



**HEALTHCARE AND FAMILY SERVICES**

**NURSING HOME RATE CALCULATION**

**HANDBOOK**

**FY 2020**

**Effective July 1, 2019**

## **INTRODUCTION**

This packet is designed to assist facilities in calculating July 1, 2019 support and nursing reimbursement rates. (Your capital component has not changed from your last rate notice.) It contains step-by-step instructions for calculating your support and nursing rates. There may be a difference of one or two cents between the rates that have been calculated and the rates issued by HFS. This is due to differences in the way decimal fractions are handled.

## **REIMBURSEMENT SYSTEM FOR NURSING FACILITIES *GENERAL DESCRIPTION***

### Key Features

The Illinois reimbursement system for nursing facilities is a prospective system; that is, the rates are set for each facility for a subsequent rate period. The rates remain in effect for the rate period and there is no retroactive reconciliation of rates to actual expenditures during the rate period.

The reimbursement rates are facility specific. Individual rates are set for each nursing facility, taking into account such factors as, individual facility costs, variations in patient case mix, geographical location, and other facility characteristics such as occupancy level.

Illinois uses a case mix or patient need based system to establish the direct care payment rate. The direct care rate is based on a measure of a nursing facility's patient case mix, which reflects the individual needs of patients within the facility and the actual services being provided to the patients. A quarterly MDS assessment for each Medicaid-eligible resident is used to determine the average patient need and service levels within each nursing facility. This provides the basis for determining the direct care reimbursement rate.

### Components of the Reimbursement Rate

The reimbursement rate has three components:

1. Nursing and Direct Care Component
2. Support Service Component
3. Capital Component

## Nursing and Direct Care Component

The nursing and direct care component covers costs associated with direct care, nursing, and other group care related health and treatment services. The rate includes payment for assisting patients in meeting basic functional and special health needs and for rehabilitative and restorative nursing care.

The facility rate is based on an OBRA MDS assessment for each Medicaid-eligible resident, which is completed initially upon admission and then quarterly for the duration of the resident's stay in the LTC facility. Medicare RUG-IV 48 group designations are determined for each patient and the CMS published Case Mix weights are compiled to determine the case mix for each facility. The facility average case mix is multiplied by the regional wage factor for the facility and by the statewide base rate. This is the facility's MDS base rate.

The statewide RUG-IV nursing base per diem rate effective on July 1, 2019 is \$85.25.

The add-on for each Alzheimer/Dementia resident as determined by I4200 and I4800 is \$0.63.

The add-on for each SMI resident in the lower 4 RUG groups as determined by S1200 A-I is \$2.67.

The add-on for each Traumatic Brain Injury resident is \$5.00. Rule 147.335 may be found at <http://www.ilga.gov/commission/jcar/admincode/089/089001470003350R.html> .

Effective 7/1/19, per Public Act 101-0010, a per diem add-on of \$4.55 will be added to the direct care per diem rate.

A facility's rate depends on the patient need and service levels and the geographic location of the facility. Nurse aide training is reimbursed through separate systems.

The MDS data used by the Department to set the reimbursement rate may be used to conduct validation reviews.

Such reviews may be conducted electronically or onsite in the facility.

Nursing component rates may be adjusted based on the findings.

Rules concerning Minimum Data Set On-Site Reviews may be found at:

<http://www.ilga.gov/commission/jcar/admincode/089/089001470003400R.html>

## Support Services Component

The support service rate covers the general service and administration costs associated with residential care. It includes costs of food, laundry, housekeeping, utilities, maintenance, administration, insurance, dietary, and general office services. These are costs that do not vary significantly with varying patient need levels.

Allowable costs for each facility are compiled from the facility cost report and updated to the rate year using various updating factors. The per diem per capita cost for each facility is derived and these costs for all facilities within designated geographic regions of the State are ranked from highest to lowest. The cost value at the 75<sup>th</sup> percentile is set as the ceiling for payment.

Facilities with per diem costs at or above the 75<sup>th</sup> percentile ceiling are reimbursed at a level equal to the 75<sup>th</sup> percentile value. Facilities having per diem per capita costs below the 75<sup>th</sup> percentile receive their full per diem per capita cost, plus a profit payment. The profit payment serves as an incentive for efficient and economic operation of the facility.

### Capital Component

The capital rate provides reimbursement for the capital costs that include mortgage interest and asset depreciation but does not use these “costs” in the rate calculation. The rate is calculated based upon a blending of

- 1) The inflated historical cost per bed of the building
- 2) The uniform cost per bed for all facilities in the same age and region.

