The global case for ESKD and dialysis

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We have now returned from a very successful World Congress of Nephrology (WCN) that took place in the warmth and vibrancy of Mexico City.

For ISN as a society, the congress brings the beginning of a new presidency. I’m delighted to open this edition of ISN News as the new ISN President and want to start by congratulating Adeera Levin on her truly inspiring efforts and dedication over the last two years.

Building on the ISN 0by25 initiative, the ISN CKD Closing the Gaps initiative was launched during her tenure, setting out to ensure access to appropriate resources to optimize the outcomes for Chronic Kidney Disease patients.

There were many firsts, including the ISN Global Kidney Health Summit that helped define a roadmap for ongoing care, research and policy activities. The ISN Global Kidney Policy Forum promoted discussion amongst policymakers and professionals regionally and internationally. The ISN Global Kidney Health Atlas now documents the world’s ability to deliver kidney care along the six domains of universal health care. I’m looking forward to building on these achievements.

In this issue, we focus on End-Stage Kidney Disease (ESKD), especially improving global access to integrated ESKD care. The next pages reveal how ISN is already active in this area, but much more can be achieved by building on these existing activities.

Over the next two years I’m looking forward to working with all members of ISN to improve the lives of patients with kidney disease.
**News in brief**

**0by25 Pilot Feasibility Project**

Testing education interventions to make a difference

Can an educational and training intervention project, implemented in low-resource areas improve outcomes for Acute Kidney Injury (AKI) patients? Our centers in Bolivia, Malawi and Nepal are helping us understand this question.

The first observational phase of the ISN 0by25 Pilot Feasibility Project has generated data for over 750 recruited patients with a moderate to high risk of developing AKI. Exciting first findings from this phase of the project were presented by Prof. Ravindra Mehta and his research team at the ISN World Congress of Nephrology in Mexico City.

Following two weeks of onsite training with our centers’ local healthcare teams in late February 2017, ISN is now well into the second phase of the project, testing the education interventions to help improve the diagnosis and treatment of AKI as well as understand their barriers.

**ISN Global Kidney Policy Forum builds momentum for better kidney health in the Americas**

On April 21, 2017, in partnership with the Mexican Ministry of Health, Sociedad Latinoamericana de Nefrología e Hipertensión (SLANH) and with the participation of The Lancet, ISN brought together high-level decision-makers and stakeholders to address the burden of kidney disease in the Americas region.

Participants shared best practices and strategies for kidney disease prevention and management and agreed on a roadmap to close policy gaps and ultimately improve risk prevention and service delivery for kidney health in the region and beyond.

The Mexico City meeting is the first in a series of ISN Policy Forum meetings that will take place at regular intervals in the future. The unique format will provide an opportunity to bring an international viewpoint on key issues related to preventing and managing kidney care, which impact a country or region.

**www.theisn.org/membership**

**ISN Membership news**

New single sign-in feature exclusive to ISN members

Make the most of our publications. Now, accessing them can be even quicker thanks to our new sign in feature for members. You can access Kidney International (KI) and other ISN journals from the ISN Academy or directly on the KI website using your ISN membership login details (username and password).

If you have not received an e-mail from us on this new feature or have further questions, contact: membership@theisn.org

**Your membership and profile**

To continue receiving all your benefits, update your profile or renew at: www.theisn.org/memberlogin

**Membership is now free for trainees**

Not yet a member? Find out more by visiting: www.theisn.org/join

**The ISN Biennial Report is now out!**

Get a roundup of our activities and programs from 2015 to 2017. www.theisn.org/about-isn/biennial-report
Tell us more about the objectives of your ISN Presidency?

DH: In the next two years, ISN will have a renewed focus on End-Stage Kidney Disease (ESKD), specifically improving global access to integrated ESKD care. ISN is already active in this area, but much more can be achieved by bringing together and building on these existing activities. ISN has been approached by the World Health Organization, the United Nations High Commissioner for Refugees and several Low- and Middle-Income countries (LMIC) to provide advice and support for introducing and consolidating dialysis in LMIC.

