

Date: March 8, 2017

To: California Healthcare Workforce Policy Commission

From: Stacie S. Walker, Deputy Director
Healthcare Workforce Development Division
Office of Statewide Health Planning and Development

Subject: Registered Nurse Shortage Areas (Update) Report

Recommended Motion

The Office of Statewide Health Planning and Development (OSHPD) recommends the California Healthcare Workforce Policy Commission (Commission) adopt the revised Registered Nurse Shortage Areas (RNSA) list based on 2014 registered nurse (RN) data and 2015 facility census data for general acute care hospitals and facility patient data for long-term care facilities.

Background and Methodology

In 2007, the Commission adopted criteria for establishing RNSAs using the number of licensed and patient volume data. OSHPD updated the RNSA list by applying the criteria to 2014 RN data and 2015 facility census data for general acute care hospitals and long-term care facilities.

The Commission augments RNSAs with additional information to inform Registered Nurse Program funding decisions. Staff develop RNSAs by calculating a ratio¹ for counties based on three factors:

1. OSHPD long-term care facilities (LTC) patient day data
2. Department of Consumer Affairs, Board of Registered Nursing (BRN) California active licensee data²
3. OSHPD general acute care hospitals (GAC) census day data³

Counties receive the RNSA designation when the county's ratio is greater than the total average.

¹ Staff calculates the ratio by dividing the number of LTC facility bed days multiplied by 0.08, plus the number of GAC bed days by the number of RNs in a specific county. Staff calculates the average ratio by dividing the sum of the ratios for all counties by 58, the number of California counties.

² Source: Department of Consumer Affairs, Board of Registered Nursing, County Projections for Clear Registered Nurse (RN) Licenses as of December 31, 2014.

³ Source: Office of Statewide Health Planning and Development, Healthcare Information Division (HID) Data Products. <http://www.oshpd.ca.gov/HID/DataFlow/index.html> 2015.

Results

Staff assigned an RNSA designation to counties with a ratio greater than 39.19. Tuolumne County gained designation with this update.

Table 1 lists the patient days for long-term care facilities, patient census days for general acute care hospitals, the projected number of registered nurses per county, the designation ratio, and designation status alphabetically:

Table 1

| County | 2015 LTC Patient Days | 2015 Census Days | BRN Projection | Ratio | Designated |
|--------------|-----------------------|------------------|----------------|--------|------------|
| Alameda | 1,584,860 | 560,672 | 14,703 | 46.76 | Yes |
| Alpine | 0 | 0 | 13 | 0.00 | Yes |
| Amador | 39,182 | 9,088 | 317 | 38.54 | No |
| Butte | 304,077 | 131,466 | 2,626 | 59.32 | Yes |
| Calaveras | 32,135 | 3,843 | 489 | 13.13 | No |
| Colusa | 31,437 | 2,207 | 57 | 82.68 | Yes |
| Contra Costa | 966,621 | 324,926 | 12,669 | 31.75 | No |
| Del Norte | 18,283 | 6,271 | 240 | 32.27 | No |
| El Dorado | 89,089 | 28,353 | 2,428 | 14.61 | No |
| Fresno | 948,427 | 396,970 | 8,736 | 54.12 | Yes |
| Glenn | 26,182 | 726 | 111 | 25.37 | No |
| Humboldt | 123,472 | 46,134 | 1,480 | 37.85 | No |
| Imperial | 73,819 | 38,041 | 968 | 45.41 | Yes |
| Inyo | 36,135 | 3,025 | 207 | 28.57 | No |
| Kern | 470,244 | 276,846 | 5,728 | 54.90 | Yes |
| Kings | 92,068 | 39,010 | 968 | 47.92 | Yes |
| Lake | 82,917 | 11,787 | 491 | 37.55 | No |
| Lassen | 21,064 | 3,664 | 238 | 22.51 | No |
| Los Angeles | 12,030,731 | 4,521,884 | 78,322 | 70.02 | Yes |
| Madera | 134,475 | 96,515 | 939 | 114.21 | Yes |
| Marin | 298,728 | 77,642 | 3,635 | 27.94 | No |
| Mariposa | 0 | 651 | 137 | 4.76 | No |
| Mendocino | 79,790 | 20,780 | 784 | 34.63 | No |
| Merced | 223,410 | 46,005 | 1,303 | 49.01 | Yes |
| Modoc | 0 | 551 | 54 | 10.19 | No |
| Mono | 0 | 1,183 | 121 | 9.75 | No |
| Monterey | 321,166 | 129,655 | 3,077 | 50.49 | Yes |
| Napa | 236,255 | 50,586 | 2,379 | 29.20 | No |
| Nevada | 127,385 | 24,256 | 1,144 | 30.10 | No |

