Supplementary Table S1. International Classification of Diseases (ICD) 9 & 10 and Current Procedural Terminology (CPT) diagnosis and procedural codes utilized to identify renal masses and partial nephrectomy procedures.

	ICD 9	**ICD 10**	**CPT**
Diagnosis	Renal tumor: D-1890, D-23691	Renal tumor: D-C641, D-C642, D-C649, D-D300, D-3001, D-3002, D-C7A093, D3A093	
Procedures	Open Partial Nephrectomy: Minimally invasive Partial Nephrectomy: P-554	Open Partial Nephrectomy: P-0TC00ZZ, P-0TC10ZZ, P-0TT00ZZ, P-0TT10ZZ, P-0TT20ZZ Minimally invasive Partial Nephrectomy: P-0TC04ZZ, P-0TC14ZZ, P-0TT04ZZ, P-0TT14ZZ, P-0TT24ZZ	Open Partial Nephrectomy: 50240, 50290 Minimally invasive Partial Nephrectomy: 50543, 50280

Supplementary Table S2. International Classification of Diseases (ICD) – 9 & 10 diagnosis codes utilized to identify socioeconomic determinants of health (SDOH)

	ICD-9 Codes	**ICD-10 Codes**
Education	V6129, 99550, 99551, 99553, 99554, 99559, V6121, 99555, V623	Z62898, Z629, Z620, Z6221, Z6222, Z6229, Z62810, Z62811, Z62812, Z62813, Z62819, Z62820, Z62821, Z62822, Z62890, Z62891, Z734, T7402XA, T7402XD, T7402XS, T7412XA, T7412XD, T7412XS, T7422XD, T7422XS, T7422XA, T7432XA, T7432XD, T7432XS, T7492XA, T7492XD, T7492XS, T7602XA, T7602XD, T7602XS, T7612XA, T7612XS, T7612XD, T7622XA, T7622XD, T7622XS, T7632XA, T7632XD, T7632XS, T7692XA, T7692XD, T7692XS, Z550, Z551, Z552, Z553, Z554, Z558, Z559, Z69010
Healthcare	V638, V639	Z749, Z748, Z753, Z754, Z758, Z759
Environmental	V8701, V8702, V8709, V8712, V8719, V1584, V1589, V8732, Z77021, Z77090, Z77098, Z77110, Z77111, Z77118, Z77122, Z77128, Z77123, Z77010, Z77012, Z77018, Z77121, V7181, 99580, 99581, 99582, 99583, 99584, 99585, E9600, E9601, E961, E9620, E9621, E9622, E9629, E963, E964, E9650, E9651, E9652, E9653, E9654, E9655, E9656, E9658, E9659, E966, E9680, E9681, E9682, E9683, E9684, E9685, E9686, E9687, E9688, E9689, E969, V8731, 9840, 9841, 9848, 9849, E8615, E8660, V1586, V1541, V1542, V1549, V6111, V6142	O9A311, O9A312, O9A313, O9A319, O9A32, O9A33, O9A411, O9A412, O9A413, O9A419, O9A42, O9A43, O9A511, O9A512, O9A513, O9A519, O9A52, O9A53, T7491XA, T7491XD, T7491XS, T7431XA, T7431XD, T7431XS, T7421XA, T7421XD, T7421XS, T7411XA, T7411XD, T7411XS, T7401XA, T7401XD, T7401XS, T7601XA, T7601XD, T7601XS, T7611XA, T7611XD, T7611XS, T7621XA, T7621XD, T7621XS, T7631XA, T7631XD, T7631XS, T7691XA, T7691XD, T7691XS, Z654, Z655, Z91410, Z91411, Z91412, Z91419, Z9142, Z9149, Z77011, Z77120, T560X1A, T560X1D, T560X1S, T560X2A, T560X2D, T560X2S, T560X3A, T560X3D, T560X3S, T560X4A, T560X4D, T560X4S, M1A10X0, M1A10X1, Z6911, Z6379
Social	V625, V603, V604, V6101, V6102, V6103, V6104, V6105, V6106, V6107, V6108, V6109, V613, V6141, V6149, V618, V619, V624, V6281, V6282, V6289, V629, V692, V693, V694, V698, V699, V695	Z603, Z605, Z608, Z609, Z600, Z602, Z604, Z650, Z651, Z652, Z653, Z658, Z659, Z6331, Z6332, Z634, Z635, Z636, Z6371, Z6372, Z6379, Z638, Z639, Z630, Z631, F439, Z732, Z733, Z7389, Z72810, Z72811, Z72820, Z72821, Z7289, Z73810, Z73811, Z73812, Z73819, Z739

