Training, Credentialing, Certification and Privileging in Nephrology

Executive Summary

The evolving nature of the kidney care delivery environment in the United States over the past decade has resulted in substantial changes in the training, certification, credentialing, and privileging of nephrologists. These changes have occurred in the context of broader modifications affecting hospitals, healthcare delivery systems, insurers and other healthcare institutions. To ensure their approval and/or authority to provide care in the multiple settings where their patients are treated, nephrologists must be attentive to the changing requirements and criteria upon which that approval or authority is based. Within the typical scope of patient care that a nephrologist can provide are a series of procedures and clinical situations in which optimal patient care for kidney patients warrants the training, skills, and expertise of a nephrologist.

This paper reviews the range of clinical renal–related services and procedures provided to kidney patients, and discusses the processes by which nephrologists become trained, competent and privileged to provide such services. For many of these activities the nephrologist is the acknowledged expert and is expected to direct therapy and establish the standards of care. In other situations, other specialists may have equal competence; for some procedures other clinicians may be the acknowledged experts. In all of these situations, the nephrologist must develop and maintain the currently accepted level of knowledge, skill and competency, and in return must be able to gain privileges to perform those procedures. Because additional benefits accrue when such procedures are performed by a nephrologist well acquainted with a patient’s history and clinical status, nephrologists are urged to develop and maintain those procedural skills.

Background

In 1998, the Renal Physicians Association (RPA) adopted a position paper that addressed issues regarding credentialing in nephrology and approved subsequent revisions to that document in 2000 and 2013. However, the training and scope of practice of nephrologists have undergone further significant changes in recent years. As such, it is timely that RPA revises and updates its previous positions on these issues in this document.

Among the issues this paper re-examines are: (1) the training, credentialing, maintenance of certification, and privileging of nephrologists; (2) those procedures and clinical situations in which optimal patient care for kidney patients would warrant the services of a
nephrologist; (3) training and credentialing of nephrologists in procedures newer to the scope of nephrology practice (e.g. ultrasound, apheresis, interventional nephrology); and (4) credentialing and privileging for those non-nephrologists who wish to undertake core nephrology procedures.

**Nephrology Training**

A physician must complete residency training in internal medicine or pediatrics before beginning training in nephrology. A minimum of two years of training is required in an approved fellowship in adult nephrology and three years for pediatric nephrology. The American Board of Internal Medicine (ABIM) defines the scope of such training, (http://www.abim.org/certification/policies/internal-medicine-subspecialty-policies/nephrology.aspx) and in doing so provides a useful description of the scope of nephrology practice and the core competencies of nephrologists, as delineated in the sections that follow. Comparable training and training requirements, with some differences, apply to pediatric nephrology (http://www.abp.org/content/pediatric-nephrology-certification).

Nephrology fellowship programs provide subspecialty-level education in renal anatomy, physiology, pathophysiology and pathology. Extensive training is provided in the clinical practice of nephrology in the hospital, office and dialysis facility settings, and as both consultant and principal care provider. This training covers general nephrology as well as transplantation, hypertension, extracorporeal treatments (e.g., hemodialysis, peritoneal dialysis, continuous renal replacement therapy [CRRT], ultrafiltration), intensive care management, and renal-related research. Through this training process, nephrology fellows acquire the skills needed to manage the full spectrum of kidney disease and related issues. In addition, fellowships teach core competencies as defined by the Accreditation Council for Graduate Medical Education (ACGME): practice-based learning and improvement, systems-based practice, professionalism, interpersonal communication skills, medical knowledge and patient care.

Fellowship level training may be understood as developing both cognitive expertise and procedural skills.

**Cognitive expertise**

Extensive experience in the care of medically complex, acutely and chronically ill patients is provided in nephrology fellowship training. This includes patients with fluid, electrolyte and acid-base disorders; hypertension; acute and chronic renal dysfunction; kidney failure; glomerular and interstitial renal diseases including proteinuria and hematuria; infections involving the urinary tract; nephrolithiasis; renal-related anemia; metabolic bone disease; renal involvement by systemic disease; and the effects of medications and toxins on the kidney. Such training also includes the appropriate use of medications, diet, chemotherapy and immunologic agents for the treatment of kidney disease.

