HealthPartners®

Total Care Relative Resource Value (TCRRV™)
Non-SAS User Instructions

Table of Contents

Description

Overview of TCRRV™ Application

Definitions

TCRRV™ Application (Components of Care Calculations)

1. Inpatient TCRRVs™
2. Outpatient TCRRVs™
3. Professional TCRRVs™
4. Pharmacy TCRRVs™

Multiple Year TCRRV™ Application

TCRRV™ Tables

Selected Professional TCRRV™ Modifiers

Align Price Point Factors

User Defined Paid Adjustment Factors

Description

The Total Care Relative Resource Values (TCRRVs™) are a comprehensive set of relative values designed to evaluate resource use across all types of medical services, procedures, and places of service. The values are independent of price and can be used to evaluate the resource consumption of providers, hospitals, physicians, and health plans against their peers in treating risk adjusted populations/conditions. TCRRVs™ are commonly used to support affordability initiatives, to identify instances of overuse/efficiency, and to measure price variations.

Overview of TCRRV™ Application

1. The TCRRVs™ are applied at the procedure or service level for each component of care with the exception of inpatient, which is applied at the full admission level.
    a. The user's data will need to be aggregated to the service line level for the outpatient and professional data, to the full admission level for inpatient, and to the prescription level for pharmacy.
    b. There should be no negative claim values within the data (e.g. no adjustments).
2. There is a TCRRV™ lookup table for each component of care where each claim's procedure is matched with the corresponding TCRRVs™ weight.
    a. There are three sets of TCRRV™ tables provided that are calibrated to the standard CMS weight files for the most current three years (e.g. in 2019, the files are 2019, 2018, and 2017). The files are independent across grouper versions; therefore TCRRVs™ files between versions cannot be compared.
    b. The TCRRV™ thresholds are also adjusted to the year of the weight files so the user can apply the TCRRVs™ to their data matching the desired year.

© HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

Then, if applicable, TCRRV™ weights are applied to the claim, which are tested for accuracy, and a total TCRRV™ is calculated.

c. If the totality of the analysis is confined to a single calendar year, it is recommended that the year of the data and the year of the TCRRV™ weight file are in-sync to ensure proper threshold application.

d. If the analysis spans multiple years, it is recommended that a single TCRRV™ set is used throughout the entire analysis. This will ensure that the resources assigned to a service are consistent over time. Using a common TCRRV™ set allows the user to measure the trend of resource use rather than have it be influenced by changes in the CMS weights.

e. When applying TCRRVs™ across multiple years, it is recommended that the year of the TCRRV™ set used matches the year of the most current data within the analysis. The process to assign the TCRRV™ set to prior year changes slightly and is documented in the Multiple Year TCRRV™ Application section.

3. The final step is to adjust the TCRRVs™ to the paid amount for each of the components of care using factors created from the user's data, which is outlined in the User Defined Paid Adjustment Factors section. This portion is optional and if omitted, will result in component of care price points that will vary from 1.00.

Definitions

Components of Care (or service category assigned to the service line)

Inpatient	Overnight stay in the hospital, either non-acute or acute submitted on a CMS 1450 claim form.
Outpatient	All non-inpatient claims submitted on CMS 1450 forms (without a room and board revenue code).
Professional	Claims submitted on a CMS 1500 form and place of service is either non-facility or facility.
Pharmacy	Pharmacy claims, optional.

Encounter Number / Visit

A unique number to identify a claim for an outpatient visit, professional visit, inpatient admission, or pharmacy prescription. A single visit can include multiple services. This would account for inpatient cycle bills and original, void, and replacement claims/transactions.

Encounter Series Number / Service Line

A unique number identifying each service performed during the visit (i.e. encounter). This would also account for inpatient cycle bills and original, void, and replacement claims/transactions.

Units

Units field from the claim or length of stay for inpatient.

- Inpatient acute length of stay on the final cycle bill of the inpatient admission (i.e. subtract the admission date from the discharge date).
- Professional units field on the claim form.
- Outpatient units field on the claim form.
- Pharmacy pill count.

© HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

Modifiers	Procedure code modifiers are utilized in the outpatient and professional settings.
User Defined Paid Adjustment Factor	The user can create their own paid adjustment factors to ensure the TCRRVs™ are in the same proportion as the paid amounts across all components of care. • Outlined in the User Defined Paid Adjustment Factors section.
TCRRV™	Total Care Relative Resource Value™ (i.e. TCRRV).

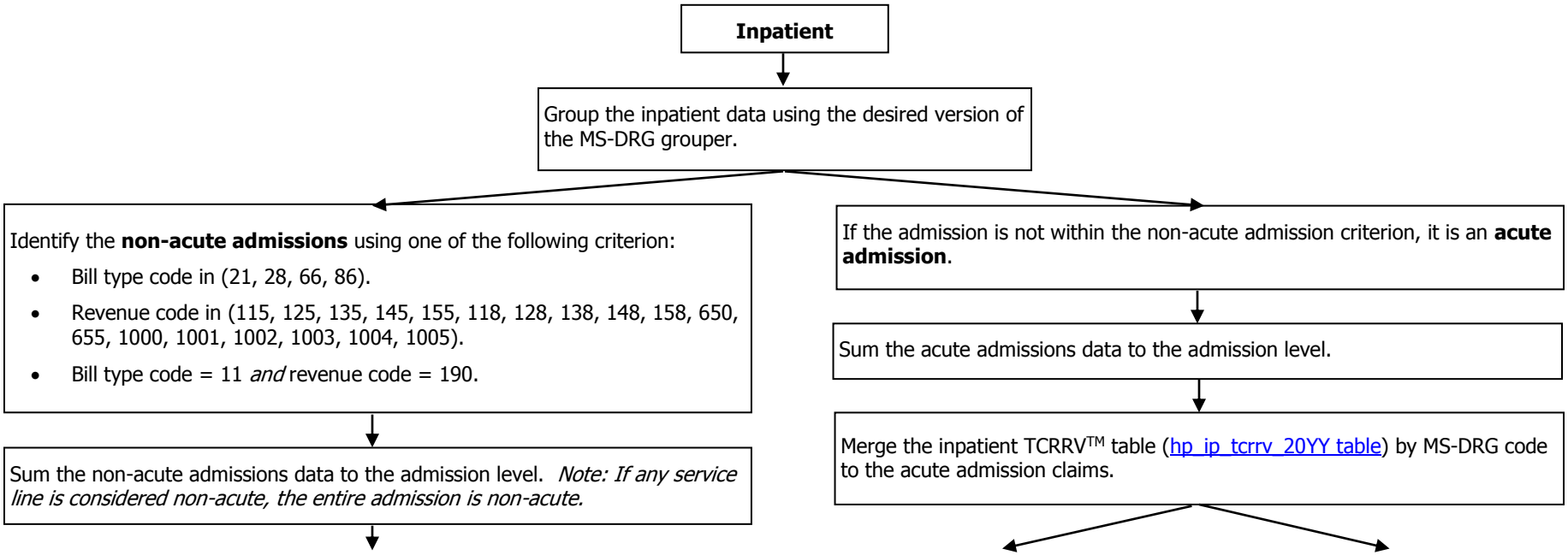
© HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

