**New Application: Nephrology**

**Review Committee for Internal Medicine**

**ACGME**

**Oversight**

**Participating Sites**

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| Describe the collaborative relationship between the subspecialty program director and the core internal medicine residency director. [PR I.B.1.b)] (Limit response to 300 words) |
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| Will the program require fellows to travel more than 60 miles from the primary clinical site for a required rotation? [PR I.B.5.] | YES  NO |

If yes, describe how the program will ensure that the fellows are not unduly burdened by required rotations at geographically distant sites. (Limit response to 250 words)

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**Resources**

Will the program, in partnership with its Sponsoring Institution:

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| ensure that the program has adequate space available, including meeting rooms, classrooms, examination rooms, and office space? [PR I.D.1.a).(1)] | YES  NO |
| ensure that the program has adequate access to computers, visual, and other educational aids? [PR I.D.1.a).(1)] | YES  NO |
| ensure that appropriate in-person or remote/virtual consultations, including those done using telecommunication technology, are available in settings in which fellows work? [PR I.D.1.a).(2)] | YES  NO |
| provide access to an electronic health record (EHR)? [PR I.D.1.a).(3)] | YES  NO |

Explain any “NO” responses. (Limit response to 250 words)

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| How will the program provide fellows with access to training using simulation to support education and patient safety? [PR I.D.1.a).(4)] (Limit response to 300 words) |
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| Describe how the program will provide fellows with a patient population representative of the broad spectrum of clinical disorders and medical conditions managed by subspecialists in this area, and of the community being served by the program. [PR I.D.1.d).(1)] (Limit response to 300 words) |
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| Describe how the program will ensure fellows have adequate exposure to patients with acute kidney injury and chronic dialysis, both in-center hemodialysis and home dialysis therapies (peritoneal dialysis and home hemodialysis). [PR I.D.1.d).(2)] (Limit response to 300 words) |
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| Is primary clinical site approved to perform renal transplantation, or have a formal written agreement with such an institution? [PR I.D.1.c).(3)] | YES  NO |

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| Explain a “NO” response. (Limit response to 300 words) |
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Will the following facilities/laboratories/services be available for fellows’ education? [PR I.D.1.b).(1).(a) – I.D.1.c).(5)]

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| Biochemistry and serologic laboratories | YES  NO |
| Ultrasound | YES  NO |
| Computerized tomography | YES  NO |
| Magnetic resonance imaging | YES  NO |
| Diagnostic radionuclide laboratory | YES  NO |
| Surgical and pathological support | YES  NO |
| An active renal transplant service | YES  NO |
| Surgery for vascular and peritoneal dialysis access | YES  NO |
| Electron and immunofluorescence microscopy | YES  NO |
| Acute and chronic hemodialysis | YES  NO |
| Continuous renal replacement therapy | YES  NO |
| Peritoneal dialysis | YES  NO |
| Renal biopsy | YES  NO |

**Educational Program**

**ACGME Competencies**

**Patient Care and Procedural Skills**

Will fellows demonstrate competence in the evaluation and management of the following?

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| --- | --- |
| Acute kidney injury [PR IV.B.1.b).(1).(a).(i)] | YES  NO |
| Chronic kidney disease [PR IV.B.1.b).(1).(a).(ii)] | YES  NO |
| Disorders of fluid, electrolyte, and acid-base regulation [PR IV.B.1.b).(1).(a).(iii)] | YES  NO |
| Disorders of mineral metabolism, including nephrolithiasis and renal osteodystrophy [PR IV.B.1.b).(1).(a).(iv)] | YES  NO |
| Drug dosing adjustments and nephrotoxicity associated with alterations in drug metabolism and pharmacokinetics in renal disease [PR IV.B.1.b).(1).(a).(v)] | YES  NO |
| End-stage renal disease, including symptom management [PR IV.B.1.b).(1).(a).(vi)] | YES  NO |
| Genetic and inherited renal disorders, including inherited diseases of transport, cystic diseases, and other congenital disorders [PR IV.B.1.b).(1).(a).(vii)] | YES  NO |
| Geriatric aspects of nephrology [PR IV.B.1.b).(1).(a).(viii)] | YES  NO |
| Glomerular and vascular diseases, including the glomerulonephritides, diabetic nephropathy, and atheroembolic renal disease [PR IV.B.1.b).(1).(a).(ix)] | YES  NO |
| Hypertensive disorders [PR IV.B.1.b).(1).(a).(x)] | YES  NO |
| Renal disorders of pregnancy [PR IV.B.1.b).(1).(a).(xi)] | YES  NO |
| Renal transplant patients [PR IV.B.1.b).(1).(b)] | YES  NO |
| Tubulointerstitial renal diseases [PR IV.B.1.b).(1).(a).(xii)] | YES  NO |
| Urinary tract infections [PR IV.B.1.b).(1).(a).(xiii)] | YES  NO |

