



**Implementation strategy:  
Understanding needs in low and  
middle income countries**

**Vivekanand Jha**

**On behalf of the KDIGO Controversies Conference  
participants**

# Deepening Nephrology

~ Science and Practice ~

May 26 (Fri) ▶ 28 (Sun), 2017

Venue

Sendai International Center  
Tohoku University Centennial Hall



# KDIGO Mission Statement

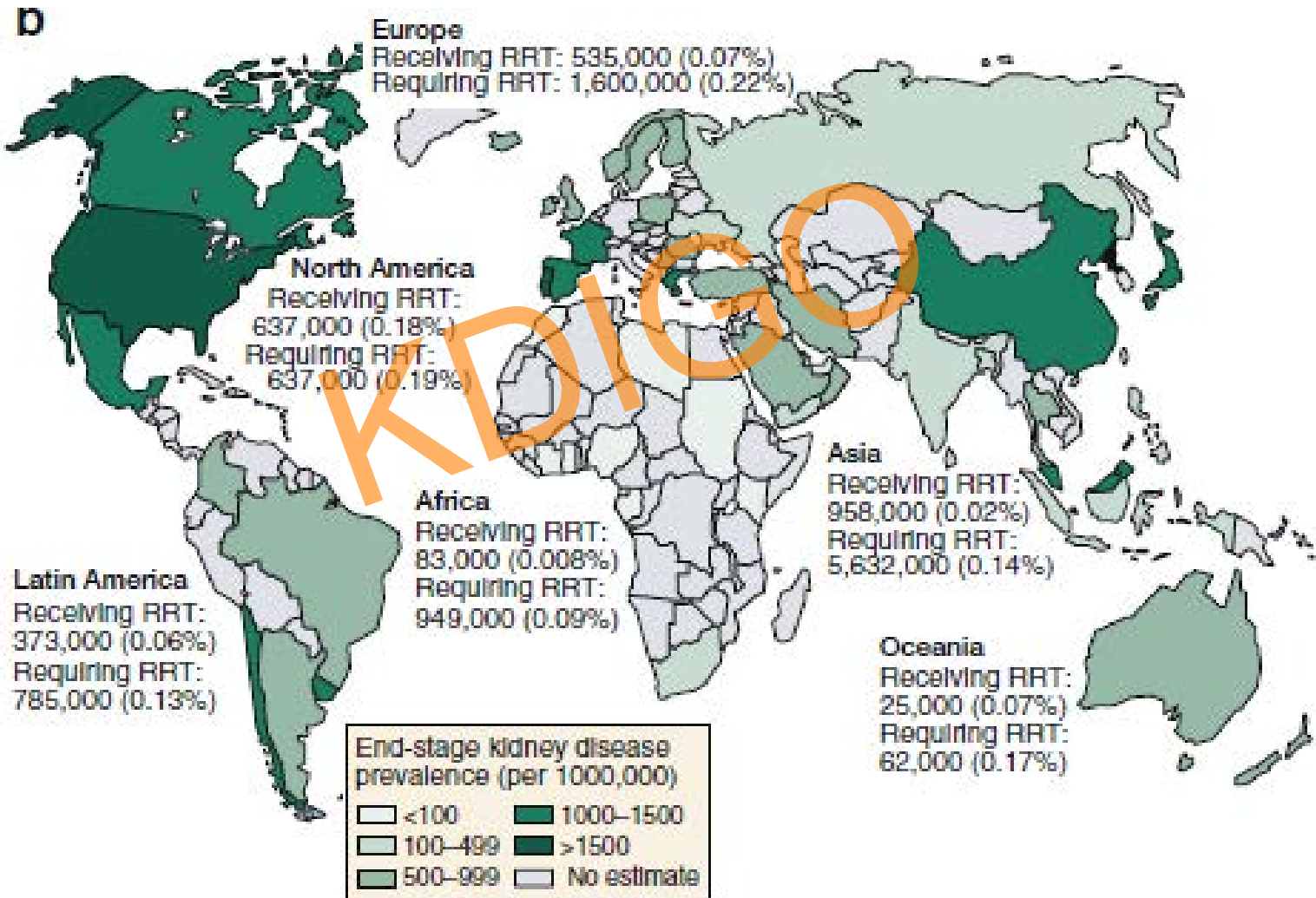
To improve the care and outcomes of kidney disease patients worldwide through the development and **implementation** of global clinical practice guidelines.

# Clinical Practice Guidelines

Systematically developed statements, to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances

