THE GLOBAL KIDNEY POLICY FORUM 2021:
FOCUS ON NORTH AMERICA AND THE CARIBBEAN
The **12 Recommendations** to Global Kidney Health serve as a benchmark to offer practical and actionable guidance to improve kidney care.

All countries in the region experience a high prevalence of CKD, but the provision of kidney replacement therapies (KRT) varies enormously among and within countries, with only 20% of countries providing Universal Health Coverage to care for patients with CKD.

“We have not seen reductions in Chronic Kidney Disease (CKD) mortality, contrary to other non-communicable diseases, but instead the prevalence of CKD and kidney failure is increasing all over the world, and most rapidly in low- and middle-income countries, with great inequities in the provision of services.”

*Dr Soumya Swaminathan - Chief Scientist at WHO*

“I would like to urge you to adopt a more aggressive approach, not only to educate, but to stimulate and animate, motivate and agitate, and change the docility of the NCD community. Provoke outrage at the inequity in how society is dealing with NCDs and CKD.”

*Sir George Alleyne - Director Emeritus, Pan American Health Organization (PAHO)*

The **ISN North America and the Caribbean Region** encompasses the English-speaking Caribbean Islands, Canada, and the United States, a broad, heterogeneous range of countries in terms of population size, ethnicity, culture, economies, and healthcare expenditure.
The International Society of Nephrology's (ISN) Global Kidney Policy Forum brings together high-level decision-makers and stakeholders to address the burden of kidney disease in a particular country or region and share strategies and concrete policy actions for the prevention and improved management of the disease at both the regional and global level.

The Global Kidney Policy Forum: Focus on North America and The Caribbean 2021 was the third in this ongoing series of ISN Policy Forums. During the first Policy Forum, which took place in Mexico City, Mexico, in April 2017, stakeholders addressed the growing burden of kidney disease and developed a set of 12 Recommendations to Global Kidney Health. The recommendations were designed to guide future efforts to reduce the burden of kidney disease worldwide and underpin the work of each Global Kidney Policy Forum.

Speakers and participants at the 2021 Virtual Forum, held as part of Virtual World Congress of Nephrology 2021, addressed key kidney-related challenges affecting the English-speaking Caribbean nations, Canada, and the United States of America, proposing concrete solutions to deliver best-practice kidney care. The program highlighted the importance of continued commitment to the adherence to and advancement of the 12 Recommendations to improve kidney care.
CKD is, in fact, the 10th leading cause of death globally; its burden is projected to increase worldwide, and kidney replacement therapy (KRT) remains inequitable, with massive gaps between those who need it, those who can access it, and those who can afford it, in particular in low- and middle-income countries where only 4% of kidney patients have access to KRT.

Advancing care of CKD patients is vitally important, and the ISN Framework for Developing Dialysis Programs in Low-resource Settings, developed alongside the World Health Organisation (WHO), and launched at the Policy Forum 2021, aims to contribute to the delivery of:

**UN Sustainable Development Goals (SDGs) 3.4:**

By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being – and SDG 10 - Reduce inequality within and among countries - by providing broad guiding principles to support health systems worldwide to develop resource-sensitive solutions to care for kidney disease patients in low-resource settings.

The Forum also underlined the devastating impact that the COVID-19 pandemic has had on all 17 SDGs, threatening the achievements made in many areas. While the virus has impacted everyone, COVID-19 has magnified the inequalities in the treatment of CKD and all other non-communicable diseases (NCD), as it is the poorest and most vulnerable populations who have been most affected by the pandemic. This is why the ISN supports the WHO’s Triple Billion initiative to ensure one billion more people benefitting from universal health coverage, one billion more people better protected from health emergencies, and one billion more people enjoying better health and well-being by 2023.

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2. [https://www.who.int/news-room/q-a-detail/the-triple-billion-targets#:~:text=By%202023%2C%20WHO%20proposes%20to,better%20health%20and%20well%20being](https://www.who.int/news-room/q-a-detail/the-triple-billion-targets#:~:text=By%202023%2C%20WHO%20proposes%20to,better%20health%20and%20well%20being), accessed on May 3, 2021.
The availability of nephrologists varies considerably within the region¹:

- The US has twice as many nephrologists as Canada - 29.54 per million population (PMP) - and six times as many as Jamaica - 4.27 PMP.

- Only 20% of countries in the region provide universal health coverage for patients with CKD; therefore, significant numbers of patients need to make out-of-pocket payments to access kidney care, including dialysis, medication, and surgery.

- Home hemodialysis is typically only available in Canada and the United States and is unavailable in 60% of countries in the region.

- Significant limitations still exist within AKI and CKD surveillance systems as there are no established registries in the region for non-dialysis AKI or CKD.

- In addition, many jurisdictions do not offer kidney transplantation services, and policies to increase access to transplantation over the past 20 years have been relatively unsuccessful.

To mitigate these barriers, policymakers should prioritize the provision of universal health coverage to all patients with CKD and seek to address workforce shortages through the development of multidisciplinary teams and telemedicine solutions.