The ISN 0by25 initiative will progress from the current pilot feasibility projects, which will be completed this year, to the key phase of implementation in Africa, Asia and Latin America. The ISN CKD Closing the Gaps initiative has achieved a great deal since it was introduced by Adeera Levin: the ISN Global Kidney Health Atlas, the Lancet Kidney Campaign and Lancet Commission, the first ISN Global Kidney Health Summit in Vancouver, the first ISN Global Policy Forum in Mexico, continued progress in Asia and Latin America around the epidemic of CKD of unknown origin. All this must continue.

As co-leader of the IDEAL study that led to major global changes in dialysis practice, what are the main tasks concerning dialysis in the future?

DH: With up to 7 million people dying from ESKD yearly and almost 2 million from AKI for want of access to dialysis, the need for a focus on improved access to dialysis is very clear. Obviously, in doing this, we must be sensitive to the resources and health priorities of individual LMIC, and the context of integrated ESKD care, which should include dialysis, conservative care and transplantation as one component of comprehensive preventative and therapeutic kidney care.

Much can be achieved in ESKD care by harnessing ISN’s very successful capacity-building programs. And progress is already being made through several other key ISN projects, including the compilation of advocacy and educational materials needed to introduce and maintain dialysis services in LMIC. We are planning a summit on integrated ESKD Care in the United Arab Emirates in March 2018 and an ISN Global Policy Forum at the ISN World Congress of Nephrology 2019 in Melbourne, exploring partnerships with industry, other relevant groups and more.
Progress in dialysis technology has been slow. Safer and more affordable options are urgently needed. This and other exciting challenges could garner a renewed interest in nephrology amongst physician trainees.

But ISN’s lens must not solely focus on capacity-building in LMIC. The therapeutic options for AKI and CKD lag behind those of other specialties and must be addressed by directing more resources to basic and clinical nephrology research.

**Training and education has always been important to ISN. What are the ongoing projects in this area?**

DH: The next two years will be very busy for ISN’s education portfolio with the launch of ISN Academy, the search for a new Kidney International editor to replace Detlef Schlöndorff when he completes his very successful tenure at the end of the year, and a new meetings strategy to provide integrated year-long educational offerings from ISN’s meetings, publications, online and mobile resources.

**How will ISN’s structure grow as its ambitious projects evolve?**

DH: ISN will undergo major restructuring in the next year or two, towards a governance and administration structure that better meets the requirements of a large complex society in a rapidly changing world, rather than those of a much smaller ISN when it was founded more than half a century ago.

The Executive Committee and Council will become smaller and nimbler, the relationships with and among ISN staff will be redefined, greater emphasis will be placed on alternative sources of revenue generation and on attraction and retention of members from every region of the world, and greater authority will be invested in ISN’s regional boards.

With the continuation of ISN’s existing successful projects, introduction of new but complementary activities, planning for future events and restructuring, 2017-2019 promises to be a busy and exciting period for ISN and all its members.
VIETNAM’S dialysis care

Co-funding from ISN Programs and the Asian Pacific Society of Nephrology was crucial in lending support to centers like Ho Chi Minh City’s Cho Ray Hospital, helping it become a valuable training hub and transforming the state of dialysis treatment in Southern Vietnam.

There are about 10 million patients with Chronic Kidney Disease (CKD) in Vietnam, for a population of more than 92 million in 2014. Around 10,000 have End-Stage Kidney Disease (ESKD), 84 to 90% choose hemodialysis as renal replacement therapy.

Overall this year, the Asian Pacific Society of Nephrology (APSN) contributed to the ISN Sister Renal Center and ISN Fellowship Programs, helping advance nephrology in Vietnam and across the OSEA region.

In 2010, the nephrology unit at Cho Ray Hospital (CRH) joined forces with Westmead and Royal Prince Alfred Hospitals, University of Sydney, Australia through the ISN Sister Renal Center Program. ISN and APSN program funding has increased training opportunities for doctors and consequently boosted dialysis care.