Will fellows demonstrate competence in the ability to: [IV.B.1.b).(2).(a).(i) – (v)]

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| perform diagnostic and therapeutic procedures relevant to their specific career paths? | YES  NO |
| treat their patients’ conditions with practices that are patient centered, safe, scientifically based, effective, timely, and cost effective? | YES  NO |
| deliver effective and patient-centered education regarding options for management of ESRD, including transplant, home dialysis therapies (peritoneal dialysis and home hemodialysis), in-center hemodialysis, and supportive care? | YES  NO |
| identify appropriate patients for native or transplant kidney biopsy, including: | YES  NO |
| interpretation and clinical application of results? | YES  NO |
| recognizing and managing adverse events? | YES  NO |
| providing counsel to patients about the procedure, recognizing potential complications, and taking measures to reduce the risk of the procedure? | YES  NO |
| identify appropriate patients for temporary dialysis access, identify potential complications and take measures to reduce the risk of the procedure, provide counsel to patients about the procedure, and recognize and manage adverse events after placement? | YES  NO |

Will fellows demonstrate competence in dialysis therapy, including: [IV.B.1.b).(2).(b) - IV.B.1.b).(2).(b).(iv)]

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| Acute and chronic hemodialysis? | YES  NO |
| Continuous renal replacement therapy? | YES  NO |
| Home dialysis therapies (peritoneal dialysis and home hemodialysis)? | YES  NO |
| Urinalysis? | YES  NO |

**Medical Knowledge**

Will fellows demonstrate sufficient knowledge in the following areas?

