

**Revised Cost Estimates of Minimum Nurse-to-Patient Ratio Proposals
September 2, 2001**

Joanne Spetz
Public Policy Institute of California
UCSF Center for the Health Professions
(415) 502-4443

These tables update those in the UCSF/CHCF report, *Minimum Nurse Staffing Ratios in California Acute Care Hospitals*. The table numbers match those in the report. This revision includes several changes from the original report:

1. The new estimates were calculated using Year 25 of OSHPD's Annual Disclosure Report, rather than Year 24. The Year 25 reports are for hospital fiscal years ending between June 29, 1999, and June 30, 2000.
2. The new estimates were computed three ways. For all tables, table "a" reports the staffing changes and costs considering only hospitals' regular employment of RNs. LVNs and registry nurses are not included. Table "b" reports the staffing changes and costs including RN and LVN employees, but not including registry nurses. The cost estimates for these tables assume that all newly hired nurses are LVNs (who command lower wages than do RNs). Table "c" reports the staffing changes and costs including regular RN and LVN employees, and registry nurses. All new hires are assumed to be regular RN employees.

When the Department of Health Services issues draft regulations, we will compute projections of the costs and staffing changes of the draft regulations.

3.

Table 1: Proposed Minimum Staffing Mandates

There are substantial differences in the proposals made by statewide organizations

	Original version of bill	CNA proposal	SEIU proposal*	CHA proposal
Medical-Surgical Acute	1:6	1:3	1:4	1:10
Pediatric Acute	1:3	1:3	1:3	1:6
Critical Care; Intensive Care	1:2	1:2	1:2	1:2
Stepdown	1:3	1:3	1:3	1:6
Intermediate Care	1:3	1:3	1:5	1:6
Telemetry	1:4	1:3	1:3	1:10
Oncology	1:4	1:3		1:10
Emergency Room	**	**	**	1:6
Transitional Care	1:6	1:4		1:12
Behavioral Health			^^	1:12
Nursery	1:4 – 1:6 #	1:5	1:4 – 1:6 %	1:8
Labor and Delivery	1:2	1:1 – 1:3	1:2	1:3
Postpartum	1:4 – 1:6 #	1:5	1:6	1:8
Operating Room	&&	1:1		1:1
Subacute Care	1:6	1:4		
Neurosurgical Radiological Intervention			1:1	
Recovery Room	1:2	1:2	1:2	

* SEIU proposal specifies RN or LVN in most cases. The SEIU proposal also specifies staffing ratios for non-RN personnel, such as clerks. The original version of the legislation specified RNs (not LVNs).

** CNA proposal is 1 RN to 2 critical care patients in ER. No specific ratio for other ER patients stated. SEIU proposal is 1 RN/LVN per 3 patients, 1 RN per trauma patient, and 1 RN/LVN per 2 critical care patients.

&& One registered nurse can serve as a circulating assistant for only one operating room.

Ratio depends on whether these units are defined as “specialty care”.

% Ratio depends on status of infants: 1 RN/LVN to 4 close observation infants; 1 RN/LVN to 6 normal infants. In addition, 1 RN/LVN should be assigned to nursery for every 5 mothers in Labor and Delivery.

^^ One RN, LVN, or Psychiatric Technician per 3 patients.

Table 24a

Share of Hospitals That Are Not in Compliance With Proposed Minimum Staffing Ratios, by Unit

Regular RN Employees Only

Source: OSHPD data

Unit	# Hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
Medical-Surgical Acute	363	49.3%	95.0%	87.3%	9.9%
Pediatric Acute	153	58.8%	58.8%	58.8%	17.0%
Obstetrics Acute	239	63.2%	79.1%	63.2%	18.0%
Labor and Delivery	256	16.4%	16.4%	16.4%	13.7%
Newborn Nursery	244	81.1%	91.4%	81.1%	39.8%
Other Acute Care	13	76.9%	84.6%	76.9%	23.1%
Definite Observation	139	87.1%	87.1%	87.1%	18.0%
Rehabilitation Care	69	66.7%	91.3%	66.7%	11.6%

Table 24b

Share of Hospitals That Are Not in Compliance With Proposed Minimum Staffing Ratios, by Unit

Regular RN & LVN Employees Only

Source: OSHPD data

Unit	# Hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
Medical-Surgical Acute	363	20.1%	91.7%	75.8%	7.7%
Pediatric Acute	153	47.7%	47.7%	47.7%	12.4%
Obstetrics Acute	239	51.5%	73.6%	51.5%	10.9%
Labor and Delivery	256	16.0%	16.0%	16.0%	13.7%
Newborn Nursery	244	77.9%	89.8%	77.9%	30.3%
Other Acute Care	13	53.8%	84.6%	53.8%	15.4%
Definite Observation	139	82.0%	82.0%	82.0%	10.1%
Rehabilitation Care	69	40.6%	82.6%	40.6%	4.3%

