

CMS Standard UPL Template Formulas

This document is intended to provide guidance on standard UPL formulas that a State may use to demonstrate their UPLs and enhanced practitioner payment limit. Here you will find a crosswalk between the names of variables and the variable numbers as identified in the OMB-approved templates. States are expected to utilize these methodologies to demonstrate their UPLs and enhanced practitioner payment limit. Acronyms are identified at the end of this document. Questions about the formulas may be directed to the [Medicaid UPL Mailbox](#).

Inpatient Hospital Services

Inpatient Cost UPL Template Description

$$UPL = \left(\left(\frac{MCR\ Costs}{MCR\ Charges} \right) * MCD\ Charges * UPL\ Inflation \right) + MCD\ Provider\ Tax\ Cost + Other\ Adj\ to\ UPL\ Amount$$

Inpatient Cost UPL Template Calculation

$$UPL = \left(\left(\frac{var\ 203}{var\ 204} \right) * var\ 301 * var\ 405 \right) + var\ 401 + var\ 402$$

Inpatient Payment UPL Template Description

$$UPL = \left(\left(\frac{MCR\ Payments}{MCR\ Charges} \right) * MCD\ Charges * UPL\ Inflation \right) + Other\ Adj\ to\ UPL\ Amount$$

Inpatient Payment UPL Template Calculation

$$UPL = \left(\left(\frac{var\ 205}{var\ 204} \right) * var\ 301 * var\ 405 \right) + var\ 402$$

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Inpatient Per Diem UPL Template Description

$$UPL = \left(\left(\frac{MCR \text{ Cost or Payments}}{MCR \text{ Days}} \right) * MCD \text{ Days} * UPL \text{ Inflation} \right) + \text{Other Adj to UPL Amount}$$

Inpatient Per Diem UPL Template Calculation

$$UPL = \left(\left(\frac{var \ 203 \text{ or } var \ 205}{var \ 210} \right) * var \ 310 * var \ 405 \right) + var \ 402$$

Inpatient DRG UPL Template Description

$$UPL = \left(MCR \text{ Payments Subject to CMI} * \left(\frac{MCD \text{ CMI}}{MCR \text{ CMI}} \right) + MCR \text{ Payments Not Subject to CMI} \right) * \frac{MCD \text{ Discharges}}{MCR \text{ Discharges}} * MCR \text{ Inflation} + \text{Other Adj to UPL Amount}$$

Inpatient DRG UPL Template Calculation

$$UPL = \left(var \ 205.1 * \left(\frac{var \ 305}{var \ 207} \right) + var \ 205.2 \right) * \frac{var \ 304}{var \ 206} * var \ 405 + var \ 402$$

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Outpatient Hospital Services

Outpatient Cost UPL Template Description

$$UPL = \left(\left(\frac{MCR\ Costs}{MCR\ Charges} \right) * MCD\ Charges * UPL\ Inflation \right) + MCD\ Provider\ Tax\ Cost + Other\ Adj\ to\ UPL\ Amount$$

Outpatient Cost UPL Template Calculation

$$UPL = \left(\left(\frac{var\ 203}{var\ 204} \right) * var\ 301 * var\ 405 \right) + var\ 401 + var\ 402$$

Outpatient Payment UPL Template Description

$$UPL = \left(\left(\frac{MCR\ Payments}{MCR\ Charges} \right) * MCD\ Charges * UPL\ Inflation \right) + Other\ Adj\ to\ UPL\ Amount$$

Outpatient Payment UPL Template Calculation

$$UPL = \left(\left(\frac{var\ 205}{var\ 204} \right) * var\ 301 * var\ 405 \right) + var\ 402$$

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Nursing Facility Services

Nursing Facility Cost UPL Template Description

$UPL = ((MCR \text{ Per Diem} + Adj \text{ to MCR Per Diem \#1} + Adj \text{ to MCR Per Diem \#2}) * UPL \text{ Inflation}) * MCD \text{ Days}$
 $+ MCD \text{ Provider Tax Cost} + Other \text{ Adj to UPL Amount}$

Nursing Facility Cost UPL Template Calculation

$UPL = ((var \ 211 + var \ 212.1 + var \ 212.2) * var \ 405) * var \ 310 + var \ 401 + var \ 402$

Nursing Facility RUGs UPL Template Description

$UPL = (Avg \ MCR \ RUGs \ Rate \ Per \ Diem + Adj \ to \ RUGs \ Rate \ \#1 + Adj \ to \ RUGs \ Rate \ \#2) * UPL \ Inflation * MCD \ Day$
 $+ Other \ Adj \ to \ UPL \ Amount$

Nursing Facility RUGs UPL Template Calculation

$UPL = (var \ 216 + var \ 219.1 + var \ 219.2) * var \ 405 * var \ 310 + var \ 402$

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Nursing Facility Per Diem UPL Template Description

$$UPL = (MCR \text{ Per Diem} + \text{Adj to MCR Per Diem \#1} + \text{Adj to MCR Per Diem \#2}) * \frac{MCD \text{ CMI}}{MCR \text{ CMI}} * UPL \text{ Inflation} * MCD \text{ Days} \\ + \text{Other Adj To UPL Amount}$$