**Implementation of guidelines is  
a local responsibility**

# Global prevalence of end-stage kidney disease

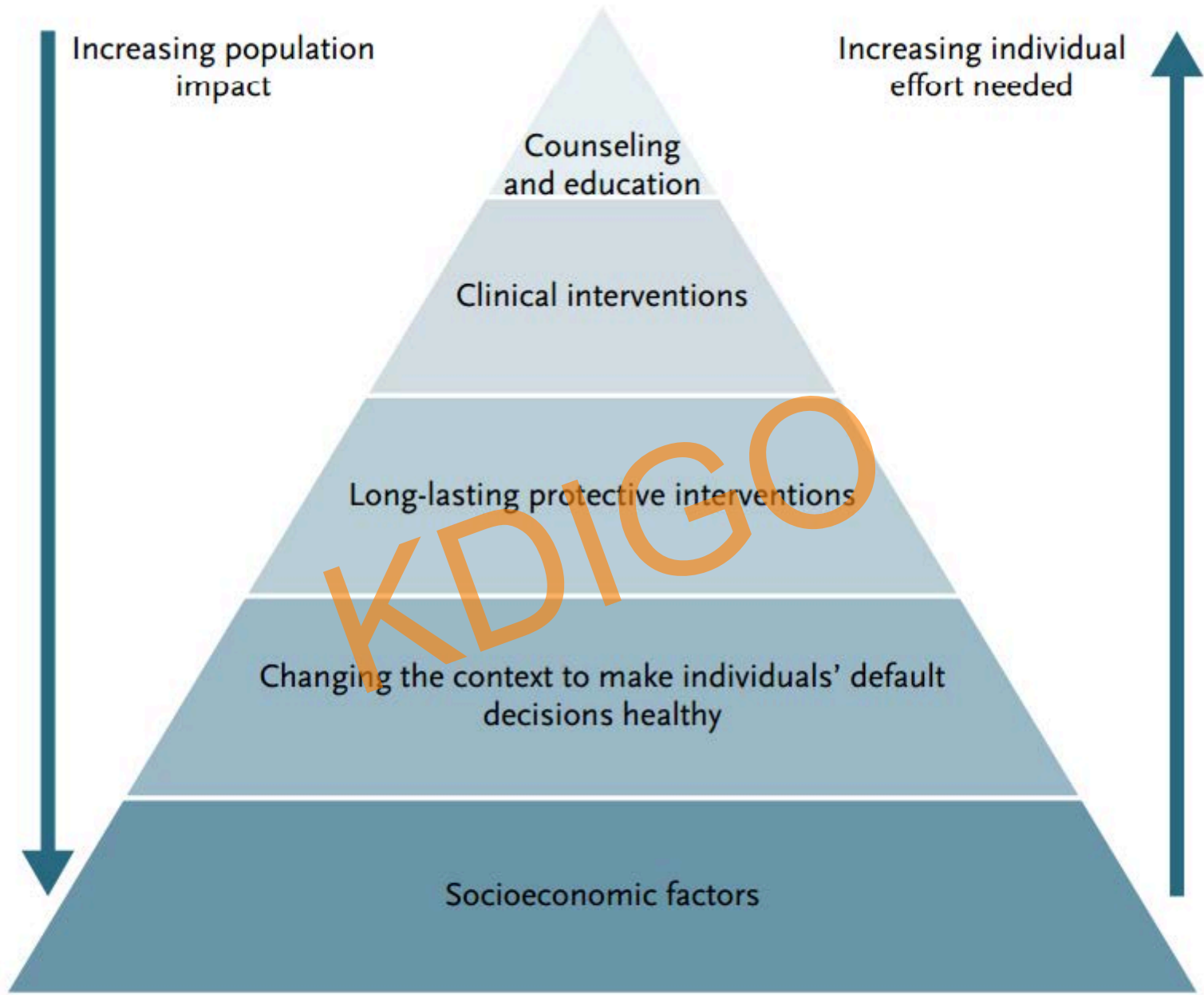




# SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

- By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all



**Figure 1. The Health Impact Pyramid.**

*Frienden, NEJM 2015*

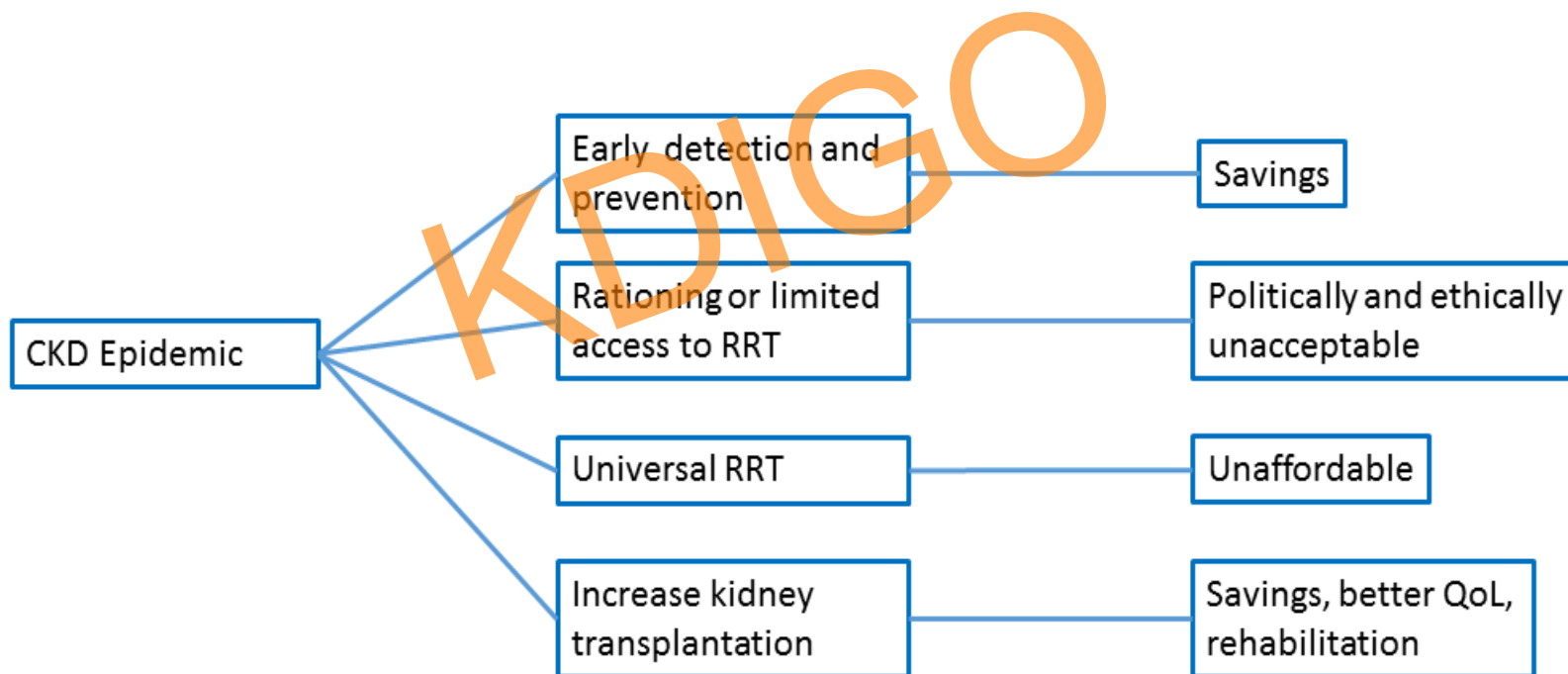


# How to make public policy?

a. Define the problem in your region

b. Analyze public policy alternatives

c. Show cost-benefit data

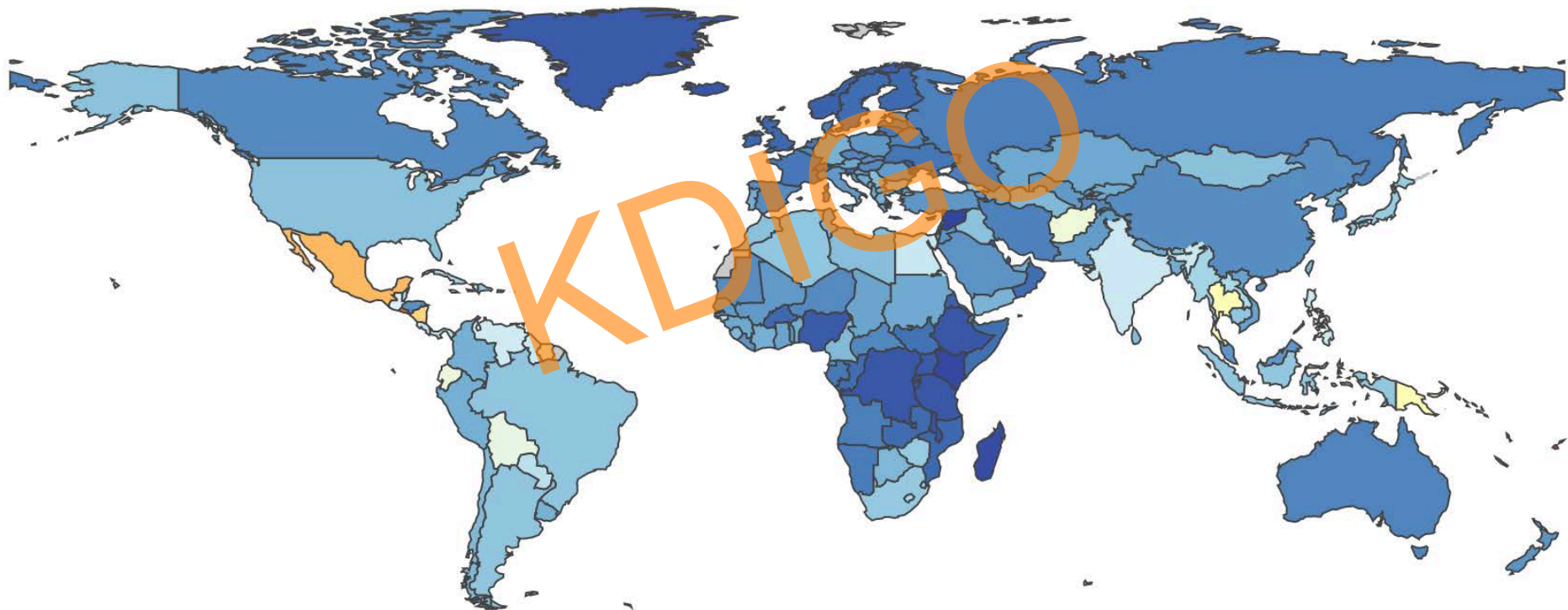


# What data do policymakers need?

---

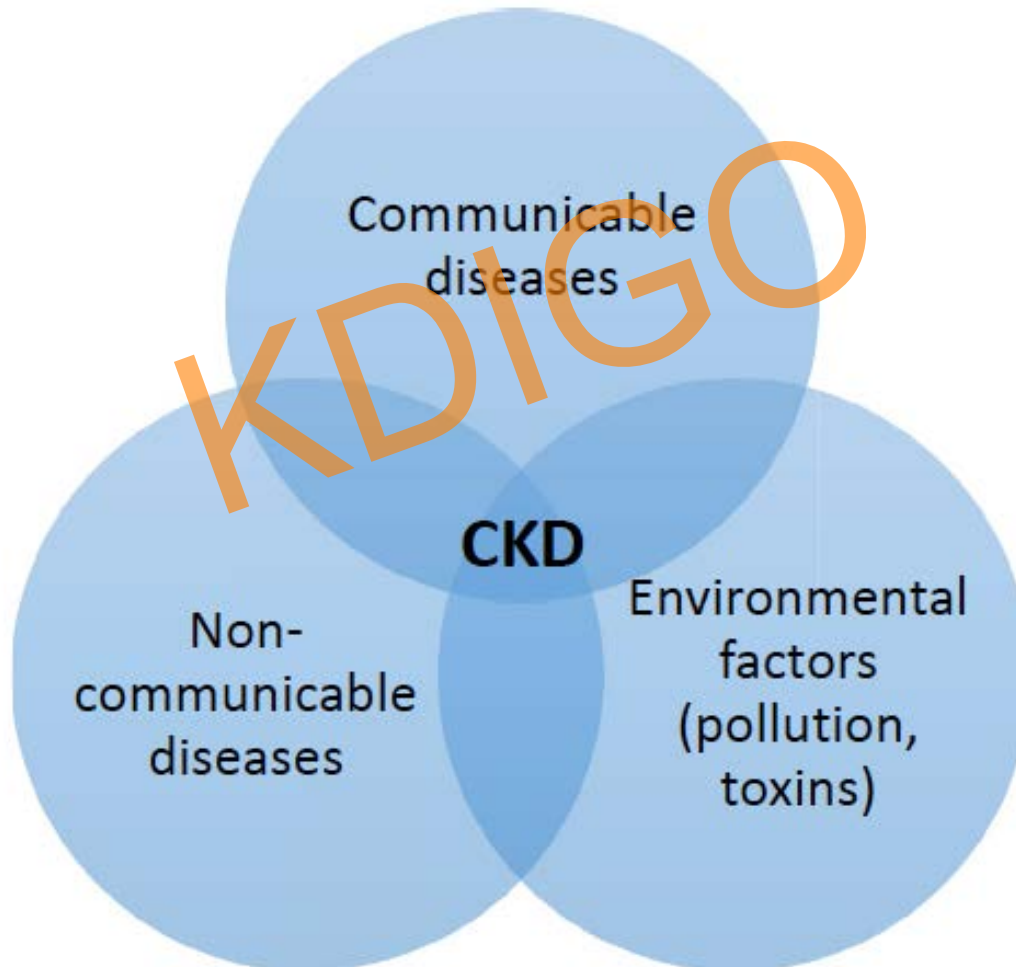
- What are the **data on intensity of AKI and CKD burden** and intersection with other diseases/risk factors?
  - What is the **impact** of kidney disease on population health and economics (in terms of DALYs and cost of care)?
  - What is the **cost-effectiveness** of interventions at different stages of CKD?
  - What **target populations** might benefit from kidney disease interventions (e.g., age, groups at increased risk, geographic location, or occupations)?
  - Are there **local factors** that exacerbate or mitigate disease risk or implementation strategies?
