

Supplemental Table 1: Bacterial Infection International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Codes Grouped by Infected Organ System and Intravenous Iron Healthcare Common Procedure Coding System (HCPCS) Codes

Infected Organ System	Bacterial Infection ICD-9-CM Codes
Cardiovascular	421.0, 421.9, 996.61
Catheter/graft	996.62, 999.31
Central nervous system	036.1, 094.9, 320.1, 320.2, 320.3, 320.82, 320.89, 320.9, 322.9, 324.0, 324.1, 324.9, 996.63
Ear, nose throat/dental	360.00, 360.01, 372.00, 372.20, 372.30, 373.13, 375.32, 376.01, 380.03, 380.10, 380.14, 382.00, 382.01, 382.4, 382.9, 383.00, 383.02, 461.0, 461.1, 461.2, 461.3, 461.8, 461.9, 462, 463, 464.00, 475, 478.22, 478.24, 522.5, 523.31, 523.33, 527.3, 528.3
Gastrointestinal/peritonitis	003.0, 005.0, 005.2, 008.00, 008.09, 008.41, 008.42, 008.43, 008.44, 008.45, 008.46, 008.47, 008.49, 008.5, 009.0, 009.1, 009.2, 009.3, 014.01, 014.04, 040.2, 536.41, 540.0, 540.1, 540.9, 541, 542, 562.01, 562.03, 562.11, 562.13, 566, 567.21, 567.22, 567.23, 567.29, 567.38, 567.39, 567.82, 567.89, 567.9, 569.5, 569.61, 572.0, 572.1, 574.00, 574.01, 574.30, 574.31, 574.60, 574.61, 574.80, 574.81, 575.0, 575.4, 575.10, 575.12, 576.1, 577.0, 996.68
Genitourinary	098.0, 099.53, 099.54, 590.10, 590.2, 590.3, 590.80, 590.9, 595.0, 595.81, 595.89, 595.9, 599.0, 601.0, 601.2, 601.3, 601.9, 639.0, 996.64, 996.65
Joint/bone	015.00, 015.04, 015.23, 711.00, 711.01, 711.02, 711.03, 711.04, 711.05, 711.06, 711.07, 711.08, 711.09, 711.91, 711.92, 711.93, 711.95, 711.97, 730.01, 730.02, 730.04, 730.05, 730.06, 730.07, 730.08, 730.20, 730.21, 730.22, 730.23, 730.24, 730.25, 730.26, 730.27, 730.28, 730.29, 730.96, 730.97, 996.66, 996.67
Reproductive/breast	604.0, 604.90, 607.1, 614.0, 614.2, 614.3, 614.5, 614.9, 615.9, 616.0, 616.10, 616.4, 647.83, 647.84, 647.93
Respiratory/thoracic	003.22, 011.44, 011.45, 011.55, 011.90, 011.92, 011.93, 011.94, 011.95, 011.96, 012.00, 012.02, 012.06, 012.15, 031.0, 033.9, 034.0, 039.1, 464.10, 464.11, 464.30, 464.31, 464.50, 464.51, 466.0, 481, 482.0, 482.1, 482.2, 482.30, 482.31, 482.39, 482.40, 482.41, 482.42, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483.0, 485, 490, 491.22, 494.1, 510.0, 510.9, 511.1, 513.0, 513.1, 519.01, 997.31
Septicemia/bacteremia	003.1, 031.2, 036.2, 038.0, 038.10, 038.11, 038.12, 038.19, 038.2, 038.3,

	038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9, 040.82, 785.52, 790.7, 995.90, 995.91, 995.92
Skin/soft tissue/muscle	031.1, 035, 040.0, 091.3, 567.31, 614.4, 680.0, 680.2, 680.3, 680.5, 680.6, 680.8, 680.9, 681.01, 681.10, 681.9, 682.0, 682.1, 682.2, 682.3, 682.4, 682.5, 682.6, 682.7, 682.8, 682.9, 685.0, 686.09, 686.8, 686.9, 695.81, 728.0, 728.86, 785.4, 958.3, 997.62, 998.51
Spleen/lymph nodes	017.20, 017.22, 017.24, 683
Tuberculosis NOS/miliary	017.90, 017.94, 018.83, 018.90, 018.94
Other	996.60, 999.39, 996.69
Iron Product	HCPCS Codes
Iron sucrose	J1756
Sodium ferric gluconate	J2916
Ferumoxytol	Q0138, Q0139
Iron dextran	J1750

