo.org/guidelines/ckd-mbd/
KDIGO-ISN Webinar

- 73% Attentiveness
- 125 Attendees
- 77 Interest Rating

- 604 people registered for this webinar – a very high number, if not a record!
- Summarized of 3 years of work in 30 minutes
- 20+ Q&A questions in 15 minutes
- Held June 21, 2017
- Recording available at https://academy.theisn.org
KDIGO Impact

KDIGO
Citations by largest STM Publisher: Elsevier

- Hep C: 166
- CKD-MBD: 405
- Kidney transplant recipient: 565
- AKI: 655
- GN: 191
- Blood Pressure: 516
- Anemia: 310
- Lipid: 247
KDIGO Guidelines are the TOP FIVE MOST CITED ARTICLES in *Kidney International Supplements*.
The KDIGO conference report on “The definition, classification and prognosis of CKD” is the MOST CITED ARTICLE in Kidney International (658 times).

The 2017 KDIGO conference report on “Screening, diagnosis, and management of patients with Fabry disease” is the FOURTH MOST READ ARTICLE in Kidney International.
Number of KDIGO citations in four largest STM publishers

- Elsevier: 2622 citations
- Springer: 1684 citations
- Wiley: 1472 citations
- Lippincott: 3578 citations
"KDIGO is only 1 of 3 guidelines scored highest on all quality domains"
KDIGO IMPACT

KDIGO has been cited in more than 150 textbooks
NOT JUST IN NEPHROLOGY!

Cardiology, Critical Care, Hepatology, Infectious Diseases, Rheumatology, Urology, etc.
Prevention of cardiac surgery-associated AKI by implementing the KDIGO guidelines

**Results:** AKI was significantly reduced with the intervention compared to controls [55.1 vs. 71.7%; ARR 16.6% (95 CI 5.5–27.9%); \( p = 0.004 \)]. The implementation of the bundle resulted in significantly improved hemodynamic parameters at different time points \( p < 0.05 \), less hyperglycemia \( p < 0.001 \) and use of ACEi/ARBs \( p < 0.001 \) compared to controls. Rates of moderate to severe AKI were also significantly reduced by the intervention compared to controls. There were no significant effects on other secondary outcomes.

**Conclusion:** An implementation of the KDIGO guidelines compared with standard care reduced the frequency and severity of AKI after cardiac surgery in high risk patients. Adequately powered multicenter trials are warranted to examine mortality and long-term renal outcomes.
WHAT LIES AHEAD – CHALLENGES & FORWARD VISION

• Expand KDIGO’s Guideline portfolio
• Guideline updates near real time
• Drive cutting edge in guideline methodology
• Expand outreach beyond nephrology
• Further increase diversity in all KDIGO Activities
• Better document KDIGO’s impact on populations