

PROJECTED COSTS
ASSOCIATED WITH NURSING HOME REFORM LEGISLATION
AS CONTAINED IN
THE OMNIBUS BUDGET RECONCILIATION ACT OF 1987 (OBRA 87)

California Rate Year 1990/91

Rate Development Branch
Medi-Cal Policy Division
Department of Health Services

March, 1990

OBRA-87 COST ESTIMATES
(All Nursing Facilities)
California Rate Year 1990/91

<u>SUBJECT</u>	<u>REQUIREMENT</u>	^{1/} <u>COST PER PATIENT DAY</u>	^{5/} <u>PROJECTED MEDI-CAL DAYS</u>	<u>ANNUAL MEDI-CAL COSTS</u>
Protection of Resident Funds	Management of personal funds will be mandatory at patient discretion. Current regulations are optional.	NF/A&B = \$.21 DP NF/B = \$.46	21,865,000 2,135,000	\$ 4,592,000 982,000
Nursing Facility Consolidation	Currently licensed freestanding Intermediate Care Facilities (ICFs) will require additional staffing to meet the higher level nursing facility certification requirements.	^{2/} NF/A = \$ 2.51 NF/B = \$.00 DP NF/B = \$.00	1,155,000 0 0	\$ 2,899,000 0 0
Social Services	Facilities with more than 120 beds must employ a full-time qualified social worker.	^{3/} NF/A&B = \$.44 DP NF/B = \$.33	8,365,000 1,535,000	\$ 3,681,000 507,000
Resident Assessments	Facilities must conduct initially and periodically a comprehensive, standardized and reproducible assessment of each resident's functional capacity.	NF/A&B = \$.35 DP NF/B = \$.45	21,865,000 2,135,000	\$ 7,653,000 <u>961,000</u>
ESTIMATED OBRA ADJUSTMENTS		^{4/} \$.56 - 3.51	SUBTOTAL	\$ 21,275,000

- 1/ Refer to pages 3 and 13 - 16 for calculations used in determining the costs per patient day.
- 2/ This cost per patient day adjustment is applicable only to nursing facilities currently licensed as Freestanding ICFs.
- 3/ These cost per patient day adjustments are applicable only to the 270 nursing facilities with more than 120 licensed beds.
- 4/ The cost per patient day adjustment will vary depending on whether the facility is currently licensed as a freestanding ICF and/or is in the 121+ bedsize category.
- 5/ Medi-Cal days are listed for only those facilities affected by each individual requirement. The total number of projected Medi-Cal days is 24,000,000.

**OBRA-87 NURSE AIDE TRAINING AND ONE-TIME START-UP COST ESTIMATES
(All Nursing Facilities)
California Rate Year 1990/91**

<u>SUBJECT</u>	<u>REQUIREMENT</u>	<u>COST PER PATIENT DAY</u> ^{1/}	<u>PROJECTED MEDI-CAL DAYS</u>	<u>ANNUAL MEDI-CAL COSTS</u>
Nurse Aide Training	Facilities must not use any individual working in the facility as a nurse aide for more than four months, unless that individual has completed a training and competency evaluation program.	NF/A&B = \$.12 DP NF/B = \$.00	21,865,000 0	\$ 2,624,000 0
One-time Start-up Costs	Facilities will incur one-time start-up costs to develop forms, upgrade computer software and provide staff orientation.	NF/A&B = \$.31 DP NF/B = \$.31	9,100,000 900,000	\$ 2,821,000 \$ 279,000

^{1/} Refer to pages 3 and 13 - 16 for calculations used in determining the cost per patient day.

