

## SUPPLEMENTARY MATERIALS

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Table S1: MS-DRG codes related to hip/knee arthroplasty procedures.

<b>MS-DRG Code</b>	<b>MS-DRG Description</b>
461	Bilateral or Multiple Major Joint Procedures of Lower Extremity with Major Complication or Comorbidity (MCC)
462	Bilateral or Multiple Major Joint Procedures of Lower Extremity without MCC
466	Revision of Hip or Knee Replacement with MCC
467	Revision of Hip or Knee Replacement with CC
468	Revision of Hip or Knee Replacement without CC/MCC
469	Major Hip and Knee Joint Replacement or Reattachment of Lower Extremity with MCC or Total Ankle Replacement
470	Major Hip and Knee Joint Replacement or Reattachment of Lower Extremity without MCC

Table S2. Results of a multivariate linear regression of excess coding intensity against facility ID for all patient-visits of a stratum of facilities with equal facility-level characteristics (N= 2,058 patient-visits)

Coefficients	Estimate	Std. Error	t statistic	p-value
(Intercept)	-0.15	0.03	-4.65	<0.0001
Facility ID 115	-0.12	0.04	-2.80	0.0051
Facility ID 290	0.12	0.06	2.08	0.0378
Facility ID 671	0.56	0.04	14.00	< 0.0001

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Residual standard error: 0.6848 on 2054 degrees of freedom

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Multiple R-squared: 0.162

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Reference group: Facility ID 78. Common values of facility characteristics: 2 (CMI); No (teaching status); No (academic status); Urban (urban/rural status); Voluntary Non-profit - Private (ownership status); 0-100 (bed count); South Atlantic (Census regional division).

Figure S1. Histogram of length of stay (days)