TCRRV™ Application

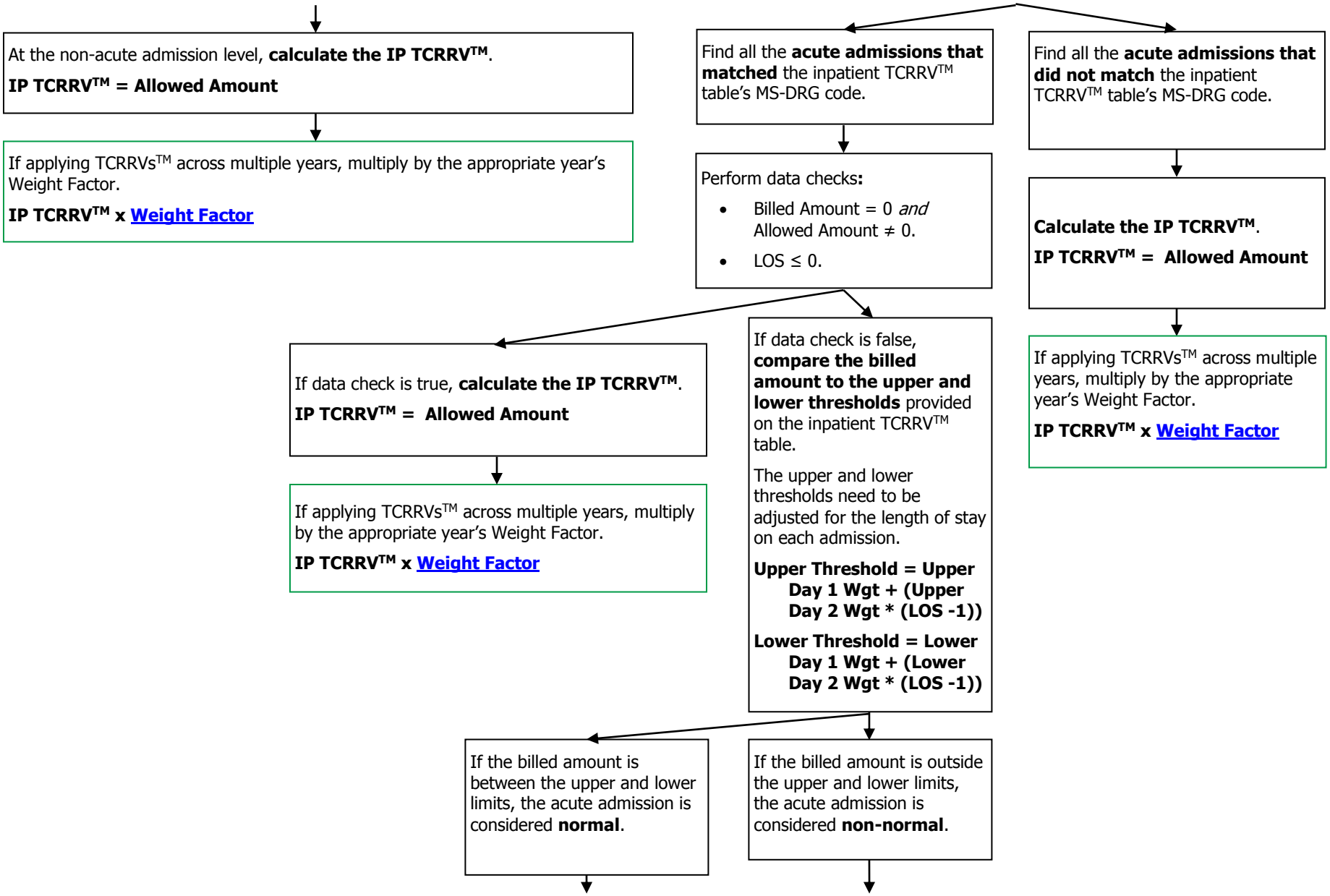
Step by step instructions on how to apply the TCRRVs™ to each component of care (i.e. inpatient, outpatient, professional, and pharmacy).

Inpatient – Calculating the Inpatient TCRRV™

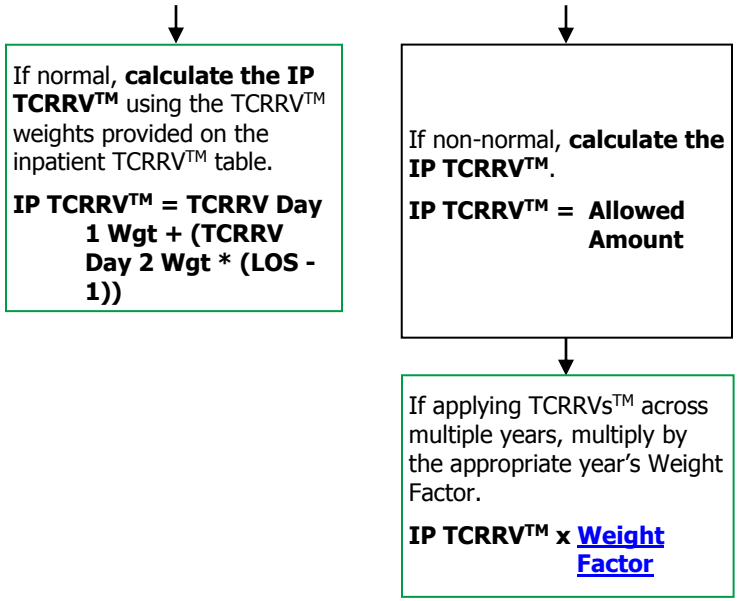
1. Filter the claims data to inpatient using the following logic:
    a. Claims submitted on CMS 1450 claim form.
    b. Inpatient claims are identified at the header record (i.e. all service lines) by *one of the following* criterion on any one line of the claim. *Note: Bill type code is the first 2 bytes of the type of bill code on a 1450 claim form.*
        i. Room and board revenue codes: 100-189, 200-219, 650, 655, 1000-1005.
        ii. Bill type code: 21, 28, 66, 86.
        iii. Bill type code = 11 *and* revenue code = 190.
2. If inpatient, do the following to find the inpatient TCRRV™:



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

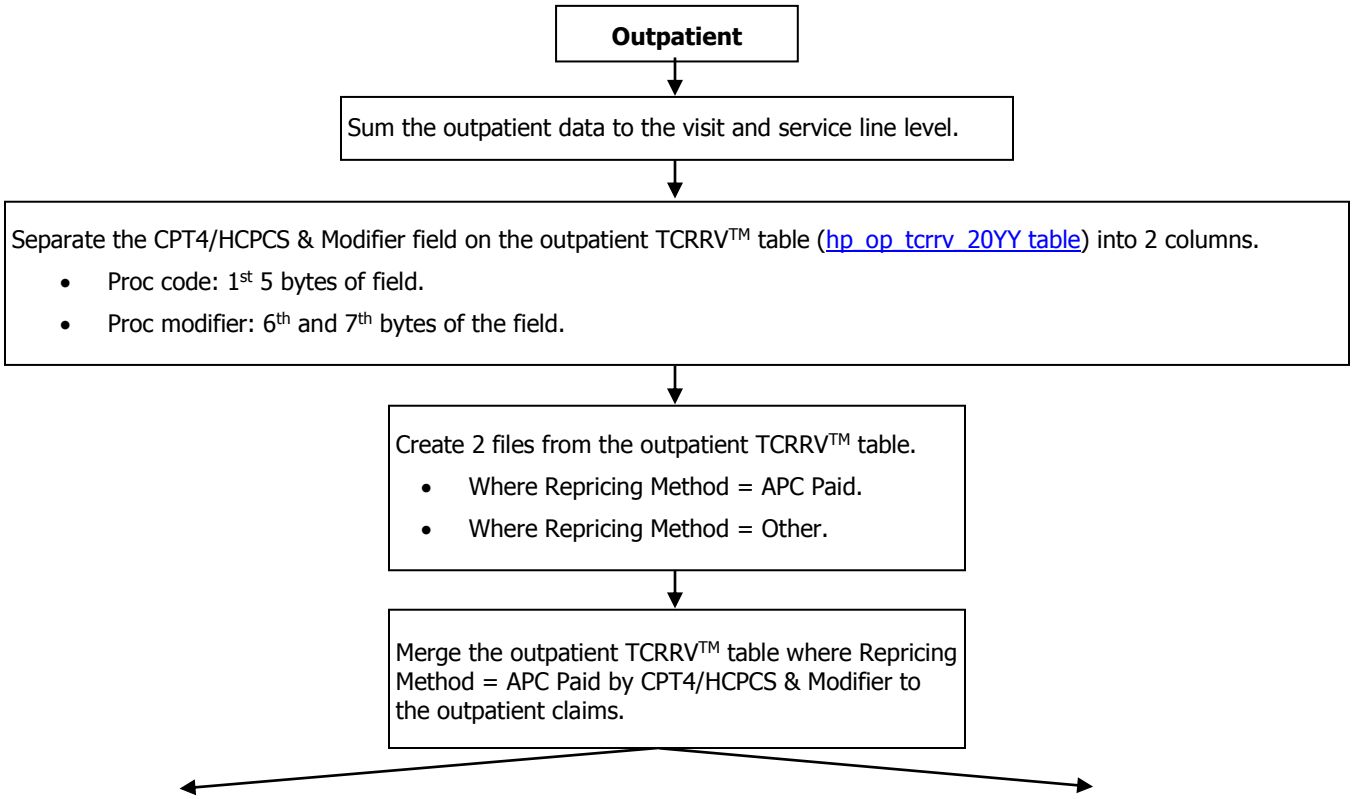


© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

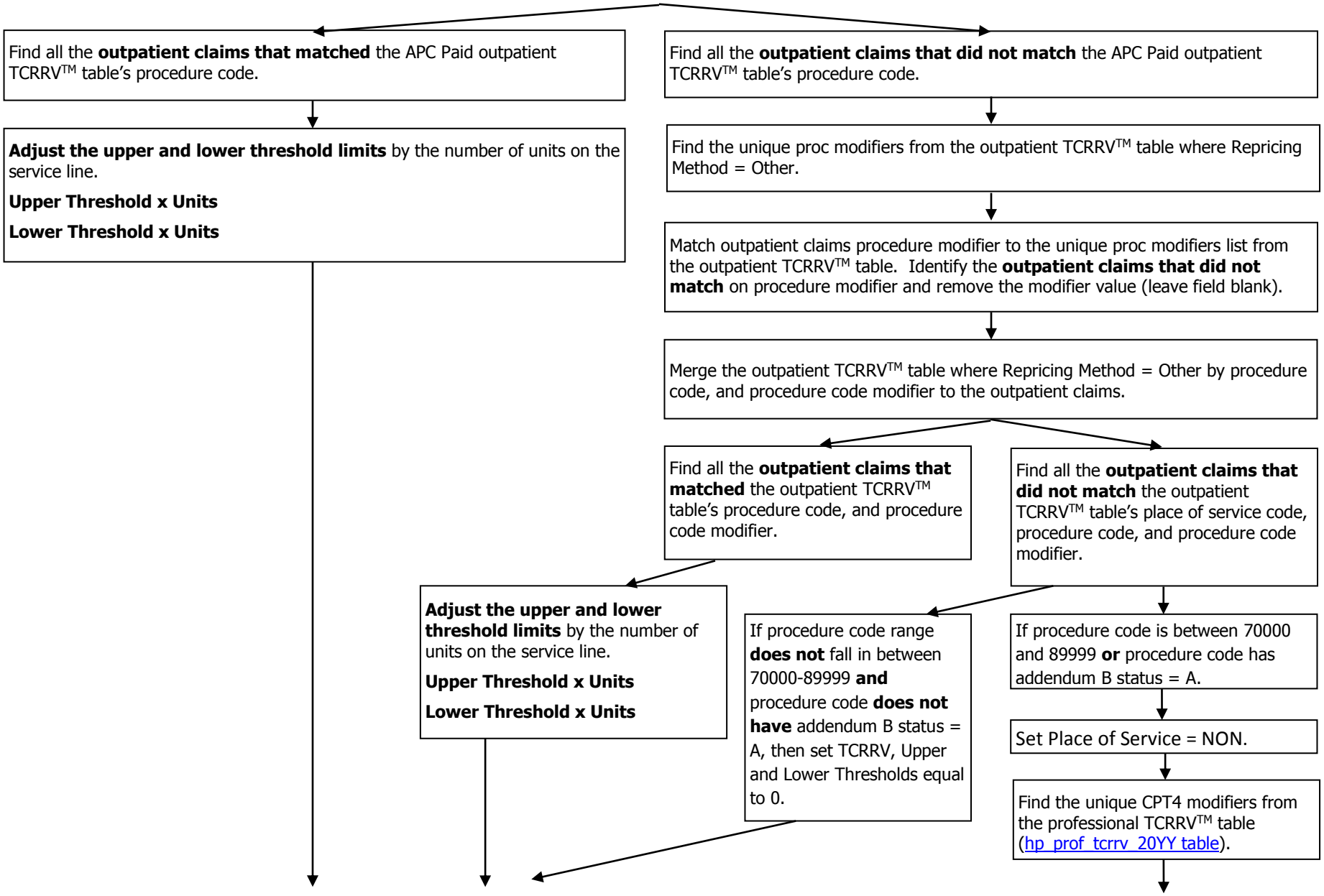
HealthPartners®

Outpatient – Calculating the Outpatient TCRRV™

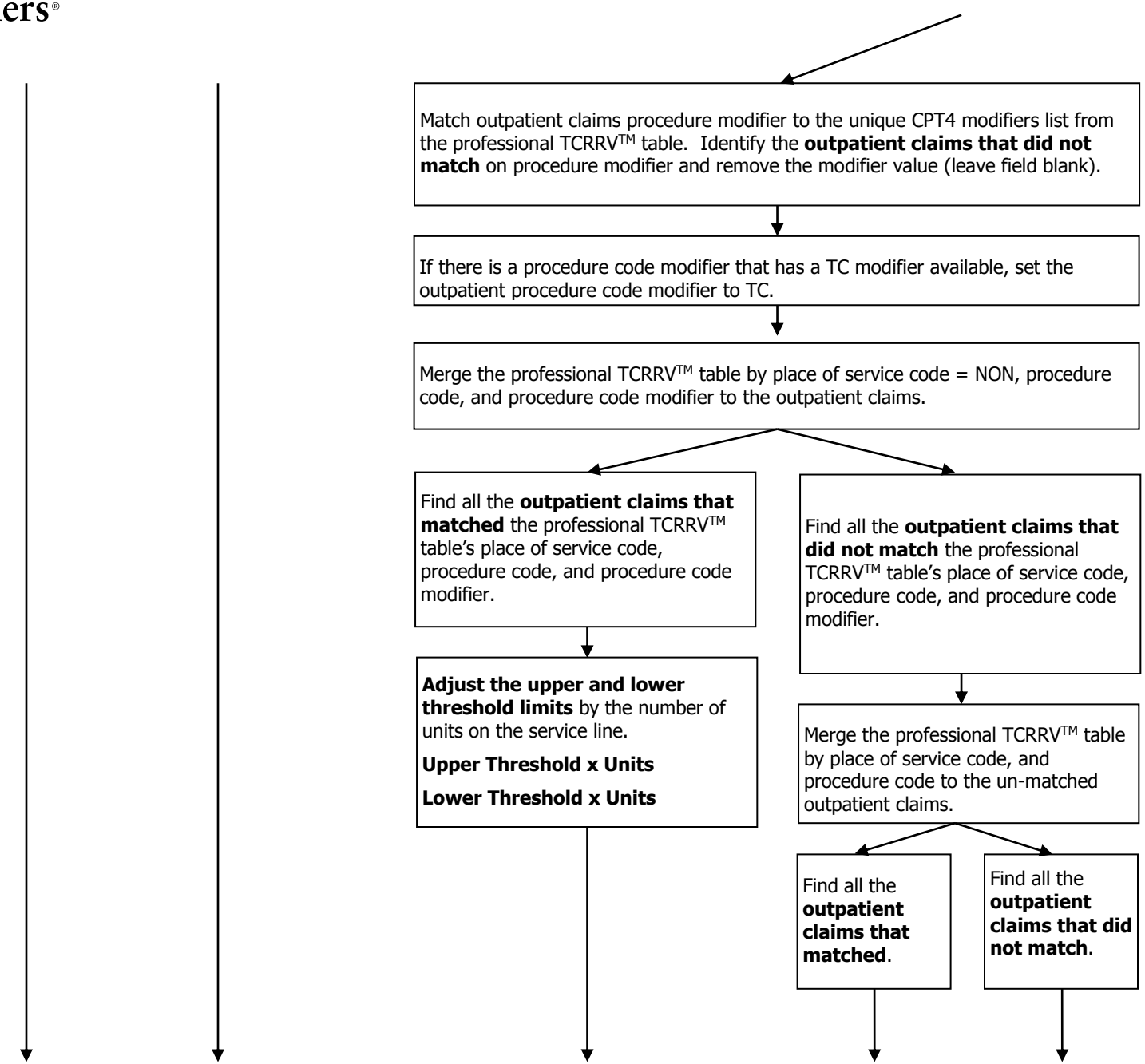
1. Filter the claims data to outpatient using the following logic:
    a. The remaining non-inpatient claims submitted on CMS 1450 claim form.
