Supplemental Table 1: Number of available patient surveys per diagnosis group

| Group name                  | Group ID number | Number of surveys responses |
|-----------------------------|-----------------|----------------------------|
| AKI                         | 1               | 6                          |
| Bone mineral disease        | 2               | 1                          |
| BP ailments                 | 3               | 56                         |
| CKD I-III                   | 4               | 143                        |
| CKD IV -V                   | 5               | 66                         |
| Cystic kidney disease       | 6               | 18                         |
| Diabetes                    | 7               | 8                          |
| Fluid and electrolyte imbalances | 8          | 13                         |
| Hematuria                   | 9               | 13                         |
| Malignancy                  | 10              | 6                          |
| Nephrolithiasis             | 11              | 34                         |
| Other                       | 12              | 53                         |
| Renal Parenchymal disease   | 13              | 36                         |
| Urological ailments         | 14              | 9                          |
| **Total**                   |                 | **462**                    |
### Supplemental Table 2: Diagnoses Grouping of patients seen in Outpatient nephrology March – July 2020

| Primary visit diagnoses                                                                 | Count of Primary Diagnosis ICD 10 |
|----------------------------------------------------------------------------------------|-----------------------------------|
| **AKI**                                                                                |                                   |
| Acute kidney failure with tubular necrosis (HCC)                                        | 13                                |
| Acute kidney failure, unspecified (HCC)                                                 | 133                               |
| Other acute kidney failure (HCC)                                                       | 5                                 |
| **Bone mineral disease**                                                                |                                   |
| Age-related osteoporosis without current pathological fracture                          | 4                                 |
| Disorder of parathyroid gland, unspecified (HCC)                                       | 2                                 |
| Disorder of phosphorus metabolism, unspecified                                         | 1                                 |
| Hyperparathyroidism, unspecified (HCC)                                                  | 9                                 |
| Hypoparathyroidism, unspecified (HCC)                                                   | 1                                 |
| Other disorders of calcium metabolism                                                  | 7                                 |
| Other disorders of phosphorus metabolism                                               | 5                                 |
| Other specified disorders of bone density and structure, unspecified site               | 4                                 |
| Primary hyperparathyroidism (HCC)                                                      | 5                                 |
| **BP ailments**                                                                         | **773**                           |
| Acute on chronic right heart failure (HCC)                                              | 1                                 |
| Autonomic dysreflexia                                                                  | 2                                 |
| Biventricular heart failure (HCC)                                                      | 1                                 |
| Chronic combined systolic (congestive) and diastolic (congestive) heart failure (HCC) | 1                                 |
| Conn's syndrome (HCC)                                                                  | 1                                 |
| Disorder of adrenal gland, unspecified (HCC)                                            | 4                                 |
| Disorder of the autonomic nervous system, unspecified                                  | 10                                |
| Elevated blood-pressure reading, without diagnosis of hypertension                     | 31                                |
| Essential (primary) hypertension                                                       | 631                               |
| Heart disease, unspecified                                                             | 1                                 |
| Heart failure, unspecified (HCC)                                                       | 1                                 |
| Hyperaldosteronism, unspecified (HCC)                                                   | 5                                 |
| Hypertension secondary to endocrine disorders                                          | 8                                 |
| Hypertensive emergency                                                                 | 4                                 |
| Hypertensive encephalopathy                                                            | 2                                 |
| Hypertensive heart disease with heart failure (HCC)                                    | 5                                 |
| Hypertensive heart disease without heart failure                                       | 10                                |
| Hypertensive urgency                                                                  | 6                                 |
| Hypotension, unspecified                                                               | 7                                 |
| Left ventricular failure, unspecified (HCC)                                            | 2                                 |
| Occlusion and stenosis of bilateral carotid arteries                                   | 1                                 |
| Occlusion and stenosis of right carotid artery                                         | 1                                 |
| Orthostatic hypotension                                                               | 8                                 |
| Other hypertrophic cardiomyopathy (HCC)                                                | 1                                 |
| Other primary hyperaldosteronism (HCC)                                                 | 3                                 |
| Other secondary hypertension                                                          | 9                                 |
| Other specified disorders of adrenal gland (HCC)                                       | 1                                 |
| Other specified endocrine disorders                                                    | 1                                 |
| Pre-existing essential hypertension complicating pregnancy, second trimester           | 2                                 |
| Pre-existing essential hypertension complicating pregnancy, unspecified trimester      | 1                                 |
### Supporting Information