OBRA-87 COST ESTIMATES
 AVERAGE 99 BED NURSING FACILITY
 (All Nursing Facilities)
 California Rate Year 1990/91

<u>SECTION</u>	<u>SUBJECT</u>	<u>TOTAL COST PER FACILITY</u> ^{1/}	<u>NUMBER OF FACILITIES</u>	<u>ESTIMATED OBRA COST</u>	<u>TOTAL PATIENT DAYS</u>	<u>COST PPD</u>
483.10(c)	Protection of Resident Funds	\$ 6,275	1,240	\$ 7,781,000	37,000,000	\$.210
483.5 483.30 483.75(k)	Nursing Facility Consolidation - Staffing and Medical Director	---	34	\$ 1,881,312	750,000	\$ 2.508
483.15(g)	Social Services	\$ 24,978	270	\$ 6,744,060	15,500,000	\$.435
483.20(b)	Resident Assessment	\$ 10,510	1,240	\$ 13,032,400	37,000,000	\$.352
483.75(q)1	Nurse Aide Training	\$ 3,625	1,240	\$ 4,495,000	37,000,000	\$.121
n/a	One-time Start-up Costs	\$ 3,805	1,240	\$ 4,718,200	37,000,000	\$.310 ^{2/}

1/
Refer to pages 4 - 16 for calculations used to determine facility costs.

2/
The annualized cost PPD for one-time start-up costs is \$.128 (\$4,718,200/37,000,000). \$.128 PPD will be adjusted to \$.310 (\$.128 x 12/5) to fully reimburse NFs during rate year 1990/91 (March 1, 1991 - July 31, 1991).

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
Protection of Resident Funds			
(c)(2) Management of Personal Funds: Mandatory at Patient Discretion,	50% of patients/families will request patient fund service involving both a formal interest bearing account and a petty cash account for immediate fund availability. Half of the residents will be in facilities that do not currently offer this service. The average 99 bed nursing facility has 91 patients x 130% patient turnover = 119 x 25% or 30 additional patient accounts.	40 minutes to establish each new account x 30 patients = 20 hours x cost of administrative staff @ \$12.00 per hour = \$240.00.	\$ 240.00
(c)(3) Deposit of Funds: \$50.00+ in Interest Bearing Accounts, \$50.00 or less in non-interest bearing accounts,		20 minutes per month to post each account x 30 accounts = 15.0 hours x \$12.00 per hour = \$180.00 x 12 months = \$2,160.00.	\$ 2,160.00
(c)(4) Accounting and Records: Separate Accounting Records,			
(c)(5) Notice of Balances: Within \$200.00 of SSI Resource Limit,		8 hours per month to balance/reconcile bank statements, provide records and SSI resource limit notice to patients, or 8 hours x \$12.00 per hour = \$96.00 x 12 months = \$1,152.00.	\$ 1,152.00
(c)(7) Assurances of Financial Security: Surety Bond,	Additional accounts will require an average of 20 minutes per month bookkeeper time to post and balance both the interest and non-interest bearing accounts. An additional 8 hours per month will be required to balance bank statements, prepare account balance records, provide records to patients, and notify patients if balance of personal funds is within the \$200.00 SSI resource limit. Finally, it will require 30 minutes per day to make change from the petty cash fund for the daily needs of patients.	30 minutes per day to make change x 365 days = 182.5 hours x \$12.00 = \$2,190.00.	\$ 2,190.00
	The average balance of funds per patient is \$300.00. In the average 99 bed facility, 23 patients will require additional surety bonds at any given time (91 patients x 50% = 46 patients requesting patient fund service x 50% of facilities without current bonding). The average surety bond is \$12.50 per \$1,000.00 of funds.	\$300.00 x 23 patients = \$6,900/\$1,000 = 6.9 x \$12.50 = \$86.00.	\$ 86.00

OBRA Requirement

Assumptions

Cost Impact

Annual Cost

Approximately 10% of all nursing facilities have computerized patient accounting systems. Approximately 75% of all nursing facilities are computerized.

One time cost to automate patient accounting systems will be capitalized over a five year period.

1240 facilities x 90% = 1116 facilities who will need computer software to do patient accounting. \$1,650 for software = \$1,650 x 1116 facilities = \$1,841,400. 25% of facilities will need hardware @ \$3,000 x 310 facilities = \$930,000. Average cost per facility = \$1,841,400 (software) + \$930,000 (hardware) = \$2,771,400/1240 facilities = \$2,235 average cost per facility.

\$2,235/5 year capitalized period = \$447 per year.

