JUSTIFICATION FOR SUPPLEMENTAL TABLES

Both Supplemental Table 1 and Supplemental Table 2 expand on the inclusion and exclusion criteria used to conduct the analyses. A clear list of diabetes-related co-diagnoses and ICD-9-CM DM codes for types 1 and 2 diabetes will assist future research studies in the replication of and expansion on the current study. Supplemental Table 3 presents unadjusted and adjusted regression results comparing homeless minors with non-homeless minors. Presentation of unadjusted and adjusted results was recommended by the reviewers; due to the fact that the table became very large, we would like to present it as a supplemental table. Similarly, Supplemental Table 4 presents unadjusted and adjusted regression results comparing type 1 DM homeless minors with type 1 DM non-homeless minors, and Supplemental Table 5 presents unadjusted and adjusted regression results comparing type 2 DM homeless minors with type 2 DM non-homeless minors. Supplemental Table 6 displays sensitivity analysis results comparing homeless minors with non-homeless minors who reside in the lowest income quartile. Supplemental Table 7 displays sensitivity analysis results comparing type 1 DM homeless minors with type 1 DM non-homeless minors who reside in the lowest income quartile. Supplemental Table 8 displays sensitivity analysis results comparing type 2 DM homeless minors with type 2 DM non-homeless minors who reside in the lowest income quartile.

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| **Supplemental Table 1.** List of diabetes-related co-diagnoses |
| **ICD-9-CM Code** | **Diagnosis** |
| 244.8 | Other specified acquired hypothyroidism |
| 244.9 | Unspecified acquired hypothyroidism |
| 242 | Thyrotoxicosis with or without goiter |
| 558.9 | Other and unspecified noninfectious gastroenteritis and colitis |
| 790.2 | Abnormal glucose |
| 251 | Other disorders of pancreatic internal secretion |
| 787 | Symptoms involving digestive system |
| 276 | Disorders of fluid, electrolyte, and acid-base balance |
| 707 | Chronic ulcer of skin |
| 366.0 | Cataract |
| 366.41 | Diabetic cataract |
| 436 | Acute, but ill-defined, cerebrovascular disease |
| 586 | Renal failure, unspecified |
| 584 | Acute kidney failure |
| 536 | Disorders of function of stomach |
| 290-319 | Mental, behavioral, and neurodevelopmental disorders |
| 577 | Diseases of the pancreas |
| 630-677, 679.0 | Complication of pregnancy, childbirth, and the puerperium |
| 648.00-648.04 | Diabetes mellitus in the mother, but complicating pregnancy, childbirth, or the puerperium |
| 682 | Cellulitis |
| 480-488 | Pneumonia and influenza |
| 590 | Infections of the kidney |
| 278.00-278.03 | Overweight and obesity |
| 962.3 | Poisoning by insulins and antidiabetic agents |
| 996.57 | Mechanical complication due to insulin pump |