| Condition                                                                 | Count |
|---------------------------------------------------------------------------|-------|
| Right heart failure, unspecified (HCC)                                   | 1     |
| Secondary hypertension, unspecified                                       | 9     |
| Supervision of other high risk pregnancies, unspecified trimester         | 1     |
| Twin pregnancy, monochorionic/diamniotic, second trimester               | 1     |
| **CKD I-III**                                                            | 1088  |
| Anemia, unspecified                                                      | 9     |
| Chronic kidney disease, stage 1                                           | 3     |
| Chronic kidney disease, stage 2 (mild)                                   | 51    |
| Chronic kidney disease, stage 3 (moderate) (HCC)                         | 628   |
| Chronic kidney disease, unspecified                                      | 16    |
| Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease | 348   |
| Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease (HCC) | 18    |
| Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease | 7     |
| Iron deficiency anemia secondary to blood loss (chronic)                 | 2     |
| Iron deficiency anemia, unspecified                                      | 1     |
| Nutritional anemia, unspecified                                           | 2     |
| Secondary hyperparathyroidism of renal origin (HCC)                      | 1     |
| Secondary hyperparathyroidism, not elsewhere classified (HCC)            | 1     |
| Unspecified kidney failure                                               | 1     |
| **CKD IV-V**                                                             | 757   |
| Chronic kidney disease, stage 4 (severe) (HCC)                           | 518   |
| Chronic kidney disease, stage 5 (HCC)                                    | 216   |
| Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease (HCC) | 15    |
| Hypertensive heart and chronic kidney disease with heart failure and stage 5 chronic kidney disease, or end stage renal disease (HCC) | 3     |
| Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease (HCC) | 2     |
| Secondary hyperparathyroidism of renal origin (HCC)                      | 3     |
| **Cystic kidney disease**                                                | 207   |
| Congenital multiple renal cysts                                          | 1     |
| Cyst of kidney, acquired                                                 | 19    |
| Cystic disease of liver                                                  | 13    |
| Cystic kidney disease, unspecified                                       | 5     |
| Family history of polycystic kidney                                      | 1     |
| Medullary cystic kidney                                                  | 9     |
| Other cystic kidney diseases                                             | 1     |
| Other polycystic kidney, infantile type (HCC)                           | 2     |
| Polycystic kidney, adult type                                            | 132   |
| Polycystic kidney, unspecified                                           | 24    |
| **Diabetes**                                                             | 89    |
| Diabetes mellitus due to underlying condition with diabetic nephropathy (HCC) | 6     |
| Diabetes mellitus due to underlying condition with hyperglycemia (HCC)  | 1     |
| Hyperglycemia, unspecified                                               | 5     |
| Impaired glucose tolerance (oral)                                       | 1     |
| Metabolic syndrome                                                       | 1     |
| Supporting Information |  |
|------------------------|--|
| Other abnormal glucose | 1 |
| Other specified diabetes mellitus with diabetic nephropathy (HCC) | 1 |
| Other specified diabetes mellitus with other diabetic kidney complication (HCC) | 1 |
| Prediabetes | 1 |
| Pre-existing type 1 diabetes mellitus, in pregnancy, second trimester | 1 |
| Type 1 diabetes mellitus with diabetic chronic kidney disease (HCC) | 4 |
| Type 1 diabetes mellitus with diabetic nephropathy (HCC) | 8 |
| Type 1 diabetes mellitus without complications (HCC) | 9 |
| Type 2 diabetes mellitus with diabetic chronic kidney disease (HCC) | 21 |
| Type 2 diabetes mellitus with diabetic nephropathy (HCC) | 2 |
| Type 2 diabetes mellitus with diabetic neuropathy, unspecified (HCC) | 1 |
| Type 2 diabetes mellitus with hyperglycemia (HCC) | 1 |
| Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral (HCC) | 1 |
| Type 2 diabetes mellitus with other diabetic kidney complication (HCC) | 2 |
| Type 2 diabetes mellitus with other skin ulcer (HCC) | 3 |
| Type 2 diabetes mellitus with other specified complication (HCC) | 17 |
| Type 2 diabetes mellitus without complications (HCC) | 1 |

**Fluid and electrolyte imbalances**

| Fluid and electrolyte imbalances | 187 |
|----------------------------------|-----|
| Acidosis | 1 |
| Alkalosis | 1 |
| Amyloidosis, unspecified (HCC) | 2 |
| Bartter's syndrome (HCC) | 1 |
| Dehydration | 2 |
| Diarrhea, unspecified | 1 |
| Disorders of magnesium metabolism, unspecified | 2 |
| Edema, unspecified | 11 |
| Gestational edema with proteinuria, first trimester | 1 |
| Hypercalcemia | 14 |
| Hyperkalemia | 31 |
| Hyperosmolality and hypernatremia | 2 |
| Hypocalcemia | 2 |
| Hypokalemia | 24 |
| Hypomagnesemia | 17 |
| Hypo-osmolality and hyponatremia | 13 |
| Hypovolemia | 1 |
| Localized edema | 13 |
| Other disorders of electrolyte and fluid balance, not elsewhere classified | 1 |
| Other fluid overload | 6 |
| Other specified abnormal findings of blood chemistry | 40 |
| Vomiting, unspecified | 1 |