    b. Inpatient claims are identified at the header record (i.e. all service lines) by *one of the following* criterion on any one line of the claim. *Note: bill type code is the first 2 bytes of the type of bill code on a 1450 claim form.*
        i. Room and board revenue codes: 100-189, 200-219, 650, 655, 1000-1005.
        ii. Bill type code: 21, 28, 66, 86.
        iii. Bill type code = 11 *and* revenue code = 190.
2. If outpatient, do the following to find the outpatient TCRRV™:



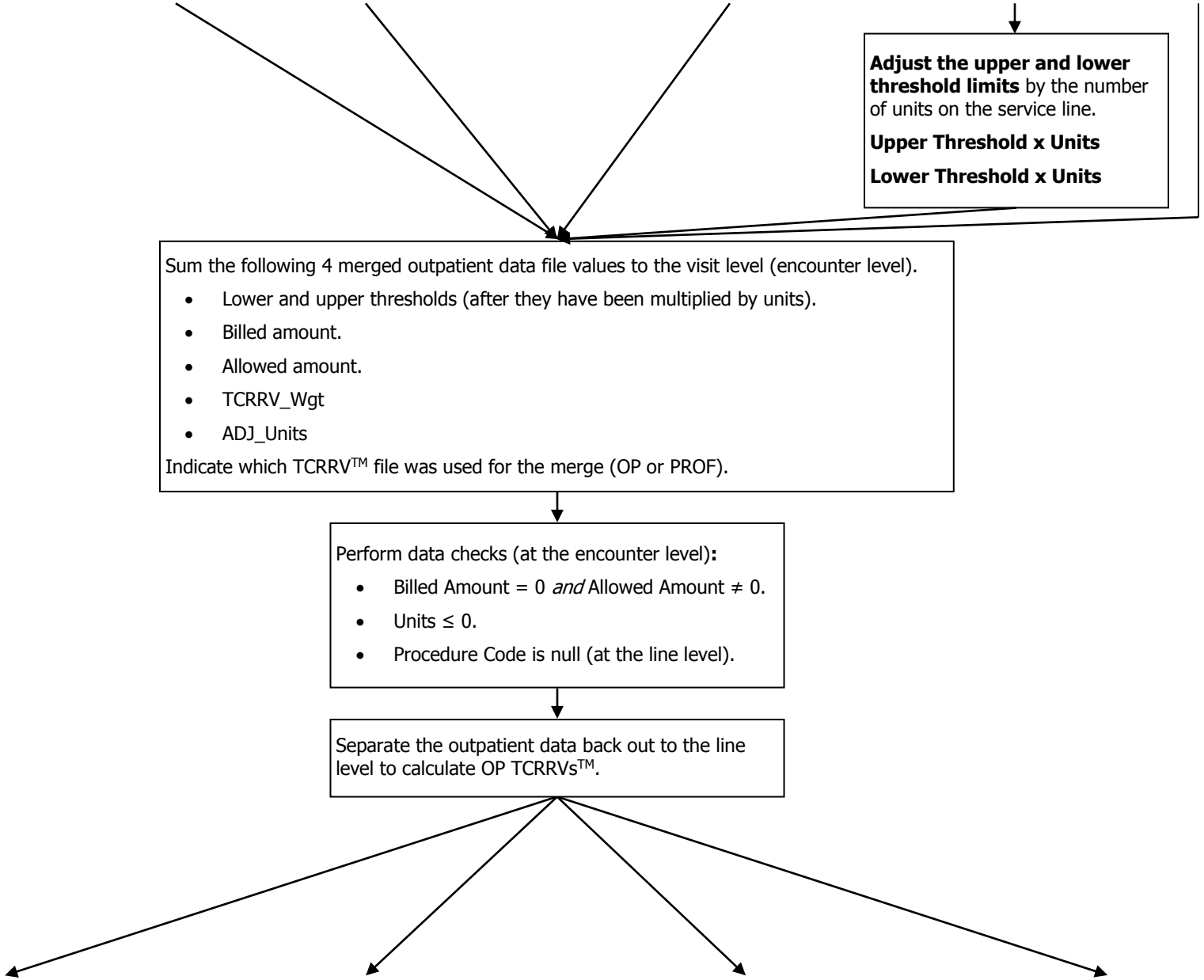
© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