\$ 447.00

Cost to Establish New Account	=	\$ 240.00
Cost to Update Each Account	=	2,160.00
Cost to Reconcile Statements	=	1,152.00
Cost to Make Change	=	2,190.00
Cost of Surety Bond	=	86.00
Automation Cost	=	<u>447.00</u>

Resident Fund Accounting Cost \$ 6,275.00

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>	
<p>Nursing Facility Consolidation Federal certification requirements will no longer distinguish between Intermediate Care Facilities (ICFs) and Skilled Nursing Facilities (SNFs). As a result, ICFs will require additional staffing to meet the higher level Nursing Facility (NF) certification requirements.</p>	<p>ICF services are provided exclusively in 34 freestanding facilities, averaging 60 beds per facility. With an occupancy rate of 98%, these facilities report 750,000 ICF patient days annually. It is estimated that 77% of all ICF patients, or 577,500 are Medi-Cal eligible.</p>	<p>Current RN hourly cost = \$ 22.00 Minus LVN cost = (17.50) Net hourly cost = \$ 4.50</p> <p>x 8 hours per day = $\frac{x 8}{}$ Daily cost = \$ 36.00</p> <p>x 104 days annually = $\frac{x 104}{}$ Annual cost = \$ 3,744</p>		
	<p>It is assumed all ICFs will remain as ICF facilities operating under current State licensing requirements. The provisions applicable to these facilities will be the upgrade from LVN to RN staffing on the weekend day shift, additional LVN staffing on the evening and night shift, and the addition of a medical director (28 of which already comply). It is assumed waivers will continue to be available for physical plant requirements.</p>	<p>x 22 facilities = $\frac{x 22}{}$ \$ 82,368</p>		\$ 82,368
	<p>The additional RN staffing on the weekend day shift will affect 29 of the 34 facilities (facilities with less than 100 beds). It is estimated that 7 of the 29 ICFs are currently staffed with an RN on at least the day shift.</p>	<p>Current LVN cost = \$ 17.50 x 11.5 hours per day = $\frac{x 11.5}{}$ Daily cost = \$ 201.25</p> <p>x 365 days annually = $\frac{x 365}{}$ Annual cost = \$ 73,456</p>		
	<p>It is also estimated that 10 of the 34 freestanding ICFs are staffed 24 hours per day with licensed nursing staff. Based on a survey of ICF facilities, it is assumed the remaining 24 facilities average 4.5 hours of LVN coverage during the evening or night shift.</p>	<p>x 24 facilities = $\frac{x 24}{}$ \$1,762,944</p>		\$ 1,762,944

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
	<p>A medical consultant contract will cost each of the six freestanding ICFs an estimated \$500.00 per month. These facilities currently report 130,000 patient days (100,000 Medi-Cal patient days) annually.</p>	<p>Medical consultant contract @ \$500.00 x 12 months = \$6,000.00. \$6,000.00 x 6 facilities = \$36,000.00.</p>	<p>\$ 36,000</p>
	<p>The remaining ICF patient days are provided in approximately 100 distinct parts of SNF facilities (DP/ICFs). The DP/ICFs already have RN staffing on weekends, 24 hour licensed nurse staffing and medical directors, as part of their SNF licensure. Since DP/ICF rates are based on freestanding ICF costs, the OBRA rate adjustment will impact all ICFs. DP/ICFs report 750,000 ICF patient days annually, of which 577,500 are Medi-Cal covered days.</p>	<hr/> <p>Cost of RN on Weekend Day Shift = Cost of 24 Hr. Licensed Nursing = Cost of Medical Director =</p> <p>Total ICF Cost</p>	<hr/> <p>\$ 82,368 1,762,944 <u>36,000</u></p> <p>\$ 1,881,312</p>

