MedInsight Release Bulletin

Product: MedInsight Health Waste Calculator

Version: 7.0

May 21, 2018

This document covers the MedInsight Health Waste Calculator only. The MedInsight system components and all other tools are released under separate release bulletins on separate schedules.

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What's in this Upgrade?

In accordance with MedInsight's maintenance standards, this document summarizes the changes included in v7.0 of the MedInsight Health Waste Calculator.

This release is provided as a full upgrade, v7.0. To install, follow the installation instructions starting on page 4 of the Health Waste Calculator Technical Guide. We recommend uninstalling any existing version of the MedInsight Health Waste Calculator prior to upgrading.

This release note is intended for clients licensing the HWC to help them understand the changes in v7.0 vs v6.0. Clients should review the Technical Guide and Analytic Guide for full details of the software

Input and Output Modifications

The input and output field specifications have been modified to support both the 2018 and the 2019 MedInsight Tools common interface file format. Input File Format Year specifies the file format year of input file. The application will accept both 2017 & 2018 for the combined file format and 2018 and 2019 for the standard file format.

A new field labelled Prevalence Rank has been added to the output. This field ranks each measure on the basis of prevalence of services as seen from the testing data output. The purpose of the field is to provide a look up for clients to help them decide which measures to report on based on the ranking.

The Fact Waste or Waste Event is the additional output generated by the HWC grouper and is an aggregated version of the outWCOutput aggregated to the WASTE_SERVICE_ID grain. One waste service event contains the dimension value of the trigger service line and the aggregated dollars of all the lines that make up the Waste Service ID. The Fact table can communicate back with the outWCOutput table via the WASTE_SERVICE_ID that will allow the user to find all the service lines within a WASTE_SERVICE_ID and link them back to the claims file. The primary purpose of that fact table is to support our standard cost model reporting and use cases. It contains three UDF by default and any number of dimensions can be used for reporting purposes.

For HWC v7 and future versions, the WASTE_SERVICE_ID is the Sequence Number (SERVICES_KEY in the FACT SERVICES table) that has the Trigger Event making it the unique key to join the two tables.

System Requirements

No changes made.

Clinical Changes in v7.0

For the v7.0 release, five new measures and one older measure were added to the existing list of measures (A complete list of measures along with their mnemonic can be found in Appendix A.)

The following changes were also made in the v7.0 release to incorporate feedback from clients' v6:

1. Added five new measures under this release. These are:

   a. SCP05 - Bleeding Time Testing;

   b. STHS05 - PFT prior to cardiac surgery;

   c. AAPMR05 - Opioids for acute back pain;

   d. AAPOS03 - Vision therapy for patients with dyslexia;

   e. APA01 - Two or more antipsychotic medications

2. Added back SGIM02 (Routine general health checks) to v7.0 release on client request.

3. Added codes per the new 2018 codes in the following measures: GE01, AFP02, AFP03, ACR01, ACPY01, AI02, AI03, SNUC01, AFP05, SNP04, COGY01, AO02, AO03, AOHN01, AOHN02, AP02, AP05, SCP01, SCCT01, DOR124, DOR85, ASA01a, ASA02, ASA01b, AFP00, ACC00, AP00.

4. Updated references in nine measures to include references not older than 5 years. These are for measures: SNP04, HPM03, AOHN04, DOR21, DOR85, ASA02, URA06, AFP00 and AFP02.

5. Updated Appendix A section on Additional Performance Measures and Medical Policy for 30 measures with most current version of similar measures identified from the various health quality metrics, such as AHRQ, CMS, NCQA and medical policies from various insurers such as Aetna, United Healthcare etc. These are in measures: URG01, GE01, AFP03, ACR01, AI02, AI03, SNUC01, AFP05, COGY01, HPM03, AN01, AO02, AOHN04, AP05, ACRH03, SCP01, SCCT01, DOR21, DOR85, DOR121, DOR124, ASA01a, ASA01b, ASA02, URA06, AFP00, ACC00, AP00, ASRM02 and ASRM03.