This blended value per bed is multiplied by a rate of return on investment and converted to a per diem value. A standard amount is added for equipment, vehicle and working capital interest costs. Additionally, an inflated real estate tax cost per diem is added to arrive at the total capital rate.

The capital component methodology and rate are not being changed at this time. They will remain at the amount as reported on your last rate notification.

# NURSING CALCULATION

07/01/2019

July 1, 2019  
CALCULATION OF NURSING RATE

This part of the packet is for calculating the nursing rate effective July 1, 2019. The MDS nursing rate is based upon the Medicaid eligible residents in the facility on March 31, 2019 as determined by the Medicaid Management Information System (MMIS) on May 31, 2019, using the most recent MDS OBRA (A0310A=01, 02, 03, 04, 05, 06) assessment in the quarter ending 3/31/2019. Residents for whom MDS resident identification information is missing or inaccurate, or for whom there is not a current MDS assessment for the quarter shall be placed in the lowest acuity level for calculation purposes.

To calculate your nursing rate, you will need to:

- Step 1: The statewide base rate in effect for 07/1/2019 will be \$85.25.
- Step 2: Determine regional wage factor for the facility from Table 1 based upon the facility's Health Service Area as determined by Illinois Department of Public Health.
- Step 3: Determine the case mix weights for all Medicaid eligible residents based on the RUG-IV 48 group status of each resident. Calculate the sum of the case mix weights for all Medicaid eligible residents. See Table 2 for the CMS published Case Mix weights.
- Step 4: Determine the total number of Medicaid eligible residents.
- Step 5: Calculate the facility average case mix by dividing the total in Step 3 by the total in Step 4.
- Step 6: Calculate the facility MDS based nursing rate by multiplying \$85.25 in Step 1 and the regional wage factor in Step 2 and the facility average case mix in Step 5.
- Step 7: Calculate the Alzheimer/Dementia add-on by taking the sum of the number of Alzheimer/Dementia residents from the MDS verification list and dividing it by the total number of Medicaid Eligible residents in Step 4 and then multiplying the product by \$0.63.
- Step 8: Calculate the SMI add-on for residents in the low 4 RUG groups by taking the sum of the number of SMI residents in the low 4 RUG groups from the MDS verification list and dividing it by the total number of Medicaid Eligible residents in Step 4 and then multiplying the product by \$2.67.
- Step 9: Calculate the TBI add-on by taking the sum of the number of Traumatic Brain Injury residents from the MDS verification list and dividing it by the total number of Medicaid Eligible residents in Step 4 and then multiplying

the product by \$5.00.

Step 10: Effective 7/1/19, per Public Act 101-0010, a per diem add-on of \$4.55 will be added to the direct care per diem rate.

Step 11: The Facility calculated MDS nursing rate is the sum of Step 6 plus Step 7 plus Step 8 plus Step 9 plus Step 10.

Table 1 -- Regional Wage Factors

<u>HSA</u>	<u>Regional Wage Factor</u>
1	0.9401
2	0.8677
3	0.8752
4	0.8903
5	0.8463
6	1.0600
7	1.0600
8	1.0576
9	1.0472
10	0.9145
11	0.9420

Table 2 -- Federal Case Mix Weights as published by CMS

<u>RUG-IV 48 Group Category</u>	<u>Federal Weight as published by CMS</u>
PA1	0.45
PA2	0.49
BA1	0.53
BA2	0.58
CA1	0.65
PB1	0.65
PB2	0.70
CA2	0.73
BB1	0.75
BB2	0.81
RAA	0.82
CB1	0.85
PC1	0.85
PC2	0.91
CB2	0.95
LB1	0.95
CC1	0.96
LC1	1.02

<u>RUG-IV 48 Group Category</u>	<u>Federal Weight as published by CMS</u>
PD1	1.06
CC2	1.08
RAB	1.10
CD1	1.15
PD2	1.15
PE1	1.17
LB2	1.21
LD1	1.21
HB1	1.22
HC1	1.23
CE1	1.25
PE2	1.25
LE1	1.26
CD2	1.29
LC2	1.30
HD1	1.33
RAC	1.36
CE2	1.39
HE1	1.47
LD2	1.54
HB2	1.55
HC2	1.57
RAD	1.58
LE2	1.61
RAE	1.65
HD2	1.69
HE2	1.88
ES1	2.22
ES2	2.23
ES3	3.00
AA1	0.45