The fellow is also trained to deal with the interactions between kidney disease and simultaneous and evolving diseases of other organ systems, including cardiorenal, pulmonary-renal and hepatorenal disorders. Focused exposure is provided regarding the pharmacokinetics and toxicity of drugs, and the nutritional, psychosocial and end of life issues unique to patients with kidney disease.
In addition, the nephrology fellow develops expertise in the microscopic examination of urine and kidney biopsy tissue, and radiologic evaluation of the urinary system. Dialysis-related training includes the underlying biophysical principles of membrane transport in dialysis; indications, contraindications, side effects, complications and implementation of hemodialysis; related extracorporeal technique including CRRT; the relevant access procedures; and the associated use of dialysis and water treatment equipment. Comparable training is provided for peritoneal dialysis and may also be provided for apheresis procedures.

The nephrologist is also trained in the care of critically ill patients in the intensive care unit (ICU), where kidney injury is the third leading type of organ system failure. Trainees develop expertise in the application of various dialysis therapies including for critically ill patients, hemodynamic assessment and monitoring, management of fluid and electrolyte abnormalities, and the treatment of relevant intoxications and overdoses.

The nephrologist receives training in the care of kidney transplant patients. This includes screening of the potential recipient and donor, immunologic evaluation, perioperative management, use of antirejection medications, diagnosis and treatment of short-term and long-term post-transplant complications, and management of transplant rejection. Those nephrologists who intend to direct a transplant program may train an additional year at a United Network for Organ Sharing (UNOS) approved renal transplant program.

Procedural training

Fellowship training also includes supervised performance of procedures including but not limited to: (1) ultrasound-guided or computed tomography (CT) guided biopsy of native and transplant kidneys; (2) ultrasound-guided insertion of temporary hemodialysis catheters and their removal; (3) the technical aspects of dialysis, including machine operations, water treatment systems, and the management of vascular and peritoneal catheter complications. Additional procedural training may include: (1) ultrasound-guided insertion of tunneled hemodialysis catheters and their removal; (2) insertion of peritoneal dialysis catheters, and their removal; (3) renal imaging by ultrasound and other modalities and; (4) interventional nephrology procedures, including fistulagrams, balloon angioplasty and stent placement for stenotic arteriovenous fistula (AVF)/arteriovenous graft (AVG), and thrombectomies of clotted dialysis catheters and AVF/AVG’s; (5) apheresis. Newer and evolving procedural technologies, including percutaneous creation of arterio-venous fistulas for dialysis, might also be included.

Board Certification and Maintenance of Certification

After successful completion of the nephrology training program, upon recommendation of the program director and within a specified time interval, the physician may sit for the certifying exam in nephrology administered by the ABIM for internal medicine trained fellows or by the American Board of Pediatrics (ABP) for pediatric trained fellows.
To become certified in the subspecialty of nephrology, physicians must:

- At the time of application, be previously certified in internal medicine by ABIM or in pediatrics by ABP;
- Satisfactorily complete the requisite graduate medical education nephrology fellowship training;
- Demonstrate clinical competence in the care of patients;
- Meet the licensure and procedural requirements; and
- Pass the certification exam in nephrology.

Board certification is becoming increasingly mandated by payers in order to be recognized as a provider, as well as by hospitals for medical staff appointment and re-appointment. Additionally, the Medicare ESRD Facility Conditions for Coverage requires Board Certification in Nephrology in order to serve as Medical Director of an outpatient dialysis facility. Thus, while board certification may not be an outright requirement to practicing as a nephrologist, absence of board certification will serve as a substantial barrier to such practice.

**Maintenance of Certification (MOC)**

**ABIM Requirements:**

Those who have been certified in nephrology before 1990 are certified for life. Those who have been certified during or after 1990 must undergo recertification every 10 years, by fulfilling certain maintenance of certification (MOC) requirements defined by the relevant subspecialty board. The ABIM requirements include: a) passing a recertifying exam every 10 years or completing a series of Knowledge Check-Ins every two years; b) completing at least one ABIM-defined MOC activity every two years; and c) earning 100 MOC credits, 20 of which must be Medical Knowledge every five years. Further information on the ABIM maintenance of certification processes is available at [http://www.abim.org/maintenance-of-certification/moc-requirements/general.aspx](http://www.abim.org/maintenance-of-certification/moc-requirements/general.aspx).