6. Removed chemotherapy codes (Procedure codes: 96416, 96417, 9925; ICD9proc: 9925; ICD10 procedure: 3E03305, 3E04305, XW03351, XW04351) from the low risk surgery Table in measures ASA01a (Table B), ASA01b (B), ASA02 (Table B) and AFP05 (Table E). In a sample of client data we saw up to 5% variance in the services measured due to our generic use of BETOS (Berenson-Eggers Type of Service) codes for identifying low risk surgery as an industry standard definition and a way to easily maintain our measures. The chemotherapy codes were included under the BETOS category P6C (minor procedures and others). However after launching v6 in the public domain we now have to refine this list starting in this release by the omission of chemotherapy codes.

7. Based on new guidelines, updated the logic for low back pain imaging (AFP02).The changes include:

    a. Added an additional exclusion step to exclude inpatient admission (Table E).

    b. The following changes were made to the Degree of Certainty section:

Not Wasteful	Likely Wasteful
i. Removed step to identify MRI (Table J) in 70 years and older.	i. Added a step with X-ray/CT lumbar spine (Table N) for a diagnosis of any other serious underlying conditions (cancer, immunosuppression) (Table K) as far back as possible on or prior to the trigger event.
ii. Updated Table K to include only other serious underlying conditions from an earlier neurological deficits or other serious underlying conditions. Added a separate table for neurological deficits (Table C). Expanded the look back period of Table K to as far back as possible.	ii. Added a step with CT lumbar spine (Table O) for a diagnosis of neurological deficits (Table C) within the service unit.
iii. Added new logic to identify MRI (Table J) and conditions requiring imaging (Table F) within 90 days on or prior to the trigger event.	
iv. Moved likely wasteful step where X-ray/CT lumbar spine without contrast/MRI without contrast (Table L) in age 70 years older to Not Wasteful.	
v. Added a step to identify X-ray/CT lumbar spine without contrast (Table M) in members with conditions requiring imaging (Table F) within 90 days on or prior to the trigger event.	
vi. Added a step to identify X-ray/CT lumbar spine without contrast/MRI without contrast (Table L) in members with long term use of steroids (Table P) and steroid prescription (Table Q).	

    c. Expanded the sufficient history period from 42 days to 1 year.

8. Based on new guideline recommendations the following changes were made to ACR01:

    a. Starting population - Removed Spect MRI codes from Table I (Imaging for Headache).

    b. Exclusions - Added codes for psychiatry IP visits to Table D (Inpatient Admission); added an additional exclusion step to exclude complicated sinusitis/mastoiditis/middle ear disease (Table F).

    c. The following changes were made to the Degree of Certainty section:

Not Wasteful	Likely Wasteful
i. Updated age in step 1 Degree of Certainty to 55 years from an earlier 60 years and also added logic to look back up to 1 year for no prior diagnosis of headache and with a service for MRI/MRA Head (Table G) and a diagnosis of raised ESR or temporal arteritis (Table H) in such members.	i. Added a step to include service for CT/CTA (Table Q) for members aged 55 years and older with no prior diagnosis of headache up to 1 year and a diagnosis of raised ESR or temporal arteritis (Table H) within the service unit.
ii. Added a step to identify CT/MRI/CTA/MRA (Table J) and a diagnosis of complicated headache (Thunderclap/horner syndrome/vertebral dissection) (Table K) within the service unit.	ii. Added a step to identify CT/MRA/CTA (Table R) and diagnosis of chronic conditions (trigeminal headache, immunocompromised) (Table P) as far back as possible.
iii. Added a step to identify MRI/CT (Table L) with a diagnosis of underlying conditions (post traumatic headache, neurologic deficit, epilepsy, ataxia) (Table M) within the service unit.	iii. Added a step to identify MRA/CTA (Table S) in members with a diagnosis of underlying conditions (post-traumatic headache, neurologic deficit, epilepsy, ataxia) (Table M) within the service unit.
iv. Added a step to identify MRI/CT (Table L) in pregnant members (Table N) without prior diagnosis of headache (Table A) up to 270 days.	iv. Added a step to identify CT (Table T) in members with meningitis/encephalitis (Table O) within the service unit.
v. Added a step to identify MRI (Table V) with a diagnosis of meningitis/encephalitis (Table O) within the service unit or chronic conditions (Trigeminal headache, immunocompromised conditions) (Table P) as far back as possible.	v. Updated Table V to only include MRI and not CT.
vi. Added a step to identify MRI/MRA/CT (Table W) with a diagnosis of cerebrovascular event (Table U) within the service unit.	

     d.   Expanded the sufficient history period to 1 year.