*PART II*

SUPPORT

CALCULATION

FISCAL YEAR 2020

CALCULATION OF SUPPORT RATES

This part of the calculation packet is for calculating your support rate. The rate is based on adjusted costs from your latest cost report on file with the Department as of March 31, 2015. You need to make sure you have adjusted your cost report to reflect any changes made by the field auditors or by the Bureau of Health Finance during the desk audit process. Audit adjustments made to Schedule V of the cost report should be posted to Column 9 of Schedule V (unless otherwise indicated) and the revised totals in Column 10 should be used in calculating your reimbursement rate. Each facility has been notified by mail of any adjustments made by the Bureau of Health Finance.

Unless otherwise specified, all line numbers refer to Schedule V of your 2014 or 2013 or 2012 cost report.

INSTRUCTIONS AND CALCULATION STEPS

STEP I Adjust Support Service Costs to Include Correct Amounts of Fringe Benefits and Payroll Taxes.

Fringe benefits and payroll taxes are reported as a lump sum under General Administration expenses on your cost report (Page 3, Column 10, Line 22). You will need to take this amount out of General Administration expenses and calculate the correct portions of this lump sum to be added to your General Services and General Administration expenses. This is done by proration.

A. General Services:

1. Determine the proportion of general services wages to total wages.
2. Multiply the total lump sum fringe amount by this proportion to get the fringe amount for General Services.
3. Add the proportioned fringe amount to your total general service expenses to get your new total general services cost.

Take	\$ _____	G.S. Wages (Column 1, Line 8)		
Divide by	\$ _____	Total Wages (Column 1, Line 45)		
Equals	_____ X	\$ _____ Total Fringe (Col. 10, Line 22)	=	\$
		Plus Total General Services (Col. 10, Line 8)	+	\$
		<b>NEW TOTAL GENERAL SERVICES COST</b>	<b>=</b>	<b>\$</b>

B. General Administration:

1. Determine the proportion of General Administration wages to total wages.
2. Multiply the total lump sum fringe amount by this proportion to get the fringe amount for Gen. Adm.
3. Add the proportioned fringe amount to your total General Administration expenses.
4. Subtract the total lump sum fringe amount from your General Administration expenses to get your new total General Administration cost.

Take \$ \_\_\_\_\_ Gen. Adm. Wages (Column 1, Line 28)  
Divide by \$ \_\_\_\_\_ Total Wages (Column 1, Line 45)  
Equals \_\_\_\_\_ X \$ \_\_\_\_\_ Total Fringe (Col. 10, Line 22) = \$  
Plus Total General Administration (Col. 10, Line 28) + \$  
Minus Total Fringe (Column 10, Line 22) - \$  
NEW TOTAL GENERAL ADMINISTRATION COST = \$

STEP II Adjust Support Service Costs for Inflation

To calculate the impact of inflation, different inflation factors are used for the General Service and General Administration costs of your cost report. These inflation factors are listed in Table I, Inflation Multipliers. To select the appropriate inflation factors, you need to calculate your base number using the formula outlined below. Once you have calculated your base number, find it in Table I. Select the inflation factors that correspond with your base number and use these in updating your support cost.

A. Base Number Calculation

Convert the beginning and ending dates of your cost reporting period (page 1, Schedule II of your cost report) into numbers and apply the following formula:

(Beginning Month + Ending Month) divided by 2:  
(Beginning Day + Ending Day) divided by 60.8: +  
(Beginning Year + Ending Year) multiplied by 6: +  
Sum of the three lines: =  
Subtract from the sum: - 23707.00  
Base Number: =  
Drop the decimal fraction to get a whole number  
Final Base Number: =

If you have a decimal fraction that is greater than 0.4 and you round the whole number upward, it will reduce your multiplier and, consequently, your rate. So be sure you drop, not round, decimal fractions in this final step.

EXAMPLE: This example shows how to calculate the base number for a cost report covering a year starting July 1, 2013 and ending June 30, 2014.