  - Who are the **stakeholders and allies**?
  - Are there **local evidence-based best practice management guidelines**, or can global guidelines be adapted to suit local needs?
  - What **innovations** can improve the delivery of care for kidney disease in an **affordable** and **scalable** manner in the context of local health system?
  - How can we **evaluate effectiveness** of health care intervention (i.e., components, process and outcome)?
  - Is there a need to set up kidney disease **registries**?
  - What is the **research agenda** for improving locally appropriate implementation?
  - What are the **metrics for measuring successful implementation** and progress of kidney disease prevention efforts?
-

# Chronic kidney disease DALYs per 100,000 (2015)



<https://vizhub.healthdata.org/gbd-compare/>

# Traditional and non-traditional risk factors interact in CKD development and progression



# Targets for advocacy initiative

- Recognize preventable deaths due to AKI in LMICs as a human rights issue
- Recognize CKD as an important cause of death and disability by national health authorities
- Include screening and management for AKI and CKD in existing or planned NCD and CD programs
- Reduce cardiovascular morbidity and mortality in those with CKD
- Retard progression of CKD and the need of RRT
- Increase government funding for CKD detection and prevention
- Increase access to RRT in an equitable and just manner
- Increase rates of organ donation and transplantation
- Establish a national ESRD registry

# Barriers to implementation

## Internal

related to the guideline itself

## External

related to the clinical environment and  
particular local circumstances

# Internal Barriers

- Ethnic and genetic variations
  - HIVAN
  - Disease behavior in different races/ethnicities
- Differences in disease characteristics
  - Differences in CKD causes
  - Proteinuric v non-proteinuric diseases

# External barriers

- Structural factors
  - financial disincentives
- Organizational factors
  - inappropriate skill mix
  - lack of facilities or equipment
- Peer group
  - local standards of care not in line with desired practice
- Individual factors
  - knowledge attitudes, skills
- Professional - patient interaction
  - problems with information processing.