Increased investments are required to prevent and manage CKD and expand health information systems to monitor disease burden and quality of care. Policies to eliminate financial disincentives (i.e., reimbursement of lost wages and out-of-pocket expenses) to living donors, preventing discrimination from employers or insurers, and ensuring the provision of immune-suppressive drugs to avoid organ re-transplantation can positively impact access to transplantation.

¹ Source: https://www.theisn.org/initiatives/global-kidney-health-atlas/
Challenges and Solutions for Indigenous Populations

The North America region is home to approximately 30 million indigenous people who, compared to the non-indigenous population, tend to have lower socioeconomic status, poorer health outcomes, and a higher prevalence of chronic diseases, mainly secondary to diabetes, obesity, and hypertension.

Several barriers limit their access to kidney care, including racism within the health care system, stigma, ethnic bias, mistrust toward conventional medicine, a lack of close-to-home healthcare facilities due to remote living, and insufficient infrastructure to reach healthcare facilities easily.

As explained by Dr Evan Adams, policy actions aimed at improving access to kidney care need to place indigenous populations at the center by tackling stigma and ethnic bias, embedding the teaching of “cultural humility”, which is the “ability to maintain an interpersonal stance that is other-oriented (or open to the other) concerning aspects of cultural identity that are most important to the [person]” within the education system. In addition, increased investments should be secured to create adequate infrastructures and close-to-home healthcare facilities and develop new technological innovations such as portable dialysis devices, which will help provide sustainable, appropriate, and effective treatment services for indigenous populations in remote areas.

COVID-19 and Kidney Care in the Region: Challenges and Solutions

COVID-19 caused severe disruption to the treatment of people living with non-communicable diseases in the region, with dialysis patients amongst the most severely affected. Given the substantial disparities between and within countries in the region, responses to the COVID-19 pandemic have varied significantly.

While the first wave of the pandemic saw 80% of fatalities occur in Canadian nursing homes and a massive decrease in transplantation activities, the Canadian Provinces demonstrated strikingly different responses to this public health crisis.

In the Caribbean, more heavily populated countries like The Dominican Republic, Cuba, and Jamaica bore the brunt of the epidemic. A lack of personal protective equipment and dialysis machines for COVID-19 patients, combined with staff shortages and diversion away from kidney care to deal with these patients, has hindered kidney care provision in the Caribbean islands.

In addition, the fall in tourism led to a drop in income which, in turn, led to a decrease in the number of people able to obtain treatment. Lockdowns also prevented people from traveling to receive care.

The United States experienced high mortality rates due to COVID-19, with a shocking 31% mortality rate for people suffering from kidney diseases. COVID-19 highly impacted the transplantation services, with a 51% decrease in deceased donor transplants and 71% of centers suspending live donor transplantations.

In the aftermath of the pandemic, priority should be given to building more resilient healthcare systems that ensure the provision of kidney care and treatment, addressing health workforce shortages and medical migration, as well as driving innovation toward patient-centered solutions.

With COVID-19 having magnified both the inequalities in treating kidney patients, particular focus needs to be given to the most impoverished and vulnerable populations who have been disproportionately affected by the pandemic.

Challenges and Solutions for Minority Populations

The ISN North America and the Caribbean region includes a divergent mix of ethnicities and cultures. However, the region has a high incidence of kidney diseases which is more prominent in ethnic minorities. In the USA, for example, African Americans comprise 13% of the total population but account for 35% of those with ESKD, likely due to genetic factors such as hypertension, diabetes, and cardiovascular disease. Hispanic minorities have the second-highest prevalence of CKD after African Americans whilst Native Americans are 50% more likely to experience kidney failure compared to white Americans, primarily due to the high prevalence of diabetes.

COVID-19 has exacerbated ethnic disparities as people of color are less likely to have access to testing and are more prone to suffer from a pre-existing condition, live in high-density housing, be exposed to pollution, and be an essential worker. Collectively, these factors have led to higher infection and death rates for ethnic minorities.

A tailored approach should be provided to vulnerable and disadvantaged populations to ensure equitable access to kidney care. In addition, protection from out-of-pocket healthcare expenditure should be guaranteed with universal health coverage and increased investments made on prevention measures specifically targeted at ethnic minorities and high-risk populations.
ISN’S 12 RECOMMENDATIONS ON GLOBAL KIDNEY HEALTH

1. Work within current frameworks promoted by the World Health Organization and the United Nations such as the Sustainable Development Goals of Agenda 2030 for Sustainable Development, Universal Health Coverage, and Life Course approach in the context of Health 2020 to develop and implement policies to ensure integration and synergies for kidney disease prevention and treatment within existing initiatives.

2. Develop and implement public health policies to prevent or reduce risk factors for chronic kidney disease in adults and children, including strategies to promote maternal and child health and nutrition, to reduce the burdens of diabetes, hypertension, obesity and tobacco consumption, to promote safe work environments and prevent infectious diseases.

3. Implement and support ongoing surveillance mechanisms to better understand and quantify the burdens of acute and chronic kidney disease within and outside the context of non-communicable diseases, specifically by developing robust national and regional registries for AKI, CKD and ESKD.