Table 24c

Share of Hospitals That Are Not in Compliance With Proposed Minimum Staffing Ratios, by Unit

Regular and Registry RNs & LVNs

Source: OSHPD data

Unit	# Hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
Medical-Surgical Acute	363	15.2%	90.9%	71.3%	7.4%
Pediatric Acute	153	43.1%	43.1%	43.1%	11.1%
Obstetrics Acute	239	50.2%	71.1%	50.2%	10.9%
Labor and Delivery	256	15.2%	15.2%	15.2%	13.3%
Newborn Nursery	244	76.7%	89.3%	76.6%	29.9%
Other Acute Care	13	53.8%	84.6%	53.8%	15.4%
Definite Observation	139	74.8%	74.8%	74.8%	7.9%
Rehabilitation Care	69	33.3%	76.8%	33.3%	4.3%

Table 26a

Average Predicted Increases in FTE RN Employment Required by Minimum Staffing Proposals (number of FTEs)

Regular RN Employees Only

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	16.3	46.9	27.2	5.3
Los Angeles CMSA	165	20.5	58.1	34.5	5.8
Sacramento CMSA	15	22.4	53.1	33.0	8.6
San Francisco CMSA	65	19.7	49.0	28.1	9.3
San Diego	25	12.3	43.1	22.6	4.7
Central Valley	42	12.1	39.9	23.1	2.9
Central Coast	15	5.3	24.1	10.5	1.5
N. Sacramento Valley	15	6.3	27.6	14.4	0.6
Northern Mountains	18	1.0	7.5	3.1	0.4
Sierra Nevada	9	2.0	10.8	6.0	0.1

Table 26b

Average Predicted Increases in FTE RN Employment Required by Minimum Staffing Proposals (number of FTEs)

Regular RN & LVN Employees Only

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	12.1	38.1	19.7	4.5
Los Angeles CMSA	165	15.1	48.5	25.9	4.7
Sacramento CMSA	15	16.4	39.9	21.6	8.1
San Francisco CMSA	65	16.8	40.9	22.1	8.5
San Diego	25	9.5	34.9	16.5	4.0
Central Valley	42	7.1	30.3	14.3	2.0
Central Coast	15	4.0	18.9	7.0	1.5
N. Sacramento Valley	15	2.4	14.1	3.2	0.2
Northern Mountains	18	0.5	4.8	1.4	0.3
Sierra Nevada	9	0.4	7.4	2.8	0.08

Table 26c

Average Predicted Increases in FTE RN Employment Required by Minimum Staffing Proposals (number of FTEs)

Regular and Registry RNs & LVNs

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	7.4	32.5	13.8	1.4
Los Angeles CMSA	165	10.7	42.9	20.2	1.7
Sacramento CMSA	15	8.1	33.2	13.4	2.1
San Francisco CMSA	65	5.8	29.8	9.7	1.6
San Diego	25	5.3	28.1	9.4	1.4
Central Valley	42	6.1	29.0	12.7	1.4
Central Coast	15	3.8	18.0	6.5	1.4
N. Sacramento Valley	15	2.2	13.7	2.9	0.2
Northern Mountains	18	0.4	4.6	1.3	0.2
Sierra Nevada	9	0.4	7.3	2.8	0.1

Table 27a

Average Predicted Increases in RN Expenditures per Hospital Caused by Staffing Mandates

Regular RN Employees Only

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	\$745,489	\$2,363,081	\$1,287,774	\$156,127
Los Angeles CMSA	165	\$1,009,827	\$2,947,112	\$1,697,800	\$190,328
Sacramento CMSA	15	\$813,472	\$2,302,374	\$1,300,790	\$156,498
San Francisco CMSA	65	\$649,266	\$2,548,011	\$1,192,394	\$192,624
San Diego	25	\$572,549	\$1,982,577	\$996,129	\$134,670
Central Valley	42	\$665,173	\$1,981,532	\$1,141,679	\$138,894
Central Coast	15	\$346,074	\$1,366,340	\$579,749	\$84,052
N. Sacramento Valley	15	\$317,127	\$1,394,754	\$734,827	\$32,068
Northern Mountains	18	\$48,527	\$343,823	\$143,710	\$19,506
Sierra Nevada	9	\$109,694	\$572,592	\$319,424	\$5,069

Table 27b

Average Predicted Increases in RN Expenditures per Hospital Caused by Staffing Mandates

