

**P2580 Standardised treatment and routine cohorting of influenza patients during seasonal epidemics minimizes nosocomial influenza infections**Johanna Wetzel\*<sup>1</sup>, Florian Banderet-Uglioni<sup>1</sup>, Anja Ulrich<sup>1</sup>, Andreas F. Widmer<sup>1</sup><sup>1</sup> University Hospital Basel, Basel, Switzerland

**Background:** Each year, hospitals are challenged with patients suffering from influenza. With an increased number of cases during peak times, the probability of nosocomial transmission increases. Reasons are limited space, increased workload for healthcare workers (HCW), and infected visitors. Most Central European hospitals report nosocomial transmission rates between 10 and 35 %.

We therefore initiated a concept of cohorting all influenza patients. The primary study question was to assess the rate of nosocomial transmission, and as secondary outcome, short-term absenteeism of HCW as a surrogate marker for transmission of influenza to HCWs by prolonged and exhaustive exposure to influenza patients.

**Materials/methods:** Data from influenza seasons 2016/17 and 2017/18 were analyzed. Influenza-infected patients were cohorted on a pre-determined ward. Management was standardized using droplet precautions, and treatment of all patients and potentially exposed patients with oseltamivir. All HCW were required to wear a surgical mask while working on the cohort ward.

HCW were calculated by the electronic systems, using only absences/full time equivalent <3 days, to exclude HCWs with prolonged diseases. Absences of HCW from the cohort ward were compared to 2 wards from the medical department and one of the surgical department.

**Results:** 752 influenza patients were hospitalized, of which 586 were cared for in the cohort ward. Nosocomial rates were 6.7 % in 2016/17 and 5.6 % in 2017/18. Short-term absenteeism in the cohort ward was 0.138 days/full-time equivalent (FTE) and 0.263 days/FTE in the control wards and, therefore, 0.125 days/FTE shorter in the cohort ward than in the control wards ( $p=0.0047$ ).

94.7 % and 96.6 % of patients received antiviral therapy in 2016/17 and 2017/18, respectively. Most contact patients received post-exposure prophylaxis (76.9 % in 2016/17 and 66.7 % in 2017/18).

**Conclusions:** Cohorting influenza patients on a specific ward resulted in a nosocomial rate of less than 7 %, significantly lower than reported from other Central European hospitals. Short-term absenteeism of HCW in the cohort ward was significantly lower than in non-influenza wards.

Influenza cohorts may help to decrease rates of nosocomial transmission without exposing HCWs to influenza and leading to influenza infection or sick leave.