Nursing Facility Per Diem UPL Template Calculation

$$UPL = (var \ 211 + var \ 212.1 + var \ 212.2) * \frac{var \ 305}{var \ 207} * var \ 405 * var \ 310 + var \ 402$$

Intermediate Care Facility for Individuals with Intellectual Disabilities (ICF/IID) Services

ICF/IID UPL Template Description

$$UPL = ((MCR \text{ Per Diem} + \text{Adj to MCR Per Diem \#1} + \text{Adj to MCR Per Diem \#2}) * UPL \text{ Inflation}) * MCD \text{ Days} \\ + MCD \text{ Provider Tax Cost} + \text{Other Adj to UPL Amount}$$

ICF/IID UPL Template Calculation

$$UPL = ((var \ 211 + var \ 212.1 + var \ 212.2) * var \ 405) * var \ 310 + var \ 401 + var \ 402$$

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Institutions of Mental Disease (IMD) Services

IMD UPL Template Description

$$UPL = ((\text{Per Diem Charge or Cost or Payment} + \text{Adj to Per Diem}) * \text{UPL Inflation}) * \text{MCD Days} \\ + \text{MCD Provider Tax Cost} + \text{Other Adj to UPL Amount}$$

IMD UPL Template Calculation

$$UPL = ((\text{var 223} + \text{var 212.3}) * \text{var 405}) * \text{var 310} + \text{var 401} + \text{var 402}$$

Psychiatric Residential Treatment Facility (PRTF) Services

PRTF UPL Template Description

$$UPL = ((\text{Per Diem Charge or Cost or Payment} + \text{Adj to Per Diem}) * \text{UPL Inflation}) * \text{MCD Days} \\ + \text{Other Adj to UPL Amount}$$

PRTF UPL Template Calculation

$$UPL = ((\text{var 223} + \text{var 212.3}) * \text{var 405}) * \text{var 310} + \text{var 402}$$

Note: The PRTF UPL is a payment limit calculated on the basis of each facility's charges; the State must demonstrate that payment on a per facility basis does not exceed charges. A State may not borrow UPL room from one provider to another.

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Clinic Services

Clinic Cost-based UPL Template Description

$$UPL = \left(\left(\frac{MCR\ Costs}{MCR\ Charges} \right) * MCD\ Charges * UPL\ Inflation \right) + Other\ Adj\ to\ UPL\ Amount$$

Clinic Cost-based UPL Template Calculation

$$UPL = \left(\left(\frac{var\ 203}{var\ 204} \right) * var\ 301 * var\ 405 \right) + var\ 402$$

Clinic Payment-based UPL Template Description

$$UPL = \left(\left(\frac{MCR\ Payments}{MCR\ Charges} \right) * MCD\ Charges * UPL\ Inflation \right) + Other\ Adj\ to\ UPL\ Amount$$

Clinic Payment-based UPL Template Calculation

$$UPL = \left(\left(\frac{var\ 205}{var\ 204} \right) * var\ 301 * var\ 405 \right) + var\ 402$$

Note: The clinic UPL demonstration applies to services of freestanding clinics not affiliated with hospitals. The clinic services UPL is generally derived from state-developed cost reports, not imputed on the basis of total cost and total charges reported on Medicare Hospital Cost Report CMS Form 2552-10. Similar to the CMS Form 2552-10, data reported at variables 203, 204, and 205 are reported inclusive of all payers, not just Medicaid. While variables 203, 204, and 205 reference Medicare, it is understood that for the purpose of demonstrating the clinic service UPL, costs, payments, and charges actually refer to the amounts reported in the clinic cost report. To derive the imputed Medicaid cost or payment according to Medicare cost principles, the all-inclusive cost-to-charge ratio or payment-to-charge ratio, is multiplied by Medicaid charges for the charges incurred over the dates of service covered by the demonstration.

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Clinic UPL Template Description if Using Fee Schedule

$$UPL = (MCR\ Payments * UPL\ Inflation) + Other\ Adj\ to\ UPL\ Amount$$

Clinic UPL Template Calculation if Using Fee Schedule

$$UPL = (var\ 205 * var\ 405) + var\ 402$$

Practitioner/Physician Services

Enhanced Practitioner Payment Template Description if Using ACR Approach

$$Enhanced\ Payment\ Amount = Average\ Commercial\ Rate$$

Enhanced Practitioner Payment Template Calculation if Using ACR Approach

$$Enhanced\ Payment\ Amount\ (var\ 423) = var\ 422$$

Note: The UPL based on the Average Commercial Rate (ACR) is reported in the template under variable 422 using data derived from the state's worksheets.

Enhanced Practitioner Payment Template Description if Using MCR Equivalent of ACR Approach

$$Enhanced\ Payment\ Amount = MCR\ Payment\ Amount * ACR\ as\ a\ Percent\ of\ MCR\ Rate$$

Physician Enhanced Payment Template Calculation if Using MCR Equivalent of ACR Approach

$$Enhanced\ Payment\ Amount\ (var\ 423) = var\ 225 * var\ 226$$

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Appendix A: Acronyms

Acronym	Definition
ACR	Average Commercial Rate
CMI	Case Mix Index
MCD	Medicaid
MCR	Medicare
RUGs	Resource Utilization Group
UPL	Upper Payment Limit
Var	Variable