

EMBARGOED FOR RELEASE until October 19, 2017 – 5:00 PM (ET)

Contacts: Tracy Hampton • (312) 339-9067 • thampton@nasw.org
Christine Feheley • (202) 640-4638 • cfeheley@asn-online.org

STUDY REVEALS HIGH HEALTHCARE COSTS LINKED WITH ACUTE KIDNEY INJURY

Increased costs persist a year following hospital admission.

Highlights

- In a study of hospitalized patients in Canada, the mildest forms of acute kidney injury (AKI) resulted in adjusted costs that were 1.2 to 1.3 times greater than those for patients without AKI.
- More severe AKI were associated with costs that were 1.8 to 2.5 times greater.
- The incremental cost of AKI in Canada was estimated to be more than \$200 million (Canadian dollars) per year.

Acute kidney injury is one of the most common and serious complications of hospitalized patients.

Washington, DC (October 19, 2017) — Acute kidney injury (AKI), an abrupt or rapid decline in kidney function, is a serious and increasingly common condition that can occur after major infections, major surgery, or exposure to certain medications. A new study appearing in an upcoming issue of the *Clinical Journal of the American Society of Nephrology* (CJASN) reveals the extensive healthcare costs that result from AKI and highlights the need for improved strategies to identify and prevent the condition.

When patients are hospitalized, they may develop AKI for a variety of reasons, with significant negative clinical consequences. To assess the healthcare costs of AKI (by degrees of severity), a team led by Scott Klarenbach, MD, MSc and David Collister, MD (University of Alberta, in Canada) studied information on adults hospitalized in Alberta between November 2002 and March 2009.

Of 239,906 hospitalized patients, 25,495 (11%), 4598 (2%), 2493 (1%) and 670 (0.3%) developed AKI stages 1, 2, 3 without dialysis, and 3 with dialysis, respectively. The mildest forms of AKI resulted in adjusted costs that were 1.2 to 1.3 times greater than those for patients without AKI. More severe AKI was associated with costs that were 1.8 to 2.5 times greater. Even patients who recovered from AKI had greater costs over the year after their recovery compared with patients who did not develop AKI. The

incremental cost of AKI in Canada was estimated to be more than \$200 million (Canadian dollars) per year.

While the incremental cost per patient was much greater for those with more severe AKI, the less severe forms of AKI resulted in greater overall costs from a population perspective. Over the time frame of admission to the hospital through a recovery period of 90 days after AKI-assessment, patients with stage 1 AKI had incremental costs of approximately CAN \$3800 per patient, while patients requiring dialysis had costs of CAN \$18,300; however, there were many more patients with stage 1 than stage 3 AKI. As such, the impact on healthcare resource utilization is far greater for the large number of patients with less severe forms of AKI.

“There is ongoing interest and research into strategies that prevent or reduce the severity of kidney injury, and knowledge of the healthcare costs of kidney injury is useful for both healthcare planning as well as to determine a cost-effective level of investment on preventative strategies,” said Dr. Klarenbach.

Study co-authors include Neesh Pannu, MD, SM, Feng Ye, MSc, Matthew James, MD, PhD, Brenda Hemmelgarn, MD, PhD, and Betty Chui, MD, MSc.

Disclosures: The authors reported no financial disclosures.

The article, entitled “Health Care Costs Associated with Acute Kidney Injury,” will appear online at <http://cjasn.asnjournals.org/> on October 19, 2017, doi: 10.2215/CJN.00950117.

The content of this article does not reflect the views or opinions of The American Society of Nephrology (ASN). Responsibility for the information and views expressed therein lies entirely with the author(s). ASN does not offer medical advice. All content in ASN publications is for informational purposes only, and is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This content should not be used during a medical emergency or for the diagnosis or treatment of any medical condition. Please consult your doctor or other qualified health care provider if you have any questions about a medical condition, or before taking any drug, changing your diet or commencing or discontinuing any course of treatment. Do not ignore or delay obtaining professional medical advice because of information accessed through ASN. Call 911 or your doctor for all medical emergencies.

Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients. ASN has nearly 17,000 members representing 112 countries. For more information, please visit www.asn-online.org or contact the society at 202-640-4660.

The American Society of Nephrology[®], ASN[®], Kidney Week[®], CJASN[®], JASN[®], NephSAP[®], and ASN Kidney News[®] are registered trademarks of ASN

###

Tweet: Study reveals high healthcare costs linked with acute kidney injury.

Facebook: Acute kidney injury, an abrupt or rapid decline in kidney function, is a serious and increasingly common condition that can occur after major infections, major surgery, or exposure to certain medications. A new study in the *Clinical Journal of the American Society of Nephrology* reveals the extensive healthcare costs that result from acute kidney injury and highlights the need for improved strategies to identify and prevent the condition.

Media contact info

Ross Neitz

rneitz@ualberta.ca