Comments for 2017 Operating Room Methodology Workgroup

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Submitted by:

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The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System (CHS) is submitting these comments related to proposed changes in the operating room (OR) methodology contained in the State Medical Facilities Plan (SMFP). We appreciate the acknowledgement of the State Health Coordinating Council (SHCC) for the need to examine the current methodology to determine future need for operating rooms.

In our prior comments we highlighted key areas of concern with the current OR methodology including: case times, capacity values, variation between facilities, growth assumption and data source. At this time the only areas that we can model changes for are the first three.

Since the last meeting of the workgroup, we have analyzed different scenarios based on adjusting case times and capacity to more closely match reported data and evaluated a tiered approach to address the different facility types. The approach we used to tier the facilities is the same as was described in the meeting on November 10. Facilities were ranked in descending order based on total surgical cases and tiers were defined by selecting logical breakpoints. The average capacity and case times were calculated for each tier.

Tier	Count	Definition	Average Capacity	Avg. IP Time	Avg. OP Time
1	5	AMCTHs	2,115	3.8	2.4
2	13	Large Referral Hospitals (Total Cases >= 10,000)	2,040	2.7	1.6
3	23	Community Hospitals (Total Cases between 9,999 and 5,000)	1,785	2.4	1.5
4	69	Small Hospitals (Total Cases < 5,000)	1,412	1.7	1.2
5	45	Ambulatory Surgical Centers	1,463	0.0	1.0

As the table demonstrates there is a wide variation in capacity and case times. We strongly encourage the workgroup to consider the unique characteristics of academic medical center teaching hospitals and keep them as a separate tier due to their significantly longer case times and hours of availability.

For several scenarios listed below we used a fixed capacity factor for the tiers based on hours per day and days per year. The capacity factors were 2,080 for AMCTHs (10 hours per day x 260 days per year), the current factor of 1,872 (9 hours per day x 260 days per year) tiers 2 and 3 and 1,632 (8 hours per day x 255 days per year) for small hospitals and ambulatory surgery centers. A utilization factor of 80 percent was applied in all three capacity calculations.

A summary of the scenarios is listed below followed by our recommended solution for your consideration.

- Scenario 1 Keep existing case times of 3 hours for inpatient and 1.5 hours for outpatient, use lower capacity of 1,632 annual hours (8 hours per day x 255 days per year x 80%) with need calculated at the county level.
- Scenario 2 Actual reported case time for each facility using the current 1,872 capacity factor with need calculated at the county level.
- Scenario 3 Tier facilities in groups and average the reported data for case times and capacity for each tier to calculate need at the county level.
- Scenario 4 Tier facilities in groups and average the reported data for case times and assign a fixed capacity factor for each tier to calculate need at the county level.
- Scenario 5 Tier facilities in groups as in Scenario 3 (average case times and capacity) but calculate need at the facility level and sum for a total county need.
- Scenario 6 Tier facilities in groups as in Scenario 4 (average case times and fixed capacity) but calculate need at the facility level and sum for a total county need.
- Scenario 7 Tier facilities in groups as in Scenario 5 (average case times and capacity) to calculate need at the facility level but sum the need for facilities under common ownership and then sum for a total county need.
- Scenario 8 Tier facilities in groups as in Scenario 6 (average case times and fixed capacity) to calculate need at the facility level but sum the need for facilities under common ownership and then sum for a total county need.

The output of these scenarios is summarized in the following table. While the initial need determinations from these scenarios are much larger than anything experienced under the current methodology, please remember that we also think using the county population

growth rate overstates the expected growth in surgical procedures. We urge the workgroup to continue to seek a source that would allow calculation of a growth rate based on historical surgical case counts. In addition, prior to inclusion in any methodology the reported case times and hours of availability need to be verified with a similar level of scrutiny applied to other methodology source data. There were numerous instances of missing or questionable values, some of which were corrected to the extent possible for the scenario modeling work. These calculations are directional in nature and we can update them as more information becomes available in the near future.

Scenario	Description	Total OR Need	Counties Showing Need
1	Current fixed case times with lower capacity	42	15
2	Reported case time with current capacity	48	4
3	Tiered facilities average case times and capacity; county need	18	5
4	Tiered facilities average case times and fixed capacity; county need	24	5
5	Tiered facilities average case times and capacity; facility need	64	13
6	Tiered facilities average case times and fixed capacity; facility need	67	11
7	Tiered facilities average case times and capacity; facility/system need	49	11
8	Tiered facilities average case times and fixed capacity; facility/system need	49	9

We would recommend the workgroup consider a methodology that calculates need at a facility level rather than county level. Assessing need at the county level will not address the issues frequently mentioned in petitions related to need at one facility negated by surplus or underutilized ORs at other facilities in the county.

We think Scenario 8 is worthy of consideration because it provides a more accurate reflection of actual case times and available capacity while also allowing for market dynamics based on where patients choose to receive their care. This scenario is similar in approach to the acute care bed need methodology where facilities under common ownership are grouped together and need is calculated for all owned facilities but results in a need for a county that anyone can file certificate of need applications to meet the need.

I will be happy to address the workgroup at its December 13, 2016 meeting to explain these items in more detail if necessary. We appreciate the opportunity to provide these comments.