**American Board of Pediatrics (ABP) Requirements:**

Those certified before mid-1988 are certified for life. Those certified since mid-1988 must: a) pass a re-certifying exam every 10 years and b) earn 100 points every five years, by participating in “Life-long Learning and Self-Assessment” (minimum 40 points) and “Improving professional Practice – Quality Improvement” activities, (minimum 40 points). Further details are at: [https://www.abp.org/content/maintenance-certification-moc](https://www.abp.org/content/maintenance-certification-moc).

**Credentialing**

Credentialing is the process of reviewing a health professional's credentials, training, experience, demonstrated ability, practice history and medical certification or license to determine if clinical privileges to practice in a particular facility are to be granted. Credentials may permit admission to a medical staff; permission to provide patient care is a “privilege”. 


Credentialing depends upon the documentation of requisite training, experience, and demonstrated current clinical competence in the performance of the procedures for which credentialing has been requested. The ABIM/ABP guidelines for certification in nephrology specify certain training requirements that must be completed successfully before the candidate is qualified to sit for the certifying exam. The standards set by the ABIM/ABP for certification are appropriate standards for assessing base expertise (core competency) in nephrology. The American Society of Diagnostic and Interventional Nephrology (ASDIN) has set training and clinical competency guidelines in specialized interventional nephrology procedures.

Board certification in nephrology should suffice to satisfy initial credentialing requirements for nephrology-specific services and procedures in healthcare organizations (e.g., health plans and hospital systems) that have such requirements. These organizations also may choose to credential certain individuals without board certification who show evidence of education, training, experience, demonstrated current clinical competence, and other professional qualifications equivalent to the above criteria. Furthermore, it is not uncommon for hospital systems and other institutions to establish and use numerical criteria for specific procedures as part of the credentialing process.

Hospital bylaws may provide for different types of staff admission such as active, courtesy, consulting, associated, emeritus, etc., with varying degrees of obligations and constraints. Requirements from The Joint Commission (formerly The Joint Commission on Accreditation of Healthcare Organizations – JCAHO) may drive many aspects of hospital credentialing or re-credentialing. For example, The Joint Commission has established a program called the Ongoing Professional Practice Evaluation (OPPE) that measures a physician’s clinical and behavioral competence in six core areas: (1) patient care; (2) medical/clinical knowledge; (3) practice-based learning and improvement; (4) interpersonal and communication skills; (5) professionalism; and (6) systems-based practice. A similar program entitled Focused Professional Practice Evaluation (FPPE) provides a more detailed assessment of physician competency during the period of review for initially requested privileges, or for a practitioner who has exceeded a first-level threshold in the OPPE assessment.

Privileging

Hospital or facility privileges in general furnish the practitioner with the approval and authority to provide care to patients, and to perform specified procedures. Criteria that may be evaluated by specific hospitals or facilities before the granting of privileges may include, but are not limited to:

- Licensure to practice medicine in the state;
- Board certification by an accredited institution or demonstration of progression towards certification;
- Proof of liability insurance, often of a specific monetary value;
- A pledge to abide by Principles and Medical Ethics of the American Medical Association (AMA) or those of other professional organizations or institution-specific principles and ethics;
- Willingness to accept committee assignments in the hospital;
- Completion of medical records in a timely fashion; and
• Evidence of continuing medical education activities

Other considerations relating to privileges are:

(1) For specific clinical and procedural privileges, the institution may require that a minimum number of patients be treated, or procedures be performed over a specified time period;

(2) While the individual with privileges may be employed in one department of the hospital or institution, the assignment of these privileges may be applicable in other departments;

(3) Privileges will usually be extended for a predetermined duration; and

(4) Certain preexisting contractual agreements between the institution and some providers may limit or control who may be granted certain privileges (e.g. anesthesia, pathology).

The Scope of Clinical Care Provided by Nephrologists

RPA believes it is important to describe the scope of renal-related cognitive and procedural subspecialty skills that nephrologists, based on education, training and experience, are uniquely prepared and qualified to practice in a health care setting. This description can serve as a basis for decisions regarding the appropriate scope of privileging for nephrologists. It can also enlighten the discussion in areas where nephrologists’ skills and scope of practice overlap those of other practitioners and can provide information about competencies and expertise that nephrologists can provide.

