COVID-19 negative patients. Increasing the in-hospital stockpile of PPE as well as the regional and national stockpile and creating local production capacities. The importance of the daily multidisciplinary managerial meeting was to improve situational awareness and allow improved decision making. Staff briefing occurred on a daily basis and during times of high uncertainty at the beginning of every shift.

Conclusion: Performing structured and frequent debriefing and analysis to achieve clinical and operational insights is crucial for improved short-term performance as well as improving preparedness for future challenges.

COVID, Co-Ventilation, and Cross-contamination

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Introduction: During the COVID-19 pandemic, consideration was given to co-ventilating multiple patients on a single ventilator. Prior work had shown that this procedure was possible by ventilating four adult-size sheep for twenty-four hours, and other groups had performed this maneuver during dire circumstances. However, no investigation had examined the safety regarding cross-contamination. The purpose of our studies was to investigate if an infection could spread between individuals who were being co-ventilated.

Method: Four sterile two-liter anesthesia bags were connected to a sterilized ventilator circuit to simulate the co-ventilated patients' "lungs." The circuit utilized Heat and Moisture Exchange filters and bacterial/viral filters, which were strategically inserted to prevent the transmission of infectious droplets. Serratia marcescens was inoculated into "lung" number one. The circuit was then run for 24 hours, after which each "lung" and three additional points in the circuit were cultured to see if S. marcescens had spread. These cultures were examined at 24 and 48 hours to assess for cross-contamination. This entire procedure was performed a total of four times.

Results: S. marcescens was not identified in lungs two, three, or four or the three additional sampling sites on the expiratory limb of the tubing at 24 and 48 hours in all four trials.

Conclusion: Cross-contamination between co-ventilated patients did not occur within 24 hours utilizing the described ventilator circuit configuration.

The Vaccinodrome: How to Set up the Largest Mass Vaccination Center in Europe.

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Introduction: Covid-19 pandemic had a massive impact on the capabilities of the healthcare system. The development of the vaccines and the setup of the vaccination program of the general population required an important coordination and organizational work, from an already worn-out system.

The implementation of mass vaccination centers is known as the most efficient way of vaccinating rapidly and efficiently a large part of the population, but requires a non-negligible amount of resources. For Covid-19 vaccination, time sustainability was an important challenge to consider due to the time-span needed between boosters; unfortunately, most of the models presented up to 2020 are short duration systems.

A mass vaccination center (MVC) organizational model was proposed and staffed with only two health care workers on a daily basis, with a more than 10,000 shots a day capacity over a seven-month duration.

Method: The MVC was under the supervision of one medical coordinator, one nurse coordinator and one operational coordinator. Students (both in health and non-health studies) were the most important part of the human resources. Data concerning the population vaccinated, the number and the type of vaccines used were routinely recorded.

Results: From March 28 to October 20, 2021, 501,714 vaccines were administered at the MVC. A mean rate of 2951 ±1804 doses was injected per day with a staff of 180 ±95 persons working every day. The peak was reached with 10,095 injections in one day. The average time spent by a patient in the MVC was 43.2 ± 15 minutes. The average time to be vaccinated was 26 ±13 minutes.

Conclusion: Provided with adequate supervision, an optimized organization and adequate training, the use of a student workforce allows for the implementation of a functional, efficient, and sustainable mass vaccination center.

The Application of Information Technology in Preventing and Controlling COVID-19 Pandemic: A Bibliometric Study

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Introduction: Information Technology has been applied to respond to the coronavirus disease 2019 (COVID-19), which has attracted increasing attention. However, there is still no comprehensive bibliometrics study in the global publications on the application of Information Technology in COVID-19. This study aimed to investigate the current research status of Information Technology in preventing and controlling the COVID-19 pandemic.

Method: Relevant literature published between 2020 and 2022 was downloaded from Web of Science Core Collection (WoSCC) databases. Key search terms included COVID-19, big data, artificial intelligence, internet of things, cloud computing, etc. The data elements were as follows: year, countries/