SUMMARY

- The success of California’s non-pharmaceutical interventions (NPIs) such as the stay-at-home order afforded the State the time to build capacity to address future waves of COVID-19. Critical capabilities have been developed, and important lessons have been learned, including the need to create hospital surge capacity in real time in order to maintain the ability to provide medically necessary care for all Californians.

- Four surge status levels are identified to guide county and health care delivery system coordination. These outline the roles of county health departments, hospitals, and the State in the context of dynamic local conditions.

- It is critical for local health officers to coordinate with the State on public health orders given the State’s ability to marshal regional and statewide resources. Orders to scale back scheduled care and non-emergent procedures and to furlough exposed asymptomatic health care workers should be done in consultation with the State and with consideration to the impact on other medically necessary care.

- County and regional Health Care Coalitions (HCCs) should serve as the starting point for developing COVID-19 County/Regional Surge Plans, with the local health officer(s) serving as the co-convener. HCCs, with local health officers, are advised to convene key local stakeholders to review this guidance by August 14, 2020.

BACKGROUND

In response to the COVID-19 pandemic, the State of California and its jurisdictions took an aggressive two-pronged strategy starting in March of implementation of NPIs and intensive health care system planning to meet the predicted surge in demand related to COVID-19 infections.

Based on early modeling of the outbreak, State leaders estimated the need to expand the existing health care delivery system to accommodate an additional 50,000 excess hospitalizations above the State licensed bed capacity by the end of April.

To meet that need, State leaders partnered with hospital systems, local health jurisdictions, and local emergency medical service agencies to expand health care capacity across California. Strategies included obtaining federal assets, working with hospital partners to expand capacity within their existing infrastructure, supporting additional acute care facilities specifically dedicated to COVID-19 patients, and creating alternate care sites in partnership with local government. In addition, many
counties partnered with local health care systems to develop their own alternate care sites.

Fortunately, with the early implementation of NPIs, the trajectory of COVID-19 shifted in California, with excess hospitalizations from confirmed COVID-19 cases peaking at below 4,000 per day. However, the strategies that hospitals employed to create reserve capacity – postponing non-emergent procedures and leveraging virtual care – resulted both in significant financial shortfalls and serious concerns for deferred care, including chronic care, cancer screenings and childhood vaccinations.

The success of our NPIs afforded the State time to build the capacity to address future waves of COVID-19. Critical capabilities we have developed to date include:

- **Testing:** Diagnostic (i.e. PCR) testing capacity has increased from an average of 2,000 tests a day at the end of March 2020 to an average of 100,000 tests a day by early July. The State will continue efforts to increase testing capacity with a specific focus on ensuring that high risk settings (e.g. SNFs) and vulnerable communities have adequate access.

- **Contact tracing:** The State has a four-pronged strategy to support counties with contact tracing. This includes deployment of a 20-hour training academy, a plan to create an initial workforce of 10,000 contact tracers, the development of a web-based case management platform with broad functionality, and a Statewide public awareness campaign on contact tracing (California Connected) with a particular emphasis on vulnerable communities.

- **Personal protective equipment (PPE):** The State has procured large stockpiles of masks, face shields, goggles, gowns and gloves to meet the current needs of multiple sectors (both private and public), and is renewing its stockpile in preparation for a health care surge.

- **Ventilators:** The State has more than 1,000 functioning ventilators in its central stockpile, and has anticipated delivery of an additional 15,000 this year, which will double the State’s capacity. Existing hospital inventory is tracked on a daily basis.

- **California Health Corps:** The State has developed the California Health Corps, comprised of more than 800 health care professionals who are ready and available for deployment to support acute COVID-19 related workforce needs. In addition, the State deploys Emergency Medical Services Agency (EMSA), CalMat, Cal Guard and Federal Health and Human Services (HHS) staff on an emergency basis.

