

erage for Kidney Transplant Patients Act would permanently remove the three-year limit from Medicare, extend Medicare's coverage of immunosuppressive medications beyond the current limit when the individual has no other coverage, and ultimately save lives.

The Department of Health and Human Services has predicted that extending Medicare's coverage of immunosuppressive medication would also result in significant savings to Medicare by diverting patients from costly dialysis—a treatment that is 300% more expensive.

ASN will continue to advocate for the legislation's passage on behalf of the more than 700,000 Americans with kidney failure and continue to provide updates to the ASN membership.

## Medicare Advantage

In a letter to Administrator Seema Verma of the Centers for Medicare & Medicaid Services (CMS) last month, ASN expressed its support for Medicare Advantage (MA) expanding access to allow patients with kidney failure to enroll in MA beginning in January 2021. These expanded plans can enable patients to access more choices and additional benefits such as transportation assistance,

greater care coordination, or even dental care.

In the MA final rule, CMS took several steps affecting network adequacy in MA plans with some provisions potentially affecting kidney care coverage. The step that has drawn the most attention in the kidney community is CMS' decision to not include maximum time and distance standards for outpatient dialysis to achieve network adequacy in MA plans.

ASN had supported CMS' bold language in the proposed rule to reconsider how to achieve network adequacy allowing for the inclusion of innovation in care delivery, increased use of telehealth, and home dialysis. However, the step to totally and immediately remove these in-center facilities from those requirements in MA plans did surprise many.

Members of the kidney community and ASN are voicing some concerns that this step could have unintended consequences that affect dialysis patients. Patients utilizing home dialysis are sometimes transitioned to in-center hemodialysis or need access to in-center facilities for a limited period of time. In such cases, there is concern that patients may not be able to see their nephrologist, could face higher out-of-network costs under a MA plan, and could have a substantial transportation burden.

Highlighting these concerns to CMS, ASN urged the agency to use its authority to maintain safety guardrails for patients and ensure the transparency needed to guarantee greater patient access to MA plans. ASN also urged that CMS continue to uphold existing policy to allow for equal access to healthcare choices, including the following: *Ensuring access to all necessary dialysis care (including in-center care) in accordance with community standards of care (recognizing that the community standard of care in San Ysidro, New Mexico, may look substantially different than the community standard of care in San Francisco, California, for example).*

ASN also encouraged CMS to aggressively use the Medicare Office of the Ombudsman to not approve plans constructed to avoid geographic areas with higher concentrations of Medicare/Medicaid dual eligible, and that reliance on hospital-based dialysis care only is not an acceptable substitute for meeting community standards of care for in-center hemodialysis.

To best evaluate the MA plans, ASN urges patients considering MA to review the healthcare professionals and dialysis organizations included in the available MA plans' in-network coverage. ■

## More Than One-Third of Hospitalized COVID-19 Patients Develop AKI, Study Finds

By Bridget M. Kuehn

**M**ore than one-third of patients hospitalized for COVID-19 in a large metropolitan New York health system developed acute kidney injury (AKI), according to a study published in *Kidney International* (1).

The largest study to date on the incidence of AKI in the United States, the study included 5449 adults admitted with COVID-19 to one of 13 hospitals in the Northwell Health system and found that 36.6% of the patients experienced a kidney injury. There was also a strong relationship between kidney injury and respiratory failure, noted study co-author Jia Hwei Ng, MD, Assistant Professor of Medicine at the Zucker School of Medicine at Hofstra University Northwell Health in Great Neck, New York. About 90% of patients who required mechanical ventilation developed AKI and most of these injuries happened within a day of intubation.

"This gives us some insight that as soon as the patient is admitted with COVID, we have to watch really closely," Ng said. She also recommended taking note of their volume status and not being afraid to give fluid. Furthermore, many patients with AKI had lower volumes based on urine data, possibly because many had already had fevers for several days. Patients taking vasopressor medications were also at higher risk of kidney

injuries.

