

MedInsight Waste Calculator



OVERVIEW

The MedInsight Health Waste Calculator is an analytical tool that provides actionable data to support healthcare quality, efficiency, and effectiveness reporting. The calculator brings together clinical expertise and powerful data analytics, allowing health care managers to target and reduce wasteful spending.

Our comprehensive measures are developed and constantly refined to provide the most innovative and up-to-date healthcare analytics by Milliman healthcare experts and our partners at VBID Health, Mike Chernew, Ph. D and Mark Fendrick, MD.

The sources we are leveraging our measures from include:

- Choosing Wisely (from the ABIM Foundation)
- US Preventive Services Task Force Grade D Recommendations (recommendations against the service), for which there is moderate to high certainty that the service has no net benefit or that the harms outweigh the benefits
- The American Medical Association's Physician Consortium for Performance Improvement
- The United Kingdom's National Institute for Health and Care Excellence (NICE) Recommendations on High Quality Care
- Medical Specialty Society Guidelines
- Numerous high-quality, evidence-based research papers, such as these recent publications:
 - Schwartz AL, Chernew ME, Landon BE, McWilliams J. Changes in Low-Value Services in Year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Intern Med.* Published online September 21, 2015
 - Romano MJ, Segal JB, Pollack C. The Association between Continuity of Care and the Overuse of Medical Procedures. *JAMA Intern Med.* 2015; 175 (7):1148-1154.
 - Glance L, Lustik S, Hannan E, Osler T, Mukamel T, Qian F et al. The Surgical Mortality Probability Model. *Annals of Surgery.* 2012; 255(4):696-702.

RATIONALE FOR DEVELOPING THE MEASURES

Milliman and VBID Health continue to research and add to our growing list of over 450 measures in our research pipeline. We are striving to identify at least 2 measures per medical society. We also have themes in our release such as version 4's focus on pre-operative testing. In general, the prioritization of our measures are based on the criteria listed below:

- High prevalence rate or incidence of the wasteful events as reported in different publications;
- High cost impact due to the wasteful events;
- Representation of different specialties or clinical conditions;
- Representation of different types of services (e.g., preventive screening tests and diagnostic tests and prescription of drugs); and
- Representation of relevant measures for different age groups (children, adults, elderly, or all population), as well as gender-specific measures.

