

Poster number: P1.36

Hospital admissions associated to respiratory viruses in the Valencia Hospital network for the study of influenza and other respiratory viruses. Season 2013-2014

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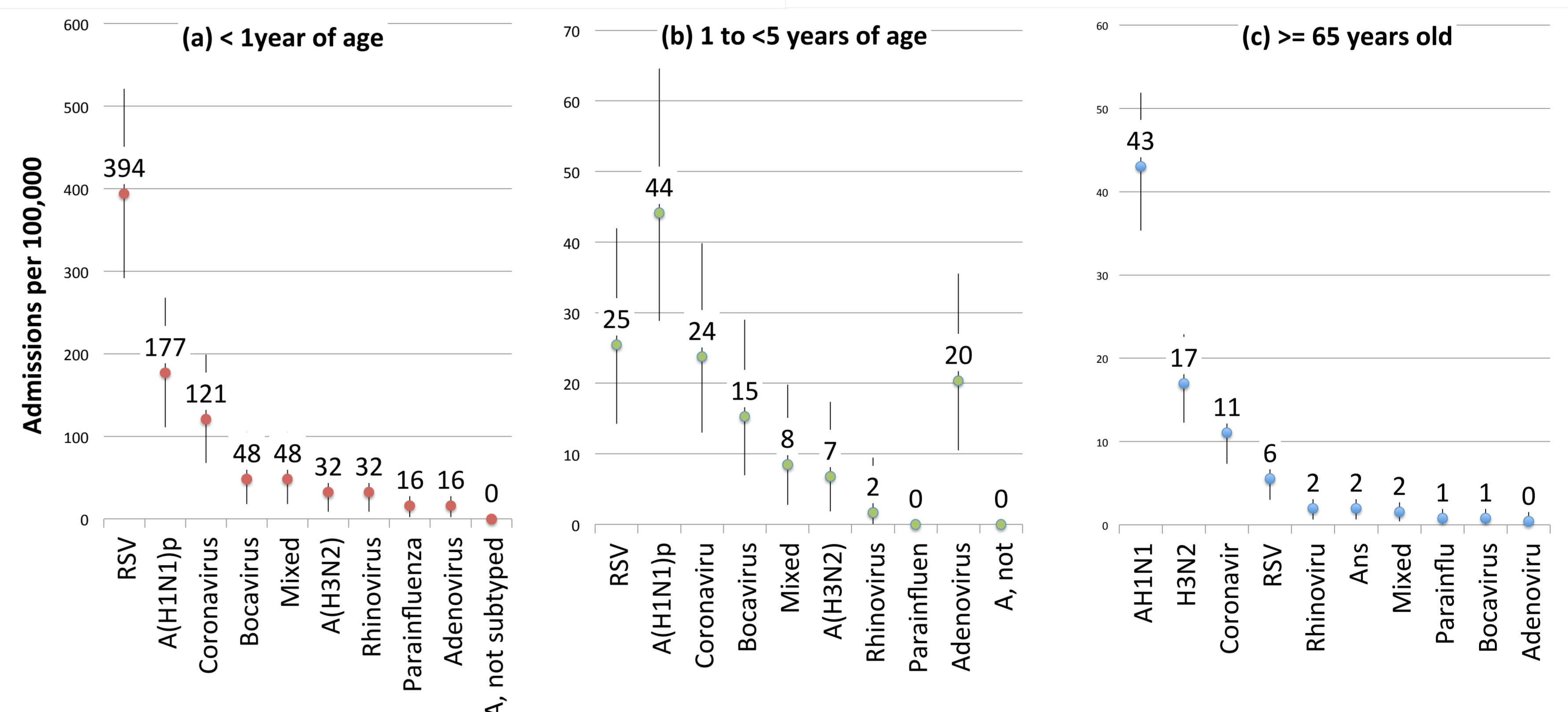
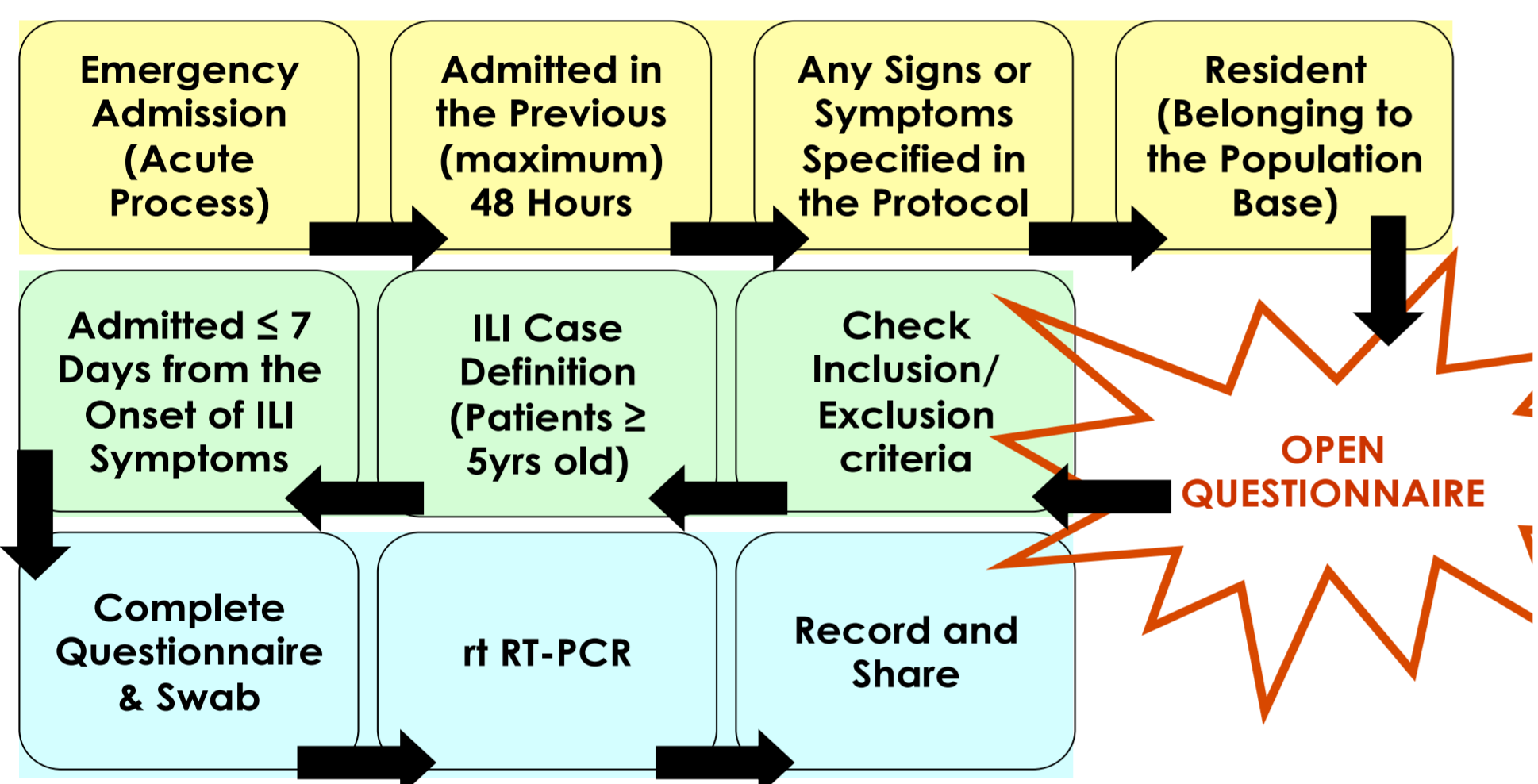
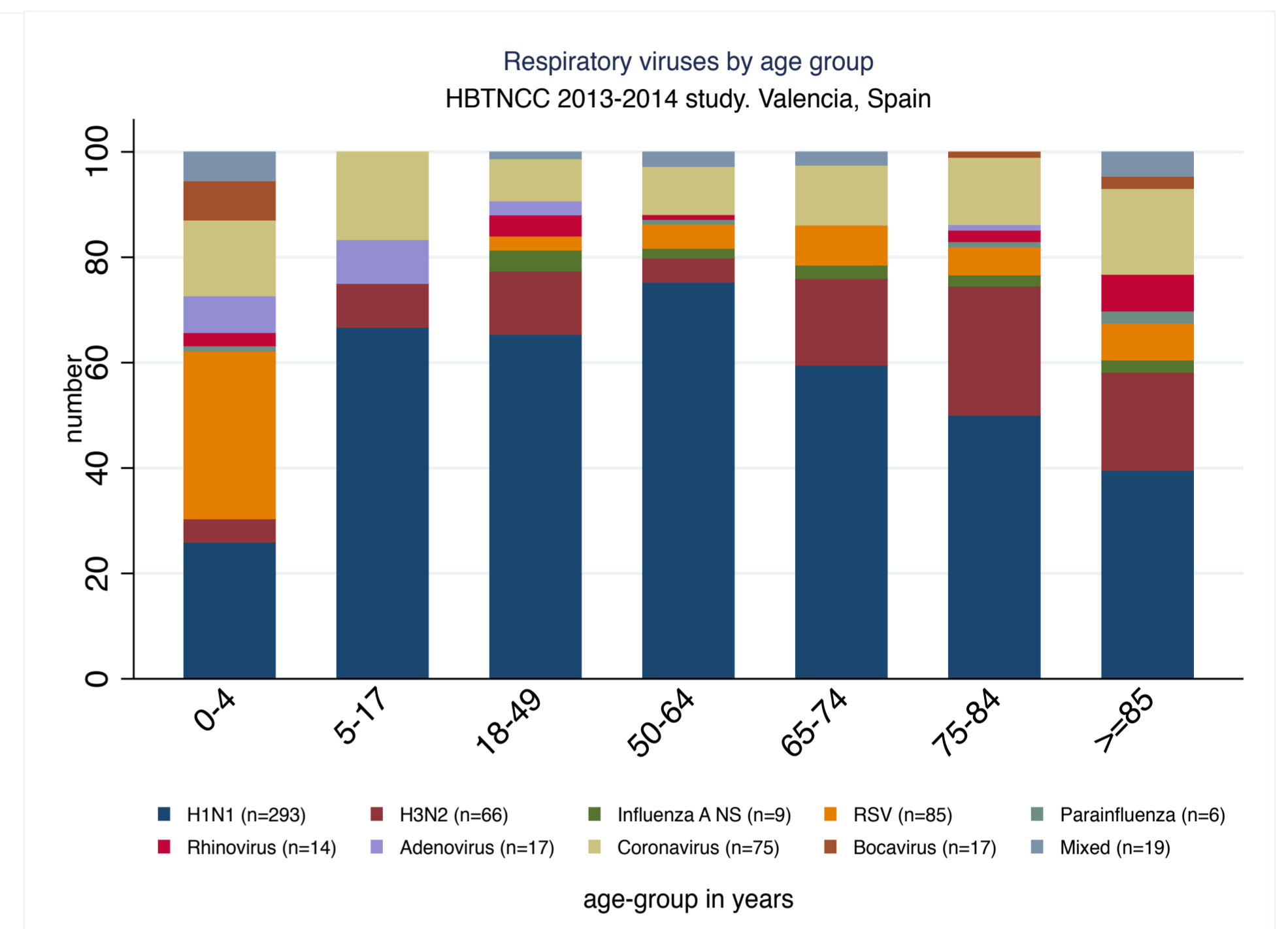