***First, convert the dates to numbers: 7/1/2013 & 6/30/2014***

Next, put the numbers in the formula:

Add 7 (Beg. Mo.) + 6 (End. Mo.), then divide by 2:	6.500000
Add 1 (Beg. Day) + 30 (End. Day), then divide by 60.8:	+ .509868
Add 2013 (Beg. Yr.) + 2014 (End. Yr.), then multiply by 6:	+24,162.00000
Sum of the three lines:	=24,169.00987
Subtract from the sum:	- 23,707.00000
Base Number:	= 462.00987
Drop Decimal Fraction to get Final Base Number:	= 462

**B. Select the Appropriate Inflation Multipliers**

Refer to Table I, Inflation Multipliers, and find the multipliers that correspond with the base number you have calculated.

General Services Multiplier:

General Administration Multiplier:

Using the example above, the Inflation Multipliers from Table One which correspond with the base number 462 are 1.0425 for General Services and 1.0436 for General Administration.

**C. Apply Inflation Multipliers to Update Cost**

1. Multiply your New Total General Services Cost (from Step I,A) by the appropriate multiplier from Table I:

New Total General Service Cost (Step I, A)	\$
General Services Multiplier (Step II, B)	X
UPDATED GENERAL SERVICES COST = \$	

2. Multiply your New Total General Administration Cost (from Step I, B) by the appropriate multiplier from Table I:

New Total General Administration Cost (Step I,B)	\$
General Administration Multiplier	X

(Step II,B)  
 UPDATED GENERAL ADMINISTRATION COST = \$

3. Total your updated Support Costs (1 and 2).

Updated General Services Costs (1) \$  
 Updated General Administration Costs (2) + \$

TOTAL UPDATED SUPPORT COSTS = \$

**STEP III** Convert Your Total Updated Support Costs (C, 3 above) to Per Diem Costs

Use one of the two procedures below to compute per diem costs.

- A. If the occupancy (Cost Report, page 2, Schedule III-C) is equal to or above 93 percent, divide your total updated support costs (Step II, C, 3, above) by the total patient days (Cost Report, Page 2, Schedule III-B, Column 5, Line 14).

Take Total Support Costs (Step II, C, 3 above): \$  
 Divide by Total Patient Days (Cost Report):  
 Equals SUPPORT COSTS PER DIEM: \$

**OR**

- B. If the occupancy is below 93 percent, calculate 93 percent of the licensed bed days (cost report, page 2, Schedule III-A, column 4, line 7). Then subtract the total patient days (cost report, page 2, Schedule III-B, column 5, line 14) from the result and calculate one-third of the difference. Then add the one-third difference to the total patient days to obtain your adjusted occupancy. Next divide your total updated support costs (Step II, C, 3 above) by your adjusted occupancy.

Licensed Bed Days: \_\_\_\_\_ (1)  
 Multiplied by: X .93 (2)  
 Equals Line (1) X Line (2): = \_\_\_\_\_ (3)  
 Minus Total Patient Days: - \_\_\_\_\_ (4)  
 Difference, line (3) minus line (4): = \_\_\_\_\_ (5)  
 One-third of Difference, line (5) times 1/3: = \_\_\_\_\_ (6)  
 Plus Total Patient Days, line (4): + \_\_\_\_\_ (7)  
 Adjusted Occupancy, line (6) plus line (7): = \_\_\_\_\_ (8)

Take Total Support Costs (Step II, C, 3 above): \$  
 Divide by Adjusted Occupancy, line (8):  
 Equals SUPPORT COSTS PER DIEM: = \$

STEP IV     Calculate Your Support Rate

The maximum allowable support reimbursement rate is the 75<sup>th</sup> percentile for your region. The 35<sup>th</sup> and 75<sup>th</sup> percentile rates by rate area are listed in Table II, Support Rate Percentiles by rate area. Use one of the three procedures below and refer to Table II to calculate your support rate.

- A.     If your support costs per diem from Step III is equal to or greater than the 75<sup>th</sup> percentile for your rate area, then your support rate is the 75<sup>th</sup> percentile rate listed in Table II.
  
- B.     If your support costs per diem from Step III is equal to or greater than the 35<sup>th</sup> percentile, but less than the 75<sup>th</sup> percentile for your rate area, then your support rate is your support costs per diem plus 50 percent of the difference between your support costs per diem and the 75<sup>th</sup> percentile rate listed in Table II. Use the following procedure to calculate your rate:

Take the 75 <sup>th</sup> Percentile Rate for your rate area: (Table II)	\$ _____ (1)
Subtract your Support Costs Per Diem: (Step III)	- \$ _____ (2)
Equals the Difference, Line (1) - Line (2):	= \$ _____ (3)
Multiply the Difference by .50, Line (3) X .50:	X     .50     (4)
Equals One-half the Difference:	= \$ _____ (5)
Add your Support Costs Per Diem (Step III):	+ \$ _____ (6)
Equals your Support Rate, Line (5) + Line (6): (7)	= \$ _____