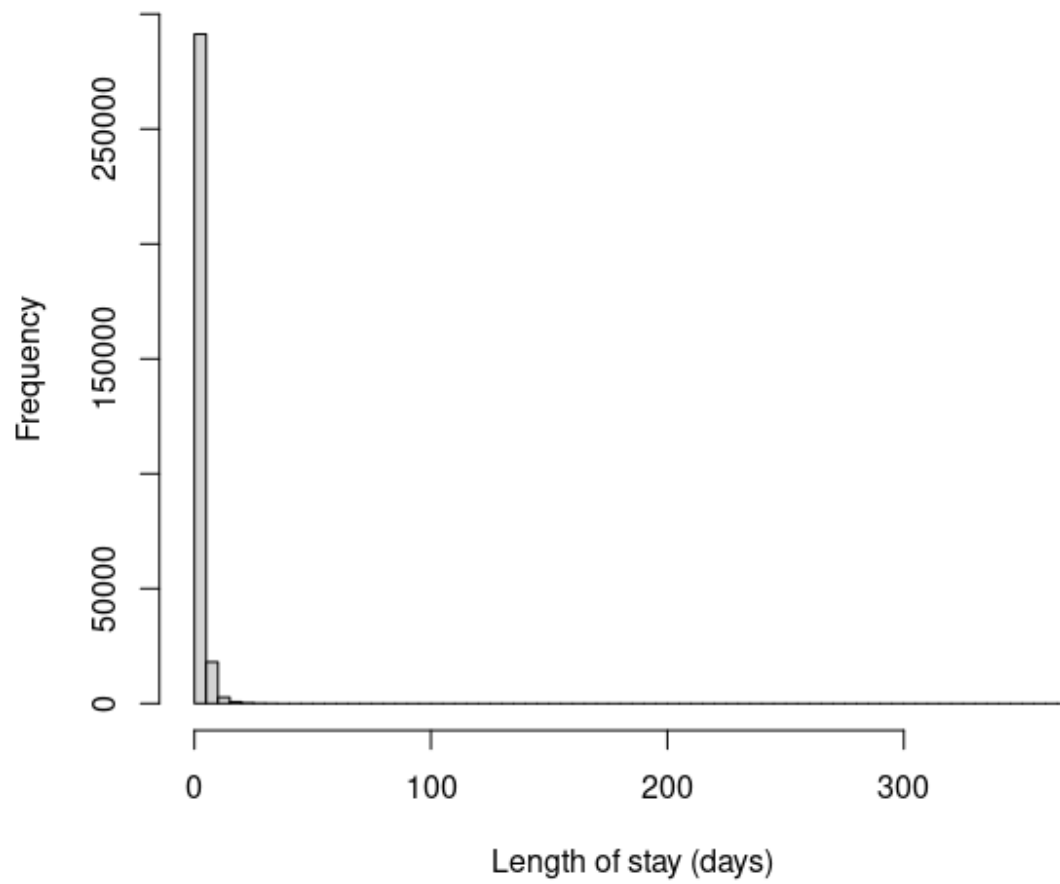


Figure S2. Histogram of log length of stay

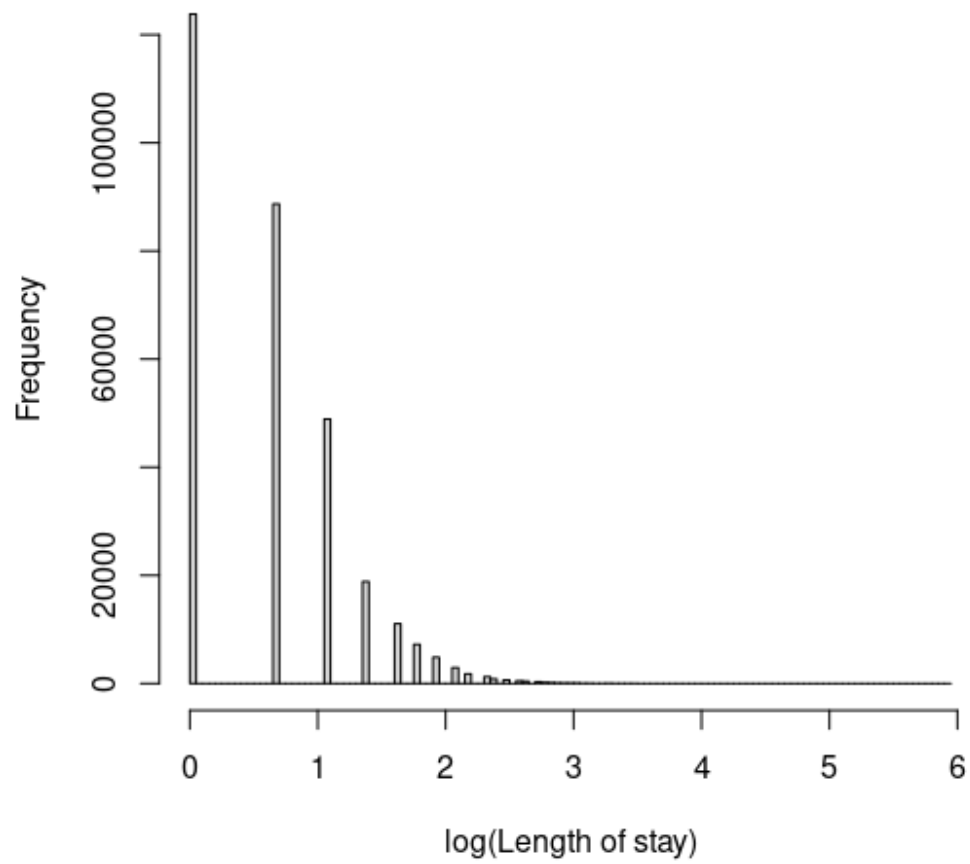


Figure S3. Effect plot of excess coding intensity by facility ID for facilities that share the same facility-level characteristics