**Hematuria**

| Hematuria | 156 |
|-----------|-----|
| Abnormal uterine and vaginal bleeding, unspecified | 1 |
| Asymptomatic microscopic hematuria | 1 |
| Benign essential microscopic hematuria | 2 |
| Gross hematuria | 6 |
| Hematuria, unspecified | 50 |
| Other microscopic hematuria | 2 |
### Supporting Information

| Condition                                                                 | Count |
|---------------------------------------------------------------------------|-------|
| Recurrent and persistent hematuria with other morphologic changes         | 94    |
| **Malignancy**                                                            | 85    |
| Acute lymphoblastic leukemia not having achieved remission (HCC)           | 1     |
| Acute myelomonocytic leukemia, not having achieved remission (HCC)         | 1     |
| Benign neoplasm of left kidney                                            | 1     |
| Benign neoplasm of right kidney                                           | 3     |
| Benign neoplasm of thymus                                                | 1     |
| Bone marrow transplant status (HCC)                                       | 1     |
| Chronic myeloproliferative disease (HCC)                                 | 1     |
| Encounter for antineoplastic immunotherapy                                | 2     |
| Follicular lymphoma grade ii, intra-abdominal lymph nodes (HCC)            | 1     |
| Light chain (AL) amyloidosis (HCC)                                       | 13    |
| Lymphangioleiomyomatosis (HCC)                                           | 1     |
| Malignant neoplasm of bladder, unspecified (HCC)                          | 4     |
| Malignant neoplasm of colon, unspecified (HCC)                            | 1     |
| Malignant neoplasm of connective and soft tissue, unspecified (HCC)       | 1     |
| Malignant neoplasm of descended left testis (HCC)                         | 1     |
| Malignant neoplasm of endometrium (HCC)                                  | 1     |
| Malignant neoplasm of left kidney, except renal pelvis (HCC)              | 3     |
| Malignant neoplasm of lower third of esophagus (HCC)                      | 1     |
| Malignant neoplasm of nasopharynx, unspecified (HCC)                      | 1     |
| Malignant neoplasm of oropharynx, unspecified (HCC)                       | 1     |
| Malignant neoplasm of pancreatic duct (HCC)                              | 1     |
| Malignant neoplasm of posterior wall of bladder (HCC)                     | 1     |
| Malignant neoplasm of prostate (HCC)                                      | 3     |
| Malignant neoplasm of rectum (HCC)                                       | 1     |
| Malignant neoplasm of right kidney, except renal pelvis (HCC)             | 3     |
| Malignant neoplasm of right renal pelvis (HCC)                           | 1     |
| Malignant neoplasm of unspecified part of left bronchus or lung (HCC)    | 1     |
| Malignant neoplasm of unspecified site of unspecified female breast (HCC)| 1     |
| Malignant neoplasm of upper lobe, left bronchus or lung (HCC)             | 1     |
| Mesothelioma of pleura (HCC)                                             | 1     |
| Monoclonal gammopathy                                                     | 13    |
| Multiple myeloma not having achieved remission (HCC)                      | 1     |
| Neoplasm of uncertain behavior of lymphoid, hematopoietic and related tissue, unspecified (HCC) | 1 |
| Organ-limited amyloidosis (HCC)                                          | 1     |
| Other specified diseases of blood and blood-forming organs               | 2     |
| Personal history of malignant neoplasm of thyroid                        | 2     |
| Personal history of other malignant neoplasm of kidney                   | 4     |
| Secondary systemic amyloidosis (HCC)                                     | 6     |
| Waldenstrom macroglobulinemia (HCC)                                      | 1     |
| **Nephrolithiasis**                                                       | 449   |
| Calculus in bladder                                                      | 2     |
| Calculus of kidney                                                       | 344   |
| Calculus of kidney with calculus of ureter                               | 41    |
| Calculus of ureter                                                       | 2     |
| Cystinuria (HCC)                                                         | 3     |
| Disorder resulting from impaired renal tubular function, unspecified     | 1     |
| Hypercalciuria                                                           | 5     |
| Condition                                                                 | Frequency |
|--------------------------------------------------------------------------|-----------|
| Hyperoxaluria                                                            | 10        |
| Hyperuricemia without signs of inflammatory arthritis and tophaceous disease | 2         |
| Hypocitraturia                                                           | 1         |
| Personal history of urinary calculi                                      | 6         |
| Primary hyperoxaluria (HCC)                                              | 12        |
| Unspecified renal colic                                                  | 1         |
| Urinary calculus, unspecified                                            | 19        |
| Other                                                                    | 598       |
| Abdominal aortic aneurysm, without rupture (HCC)                         | 3         |
| Abdominal distension (gaseous)                                           | 1         |
| Abnormal electrocardiogram (ECG) (EKG)                                   | 1         |
| Abnormal findings on diagnostic imaging of other abdominal regions, including retroperitoneum | 1         |
| Abnormal immunological findings in specimens from other organs, systems and tissues | 1         |
| Abnormal results of liver function studies                               | 1         |
| Abnormal weight loss                                                     | 3         |
| Acne, unspecified                                                        | 1         |
| Acquired absence of stomach (part of)                                    | 1         |
| Acute bronchiolitis, unspecified                                         | 1         |
| Acute pyelonephritis                                                    | 4         |
| Acute sinusitis, unspecified                                             | 1         |
| Aneurysm of renal artery (HCC)                                            | 1         |
| Aortic aneurysm of unspecified site, without rupture (HCC)               | 1         |
| Arterial fibromuscular dysplasia (HCC)                                   | 9         |
| Arteritis, unspecified (HCC)                                              | 4         |
| Atherosclerosis of aorta (HCC)                                           | 1         |
| Atherosclerosis of native arteries of extremities with intermittent claudication, bilateral legs (HCC) | 1         |
| Atherosclerosis of native arteries of extremities with intermittent claudication, left leg (HCC) | 1         |
| Atherosclerosis of renal artery (HCC)                                    | 29        |
| Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris (HCC) | 1         |
| Atherosclerotic heart disease of native coronary artery with unstable angina pectoris (HCC) | 1         |
| Atherosclerotic heart disease of native coronary artery without angina pectoris (HCC) | 4         |
| Bacteremia                                                               | 1         |