9.   Based on new guideline recommendations the following changes were made to AOHN04:

     a.   Starting population – Expanded the age band to include members of all age groups from an earlier 12 years and older.

     b.   Exclusion – Added steps to exclude inpatient admission (Table B) and competing diagnosis (Table D) within 30 days.

     c.   The following changes were made to the Degree of Certainty section:

Not Wasteful	Likely Wasteful
i. Merged step 1 and step 2 in the Degree of certainty section to include members with sinus or head CT (Table K) and a diagnosis of chronic sinusitis (Table J) within 30 days.	Updated Table W to include codes for acute frontal or sphenoidal sinusitis along with immunodeficiency codes.

Not Wasteful	Likely Wasteful
ii. Updated Table J from an earlier acute frontal sphenoid sinusitis and chronic sinusitis to include only chronic sinusitis codes. Moved the diagnosis for acute frontal sphenoid sinusitis to Table W under likely wasteful criteria.	
iii. Added a new Table C for diagnosis of acute or recurrent sinusitis.	
iv. Updated Table L codes for complicated rhino sinusitis to include orbital or intracranial complications with ocular or neurologic deficits, preseptal or post septal cellulitis, sub periosteal abscess, orbital cellulitis or abscess, cavernous sinus thrombosis, osteomyelitis of frontal bone, subdural empyema, epidural or brain abscess, meningitis, brain infarction or myotic aneurysm, sinonasal obstruction and suspected mass lesion.	

10. Added an exclusion step in AFP05 to exclude inpatient admission (Table F) based on v6 analysis and client feedback where we found around 11% EKG testing in our testing database were during an inpatient admission.

11. Removed diagnosis codes Z13820 and V8281 from Table A (DEXA Screening) from the starting population of the measure AFP03 since these codes are covered by the procedure codes and also because the claim lines with these diagnosis codes had services other than DEXA screening such as a mammogram, X-ray chest, etc.

12. Removed codes for CT, MRI MRA imaging from (Table A) from the measure AN02 and included only carotid duplex ultrasound codes. Added codes for dizziness and giddiness to Table B. Added codes to Table C and Table D.

13. Added codes for diabetes in Table C, Table G and Table I in the measure AO02 since we had included diabetic complications as not wasteful but on analysis found that not all members having diabetes had a code for diabetic complication.

14. Updated the starting population in the measure AO03 to include only topical antibiotics. Moved codes for skin conditions (Table C) from exclusion step to not wasteful. Updated NDC codes in table I. Removed oral antibiotics since on analysis we found members had other conditions (e.g. Cellulitis, sinusitis, otitis media etc.) along with adenoviral conjunctivitis.

15. Expanded the service unit from 3 days to 7 days in the measure AOHN01 (CT head or brain for sudden onset hearing loss) since this is not a life threatening condition and so it is likely that any follow-up CT scan would not be emergent and could be one week or more after the ED encounter. Added an exclusion step to exclude competing diagnosis (Table

C) (headache, sinusitis, syncope and dizziness/vertigo) so as to prevent any duplication with other CT imaging measures. Updated Table I to only include codes for acoustic neuroma/CVA.

16. Expanded the scope of the Vitamin D screening (SCP01) measure by including 1, 25-dihydroxy vitamin D testing rather than creating a separate measure for 1, 25-dihydoxy vitamin D testing. Codes for 1, 25-dihydroxy vitamin D testing added to Table A. Updated all steps 1-5 to include logic for 1, 25-dihydroxy Vitamin D testing. Added additional step 6 with logic specific to 1, 25-dihydroxy vitamin D testing only.

17. Updated JH001 per new guideline recommendations. Removed codes for CT neck and CTA from Table B in the measure JH001 per guideline recommendations. Added exclusion steps to exclude comorbid conditions (Table C) so as to avoid duplicative services with measures ACR01 and AOHN04. Also added an exclusion for inpatient admission (Table D) based on v6 client feedback. Updated Table name for Table I from Head Injury/ Other Brain Conditions to competing diagnosis.