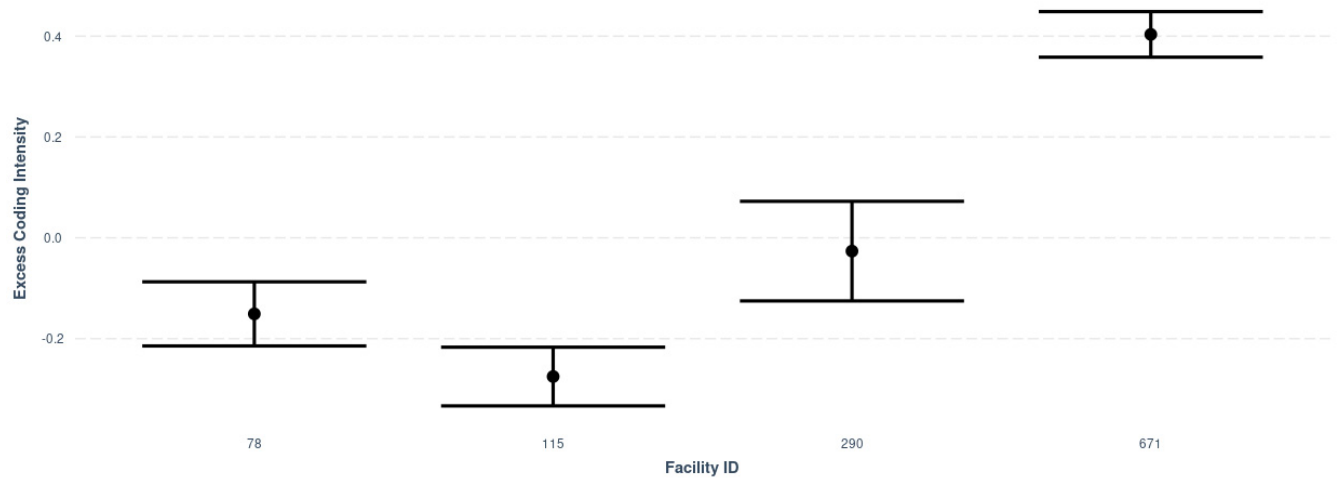


Figure S4. Effect plot of excess coding intensity by admission month

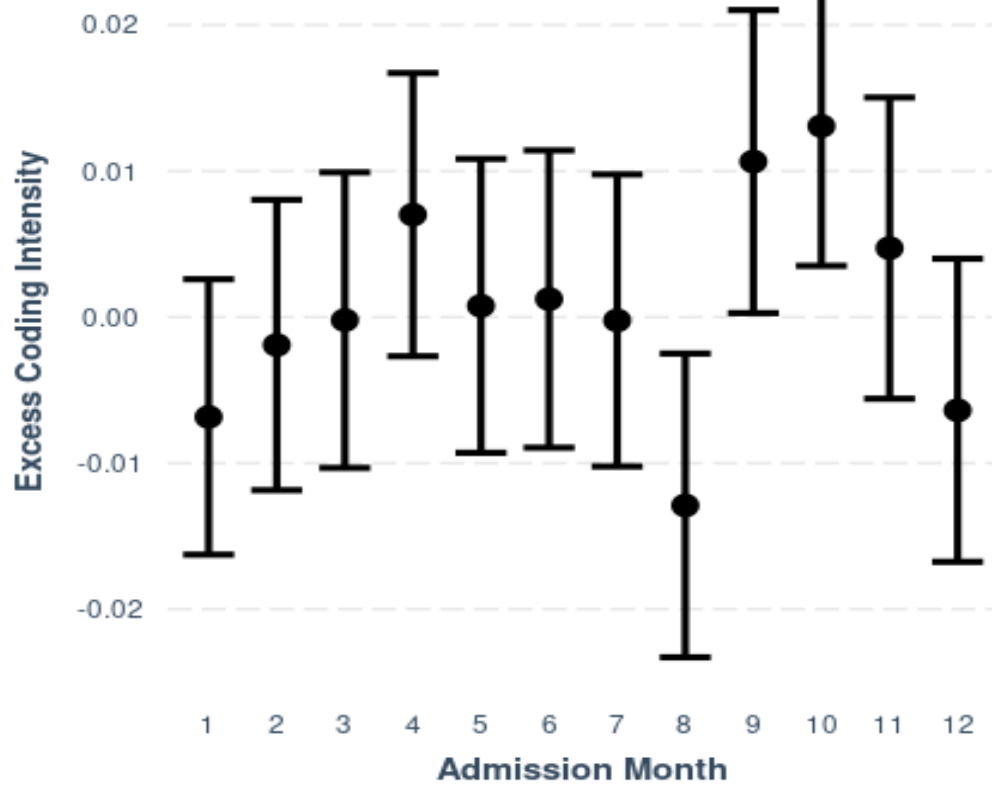


Figure S5. Effect plot of excess coding intensity by facility urban/rural status

