(1) Warning “pop up” when a user navigates to the hospitalization data tab:

The presentation of these hospitalization data should be considered preliminary. There are a number of nuances and considerations relevant to interpreting these charts noted in the technical documentation. Of particular note, the summaries of 'charges' shown, are specifically, charges based on hospital administrative systems, and do not indicate the actual costs, reimbursements, or payments for those charges. However these charge data provide one lens of valuable information regarding the patterns of monetary burden. We are also in the midst of assessing optimal ways of grouping conditions/diseases and other aspects of the sharing of these data. We welcome your input.

(2) “Help” information when a user clicks on the “Show Tab Information” link:

"These charts show **rankings** for California and for each County of the <b>number of persons hospitalized for specific reasons, the **total charges** for those hospitalizations, and the associated **median charges**. These rankings provide a valuable view into the burden of disease/injury in California, and provide an important view of the economic impact of these conditions.

The presentation of these hospitalization data should be considered preliminary. There are a number of nuances and considerations relevant to interpreting these charts noted in the technical documentation. Of particular note, the summaries of 'charges' shown, are specifically, *charges* based on hospital administrative systems, and do not indicate the actual costs, reimbursements, or payments for those charges. However, these charge data provide one lens of valuable information regarding the patterns of monetary burden. We are also in the midst of assessing optimal ways of grouping conditions/diseases and other aspects of the sharing of these data. We welcome your input."

"This chart shows the **primary** reason for hospitalization (i.e. the first code listed), and includes rankings based on the number of **hospitalizations**, the average **length of stay**, and associated **total charges** and **median charges**. This chart is particularly valuable for comparing the different rankings for the same condition based on numbers of hospitalizations, versus total charges or median charges. Some conditions have high (or low) total charges because of high (or low) median charges, some because of large (or small) numbers of hospitalizations, and all sorts of things in between."

"This chart shows hospitalization for a condition based on it being the primary reason (principal or primary diagnosis) for hospitalization OR it being listed in ANY of the other diagnostic positions (other or secondary diagnoses) for the hospitalization. This chart provides important insights for understanding burden since some conditions are overwhelmingly listed as 'primary' (e.g. birth-related), with few conditions listed in other positions; whereas other conditions are frequently listed in non-primary positions."

(3) Information about PDD and our use of those data in the Technical Documentation tab:

* Data source
  + Hospitalization data are based on 2016 nonpublic Patient Discharge Data received from the [California Office of Statewide Health Planning and Development (OSHPD)](https://oshpd.ca.gov). OSHPD provides such files from inpatient data they collect from California-licensed hospitals in California. The data set consists of a record for each inpatient discharged from a California-licensed hospital. Licensed hospitals include general acute care, acute psychiatric, chemical dependency recovery, and psychiatric health facilities. Data are not collected from Veteran’s Administration, Military or other Federal Hospitals or from Tribal Hospitals.
  + Detailed information for the current OSHPD Patient Discharge Data and data system can be found [here](https://oshpd.ca.gov/ml/v1/resources/document?rs:path=/Data-And-Reports/Documents/Request/Data-Documentation/DataDictionary_PDD_2018_Nonpublic.pdf) and a link to the 2016-specific data can be found [here](https://oshpd.ca.gov/data-and-reports/request-data/tools-resources/data-documentation/).
* Charges
  + For each hospitalization one total charge is listed, reflecting the charges associated with the primary condition as well as any other charge associated with the hospitalization.
    - Total charge is all charges for services rendered during the length of stay for patient care at the facility, based on the hospital’s full established rates. Charges include, but are not be limited to daily hospital services, ancillary services, and patient care services.
    - Hospital-based physician fees are excluded, as are items like take-home drugs, television, follow-up home health visits, ambulance services, etc.
    - If a patient’s length of stay is more than 1 year (365 days), only Total Charges for the last year (365 days) are reported.
  + The noted charges are based on hospitals’ administrative systems and do not indicate actual costs/payments for those charges .
  + Nevertheless, because the CCB describes summary data, the charts and tables shown provide valuable information regarding the patterns of the monetary burden of disease/conditions in California from the hospitalization perspective.
  + For some hospitalizations, no charges are included, and for some hospitalizations implausibly high charges (likely errors)have been excluded, so total charges may be slight underestimates from this perspective. ‘Average’ charges in these charts are based on the median rather than the mean, so are largely not impacted by these issues.
* ICD-10-CM Codes
  + For each hospitalization, one condition is established and coded as the chief cause of the admission, and is noted as the Principal or Primary diagnosis. Up to 24 other conditions that coexist at the time of admission, that develop subsequently during the hospital stay, or that affect the treatment received are also included and notes as Other or Secondary diagnoses.
  + Coding for these Principal and Other diagnoses are based on the ICD10-CM system (from 2016 forward; prior to 2016 ICD9-CM was used), along with standardized guidance.
  + The codes entered by the hospitals are subject to multiple sources of variation or potential error (e.g. selective use of codes for billing purposes). Nevertheless, since the data are used in the CCB in summary form, the overall patterns displayed are likely to be meaningful and informative.
* Grouping of ICD-10-CM Codes
  + ICD10-CM codes are highly detailed and specific, with about 68,000 codes. There are many ways these codes can be grouped or summarized into meaningful categories. We continue to explore which grouping system(s) are most useful for purposes of the CCB, and would welcome you input. At this time, settings are available to toggle between these options. Four possible systems include:
    - The Global Burden of Disease system (GBD) system (coded by the CCB team), groups the hospitalization ICD-10-CM codes into conditions based on, generally, the Global Burden of Disease system, as describe above for death data, and includes ‘high volume’ conditions and some other conditions of clear programmatic public health interest in California. At the moment, this system is not exhaustive, and includes only a sample of conditions of interest.
    - The Major Diagnostic Categories (MDCs) system (included in the OSHPD data set), groups principal diagnoses into 25 mutually exclusive diagnosis groupings. The diagnoses in each MDC correspond to a single organ system or etiology and, in general, are associated with a particular medical specialty. The system was established and is maintained by CMS.
    - The Medicare Severity Diagnosis Related Group (DRG) system (included in the OSHPD data set), categorizes patients based on clinical coherence and expected resource intensity, with respect to diagnoses, treatment and length of hospital stay. The assignment of a DRG is based on: the principal diagnosis and any secondary diagnoses, surgical procedures performed, comorbidities and complications, patient’s age and sex, and discharge status. The system was established and is revised annually by the U.S. Department of Health and Human Services (DHHS) Centers for Medicare and Medicaid Services (CMS). See CCR Section 97212.
    - The [Clinical Classifications Software (CCS)](https://www.hcup-us.ahrq.gov/tools_software.jsp) system (included in the OSHPD data set), aggregates the ICD codes into a manageable number (285) of clinically meaningful categories to make it easier to quickly understand diagnosis patterns. The system is evolving, with the current system organized across 21 body systems, which generally follow the structure of the ICD-10-CM diagnosis chapters.