

5101:3-2-07.4 **Basic methodology for determining prospective payment rates.**

## (A) General description.

Except as provided in paragraph (B) of this rule, in computing the payment rate, the average cost per discharge determined and adjusted as described in paragraphs (D) to (G)(3)(b) of this rule is multiplied by the relative weight for the DRG as described in rule 5101:3-2-07.3 of the Administrative Code. Applicable allowances for capital and medical education, as described in this rule, are added after the average cost per discharge component is multiplied by the relative weight. The components of the prospective payment rates for each recipient discharged from a hospital are:

- (1) The DRG assigned to that discharge;
- (2) The adjusted inflated average cost per discharge component described in paragraphs (D) to (G)(3)(b) of this rule;
- (3) Relative weights defined in rule 5101:3-2-07.3 of the Administrative Code for each DRG;
- (4) An allowance for capital described in rule 5101:3-2-07.6 of the Administrative Code;
- (5) For certain hospitals, a medical education allowance as described in rule 5101:3-2-07.7 of the Administrative Code.

## (B) Payment rates.

Payment rates consist of the components described in paragraphs (A) to (A)(5) of this rule, subject to special payment provisions for certain types of cases, as described in rules 5101:3-2-07.9 and 5101:3-2-07.11 of the Administrative Code.

## (C) Determination of average cost per discharge component.

- (1) For children's hospitals as defined in rule 5101:3-2-07.2 of the Administrative Code, the average cost per discharge component is one hundred per cent hospital specific and is determined in accordance with paragraphs (D) to (G)(3)(b) of this rule.
- (2) For out-of-state hospitals for discharges on or after July 1, 1990, the average cost per discharge component is determined in accordance with the methodology described in paragraphs (C)(1) to (C)(3)(b) of rule

5101:3-2-07.2 of the Administrative Code.

- (3) For hospitals other than those identified in paragraphs (C)(1) and (C)(2) of this rule, the average cost per discharge component will be one hundred per cent of the peer group average costs per discharge determined in accordance with paragraphs (E) to (G)(3)(a) of this rule using the peer groups defined in rule 5101:3-2-07.2 of the Administrative Code.

(D) Calculation of hospital-specific adjusted average cost per discharge.

Unless otherwise indicated, two types of source documents are used to obtain information needed to calculate the hospital-specific average cost per discharge defined in this rule. Those documents are the ODHS 2930 "Cost Report" and the HCFA 2552-85, as submitted to the department as required in rule 5101:3-2-23 of the Administrative Code. The ODHS 2930 will be adjusted by the department in accordance with rules 5101:3-2-22, 5101:3-2-23, and 5101:3-2-24 of the Administrative Code using data made available to the department as of June 15, 1987. The documents used are those reflecting costs associated with the hospital's 1985 or 1986 fiscal year reporting period. For purposes of this rule, the 1985 cost report will be used for those hospitals with fiscal periods ending September thirtieth, October thirty-first, or December thirty-first; the 1986 cost report will be used for those hospitals with fiscal periods ending March thirty-first, May thirty-first, June thirtieth, or August thirty-first. The hospital-specific average cost per discharge component is calculated in accordance with the provisions set forth in paragraphs (D)(1) to (D)(13) of this rule.

- (1) For those hospitals that have merged since the end of the fiscal year period specified in paragraph (D) of this rule and had the same fiscal reporting period, the cost reports for the hospitals will be combined. ODHS will combine the total cost, total charges, total days, medicaid charges, and medicaid discharges for the hospitals. A new report will be prepared by ODHS for the merged hospital.
- (2) For those hospitals that have merged since the end of the fiscal year period specified in paragraph (D) of this rule and had different fiscal reporting periods, the procedures described in paragraphs (D)(3) to (D)(13)(d) of this rule will be followed. At that point, the average cost per discharge for the hospitals will be combined by:
  - (a) Multiplying the average cost per discharge for each hospital derived from paragraph (D)(12)(g) of this rule, as applicable, by the number of discharges for each hospital derived from paragraph (D)(11)(a) of this rule. Round the result to the nearest whole dollar.