The ABIM defines the content of the adult nephrology fellowship, which is designed to provide training in the knowledge base, diagnostic reasoning, and clinical judgment skills expected of the certified nephrologist in the broad domain of nephrology. Comparable content pertains to the pediatric nephrology fellowship. The clinical areas include:

• Sodium and Water Abnormalities
• Acid Base and Potassium Disorders
• Calcium, Phosphorus, and Magnesium Disorders and Stones
• Chronic Kidney Disease
• Hypertension
• Tubular, Interstitial, and Cystic Disorders
• Glomerular and Vascular Disorders
• Kidney Transplantation
• Pharmacology
• Acute Kidney Injury and Intensive Care Unit Nephrology

ABIM also requires fellowship trainees to receive training and develop competency in:

• Placement of temporary vascular access for hemodialysis and related procedures
• Acute and chronic hemodialysis
• Peritoneal dialysis (excluding placement of temporary peritoneal catheters)
• Continuous renal replacement therapy (CRRT)
- Percutaneous biopsy of both autologous and transplanted kidneys

These are a minimal set of clinical core competencies for board certified nephrologists. They are appropriately expanded to include, implicitly, microscopic examination of urine and medical care for patients with acute and chronic kidney disease, at the level of a specialist in Internal Medicine (or Pediatrics).

In these areas, the nephrologist is the acknowledged expert in the diagnosis and treatment of kidney disease and is expected to direct renal care, in collaboration with other clinicians. Because of their training and expertise, nephrologists are also expected to define for their institutions the appropriate standards of quality care in nephrology, and to assure that current practices, policies and procedures are consistent with external standards and policies, and that recently implemented innovations in the field are appropriately brought into use. As subspecialty experts, nephrologists are also expected to participate in nephrology-related quality improvement and patient safety programs.

Furthermore, a discussion of goals of care including cardiac resuscitation, end-of-life care, and patient preferences are essential components of comprehensive care for the renal patient. The opportunity to conduct such a conversation between a patient and the nephrologist who has provided long-term care and is familiar with the ups and downs of the patient’s clinical course and prognosis, provides a unique opportunity for a compassionate, clear-eyed and insightful interaction.

Board certified nephrologists who provide satisfactory evidence of nephrology training, board certification and competency should be eligible for privileges for the general practice of nephrology, including hemodialysis, peritoneal dialysis, continuous renal replacement therapy (CRRT), management of kidney transplantation and the use of chemotherapeutic and immunosuppressive agents for the treatment kidney diseases.

RPA believes that nephrologists who have achieved and maintain knowledge, expertise and competency in those areas, as well as any area of nephrology covered by current nephrology fellowship programs should not, in the absence of contractual constraints, be prevented from receiving privileges in those areas simply because non-nephrologists may also be providing them in the same institution or facility.

**PROCEDURAL SKILLS**

Various areas exist within the field of nephrology in which nephrologists have competencies that may overlap with non-nephrologists. These may include kidney biopsy, renal pathology, radiologic imaging of the kidney (e.g. ultrasound, fluoroscopy), ICU care, HD and PD catheter insertion and removal, renal transplant management, apheresis, and interventional nephrology procedures, among others. It is RPA’s belief that nephrologists should have a central role in both the decision-making process and the performance of these procedures and other high-risk nephrology-related interventions (e.g., use of chemotherapeutic agents and biologics to treat renal-related disorders).
Many nephrology-specific activities and procedures require high level cognitive decision making as to the optimal treatment plan, including determining if and when invasive and other high-risk interventions might be undertaken, or deferred. This decision-making process is best undertaken by considering the entire context of the patient’s disease state, current clinical status and long-term treatment goals. As the one most knowledgeable specialists about the renal aspects of the patient’s care, the nephrologist should have a central role in such decision-making.

Furthermore, most of these nephrology-related interventions require informed consent from the patient or designee, a process which must include a description and explanation of the nature, purpose, risks, benefits and alternatives related to the procedure. Who would be better suited to provide such an informed discussion than the nephrologist who has detailed knowledge of, and experience with, the proposed intervention, familiarity with the patient clinical history, and the expertise to determine the wisdom of the proposed intervention.

For example, a patient may be receiving CRRT for treatment of acute kidney injury (AKI) and volume overload in the setting of shock. The nephrologist is best able to determine if and when conversion to a conventional hemodialysis therapy is most appropriate for that particular patient. At a minimum, if a non-nephrologist is requesting a hemodialysis treatment, the active participation of the nephrologist is needed to ensure optimal patient care.