| County | 2015 LTC Patient Days | 2015 Census Days | BRN Projection | Ratio | Designated |
|-----------------|------------------------------|-------------------------|-----------------------|--------------|-------------------|
| Orange | 2,363,880 | 1,127,478 | 28,130 | 46.80 | Yes |
| Placer | 358,339 | 170,500 | 5,701 | 34.94 | No |
| Plumas | 0 | 2,850 | 179 | 15.88 | No |
| Riverside | 1,321,459 | 695,339 | 19,077 | 41.99 | Yes |
| Sacramento | 1,215,848 | 669,004 | 13,683 | 56.00 | Yes |
| San Benito | 0 | 7,142 | 370 | 19.29 | No |
| San Bernardino | 1,465,701 | 837,712 | 18,845 | 50.67 | Yes |
| San Diego | 2,629,273 | 1,249,205 | 32,256 | 45.25 | Yes |
| San Francisco | 388,231 | 434,989 | 8,110 | 57.47 | Yes |
| San Joaquin | 837,739 | 215,570 | 5,505 | 51.33 | Yes |
| San Luis Obispo | 228,381 | 69,097 | 3,144 | 27.79 | No |
| San Mateo | 313,150 | 165,289 | 8,945 | 21.28 | No |
| Santa Barbara | 348,633 | 140,252 | 3,082 | 54.56 | Yes |
| Santa Clara | 1,661,867 | 738,388 | 15,514 | 56.16 | Yes |
| Santa Cruz | 246,925 | 71,961 | 2,978 | 30.80 | No |
| Shasta | 274,263 | 108,849 | 2,359 | 55.44 | Yes |
| Sierra | 0 | 0 | 33 | 0.00 | Yes |
| Siskiyou | 13,684 | 7,470 | 406 | 21.10 | No |
| Solano | 261,341 | 132,523 | 5,987 | 25.63 | No |
| Sonoma | 517,529 | 140,625 | 5,493 | 33.14 | No |
| Stanislaus | 593,353 | 293,979 | 4,552 | 75.02 | Yes |
| Sutter | 137,946 | 6,467 | 804 | 21.78 | No |
| Tehama | 35,644 | 8,065 | 342 | 31.95 | No |
| Trinity | 0 | 2,024 | 73 | 27.56 | No |
| Tulare | 488,644 | 109,787 | 3,284 | 45.33 | Yes |
| Tuolumne | 69,350 | 20,494 | 648 | 40.21 | Yes |
| Ventura | 531,845 | 260,697 | 7,916 | 38.31 | No |
| Yolo | 202,785 | 19,101 | 1,523 | 23.20 | No |
| Yuba | 29,715 | 45,699 | 399 | 120.56 | Yes |

Table 2 lists the counties by ratio.

Table 2

| County | 2015 LTC Patient Days | 2015 Census Days | BRN Projection | Ratio | Designated |
|----------------|------------------------------|-------------------------|-----------------------|--------------|-------------------|
| Yuba | 29,715 | 45,699 | 399 | 120.56 | Yes |
| Madera | 134,475 | 96,515 | 939 | 114.21 | Yes |
| Colusa | 31,437 | 2,207 | 57 | 82.68 | Yes |
| Stanislaus | 593,353 | 293,979 | 4,552 | 75.02 | Yes |
| Los Angeles | 12,030,731 | 4,521,884 | 78,322 | 70.02 | Yes |
| Butte | 304,077 | 131,466 | 2,626 | 59.32 | Yes |
| San Francisco | 388,231 | 434,989 | 8,110 | 57.47 | Yes |
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| Shasta | 274,263 | 108,849 | 2,359 | 55.44 | Yes |
| Kern | 470,244 | 276,846 | 5,728 | 54.90 | Yes |
| Santa Barbara | 348,633 | 140,252 | 3,082 | 54.56 | Yes |
| Fresno | 948,427 | 396,970 | 8,736 | 54.12 | Yes |
| San Joaquin | 837,739 | 215,570 | 5,505 | 51.33 | Yes |
| San Bernardino | 1,465,701 | 837,712 | 18,845 | 50.67 | Yes |
| Monterey | 321,166 | 129,655 | 3,077 | 50.49 | Yes |
| Merced | 223,410 | 46,005 | 1,303 | 49.01 | Yes |
| Kings | 92,068 | 39,010 | 968 | 47.92 | Yes |
| Orange | 2,363,880 | 1,127,478 | 28,130 | 46.80 | Yes |
| Alameda | 1,584,860 | 560,672 | 14,703 | 46.76 | Yes |
| Imperial | 73,819 | 38,041 | 968 | 45.41 | Yes |
| Tulare | 488,644 | 109,787 | 3,284 | 45.33 | Yes |
| San Diego | 2,629,273 | 1,249,205 | 32,256 | 45.25 | Yes |
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| Tuolumne | 69,350 | 20,494 | 648 | 40.21 | Yes |
| Amador | 39,182 | 9,088 | 317 | 38.54 | No |
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| Glenn | 26,182 | 726 | 111 | 25.37 | No |
| Yolo | 202,785 | 19,101 | 1,523 | 23.20 | No |
| Lassen | 21,064 | 3,664 | 238 | 22.51 | No |
| Sutter | 137,946 | 6,467 | 804 | 21.78 | No |
| San Mateo | 313,150 | 165,289 | 8,945 | 21.28 | No |
| Siskiyou | 13,684 | 7,470 | 406 | 21.10 | No |
| San Benito | 0 | 7,142 | 370 | 19.29 | No |
| Plumas | 0 | 2,850 | 179 | 15.88 | No |
| El Dorado | 89,089 | 28,353 | 2,428 | 14.61 | No |
| Calaveras | 32,135 | 3,843 | 489 | 13.13 | No |
| Modoc | 0 | 551 | 54 | 10.19 | No |
| Mono | 0 | 1,183 | 121 | 9.75 | No |
| Mariposa | 0 | 651 | 137 | 4.76 | No |
| Alpine | 0 | 0 | 13 | 0.00 | Yes |
| Sierra | 0 | 0 | 33 | 0.00 | Yes |

Registered Nurse Shortage Areas (RNSA) By County Using the Mean as the Analytical Unit



Sources:
 Board of Registered Nursing data 2014
 OSHPD Long-Term Care and General Acute Care Hospital
 Patient Days data 2015

The RNSA is updated annually; therefore, counties
 may gain or lose their designation status with each update.