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
<p>Social Services Each nursing facility must provide medically-related social services to attain or maintain the highest practicable physical, mental or psychosocial well-being of each resident. The new regulations require nursing facilities with more than 120 beds to employ a full-time qualified social worker.</p> <p>The qualifications of a social worker are: (1) a bachelor's degree in social work, or (2) two years of social work supervised experience in a health care setting working directly with individuals, or (3) similar professional qualifications.</p>	<p>There are approximately 270 nursing facilities with more than 120 beds. The average facility in this category has 168 beds and reports approximately 53,600 patient days per year.</p> <p>It is estimated that 20% of all facilities with more than 120 beds currently employ a full-time qualified social worker.</p>	<p>1.0 full-time social worker = 2080 hours per year @ \$15.00 per hour (including employee benefits) = \$31,200.00 per year. \$31,200.00/53,600 patient days annually = \$.582 per patient day x 80% (facilities with more than 120 beds and without a full-time qualified social worker) = a net cost increase for all facilities with more than 120 beds of \$.466 per patient day. \$.466 x 53,600 patient days annually = \$24,978.00.</p> <hr/>	<p>\$ 24,978.00</p> <hr/>
		<p>Total Social Worker Cost</p>	<p>\$ 24,978.00</p>

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
Resident Assessment Upon Admission Nursing facilities must conduct initially and periodically (see below) a comprehensive, accurate, standardized, reproducible assessment of each resident's functional capacity. The assessment instrument will be specified by the State and shall include a minimum data set, as defined by the Health Care Financing Administration.	Each nursing facility must assess 120 new admissions annually and will require 1.0 hour of RN time.	1.0 hour of RN time @ \$22.00 x 120 assessments = \$2,640.00.	\$ 2,640.00
	Each assessment will require 1.0 hour of staff support per assessment. This staff includes dietary, CNAs, social services and/or activities staff.	1.0 hour of staff support @ \$10.00 x 120 assessments = \$1,200.00.	\$ 1,200.00
	The DSD to conduct training on the resident assessment process and documentation requirements. Two 3.0 hour classes, or 6.0 hours per year. Additional 3.0 hours per year for RNs and CNAs to attend training.	6.0 hours of DSD time @ \$18.00 per hour = \$108.00.	\$ 108.00
	The new assessment requirements will increase five fold the time and cost to complete the resident assessment.	The average training class hours will involve RNs (15 hours) and CNAs (20 hours) = 35 total staff hours. The weighted average cost per hour = $15 \times \$22.00 + 20 \times \$7.50 = \$480.00/35$ hours or \$13.71 per hour. Twice a year training, or 70 hours x \$13.71 per hour = \$960.00.	\$ 960.00
		Current assessment cost = 1/5 of projected cost, or \$982.00.	\$ 4,908.00
			(\$ 982.00)
			\$ 3,926.00

Average cost to conduct each resident assessment = \$4,908.00/120, or \$40.90.

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
Resident Assessment After Significant Change in Condition Assessments must be conducted promptly after a significant change in resident's physical or mental condition.	Each patient (120 throughout the year) will have one significant change in condition. This assessment will only require 1/3 of the time necessary to complete the initial resident assessment.	120 assessments x \$13.63 (1/3 of \$40.90) = \$ 1,636.00	\$ 1,636.00
Annual Resident Assessment Assessments must be conducted no less often than once every twelve months.	25% of patients require annual assessments or 30 annual assessments. Average cost per assessment = \$40.90.	30 annual assessments x \$40.90 = \$ 1,227.00.	\$ 1,227.00
Quarterly Review of Resident Assessments Nursing facilities must examine each resident no less than once every 3 months and, as appropriate, revise the resident's assessment to assure the continued accuracy of the assessment.	Quarterly reassessments will take 1/3 the time to complete the new resident assessment criteria and cost an estimated \$13.63 per assessment. Since an annual assessment is required, only 3 quarterly assessments are needed per year. Average of 91 patients year round.	91 patients x 3 reassessments = 273 reassessments x \$13.63 per assessment cost = \$ 3,721.00.	\$ 3,721.00
		<hr/> Cost of RA - Admission Cost of RA - Change in Condition Cost of RA - Annual Assessment Cost of RA - Quarterly Review	<hr/> \$ 3,926.00 1,636.00 1,227.00 <u>3,721.00</u>
		Total Resident Assessment Cost	\$10,510.00