- (b) Sum the products.
  - (c) Divide the resulting sum by the sum of the hospital's discharges. Round the result to the nearest whole penny.
- (3) The case-mix computation for merged providers will be performed by combining the hospital's claim records as described in paragraphs (D)(13) to (D)(13)(d) of this rule.
- (4) Determination of medicaid inpatient cost adjusted to remove the cost of blood replaced by patient donors.
- (a) Identify medicaid inpatient service cost on ODHS 2930, schedule H, section I, line 1, column 12.
  - (b) Identify cost of blood replaced by donor for medicaid inpatients on ODHS 2930, schedule H, section I, line 2, column 12.
  - (c) Subtract the amount identified in paragraph (D)(4)(b) of this rule from the amount identified in paragraph (D)(4)(a) of this rule.
- (5) Determination of medicaid inpatient cost adjusted to include PSRO/UR cost separately identified.
- (a) Identify PSRO/UR cost on ODHS 2930, schedule H, section I, line 3, column 12.
  - (b) Add the amount derived from paragraph (D)(5)(a) of this rule to the amount described in paragraph (D)(4)(c) of this rule.
- (6) Determination of medicaid inpatient cost adjusted to include the cost of malpractice insurance.
- (a) Identify the hospital's malpractice insurance premium cost on HCFA 2552-85, worksheet D-8, part II, line 11, for the hospital's fiscal reporting period ending in 1986.
  - (b) Compute the hospital's per cent of medicaid inpatient charges to total charges.

- (i) Identify medicaid inpatient charges on ODHS 2930, schedule H, section I, line 11, column 12.
    - (ii) Identify total charges for all patients on ODHS 2930, schedule A, line 101B, column 1.
    - (iii) Divide the amount identified in paragraph (D)(6)(b)(i) of this rule by the amount identified in paragraph (D)(6)(b)(ii) of this rule. Round the result to six decimal places.
  - (c) For those hospitals whose fiscal year ends on or prior to December 31, 1985, divide the amount identified in paragraph (D)(6)(a) of this rule by the appropriate deflation factor described in paragraph (G)(1) of this rule. Round to the nearest whole dollar.
  - (d) Multiply the amount identified in paragraph (D)(6)(a) or (D)(6)(c) of this rule, as applicable, by the percentage derived from paragraph (D)(6)(b)(iii) of this rule. Round the result to the nearest dollar.
  - (e) Add the amount computed in paragraph (D)(6)(d) of this rule to the amount derived in paragraph (D)(5)(b) of this rule.
- (7) Determination of medicaid inpatient cost adjusted to remove the direct cost of medical education.
- (a) Identify the hospital direct medical education on the HCFA 2552-85, worksheet B, part I, line 95, columns 20, 21, 22, 23, and 24.
  - (b) Multiply the sum of the amounts in paragraph (D)(7)(a) of this rule by the percentage derived from paragraph (D)(6)(b)(iii) of this rule. Round the result to the nearest dollar.
  - (c) Subtract the amount computed in paragraph (D)(7)(b) of this rule from the amount computed in paragraph (D)(6)(e) of this rule.
- (8) Determination of medicaid inpatient cost adjusted to remove capital-related cost.
- (a) Identify the hospital capital-related cost on the HCFA 2552-85, worksheet B, part II, line 95, column 25.

- (b) Multiply the amount in paragraph (D)(8)(a) of this rule by the percentage derived from paragraph (D)(6)(b)(iii) of this rule. Round the result to the nearest dollar.
  - (c) Subtract the amount derived from paragraph (D)(8)(b) of this rule from the amount derived from paragraph (D)(7)(c) of this rule.
- (9) Determination of medicaid inpatient cost adjusted to remove the indirect cost of medical education.
  - (a) Identify the hospital's indirect medical education percentage described in rule 5101:3-2-07.7 of the Administrative Code. Add 1.00.
  - (b) Divide the amount derived from paragraph (D)(8)(c) of this rule by the factor derived in paragraph (D)(9)(a) of this rule. Round the result to the nearest dollar.
- (10) Determination of medicaid inpatient cost adjusted to remove the effects of wage differences for hospitals in the teaching hospital peer group defined in rule 5101:3-2-07.2 of the Administrative Code.
  - (a) The labor portion of hospital cost is .7439.
  - (b) Multiply the amount derived from paragraph (D)(9)(b) of this rule by the labor portion of hospital cost identified in paragraph (D)(10)(a) of this rule. Round the result to the nearest whole dollar.
  - (c) Subtract the amount derived from paragraph (D)(10)(b) of this rule from the amount derived in paragraph (D)(9)(b) of this rule.
  - (d) Divide the labor portion of medicaid inpatient cost derived from paragraph (D)(10)(b) of this rule by the wage index for urban areas as published in Federal Register, Volume 51, Number 170, Wednesday, September 3, 1986, as applicable for the geographic area in which the teaching hospital is located. Round the result to the nearest whole dollar.
  - (e) Add the amount derived from paragraph (D)(10)(c) of this rule to the amount derived from paragraph (D)(10)(d) of this rule.