# Barriers to kidney disease care in LMIC

- **System-level barriers**

- Lack of access to health insurance
- Lack of trained manpower and resources
- Lack of education around standardized, guideline-based uniformity of care

- **Kidney disease-specific issues**

- Lack of comprehensive curricula
- Focus on unregulated improvement
- Lack of
- Inadequate health systems response to kidney care delivery
- Omission of kidney disease screening and management in course curricula
- Lack of data on AKI and CKD burden and its consequences
- Inadequate understanding of risk factors for CKD development and/or progression
- Inadequate understanding of the consequences of missed opportunities for kidney disease care
- Delayed diagnosis and late presentation with advanced disease and complications
- Fragmentation of information and communication on kidney disease care
- Lack of locally appropriate or adapted guidelines for kidney disease (e.g., language, complexity, implementation tools)
- Lack of standardized care tools for physicians and educational tools for patients

# Understanding and identifying barriers to guideline implementation

- Understanding the barriers to Change
  - Awareness and knowledge
  - Motivation; Practicalities; Acceptance and beliefs; Skills
  - The external environment
- Identifying the barriers to change
  - Talk to key individuals
  - Observe clinical practice in action
  - Use a questionnaire, Run a focus group,
  - Brainstorm

*<https://www.nice.org.uk/media/default/about/what-we-do/into-practice/support-for-service-improvement-and-audit/how-tochange-practice-barriers-to-change.pdf>*

JSN 2017, Sendai

# Overcoming Barriers to Change

- Educational materials
- Educational meetings - interactive workshops
- Educational outreach visits
- Opinion leaders
- Clinical audit and feedback
- Reminder systems
- Patient-mediated strategies (e.g. mass media campaigns)

# Overcoming barriers to change

Understanding	identifying	Overcoming
<ul style="list-style-type: none"> <li>• Awareness and knowledge</li> <li>• Motivation</li> <li>• Practicalities</li> <li>• Acceptance and beliefs</li> <li>• Skills</li> <li>• External environment</li> </ul>	<ul style="list-style-type: none"> <li>• Talk to key individuals</li> <li>• Observe clinical practice in action</li> <li>• Use a questionnaire</li> <li>• Brainstorm</li> <li>• Run a focus group</li> </ul>	<ul style="list-style-type: none"> <li>• Educational materials</li> <li>• Meetings, workshops</li> <li>• Outreach visits</li> <li>• Opinion leaders</li> <li>• Clinical audit and feedback</li> <li>• Reminder systems</li> <li>• Patient-mediated strategies</li> </ul>

# Executive summary of the KDIGO Controversies Conference on Supportive Care in Chronic Kidney Disease: developing a roadmap to improving quality care

Sara N. Davison<sup>1</sup>, Adeera Levin<sup>2</sup>, Alvin H. Moss<sup>3</sup>, Vivekanand Jha<sup>4,5</sup>, Edwina A. Brown<sup>6</sup>, Frank Brennan<sup>7</sup>, Fliss E.M. Murtagh<sup>8</sup>, Saraladevi Naicker<sup>9</sup>, Michael J. Germain<sup>10</sup>, Donal J. O'Donoghue<sup>11</sup>, Rachael L. Morton<sup>12,13</sup> and Gregorio T. Obrador<sup>14</sup>