| Benign paroxysmal vertigo, bilateral                                     | 1         |
| Bradycardia, unspecified                                                 | 2         |
| Burn of unspecified degree of abdominal wall, initial encounter           | 1         |
| Cardiac arrhythmia, unspecified                                          | 2         |
| Cardiac murmur, unspecified                                              | 1         |
| Cardiomyopathy, unspecified (HCC)                                        | 3         |
| Cellulitis, unspecified                                                  | 1         |
| Cerebral infarction, unspecified (HCC)                                   | 4         |
| Chest pain, unspecified                                                  | 2         |
| Chronic diastolic (congestive) heart failure (HCC)                       | 1         |
| Chronic obstructive pulmonary disease with (acute) lower respiratory infection (HCC) | 2         |
| Complications of stem cell transplant (HCC)                             | 1         |
| Condition                                                                 | Count |
|---------------------------------------------------------------------------|-------|
| Congenital insufficiency of aortic valve (HCC)                           | 1     |
| Constipation, unspecified                                                | 1     |
| Cough                                                                     | 2     |
| Cushing's syndrome, unspecified (HCC)                                    | 1     |
| Decreased white blood cell count, unspecified                            | 1     |
| Deficiency of other specified B group vitamins                            | 1     |
| Disease of spinal cord, unspecified (HCC)                                | 1     |
| Disorder of the skin and subcutaneous tissue, unspecified                | 2     |
| Disorientation, unspecified                                              | 1     |
| Dissection of renal artery (HCC)                                         | 1     |
| Disseminated intravascular coagulation (defibrination syndrome) (HCC)    | 1     |
| Diverticulosis of large intestine without perforation or abscess without bleeding | 1     |
| Dizziness and giddiness                                                  | 2     |
| Dorsalgia, unspecified                                                   | 2     |
| Dyspnea, unspecified                                                     | 1     |
| Encounter for antenatal screening for chromosomal anomalies              | 1     |
| Encounter for examination for normal comparison and control in clinical research program | 2     |
| Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm | 1     |
| Encounter for general adult medical examination without abnormal findings| 8     |
| Encounter for other preprocedural examination                            | 13    |
| Encounter for screening, unspecified                                     | 1     |
| Essential tremor                                                         | 1     |
| Fatty (change of) liver, not elsewhere classified                        | 2     |
| Female infertility, unspecified                                          | 1     |
| Fever, unspecified                                                       | 2     |
| Finding of unspecified substance, not normally found in blood            | 2     |
| Gastro-esophageal reflux disease without esophagitis                     | 4     |
| Generalized anxiety disorder                                             | 1     |
| Generalized hyperhidrosis                                                | 1     |
| Glycosuria                                                                | 1     |
| Gout, unspecified                                                        | 6     |
| Heart transplant status (HCC)                                            | 1     |
| Heartburn                                                                | 1     |
| Hemochromatosis, unspecified                                             | 1     |
| Hepatorenal syndrome (HCC)                                               | 1     |
| Hyperlipidemia, unspecified                                              | 16    |
| Hypersensitivity angitis (HCC)                                           | 1     |
| Hypothyroidism, unspecified                                              | 5     |
| Immunodeficiency, unspecified (HCC)                                      | 2     |
| Infection following a procedure, unspecified, initial encounter          | 1     |
| Inflammatory polyps of colon without complications (HCC)                | 1     |
| Interstitial pulmonary disease, unspecified (HCC)                        | 1     |
| Intra-abdominal and pelvic swelling, mass and lump, unspecified site     | 3     |
| Irritable bowel syndrome with diarrhea                                   | 2     |
| Ischemia and infarction of kidney (HCC)                                  | 2     |
| Left lower quadrant abdominal swelling, mass and lump                    | 1     |
| Left upper quadrant pain                                                 | 1     |
| Liver disease, unspecified                                               | 1     |
| Condition                                                                 | Frequency |
|--------------------------------------------------------------------------|-----------|
| Liver transplant status (HCC)                                            | 6         |
| Long term (current) use of anticoagulants                                 | 3         |
| Low back pain                                                            | 7         |
| Lung transplant status (HCC)                                             | 1         |
| Lymphedema, not elsewhere classified                                     | 2         |
| Malabsorption due to intolerance, not elsewhere classified (HCC)          | 1         |
| Mixed irritable bowel syndrome                                           | 1         |
| Morbid (severe) obesity due to excess calories (HCC)                      | 5         |
| Multiple endocrine neoplasia (MEN) type I (HCC)                          | 1         |
| Nausea                                                                   | 1         |
| Nicotine dependence, cigarettes, uncomplicated                           | 1         |
| Noninfective gastroenteritis and colitis, unspecified                     | 1         |
| Non-pressure chronic ulcer of other part of right lower leg limited to breakdown of skin (HCC) | 1 |
| Non-pressure chronic ulcer of unspecified part of left lower leg with unspecified severity (HCC) | 1 |
| Nonrheumatic aortic (valve) insufficiency                                | 1         |
| Nonrheumatic aortic (valve) stenosis                                     | 4         |
| Nonrheumatic aortic valve disorder, unspecified                          | 2         |
| Nonrheumatic mitral (valve) insufficiency                                | 1         |
| Nontraumatic intracerebral hemorrhage, unspecified (HCC)                 | 1         |
| Obesity, unspecified                                                     | 4         |
| Obstructive sleep apnea (adult) (pediatric)                              | 1         |
| Other atherosclerosis of native arteries of extremities, bilateral legs (HCC) | 1 |
| Other chest pain                                                         | 3         |
| Other chronic pain                                                       | 1         |
| Other chronic pancreatitis (HCC)                                         | 2         |
| Other diseases of capillaries                                            | 1         |
| Other diseases of mediastinum, not elsewhere classified                   | 2         |