- (11) Determination of medicaid inpatient hospital-specific average cost per discharge.
  - (a) Identify total medicaid discharges on adjusted ODHS 2930, schedule D, section II, line 6.
  - (b) Divide the adjusted medicaid inpatient cost derived from paragraph (D)(10)(e) or (D)(9)(b) of this rule, as applicable, by the discharges identified in paragraph (D)(11)(a) of this rule. Round the result to the nearest whole penny.
  - (c) For hospitals exceeding the limits described in section (III)(A) or (III)(B) of appendix A of this rule, the average cost per discharge is reduced by multiplying the amount derived from paragraph (D)(11)(b) of this rule is multiplied by .97.
- (12) Determination of medicaid average cost per discharge adjusted to account for varying fiscal year ends.
  - (a) Compute a daily inflation factor by dividing the inflation factor for 1986 or 1987, as applicable, described in paragraph (G)(1) of this rule, by three hundred sixty-five. Round the result to six decimal places.
  - (b) With the exception of those hospitals whose fiscal years end on August thirty-first, compute the number of days between the hospital's fiscal year end and June 30, 1986.
  - (c) With the exception of those hospitals whose fiscal years end on August thirty-first, multiply the applicable daily inflation factor from paragraph (D)(12)(a) of this rule by the days computed in paragraph (D)(12)(b) of this rule. Round the result to six decimal places, then add 1.0 to yield an inflation adjustment factor.
  - (d) With the exception of those hospitals whose fiscal years end on August thirty-first, multiply the medicaid average cost per discharge derived from paragraph (D)(11)(b) or (D)(11)(c) of this rule by the inflation factor derived from paragraph (D)(12)(c) of this rule, as applicable. Round the result to the nearest whole penny.
  - (e) For those hospitals whose fiscal year ends on August thirty-first, determine the number of days from June 30, 1986 to the hospitals' fiscal

year-end.

- (f) For those hospitals whose fiscal year ends on August thirty-first, multiply the applicable daily inflation factor derived from paragraph (D)(12)(a) of this rule by the days derived from paragraph (D)(12)(e) of this rule. Round the result to six decimal places, then add 1.0 to yield an inflation adjustment factor.
- (g) For those hospitals whose fiscal year ends on August thirty-first, divide the hospital-specific average cost per discharge derived from paragraph (D)(11)(b) or (D)(11)(c) of this rule, as applicable, by the inflation adjustment factor derived from paragraph (D)(12)(f) of this rule, as applicable. Round the result to the nearest whole penny.

(13) Determination of medicaid average cost per discharge adjusted for case mix.

For each hospital the average cost per discharge, adjusted as described in paragraphs (D)(12)(a) to (D)(12)(g) of this rule, is adjusted to remove the effects of the hospital's case mix. The data used to compute the hospital's case mix index are the hospital's claim records for discharges occurring during the hospital's fiscal period as described in paragraph (D) of this rule and paid as of May 1, 1987. For purposes of this paragraph, case mix is determined using the DRG categories and relative weights described in rule 5101:3-2-073 of the Administrative Code and includes outlier cases described in rule 5101:3-2-079 of the Administrative Code.