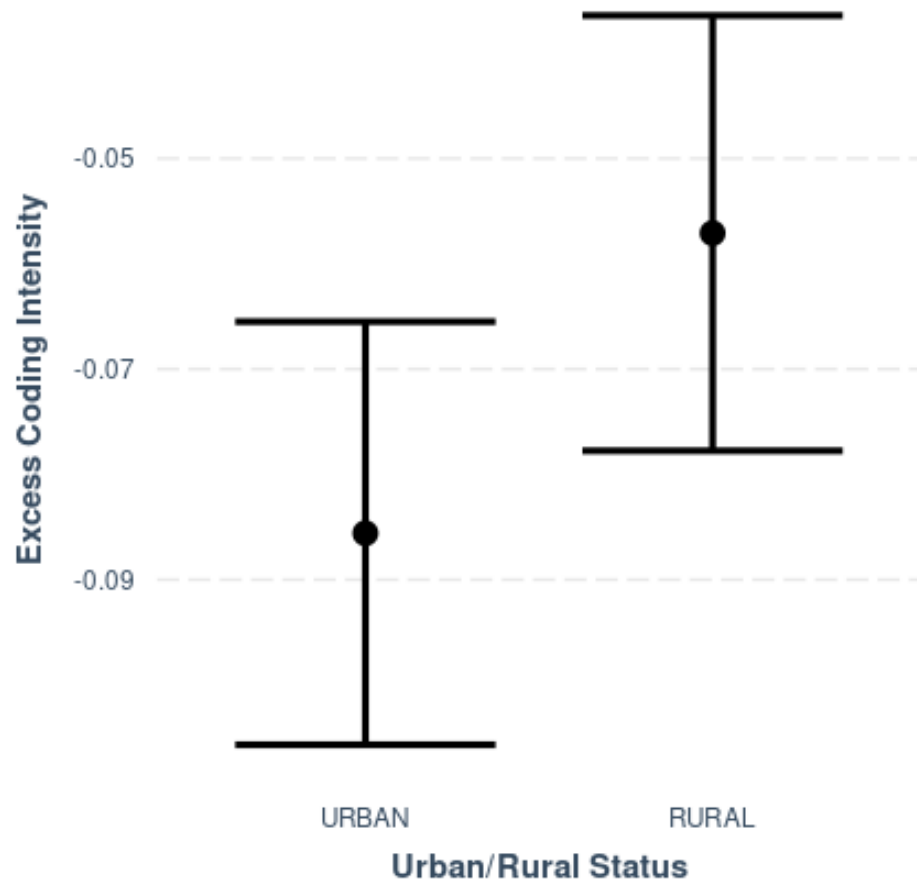




Figure S6. Effect plot of excess coding intensity by facility ownership

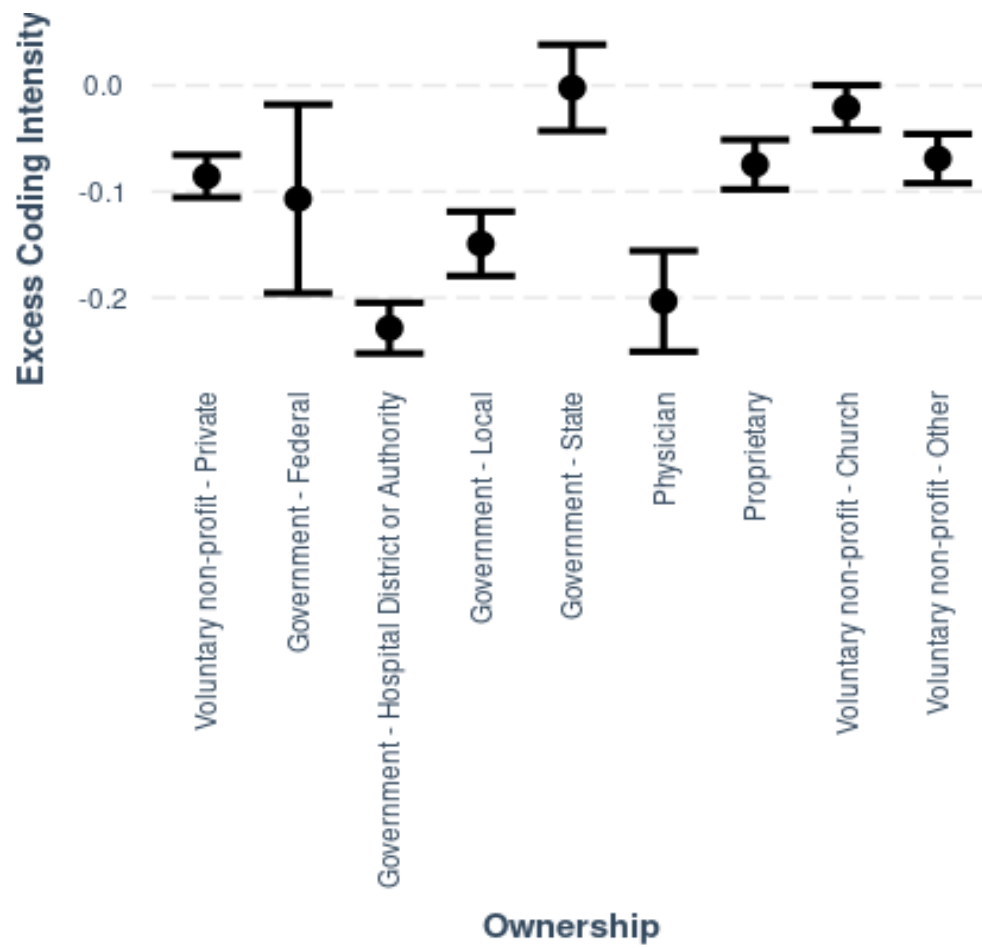


Figure S7. Effect plot of excess coding intensity by facility case mix index (CMI)