| Other disorders resulting from impaired renal tubular function           | 9         |
| Other fatigue                                                            | 5         |
| Other forms of dyspnea                                                    | 4         |
| Other general symptoms and signs                                         | 4         |
| Other long term (current) drug therapy                                   | 4         |
| Other phakomatoses, not elsewhere classified (HCC)                       | 1         |
| Other specified abnormal immunological findings in serum                 | 12        |
| Other specified cardiac arrhythmias                                      | 1         |
| Other specified diseases of liver                                        | 7         |
| Other specified disorders of arteries and arterioles (HCC)              | 43        |
| Other specified disorders of nose and nasal sinuses                      | 1         |
| Other specified erythematous conditions                                  | 1         |
| Other specified hearing loss, bilateral                                  | 1         |
| Other specified personal risk factors, not elsewhere classified          | 3         |
| Other specified postprocedural states                                    | 1         |
| Other specified soft tissue disorders                                     | 2         |
| Other specified symptoms and signs involving the circulatory and respiratory systems | 4 |
| Other vascular disorders of intestine (HCC)                             | 1         |
| Other visual disturbances                                                | 1         |
| Overweight                                                               | 1         |
| Condition                                                                 | Count |
|---------------------------------------------------------------------------|-------|
| Pain in left hip                                                          | 1     |
| Pain in right hip                                                         | 1     |
| Pain in right knee                                                        | 1     |
| Pain in unspecified joint                                                 | 2     |
| Palpitations                                                              | 1     |
| Paroxysmal atrial fibrillation (HCC)                                      | 2     |
| Periodic paralysis                                                        | 1     |
| Personal history of other diseases of the circulatory system              | 1     |
| Personal history of other diseases of the musculoskeletal system and connective tissue | 14    |
| Personal history of other specified conditions                            | 1     |
| Personal history of transient ischemic attack (TIA), and cerebral infarction without residual deficits | 1     |
| Pigmentary retinal dystrophy                                              | 1     |
| Pneumonia, unspecified organism                                            | 1     |
| Polymyalgia rheumatica (HCC)                                              | 1     |
| Polyneuropathy, unspecified                                               | 7     |
| Postsurgical malabsorption, not elsewhere classified (HCC)                | 2     |
| Presence of coronary angioplasty implant and graft                        | 1     |
| Primary adrenocortical insufficiency (HCC)                                | 2     |
| Pulmonary hypertension, unspecified (HCC)                                 | 2     |
| Pure hypercholesterolemia, unspecified                                    | 1     |
| Pyuria                                                                    | 4     |
| Radiculopathy, site unspecified                                           | 1     |
| Rash and other nonspecific skin eruption                                  | 1     |
| Raynaud's syndrome without gangrene                                        | 1     |
| Renal agenesis, unilateral                                                | 1     |
| Renal sclerosis, unspecified                                              | 57    |
| Renovascular hypertension                                                 | 37    |
| Right upper quadrant pain                                                 | 1     |
| Schizoaffective disorder, unspecified (HCC)                               | 1     |
| Secondary polycythemia                                                    | 5     |
| Secondary pulmonary arterial hypertension (HCC)                           | 1     |
| Shortness of breath                                                       | 2     |
| Sjogren's syndrome with other organ involvement (HCC)                     | 1     |
| Sleep apnea, unspecified                                                  | 1     |
| Sleep disorder, unspecified                                               | 1     |
| Snoring                                                                   | 2     |
| Spinal stenosis, lumbar region with neurogenic claudication              | 2     |
| Spontaneous ecchymoses                                                   | 1     |
| ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery (HCC) | 1     |
| Stem cells transplant status (HCC)                                        | 1     |
| Stricture of artery (HCC)                                                 | 2     |
| Supervision of high risk pregnancy, unspecified, unspecified trimester    | 2     |
| Syncope and collapse                                                      | 4     |
| Syndrome of inappropriate secretion of antidiuretic hormone (HCC)         | 3     |
| Tachycardia, unspecified                                                  | 1     |
| Thoracic aortic aneurysm, ruptured (HCC)                                  | 1     |
| Thoracic aortic aneurysm, without rupture (HCC)                           | 1     |
| Abnormal Condition                                                                 | Count |
|-----------------------------------------------------------------------------------|-------|
| Thrombotic microangiopathy (HCC)                                                   | 5     |
| Transient cerebral ischemic attack, unspecified                                     | 1     |
| Tremor, unspecified                                                                | 1     |
| Tuberous sclerosis (HCC)                                                           | 4     |
| Underweight                                                                        | 1     |
| Unilateral primary osteoarthritis, right knee                                      | 1     |
| Unspecified abdominal pain                                                          | 12    |
| Unspecified abnormal findings in urine                                             | 1     |
| Unspecified atrial fibrillation (HCC)                                              | 3     |
| Unspecified atrioventricular block                                                 | 1     |
| Unspecified convulsions (HCC)                                                      | 1     |
| Unspecified dementia without behavioral disturbance (HCC)                          | 1     |
| Unspecified diastolic (congestive) heart failure (HCC)                              | 2     |
| Unspecified open wound, left lower leg, initial encounter                           | 1     |
| Urinary tract infection, site not specified                                        | 15    |
| Varicose veins of bilateral lower extremities with other complications              | 1     |
| Weakness                                                                           | 2     |

