ACGME Program Requirements for Graduate Medical Education in Transplant Nephrology
IMPACT STATEMENT

1. **Describe the scope of practice of the new specialty, as well as the process involved in development of the requirements (e.g., date of recognition of the specialty by the ACGME Board of Directors, involvement of specialty boards/organizations).**

   Transplant nephrology encompasses an expanded understanding of nephrology and the study of the diseases leading to kidney transplantation; evaluation of pre-transplant patients; management of waitlisted transplant candidates; evaluation and treatment of post-transplant patients, including managing transplant-related complications; and complementing general nephrologists' skills in the management of patients throughout their journey, particularly focusing on the more complex transplant needs. Transplant nephrology fellowships provide advanced education to allow a fellow to acquire competence in the subspecialty with sufficient expertise to act as an independent consultant. The Transplant Nephrology Fellowship Training Accreditation Program, LLC (TNFTAP) of the American Society of Transplantation (AST) currently accredits transplant nephrology fellowships and had previously established program requirements to standardize education and training. The American Society of Nephrology and AST worked together to submit the proposal for ACGME accreditation of transplant nephrology fellowships. The TNFTAP program requirements were used as a basis for the development of the proposed ACGME Program Requirements for Graduate Medical Education in Transplant Nephrology.

2. **How will the proposed requirements improve resident/fellow education?**

   Transplant nephrology training is distinct from and builds upon education and training obtained during a nephrology fellowship. Compliance with these Program Requirements will ensure that fellows are provided with the curriculum and resources necessary to be educated to competently provide safe and specialized patient care, consistently and comprehensively, in the pre-transplant evaluation period through the peri-operative period, including complications, and in managing the long-term effects of chronic immunosuppression and other complications and sequalae post-kidney transplantation—as well as living donor evaluation and care. Fellow education will contribute to the expertise needed to contribute to improved kidney transplant patient outcomes.

   The management of kidney transplant patients is complex, as they require special care by nephrologists who have expertise in assessing transplant candidates and candidates for living-donor kidney donation, counseling patients about paired-kidney exchange and ongoing changes in national allocation policy, and ensuring that donor and recipient candidates remain transplant ready. Transplant nephrologists also work with particularly complex transplant candidates, such as highly immunologically sensitized individuals with high titers of preexisting anti-human leukocyte antigen (HLA) antibodies that may make it difficult to find a compatible donor kidney, as well as help patients weigh the benefits and risks of accepting less conventional kidneys, such as from hepatitis C virus (HCV)-infected donors. Collectively, these foregoing efforts require that transplant nephrologists understand immunology and organ rejection, have familiarity with peri-operative complications—including transmission of diseases from donors and recurrence

of native kidney diseases—and can safely manage the long-term effects of chronic immunosuppression. Immunosuppression and its complications pose substantial medical risks for patients.

3. How will the proposed requirements improve patient care and patient safety/quality?

Kidney transplantation is the treatment of choice for many patients with kidney failure. As compared to either conservative management without any kidney replacement therapy or dialysis, a commonly used kidney replacement therapy option for people with kidney failure, kidney transplantation offers better quality of life and lower mortality.[1,2] Transplantation also substantially reduces longer-term, annual health care expenditures compared to dialysis.

Currently, there are more than 250,000 patients with a functioning kidney allograft and approximately 90,000 waitlisted patients awaiting kidney transplants, with a burgeoning number added to the kidney transplant waitlist every year. It is estimated that there are additionally tens of thousands of patients with advanced kidney diseases currently in referral or still undergoing evaluation for a transplant who are not yet on the waitlist. In 2022, more than 40,000 patients were added to the kidney waitlist and more than 25,000 received a kidney transplant.

Compliance with these Program Requirements will ensure that fellows are provided with specialized knowledge, skills, and training necessary to ensure quality transplant care, patient safety, and outcomes for the increasing number of kidney transplant patients.

References

1. Haller, Maria C., Alexander Kainz, Heather Baer, and Rainer Oberbauer. 2017. "Dialysis Vintage and Outcomes after Kidney Transplantation: A Retrospective Cohort Study." *Clin J Am Soc Nephrol* 12(1): 122-130. doi:10.2215/CJN.04120416 https://pubmed.ncbi.nlm.nih.gov/27895135/
2. Conservative Management for Kidney Failure. NIDDK. https://www.niddk.nih.gov/health-information/kidney-disease/kidneyfailure/conservative-management

4. How will the proposed requirements impact continuity of patient care?

Compliance with these Program Requirements will ensure that programs provide fellows with educational experiences to prepare them to provide continuing care in the pre- and peri-transplant period; in managing the long-term effects of complications in patients undergoing kidney transplantation; and in the evaluation and care of living donors.

5. Will the proposed requirements necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support, volume and variety of patients)? If so, how?

It is anticipated that only an institution with the necessary facilities, faculty, structure to support interdisciplinary cooperation, and funding would apply for accreditation of such a program. The cost in adding any of those resources is difficult to estimate. At present, there are approximately 65 programs participating in the TNFTAP accreditation program.

6. How will the proposed requirements impact other accredited programs?

In most institutions, a transplant nephrology fellowship is at present, and will continue to be, additive to other specialty programs through exposure of new knowledge/disease management and procedures and increased experiences for those interested to develop specialized expertise in this area. Transplant nephrology is an interdisciplinary field that requires collaboration between nephrologists, surgeons, and other health care professionals. Transplant nephrologists are primarily responsible for the medical management of transplant candidates and recipients, including medication management, immunologic monitoring, and addressing complications—as well as care for living donors. Therefore, the Program Requirements are not expected to negatively impact other specialties, particularly for existing transplant nephrology fellowships.