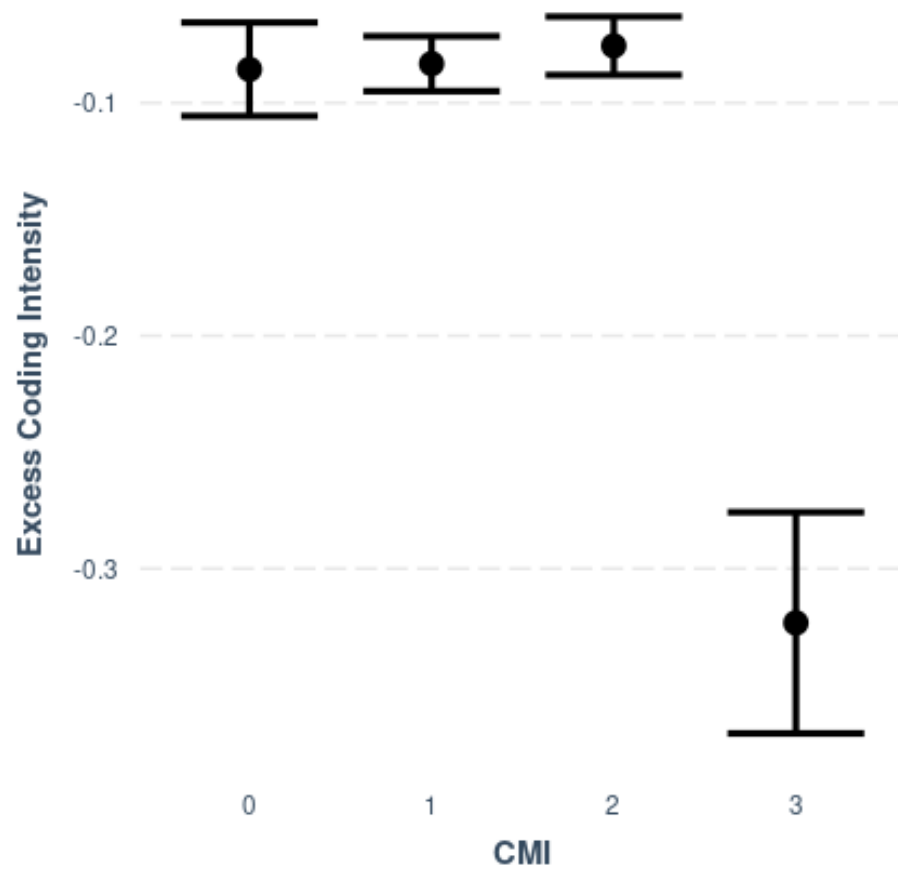


Figure S8. Effect plot of excess coding intensity by facility teaching status

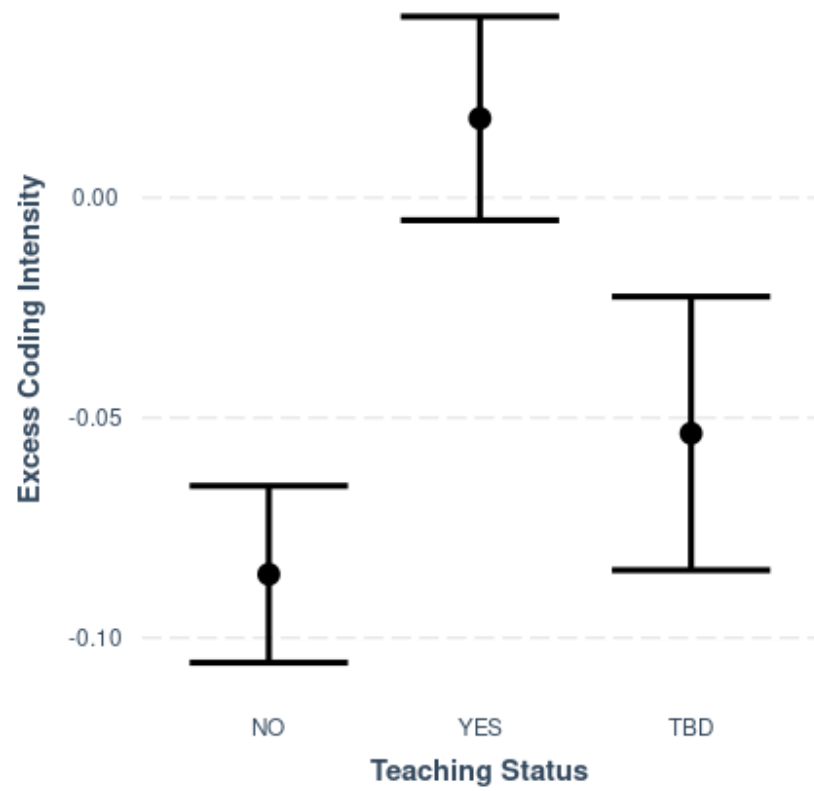


Figure S9. Effect plot of excess coding intensity by facility academic status

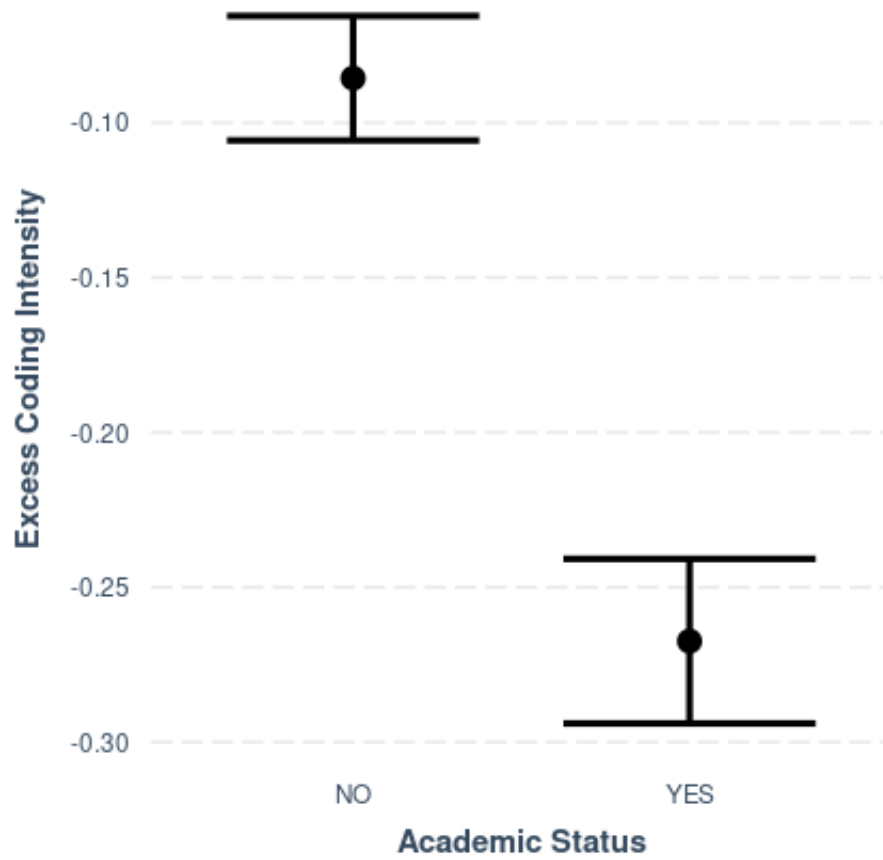


Figure S10. Effect plot of excess coding intensity by facility U.S. Census regional division