- C.     If your support cost per diem from Step III is below the 35<sup>th</sup> percentile for your rate area, then your support rate is your support costs per diem plus 50 percent of the difference between your support costs per diem and the 75<sup>th</sup> percentile rate up to a ceiling. This ceiling is equal to 50 percent of the difference between the 35<sup>th</sup> and 75<sup>th</sup> percentiles plus \$.05. The ceiling for each rate area is listed in Table II. Use the following procedure to calculate your rate:

Take the 75 <sup>th</sup> Percentile Rate for your rate area: (Table II)	\$ _____ (1)
Subtract your Support Costs Per Diem: (Step III)	- \$ _____ (2)
Equals the Difference, Line (1) - Line (2):	= \$ _____ (3)
Multiply the Difference by .50, Line (3) X .50:	X     .50     (4)
Equals One-half the Difference:	= \$ _____ (5)
Compare one-half the difference, Line (5),	

to the profit ceiling for your rate area in  
Table II, and

Enter the Lower of the Two Amounts: = \$ \_\_\_\_\_ (6)  
Add your Support Costs Per Diem (Step III): + \$ \_\_\_\_\_ (7)  
Equals your Support Rate, Line (6) + Line (7): = \$ \_\_\_\_\_  
(8)

Your Calculated SUPPORT RATE from  
A, B, or C above: \$ \_\_\_\_\_

D. Enter your 06/30/2019 support rate from prior rate notification \$ \_\_\_\_\_

E. Per 90.8% of your Calculated Support Rate from above \$ \_\_\_\_\_

F. Greater of D. or E. above \$ \_\_\_\_\_

G. 3.45% of F above \$ \_\_\_\_\_

H. 7/1/19 Support Rate per Public Act 101-0010 F. + G. above \$ \_\_\_\_\_

**TABLE I -- INFLATION MULTIPLIERS**

BASE NUMBER	GENERAL SERVICES MULTIPLIER	GENERAL ADMINISTRATION MULTIPLIER	BASE NUMBER	GENERAL SERVICES MULTIPLIER	GENERAL ADMINISTRATION MULTIPLIER
437	1.0744	1.0691	462	1.0425	1.0436
438	1.0732	1.0683	463	1.0418	1.0434
439	1.0724	1.0680	464	1.0411	1.0432
440	1.0717	1.0678	465	1.0391	1.0411
441	1.0731	1.0709	466	1.0384	1.0409
442	1.0724	1.0706	467	1.0377	1.0406
443	1.0716	1.0704	468	1.0315	1.0323
444	1.0691	1.0675	469	1.0308	1.0321
445	1.0684	1.0673	470	1.0302	1.0319
446	1.0676	1.0671	471	1.0278	1.0293
447	1.0638	1.0623	472	1.0271	1.0290
448	1.0630	1.0620	473	1.0264	1.0288
449	1.0623	1.0618	474	1.0224	1.0238
450	1.0589	1.0577	475	1.0218	1.0235
451	1.0582	1.0575	476	1.0211	1.0233
452	1.0574	1.0573	477	1.0184	1.0201
453	1.0572	1.0577	478	1.0177	1.0199
454	1.0564	1.0575	478	1.0170	1.0197
455	1.0557	1.0572	480	1.0103	1.0106
456	1.0480	1.0468	481	1.0096	1.0104
457	1.0473	1.0466	482	1.0090	1.0102
458	1.0466	1.0463	483	1.0027	1.0018
459	1.0459	1.0461	484	1.0021	1.0016
460	1.0452	1.0459	485	1.0014	1.0014
461	1.0445	1.0457	486	1.0000	1.0000

**TABLE II  
SUPPORT RATE PERCENTILES BY RATE AREA**

HSA	RATE AREA	75TH PERCENTILE	35TH PERCENTILE	BELOW 35TH PROFIT CEILING
1 & 10	Northwest	67.00	53.39	6.855
2 & 4	Central	65.97	52.67	6.700
3	West Central	59.58	49.68	5.000
5	South	55.27	46.55	4.410
6, 7 & 8	Chicago	75.83	53.56	11.185
9	S. Suburbs	75.68	54.51	10.635
11	St. Louis	59.56	49.56	5.050