Daniel Batlle, MD, the Earle, del Greco, Levin Professor of Nephrology/Hypertension at Northwestern University Feinberg School of Medicine in Chicago, said the study may be the best data available to date on the incidence of AKI in COVID-19 patients.

"The key thing about this paper is the temporal relationship, how quickly you see AKI when the patient goes to the intensive care unit (ICU) for intubation and the use of the respirator," said Batlle, who was not involved in the study.

Kidney injuries are very common in ICU patients, but in COVID-19 patients they seem to be happening faster, Batlle said. In an observation that may boost understanding of potential mechanisms, Ng noted that the kidney damage appears to be caused by tubular injuries as a result of a loss of blood flow. Batlle and colleagues recently described what appears to be a multifactorial mechanism of AKI in patients with COVID-19 (2).

"It looks like this type of AKI is not the bread-and-butter AKI we see all the time," Batlle said. In particular, he highlighted the high rate of blood clot formation and the need to give anticoagulating agents to patients who require renal replacement.

The study also suggests a much higher incidence of AKI in hospitalized COVID-19 patients than previous studies, which have found rates as low as 5% in China (3) and 19% in Seattle (4), Ng said. A likely reason for the higher rate of kidney injury was that the patients included in this study had more comorbidities and were more likely to need mechanical ventilation than in other studies, Ng said.

The researchers also found that 14.3% of these patients required renal replacement therapy.

They expected a higher rate of AKI than previous studies based on what they were seeing in New York, said study co-author Kenar Jhaveri, MD, associate chief of the division of kidney diseases and hypertension at the Zucker School of Medicine at Hofstra University Northwell Health. "We expected the incidence to be at least above 20%," he said. "What was surprising to us was that almost 15% of those with AKI ended up needing dialysis, or 5% [of all COVID-19 inpatients] needed dialysis. That was a little bit shocking."

Like many health systems in New York and other hard-hit areas of the country, Northwell experienced a surge in demand for dialysis (5). The system had

begun planning about a month before the surge and purchased more dialysis equipment and dialysis fluid. "We were on edge," as patients started arriving, Jhaveri said. By moving supplies among the system's 23 hospitals as needed they were able to keep up. But keeping up adequate staffing levels of nurses trained in dialysis was difficult, especially when some nurses became sick.

"We really had to make sure we had enough nursing staff and physician staff to take care of these patients," Jhaveri said. "That was the biggest challenge."

Jhaveri said he hoped the data would help hospitals prepare for potential future surges of coronavirus patients.

"If they know these numbers to get a better sense, okay, so if 35% get injuries, maybe we should add additional kidney doctors in the hospital instead of being in the office so that there's enough manpower, so people don't get burned out," he said. "That's where this is going to be very useful, in planning."

Ng and Jhaveri plan to do further analyses of the patient data after 60 days, which may provide more insights about recovery rates from coronavirus-associated kidney injuries. Such longer-term data will be important to see how the condition evolves and how many patients recover, Batlle said.

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### References

1. JS Hirsch, et al. AKI in patients hospitalized with COVID-19. *Kidney International* Published online May 16, 2020. <https://doi.org/10.1016/j.kint.2020.05.006>
2. Daniel Batlle, et al. Acute kidney injury in COVID-19: Emerging evidence of a distinct pathophysiology. *J Am Soc Nephrol* May 2020; <https://doi.org/10.1681/ASN.2020040419>
3. Cheng Y, et al. Kidney disease is associated with in-hospital death of patients with COVID-19. *Kidney Int* 2020; 97:829–838.
4. Arentz M, et al. Characteristics and outcomes of 21 critically ill patients with COVID-19 in Washington state. *JAMA* 2020; 323:1612–1614.
5. *Kidney News*. June 2020 (Vol. 12, Number 6) <https://www.kidneynews.org/kidney-news/features/post%E2%80%9393covid-19-dialysis-poses-challenges-for-dialysis-providers-and-patients>