Similarly, a non-nephrologist may order a renal biopsy to aid in the diagnosis of a systemic disorder with renal involvement. A nephrologist is best suited to understand the renal implications of the diagnostic possibilities, to determine if the biopsy is needed and safe, if it can yield the needed information, and if the potential therapy would be tolerated and beneficial from a renal perspective.

In both situations the nephrologist can best discuss the critical issue of alternatives to the proposed treatment, and the balancing of risks and benefits of the proposed procedure in the context of the patient’s overall clinical situation. This goes to the essence of the informed consent discussion.

Clinical procedures that are commonly performed by non-nephrologists obligate the nephrologist to achieve at minimum the same standard of competence and procedural skill as the non-nephrologist. As an example, since ultrasound guidance is now the preferred practice for vascular catheter insertion and kidney biopsy, nephrologists should also follow these recommendations. Similarly, since procedural time-outs and procedure site designation are now standard practice for invasive procedures, nephrologists must be held to the same standard when performing such invasive procedures. In general, this perspective emphasizes the need for all nephrologists to utilize continuing medical education activities to maintain both cognitive and procedural knowledge and skills at currently accepted standards.

A related issue arises regarding whether nephrology fellows need to be trained in the nephrology procedural skills that may also be performed by non-nephrologists. RPA believes that training and experience in most nephrology-related procedural techniques are essential for a well-rounded nephrology practitioner.
The following rationales are offered:

- As detailed above, a range of procedural skills represent core competencies for a nephrologist. For these activities, nephrologists are acknowledged as the experts who maintain the highest level of knowledge, competence and skill, and establish the standards of practice. These include, at minimum, hemodialysis, peritoneal dialysis, CRRT, urinalysis, native and transplant renal biopsies, use of chemotherapeutic and biologic agents for the treatment of glomerulonephritis and renal transplantation, critical care management of renal-related issues, and end-of-life issues for patients with kidney disease. With appropriate training and experience, additional nephrology procedures will fall within the scope of nephrologist as high-level expertise, including apheresis, ultrasound-guided insertion of tunneled hemodialysis catheters and their removal, insertion of peritoneal dialysis catheters and their removal, renal imaging by ultrasound and other modalities and interventional nephrology procedures.

- Urgent and emergent situations may arise when the ability of the nephrologist to perform a procedure may be life-saving. This most obviously can involve placement of a temporary hemodialysis catheter for emergent hemodialysis, but might also apply in certain scenarios, to performance of CRRT, kidney biopsy, renal ultrasound and apheresis, among others.

- Clinical experience in performing a procedure enhances one’s skill in various clinical areas. These include: assessment of risks and benefits, anticipation and management of complications, interactions with other aspects of patient care, assessment of outcomes, and interpretation of results.

- Nephrologist performance of a procedure enhances the doctor-patient relationship, demonstrating the physician’s involvement in and commitment to the patient’s care.

- The performance and interpretation of renal-related diagnostic studies are markedly enhanced when the performing physician (i.e. the nephrologist) has intimate knowledge of the patient’s medical history, condition, ongoing treatment, and goals of therapy.

**Nephrology Clinical Services Optimally Provided by or with the Involvement of a Nephrologist**

- **Acute and Chronic Hemodialysis and Peritoneal Dialysis:** Only a nephrologist by virtue of experience in and dedication to understanding these techniques with attendant familiarity with electrolyte, divalent mineral and acid-base balance and the assessment of volume parameters is able to apply these techniques appropriately. If these techniques are applied too early or too late, patients can suffer because complications arise from the unnecessary or improper use of such procedures. The various dialysis modalities which RPA believes must be provided by a nephrologist include acute hemodialysis, chronic hemodialysis, home hemodialysis, peritoneal dialysis, nocturnal dialysis, and the other forms of more intensive dialysis (i.e., of greater frequency or duration than the thrice weekly regimen of 3-4 hours duration commonly used).
• **Continuous Renal Replacement Therapy (CRRT):** Included in CRRT in this context are all related forms of treatment for acute kidney failure, volume overload and drug intoxication. In addition to training in the aforementioned renal replacement therapies, the nephrology fellow gains proficiency in CRRT that can be applied in the critical care setting. Competency in these procedures requires their proper prescription, the ability to provide and maintain adequate vascular access, and knowledge of the associated treatment requirements, such as the utilization of varied anticoagulation techniques and familiarity with complications and their management. These are high-intensity techniques that require special knowledge of the impact of changing renal function on acid-base physiology and fluid and electrolyte balance in patients with impaired renal function. The RPA believes that a nephrologist must direct these therapies. Patient safety depends on the ability to recognize the limitations of these techniques and when to change to intermittent hemodialysis. Nephrologists are trained to recognize when to make this change and how to perform it correctly. Patients receiving CRRT under the guidance of physicians without nephrology expertise may be subject to a greater risk of harm from these complicated therapies.