Talking about the educational impact of the ISN Programs, ISN President David Harris explains: ‘It has now effectively enhanced the diagnostic and therapeutic skills of clinicians managing patients with Acute Kidney Injury (AKI), CKD and ESKD, expanding dialysis services at CRH and other regional centers.’

Trung Duong Toan, from CRH’s Hemodialysis Department, spent three months at Westmead. His objectives were to manage hemodialysis in-patients, including those with ESKD on maintenance hemodialysis treatment. He also learned how to ensure the quality and performance of the center’s dialysis water treatment system and machines.

Before starting her year-long training in June 2016, ISN Fellow Anh Ngoc Lan Nguyen, from Ho Chi Minh City University of Medicine and Pharmacy, explained the challenges of ESKD patient cases at the pre-dialysis stage, particularly in dealing with vascular access, hemodialysis catheter or tunneled catheter complications.

In 2016, ISN Educational Ambassador John Swinnen led the first Arteriovenous Fistula (AVF) training program at CRH focusing on the theory, mechanics and pathophysiology of AVF, creating native vascular access for ESKD patients and explaining interventional procedures needed to treat AVF stenosis.

The growth of dialysis services and kidney transplant activity at CRH has highlighted the need to further develop specialist nursing skills to triage and co-manage transplant related patient problems.

Moreover, a transplant program now exists thanks to valuable training on clinical transplantation and infectious disease management post-transplant provided through the expertise of Professor Richard Allen and his colleagues.
China’s National Clinical Research Center of Kidney Disease at Jingling Hospital, in Nanjing and The Institute of Nephrology at Peking University in Beijing have been assigned as China’s two Regional Training Centers. They are delighted about guiding and supporting nephrologists from across North and East Asia. In Nanjing, Zhi-Hong Liu, explains: ‘As a Regional Training Center, we will provide a comprehensive program that includes the clinic, renal pathology, blood purification, kidney transplant, renal ICU as well as basic research.’ She hopes the new status ‘will narrow the gap in patient care and health system within the country and enhance the region’s relationship globally, to implement ISN’s mission.’

Speaking from Peking University, Ming-Hui Zhao hopes that becoming an ISN Regional Training Center will help the institution increase the number of nephrologists, renal pathologists, dialysis nurses and technicians, providing much needed training in clinical epidemiology, chronic kidney disease and acute kidney injury prevention and pathogenesis of immune-mediated glomerulonephritis.

He adds: the training center will provide capacity building for nephrology education in the developing world and will provide excellent opportunities for sharing expertise and knowledge in the region.

ISN will also work with the Regional Training Centers, national and regional affiliated societies to develop jointly funded ISN Programs focused on more disadvantaged areas within the country and region.

Global nephrology partnerships are getting stronger as ISN Programs are increasingly delivering nephrology training across specific regions. Several renal centers in Low- and Middle-Income countries (LMIC), including graduated ISN Sister Renal Centers, have built up solid capacity and expertise to host fellows, support emerging centers as part of Sister Renal Centers trio partnerships, develop and deliver Continuing Medical Education courses, provide Educational Ambassadors and mentor clinical researchers.

ISN will also work with the Regional Training Centers, national and regional affiliated societies to develop jointly funded ISN Programs focused on more disadvantaged areas within the country and region.

INTRODUCING EIGHT REGIONAL TRAINING CENTERS

• **Eastern & Central Europe:** The Nephrology Department, Hospital of Lithuanian University of Health Sciences, Kaunas (Lithuania)

• **North East Asia:** The National Clinical Research Center of Kidney Disease, Jingling Hospital, Nanjing and the Institute of Nephrology, Peking University, Beijing (China)

• **South Asia:** The Department of Pediatric Nephrology, Children’s Kidney Care Center, St. John’s Medical College Hospital, Bangalore (India)

• **Latin America:** The Fundación Clínica Valle del Lili, Cali (Colombia) and the Department of Nephrology & Mineral Metabolism, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City (Mexico)