| Renal Parenchymal Disease | 439 |
|---------------------------|-----|
| Acute nephritic syndrome with diffuse crescentic glomerulonephritis                | 1   |
| Acute nephritic syndrome with other morphologic changes                             | 2   |
| Acute nephritic syndrome with unspecified morphologic changes                      | 3   |
| Allergic purpura (HCC)                                                           | 1   |
| Alport syndrome (HCC)                                                            | 3   |
| Arthropathic psoriasis, unspecified (HCC)                                         | 1   |
| Chronic nephritic syndrome with diffuse crescentic glomerulonephritis              | 2   |
| Chronic nephritic syndrome with diffuse mesangiocapillary glomerulonephritis       | 1   |
| Chronic nephritic syndrome with focal and segmental glomerular lesions             | 4   |
| Chronic nephritic syndrome with other morphologic changes                           | 2   |
| Chronic nephritic syndrome with unspecified morphologic changes                    | 1   |
| Chronic tubulo-interstitial nephritis, unspecified                                 | 3   |
| Cr(e)st syndrome (HCC)                                                           | 1   |
| Cryoglobulinemia (HCC)                                                            | 2   |
| Defects In The Complement System (HCC)                                            | 2   |
| Discoid lupus erythematosus                                                       | 4   |
| Fabry (-anderson) disease (HCC)                                                   | 2   |
| Glomerular disease in systemic lupus erythematosus (HCC)                           | 55  |
| Hemolytic-uremic syndrome (HCC)                                                   | 4   |
| Inflammatory polyarthropathy (HCC)                                                | 1   |
| Isolated proteinuria with diffuse endocapillary proliferative glomerulonephritis   | 1   |
| Isolated proteinuria with focal and segmental glomerular lesions                   | 1   |
| Lupus anticoagulant syndrome (HCC)                                                | 1   |
| Microscopic polyangiitis (HCC)                                                    | 3   |
| Nephrotic syndrome with dense deposit disease                                     | 6   |
| Nephrotic syndrome with diffuse membranous glomerulonephritis                      | 6   |
| Nephrotic syndrome with diffuse mesangiocapillary glomerulonephritis               | 3   |
| Nephrotic syndrome with other morphologic changes                                  | 1   |
| Nephrotic syndrome with unspecified morphologic changes                             | 12  |
| Other chronic tubulo-interstitial nephritis                                       | 3   |
| Other nonthrombocytopenic purpura (HCC)                                           | 1   |
| Proteinuria, unspecified                                                          | 78  |
| Supporting Information |
|------------------------|
| **Psoriasis, unspecified** | 1 |
| **Recurrent and persistent hematuria with diffuse membranous glomerulonephritis** | 1 |
| **Recurrent and persistent hematuria with unspecified morphologic changes** | 2 |
| **Rheumatoid arthritis, unspecified (HCC)** | 1 |
| **Sarcoidosis of lung with sarcoidosis of lymph nodes (HCC)** | 1 |
| **Sarcoidosis of other sites** | 2 |
| **Sarcoidosis, unspecified** | 2 |
| **Sicca syndrome with tubulo-interstitial nephropathy (HCC)** | 2 |
| **Sicca syndrome, unspecified (HCC)** | 2 |
| **Systemic lupus erythematosus, unspecified (HCC)** | 25 |
| **Tubulo-interstitial nephritis, not specified as acute or chronic** | 12 |
| **Unspecified nephritic syndrome with dense deposit disease** | 3 |
| **Unspecified nephritic syndrome with diffuse membranous glomerulonephritis** | 68 |
| **Unspecified nephritic syndrome with diffuse mesangiocapillary glomerulonephritis** | 31 |
| **Unspecified nephritic syndrome with focal and segmental glomerular lesions** | 4 |
| **Unspecified nephritic syndrome with minor glomerular abnormality** | 37 |
| **Unspecified nephritic syndrome with other morphologic changes** | 21 |
| **Unspecified nephritic syndrome with unspecified morphologic changes** | 12 |
| **Wegener's granulomatosis without renal involvement (HCC)** | 1 |