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| **Supplement Table 2.** ICD-9-CM codes, type 1 & type 2 diabetes |  |  |
|  | **Type 1 Diabetes** | **Type 2 Diabetes** |
| **250.0** | **Diabetes mellitus** |  |  |
|  | 250.01 | Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled | 250.00 | Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled |
|  | 250.03 | Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled | 250.02 | Diabetes mellitus without mention of complication, type II, uncontrolled |
| **250.1** | **Diabetes with ketoacidosis** |  |  |
|  | 250.11 | Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled | 250.10 | Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled |
|  | 250.13 | Diabetes with ketoacidosis, type I [juvenile type], uncontrolled | 205.12 | Diabetes with ketoacidosis, type II or unspecified type, uncontrolled |
| **250.2** | **Diabetes with hyperosmolarity** |  |  |
|  | 250.21 | Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled | 250.20 | Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled |
|  | 250.23 | Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled | 250.22 | Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled |
| **250.3** | **Diabetes with other coma** |  |  |
|  | 250.31 | Diabetes with other coma, type I [juvenile type], not stated as uncontrolled | 250.30 | Diabetes with other coma, type II or unspecified type, not stated as uncontrolled |
|  | 250.33 | Diabetes with other coma, type I [juvenile type], uncontrolled | 250.32 | Diabetes with other coma, type II or unspecified type, uncontrolled |
| **250.4** | **Diabetes with renal manifestations** |  |  |
|  | 250.41 | Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled | 250.40 | Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled |
|  | 250.43 | Diabetes with renal manifestations, type I [juvenile type], uncontrolled | 250.42 | Diabetes with renal manifestations, type II or unspecified type, uncontrolled |
| **250.5** | **Diabetes with ophthalmic manifestations** |  |  |
|  | 250.51 | Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled | 250.50 | Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled |
|  | 250.53 | Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled | 250.52 | Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled |
| **250.6** | **Diabetes with neurological manifestations** |  |  |
|  | 250.61 | Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled | 250.60 | Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled |
|  | 250.63 | Diabetes with neurological manifestations, type I [juvenile type], uncontrolled | 250.62 | Diabetes with neurological manifestations, type II or unspecified type, uncontrolled |
| **250.7** | **Diabetes with peripheral circulatory disorders** |  |  |
|  | 250.71 | Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled | 250.70 | Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled |
|  | 250.73 | Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled | 250.72 | Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled |
| **250.8** | **Diabetes with other specified manifestations** |  |  |
|  | 250.81 | Diabetes with other specified manifestations, type I [juvenile type], not stated as controlled | 250.80 | Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled |
|  | 250.83 | Diabetes with other specified manifestations, type I [juvenile type], uncontrolled | 250.82 | Diabetes with other specified manifestations, type II or unspecified type, uncontrolled |
| **250.9** | **Diabetes with unspecified complication** |  |  |
|  | 250.91 | Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled | 250.90 | Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled |
|   | 250.93 | Diabetes with unspecified complication, type I [juvenile type], uncontrolled | 250.92 | Diabetes with unspecified complication, type II or unspecified type, uncontrolled |

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| **Supplement Table 3**. Unadjusted and adjusted regression results for the effect of homeless vs. non-homeless status on hospital-related outcomes |
|  | Unadjusted |  |  | Adjusted\* |  |  |  |  |
|  | Estimate† | 95%CI‡ | *P*  | Estimate† | 95%CI‡ | *P*  | AIC§ without homeless | AIC with homeless |
| In-hospital mortality|| |   |   |   |   |   |   |   |   |
| Homeless | 2.43 | [0.00, 0.00] | .85 | 2.27 | [0.20, 25.28] | .51 | 109 | 110 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Emergency admission¶ |  |  |  |  |  |  |  |  |
| Homeless | 1.50 | [1.21, 1.86] | <.01 | 1.54 | [1.23, 1.92] | <.01 | 11,947 | 11,934 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Ketoacidosis|| |  |  |  |  |  |  |  |  |
| Homeless | 0.75 | [0.58, 0.98] | .03 | 0.75 | [0.59, 0.96] | .02 | 14,016 | 14,013 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Hospitalization cost# |  |  |  |  |  |  |  |  |
| Homeless | 0.87 | [0.78, 0.96] | <.01 | 0.88 | [0.79, 0.97] | <.01 | 21,864 | 21,845 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Length of stay\*\* |  |  |  |  |  |  |  |  |
| Homeless | 1.43 | [1.27, 1.60] | <.01 | 1.20 | [1.08, 1.35] | <.01 | 46,279 | 46,270 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| DM2||, †† |  |  |  |  |  |  |  |  |
| Homeless | 3.99 | [0.06, 0.08] | <.01 | 2.02 | [1.20, 3.38] | <.01 | 7,525 | 7,520 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |   |   |

\*Models adjusted by age, race/ethnicity, sex, and insurance type

†Estimates presented as Odds Ratios (ORs), except length of stay which is presented as an Incidence Rate Ratio (IRR)