4. Educate the public and people at risk about kidney disease within non-communicable disease education campaigns.

5. Improve awareness of kidney disease among health care workers at all levels and ensure appropriate access to essential tools and medications required for diagnosis and treatment.

6. Work towards universal health coverage to permit sustainable access to effective and affordable medication (for hypertension, diabetes, cardiovascular disease) to treat risk factors for kidney disease and delay kidney disease progression.

7. Support education for a skilled nephrology workforce to implement prevention and treatment of kidney disease at all stages.

8. Implement early detection, preventive and treatment strategies for AKI.

9. Integrate early evidence-based treatment for CKD acknowledging the important synergies with diabetes, hypertension and cardiovascular disease.

10. Develop and implement transparent policies governing just and equitable access to kidney disease care including dialysis and transplantation, according to international standards, and to support, safe, ethical, affordable and sustainable programs.

11. Promote and expand kidney transplantation programs within countries and across the region.

12. Support local, regional and transnational research on kidney disease to further understanding of prevention and treatment strategies.
KIDNEY CARE: AN IMPERATIVE TO CHANGE

The Global Kidney Policy Forum 2021 presented an international view on kidney health in the North America and Caribbean region, proposing concrete policy actions to improve the delivery of and access to kidney care. Simply put, the kidney community needs to develop a more aggressive approach to motivate, even agitate, both policymakers and politicians so that they become agents of change in delivering equal access to kidney care.

Concrete steps need to be taken to achieve the SDGs and the Triple Billion Initiative fully. As highlighted by the ISN Framework for Developing Dialysis Programs in Low-resource Settings, the adoption of multi-sectoral, integrated, and people-centered approaches that aim to decrease risk factors for all NCDs and prevent kidney disease is critical to the advancement of kidney care. Policies targeting specific ethnic minorities and high-risk groups and the inclusion of multi-morbidity management in effective primary health care services will be crucial in achieving equitable health outcomes.

Investments in people’s health literacy, physicians’ education in their approach to others, and innovative technologies will be vital in tackling the increasing burden of kidney disease. Additional funding should be directed toward building more resilient healthcare systems that ensure kidney care and treatment and address health workforce shortages and migration from poorer areas of the region. Increasing the proportion of successful transplantations can be achieved by implementing policies that remove barriers to preventing kidney donations and decreasing organ rejection rates by improving recipients’ access to immunosuppressive drugs.
SPEAKERS AND SESSION CHAIRS IN ORDER OF APPEARANCE

Professor Vivekanand Jha, President International Society of Nephrology (2019-2021) (Chair)

Keynote Speaker: Dr Soumya Swaminathan, World Health Organization (WHO Perspectives on Global Kidney Health Issues)

Keynote Speaker: Sir George Alleyne, Pan American Health Organization (Sustainable Development Goals in the Context of CKD and NCDs)

Professor Aminu Bello, University of Alberta (Global Kidney Health Atlas: Findings for North American Region: Context and Comparisons)

Professor Adeera Levin, University of British Columbia (Global Kidney Policy Forum: The 12 Recommendation and High-Level Overview North America Region)

Professor Rulan Parekh, The Hospital for Sick Children (Chair)

Ms Mary Beaucage, Can-SOLVE CKD Network (Chair)

Dr Evan Adams, Indigenous Service Canada (Indigenous Health and Wellness: Challenges and Opportunities, Focus on Kidney Diseases)

Dr Murray Vasilevsky, Montreal General Hospital (Challenges in Delivering Kidney Care in Rural, Remote and Indigenous Populations in Canada)

Professor Everard Barton, University of the West Indies (Chair)

Dr Ian Thomas, Mount St. John's Medical Centre (Overview of Diversity of Caribbean Regional Resources for Kidney Care)

Dr Lori-Ann Fisher, University of the West Indies (COVID-19 and Kidney Care in the Caribbean)

Professor Soyibo Adedamola, University of the West Indies (Challenges and Successes in the Region regarding Kidney Disease)

Dr Neil Powe, San Francisco General Hospital (Chair)

Associate Professor Susanne B. Nicholas, University of California (Current State Funding, Care and Access to Kidney Services)

Ms Glenda Roberts, Kidney Research Institute, University of Washington (Patient Perspectives and Kidney Health Initiative)

Assistant Professor Shuchi Anand, Stanford University (CKDu Global Trends and in North America)

Professor John Gill, University of British Columbia (Initiatives to Improve Access to Transplantation in North America: Comparisons and Contrasts)

Professor Myles Wolf, Duke University School of Medicine (Chair)

Dr Samaya Anumudu, Baylor College of Medicine (Chair)

Dr Deborah Zimmerman, Riverside Hospital (Observations and Insights from Canada)

Dr Kyaw Hoe, University of the West Indies (Observations and Insights from Jamaica)

Professor Jai Radhakrishnan, Columbia University (Observations and Insights from USA)

Professor Adeera Levin, University of British Columbia (Summary of the Challenges and Opportunities in North American and Caribbean and Global Implications)

Professor Vivekanand Jha, President International Society of Nephrology (2019-2021) (Closing remarks)