

Supplemental Material

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Supplemental Table 1: Hierarchy for determining baseline reference creatinine.

| | Creatinine values available prior to admission | Reference creatinine |
|--------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Preference 1 | 3 or more outpatient values available in 365 days prior to admission (PTA) | Mean of all outpatient creatinine values |
| Preference 2 | 2 outpatient values available in 365 days PTA + some prior inpatient values | Mean of 2 outpatient values and lowest inpatient creatinine from prior admissions |
| Preference 3 | 1 or fewer outpatient creatinine values in 365 days PTA but more outpatient values available within 18 months PTA | Mean of any outpatient creatinine values available in 18 months prior to admission |
| Preference 4 | No outpatient creatinine values in 18 months PTA but patient had prior inpatient admissions | Mean of 3 lowest inpatient creatinine values over the past 18 months |
| Preference 5 | No prior inpatient or outpatient creatinine available | Creatinine at admission or as determined by nephrologist |

Supplemental Table 2. Comparison of groups before and after propensity score matching

| Original Cohort | | | |
|----------------------------------------|-------------------------|---------------------|-------------------------------------|
| | Non-participants | Participants | Standardized Mean Difference |
| | 400 | 52 | |
| Age | 63.60 (17.05) | 63.42 (14.39) | 0.011 |
| Length of stay | 12.89 (12.41) | 10.06 (7.37) | 0.277 |
| Charlson comorbidity index | 5.93 (3.82) | 5.69 (4.08) | 0.06 |
| Discharge eGFR | 53.95 (34.74) | 32.22 (25.39) | 0.714 |
| Gender = Male n (%) | 216 (54.0) | 30 (57.7) | 0.074 |
| Race= White n (%) | 384 (96.0) | 52 (100.0) | 0.289 |
| Admissions in prior year n (%) | 6 (1.5) | 1 (1.9) | 0.033 |
| Discharge disposition n (%) | | | |
| Home | 187 (46.8) | 40 (76.9) | 0.77 |
| Rehab | 32 (8.0) | 4 (7.7) | |
| SNF | 134 (33.5) | 8 (15.4) | |
| Dialysis as inpatient n (%) | 36 (9.0) | 6 (11.5) | 0.084 |
| CHF diagnosis n (%) | 123 (30.8) | 10 (19.2) | 0.268 |
| ICU stay n (%) | 205 (51.2) | 17 (32.7) | 0.383 |
| AKI stage= stage 3 n (%) | 131 (32.8) | 44 (84.6) | 1.239 |
| After propensity score matching | | | |
| | Non-participants | Participants | Standardized Mean Difference |
| | 45 | 45 | |
| Age | 62.76 (15.41) | 63.69 (14.99) | 0.061 |
| Length of stay | 11.93 (9.34) | 10.53 (7.77) | 0.163 |
| Charlson comorbidity index | 5.58 (3.35) | 5.89 (4.33) | 0.08 |
| Discharge eGFR | 37.93 (29.50) | 35.01 (26.14) | 0.105 |
| Gender = Male n (%) | 29 (64.4) | 25 (55.6) | 0.182 |
| Race= White (%) | 45 (100.0) | 45 (100.0) | <0.001 |
| Admissions in prior year (%) | 0 (0.0) | 1 (2.2) | 0.213 |
| Discharge disposition (%) | | | |
| Home | 31 (68.9) | 33 (73.3) | 0.113 |
| Rehab | 4 (8.9) | 4 (8.9) | |
| SNF | 10 (22.2) | 8 (17.8) | |
| Dialysis as inpatient n (%) | 7 (15.6) | 6 (13.3) | 0.063 |
| CHF diagnosis n (%) | 5 (11.1) | 9 (20.0) | 0.247 |
| ICU stay n (%) | 18 (40.0) | 17 (37.8) | 0.046 |
| AKI stage= stage 3 n (%) | 39 (86.7) | 37 (82.2) | 0.123 |

All values indicate mean and standard deviation unless otherwise indicated

Supplemental Table 3. Rehospitalization and mortality outcomes of propensity score-matched AKI rehabilitation program participants and non-participants

| Outcome | Participants N=45 | Non-participants N= 45 | p-value |
|----------------------------------------------|------------------------------|-----------------------------------|----------------|
| 30-day rehospitalization or mortality | 8 (17.8%) | 14 (31.1%) | 0.22 |
| 30-day rehospitalization | 7 (15.6%) | 12 (26.7%) | 0.30 |
| 30-day mortality | 1 (2.2%) | 2 (4.4%) | - |
| 90-day rehospitalization or mortality | 21 (46.7%) | 26 (57.8%) | 0.4 |
| 90-day rehospitalization | 15 (33.3%) | 17 (37.8%) | 0.22 |
| 90-day mortality | 3 (6.7%) | 7 (15.6%) | 0.31 |

Supplemental Table 4: Characteristics of stage 2 and stage 3 AKI patients in the AKI rehabilitation program

| Characteristics | | Stage 3 n = 44 | Stage 2 n = 8 |
|---------------------------------------|-------------|---------------------------|--------------------------|
| Age | | 61.6 (13.6) | 73.5 (15.1) |
| Gender | | | |
| | Female | 16 (36%) | 6 (75%) |
| | Male | 28 (64%) | 2 (25%) |
| Race | | | |
| | Caucasian | 42 (95%) | 8 (100%) |
| | Hispanic | 2 (5%) | |
| Length of stay | | 10.4 (7.5) | 8.1 (6.5) |
| Discharge disposition | | | |
| | Home | 34 (77%) | 6 (75%) |
| | Acute rehab | 4 (9%) | 0 (0%) |
| | SNF | 6(14%) | 2 (25%) |
| Charlson Comorbidity Index | | 4.9 (4.0) | 6 (3.8) |
| Discharge eGFR | | 35.7 (25.9) | 13.1 (7) |
| Inpatient dialysis/ CRRT | | 6 (14%) | 0 |
| ICU stay during admission | | 16 (36%) | 1 (13%) |
| Type of admission | | | |
| | Medical | 25 (57%) | 6 (75%) |
| | Surgical | 19 (43%) | 2 (25%) |
| Outcomes | | | |
| 30-day mortality | | 1 (2%) | 0 (0%) |
| 30-day rehospitalization | | 4 (9%) | 3 (38%) |
| 30-day mortality or rehospitalization | | 5 (11%) | 3 (38%) |
| 90-day mortality | | 3 (7%) | 0 (0%) |
| 90-day rehospitalization | | 11 (25%) | 4 (50%) |
| 90-day mortality or rehospitalization | | 12 (27%) | 4 (50%) |