‡Confidence Interval

§Akaike Information Criterion

||Hierarchical multivariable logistic regression

¶Multivariable logistic regression

#Hierarchical multivariable log-transformed linear regression

\*\*Hierarchical multivariable negative binomial regression

††Type 2 diabetes

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| **Supplement Table 4.** Unadjusted and adjusted regression results among type 1 DM homeless vs. non-homeless status on hospital-related outcomes |
|  | Unadjusted |  |  | Adjusted\* |  |  |  |  |
|  | Estimate† | 95%CI‡ | *P*  | Estimate† | 95%CI‡ | *P*  | AIC§ without homeless | AIC with homeless |
| In-hospital mortality|| |   |   |   |   |   |   |   |   |
| Homeless | - | - | - | - | - | - | - | - |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Emergency admission¶ |  |  |  |  |  |  |  |  |
| Homeless | 1.79 | [1.39, 2.30] | <.01 | 1.88 | [1.45, 2.43] | <.01 | 10,329 | 10,305 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Ketoacidosis# |  |  |  |  |  |  |  |  |
| Homeless | 1.05 | [0.79, 1.40] | .74 | 0.77 | [0.54, 1.09] | .14 | 12,565 | 12,564 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Hospitalization cost\*\* |  |  |  |  |  |  |  |  |
| Homeless | 0.90 | [0.80, 1.01] | .08 | 1.06 | [0.82, 1.03] | .17 | 18,630 | 18,630 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Length of stay†† |  |  |  |  |  |  |  |  |
| Homeless | 1.41 | [1.24, 1.60] | <.01 | 1.22 | [1.08, 1.37] | <.01 | 39,075 | 39,068 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |   |   |

\*Models adjusted by age, race/ethnicity, sex, and insurance type

†Estimates presented as Odds Ratios (ORs), except length of stay which is presented as an Incidence Rate Ratio (IRR)

‡Confidence Interval

§Akaike Information Criterion

||In-hospital mortality omitted as outcome due to ≤10 cases

¶Multivariable logistic regression

#Hierarchical multivariable logistic regression

\*\*Hierarchical multivariable log-transformed linear regression

††Hierarchical multivariable negative binomial regression

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| **Supplement Table 5.** Unadjusted and adjusted regression results among type 2 DM homeless vs. non-homeless status on hospital-related outcomes |
|  | Unadjusted |  |  | Adjusted\* |  |  |  |  |
|  | Estimate† | 95%CI‡ | *P*  | Estimate† | 95%CI‡ | *P*  | AIC§ without homeless | AIC with homeless |
| In-hospital mortality|| |   |   |   |   |   |   |   |   |
| Homeless | - | - | - | - | - | - | - | - |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Emergency admission¶ |  |  |  |  |  |  |  |  |
| Homeless | 0.85 | [0.56, 1.31] | .47 | 0.74 | [0.47, 1.14] | .17 | 1,639 | 1,639 |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Ketoacidosis# |  |  |  |  |  |  |  |  |
| Homeless | 0.70 | [0.35, 1.38] | .30 | 0.70 | [0.36, 1.34] | .28 |  1,387  |  1,388  |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Hospitalization cost\*\* |  |  |  |  |  |  |  |  |
| Homeless | 0.77 | [0.65, 0.92] | <.01 | 0.77 | [0.65, 0.93] | <.01 |  3,200  |  3,190  |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |  |  |
| Length of stay†† |  |  |  |  |  |  |  |  |
| Homeless | 1.25 | [1.00, 1.57] | .05 | 1.10 | [0.87, 1.38] | .44 |  7,081  |  7,082  |
| Non-homeless | **REFERENCE** |  |  | **REFERENCE** |  |  |   |   |

\*Models adjusted by age, race/ethnicity, sex, and insurance type

†Estimates presented as Odds Ratios (ORs), except length of stay which is presented as an Incidence Rate Ratio (IRR)

‡Confidence Interval

§Akaike Information Criterion

||In-hospital mortality omitted as outcome due to ≤10 cases

¶Multivariable logistic regression

#Hierarchical multivariable logistic regression

\*\*Hierarchical multivariable log-transformed linear regression

††Hierarchical multivariable negative binomial regression

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| **Supplement Table 6**. Adjusted regression results for homeless vs. low income non-homeless status on hospital-related outcomes\* |
|  | Estimate† | 95%CI‡ | *P* | AIC§  without homeless | AIC with homeless |
| In-hospital mortality|| |   |   |   |   |   |
| Homeless | **-** | **-** | **-** | **-** | **-** |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Emergency admission¶ |  |  |  |  |  |
| Homeless | 1.42 | [1.04, 1.95] | .03 | 2,274 | 2,271 |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Ketoacidosis# |  |  |  |  |  |
| Homeless | 0.71 | [0.51, 0.98] | .04 | 2,755 | 2,752 |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Hospitalization cost\*\* |  |  |  |  |  |
| Homeless | 0.74 | [0.65, 0.83] | <.01 | 4,715 | 4,695 |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Length of stay†† |  |  |  |  |  |
| Homeless | 1.14 | [0.98, 1.32] | .08 | 10,057 | 10,056 |
| Non-homeless | **REFERENCE** |  |  |  |  |
| DM2#, ‡‡ |  |  |  |  |  |
| Homeless | 2.85 | [0.84, 9.71] | .09 | 1,547 | 1,546 |
| Non-homeless | **REFERENCE** |  |  |  |  |