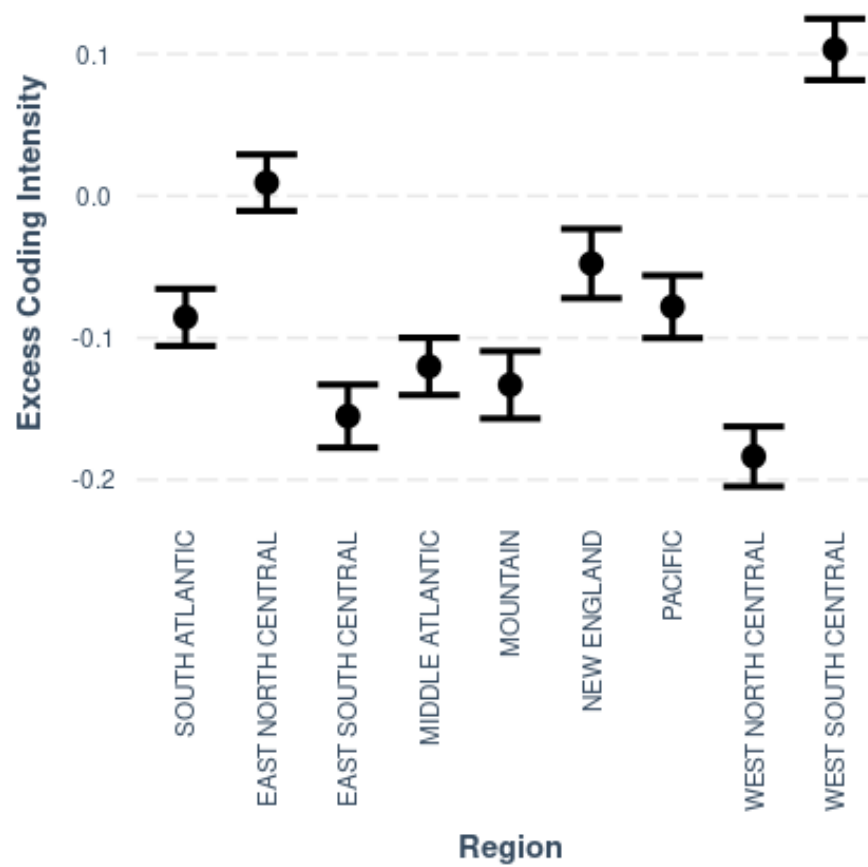


Figure S11. Effect plot of excess coding intensity by facility bed count

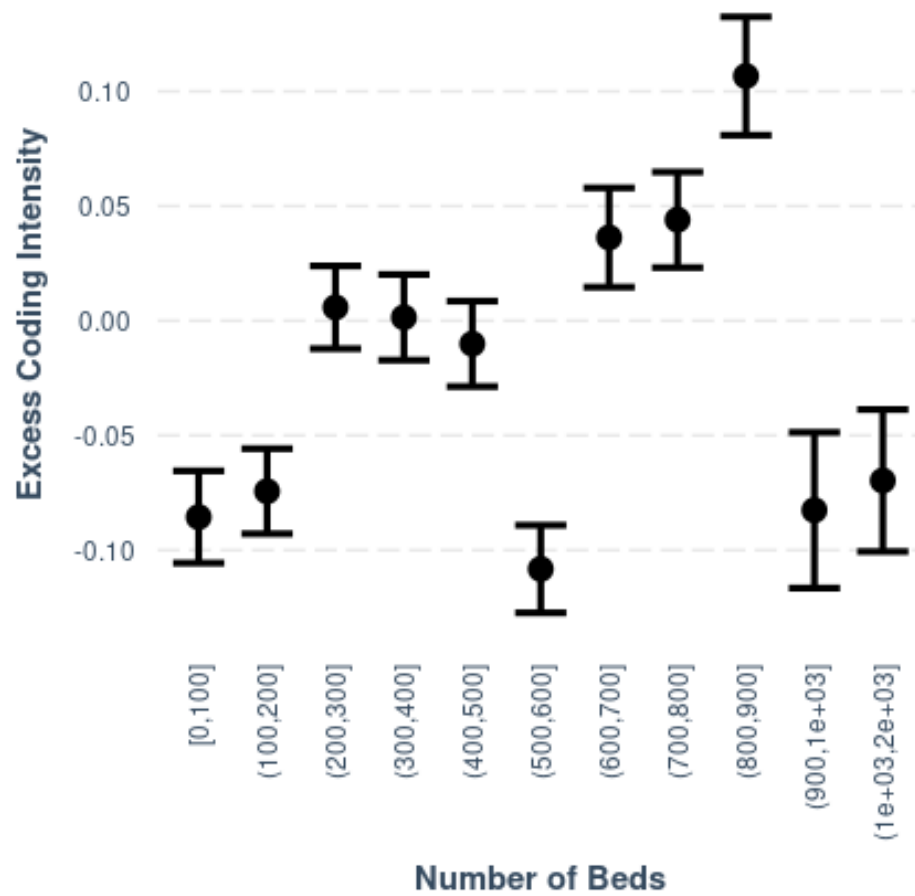


Figure S12. Heatmap of AAECI seasonality by admission month and facility region based on the U.S. Census Bureau definition of 9 regional divisions

