

Risk stratification for the safety of patients and hospital health workers during Covid-19 emergency

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Covid-19 emergency has forced hospitals to face enormous organizational challenges in order to implement solutions to minimize the impact of the infection and guarantee at the same time the quality of health services provided and the safety of patients and health workers. ULSS 6 Euganea - Health Trust (District of Padua) has defined four levels of risk for Hospital Units (from the highest to the lowest risk: Red, Yellow, Green and White) based on the following parameters: type of patients hospitalized (SARS-CoV-2 positive, Covid-like, negative), type of health services provided, time of assistance and care for hospitalized patient.

This risk stratification in the Hospital of Cittadella - ULSS 6 Euganea has been applied to different contexts, such as distribution of personal protective equipment, health surveillance, frequency of cleaning and sanitation. Since February 21 (first confirmed case in Veneto Region), in the Hospital of Cittadella personal protective equipment has been delivered daily to health workers; the quantity and quality of devices provided have been carefully monitored, with particular regard to high-risk settings (Red Areas: Intensive Care Unit, Emergency Room, Covid Wards, Operating Room, Radiology, swab samples Area, Morgue).

The performance of nasopharyngeal swabs has been periodically organized for every health worker, according to the level of risk of their Unit: every 10 days for Red Areas, every 20 days for Yellow and Green Areas, every 30 days for White Areas. The frequency of cleaning and sanitation has been intensified in Red and Yellow Areas, following the guidelines released by the World Health Organization.

The definition of four levels of risk for Hospital Units is proving to be a useful and flexible tool in the management of Covid-19 emergency; further research in the next months needs to be made to assess the impact of risk stratification on the different aspects covered (ex. number of health workers infected).

Key messages:

- Covid-19 emergency has forced hospital to face enormous organizational challenges to minimize the impact of the infection and guarantee the safety of patients and health workers.
- The definition of four levels of risk for Hospital Units is proving to be a useful and flexible tool in the management of Covid-19 emergency.