• **NIS & Russia:** The National Center of Nephrology & Renal Replacement Therapy, Minsk (Belarus)

• **Africa:** The Department of Nephrology, Groote Schuur Hospital, Cape Town (South Africa)
A partnership between ISN, the International Pediatric Nephrology Association (IPNA), the International Society for Peritoneal Dialysis (ISPD), EuroPD and the Sustainable Kidney Care Foundation (SKCF), SYL has now helped develop acute Peritoneal Dialysis (PD) programs in eight centers in Africa, where dialysis was previously unavailable. It is now working to establish treatments in three other sites. Between January 2013 and September 2015, 175 children and adults received dialysis in these centers.

Challenges continue to be the high costs of viably transporting. The only solution is often to use locally-made supplies and improvise means create catheters. More training is therefore crucial to help doctors to care for patients in this environment.

### Dialysis in low-resource settings

Dakar’s Aristide Le Dantec hospital in Senegal and Cape Town’s Red Cross Children’s War Memorial Hospital in South Africa held Saving Young Lives (SYL) dialysis workshops in 2016. Last November, issues of peritoneal and hemodialysis led talks at the workshop organized in Dakar and hosted by ISN with the Senegal Society of Nephrology. One session presented the challenges and opportunities of setting up an Acute Kidney Injury (AKI) treatment program in Western Africa, while emphasizing the value of PD.

Under the leadership of Mignon McCulloch, the course in South Africa brought together more than 15 pairs of doctors and nurses from all over Africa. It included a mix of theoretical lectures and practical training around PD, helping physicians to understand the practical challenges of inserting PD catheters in children and adults.

### Joining AFRAN 2017

Experts from the initiative also presented a valuable session dedicated to PD at March’s African Association of Nephrology, the African Pediatric Nephrology Association (AFRAN/AFPNA) congress in Cameroon. This edition celebrated 30 years since the foundation of AFRAN, focusing on the theme of preserving kidney health in Africa. Talks highlighted AKI, transplantation and looked into curbing progressive kidney failure and combating the complications of Chronic Kidney Disease to maintain good health.

The ISN African Regional Workshop was a unique opportunity to find out about all the ISN activities and how to get involved. Gloria Ashuntantang, General Hospital of Yaoundé in Cameroon also highlighted the importance of a session dedicated to the challenges surrounding peritoneal dialysis for AKI patient care, focusing on the achievements of the Saving Young Lives projects. The hands-on training program about peritoneal dialysis and catheter insertion, aimed at doctors, was a valuable addition to this year’s congress.
A first-hand educational experience, ISN Academy delivers the latest knowledge in nephrology, where and when you need it. With up-to-date and interactive resources, it opens doors to a unique mix of presentations, cases, articles, webinars, guidelines and more. Expand your understanding of nephrology and step into our exclusive global community.

Get learning now on: www.academy.theisn.org or download the app from the App Store or Google Play.
INTRODUCING THE ISN ACADEMY

Following in the footsteps of ISN Education, we are proud to announce the arrival of the new ISN Academy e-learning portal and app. We have dedicated time, funds and expertise to developing a new and more interactive tool so the global nephrology community has equal access to the best and latest knowledge within the field.

Following on from ISN Education, ISN Academy sets out to encourage nephrologists to get out of the classroom and access a wide range of educational resources where and when they need it. User-friendly and interactive, the dashboard empowers learners to track their progress and study at their own pace. It is also the main entry point to read ISN’s flagship journal, Kidney International.

Tushar Vachharajani explains how the ISN Academy will be developing e-learning modules on specific topics, so learners can earn an ISN Completion Certificate and keep track of activities. ISN Webinar Series will also be extended into other languages to benefit the international audience. Some of the content will be accredited to earn CME credit to maintain professional competency.

“The futuristic goal is to develop an online repository of educational contents with a unique Digital Object Identifier number for proper citation and indexing.”