18. Updated the measure DOR21 to assign a WC Cost Count Flag value of "Y" to all claim lines on the day of the trigger event so as to include the cost of professional and facility fee associated with the knee arthroscopy service.

Contact your MedInsight representative or email medinsight.support@milliman.com with any further questions.

Appendix A: Waste Calculator Measures v7.0

The following table contains a comprehensive list of the waste calculator specifications in the application by release:

	Waste Headline	Waste Mnemonic	Last Updated
1	Coronary artery calcium scoring for known CAD	SCCT01	2/2018
2	Headache image	ACR01	2/2018
3	Immunoglobulin G/immunoglobulin E testing	AI02	2/2018
4	Lower back pain image	AFP02	2/2018
5	PSA	URG01	5/2017
6	Radiographic imaging for uncomplicated acute rhinosinusitis	AOHN04	2/2018
7	Annual EKGs or cardiac screening	AFP05	2/2018
8	Antibiotics for adenoviral conjunctivitis	AO03	2/2018
9	Colorectal Cancer Screening in Adults 50 Years and Older	GE01	2/2018
10	CT head/brain for sudden hearing loss.	AOHN01	2/2018
11	Dexa	AFP03	1/2018
12	Diagnostics chronic urticarial	AI03	2/2018
13	ED CT scans for dizziness	JH001	2/2018
14	Electroencephalography (EEG) for headaches.	AN01	3/2017
15	Imaging of the carotid arteries for simple syncope	AN02	2/2018
16	NSAIDs for hypertension, heart failure, or CKD	SNP04	1/2018
17	Syncope image	ACPY01	2/2018
18	25-OH-vitamin D deficiency	SCP01	2/2018
19	Antidepressants monotherapy in bipolar disorder	DOR85	2/2018
20	Arthroscopic lavage and debridement for knee osteoarthritis	DOR21	2/2018
21	Cough and cold medicines in children < 4 years	AP02	2/2018
22	Inductions of labor or cesarean deliveries before 39 weeks	COGY01	2/2018
23	MRI for rheumatoid arthritis	ACRH03	3/2016
24	Oral antibiotics for uncomplicated acute tympanostomy tube otorrhea	AOHN02	2/2018
25	Post-coital test for infertility	ASRM03	3/2017
26	Preoperative baseline laboratory studies	ASA01a	2/2018
27	Preoperative cardiac echocardiography or stress testing	ASA02	2/2018
28	Preoperative EKG, chest X-ray, and PFT	ASA01b	2/2018
29	Repeated CT for kidney stones	URA06	2/2018
30	Sperm function testing	ASRM02	3/2017
31	Coronary Angiography	SNUC01	2/2018
32	Imaging Tests for Eye Disease	AO02	2/2018

	Waste Headline	Waste Mnemonic	Last Updated
33	CT Scans for Abdominal Pain in Children	AP05	2/2018
34	Renal Artery Revascularization	DOR124	2/2018
35	PICC stage III–V CKD	SNP01	5/2017
36	Multiple Palliative Radiation Treatments in Bone Metastases	HPM03	2/2018
37	Voiding Cystourethrogram for Urinary Tract Infection	DOR28	12/2016
38	Vertebroplasty	DOR121	5/2017
39	Cervical Cancer Screening in Women	AFP00	2/2018
40	Cardiac Stress Testing	ACC00	2/2018
41	Antibiotics for Acute Upper Respiratory and Ear Infections	AP00	2/2018
42	Pediatric Head Computed Tomography Scans	AAP00	1/2017
43	Bleeding Time Testing	SCP05	2/2018
44	Pulmonary Function Testing Before Cardiac Surgery	STHS05	2/2018
45	Routine general health checks	SGIM02	2/2018
46	Concurrent Use of Two or More Antipsychotic Medications	APA01	2/2018
47	Vision therapy for patients with dyslexia	AAPOS03	1/2018
48	Opioids for Acute Back Pain	AAPMR05	2/2018