**Supplementary Table 1 to “System Factors to Explain 2009 H1N1 State Vaccination Rates for Children and High-Risk Adults in US Emergency Response to Pandemic”: Examples of highly correlated variables with those variables in the models.**

| **Variable** | **Description** | **Examples of highly correlated variables ('+' is > 0.5, '-' is < -0.5)** |
| --- | --- | --- |
| **Indep1** | Percent of Women Age 18 and Older Who Report Having Had a Pap Smear Within the Last Three Years, 2008 | + Percent of women who had a mammogram within the last two years+ Percent of Women who had a colorectal cancer screening | + Child had one or more preventive medical care visits- Percentage of population < 18 years old- Percentage of doses sent to counties |
| **Indep6** | Maximum number of ship-to-sites per state per thousand population | + Resident population 65 years old and over + Medicare enrollment as percent of total population | - State's area |
| **Indep8** | Percentage Reporting Not Seeing a Doctor in the Past 12 Months Because of Cost | + Percent people in poverty+ General health condition fair/poor+ Deaths by stroke per 100,000 population | - Have any kind of healthcare coverage- Percent of adults with dental visit in a year- Educational attainment at least high school |
| **Indep9** | Underserved Population Living in Primary Care Health Professional Shortage Areas, as of September, 2008 | + Percent people in poverty+ Chronic liver disease mortality- Percent children with private insurance | - Peak week for number of ILI cases after week 30 |
| **Indep10** | Resident population under 18 years, percent (July 1 - estimate) 2008 | + Percent of births to population+ Average persons per household+ Square root of state’s area | - Per capita healthcare expenditure by state- Number of healthcare practitioners- Percent of women 40+ with mammogram |
| **Indep11** | Resident population: American Indian and Alaska Native alone, percent (July 1 - estimate) 2008 | + Average days between shipments+ Area of the state+ Average number of doses per shipment |  |
| **Indep12** | Total Public Doses Oct-Feb divided by Estimated People Vaccinated | - Percentage of days with shipments |  |
| **Indep13** | H1N1 Vaccine Doses Distributed or Administered to Date from Large Pharmacy Chains / Retail-Based Clinics to States as of January 29, 2010 | (no high correlations were found)) |  |
| **Indep14** | Seasonal Flu Coverage for adults 18 -- 49 yrs on the 2007-2008 season | + Previous seasons vaccination coverage |  |
| **Indep15** | Natural logarithm of the ratio of number of shipments to number of ship-to-sites | + Percentage of doses sent to counties+ Average days between shipments- Number of ship-to sites actually used |  |
| **Indep16** | Percentage of doses sent to primary care, MDs, counties, hospitals, urgent care, clinics, or pharmacies. | + Square root of state’s area- Percent of women 40+ with mammogram- Adults 50+ with sigmoidoscopy or colonoscopy | - Number of ship-to sites actually used- Percent of adults with dental visit in a year- Average travel time to work- Educational attainment at least high school |
| **Indep17** | Total number of cars, trucks and buses per capita | - Average travel time to work | - Percentage of children living with their grandparents |
| **Indep18** | Coverage expanded to general population by Dec. 4, 2009: 1- Yes, 0- No | + Deaths by stroke per 100,000 population |  |
| **Indep19** | School-based clinic strategy: 1- School Focus, 2- No | + Coverage expanded to general population by Dec. 4, 2009+ State makes transfer/redistribution to small providers | - Determination of allocation amount to private providers made locally vs. state |
| **Indep20** | Third parties make transfer/ redistribution to small providers | (no high correlations were found)) |  |