\*Models adjusted by age, race/ethnicity, sex, and insurance type

†Estimates presented as Odds Ratios (ORs), except length of stay which is presented as an Incidence Rate Ratio (IRR)

‡Confidence Interval

§Akaike Information Criterion

||In-hospital mortality omitted as outcome due to ≤10 cases

¶Multivariable logistic regression

#Hierarchical multivariable logistic regression

\*\*Hierarchical multivariable log-transformed linear regression

††Hierarchical multivariable negative binomial regression

‡‡Type 2 diabetes

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| **Supplement Table 7.** Adjusted regression results for type 1 DM homeless vs. low income non-homeless status on hospital-related outcomes\* |
|  | Estimate† | 95%CI‡ | *P*  | AIC§  without homeless | AIC with homeless |
| In-hospital mortality|| |   |   |   |   |   |
| Homeless | **-** | **-** | **-** | **-** | **-** |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Emergency admission¶ |  |  |  |  |  |
| Homeless | 1.87 | [1.28, 2.74] | <.01 |  2,144  |  2,134  |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Ketoacidosis# |  |  |  |  |  |
| Homeless | 0.79 | [0.55, 1.12] | .18 |  2,655  |  2,655  |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Hospitalization cost\*\* |  |  |  |  |  |
| Homeless | 0.78 | [0.67, 0.90] | <.01 |  4,423  |  4,416  |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Length of stay†† |  |  |  |  |  |
| Homeless | 1.22 | [1.03, 1.44] | .02 |  9,432  |  9,429  |
| Non-homeless | **REFERENCE** |  |  |   |   |

\*Models adjusted by age, race/ethnicity, sex, and insurance type

†Estimates presented as Odds Ratios (ORs), except length of stay which is presented as an Incidence Rate Ratio (IRR)

‡Confidence Interval

§Akaike Information Criterion

||In-hospital mortality omitted as outcome due to ≤10 cases

¶Multivariable logistic regression

#Hierarchical multivariable logistic regression

\*\*Hierarchical multivariable log-transformed linear regression

††Hierarchical multivariable negative binomial regression

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| **Supplement Table 8.** Adjusted regression results for type 2 DM homeless vs. low income non-homeless status on hospital-related outcomes\* |
|  | Estimate† | 95%CI‡ | *P* | AIC§ without homeless | AIC with homeless |
| In-hospital mortality|| |   |   |   |   |   |
| Homeless | **-** | **-** | **-** | **-** | **-** |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Emergency admission¶ |  |  |  |  |  |
| Homeless | 0.69 | [0.39, 1.23] | .21 |  1,845  |  1,846  |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Ketoacidosis# |  |  |  |  |  |
| Homeless | 0.39 | [0.16, 0.95] | .04 |  2,091  |  2,088  |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Hospitalization cost\*\* |  |  |  |  |  |
| Homeless | 0.64 | [0.51, 0.81] | <.01 |  3,623  |  3,611  |
| Non-homeless | **REFERENCE** |  |  |  |  |
| Length of stay†† |  |  |  |  |  |
| Homeless | 0.98 | [0.76, 1.27] | .90 |  7,407  |  7,409  |
| Non-homeless | **REFERENCE** |  |  |   |   |

\*Models adjusted by age, race/ethnicity, sex, and insurance type

†Estimates presented as Odds Ratios (ORs), except length of stay which is presented as an Incidence Rate Ratio (IRR)

‡Confidence Interval

§Akaike Information Criterion

||In-hospital mortality omitted as outcome due to ≤10 cases

¶Multivariable logistic regression

#Hierarchical multivariable logistic regression

\*\*Hierarchical multivariable log-transformed linear regression

††Hierarchical multivariable negative binomial regression