Economic	V620, V621, V6229, V713, 99552, 99584, V602, V691, 9942, 9943, E9041, E9042, V600, V601, V6089, V609, V605	Z560, Z5689, Z569, Z563, Z562, Z561, Z564, Z565, Z566, Z5681, Z570, Z571, Z572, Z5731, Z5739, Z574, Z575, Z576, Z577, Z578, Z579, T730XXD, T730XXS, T730XXA, T731XXA, T731XXD, T731XXS, E630, E631, E638, E639, Z594, T738XXA, T738XXD, T738XXS, T739XXA, T739XXD, T739XXS, X58XXXA, X58XXXD, X58XXXS, Z724, E40, E41, E42, E43, E440, E441, E45, E46, E5111, E5112, E519, E52, E530, E531, E538, E539, E54, E550, E559, E560, E561, E568, E569, E58, E59, E60, E610, E611, E612, E613, E614, E615, E616, E617, E618, E619, E640, E641, E642, E643, E648, E649, Z590, Z591, Z595, Z596, Z597, Z598, Z599, Z91120

Supplementary Table S3. International Classification of Diseases (ICD) 9 & 10 diagnosis codes utilized to identify complications.

Complications	ICD 9	ICD 10
Acute Kidney Injury	5845, 5846, 5847, 5848, 5849	N170, N171, N172, N178, N179
Blood transfusion	990	Z513
Deep vein thrombosis	45340, 45342, 45341, 4532, 45382, 45384, 45385, 45386	I824Z1, I824Z2, I82220, I82621, I82622, I82623, I82629, I82A11, I82A12, I82A13, I82A19, I82B11, I82B12, I82B13, I82B19, I82C11, I82C12, I82C13, I82C19, I82401, I82402, I82403, I82409, I82411, I82412, I82413, I82419, I82421, I82422, I82423, I82429, I82431, I82432, I82433, I82439, I82441, I82442, I82443, I82449, I82451, I82452, I82453, I82459, I82461, I82462, I82463, I82469, I82491, I82492, I82493, I82499, I824Y1, I824Y2, I824Y3, I824Y9, I824Z3, I824Z9
Disruption of surgical wound	99830, 99831, 99832	T8130XA, T8131XA, T8132XA
Ileus	5601, 56081, 56089, 5609	K91
Leakage	56722, 56738, 56981	K632, K630, K651, K6811, K6819
Pneumonia	99731, 481, 4820, 4821, 48230, 48231, 48232, 48239, 48240, 48241, 48242, 48249, 48281, 48282, 48283, 48289, 4829, 4838, 485, 486, 4800, 4801, 4802, 4803, 4808, 4809	J120, J121, J122, J123, J1281, J1289, J129, J180, J181, J182, J188, J189, J13, J14, J150, J151, J1520, J15211, J15212, J1529, J153, J154, J155, J156, J157, J158, J159, J168
Pulmonary embolism	41511, 41512, 41519	I2601, I2609, I2690, I2693, I2699
Sepsis	99591, 99592, 99802, 0380, 03810, 03811, 03812, 03819, 0382, 0383, 03840, 03841, 03842, 03843, 03844, 03849, 0388, 0389	A327, A400, A401, A403, A408, A409, A4101, A4102, A411, A412, A413, A414, A4150, A4151, A4152, A4153, A4159, A4181, A4189, A419, R6520, R6521, T8144XA, T8144XD, T8144XS, T8112XA, T8112XD, T8112XS
Urinary tract infection	5990	N390
Vascular injury	9049, 9982	E3611, E3612, I978