## Decide leader, stakeholder

## Prepare people/ environment for GL implementation

- Account for pt preferences/views

## Determine current position

- Review local environment
- Audit current practices
- Identify gaps

## Decide on appropriate implementation techniques

- with respect to barriers

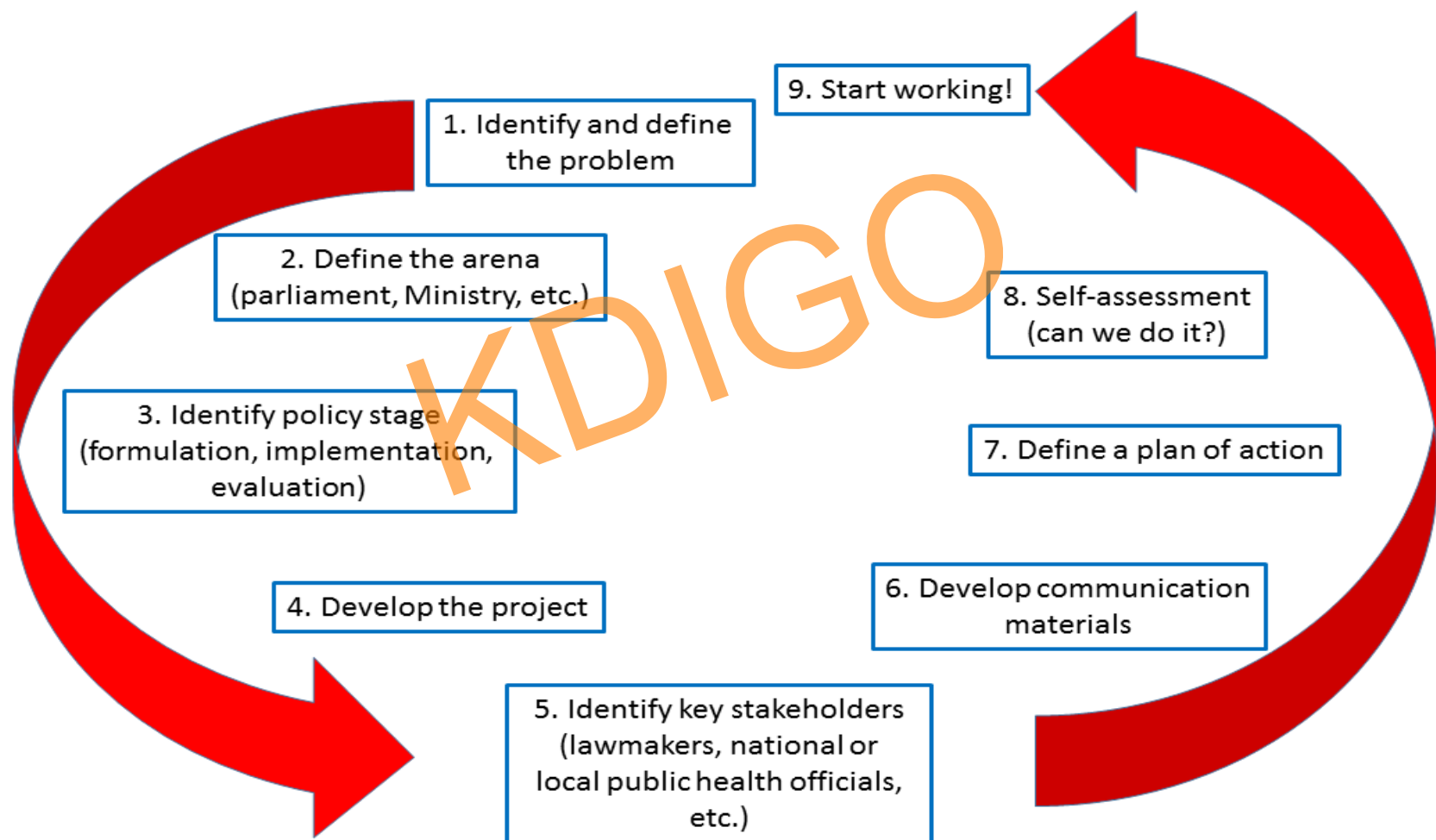
## Action plan

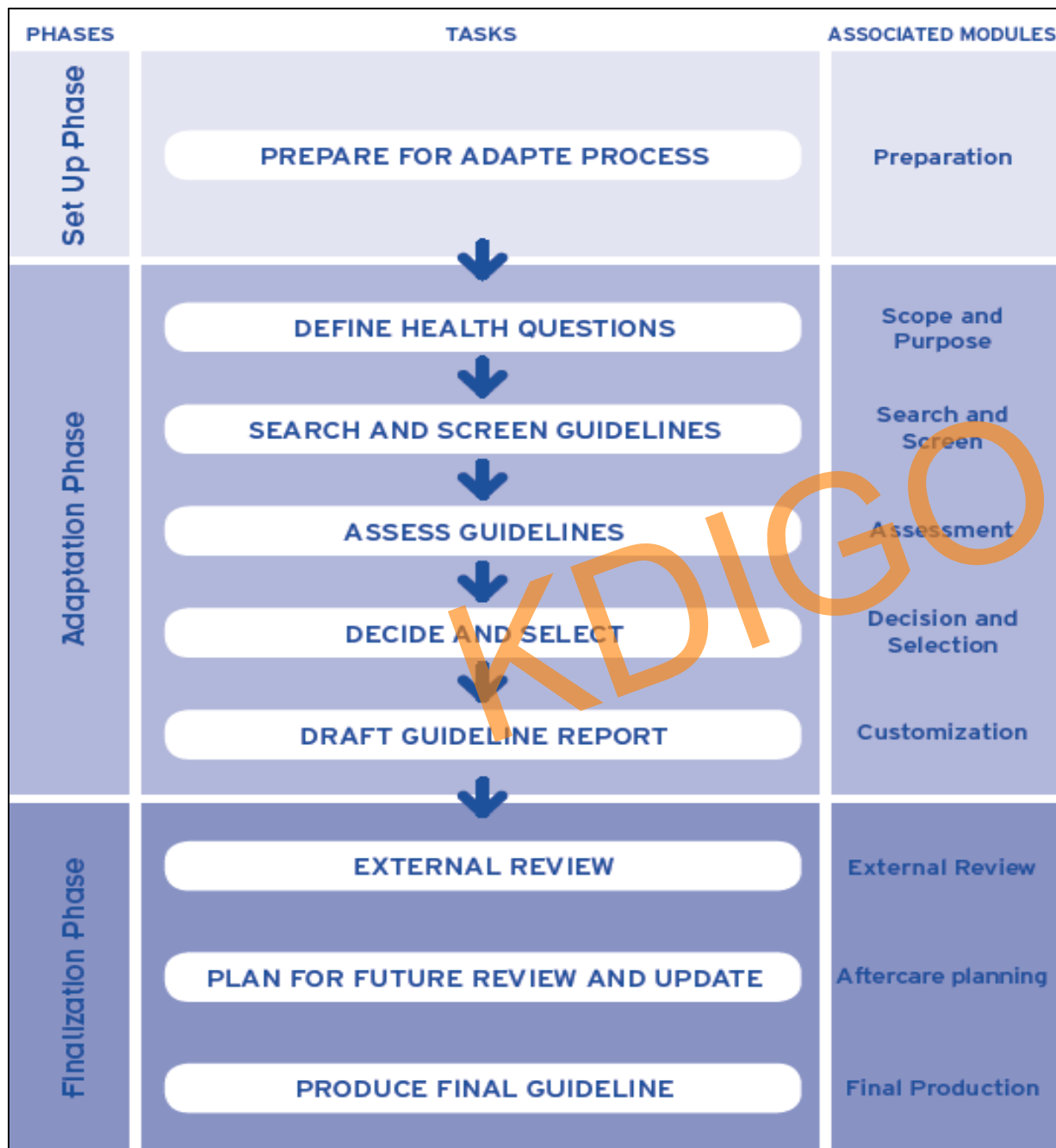
- putting it together

## Evaluate process

- Audit
- Reward
- modify