Regular RN & LVN Employees Only

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	\$255,156	\$1,126,477	\$506,566	\$49,768
Los Angeles CMSA	165	\$375,771	\$1,456,512	\$724,627	\$65,381
Sacramento CMSA	15	\$213,048	\$973,500	\$392,972	\$45,858
San Francisco CMSA	65	\$209,533	\$1,160,001	\$438,774	\$64,117
San Diego	25	\$190,994	\$983,471	\$394,149	\$37,899
Central Valley	42	\$191,226	\$952,236	\$416,460	\$37,830
Central Coast	15	\$88,847	\$645,248	\$187,031	\$4,706
N. Sacramento Valley	15	\$65,391	\$456,391	\$94,219	\$701
Northern Mountains	18	\$10,860	\$120,238	\$34,414	\$5,749
Sierra Nevada	9	\$2,173	\$230,381	\$84,588	\$0

Table 27c

Average Predicted Increases in RN Expenditures per Hospital Caused by Staffing Mandates

Regular and Registry RNs & LVNs

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	\$386,799	\$1,714,530	\$714,236	\$76,059
Los Angeles CMSA	165	\$546,511	\$2,221,553	\$1,028,938	\$88,003
Sacramento CMSA	15	\$382,707	\$1,540,131	\$614,737	\$99,347
San Francisco CMSA	65	\$339,309	\$1,754,067	\$567,970	\$92,109
San Diego	25	\$259,694	\$1,326,641	\$446,355	\$64,668
Central Valley	42	\$304,129	\$1,490,142	\$630,930	\$70,041
Central Coast	15	\$222,076	\$1,039,191	\$357,926	\$75,238
N. Sacramento Valley	15	\$107,627	\$689,396	\$144,238	\$9,718
Northern Mountains	18	\$19,839	\$212,388	\$61,471	\$10,628
Sierra Nevada	9	\$21,172	\$387,239	\$149,150	\$4,872

Table 28a

Average Predicted Percent Increases in RN Expenditures Caused by Staffing Mandates
Regular RN Employees Only

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	16.0%	50.7%	28.4%	3.3%
Los Angeles CMSA	165	20.7%	56.3%	33.7%	4.1%
Sacramento CMSA	15	13.4%	47.8%	26.9%	2.7%
San Francisco CMSA	65	8.4%	36.7%	16.8%	2.2%
San Diego	25	12.8%	43.7%	23.4%	2.1%
Central Valley	42	20.7%	67.8%	38.7%	4.6%
Central Coast	15	9.2%	38.3%	18.4%	3.4%
N. Sacramento Valley	15	15.4%	57.6%	30.6%	1.4%
Northern Mountains	18	3.1%	26.6%	10.7%	1.1%
Sierra Nevada	9	7.3%	39.6%	22.0%	0.2%

Table 28b

Average Predicted Percent Increases in RN Expenditures Caused by Staffing Mandates
Regular RN & LVN Employees Only

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	4.0%	20.9%	9.5%	0.7%
Los Angeles CMSA	165	5.9%	24.4%	12.5%	0.9%
Sacramento CMSA	15	3.5%	18.7%	8.0%	0.9%
San Francisco CMSA	65	2.1%	14.6%	5.0%	0.5%
San Diego	25	2.4%	19.5%	7.7%	0.4%
Central Valley	42	4.0%	26.6%	12.2%	0.9%
Central Coast	15	2.3%	18.6%	6.6%	0.4%
N. Sacramento Valley	15	2.6%	17.3%	4.8%	0.2%
Northern Mountains	18	0.6%	7.3%	1.9%	0.3%
Sierra Nevada	9	0.3%	14.5%	5.9%	0.0%

Table 28c

Average Predicted Percent Increases in RN Expenditures Caused by Staffing Mandates
Regular and Registry RNs & LVNs

	Number of hospitals	Original version of bill	CNA proposal	SEIU proposal	CHA proposal
All Hospitals	369	2.0%	11.0%	4.6%	0.5%
Los Angeles CMSA	165	2.5%	10.6%	5.1%	0.6%
Sacramento CMSA	15	1.4%	11.5%	3.4%	0.2%
San Francisco CMSA	65	1.1%	6.7%	1.9%	0.5%
San Diego	25	0.3%	2.4%	0.8%	0.05%
Central Valley	42	3.3%	19.8%	8.6%	0.9%
Central Coast	15	3.1%	16.4%	6.8%	1.0%
N. Sacramento Valley	15	1.0%	11.7%	1.9%	0.09%
Northern Mountains	18	0.8%	8.2%	2.2%	0.3%
Sierra Nevada	9	1.1%	20.9%	8.9%	0.2%