- (a) For each hospital the number of cases in each DRG is multiplied by the relative weight for each DRG. Round the result to five decimal places. The relative weights are those described in rule 5101:3-2-073 of the Administrative Code.
- (b) Sum the result of each computation in paragraph (D)(13)(a) of this rule.
- (c) Divide the product from paragraph (D)(13)(b) of this rule by the number of cases in hospital's sample as described in paragraph (D)(13) of this rule. Round the result to five decimal places. This produces a hospital-specific case mix index.
- (d) Divide the medicaid inpatient hospital-specific average cost per discharge derived from paragraphs (D)(12)(a) to (D)(12)(g) of this rule by the hospital-specific case mix index computed in paragraph (D)(13)(c) of this rule. Round the result to the nearest whole penny.

(E) Computation of peer group average cost per discharge.

- (1) Within each peer group (except for the children's hospital peer group as defined in rule 5101:3-2-07.2 of the Administrative Code), multiply each hospital's average cost per discharge from paragraph (D)(13)(d) of this rule by each hospital's number of medicaid discharges from paragraph (D)(11)(a) of this rule.
  - (2) Sum the results of each computation in paragraph (E)(1) of this rule.
  - (3) Sum the number of medicaid discharges described in paragraph (E)(1) of this rule.
  - (4) Divide the result derived from paragraph (E)(2) of this rule by the result derived from paragraph (E)(3) of this rule. Round the result to the nearest whole penny.
- (F) Adjustments to the peer group average cost per discharge component described in paragraphs (E)(1) to (E)(4) of this rule and each children's hospital average cost per discharge component described in paragraph (D)(13)(d) of this rule are those described in paragraphs (F)(1) to (F)(3) of this rule.
- (1) Disproportionate share payments will be made in accordance with rules 5101:3-2-09 and 5101:3-2-10 of the Administrative Code.
  - (2) An outlier set-aside is determined for each peer group except the teaching hospital and children's hospitals peer groups as described in rule 5101:3-2-07.2 of the Administrative Code. For teaching hospitals and children's hospitals identified in rule 5101:3-2-07.2 of the Administrative Code, an amount is calculated using each hospital's information to determine a hospital-specific group set-aside amount. This set-aside amount is calculated using the methodology described in paragraphs (F)(2)(a) to (F)(2)(f) of this rule.
    - (a) The additional payments that would be paid for outlier cases for discharges on and after July 1, 1985 to June 30, 1986 is determined using payment rates developed in accordance with this rule except that payment rates do not reflect the adjustment described in paragraph (F)(2)(f) of this rule. Relative weights as described in rule 5101:3-2-07.3 of the Administrative Code, and the day thresholds, cost thresholds, and geometric mean length of stay, excluding outliers, for each DRG as described in rule 5101:3-2-07.9 of the Administrative



Code are used.

- (b) For each hospital, the total additional payments made for outlier cases is divided by the sum of the total payment amount for all cases in that hospital, less payment amounts for teaching and capital allowances as described in paragraphs (H)(1) and (H)(2) of this rule and payments made for day outliers as described in paragraph (F)(2)(a) of this rule. The resulting per cent is rounded to four decimal places and represents the hospital-specific outlier per cent.
- (c) For all hospitals, the total additional payment for outlier cases is calculated by summing each hospital's additional payments described in paragraph (F)(2)(a) of this rule and is divided by the summed total payment amounts for all cases in all hospitals, less payment amounts for teaching and capital allowances as described in paragraphs (H)(1) and (H)(2) of this rule, plus total payments in all hospitals for day outliers. The resulting per cent is rounded to four decimal places and represents the statewide average outlier per cent.
- (d) For hospitals which have a hospital-specific outlier per cent (as described in paragraph (F)(2)(b) of this rule) over the statewide average outlier per cent as described in paragraph (F)(2)(c) of this rule, the outlier payments that are used in the peer group calculation described in paragraph (F)(2)(e) of this rule are capped by multiplying the hospital-specific additional payment amount described in paragraph (F)(2)(a) of this rule by seventy-five per cent.
- (e) The outlier set-aside amount is calculated on a peer group basis using the following methodology:
  - (i) For each peer group except the teaching hospital and children's hospital peer groups as described in rule 5101:3-2-07.2 of the Administrative Code and for each teaching hospital and children's hospital (identified in rule 5101:3-2-07.2 of the Administrative Code), sum the total additional payments for outliers as described in paragraph (F)(2)(a) or (F)(2)(d) of this rule, as applicable.
  - (ii) For each peer group except the teaching hospital and children's hospital peer groups and for each teaching and children's hospital, divide the sum from paragraph (F)(2)(e)(i) of this rule by the sum of the total payment amount, less payment amounts for teaching and capital allowances as described in paragraphs (H)(1) and (H)(2) of this rule, plus total day outlier payments.