HEALTH WASTE CALCULATOR PRODUCTION MEASURES			
WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Antibiotics for Acute Rhinosinusitis	Don't indiscriminately prescribe antibiotics for uncomplicated acute rhinosinusitis.	AI01b	v1
Coronary Artery Calcium Scoring for Known CAD	Don't use coronary artery calcium scoring for patients with known coronary artery disease (including stents and bypass grafts).	SCCT01	v1
Headache Image	Don't do imaging for uncomplicated headache.	ACR01	v1
Immunoglobulin G/ immunoglobulin E Testing	Don't perform unproven diagnostic tests, such as immunoglobulin G (IgG) testing or an indiscriminate battery of immunoglobulin E (IgE) tests, in the evaluation of allergy.	AI02	v1
Lower Back Pain Image	Don't do imaging for low back pain within the first six weeks, unless red flags are present.	AFP02	v1
PSA	Don't perform PSA-based screening for prostate cancer in all men regardless of age.	URG01	v1
Radiographic Imaging for Uncomplicated Acute Rhinosinusitis	Don't routinely obtain radiographic imaging for patients who meet diagnostic criteria for uncomplicated acute rhinosinusitis.	AOHN04	v1
Routine Annual Stress Testing	Don't perform routine annual stress testing after coronary artery revascularization.	NMMI02	v1
Stress Cardiac Imaging or Advanced Non-Invasive Imaging	Don't perform stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high-risk markers are present.	AC01	v1
Annual EKGs or Cardiac Screening	Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms.	AFP05	v2
Antibiotics for Adenoviral Conjunctivitis	Don't order antibiotics for adenoviral conjunctivitis (pink eye).	AO03	v2
Colonoscopy	Don't order unnecessary screening for colorectal cancer in adults older than age 50 years.	GE01	v2
CT Head/Brain for Sudden Hearing Loss	Don't order computed tomography (CT) scan of the head/brain for sudden hearing loss.	AOHN01	v2
CT Scans for Pediatric Headache	Don't perform computed tomography scans on children being treated for headache.	AAP06	v2
Dexa	Don't use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 or men younger than 70 with no risk factors.	AFP03	v2
Diagnostics Chronic Urticaria	Don't routinely do diagnostic testing in patients with chronic urticaria.	AI03	v2
Echocardiography as Routine Follow-Up	Don't perform echocardiography as routine follow-up for mild, asymptomatic native valve disease in adult patients with no change in signs or symptoms.	AC02	v2
ED CT Scans for Dizziness	Don't perform routine head CT scans for emergency room visits for severe dizziness.	JH001	v2
Electroencephalography (EEG) for Headaches	Don't perform electroencephalography (EEG) for headaches.	AN01	v2
Exercise Electrocardiogram	Don't obtain screening exercise electrocardiogram testing in individuals who are asymptomatic and at low risk for coronary heart disease.	ACPY02	v2
Imaging of the Carotid Arteries for Simple Syncope	Don't perform imaging of the carotid arteries for simple syncope without other neurologic symptoms.	AN02	v2
Neuroimaging in a Child with Simple Febrile Seizure	Don't perform Neuroimaging (CT, MRI) in a child with simple febrile seizure.	AP04	v2
NSAIDs for Hypertension, Heart Failure, or CKD	Don't prescribe nonsteroidal anti-inflammatory drugs (NSAIDS) in individuals with hypertension or heart failure or CKD of all causes, including diabetes.	SNP04	v2
Oral Antibiotics for Uncomplicated Acute External Otitis	Don't prescribe oral antibiotics for uncomplicated acute external otitis.	AOHN03	v2
Pap Smear Hysterectomy	Don't perform Pap smears on women with previous hysterectomy.	AFP04	v2
Pap Smear Under 21	Don't perform Pap smears on women younger than 21.	AFP01	v2

HEALTH WASTE CALCULATOR PRODUCTION MEASURES			
WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Radionuclide Imaging	Don't perform radionuclide imaging as part of routine follow-up in asymptomatic patients.	SNC01	v2
Routine Pap in Women 21–65 Years of Age	Don't perform routine annual cervical cytology screening (Pap tests) in women 21–65 years of age.	COGY02	v2
Syncope Image	Don't obtain brain imaging studies (CT or MRI) in the evaluation of simple syncope and a normal neurological examination.	ACPY01	v2
Antidepressants Monotherapy in Bipolar Disorder	Don't prescribe antidepressants as monotherapy in patients with bipolar I disorder.	DOR85	v4
Arthroscopic Lavage and Debridement for Knee Osteoarthritis	Don't perform arthroscopy with lavage and/or debridement in patients with a primary diagnosis of symptomatic osteoarthritis of the knee.	DOR21	v4
Cervical Cancer Screen in Women Over 65 Years	Don't screen women older than 65 years of age for cervical cancer who have had adequate prior screening and are not otherwise at high risk for cervical cancer.	AFP07	v4
Cough and Cold Medicines in Children Under 4 Years	Don't prescribe or recommend cough and cold medicines for respiratory illnesses in children under four years of age.	AP02	v4
CT for Kidney Stones	Don't order CT scans in those suspected with kidney stones prior to an ultrasound.	URA06	v4
Inductions of Labor or Cesarean Deliveries before 39 Weeks	Don't schedule elective, non-medically indicated inductions of labor or Cesarean deliveries before 39 weeks, 0 days gestational age.	COGY01	v4
MRI for Inflammatory Arthritis	Don't perform MRI of the peripheral joints to routinely monitor inflammatory arthritis.	ACRH03	v4
Oral Antibiotics for Uncomplicated Acute Tympanostomy Tube Otorrhea	Don't prescribe oral antibiotics for uncomplicated acute tympanostomy tube otorrhea.	AOHN02	v4
Postcoital Test for Infertility	Don't perform a postcoital test (PCT) for the evaluation of infertility.	ASRM03	v4
Preoperative Baseline Laboratory Studies	Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery – specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal.	ASA01a	v4
Preoperative Cardiac Echocardiography or Stress Testing	Don't obtain baseline diagnostic cardiac testing (trans-thoracic/esophageal echocardiography – TTE/TEE) or cardiac stress testing in asymptomatic stable patients with known cardiac disease (e.g., CAD, valvular disease) undergoing low or moderate risk non-cardiac surgery.	ASA02	v4
Preoperative ECG, Chest X Ray, and PFT	Don't obtain ECG, chest X rays or Pulmonary function test in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery.	ASA01b	v4
Screening for 25-OH-Vitamin D Deficiency	Don't perform population based screening for 25-OH-Vitamin D deficiency.	SCP01	v4
Sperm Function Testing	Don't perform advanced sperm function testing, such as sperm penetration or hemizona assays, in the initial evaluation of the infertile couple.	ASRM02	v4