- **Skilled nursing facilities (SNF):** The State requires each SNF to develop a mitigation plan that includes dedicated infection prevention staff, as well as
plans for PPE, staffing, facilities management, and universal testing of residents and health care workers. A SNF “strike team” program using California Health Corps has been developed to remediate acute staffing shortages.

- **Alternate care facilities:** The State has three alternate care sites – Sleep Train Arena, Fairview, and Porterville – which collectively have about 1500 beds readily deployable (within two to three weeks) to accept lower level acuity patients. In addition, the State has up to 1750 Federal Medical Station beds that can be deployed as needed.

- **All Access Transfer Center:** The State has contracted with a statewide disaster management patient transfer system to augment established transfer agreements in the event of a surge. The State also has the capability to activate a system of 6 Regional Transfer Centers if there is a statewide surge.

- **Data:** Data-driven decision-making remains a priority for the State. The State is leveraging multiple sources of data, including laboratory, testing, death, hospital, residential care and SNF data to track the pandemic at State and county levels, as well as create publicly available short, medium and long term forecasts for case rates, hospitalizations, and deaths.

Given forecasted COVID-19 resurgence due to increased movement, coupled with seasonal influenza during fall and winter, California must ensure it is prepared to address community and health system impacts and responses.

One learning from the spring of 2020 is that prematurely curtailing routine care to prepare for projected COVID-19 patients unnecessarily reduces access to care for Californians as a whole. This guidance provides a different, more nuanced approach in which counties work with hospitals to develop COVID-19 County/Regional Surge Plans, hospitals surge in real time to care for COVID-19 patients, and the state provides support to both hospitals and alternate care sites as needed.

Importantly, given the size and diversity of California, the trajectory of the pandemic will vary across the State, and therefore surge planning should be tailored to local and regional conditions while being coordinated statewide.

**SURGE STATUS LEVELS**

Given the enhanced data capabilities for both tracking and forecasting the pandemic, California has an ability to respond to increased demand in a more dynamic fashion. While surge status should primarily be determined by individual acute care hospitals, it must be coordinated at the county or regional level based on a holistic analysis of public health metrics and the collective status of hospitals and other health care capacity in the area. The surge status levels described below are at the county/regional level.
Importantly, the increase in hospital census needs to be considered in the context of both 1) percent of hospitalized patients who are COVID+, and 2) regional and statewide capacity and context. When multiple regions are experiencing surges in COVID+ hospitalizations, local county health officers, hospitals, and the State will need to be more aggressive in both reinstituting NPIs and ensuring sufficient acute care capacity.

It is critical that local county health officers coordinate public health orders, including decisions to scale back routine health care services, with the State.

**Mild <10% increase over average annual census**
- Local county health departments prioritize community messaging, engagement, and support of established public health measures including NPIs.
- Hospitals are able to accommodate increased demand with existing bed capacity. However, bed classification regulatory flexibility (ICU/TCU/med-surg) may be used to increase ICU capacity as needed.

**Moderate 10-20% increase over average annual census**
- Local county health departments consider sector modification and closures to reduce transmission, and work with county and state agencies to enforce county and state guidances and health orders. Counties work to ensure effective patient transport approaches to maximize the aggregate capacity of all hospitals in county/region.
- Hospitals implement surge plans that may require bed classification regulatory flexibility; special attention should be paid to ICU and ventilator capacity.
- The State identifies key geographic and functional areas in need, and provides targeted support as needed.

**Severe 20-35% increase over average annual census**
- Local health officers reinstitute range of NPIs such as targeted closure of sectors. Patients are transferred to hospitals to load balance within counties and mutual aid regions.
- Hospitals curtail non-emergent procedures and scheduled admissions in real time as needed to accommodate increased case volumes in emergency departments and inpatient units. Hospitals implement surge plans that require a range of regulatory waivers to provide expanded care in primarily clinical areas. Hospitals maximize use of registry staffing contracts and initiate PPE conservation processes.
- The State actives regional alternate care sites (e.g. Sleep Train Arena, Fairview, Porterville) and provides financial, supply, equipment, staff, technical assistance and/or logistics support to hospitals as needed.