# Engage stakeholders

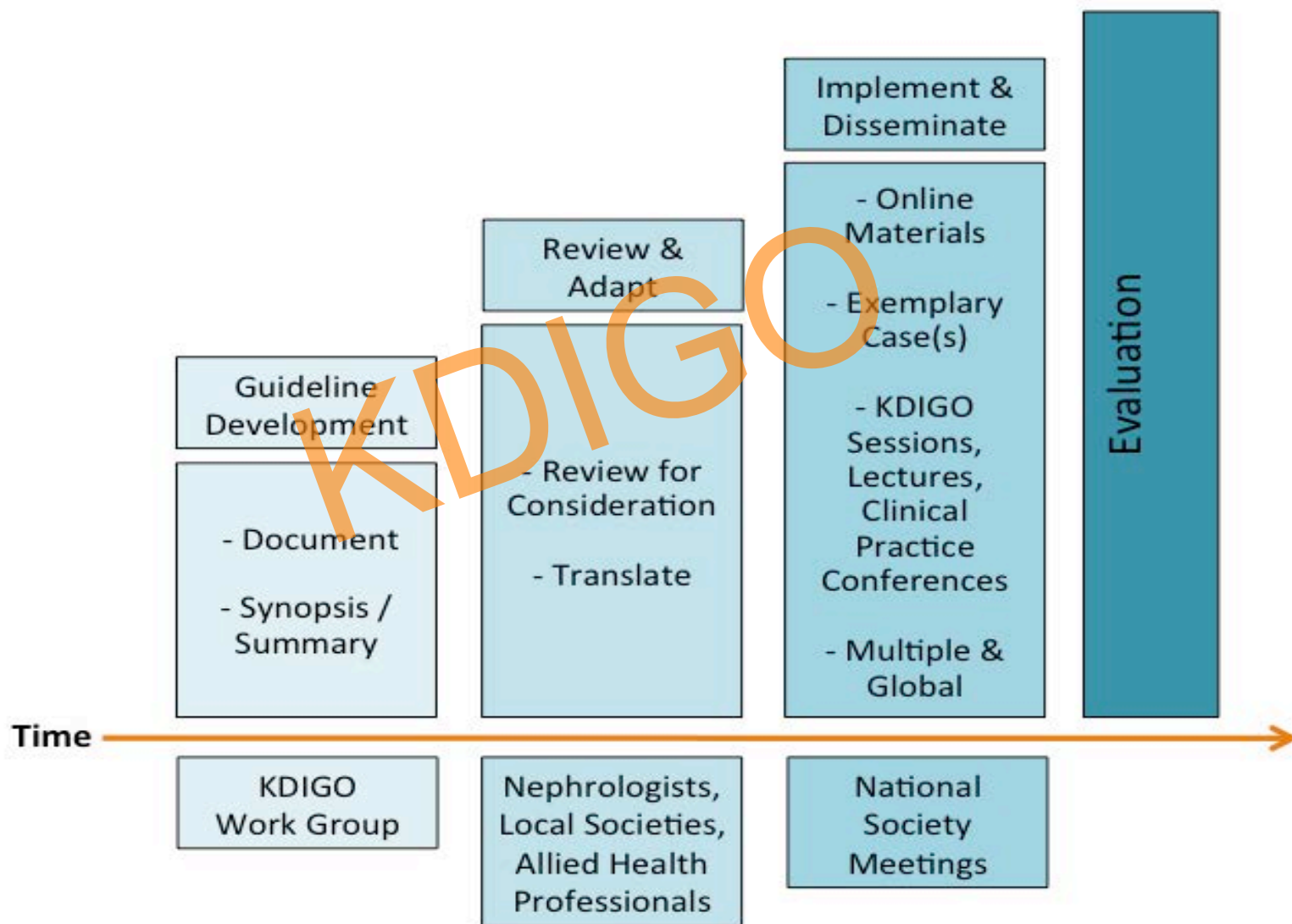




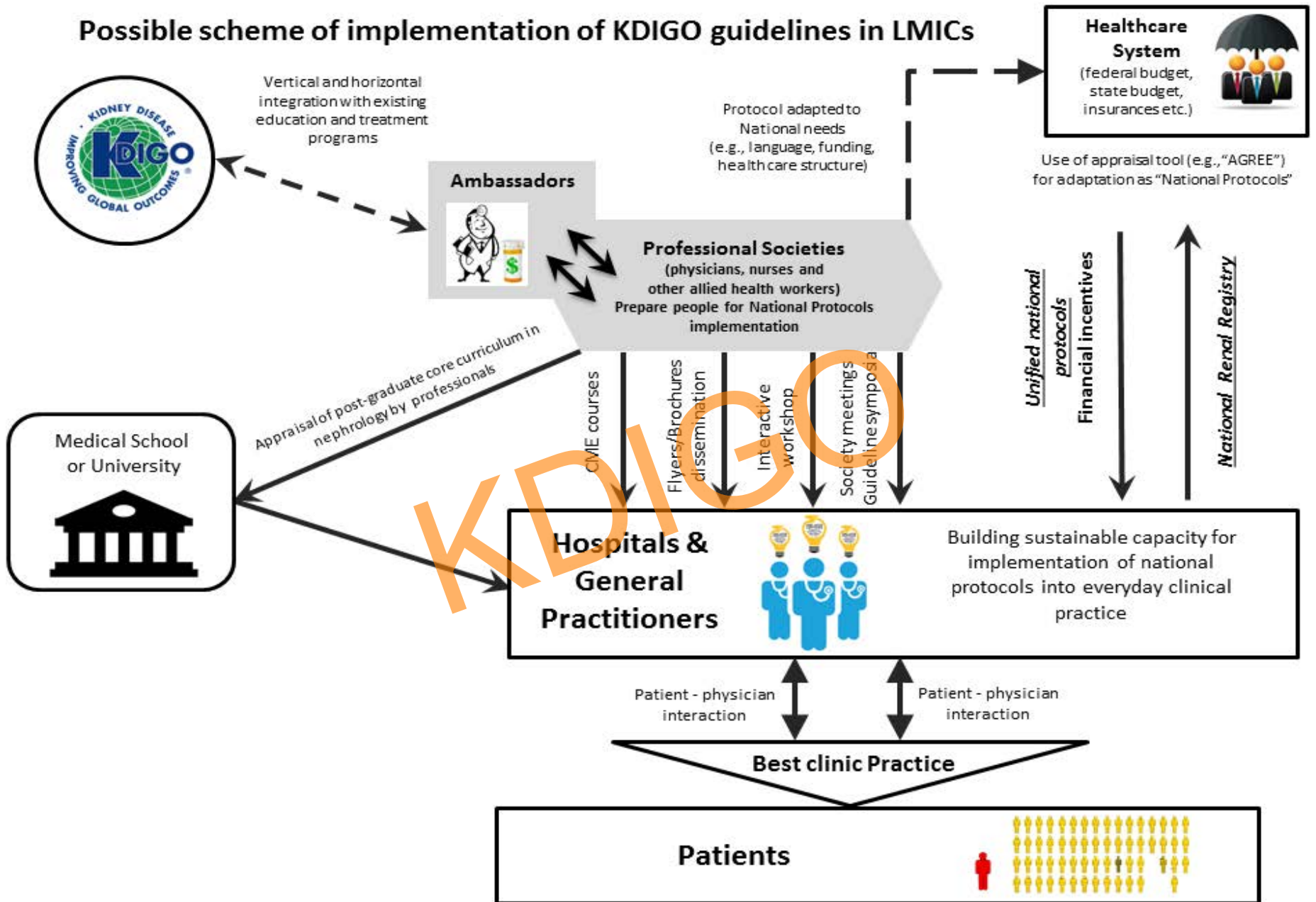
# ADAPTE Process for developing resource sensitive guidelines



# Pathway to implementation



# Possible scheme of implementation of KDIGO guidelines in LMICs



# Understanding kidney care needs and implementation strategies in low- and middle-income countries: conclusions from a “Kidney Disease: Improving Global Outcomes” (KDIGO) Controversies Conference



OPEN

Vivekanand Jha<sup>1,2</sup>, Mustafa Arici<sup>3</sup>, Allan J. Collins<sup>4,5</sup>, Guillermo Garcia-Garcia<sup>6</sup>, Brenda R. Hemmelgarn<sup>7</sup>, Tazeen H. Jafar<sup>8,9,10</sup>, Roberto Pecoits-Filho<sup>11</sup>, Laura Sola<sup>12</sup>, Charles R. Swanepoel<sup>13</sup>, Irma Tchokhonelidze<sup>14</sup>, Angela Yee Moon Wang<sup>15</sup>, Bertram L. Kasiske<sup>16</sup>, David C. Wheeler<sup>17</sup> and Goce Spasovski<sup>18</sup>; for Conference Participants<sup>19</sup>

*Kidney International* (2016) **90**, 1164–1174;