Supplemental Table 2: Infected Organ System by Receipt of Intravenous Iron

Infected Organ System	Intravenous Iron Received (n=2463)	No Intravenous Iron Received (n=20,357)	P Value^a
Septicemia/bacteremia	29.3	30.8	0.11
Catheter/graft	32.9	27.0	<0.001
Skin/soft tissue/muscle	10.4	11.2	0.25
GI/peritonitis	8.12	12.0	<0.001
Respiratory/thoracic	7.15	6.87	0.61
Genitourinary	6.98	6.54	0.40
Joint/bone	3.00	2.86	0.69
Cardiovascular	1.14	1.37	0.35
ENT/dental	0.45	0.54	0.57
Other	0.16	0.38	0.11
Reproductive/breast	0.24	0.21	0.74
CNS	0.16	0.22	0.82
Tuberculosis (NOS, miliary)	0.04	0	0.11
Spleen/lymph nodes	0	0	1.00

Data are presented as percentages.

^aComparisons performed with the chi-squared test and Fisher's exact test as appropriate.

Supplemental Table 3: Associations between Receipt of Intravenous Iron and Adverse Outcomes**Excluding Patients with Receipt of Intravenous Iron within the Week Prior to Admission**

Outcome	Estimated Adjusted Association or Length of Stay	P Value
All-cause mortality within 30 d of admission ^a	0.75 (0.55 to 1.04)	0.08
All-cause 2010 mortality ^b	1.01 (0.86 to 1.19)	0.93
Mean length of stay, d	9.8 (9.0 to 10.6) versus 10.5 (10.1 to 10.9)	0.17
Readmission for infection or all-cause mortality within 30 d of discharge ^a	1.17 (0.91 to 1.50)	0.22

Estimated adjusted association and length of stay data are presented with 95% confidence intervals. Results show the comparison of receipt versus no receipt of intravenous iron adjusted for age, duration of ESRD, sex, race, geographic location of ESRD network, coronary artery disease, other cardiac disease, congestive heart failure, hypertension, peripheral vascular disease, diabetes mellitus, cerebrovascular disease, cancer, chronic obstructive pulmonary disease, alcohol dependence, drug dependence, and tobacco use and the infected organ system.

^aOdds ratio.

^bHazard ratio.

Supplemental Table 4: Associations between Receipt of Intravenous Iron and Adverse Outcomes among Patients Hospitalized for Catheter/Graft Infections

Outcome	Estimated Adjusted Association or Length of Stay	P Value
All-cause mortality within 30 d of admission ^a	0.83 (0.61 to 1.12)	0.22
All-cause 2010 mortality ^b	0.90 (0.78 to 1.06)	0.21
Mean length of stay, d	9.6 (9.0 to 10.1) versus 10.6 (10.3 to 10.9)	0.001
Readmission for infection or all-cause mortality within 30 d of discharge ^a	0.79 (0.63 to 1.01)	0.06

Estimated adjusted association and length of stay data are presented with 95% confidence intervals. Results show the comparison of receipt versus no receipt of intravenous iron adjusted for age, duration of ESRD, sex, race, geographic location of ESRD network, coronary artery disease, other cardiac disease, congestive heart failure, hypertension, peripheral vascular disease, diabetes mellitus, cerebrovascular disease, cancer, chronic obstructive pulmonary disease, alcohol dependence, drug dependence, and tobacco use and the infected organ system.

^aOdds ratio.

^bHazard ratio.

Supplemental Table 5: Associations between Receipt of Intravenous Iron and Adverse Outcomes among Patients Hospitalized for Septicemia/Bacteremia

Outcome	Estimated Adjusted Association or Length of Stay	P Value
All-cause mortality within 30 d of admission ^a	0.88 (0.72 to 1.06)	0.19
All-cause 2010 mortality ^b	0.94 (0.84 to 1.06)	0.33
Mean length of stay, d	11.4 (10.6 to 12.3) versus 12.5 (12.1 to 12.8)	0.03
Readmission for infection or all-cause mortality within 30 d of discharge ^a	1.28 (1.05 to 1.56)	0.01

Estimated adjusted association and length of stay data are presented with 95% confidence intervals. Results show the comparison of receipt versus no receipt of intravenous iron adjusted for age, duration of ESRD, sex, race, geographic location of ESRD network, coronary artery disease, other cardiac disease, congestive heart failure, hypertension, peripheral vascular disease, diabetes mellitus, cerebrovascular disease, cancer, chronic obstructive pulmonary disease, alcohol dependence, drug dependence, and tobacco use and the infected organ system.

^aOdds ratio.

^bHazard ratio.