

# Agenda Item 19: Registered Nurse Shortage Areas Update

Andre Haynes, Research Data Analyst II  
June 13, 2019

# Background

- ❑ The Commission needs a quantitative, repeatable, and meaningful way of ranking applicants whose graduates and training facilities operate in areas of unmet need.
- ❑ In February 2007, the Commission adopted OSHPD staff's proposal to create a Registered Nurse Shortage Area (RNSA).
- ❑ The RNSA is a function of the number of licensed registered nurses (supply) and patient volume (demand), which produces a ratio per county and uses the mean ratio of all counties to determine designation.

# Data Sources

□ Three data sources used for defining nursing shortages:

## **OSHDP Data - 2017**

- Long-term care facilities (LTC) patient day data.
- General acute care hospitals (GAC) census day data.

## **External Data - 2017**

- Department of Consumer Affairs, Board of Registered Nursing active licensee data for California.

# RNSA Calculation

$$\frac{\sum (\text{CensusDaysGAC} + (\text{PatientDaysLTC} * 0.08))}{\text{RNCount}}$$

- ❑ Staff calculates the ratio by dividing the number of Long Term Care patient days multiplied by 0.08, plus the number of General Acute Care census days by the number of Registered Nurses in a specific county.
- ❑ Designation:
  - County ratios greater than the mean.
  - Counties with no facilities (automatic designation).

# Results

2018	
Number of Designated Counties	28
Counties that <b>Gained</b> Designations from Previous Year	Colusa
Counties that <b>Lost</b> Designations from Previous Year	Trinity

# Recommendation

- Postpone vote for RNSA update until RNSA sub-committee has made recommendation.

## Registered Nurse Shortage Areas (RNSA)



# Questions?

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# Memorandum

## OSHDP


State of California

*"Access to Safe, Quality Healthcare Environments that Meet California's Dynamic and Diverse Needs"*

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**Date:** June 12-13, 2019

**To:** California Healthcare Workforce Policy Commission

**From:** Christopher Howard, Deputy Director   
Healthcare Workforce Development Division  
Office of Statewide Health Planning and Development

**Subject:** Registered Nurse Shortage Areas (Update) Report

### Recommendation

In 2007, the California Healthcare Workforce Policy Commission (Commission) adopted criteria for establishing Registered Nurse Shortage Areas (RNSA) using the number of active, licensed registered nurses (RN) and patient volume data. The Office of Statewide Health Planning and Development (OSHDP) updated the RNSA list by applying the criteria to 2017 RN data and 2017 census day data for general acute care hospitals and patient day data for long-term care facilities.

### Recommended Motion

Postpone vote for RNSA update until RNSA sub-committee has made recommendation.

### Background and Methodology

The Commission augments RNSAs with additional information to inform Registered Nurse Program funding decisions. Staff develop RNSAs by calculating a ratio<sup>1</sup> for counties based on three factors:

1. Department of Consumer Affairs, Board of Registered Nursing (BRN) California active licensee data<sup>2</sup>.
2. OSHDP long-term care (LTC) facilities patient day data.
3. OSHDP general acute care hospitals (GACH) census day data<sup>3</sup>.

Counties receive the RNSA designation when the county's ratio is greater than the total average or when there are no facilities in a county.

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<sup>1</sup> Staff calculates the ratio by dividing the number of LTC patient days multiplied by 0.08, plus the number of GAC census 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.

<sup>2</sup> Source: Department of Consumer Affairs, Board of Registered Nursing, County Projections for Clear Registered Nurse (RN) Licenses as of December 31, 2017.

<sup>3</sup> Source: Office of Statewide Health Planning and Development, Information Services Division. 2017.

## Results

Staff assigned an RNSA designation to counties with a ratio greater than 38.56. Colusa County gained designation and Trinity County lost designation with this update.