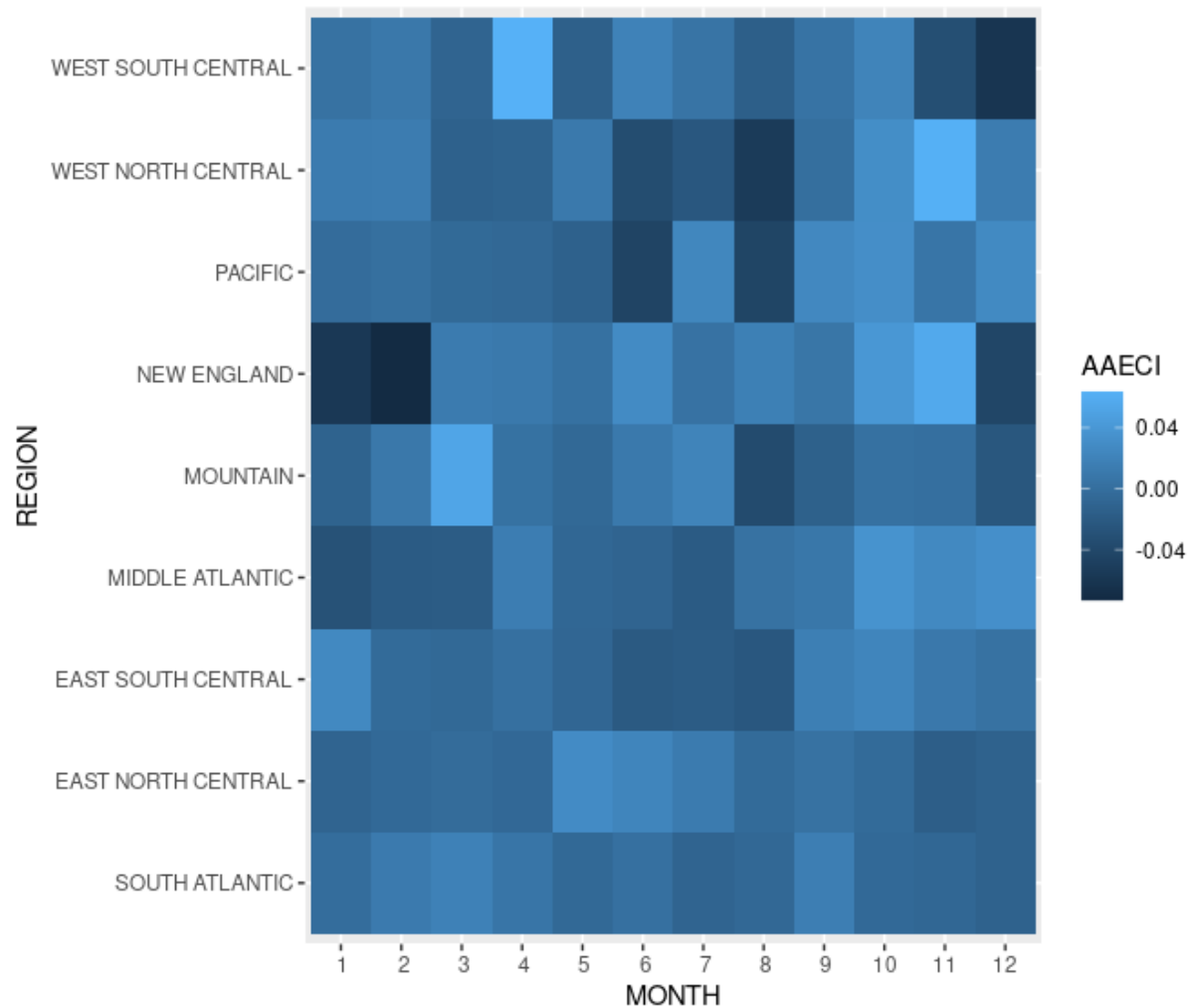


Figure S13. Effect plot of adjusted excess coding intensity (AECI) by facility