Tushar Vachharajani

www.theisn.org/academy
THE STORY BEHIND ISN EDUCATION

The first ISN web-based resource portal was an exciting addition to the education portfolio, its content tailored to the broad needs of nephrologists and nephrology trainees worldwide.

Launched mid-2012, the ISN Education concept was originally led by Past ISN Education Committee Chair David Harris, joined by Tushar Vachharajani as Editor, supported by an editorial subcommittee including nephrologists Jai Radhakrishnan and Vivek Jha, the Education committee, and a wide group of contributors.

With extensive experience setting up and managing UKidney, the leading resource in nephrology education, Jordan Weinstein fills us in on the portal’s history.

At the time of its launch, what set ISN Education apart?

JW: ISN Education was a bold and audacious idea at inception. Nephrologists worldwide could contribute news, educational content and opinions for the entire nephrology community. Within a very short time, we produced more original web-based content than any other nephrology society in the world.

Its organizers intelligently drew on the large number of educational programs produced by the ISN and rebroadcast content from the world-over, largely to members who would not have otherwise seen it. Several partnerships with related nephrology societies formed quickly to enhance the content offerings even further.

A nephrologist and developer, how did your experience add value to the overall development?

JW: My mission has always been to bridge the divide between clinicians and developers, to the point where I became an example of both. I believe strongly that one way to ensure that content will be well received by learners is to fully understand their needs.

Physicians have certain expectations about educational programs and too often developers only approach content development generically, without the physician’s needs in mind. By becoming a developer who also teaches and learns in the same field, I feel uniquely positioned to help guide educational frameworks and program development whose target audience include my own colleagues.

What have UKidney and ISN Education brought to global nephrology education?

JW: Both websites are contributing to the over-all volume of available high-quality educational materials.

In the case of UKidney, for over 10 years, this website has evolved from a passion project to a well-respected destination for nephrology education, free for all to use and enjoy. And although ISN Education was formed some years later, it has quickly become a dominant platform in this area poised for even greater things in the future. It has been a great honor to facilitate the development of both exciting projects.
Thank you for taking part in World Kidney Day 2017!
A UNITED VOICE

The Lancet Kidney Campaign encouraged nephrologists to sharpen their policy pencils and give a greater voice to the issues affecting their patients.

The Lancet Kidney Campaign reached its goal. Aside from creating awareness about nephrology-related policies to the broader Lancet readership, it attuned nephrologists to think differently in their daily practice and awakened them to talk about the big issues affecting global kidney patients worldwide.

The campaign drew evidence from The Lancet 2013 Series on global kidney disease and the 0by25 collaboration with the ISN and set the stage for further research and advocacy in the wide spectrum of kidney disease. After a year working on the project, Donal O’Donoghue was inspired by the enthusiasm of colleagues, learning ‘how powerful a united voice can be in raising awareness and influencing outcomes.’

He adds: ‘Nephrologists have a key role to play in advocating for both better services for their patients now and for innovation to develop additional evidence-based interventions to improve kidney care in the future.’

Marking its launch on March 10, 2016, The Lancet online editorial called for ‘a refocusing of health dialogue that puts the kidney in its indisputable place at the center.’ The monthly publication of updates to raise attention about issues within nephrology successfully sets the tone for interesting and engaging content.

Thanks to a dedicated panel of contributors from the ISN membership, the short news articles highlighted peritoneal dialysis and related policies in Hong Kong, Asia Pacific and beyond, the impact of Chronic Kidney Disease (CKD), obesity and kidney disease in Latin America. It underlined issues surrounding Ramadan and CKD patients, pediatric nephrology services, strategies for living donor transplantation, the case of child refugees with kidney disease, HIV nephropathy, onc nephrology, hydration and more. It also reported on discussions at the first ISN Global Kidney Health Summit and ASN Kidney Week 2016.

In more news…

The ISN CKD Closing the Gaps initiative has published reports stemming from the ISN Global Kidney Health Atlas and the first ISN Global Kidney Health Summit, which both featured in the ISN Policy Forum in Mexico City. Find out more here: www.theisn.org/global-atlas
In a bid to keep our educational offerings innovative, sustainable and ensure they continually fit the training needs of nephrologists worldwide and support policy objectives while actively engaging younger generations, it has been confirmed that ISN Frontiers meetings will replace ISN Nexus and ISN Forefronts symposia.