| **Urological ailments** | 93 |
|------------------------|----|
| **Acquired absence of kidney** | 13 |
| **Atrophy of kidney (terminal)** | 4 |
| **Benign prostatic hyperplasia with lower urinary tract symptoms** | 1 |
| **Benign prostatic hyperplasia without lower urinary tract symptoms** | 2 |
| **Bladder disorder, unspecified** | 1 |
| **Congenital malformation of kidney, unspecified** | 1 |
| **Congenital renal failure** | 1 |
| **Disorder of kidney and ureter, unspecified** | 28 |
| **Dysuria** | 1 |
| **Elevated prostate specific antigen (PSA)** | 3 |
| **Family history of disorders of kidney and ureter** | 1 |
| **Flaccid neuropathic bladder, not elsewhere classified** | 1 |
| **Frequency of micturition** | 2 |
| **Lobulated, fused and horseshoe kidney** | 1 |
| **Neuromuscular dysfunction of bladder, unspecified** | 2 |
| **Obstructive and reflux uropathy, unspecified** | 4 |
| **Other artificial openings of urinary tract status (HCC)** | 4 |
| **Other difficulties with micturition** | 1 |
| **Other polyuria** | 1 |
| **Other specified disorders of kidney and ureter** | 4 |
| **Personal history of other diseases of urinary system** | 2 |
| **Retention of urine, unspecified** | 1 |
| **Spermatocele of epididymis, unspecified** | 1 |
| **Specified hydronephrosis** | 6 |
| **Unspecified urinary incontinence** | 3 |
| **Urethral syndrome, unspecified** | 1 |
| **Urgency of urination** | 1 |
| **Vesicoureteral-reflux with reflux nephropathy without hydroureter, bilateral** | 1 |
| **Vesicoureteral-reflux with reflux nephropathy without hydroureter, unspecified** | 1 |