**Critical >35% increase over average annual census**
- Local health officers strongly consider reinstituting Stay-at-Home orders.
- Hospitals cancel all non-urgent procedures and scheduled admissions and deploy hospital campus-based surge capacity in non-clinical areas on the hospital hardscape; this could include parking structures, tents in parking lots, and auditoriums. Hospitals implement crisis standards of care as needed.
- The State augments hospital-based surge capacity by operating alternate care sites, deploying federal medical stations, and supporting county supported alternate care sites as needed.
- The State continues to prioritize scarce resource allocation and works to coordinate mutual aid across regions. Depending on status of surge across multiple regions, California requests mutual aid from other States.

COVID-19 SURGE PLANNING PRINCIPLES

The guiding principle for California’s surge planning process is to develop solutions that are State guided, county or regionally partnered, and health care facility based.

State guided. The State provides regional and statewide guidance and directives to reduce disease transmission and ensure health care capacity. It conducts ongoing monitoring of county transmission, hospital utilization and surge capacity; targets engagement to counties with concerning case rate or hospital metrics; and mandates reinstitution of community measures when needed. The State also provides supply and workforce assistance in emergent situations, and coordinates mutual aid across counties and regions.

County or regionally partnered. Health Care Coalitions, working with local health officers, build on existing surge plans and convene key stakeholders, including local hospitals, to develop COVID-19 County/Regional Surge Plans as described below. It should be determined at the outset whether the Surge Plan will be focused on a single county or involve multiple counties. Local health officers authorize public health orders for NPIs; county government departments and agencies enforce public health orders.

Health care facility based. All hospitals in an area should take an active role in responding to COVID-19 patient care needs as a shared public health responsibility. Each hospital updates and manages its existing surge plan to specifically incorporate COVID-19 considerations and coordination with the Surge Plan.

COVID-19 COUNTY/REGIONAL SURGE PLAN OVERVIEW

The State’s Health Care Coalitions should serve as the starting point for developing COVID-19 County/Regional Surge Plans, with the local health officer(s) serving as the co-convener. Importantly, in the context of COVID-19, a decision should be made whether a county specific or regional plan will be pursued.

The Surge Plan should utilize and expand on existing facility, county and Health Care Coalition surge plans to include COVID-19 specific considerations. It should incorporate and build on existing and ongoing work by the local health departments including county variance attestations and mitigation plans. The Surge Plan is intended to be a high-level response plan, identifying the experts and specialized resources that exist.
within the county/region, demonstrating how hospitals will create surge capacity, describing how health care assets and resources will be deployed, how care will be coordinated across the continuum of care, and outlining the mechanisms/processes that will be used to determine how and when non-pharmaceutical interventions (NPIs) should be enforced or reinstituted.

Please note the Surge Plan guidance below assumes the following all-hazards basics are already in place through planning, exercise, and response activities:

- Incident management structures and principles at the facility, agency, and coalition level;
- Basic information sharing capabilities between planning partners (e.g. web-based, telephone) and a process for information sharing during an incident;
- Emergency medical services (EMS), Medical Health Operational Area Coordinator (MHOAC) and Regional Disaster Medical Health Coordinator and Specialists (RDMHC/S) mutual aid and disaster response plans; and
- Individual hospital disaster and surge capacity plans, developed and managed at the hospital level.

COVID-19 COUNTY/REGIONAL SURGE PLAN GUIDANCE

The following topical prompts are designed to guide county/regional planning group discussions and planning, and provide consistency across the State. Health Care Coalitions, in concert with local health officers, are advised to convene key local stakeholders to review this guidance by August 14, 2020.