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| Clinical pharmacology, including drug metabolism, pharmacokinetics, and the effects of drugs on renal structure and function [PR IV.B.1.c).(1).(a)] | YES  NO |
| Dialysis and extracorporeal therapy, including: [PR IV.B.1.c).(1).(b)] | YES  NO |
| the indication for each mode of dialysis [PR IV.B.1.c).(1).(b).(i)] | YES  NO |
| dialysis modes and their relation to metabolism [PR IV.B.1.c).(1).(b).(ii)] | YES  NO |
| dialysis water treatment, delivery systems, and reuse of artificial kidneys [PR IV.B.1.c).(1).(b).(iii)] | YES  NO |
| the kinetic principles of hemodialysis and peritoneal dialysis [PR IV.B.1.c).(1).(b).(vi)] | YES  NO |
| the principles of dialysis access (acute and chronic vascular and peritoneal), including indications, techniques, and complications [PR IV.B.1.c).(1).(b).(v)] | YES  NO |
| the short- and long-term complications of each mode of dialysis and its management [PR IV.B.1.c).(1).(b).(vi)] | YES  NO |
| the artificial membranes used in hemodialysis and biocompatibility [PR IV.B.1.c).(1).(b).(vii) ] | YES  NO |
| urea kinetics and protein catabolic rate [PR IV.B.1.c).(1).(b).(vii)] | YES  NO |
| Technical and regulatory aspects of dialysis including acute dialysis, in-center hemodialysis, and home dialysis therapies (peritoneal dialysis and home hemodialysis) [PR IV.B.1.c).(1).(c)] | YES  NO |
| Normal and abnormal blood pressure regulation [PR IV.B.1.c).(1).(d)] | YES  NO |
| Normal and disordered fluid, electrolyte, and acid-base metabolism [PR IV.B.1.c).(1).(e)] | YES  NO |
| Normal mineral metabolism and its alteration in renal diseases, metabolic bone disease, and nephrolithiasis [PR IV.B.1.c).(1).(f)] | YES  NO |
| Nutritional aspects of renal disorders [PR IV.B.1.c).(1).(g)] | YES  NO |
| Immunologic aspects of renal disease [PR IV.B.1.c).(1).(h)] | YES  NO |
| Indications for and interpretations of radiologic tests of the kidney and urinary tract [PR IV.B.1.c).(1).(i)] | YES  NO |
| Pathogenesis, natural history, and management of congenital and acquired diseases of the kidney and urinary tract, and renal diseases associated with systemic disorders [PR IV.B.1.c).(1).(j)] | YES  NO |
| Renal anatomy, physiology, and pathology [PR IV.B.1.c).(1).(k)] | YES  NO |
| Renal transplantation, including [PR IV.B.1.c).(1).(l)] | YES  NO |
| biology of transplantation rejection [PR IV.B.1.c).(1).(l).(i)] | YES  NO |
| indications and contraindications for renal transplantation [PR IV.B.1.c).(1).(l).(ii)] | YES  NO |
| principles of transplant recipient evaluation and selection [PR IV.B.1.c).(1).(l).(iii)] | YES  NO |
| principles of evaluation of transplant donors, both living and cadaveric, including histocompatibility testing [PR IV.B.1.c).(1).(l).(iv)] | YES  NO |
| principles of organ harvesting, preservation, and sharing [PR IV.B.1.c).(1).(l).(v)] | YES  NO |
| psychosocial aspects of organ donation and transplantation [PR IV.B.1.c).(1).(l).(vi)] | YES  NO |
| the pathogenesis and management of acute renal allograft dysfunction [PR IV.B.1.c).(1).(l).(vii)] | YES  NO |
| Management of renal disorders in non-renal organ transplantation [PR IV.B.1.c).(1).(m)] | YES  NO |
| Geriatric medicine, including [PR IV.B.1.c).(1).(n)] | YES  NO |
| physiology and pathology of the aging kidney [PR IV.B.1.c).(1).(n).(i)] | YES  NO |
| drug dosing and renal toxicity in elderly patients [PR IV.B.1.c).(1).(n).(ii)] | YES  NO |
| The principles and practice of hemodialysis and peritoneal dialysis [PR IV.B.1.c).(1).(o)] | YES  NO |
| The technology of hemodialysis and peritoneal dialysis [PR IV.B.1.c).(1).(p)] | YES  NO |
| The pharmacology of commonly used medications and their kinetic and dosage alteration with hemodialysis and peritoneal dialysis [PR IV.B.1.c).(1).(q)] | YES  NO |
| The psychosocial and ethical issues of dialysis [PR IV.B.1.c).(1).(r)] | YES  NO |

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| Will fellows be supervised by a qualified faculty member until they attain proficiency in performing required procedures? [PR IV.C.10.a)] | YES  NO |

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| Will fellows’ performance and interpretation of procedures be documented in the fellow’s record, including indications, outcomes, diagnoses, and supervisor(s)? [PR IV.C.10.b)] | YES  NO |

Explain any “NO” responses. (Limit response to 250 words)

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| Click or tap here to enter text. |

**Practice-Based Learning and Improvement**

Briefly describe how fellows will demonstrate competence in investigating and evaluating their care of patients, appraising and assimilating scientific evidence, and continuously improving their patient care based on self-evaluation and lifelong learning. [PR IV.B.1.d)] (Limit response to 400 words)

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**Interpersonal and Communication Skills**

Briefly describe how fellows will develop skills that result in the effective exchange of information and collaboration with patients, their families and health professionals. [PR IV.B.1.e)] (Limit response to 400 words)