• **Ultrafiltration:** Isolated ultrafiltration is used to treat several different refractory volume excess conditions. Nephrologists are best positioned to choose, direct and coordinate therapies designed to safely remove excess volume, and to determine when such therapy is no longer efficacious. They are also experienced in securing adequate vascular access to support various extracorporeal therapies. Nephrologists have the high degree of training and expertise in extracorporeal therapy beyond that of other specialists to facilitate the safe, effective, and cost-efficient provision of this service.

• **Temporary Vascular Access:** During fellowship training, the nephrologist learns the techniques necessary to insert temporary vascular access to allow for extracorporeal therapy. Clinical privileges to continue performing those procedures should be granted to the nephrologist who demonstrates current clinical competence and ongoing performance of the technique.

• **Percutaneous Renal Biopsy:** During fellowship training, the nephrologist must learn the techniques necessary to perform percutaneous kidney biopsy. Clinical privileges to continue performing this procedure should be granted to the nephrologist who can demonstrate current clinical competence. For the patient’s benefit, only a nephrologist can coordinate: (1) indications for a kidney biopsy; (2) the therapeutic benefit versus risk of the procedure; (3) interpretation of a biopsy from a clinical viewpoint; (4) the prognosis and the progression of the patient’s disease based on the clinical and morphologic findings; and (5) the best therapy based on these items.

• **Apheresis:** Apheresis is indicated for a wide variety of renal and non-renal indications. As an expert in extracorporeal blood purification, management of this procedure may be done by a nephrologist, as she or he is highly qualified to perform and manage the procedure. The use of apheresis technology to treat renal disease requires the knowledge of when its use is clinically appropriate. The RPA believes that these therapies and related services are ideally performed by or in close
conjunction with nephrologists for kidney patients

- **Critical Care:** There is a trend toward limiting care in the ICU and other critical care units to intensivists and some other “grandfathered” specialists. It is essential for the benefit of patients with renal and renal-related disorders that nephrologists with hospital privileges be considered appropriately credentialed to render renal care in the critical care setting.

- **Diagnostic Imaging Techniques:** Imaging techniques used in nephrology practice include diagnostic ultrasound and fluoroscopy. Ultrasonography has many applications in general nephrology, ESRD, and transplant nephrology (for example, determination of kidney size, presence of urinary obstruction, and for percutaneous renal biopsy, evaluation of arteriovenous fistulas and grafts, and line insertion). Fluoroscopy is utilized for placement of hemo dialysis and peritoneal dialysis catheters among other purposes. Nephrologists may apply these techniques to the care of their patients or perform them after requisite training. Newer applications of bedside portable ultrasound, e.g., for assessment of intravascular volume, lung water, and cardiac contractility should be accessible to nephrologists suitably trained and competent.

- **End of Life Care:** Delivery of end of life care, including the initiation of and withdrawal from dialysis is a critically important clinical activity provided by the nephrologist that is the subject of increased emphasis in the healthcare delivery environment broadly. Nephrologists are keenly aware of the challenges in discussing prognosis and treatment options with CKD/ESRD patients and their families. Additionally, nephrologists are aware of the under-recognition and under-treatment of pain and other symptoms in dialysis patients, and the underutilization of palliative care and hospice in dialysis patients. Further, nephrologists appreciate that pediatric dialysis decision-making is distinct from that for adults and that sufficient evidence and ethical policy statements exist to make unique recommendations regarding pediatric dialysis decision-making. (1, 2, 3) The RPA recognizes the value that those trained in hospice care or palliative medicine outside of the specialty of nephrology bring to the care of renal patients. The RPA believes that those professionals should work in close collaboration with nephrologists in their care of renal patients.