I. Overview/Organization
   a) Geographic area covered (county or counties)
   b) Planning group members, including representatives from:
      - Health Care Coalitions
      - Local Public Health Departments
      - County EMS /LEMSAs
      - County OES
      - Medical Health Operational Area Coordinators (MHOACs)/ Regional Disaster Medical Health Specialists (RDMHS)
      - Hospitals
      - Skilled Nursing/Long Term Care Facilities (traditionally not a part of HCCs)
      Other groups to consider include ambulatory surgical centers, clinics and physician groups; community-based organizations, particularly those connected to communities of color; correctional facilities, and key business and elected leaders.
   c) Lead entities for key functions (e.g. alternate care facility operations, PPE tracking, etc)

II. Situation
a) Population covered by the plan, including demographics and special populations related to COVID-19 (e.g. age, comorbidities, congregate living settings)
b) Type of healthcare facilities covered in this plan, including acute care, SNF, and transfer facilities
c) Local/regional special considerations (e.g. geographic challenges, language barriers, federal correctional facilities, high risk industries)
d) Available resources (e.g. telemedicine capabilities, alternate care facility sites)

III. County/Regional Specific Surge Status Levels
a) County/regional specific thresholds for each level of surge – mild, moderate, severe, crisis as outlined above
b) Plan for monitoring surge status for individual hospitals in the county/region
c) Alerting/notification mechanisms individual facilities will use to update the county/region, including frequency of notification
d) County/regional transport plans to level load med-surg and ICU census from COVID-19

IV. Hospital Surge Capacity Planning
a) County/regional understanding and coordination of individual acute care hospital surge plans, including ensuring timely and complete flow of information to track aggregate surge status for all acute care facilities in the county/region
b) Hospitals are responsible for refining, updating, and managing their individual surge plans that incorporate COVID-19 considerations. These plans should include:
   • Total number of med-surg and ICU beds at the facility at baseline
   • Plans for accommodation of increased emergency, inpatient and ICU capacity within existing clinical care settings
   • Clinical strategies (e.g. telehealth) and prioritization policies on non-emergent procedures and scheduled admissions in the event of severe or critical surge
   • Plans to expand ICU and ventilator capacity
   • Plans for hospital-campus based surge capacity utilizing non-clinical care setting
   • Staffing and staffing contingency plans including training and orientation of travelers and externally deployed staff
   • Establishing PPE and supply chain contingencies
   • Facility and operational changes needed for effective physical distancing, infection control, and patient cohorting
   • Incorporation of California COVID-19 Crisis Care Guidelines

V. Alternate Care Facilities
a) Identification of what types of patients would be eligible for alternate care facilities
b) Indicators and potential triggers for implementation of alternate care facilities
c) A list of vetted sites for alternate care facilities in the county/region, the type of patient(s) who can be cared for and the lead organization at each site
d) Workforce for staffing alternate care facilities
e) A plan for how other county/region healthcare assets should be deployed, including the use of ambulatory surgical center, community clinic, and medical group facilities, providers, and staff

VI. Long Term Care and Congregate Settings
a) Total number of SNFs and SNF residents in the county/region
b) Established communication and data processes to track and support SNFs in the county/region
c) Specific skilled nursing facilities or issues of particular concern
d) Other congregate settings of concern, e.g. correctional facilities, RCFEs

VII. Allocation of Scarce Resources
a) Plans for assessing local/regional health care shortages
b) Process for prioritizing allocation of scarce resources including PPE, critical medical equipment, medications, testing, and other supplies
c) Plans for local/regional stockpiles and mutual aid
d) Established processes to request resources
e) Incorporation of crisis care guidelines into decision making

VIII. Patient Transfers
a) County/regional plans for managing patient transfers to level load census for both med-surg and ICU beds due to COVID-19 patients
b) County/regional plans in the event that all hospitals in the county/region are over capacity, including triggers and processes for engaging the State proactively if transfers are required across mutual aid regions.

IX. Enforcement or Reinstitution of NPIs
a) County/regional plans for enforcement or reinstitution of NPIs for each level of surge – mild, moderate, severe, critical – as described above

X. Influenza Vaccination
a) Efforts/planning underway, new requirements or incentives being considered, and additional resources needed to aid in increased flu-vaccinations