ISN Frontiers meetings build on the success and achievements of ISN Nexus and Forefronts, bringing together basic scientists, clinicians and practitioners in a unique setting. This new event format will make more cutting-edge science available to a global audience, breaking down cross-regional barriers in accessing the latest knowledge and expertise.

The first meeting will take place in Tokyo, Japan from February 22 to 25, 2018, and will tackle the topic of Kidney Disease & Cardiovascular Disease, promising interesting and engaging debates.

**Ground-breaking research**

Forefronts in Nephrology Symposia have played an important educational role for nephrologists since 1984 by focusing on emerging and ground-breaking research.

Gathering nephrologists and active investigators from other fields they stimulated exposure to new scientific domains and reviewed the latest developments in kidney disease.

Small and interactive they allowed participants to exchange ideas, get an in-depth coverage of the topic and develop a collegial relationship with leading researchers from other disciplines. They also included abstract-based poster sessions and presentations to enhance discussions and to boost even more interaction.

**A multi-disciplinary approach**

Introduced in 2006, the Nexus Symposia helped bridge the gap between basic research and clinical practice.

They addressed the increasingly multidisciplinary approach to kidney health issues by bringing together researchers and practicing clinicians to advance science and treatment around highly-targeted and specific themes of current relevance.

These meetings enabled collaborations to take place by highlighting real clinical challenges and directions for future research and healthcare solutions.

We thank all of those involved in the success of ISN Forefronts and ISN Nexus over the years, and look forward to ISN Frontiers meetings as the new platform that will continue to provide valuable networking opportunities for participants worldwide. Stay tuned to find out more about the first meeting of 2018.

[www.isnfrontiers.org](http://www.isnfrontiers.org)
ISN upcoming events

ISN events connect global medical communities, giving them the knowledge and support to reduce the impact of kidney disease worldwide.

Vicenza 2017: examining critical care nephrology

This year's International Vicenza Course on Critical Care Nephrology is taking place in Vicenza, Italy from June 13 to 16, 2017. Over three days, participants can take part in a series of lectures and panel discussions, that will bring together specialists from different disciplines and highlight the multidisciplinary approach to helping critically-ill patients with Acute Kidney Injury and multiple organ dysfunction. The scientific quality of the course and its multidisciplinary nature are guaranteed by the reputation of the faculty and the endorsement of several scientific societies.

For more information about the program:
www.irriv.com/educational/events/35th-vicenza-course-on-aki-crrt/program

Save the date: WCN 2019

Following the excitement and success of the ISN World Congress of Nephrology (WCN) 2017 in Mexico City this April, we are delighted to announce that the next congress will take place in Melbourne, Australia from April 12 to 15, 2019. Once again, this next congress promises to attract attendance from the global nephrology community and other healthcare professionals involved in multidisciplinary nephrology care. It will feature a world-class scientific program and reflect our unique role in advancing care worldwide, particularly focusing on glomerulonephritis and dialysis and engaging young nephrologists, industry partners and regional interests.

To stay up to date: www.isnwcn2019.org

Check out ISN Academy webinars
As well as ISN events, you can also catch the latest ISN Academy webinars, visit: www.academy.theisn.org

ISN Frontiers meetings
Kidney Disease & Cardiovascular Disease
February 22-25, 2018, Tokyo, Japan
www.isnfrontiers.org/tokyo
For questions, contact: mvanderstraten@theisn.org

ISN World Congress of Nephrology 2019
April 21-25, 2019, Melbourne, Australia
www.isnwcn2019.org
For questions, contact: mvanderstraten@theisn.org
Mark your Calendar!

KIDNEY DISEASE & CARDIOVASCULAR DISEASE
FEBRUARY 22-25, 2018
TOKYO, JAPAN