**Supplement 1**

* **Population estimate files**
1. **U.S. Census Bureau estimates by age and gender**

https://www2.census.gov/programs-surveys/popest/tables/2010-2019/national/asrh/nc-est2019-asr6h.xlsx

1. **U.S. Census Bureau regional population estimates**

https://www2.census.gov/programs-surveys/popest/tables/2010-2019/state/totals/nst-est2019-01.xlsx

* **Description of variables**
1. **Region**

It is defined by the U.S. Census Bureau as below:

|  |  |
| --- | --- |
| **Region** | **States** |
| Northeast | ME, NH, VT, MA, RI, CT, NY, NJ, and PA |
| Midwest | OH, IN, IL, MI, WI, MN, IA, MO, ND, SD, NE, and KS |
| South | DE, MD, DC, VA, WV, NC, SC, GA, FL, KY, TN, AL, MS, AR, LA, OK, and TX |
| West | MT, ID, WY, CO, NM, AZ, UT, NV, WA, OR, CA, AK, and HI |

1. **Insurance status**

The expected primary payer for the hospitalization accounts for insurance status in our analysis.

|  |  |
| --- | --- |
| **Primary payer** | **Description** |
| Medicare | Fee-for-service and managed care Medicare patients |
| Medicaid | Fee-for-service and managed care Medicaid patients |
| Private insurance  | Blue cross, Blue shield, HMO (Health Maintenance Organization) plans, PPO (Preferred Provider Organization) plans, and other private insurance providers |
| Uninsured | Self-pay/No-charge |

1. **APR-DG Severity of illness**

The All Patient Refined DRGs (APR-DRGs) are assigned using software developed by 3M Health Information Systems. See the link below: https://www.hcupus.ahrq.gov/db/vars/aprdrg\_severity/nisnote.jsp

|  |  |
| --- | --- |
| 0 | No class specified |
| 1 | Minor loss of function (includes cases with no comorbidity or complications) |
| 2 | Moderate loss of function |
| 3 | Major loss of function |
| 4 | Extreme loss of function |

1. **APR-DG Risk of mortality**

|  |  |
| --- | --- |
| 0 | No class specified |
| 1 | Minor likelihood of dying |
| 2 | Moderate likelihood of dying |
| 3 | Major likelihood of dying |
| 4 | Extreme likelihood of dying |