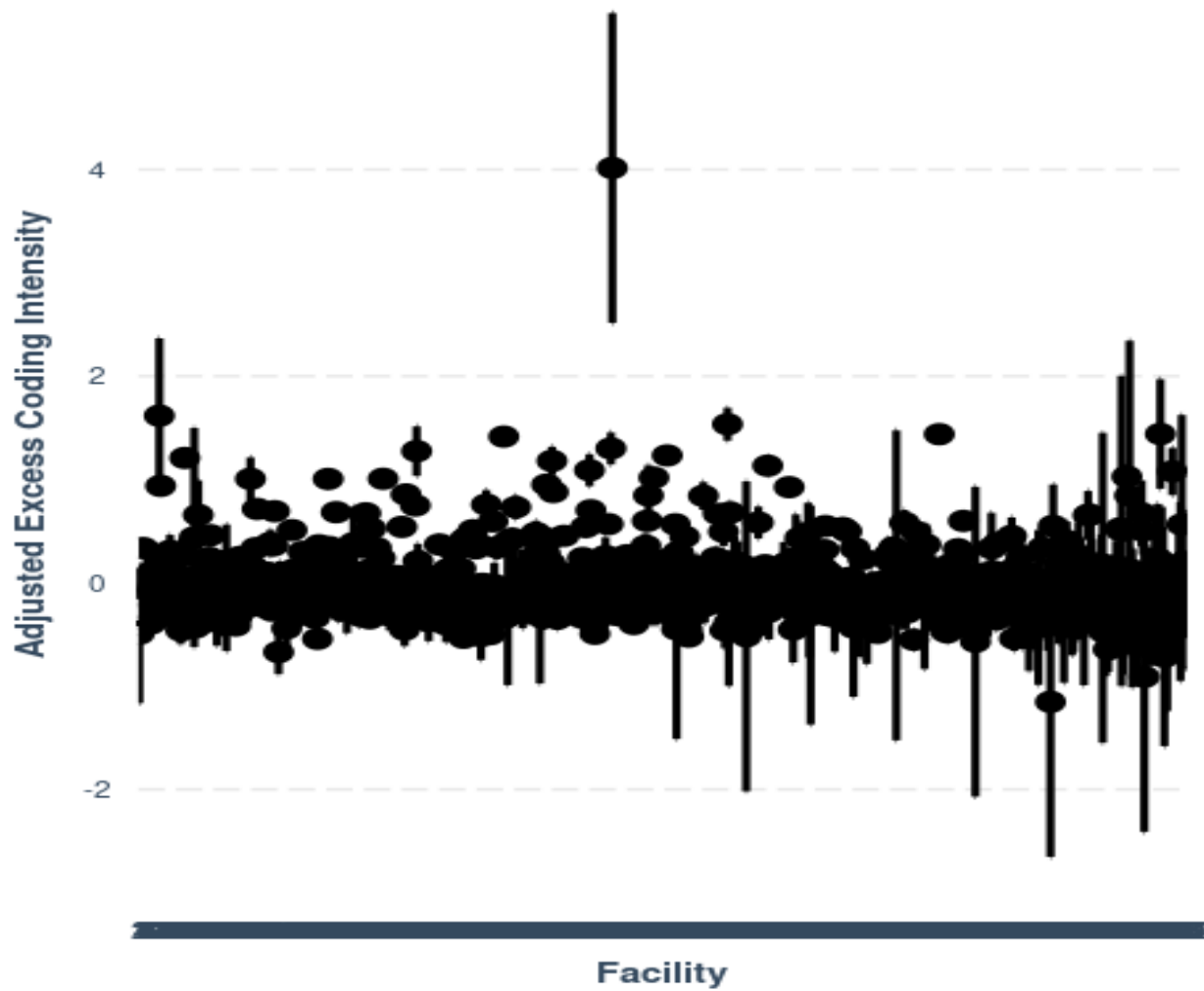




Figure S14. Sorted dot plot of adjusted excess coding intensity (AECI) across facilities