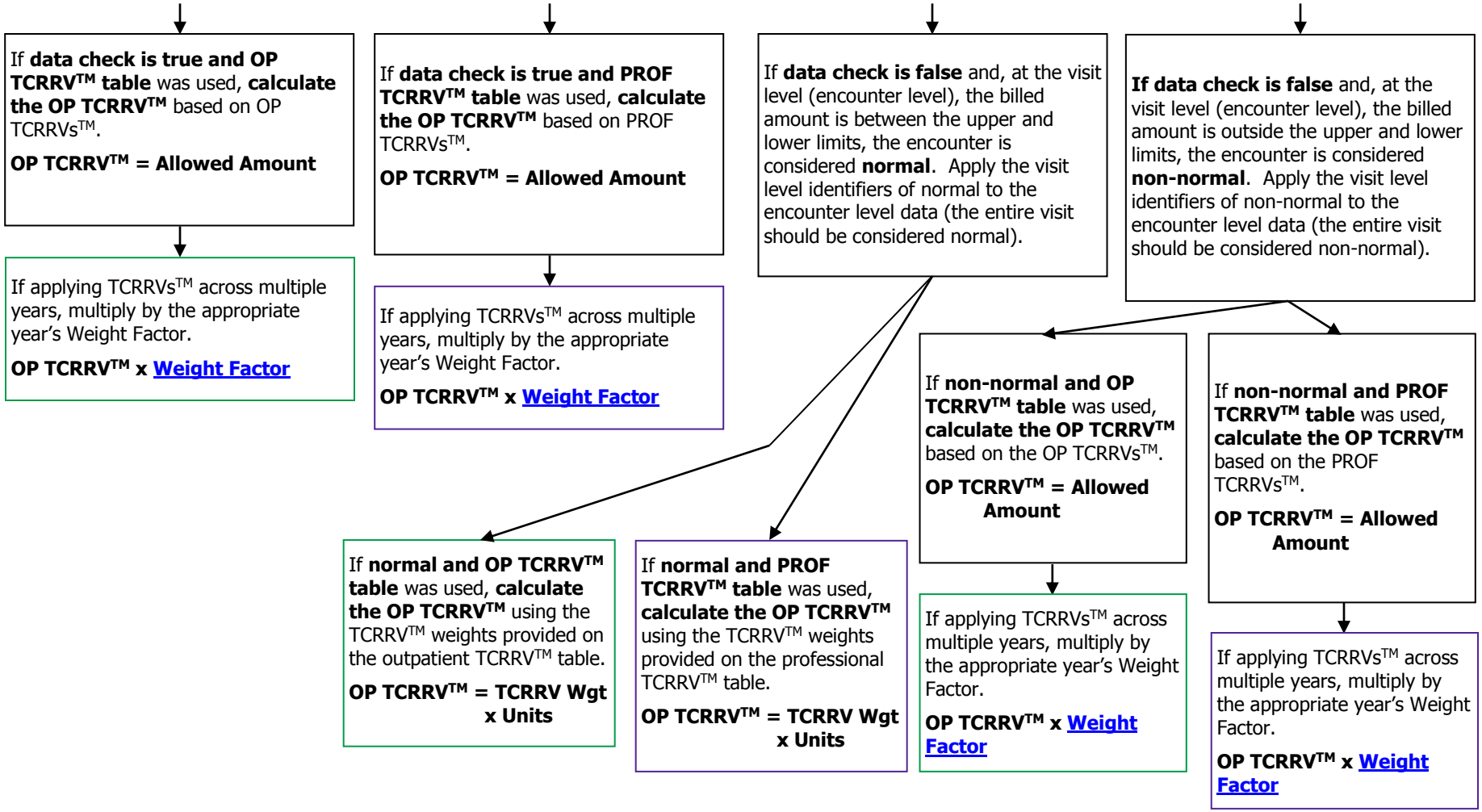
© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