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
Required Training of Nurse Aides Nursing facilities must not use any individual working in the facility as a nurse aide for more than four months, on a full-time, temporary, per diem or other basis, unless (1) that individual has completed a training and competency evaluation program, or a competency evaluation program approved by the State, and (2) that individual is competent to provide nursing and related services.	Nurse aides are currently required to complete their 150 hour certification program within six months of the date of employment. Nursing facilities who operate an approved facility based program conduct an average of four certification classes each year. The new requirement that nurse aides complete their training within four months will require two additional certification programs per year.	2 new 150 hour certification programs = 300 hours + 25% of class time for preparation and administration = 375 hours. 375 hours of DSD time @ \$18.00 per hour = \$ 6,750.00. Additional training supplies and equipment = \$ 500.00.	\$ 6,750.00 \$ <u>500.00</u> \$ 7,250.00
	Half of all nursing facilities operate a facility based certification program, while the other half refer their nurse aides to community based certification programs, such as community colleges or regional occupational programs.	Current community based program costs = 1/2 of projected costs, or \$3,625.00.	(<u>\$ 3,625.00</u>) \$ 3,625.00
		<hr/>	<hr/>
		Total Nurse Aide Training Cost	\$ 3,625.00

<u>OBRA Requirement</u>	<u>Assumptions</u>	<u>Cost Impact</u>	<u>Annual Cost</u>
Nursing facilities will incur one-time start-up costs to develop and distribute additional resident notices, upgrade computer software and to provide staff orientation.	Resident notices must be in writing. Current industry practice is typically a telephone or personal discussion. Resident notices will require 40 hours of RN time and 40 hours of administrative staff time to develop new forms and processing procedures. It is assumed the facility will need to make available 4,400 copies of necessary notices.	40 hours of RN time @ \$22.00 per hour = \$880.00. 40 hours of administrative staff time @ \$12.00 per hour = \$480.00. 4,400 copies @ \$.05 per copy = \$220.00. Total cost to develop forms (\$880.00 + \$480.00 + \$220.00).	\$ 1,580.00
	Upgrade of computer software will vary, but average \$900.00 per nursing facility.	One-time cost for computer upgrade/software.	\$ 900.00
	RN staff must provide the equivalent of one day of training to 2 LVNs and 9 administrative staff.	8 hours of RN time @ \$22.00 per hour = \$180.00. 16 hours of LVN time @ \$17.50 per hour = \$280.00. 72 hours of administrative staff time @ \$12.00 per hour = \$865.00. Total cost to provide staff orientation (\$180.00 + \$280.00 + \$865.00).	\$ 1,325.00
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		Cost to Develop Forms = \$ 1,580.00 Cost for Computer Upgrade = 900.00 Cost for Staff Orientation = 1,325.00	
Total One-Time Costs			\$ 3,805.00

VARIATION IN ASSUMPTIONS AND COSTS FOR HOSPITAL-BASED DISTINCT
PART FACILITIES VS THE AVERAGE 99 BED NURSING FACILITY

Subject: Protection of Resident Funds

Assumptions

No Hospital-based Distinct Part Nursing Facilities (DP NFs) currently offer resident fund service (vs 50% for the "average 99 bed" Nursing Facility (NF) used in cost calculations), so the relative number of additional trust accounts will be doubled.

Patient turnover is 2.5 times as high for Medi-Cal patients in DP NFs as for all patients in the NF, so proportionately more new trust accounts will need to be set up and more surety bonds will need to be paid.

Additionally, since no DP NFs currently have patient trust accounts, none of them will have computerized patient accounting systems (vs 10% of the NFs) and all will need software.

All DP NFs (vs 75% of NFs) are computerized, so none will need to buy hardware. However, most are tied to a larger central computer with more costly software, not readily reprogrammed for patient trust account transactions. Software purchases and modifications will be approximately three times as costly.

All other assumptions are the same.