- **Interventional Nephrology:** For interventional nephrology, additional training in endovascular therapy should include demonstrated mastery of a body of specialized knowledge. This includes: vascular anatomy and examination; relevant radiologic techniques and radiation safety; conscious sedation and analgesia; and, the use of endovascular equipment. The procedures an interventional nephrologist may perform include but are not limited to: ultrasound-guided insertion of tunneled hemodialysis catheters and their removal; insertion of peritoneal dialysis catheters, and their removal; renal imaging by ultrasound and other modalities; interventional procedures, including fistulagrams, balloon angioplasty and stent placement for stenotic arteriovenous fistula (AVF)/ arteriovenous graft (AVG), and thrombectomies of clotted dialysis catheters and AVF/AVG’s.
Interventional nephrology also encompasses the use of ultrasound for imaging the kidneys and associated structures for diagnostic purposes as well as guidance for renal biopsies. Interventional nephrology training may be a part of a nephrology fellowship that verifies educational experiences meeting the proposed standards. In addition, nephrologists, not trained in these procedures as part of fellowship training, may be credentialed by obtaining experience with endovascular techniques under the supervision of a trained interventionalist. Specifically, this entails didactic instruction, procedural training under direct supervision of an instructor, and performance of a requisite number of procedures as primary operator while being proctored by the instructor. Detailed reporting of the outcomes and complications of these procedures is required to ensure adequate clinical competence.

- Informed Consent for Nephrologist Procedures: For many such procedures informed consent is required, which must include discussion of the nature, purpose, risks, benefits and alternatives to the proposed procedure. In most situations the nephrologists can best discuss the full range of these critical issues, including balancing the risks and benefit of the proposed procedure in the context of the patient’s overall clinical situation. In some states (e.g. Pennsylvania) this task must be done by a physician, and cannot by law be delegated to a nurse, nurse practitioner or physician assistant.

Principles

1. RPA believes it is appropriate for credentialing bodies such as hospitals and health plans to grant privileges to nephrologists as both specialists and principal care providers for patients with kidney and kidney-related disorders, including privileges to provide care in the intensive care unit setting.

2. RPA believes that credentialing bodies should qualify nephrologists in the performance of nephrology procedures that are covered in the requirements for ABIM/ABP Certification in Nephrology (such as acute and chronic hemodialysis; peritoneal dialysis; placement of temporary vascular access for hemodialysis and related procedures; CRRT, and percutaneous biopsy of both native and transplanted kidneys), based upon documentation of their training in accredited programs, their certification by the ABIM/ABP, and current clinical competence.

3. RPA recognizes that the delineation of clinical privileges is an institutional responsibility, vested in the medical staff and the governing body of the healthcare organization and is distinctly separate from the process of medical specialty certification. Therefore, such organizations may choose to credential certain individuals who show evidence of education, training, experience, demonstrated current clinical competence, and other professional qualifications equivalent to the ABIM/ABP certification requirements.

4. RPA believes that credentialing of nephrologists for procedures that are not covered in the requirements for ABIM/ABP Certification in Nephrology should be based upon documentation of the requisite amount of training and
experience in the performance of such procedures during their training in an accredited program as well as current clinical competence.

5. RPA believes that there is a series of extracorporeal therapies and other services that are ideally performed by or in close conjunction with nephrologists for kidney patients. These include but are not limited to: (1) acute and chronic hemodialysis and peritoneal dialysis; (2) continuous renal replacement therapy (CRRT) including all related forms of treatment for acute kidney failure, volume overload and drug intoxication; (3) ultrafiltration; (4) vascular access; (5) percutaneous renal biopsy; (6) ICU care; (7) apheresis; (8) kidney-specific diagnostic imaging techniques; and (9) end of life care, including the initiation of and withdrawal from dialysis.

6. RPA believes that credentialing bodies and other health care organizations should recognize that interventional nephrology is a distinct area of competency in nephrology, that these procedures are essential to the management of the patient with renal disease, and as such represent an appropriate component of the nephrologist’s scope of practice.

7. RPA believes that procedural privileges, including for interventional nephrology, can only be granted in accordance with specified professional criteria to ensure that kidney patients receive quality care, and that nephrologists requesting such privileges must show evidence of relevant training or experience as well as current clinical competence.
References


2. Coalition for Supportive Care of Kidney Patients http://www.kidneysupportivecare.org/