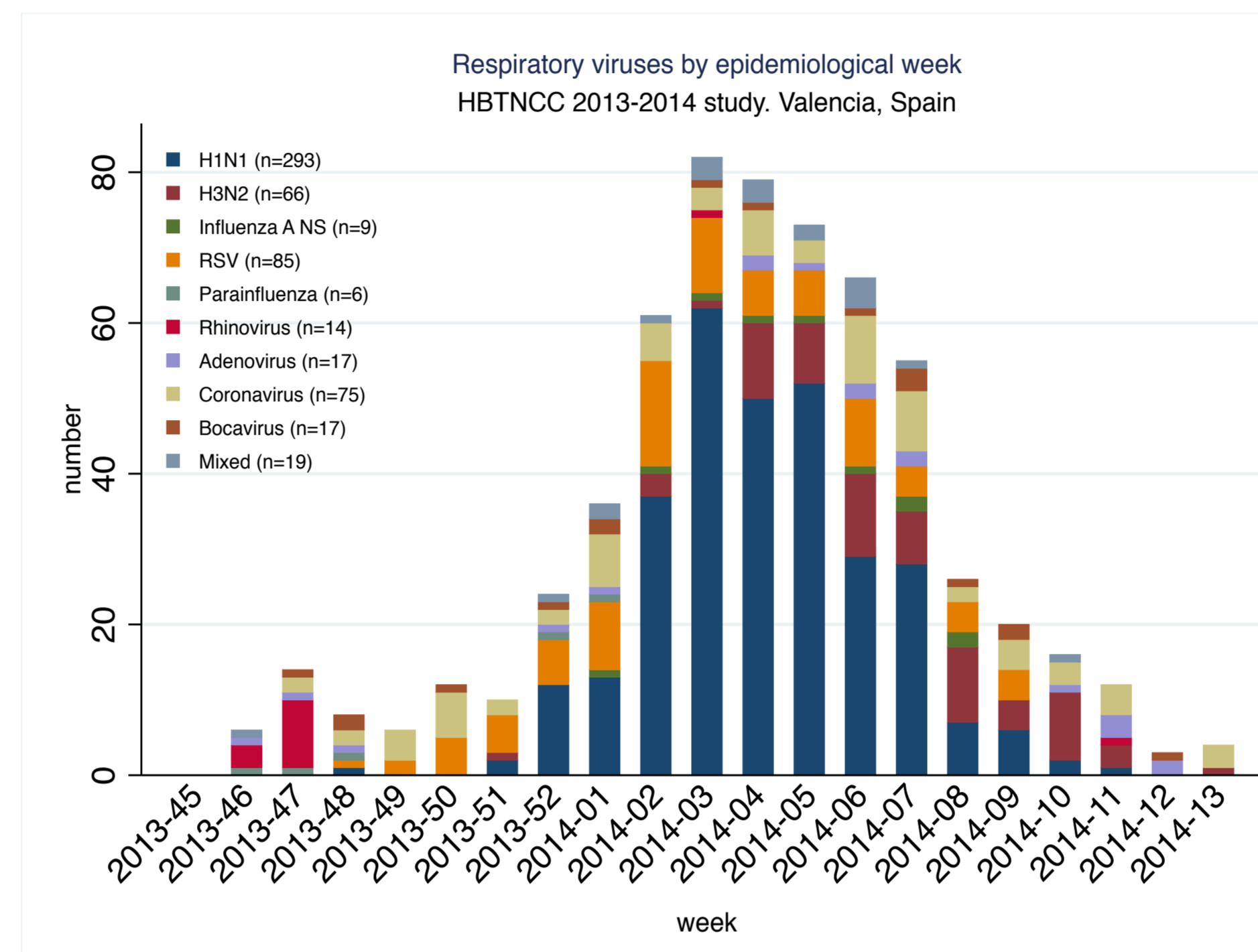
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Background