VARIATION IN ASSUMPTIONS AND COSTS FOR HOSPITAL-BASED DISTINCT
PART FACILITIES VS THE AVERAGE 99 BED NURSING FACILITY

Subject: Protection of Resident Funds (continued)

Cost Impact

The cost of patient fund service for NFs is modified as follows for DP NFs:

2 x 2.5 x \$240.00 = \$1,200.00, an increase of \$960.00 to establish new accounts.

2 x \$2,160.00 = \$4,320.00, an increase of \$2,160.00 to update each account.

2 x \$1,152.00 = \$2,304.00, an increase of \$1,152.00 to reconcile statements.

2 x \$2,190.00 = \$4,380.00, an increase of \$2,190.00 to make change.

2 x 2.5 x \$86.00 = \$430.00, an increase of \$344.00 for surety bonds.

1.00/0.90 x \$1,485.00 x 3 = \$4,950.00, an increase of \$3,465.00 for software or \$693.00 per year capitalized over five years.

Elimination of the need to purchase hardware at an average cost of \$750.00, or \$150.00 per year capitalized over five years.

The net change is:

Establish New Account	\$ 960.00
Update Each Account	2,160.00
Reconcile Statements	1,152.00
Make Change	2,190.00
Surety Bonds	344.00
Automation - Software	693.00
- Hardware	(150.00)
	\$7,349.00

The overall facility cost of \$6,275.00 for NFs will increase by \$7,349.00 or 117.1% for DP NFs. So, the cost per patient day will increase by 117.1% from \$.21 to \$.46 for DP NFs.

VARIATION IN ASSUMPTIONS AND COSTS FOR HOSPITAL-BASED DISTINCT
PART FACILITIES VS THE AVERAGE 99 BED NURSING FACILITY

Subject: Resident Assessments

Assumptions

Patient turnover is 2.5 times as high for Medi-Cal patients in DP NFs as for all patients in NFs. Therefore, 2.5 times as many initial assessments upon admission will need to be done, but the number of assessments after a change in condition will not be different. Because patients do not stay as long on the average in DP NFs, only one fourth as many annual assessments will be required and one half as many quarterly reviews.

All other assumptions are the same.

Cost Impact

The cost of resident assessments for NFs is modified as follows for DP NFs:

$2.5 \times \$3,926.00 = \$9,815.00$, an increase of \$5,889.00 for assessments upon admission.

$0.25 \times \$1,227.00 = \306.75 , a decrease of \$920.25 for annual assessments.

$0.50 \times \$3,721.00 = \$1,860.50$, a decrease of \$1,820.50 for quarterly reviews.

The net change is:

RA - Admission	\$ 5,889.00
RA - Change in Condition	0.00
RA - Annual Assessment	(920.25)
RA -Quarterly Review	<u>(1,860.50)</u>
TOTAL	\$ 3,108.25

The overall facility cost of \$10,510.00 for NFs will increase by \$3,108.25 or 29.6% for DP NFs. So the cost per patient day will increase by 29.6% from \$.35 to \$.45 for DP NFs.

VARIATION IN ASSUMPTIONS AND COSTS FOR HOSPITAL-BASED DISTINCT
PART FACILITIES VS THE AVERAGE 99 BED NURSING FACILITY

Subject: Social Services

Assumptions

Of DP NFs with more than 120 beds, 40% currently employ a full-time qualified social worker (vs 20% for NFs).

Cost Impact

The cost to add a full-time social worker is modified as follows for DP NFs:

$0.60/0.80 \times \$24,978.00 = \$18,733.50$, a decrease of \$6,244.50 or 25.0%.

The overall facility cost of \$24,978.00 for NFs will decrease by \$6,244.50 or 25.0% for DP NFs. So the cost per patient day will decrease by 25.0% from \$.44 to \$.33 for DP NFs.

Subject: Nurse Aide Training

Assumptions

Among DP NFs, no facilities now do training programs (vs half of the NFs), and none of the DP NFs will institute them. Relatively fewer nurse assistants are hired in DP NFs and a greater percentage are already certified, so fewer new hires will need training and those who do will be trained in outside training programs.

Cost Impact

The additional cost to train nurse aides is estimated to be zero for DP NFs.