

CSAC 2020 Challenge Award Entry

Los Angeles County, Department of Public Health

COVID-19 Personal Protective Equipment (PPE) Inventory Dashboard

OVERVIEW: Department of Public Health's (DPH) implementation of a COVID-19 Personal Protective Equipment (PPE) dashboard, to ensure real-time monitoring of the PPE inventory.

CHALLENGES: On January 26, 2020, DPH activated the Incident Command Systems (ICS) to deploy resources and programs necessary for management of outbreaks. On March 04, 2020, County of Los Angeles (COLA) declared COVID-19 a Local Health Emergency. These actions meant that DPH employees as ICS field responders and those reporting to healthcare or office worksites to maintain key operational activities, required increasing supplies of critical PPEs. The surge in demand for PPE, national shortages, and uncertainty over the duration of the pandemic required detailed tracking and metrics for effective decision-making to ensure the availability of PPE for DPH's workforce. Tracking and timely procurement of PPE for a pandemic response using the traditional decentralized purchasing systems would have been labor-intensive and inefficient in the pandemic's unpredictable supply chain capacity and reliability of alternate sources of PPE.

INNOVATION/SOLUTION: To ensure safety of employees during ICS response activities we focused on the PPEs, which were most critical from a supply perspective and on forecasting the demand for those PPEs. The newly developed dashboard leverages Smartsheet technology to collect real-time data from multiple stakeholders using a shared platform. Designees in key ICS operations provide PPE inventory and usage data using an online form that is readily accessible from a computer or smartphone. User information is centralized and configured to produce a snapshot, at-a-glance view of key inventory metrics such as trends in usage of PPE by type,

size, and days on hand. The dashboard's design allows for producing both metrics utilized in real time assessment of procurement needs, and an at a glance color-coded status of critical PPE.

RESULTS: The development and implementation of the automated COVID-19 dashboard to track, monitor, and forecast inventory, has resulted in several efficiencies and ensured the availability of critical PPE for the DPH workforce. The dashboard has reduced the amount of time and labor required to collect and organize inventory data and increased the quality and the quantity of the data collected. This has allowed decision-makers to more confidently and reliably use the conclusions drawn from the data to make policy decisions.

In-house development of the dashboard was a cost-saving way to avoid financial and human resources necessary to procure and customize an automated inventory system, under the emergency response time constraints. The dashboard is also shared in "view mode" with DPH employees' representatives, using the hyperlink feature.

REPLICABILITY: Other California Counties could replicate these efficiencies by leveraging existing in-house software to develop applications similar to the DPH COVID-19 dashboard. Moreover, the collaborative nature of the software as a service product allows for the sharing of application templates between municipalities for customization to their unique operational needs

OPTIONAL SUBMISSION:

Dashboard targeted for external partners can be viewed at:

<https://app.smartsheet.com/b/publish?EQBCT=3675516c0da741c1bfc2120a83f3a993>