- (f) The outlier adjustment amount is calculated by multiplying the percentage described in paragraph (F)(2)(e)(ii) of this rule by the applicable average cost per discharge component for each peer group as described in paragraphs (E) to (E)(4) of this rule and for each children's hospital as described in paragraph (D)(13)(d) of this rule. Round the result to the nearest whole penny to determine the outlier adjustment amount. Subtract the outlier adjustment amount from the applicable average cost per discharge component described in paragraph (F)(1)(a) of this rule for discharges occurring on and after July 1, 1988 and prior to February 1, 1989. For discharges occurring on and after February 1, 1989, subtract the outlier adjustment amount from the average cost per discharge component for each peer group as described in paragraph (E)(4) of this rule and for each children's hospital as described in paragraph (D)(13)(d) of this rule. Round the result to the nearest whole penny.
- (3) For purposes of coding adjustment, the applicable average cost per discharge component described in paragraph (F) of this rule is divided by 1.005. Round the result to the nearest whole penny.
- (4) For Ohio hospitals meeting the teaching hospital peer group criteria defined in rule 5101:3-2-07.2 of the Administrative Code, the peer group average cost per discharge described in paragraph (F)(3) of this rule is multiplied by a wage factor and rounded to the nearest whole penny. The wage factor is determined by dividing the amount derived from paragraph (D)(9)(b) of this rule by the amount derived from paragraph (D)(10)(e) of this rule, rounded to six decimal places.

(G) Adjustments for inflation.

In calculating the prospective payment rate, it is necessary to adjust costs to reflect inflation at various points in the calculation.

- (1) In order to assure hospitals an annual allowance for inflation, an inflation factor is developed. The Ohio specific "inflation factor" is a weighted average of twenty-three price and wage indexes, either regional or national. The weights are those published shown below. Price growth increase values for these weighted items are determined by DRI-WEFA for the department. Annual inflation factors are derived from summing the result of the following calculation for each item and adding one to produce a factor:

Factor X Weight X Projected Price Increase

The categories and indexes are those identified in paragraphs (G)(1)(a) to (G)(1)(t) of this rule. When more than one period is being inflated, annual factors are multiplied by one another to produce a composite factor.

- (a) Wages: average hourly earnings (AHE), general medical and surgical hospitals, midwest region. The weight is .4339.
- (b) Benefits: supplements to wages and salaries per employee, east north central (ENC). The weight is .0949.
- (c) Professional fees, nonmedical: "Employment Cost Index" (ECI) wages and salaries, midwest region. The weight is .0213.
- (d) Malpractice insurance: Health care financing administration, professional liability insurance premium index. The weight is .0119.
- (e) Utilities: producer price index (PPI) - electricity, commercial sector, ENC (the weight is .0093); price of natural gas for the commercial sector, ENC (the weight is .0037); "Consumer Price Index - All Urban" CPIU - water and sewerage maintenance, U.S. (the weight is .0025). The combined weight is .0155.
- (f) Prescription pharmaceuticals: PPI - pharmaceutical preparations, prescription (chemicals), U.S. The weight is .0416.
- (g) Food: direct purchase, PPI - processed foods and feeds, U.S. (the weight is .0231); contract purchase, CPIU, food at home, ENC (the weight is .0107).
- (h) Chemicals: PPI - industrial chemicals, U.S. The weight is .0367.
- (i) Medical instruments: PPI - surgical and medical instruments and apparatus, U.S. The weight is .0308.
- (j) Photographic supplies: PPI - photographic supplies, U.S. the weight is .0039.
- (k) Rubber and plastics: PPI - rubber and plastics products, U.S. The weight is .0475.
- (l) Paper products: PPI - paper and paperboard, U.S. The weight is .0208.

