**S1 File**. **Summarized equations for the adjustment factors accounting for persons who were not tested for influenza, those who did not seek healthcare, and for asymptomatic detection of influenza**

**Equation 1.** Incidence rate of influenza-associated hospitalization/outpatient visit

Where:

= Unadjusted incidence rate of influenza-associated hospitalizations/outpatient visits

= Total number of cases who tested positive for influenza

*PoY*= Person-time of surveillance in years/Mid-year population

**Equation 2a.** Adjustment for those who met the specific case definition but were not tested for influenza

Where:

= Incidence adjusted for those who were not tested for influenza

= Unadjusted (crude) incidence rate of influenza-associated hospitalizations/outpatient visits

= Proportion of hospitalized patients who met the specific case definition and were tested for influenza

**Equation 2b.** Adjustment for those who did not seek healthcare

Where:

= Incidence adjusted for those who were not tested for influenza

= Unadjusted (crude) incidence rate of influenza-associated hospitalizations/outpatient visits

= Proportion of cases in the community who met the specific case definition and sought healthcare at the study hospital/clinic

**Equation 2c.** Adjustment for asymptomatic detection of influenza

Where:

= Incidence adjusted for those who were not tested for influenza

= Unadjusted (crude) incidence rate of influenza-associated hospitalizations/outpatient visits

= Pathogen-attributable fraction defined as (OR-1)/OR

= The odds ratio of detection of influenza among cases compared to asymptomatic controls from a case-control analysis

**Note**: Refer to the individual published papers for further details on specific adjustments used.