Instructions for Real-Time Modeling of Operating Room Need, Version 2
Revised January 18, 2017

Step 1. Use the MAIN SELECTION window to determine whether and/or how to group facilities.

I. Main Selection
    A. No Grouping
        Standard measures of all parameters. As currently set, parameters are those in the standard methodology. Note: Needs are calculated for each owner. Service area needs may not match those in the 2017 SMFP.
    B. Grouping
        Grouping by hours/cases. Select availability (hours per day/days per year) and full utilization percentage.
    C. Grouping with Outlier Substitution
        Grouping by hours/cases. Uses case times reported by facility. Outlier case times are substituted. The default setting is 1 standard deviation (SD) above the mean.
    D. Grouping for Availability Only
        Uses case times reported by facility. Grouping by hours/cases for the purposes of applying availability to each group.

Step 2.
- **If *"A. No Grouping"* is chosen in Step 1, skip to "V. Growth Type."**
- **Otherwise, complete all items below.**

II. Grouping of Academic Medical Center Teaching Hospitals
    A. Assign teaching hospitals to separate group
    B. Group teaching hospitals along with all other facilities
III. Grouping for Ambulatory Surgery Centers
    A. All AMSUs go into Group 4
    B. Group 4 = single specialty; Group 5 = multispecialty
IV. Grouping Type
    A. Group by surgical hours
        The default values used in calculations are: Group 1 = >40,000 hours; Group 2 = 15,000-40,000 hours; Group 3 = <15,000 hours; Group 4 = AMSUs
    B. Group by surgical cases
        The default values used in calculations are: Group 1=>10,000 cases; Group 2=5,000-10,000 cases, Group 3=<5,000 cases; Group 4 = AMSUs
V.   Growth Type
    A. Population Growth
    B. Case Growth
    C. No Growth

If MAIN SELECTION is "*A. No Grouping*," you are finished. Click RUN MODEL to view the need determinations by health system and/or by county.

IMPORTANT: When changing case times, availability, and percents, do **NOT** drag and drop.

If MAIN SELECTION is "*B. Grouping,*" go to Section 1 on the worksheet.
    Values will appear in Section 1 only if the MAIN SELECTION is "*B. Grouping.*"

Case Times
    1 = Average: Assign facility's Case Times for methodology calculations using the average case time for the group.
    2 = Median: Assign facility's Case Times for methodology calculations using the median case time for the group.
    3 = User Assigned: User assigns Case Times for each group.

Availability
    1 = Average: Assign facility's Availability for methodology calculations using the average case time for the group.
    2 = Median: Assign facility's Availability for methodology calculations using the median case time for the group.
    3 = User Assigned: User assigns Availability for each group.

    Note: Staff recommends use of Option 3 for Availability because data on this item has been inconsistent.

Percent (percentage of total availability that is considered full utilization)
    Enter a value between 0% and 100%.

Click RUN MODEL to view the need determinations by health system and/or by county.

If MAIN SELECTION is "*C. Grouping with outlier substitution,*" go to Section 2 on the worksheet.

Values will appear in Section 2 only if the MAIN SELECTION is "*C. Grouping with outlier substitution.*"

Teaching Hospital Outlier Substitution
1. No Case Time substitution (Actual case times for teaching hospitals are used in calculating the average case time for the group.)
2. Case Time substitution (For teaching hospitals whose case times are greater than 1 standard deviation above the mean, case times equal to 1 standard deviation above the mean are substituted when calculating the average case time for the group.)

The first 3 columns reflect the grouping selections made above (IV. Grouping Type).

You may change the Availability and Utilization values. By default, the Availability parameters are set as described in Section 1.

Click RUN MODEL to view the need determinations by health system and/or by county.

If MAIN SELECTION is *"D. Grouping for availability only,"* **go to Section 3 on the worksheet.**

Values will appear in Section 3 only if the MAIN SELECTION is *"D. Grouping for availability only."*

The first 3 columns show the grouping selections made above (IV. Grouping Type).

You may change the Availability and Utilization values. By default, the Availability parameters are set as described in Section 1.

Click RUN MODEL to view the need determinations by health system and/or by county.

Assumptions

- Growth Type:
  - Population Growth: The growth rate is calculated as it is done in the standard methodology (percentage change in the service area population from 2015 to the projected 2019 population).
  - Case Growth: The growth rate is the percentage change in the number of cases from 2011-2015.
  - No Growth: The growth rate is set at zero for all facilities/service areas. This option produces a "baseline" deficit of ORs for 2015, based on the other parameters selected for the model.
- AC-3 ORs are included in the inventory in all models.
- Deficits have been rounded based on the total number of ORs in the service area, as done in the standard methodology.
- All models presented to the workgroup included "User Entered" values for Availability, due to inconsistencies in this data on the LRAs.