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**Systems Based Practice**

Briefly describe how fellows will demonstrate an awareness of and responsiveness to the larger context and system of health care, including the structural and social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care. [PR IV.B.1.f)] (Limit response to 400 words)

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**Curriculum Organization and Fellow Experiences**

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| How many months are devoted to clinical experiences? [PR IV.C.3.] | # |
| How many months of experience will fellows have with dialysis therapies, both hemodialysis and peritoneal dialysis? [PR IV.C.3.a)] | # |
| How many months of clinical experience will fellows have on an active renal transplant service? [PR IV.C.3.b)] | # |
| How many new transplant recipients will fellows have supervised involvement in the immediate postoperative management including administration of immunosuppressants? [PR IV.C.6.c)] | # |
| How many months does each fellow spend in patient-care activities with renal transplant patients in the ambulatory setting? [PR IV.C.6.d)] | # |
| How many renal transplant recipients will each fellow follow in the ambulatory setting? [PR IV.C.6.d)] | # |
| How many new renal transplant recipients will each fellow see during the course of their fellowship? [PR I.D.1.d).(2).(a)] | # |

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| Will the program provide fellows individualized educational experiences to allow them to participate in opportunities relevant to their future practice or to further skill/competency development in the foundational educational experiences in the subspecialty? [PR IV.C.9.] | YES  NO |

Explain “NO” response. (Limit response to 250 words)

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Will fellows receive supervised involvement in the following dialysis therapy?

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| Education and evaluation of pre-dialysis chronic kidney disease patients and dialysis patients regarding management of kidney failure, including transplant, home dialysis therapies (peritoneal dialysis and home hemodialysis), in-center hemodialysis, and supportive care [PR IV.C.5.a)] | YES  NO |
| Longitudinal care of patients treated with home dialysis therapies (peritoneal dialysis and home hemodialysis) and in-center hemodialysis [PR IV.C.5.b)] | YES  NO |
| Assessment of hemodialysis and peritoneal dialysis efficiency [PR IV.C.5.c)] | YES  NO |
| The evaluation and management of complications of hemodialysis and peritoneal dialysis [PR IV.C.5.d)] | YES  NO |
| Determining special nutritional requirements of patients undergoing hemodialysis and peritoneal dialysis [PR IV.C.5.e)] | YES  NO |
| End-of-life care and pain management in the care of patients undergoing home dialysis therapies and in-center hemodialysis [PR IV.C.5.f)] | YES  NO |
| Evaluation and management of medical complications in patients during and between hemodialyses and peritoneal dialysis [PR IV.C.5.g)] | YES  NO |
| Evaluation and selection of patients for acute hemodialysis or continuous renal replacement therapies [PR IV.C.5.h)] | YES  NO |
| Long-term follow-up of patients undergoing chronic hemodialysis and peritoneal dialysis [PR IV.C.5.i)] | YES  NO |
| Modification of drug dosage during hemodialysis and peritoneal dialysis [PR IV.C.5.j)] | YES  NO |
| Examination of dialysis access for hemodialysis and peritoneal dialysis [PR IV.C.5.k)] | YES  NO |
| Writing peritoneal dialysis, home hemodialysis, and hemodialysis prescriptions and how to assess dialysis adequacy [PR IV.C.5.l)] | YES  NO |

Will fellows receive supervised involvement in the following pre- and post-transplant care?

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| Clinical and laboratory diagnosis of all forms of rejection [PR IV.C.6.a)] | YES  NO |
| Evaluation and selection of transplant candidates [PR IV.C.6.b)] | YES  NO |
| Management in the intensive care unit setting for patients with renal disorders [PR IV.C.6.e)] | YES  NO |
| Medical management of rejection, including use of immunosuppressive drugs and other agents [PR IV.C.6.f)] | YES  NO |
| Preoperative evaluation and preparation of transplant recipients and donors [PR IV.C.6.g)] | YES  NO |
| The psychosocial and ethical issues of renal transplantation [PR IV.C.6.h)] | YES  NO |
| Recognition and medical management of the surgical and nonsurgical complications of transplantations [PR IV.C.6.i)] | YES  NO |

Will fellows have formal instruction regarding indications for and interpretation of the results of the following?