Table 1 lists the counties alphabetically, patient days for LTC facilities, patient census days for GACH, the count of active registered nurses per county, the ratio, and designation status:

**Table 1**

County	2017 LTC Patient Days	2017 GACH Census Days	2017 BRN Count	Ratio	Designation Status
Alameda	1,648,680	568,888	15,069	46.50	Yes
Alpine	0	0	11	0.00	Yes
Amador	0	8,830	305	28.95	No
Butte	288,267	141,528	2,686	61.28	Yes
Calaveras	32,288	3,517	416	14.66	No
Colusa	31,017	0	53	46.82	Yes
Contra Costa	866,930	320,194	13,166	29.59	No
Del Norte	28,541	9,588	218	54.46	Yes
El Dorado	86,800	28,003	2,512	13.91	No
Fresno	947,306	440,125	9,211	56.01	Yes
Glenn	23,606	479	116	20.41	No
Humboldt	86,497	51,397	1,410	41.36	Yes
Imperial	78,285	38,374	1,009	44.24	Yes
Inyo	36,135	2,967	186	31.49	No
Kern	416,197	283,872	5,930	53.49	Yes
Kings	91,778	41,835	948	51.87	Yes
Lake	78,268	12,423	448	41.71	Yes
Lassen	17,213	0	224	6.15	No
Los Angeles	11,747,962	4,504,994	81,257	67.01	Yes
Madera	125,298	95,716	924	114.44	Yes
Marin	289,270	73,029	3,376	28.49	No
Mariposa	0	884	138	6.41	No
Mendocino	74,879	19,042	751	33.33	No
Merced	235,890	50,832	1,346	51.79	Yes
Modoc	0	630	46	13.70	No
Mono	0	1,294	104	12.44	No
Monterey	302,691	139,356	3,091	52.92	Yes
Napa	216,407	60,963	2,296	34.09	No
Nevada	124,153	23,063	1,191	27.70	No
Orange	2,175,911	1,090,667	29,497	42.88	Yes

County	2017 LTC Patient Days	2017 GAC Census Days	2017 BRN Count	Ratio	Designation Status
Placer	286,068	188,723	6,509	32.51	No
Plumas	0	1,802	165	10.92	No
Riverside	1,436,400	665,636	20,694	37.72	No
Sacramento	1,206,606	670,806	14,975	51.24	Yes
San Benito	0	6,091	400	15.23	No
San Bernardino	1,500,674	868,541	19,829	49.86	Yes
San Diego	2,832,885	1,284,675	33,374	45.28	Yes
San Francisco	294,724	551,528	8,151	70.56	Yes
San Joaquin	848,741	212,179	5,929	47.24	Yes
San Luis Obispo	245,658	70,415	3,299	27.30	No
San Mateo	347,873	160,957	8,735	21.61	No
Santa Barbara	331,984	143,794	3,145	54.17	Yes
Santa Clara	1,678,240	745,644	15,426	57.04	Yes
Santa Cruz	203,596	71,161	3,074	28.45	No
Shasta	283,232	109,129	2,316	56.90	Yes
Sierra	0	0	22	0.00	Yes
Siskiyou	14,939	7,222	389	21.64	No
Solano	251,297	138,559	6,308	25.15	No
Sonoma	463,042	151,000	5,590	33.64	No
Stanislaus	604,540	294,697	4,843	70.84	Yes
Sutter	112,056	2,723	795	14.70	No
Tehama	31,586	8,016	401	26.29	No
Trinity	0	2,067	59	35.03	No
Tulare	423,822	132,922	3,289	50.72	Yes
Tuolumne	65,673	18,254	675	34.83	No
Ventura	521,137	251,196	8,262	35.45	No
Yolo	197,423	20,886	1,539	23.83	No
Yuba	27,268	52,466	420	130.11	Yes

Table 2 lists the counties by ratio.

**Table 2**

<b>County</b>	<b>2017 LTC Patient Days</b>	<b>2017 GAC Census Days</b>	<b>2017 BRN Count</b>	<b>Ratio</b>	<b>Designation Status</b>
Yuba	27,268	52,466	420	130.11	Yes
Madera	125,298	95,716	924	114.44	Yes
Stanislaus	604,540	294,697	4,843	70.84	Yes
San Francisco	294,724	551,528	8,151	70.56	Yes
Los Angeles	11,747,962	4,504,994	81,257	67.01	Yes
Butte	288,267	141,528	2,686	61.28	Yes
Santa Clara	1,678,240	745,644	15,426	57.04	Yes
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Kings	91,778	41,835	948	51.87	Yes
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# Registered Nurse Shortage Areas (RNSA)



Sources:  
 Board of Registered Nursing Data 2017  
 OSHPD Long-Term Care Patient Day and General Acute  
 Care Hospital Census Day Data 2017

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

December 2018