case scenario were modeled. The benefits were adjusted to an annual probability of a pandemic as low as 1%, and the relevant cost-benefit ratio was calculated. The impact of vaccination on disease spread was assessed according to a systematic review of published dynamic models.
Results: The model showed that a advanced purchase agreement was cost-saving, with a cost:benefit ratio of 1.81:3.65 in the base-case scenario, depending, among other factors, on the assumed R0 in the underlying mathematical models. The ratio proved relatively robust in extensive sensitivity analyses.
Conclusions: The risk of a severe pandemic caused by a highly pathogenic influenza virus remains. An advance purchase agreement for future vaccine supply is a cost-saving strategy and should be pursued. The practical aspects of this strategy will be discussed.
Keywords: cost-benefit; H1N1; influenza; pandemic; vaccine
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Development of Crisis Care Guidelines for Critical Care Management and the Allocation of Scarce Resources during the H1N1 Pandemic

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Introduction: The H1N1 pandemic has raised concerns about potential limited resources during peak surges. These limited resources may include respiratory care equipment (e.g., ventilator), sub-specialist access, critical care/intensive care unit (ICU) bed capacity, and surgical access. Many emergency preparedness coordinators have developed plans to allocate scarce resources, including a triage system with inclusion and exclusion criteria. However, in order to provide equal and equitable care, this triage system must be applied evenly across the healthcare spectrum. In Northern California, a guideline to provide equal and ethical care across a diverse region during the H1N1 pandemic was developed. This guideline includes regional and healthcare triggers, the local facility trigger, suggested beside guidance, and the development of a facility and regional triage team. In this presentation, the development of this guideline will be discussed including examples, test cases, and drill data to show its success and limitations. Detailed portions of the guideline will be distributed and discussed.
Objectives:

1. Understand the broad development of crisis-care guidelines for H1N1 pandemic management, including the allocation of scarce resources;
2. Discuss and develop a triage model for the allocation of scarce resources; and
3. Discuss the ethical and policy issues regarding crisis care during a pandemic.

Keywords: critical care; H1N1; guidelines, preparedness; resources; triage
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Do Standard Operating Procedures for Pandemic Influenza Impact on Emergency Preparedness?

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Introduction: Standard operating procedures (SOPs) are the basis of preparedness for biological threats. This study investigated the relationship between the quality of the SOPs for the management of pandemic influenza to the level of performance in an H5N1 drill.
Methods: The SOPs for of all general hospitals in Israel for managing pandemic influenza were evaluated using a tool developed for this purpose. Results were compared to the levels of performance measured in an avian influenza drill.
Results: The reliability of the two scales was high (SOP evaluation = 0.741 and drill assessment = 0.739). The overall correlation between the SOP score and drill assessment was strong (r = 0.737; p <0.000). Performance in the avian flu drill correlated significantly with the SOP evaluation in: (1) protection of staff and patients (r = 0.591, p = 0.002); (2) manpower control (r = 0.8750; p = 0.000); (3) infrastructure and minimizing overload (r = 0.932; p = 0.000). Results of two stepwise regressions: (1) using the SOP scores to predict performance on the drill; and (2) using the drill scores to predict the SOPs ratings resulted in the emergence of two significant models.
Discussion: A correlation was found between the SOPs for pandemic flu and the performance on the Avian flu drill, mainly in relation to elements that were unfamiliar to the staff or in areas which were perceived by the staff as posing a risk to their well-being. High quality SOPs have a strong correlation with the performance of the hospital in an avian flu drill; therefore, it is recommended to invest effort in developing high quality SOPs in order to promote the preparedness for pandemic flu.
Keywords: avian flu; drills; pandemic influenza; performance; preparedness; standard operating procedures
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Biosurveillance for Pandemic Influenza: US Experience with the H1N1 Outbreak, April–June, 2009

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Introduction: Making good decisions under crisis conditions is dependent on understanding the types of decisions