| **Grand Total** | 5110 |
**MEDICAL PRACTICE TELEMEDICINE SURVEY**

We thank you in advance for completing this questionnaire. When you have finished, please mail it in the enclosed envelope.

INSTRUCTIONS: Please rate the services you received from our practice. Select the response that best describes your experience. If a question does not apply to you, please skip to the next question. Space is provided for you to comment on good or bad things that may have happened to you.

| ACCESS                  | Very Poor | Poor | Fair | Good | Very Good |
|-------------------------|-----------|------|------|------|-----------|
| 1. Ease of arranging your video or telephone visit | O         | O    | O    | O    | O         |
| 2. Ease of contacting us (e.g. email, phone, web portal) | O         | O    | O    | O    | O         |

| CARE PROVIDER           | Very Poor | Poor | Fair | Good | Very Good |
|-------------------------|-----------|------|------|------|-----------|
| DURING YOUR VIDEO OR TELEPHONE VISIT, YOUR CARE WAS PROVIDED PRIMARILY BY A DOCTOR, PHYSICIAN ASSISTANT (PA), NURSE PRACTITIONER (NP), OR MIDWIFE. PLEASE ANSWER THE FOLLOWING QUESTIONS WITH THAT HEALTH CARE PROVIDER IN MIND. |

1. Concern the care provider showed for your questions or worries | O         | O    | O    | O    | O         |
2. Explanations the care provider gave you about your problem or condition | O         | O    | O    | O    | O         |
3. Care provider’s efforts to include you in decisions about your care | O         | O    | O    | O    | O         |
4. Care provider’s discussion of any proposed treatment (options, risks, benefits, etc.) | O         | O    | O    | O    | O         |
5. Likelihood of your recommending this care provider to others

Comments (describe good or bad experience): ___________________________________________
____________________________________________________________________________________

**TELEMEDICINE TECHNOLOGY**

|               | Very Poor | Poor | Fair | Good | Very Good |
|---------------|-----------|------|------|------|-----------|
| 1. Ease of talking with the care provider over the video or audio connection | 0 | 0 | 0 | 0 | 0 |
| 2. How well the audio connection worked during your visit | 0 | 0 | 0 | 0 | 0 |
| 3. How well the video connection worked during your visit (please only answer if your visit was by video) | 0 | 0 | 0 | 0 | 0 |

**OVERALL ASSESSMENT**

|               | Very Poor | Poor | Fair | Good | Very Good |
|---------------|-----------|------|------|------|-----------|
| 1. How well the staff (including the care provider) worked together to care for you | 0 | 0 | 0 | 0 | 0 |
| 2. Likelihood of your recommending our practice to others | 0 | 0 | 0 | 0 | 0 |

**ADDITIONAL COMMENTS**

1. Please tell us about anything that **impressed you** about your experience.
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________

2. Please tell us about anything that **disappointed you** about your experience.
   ____________________________________________________________________
   ____________________________________________________________________
   ____________________________________________________________________
Supporting Information

Supplemental table 4: How the frequency of top box score of 5 varied by month for telenephrology survey responses

| Month | Count of Top Box = 5 | Total | % | Count of Top Box = 5 | Total | % | Count to Top Box = 5 | Total | % |
|-------|----------------------|-------|---|----------------------|-------|---|----------------------|-------|---|
| March | 9                    | 12    | 75% | 9                    | 12    | 75% | 133                  |       |   |
| April | 25                   | 33    | 76% | 26                   | 33    | 79% | 7                    | 9     | 78% |
| May   | 13                   | 15    | 87% | 10                   | 15    | 67% | 4                    | 7     | 57% |
| June  | 20                   | 24    | 83% | 20                   | 24    | 83% | 6                    | 11    | 55% |
| July  | 14                   | 15    | 93% | 14                   | 15    | 93% | 12                   | 13    | 92% |
|       |                      |       |    |                      |       |     | 133                  |       |   |
|       |                      |       |    |                      |       |     | 7                    | 9     | 78% |
|       |                      |       |    |                      |       |     | 4                    | 7     | 57% |
|       |                      |       |    |                      |       |     | 6                    | 11    | 55% |
|       |                      |       |    |                      |       |     | 12                   | 13    | 92% |

Supplemental Figure 1: How the frequency of top box score of 5 varied by month for telenephrology survey responses

![Graph showing the frequency of top box score of 5 varied by month for telenephrology survey responses. The graph includes data points for various months and questions related to telemedicine survey responses.](image-url)
Supporting Information

Supplemental Table 5: Press Ganey Survey - Medical Practice Survey Response Rate for October 2019 – September 2020, Nephrology Division, Mayo Clinic, Rochester MN

| Category                      | Number   |
|-------------------------------|----------|
| Number of Providers           | 48       |
| Number of surveys mailed      | 4663     |
| Number of surveys undelivered | 27       |
| Number of surveys returned    | 1399     |
| Average survey response rate  | 30.2%    |

Supplemental Figure 2: Survey respondents distribution by visit type and diagnoses groups (Face-to-face and telenephrology)
Supplemental Table 6: Survey Respondents by primary diagnosis group

| Primary Diagnosis Group     | F2F | Phone | Video | Grand Total |
|-----------------------------|-----|-------|-------|-------------|
| Cystic kidney disease       | 15  | 1     |       | 16          |
| Nephrolithiasis             | 24  | 3     | 5     | 32          |
| Renal Parenchymal disease   | 35  | 9     | 3     | 47          |
| BP/ Hypertension            | 38  | 9     | 8     | 55          |
| CKD 4-5                     | 53  | 9     | 2     | 64          |
| Other                       | 68  | 9     | 11    | 88          |
| CKD 1-3                     | 117 | 15    | 9     | 141         |
| **Grand Total**             | **350** | **55** | **38** | **443**     |