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| Balloon angioplasty of vascular access, or other procedures utilized in the maintenance of chronic vascular access patency [PR IV.C.10.c).(1)] | YES  NO |
| Management of peritoneal catheters [PR IV.C.10.c).(2)] | YES  NO |
| Radiology of vascular access [PR IV.C.10.c).(3)] | YES  NO |
| Renal Imaging [PR IV.C.10.c).(4)] | YES  NO |
| Therapeutic plasmapheresis [PR IV.C.10.c).(5)] | YES  NO |

**CONTINUITY AMBULATORY CLINIC EXPERIENCES**

Provide information for the fellows' continuity experience and patient distribution for all years of training. List each experience indicating the name of the experiences (e.g., Continuity Clinic, Other), site name, duration of the experience, number of ½ day sessions per week, average number of patients seen per session, whether faculty supervision is provided for each experience, and the percent of female patients.

|  | **Site #1** | **Site #2** | **Site #3** | **Site #4** | **Site #5** | **Site #6** |
| --- | --- | --- | --- | --- | --- | --- |
| Name of Experience: | Experience | Experience | Experience | Experience | Experience | Experience |
| Duration (weeks): | # | # | # | # | # | # |
| ½ day sessions per week: | # | # | # | # | # | # |
| Average patients seen per session: | # | # | # | # | # | # |
| On-site concurrent faculty supervision present? | Y  N | Y  N | Y  N | Y  N | Y  N | Y  N |
| % Female: | # % | # % | # % | # % | # % | # % |

**OTHER AMBULATORY EXPERIENCE**

Provide information for the fellows' other ambulatory experience and patient distribution for all years of training. List each experience indicating the name of the experiences (e.g., Continuity Clinic, Other), site name, duration of the experience, number of ½ day sessions per week, average number of patients seen per session, whether faculty supervision is provided for each experience, and the percent of female patients.

|  | **Site #1** | **Site #2** | **Site #3** | **Site #4** | **Site #5** | **Site #6** |
| --- | --- | --- | --- | --- | --- | --- |
| Name of Experience: | Experience | Experience | Experience | Experience | Experience | Experience |
| Duration (weeks): | # | # | # | # | # | # |
| ½ day sessions per week: | # | # | # | # | # | # |
| Average patients seen per session: | # | # | # | # | # | # |
| On-site concurrent faculty supervision present? | Y  N | Y  N | Y  N | Y  N | Y  N | Y  N |
| % Female: | # % | # % | # % | # % | # % | # % |

**Didactic Experience**

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| Briefly describe the conduct of Core Curriculum Conference Series in your program. [PR IV.C.12.] |
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Describe how the program will ensure that fellows have an opportunity to review all knowledge content from conferences that they were unable to attend. [PR IV.C.12.a).(1)] (Limit response to 300 words)

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| Will the faculty participate in required conferences? [PR II.B.2.e)] | YES  NO |

Describe the program’s patient- or case-based approach to clinical teaching. [PR IV.C.13.] (Limit response to 300 words)

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Describe how the fellows will receive instruction in practice management relevant to the subspecialty. [PR IV.C.14.] (Limit response to 300 words)

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**Evaluation**

**Fellow Evaluation**

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| Describe the method for assessment of procedural competence. [PR V.A.1.a).(1)] |
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| Will the program use multi-source evaluation, including patients, peers, and non-physician team members, to assess each fellow's ability to meet professional responsibilities? [PR V.A.1.c).(1)] | YES  NO |

**Faculty Evaluation**

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| --- | --- |
| Will the faculty evaluations be written and confidential? [PR V.B.1.b)] | YES  NO |
| Will faculty members receive feedback on their evaluations at least annually? [PR V.B.2.] | YES  NO |