- (m) Apparel: PPI - textile products and apparel, U.S. The weight is .0087.
- (n) Machinery and equipment: PPI - machinery and equipment, U.S. The weight is .0021.
- (o) Miscellaneous products: PPI - finished goods, U.S. The weight is .0224.
- (p) Postage: CPIU - postage, U.S. The weight is .0027.
- (q) Telephone services: CPIU - telephone services, U.S. The weight is .0058.
- (r) All other, labor intensive: ECI - compensation business services, U.S. The weight is .0728.
- (s) All other, non-labor intensive: CPIU - all items, ENC. The Weight is .0080.
- (t) Miscellaneous: CPIU - medical care, ENC. The weight is .0849.

(2) Application of estimated inflation factors.

The inflation values applied at the beginning of each rate year to produce a new composite inflation factor shall be based on the estimate of price indicators outlined in paragraphs (G) and (G)(1) of this rule that have been supplied to the department by three months prior to the beginning of a new rate year, except for the rate year beginning January 1, 2002 and ending December 31, 2002 when the composite inflation factor shall be adjusted to market basket minus 1.00 per cent. For the rate year beginning January 1, 2003 and ending December 31, 2003, there shall be no adjustment from January 1, 2003 to May 31, 2003. ~~From June 1, 2003 to December 31, 2003, the composite inflation factor shall be adjusted to 1.029 and shall be implemented on June 1, 2003.~~ to September 1, 2003. The inflation factors shall be uniformly applied to the average cost per discharge component and shall remain fixed for that rate period.

- (3) Calculation of inflated peer group adjusted average cost per discharge, including each children's hospital adjusted average cost per discharge.
- (a) For each hospital/peer group, the peer group adjusted average cost per discharge derived from paragraph (F)(3) or (F)(4) of this rule, as applicable, is multiplied by an inflation factor derived from paragraph

(G)(2) of this rule. Round the result to the nearest whole penny.

(b) For each children's hospital as defined in rule 5101:3-2-07.2 of the Administrative Code, the hospital-specific adjusted average cost per discharge derived from paragraph (F)(4) of this rule is multiplied by an inflation factor derived from paragraph (G)(2) of this rule. Round the result to the nearest whole penny.

(H) Addition of hospital-specific allowances.

Hospital-specific allowances include those described in paragraphs (H)(1) to (H)(3) of this rule.

(1) For Ohio hospitals having approved teaching programs as defined in 42 CFR 405.421, an education allowance amount is added. The medical education allowance amount is described in rule 5101:3-2-07.7 of the Administrative Code.

(2) For Ohio hospitals, a hospital-specific capital allowance amount is added. The capital allowance amount is described in rule 5101:3-2-07.6 of the Administrative Code.

(3) For non-Ohio hospitals, a single capital allowance amount is added. The capital allowance amount is described in rule 5101:3-2-07.6 of the Administrative Code.

(I) The final prospective payment rate is calculated by multiplying the adjusted inflated average cost per discharge, derived from paragraphs (G)(3)(a) and (G)(3)(b) of this rule, by the relative weight appropriate to the DRG (see rule 5101:3-2-07.3 of the Administrative Code), rounding the result to the nearest whole penny, then adding all applicable hospital-specific allowance amounts described in paragraphs (H)(1) to (H)(3) of this rule, i.e.:

Adjusted Inflated Average Cost Per Discharge	X	DRG Relative Weight	+	Hospital-Specific Capital Allowance (as applicable)	+	Hospital-Specific Education Allowance (as applicable)	=	Final Prospective Payment Rate
--	---	---------------------	---	---	---	---	---	--------------------------------

Effective: 05/30/2003

CERTIFIED ELECTRONICALLY

---

Certification

05/30/2003

---

Date

Promulgated Under: 119.03  
Statutory Authority: 5111.01, 5111.02  
Rule Amplifies: 5111.01, 5112.02  
Prior Effective Dates: 10/4/84, 7/1/85, 7/5/86,  
10/19/87, 7/1/88 (Emer.),  
9/29/88, 7/1/89, 6/29/90  
(Emer.), 9/23/90, 9/3/91  
(Emer.), 11/10/91, 7/1/92,  
7/1/93, 12/29/95 (Emer.),  
3/16/96, 7/1/96, 7/2/98,  
01/01/00, 01/01/02, 12/31/02  
(Emer), 02/06/03