

# Global Health Day

## Health Information System's Response to COVID-19 in China

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**Background:** After the outbreak of COVID-19 pandemic, Chinese hospitals and health information technology (HIT) vendors collaborated to provide comprehensive information technology support for the pandemic prevention and control. Up to now, the pandemic situation in China has been basically controlled, achieving a milestone.

**Objective:** To describe the responses from the health information systems (HIS) to the COVID-19 pandemic and evaluate the application of emerging health technologies in China. **Methods:** This descriptive study utilized a nationally representative, cross-sectional survey of hospitals in China (N=1014) from 30 provincial administrative regions across the country. Participants include hospital managers, hospital information workers and health care providers.

**Results:** Among all the responses, the most popular interventions and applications include expert question-and-answer sessions and science popularization (61.74%) in online medical consultation, online appointment registration (58.97%) in online medical service, and remote consultation (75.15%) in telehealth service. 63.71% of the participating hospitals expanded their fever clinics during the pandemic, 15.38% hospitals used new or upgraded mobile ward rounds systems, and 44.68% hospitals applied online self-service systems. Challenges and barriers include protecting network information security (57.00%) since some hospitals experienced cybersecurity incidents. 71.79% participants hope to shorten visiting time and optimize the treatment process. The workload in hospitals was not significantly different during the pandemic.

**Conclusion:** In the process of fighting against the COVID-19, hospitals have widely used traditional and emerging novel health information technologies. These technologies have strengthened the capacity of prevention and control of the pandemic, and provided comprehensive information technology support while also improving accessibility and efficiency.

*This research was presented as part of Northwestern University Institute for Global Health's Annual Global Health Day on Friday, December 4<sup>th</sup>, 2020.*