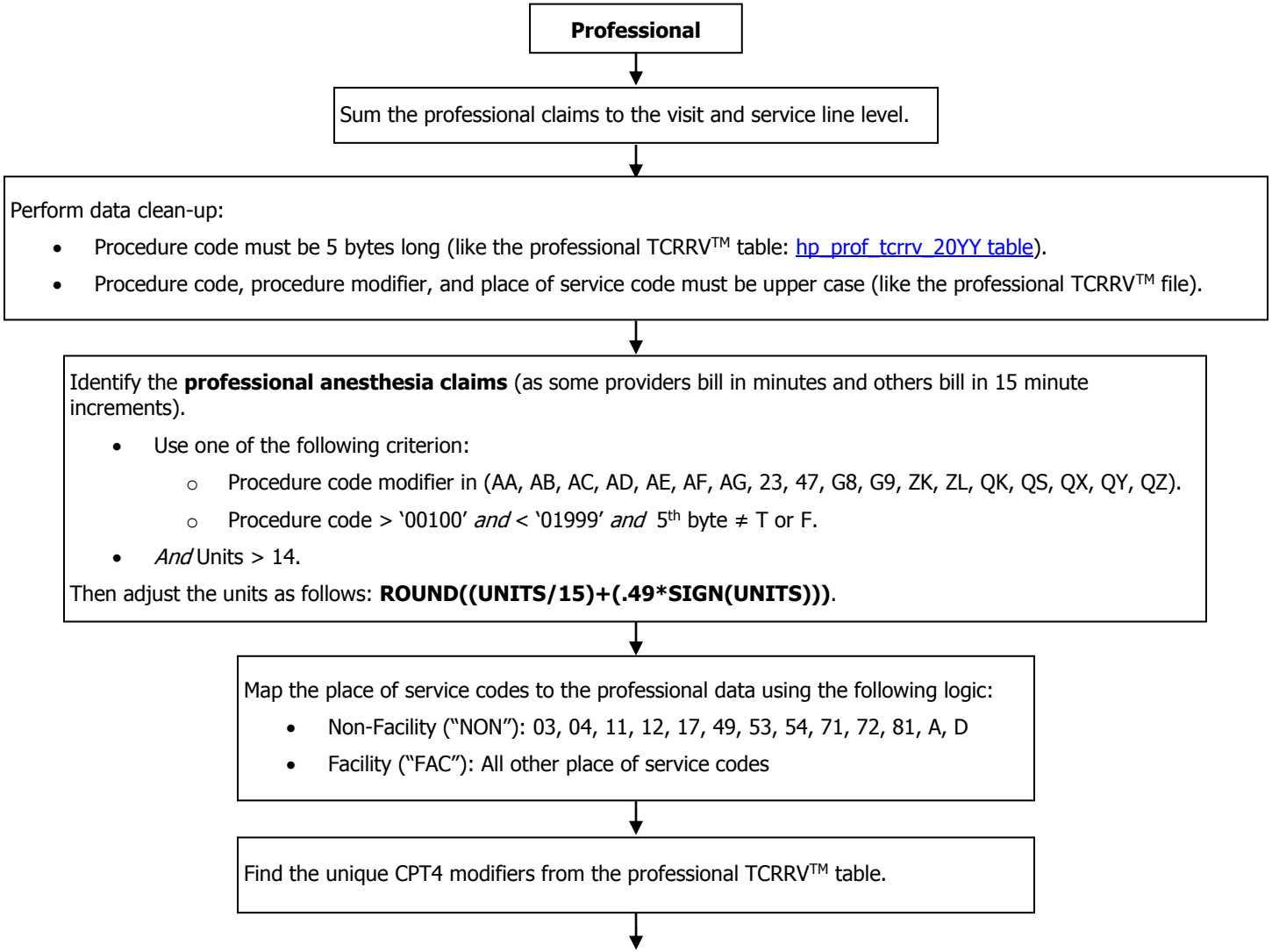


© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

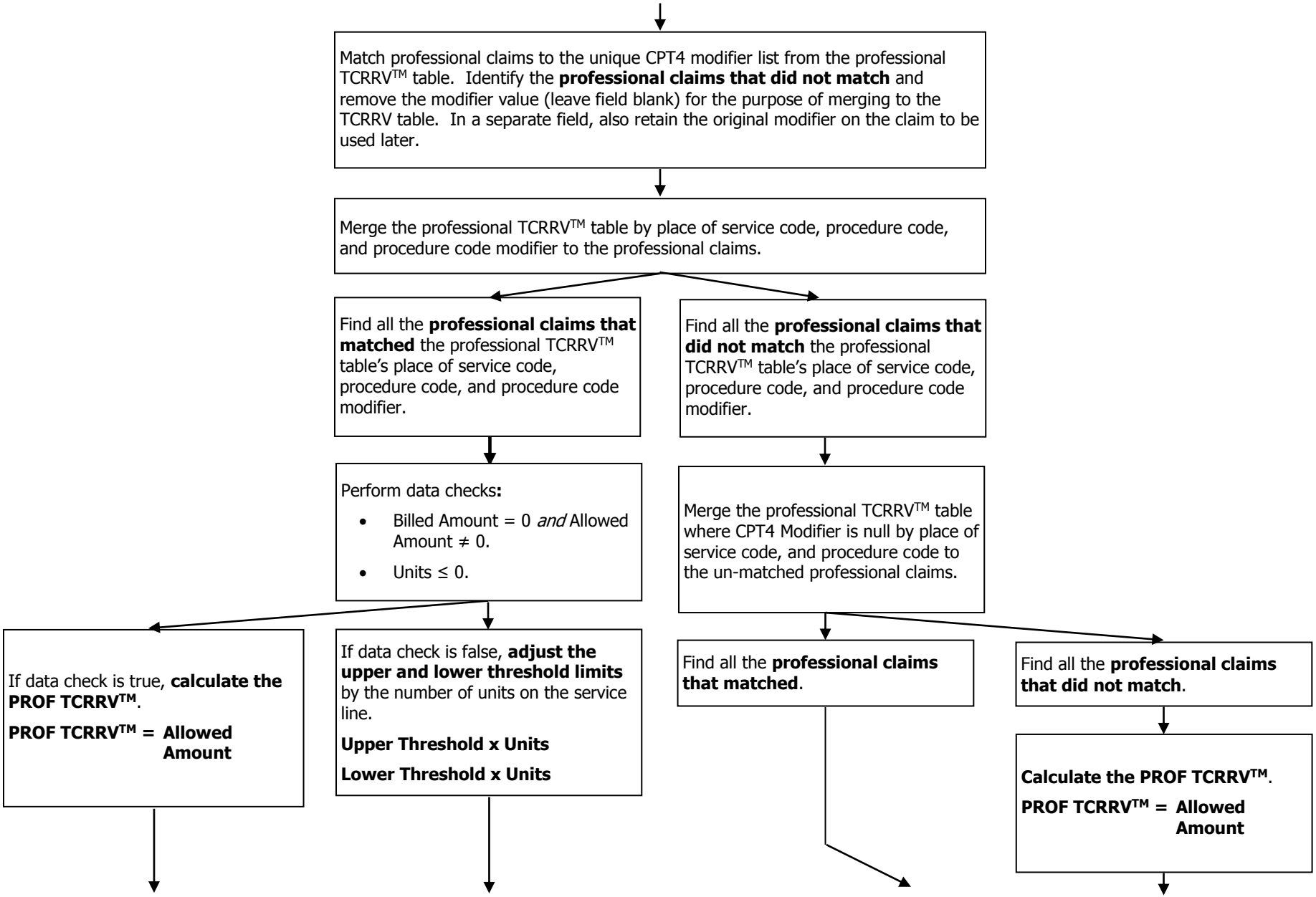
HealthPartners®

Professional – Calculating the Professional TCRRV™

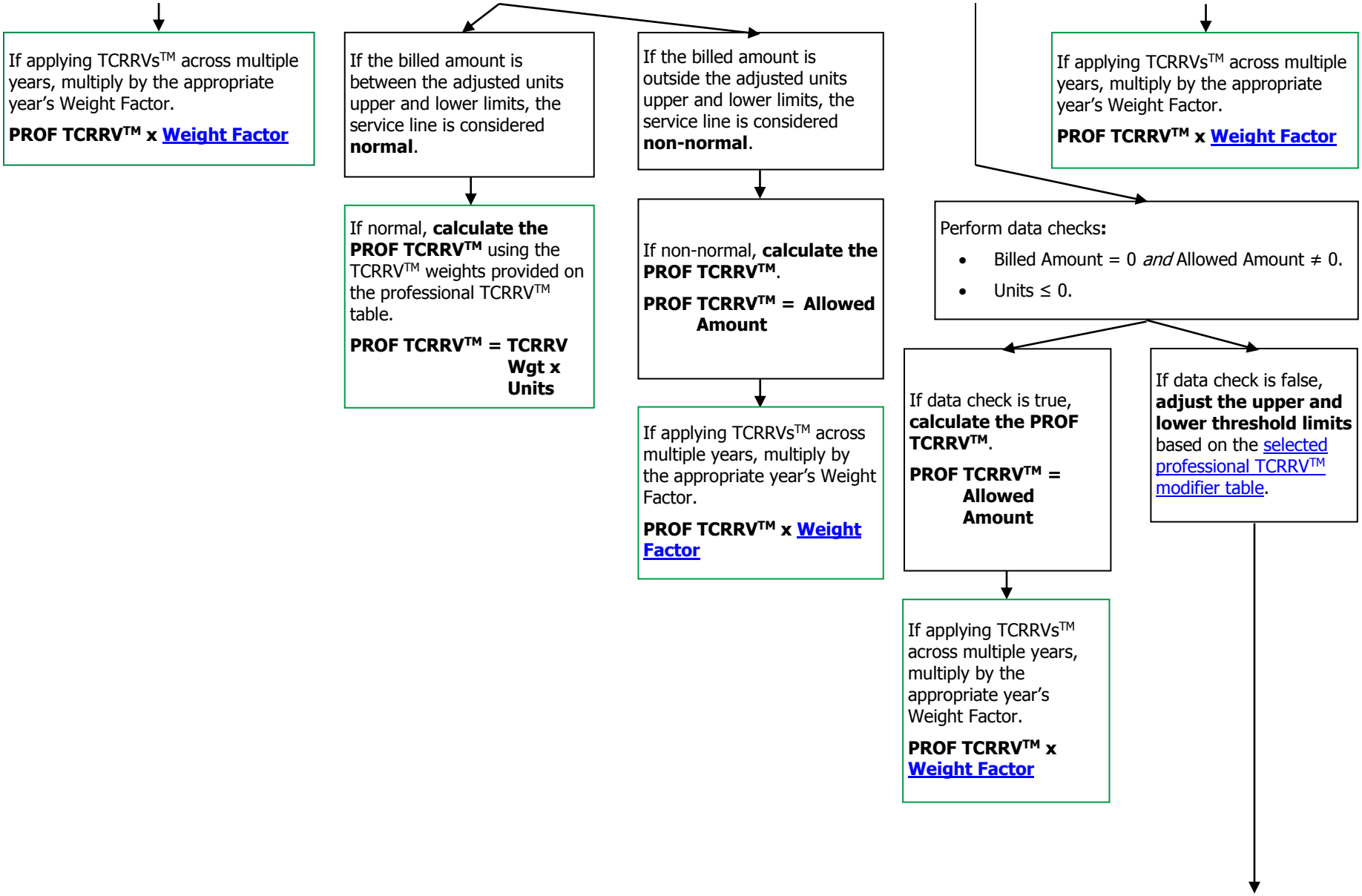
1. Filter the claims data to professional based on claims submitted on CMS 1500 claim form.
2. If professional, do the following to find the professional TCRRV™:



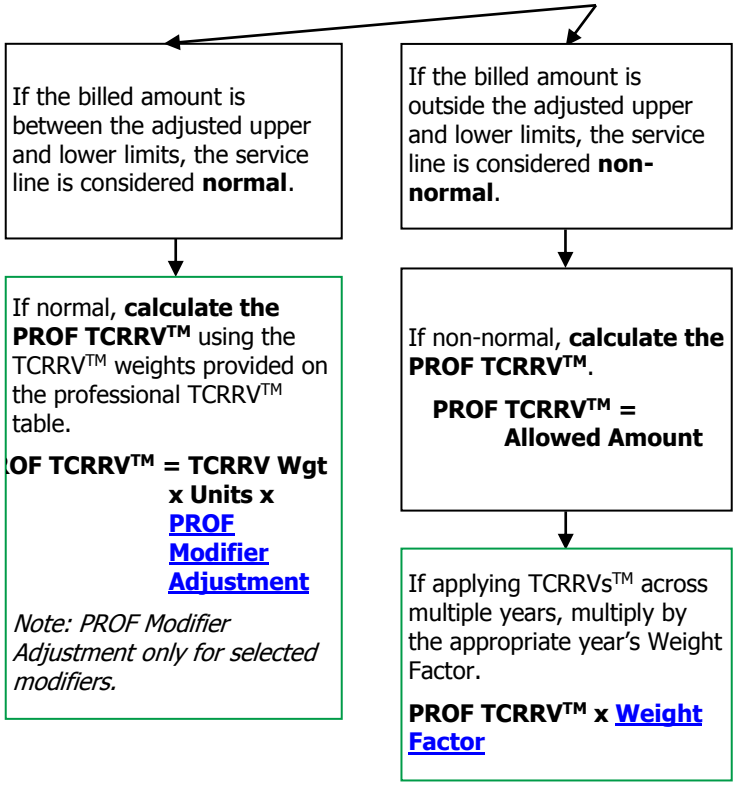
© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