Burden of disease associated with respiratory viruses (RV) is poorly defined. The aim of this study was to estimate the incidence of admissions with RV, by age group and virus.

Methods

We conducted a prospective, hospital-based, active surveillance for respiratory illness in all age-groups admissions in six hospitals in Valencia (Spain) during the 2013-2014 winter season. Clinical and demographic data were obtained from medical records and by face-to-face interviews. Respiratory viruses were detected from combined nasopharyngeal (all patients) nasal (patients aged <14 years) or pharyngeal (≥14 years) swabs by means of rRT-PCR. We estimated age and virus-specific associated hospitalisations with respiratory viral infection.



Results

Eligible: 4,841 admissions

Excluded: 2,268
 No consent: 316
 No resident: 55
 Hospitalized within 30 of current episode: 34
 No ILI or onset of symptoms > 7 días of current admission: 1,846

Included: 2,573 (53%)

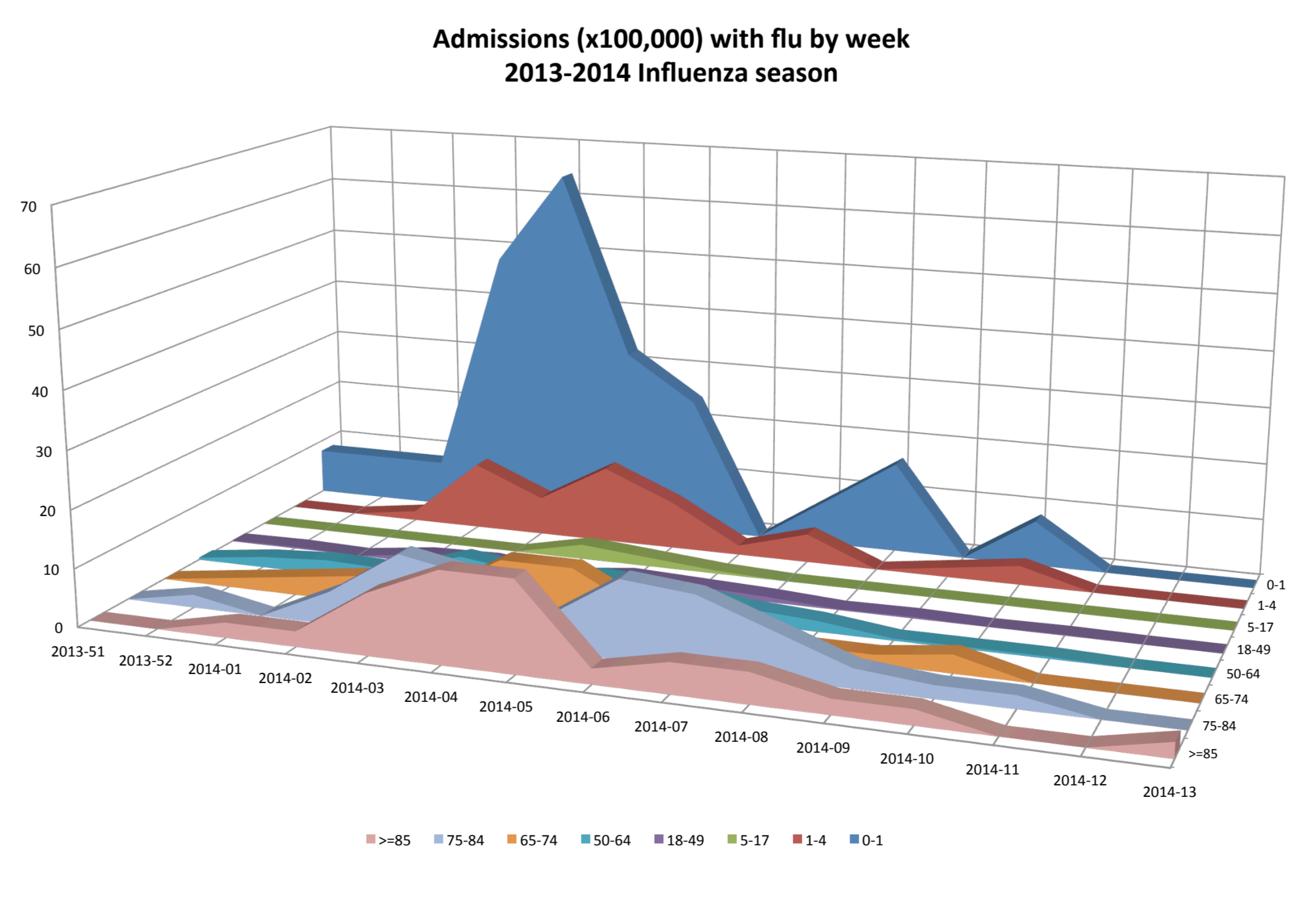
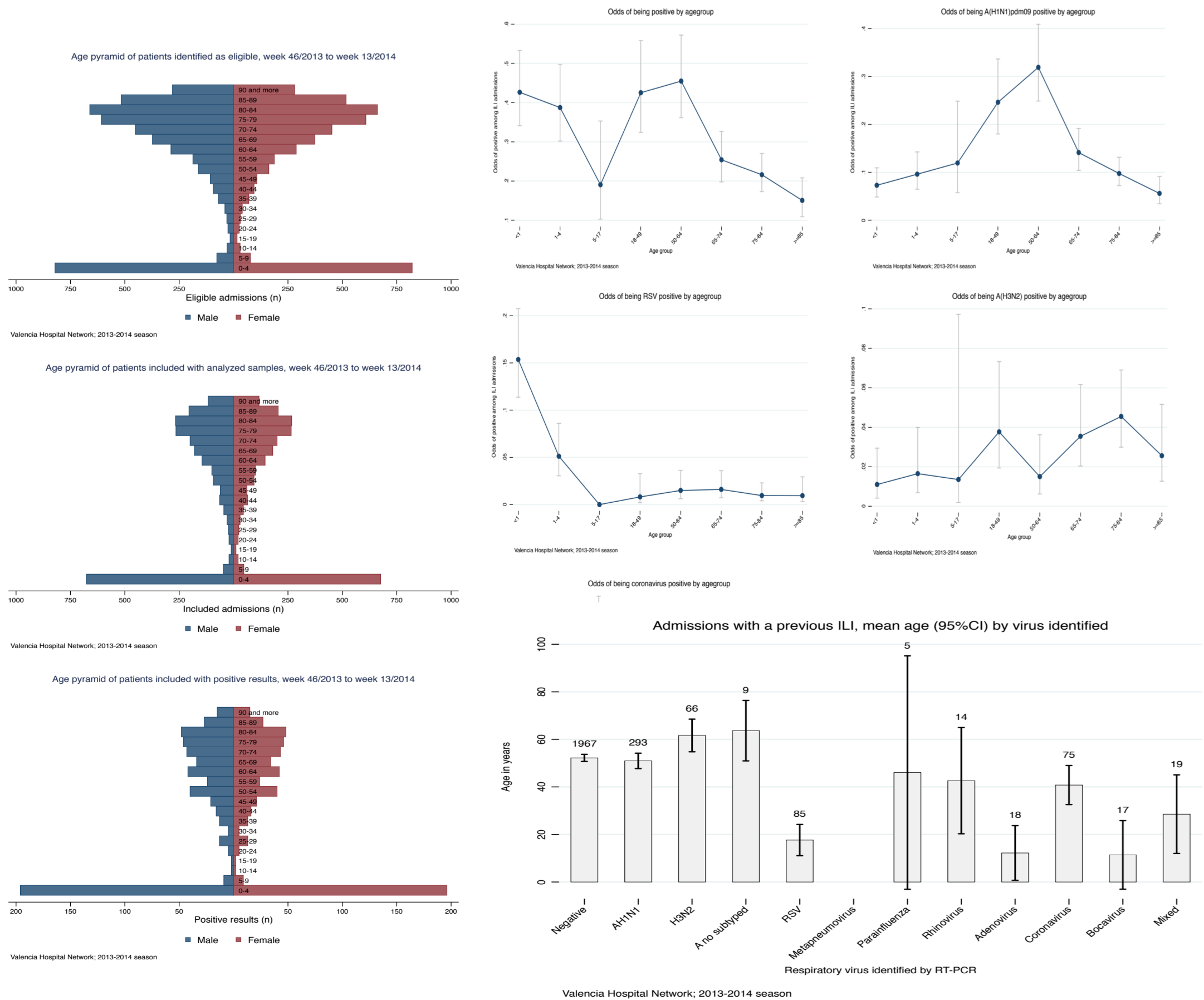
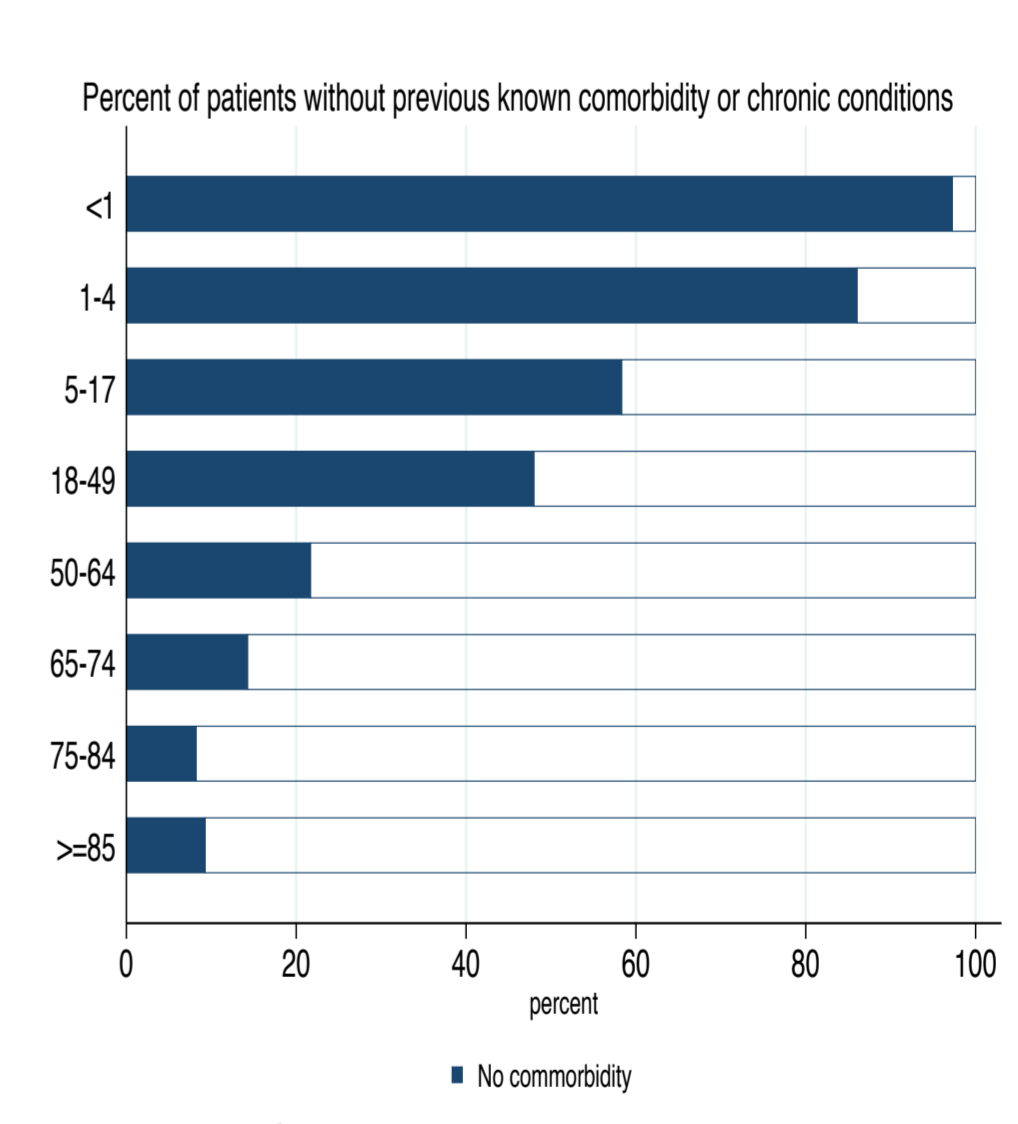
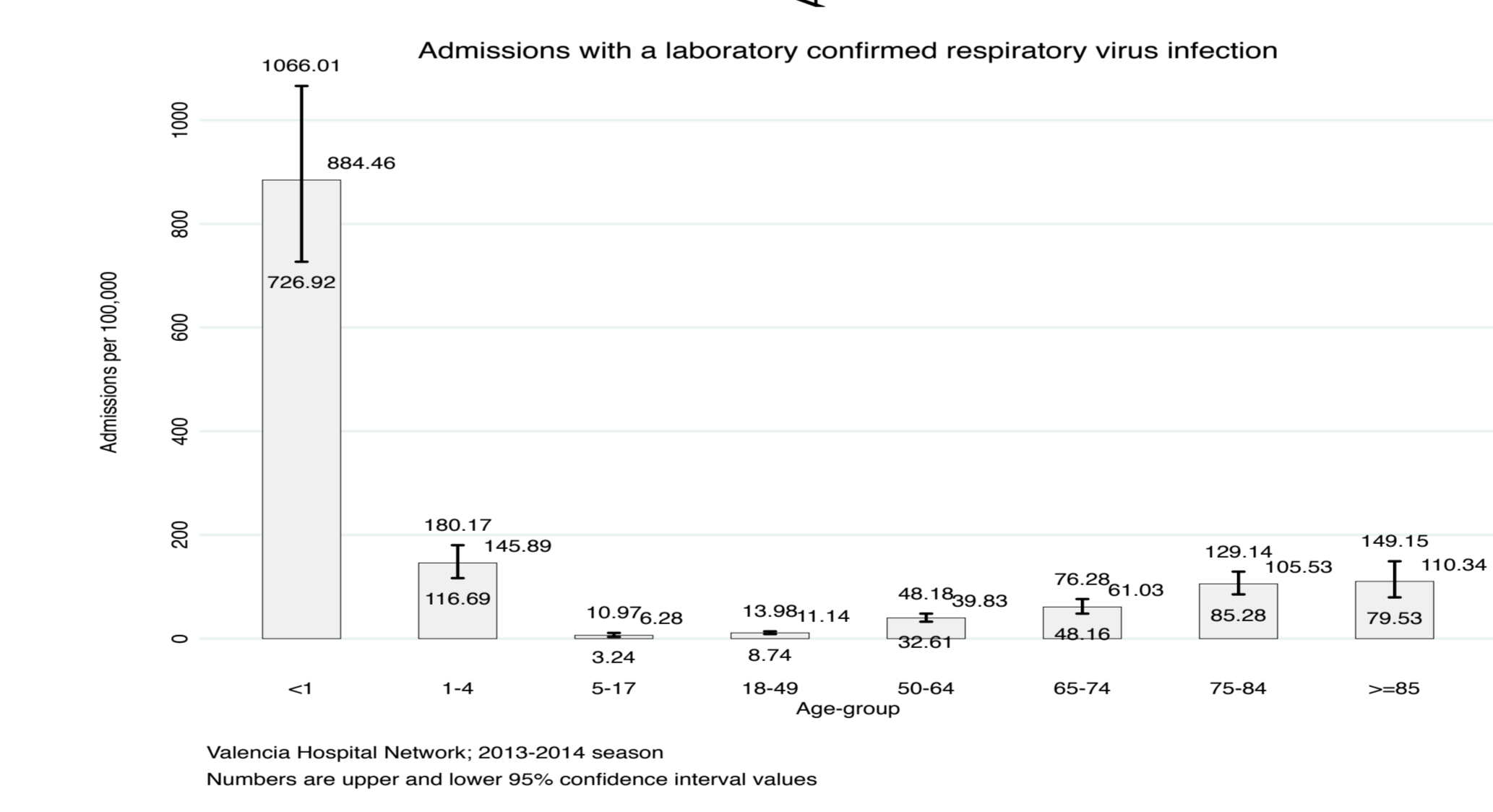
Included with valid results: 2,568 (5 inadequate samples)

Negative: 1,967 (59%)

Positive: 601 (23.4%)

Influenza: 368 (61%)

Other RV: 233 (39%)



Conclusions

In the studied VAHNSI season, the most frequently identified viruses (88%) were influenza (63%), VRS (14%), and coronavirus (12%).

The greatest burden of severe disease by RV was observed in children under one year (*this was even greater in those less than 6 months [data not shown]*).

Despite the predominance of RSV in this age group, the rate of hospitalization per 100,000 with influenza A(H1N1)p in children <1 year was four times that experienced in the group aged 65 or older. For children aged 1-4 years, A(H1N1)p admissions rates were similar to those in subjects aged 65 and over.

Overall, 40% of RV admissions occurred in patients without previous known comorbidities or risk factors.

Our results support WHO recommendation of including children 6 to 59 months and pregnant women (*to protect children under 6 months of age*) in the priority groups in vaccination programs against influenza.

A vaccine against RSV should be considered as a high profile public health priority

Abbreviations used across text, tables and figures:
 RT-PCR. Reverse transcription polymerase chain reaction. RV, respiratory virus (or viruses). rt, real time. RSV: respiratory syncytial virus.

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