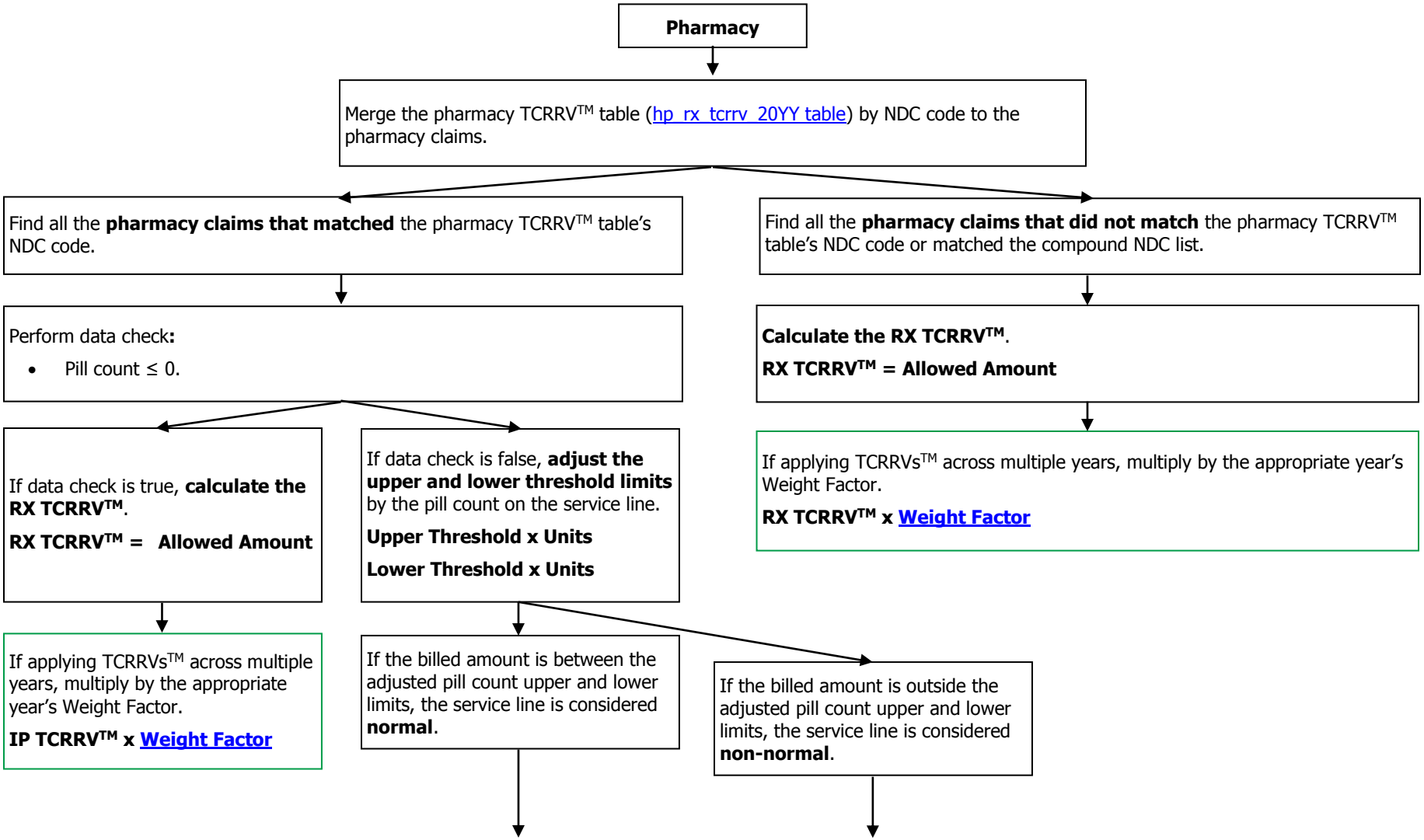


© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

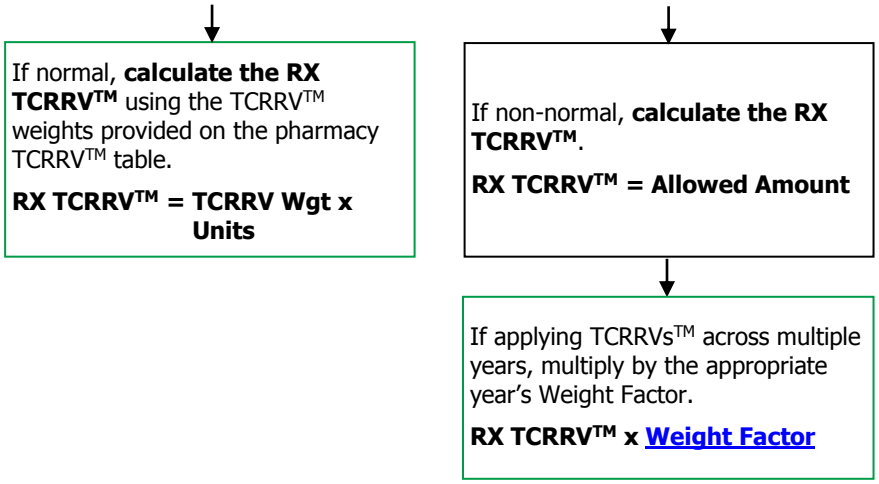
HealthPartners®

Pharmacy – Calculating the Pharmacy TCRRV™

1. Filter the claims data to pharmacy claims.
2. If pharmacy, do the following to find the pharmacy TCRRV™:



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.



© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

Multiple Year TCRRV™ Application

When applying TCRRVs™ across multiple years, it is recommended that the year of the TCRRV™ set used matches the year of the most current data within the analysis.

The following factor(s) are applied to the user's billed and paid amounts prior to the application of the TCRRVs™. The user will need to match the TCRRV™ set and data year for their specific application to the list below to determine the factors to utilize. If the TCRRV™ set matches the year of data, no factor needs to be applied.

This step is necessary as TCRRV™ sets need to be consistent to the user's year of data. The adjusted factor for billed and paid amounts should only be used for the TCRRV™ application process and should not be used in any analysis.

Weight Factors

TCRRV™ Set	Data Year	Weight Factors
2019	2018	1.0178
2019	2017	1.0178 x 1.0198
2019	All Prior Years	1.0178 x 1.0198 x 1.03 (2017 – data year)
2018	2017	1.0198
2018	All Prior Years	1.0198 x 1.03 (2017 – data year)
2017	All Prior Years	1.03 (2016 – data year)

TCRRV™ Tables

The TCRRV™ tables are saved as semicolon delimited text files (reference table samples).

Inpatient – hp_ip_tcrrv_20YY

DRG CODE	CMS MS-DRG code
TCRRV WGT1	TCRRV™ weight associated to the first day of an admission
TCRRV WGT2	TCRRV™ weight associated to all subsequent day of an admission
UPPER1	Day one upper limit used to calculate the total upper limit
UPPER2	Day two upper limit used to calculate the total upper limit
LOWER1	Day one lower limit used to calculate the total lower limit
LOWER2	Day two lower limit used to calculate the total lower limit

© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

Outpatient – hp_op_tcrrv_20YY

Repricing Method	Indicator of how the CPT/HCPCS was valued (e.g. APC PAID, OTHER)
CPT4/HCPCS & Modifier	Combined code of CMS CPT4 code/HCPCS and modifier
TCRRV WGT	TCRRV™ weight
UPPER	Upper limit
LOWER	Lower limit

Professional – hp_prof_tcrrv_20YY

PLACE OF SERVICE CODE	CMS 1500 claim form place of service code
CPT4 or HCPCS	CPT4 or HCPCS code
CPT4 MODIFIER	CPT4 or HCPCS modifier code
TCRRV WGT	TCRRV™ weight
UPPER	Upper limit
LOWER	Lower limit
UPPER OP	Upper limit used when applied to outpatient data

Pharmacy – hp_rx_tcrrv_20YY

NDC CD	National Drug Classification code
LOWER	Lower limit
UPPER	Upper limit
TCRRV WGT	TCRRV™ Weight

© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

HealthPartners®

Selected Professional TCRRV™ Modifier Tables

The following adjustment factors must be applied to the professional data's TCRRVs™. They are applied to the TCRRV™ in order to reflect the actual resources consumed and are based on CMS's fee schedule payments. Apply the factor to both the upper and lower limits, if applicable.

TCRRV™ Adjustment Factors

Modifier	Description	Factor
22	Unusual Procedural Services	1.10
25	Significant, Separately Identifiable E&M Service (Same Physician)	0.80
50	Bilateral Procedure	1.50
52	Reduced Services	0.50
53	Discontinued Procedure	0.25
54	Surgical Care Only	0.70
55	Postoperative Management Only	0.20
56	Preoperative Management Only	0.10
62	Two Surgeons (Co-Surgeons)	0.625
66	Surgical Team	0.625
73	Discontinued Outpatient-Hospital/Ambulatory Surgery Center	0.50
80	Assistant Surgeon	0.16
81	Minimum Assistant Surgeon	0.16
82	Assistant Surgeon (When Qual Resident Surgeon not Available)	0.16
AS	Physician Assistant, Nurse Practitioner, or Clinical Nurse Specialist Services For Assistant At Surgery	0.14
FC	Partial Credit Received for Replaced Device	0.50
HQ	Group Setting	0.50

© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.

Align Price Points

The user can create their own price alignment factors to ensure that the default (non-normal) TCRRV™ assignments are in line with the price points generated by normal TCRRV™ assignment.

- After the TCRRVs™ have been applied, sum the paid amount and TCRRVs™ to the component level (inpatient, outpatient, professional and pharmacy) for normal lines only.
    - The outpatient data that was combined with the professional data should be classified as professional for this step.
- Divide the TCRRV by the paid amount for each of the respective components of care, the result will be the align price factors.
    - To calculate the TCRRVs for non normal claims, the align price factors need to be multiplied by the paid amounts. This will adjust price points within each component of care to the normal price point. *Note: the alignment factors should not be applied to normal claims lines.*

User Defined Paid Adjustment Factors

The user can create their own paid adjustment factors to ensure the TCRRVs™ are in the same proportion as the paid amounts across all components of care.

- After the TCRRVs™ have been applied, sum the paid amount and TCRRVs™ to the component level (inpatient, outpatient, professional and pharmacy).
    - The outpatient data that was combined with the professional data should be classified as professional for this step.
    - The pharmacy percent could be lower than expected due to members with a pharmacy carve-out benefit. This has no impact on the paid adjustment factors as the pharmacy TCRRVs™ and paid amounts are affected the same.
- Divide the paid amount by the TCRRV for each of the respective components of care.
    - The outcomes are the paid adjustment factors that need to be applied to the TCRRVs™, which will adjust all components of care to the paid amount (price = 1).

	Inpatient	Outpatient	Professional	Pharmacy	Total
TCRRVs™	2,500	2,300	4,000	1,200	10,000
Paid	2,280	2,280	3,895	1,045	9,500
Paid/TCRRV™ = Factor	0.91	0.99	0.97	0.87	0.95

- Test to ensure proper application:
    - Sum the adjusted TCRRVs™ and paid amounts to the component of care level.
    - The paid amount and adjusted TCRRV amounts should match.

© 2014 HealthPartners. Reprints allowed for non-commercial purposes only if this copyright notice is prominently included and HealthPartners is given clear attribution as the copyright owner.