Q4 2016 RELEASE – SCHEDULED MEASURES (SCHEDULED)

WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Coronary Angiography for Patients without Cardiac Symptoms	Don't perform coronary angiography in patients without cardiac symptoms unless high-risk markers present.	SNUC01	v5
CT for Abdominal Pain	Don't perform Computed tomography (CT) scans in the routine evaluation of abdominal pain.	AP05	v5
Imaging Tests for Eye Disease	Don't routinely order imaging tests for patients without symptoms or signs of significant eye disease.	AO02	v5
Revascularization versus Medical Therapy for Renal-Artery Stenosis	Don't perform revascularization without prior medical management for renal artery stenosis.	DOR124	v5

Q4 2016 RELEASE – SCHEDULED MEASURES (SCHEDULED)

WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
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Note Q4 2016 and Q1 2017 Release is dedicated to ICD10 research, code update and research update in addition to new measure development.

Q1 2017 RELEASE – SCHEDULED MEASURES (TENTATIVE)

WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Antibiotics Before or After Intravitreal Injections	Don't routinely provide antibiotics before or after intravitreal injections.	AO04	v6
Antibiotics for Apparent Viral Respiratory Illnesses (Pharyngitis, Bronchitis)	Don't prescribe antibiotics for apparent viral respiratory illnesses (pharyngitis, bronchitis).	AP01	v6
Bleeding Time	Don't use bleeding time test to guide patient care. (Bleeding time test is obsolete.)	SCP05	v6
Cerclage in Women with Short Cervix	Don't place a cerclage in women with short cervix who are pregnant with twins.	SMFM02	v6
Palliative Radiation	Don't recommend more than a single fraction of palliative radiation for an uncomplicated painful bone metastasis.	HPM03	v6
PFT Prior to Cardiac Surgery	Don't recommend pulmonary function testing prior to cardiac surgery, in the absence of respiratory symptoms.	STHS05	v6
Vertebroplasty for Osteoporotic Vertebral Fractures	Don't perform vertebroplasty for osteoporotic vertebral fractures.	DOR121	v6
Vision Therapy for Patients with Dyslexia	Don't recommend vision therapy for patients with dyslexia.	AAPOS03	v6
Imaging Studies after a First Febrile Urinary Tract Infection in Young Children	Don't perform voiding cystourethrogram (VCUG) routinely in first febrile urinary tract infection (UTI) in children aged 2–24 months	DOR28	v6
PICC Stage III–V CKD	Don't place peripherally inserted central catheters (PICC) in stage III–V CKD patients without consulting nephrology.	SNP01	v6

Q2 2017 RELEASE – SCHEDULED MEASURES (TENTATIVE)

WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Proton beam therapy for prostate cancer	Don't routinely recommend proton beam therapy for prostate cancer outside of a prospective clinical trial or registry.	ASRO04	v7
Total or free T3 level	Don't order a total or free T3 level when assessing levothyroxine (T4) dose in hypothyroid patients.	AACE04	v7
Surgical deactivation of migraine trigger points	Don't recommend surgical deactivation of migraine trigger points outside of a clinical trial.	AHS03	v7
Oral antibiotics for treatment of atopic dermatitis	Don't use oral antibiotics for treatment of atopic dermatitis unless there is clinical evidence of infection.	AAD04	v7
Homocysteine testing for CVD	Don't order Homocysteine testing for preventing cardiovascular events in those with known cardiovascular disease.	JAMA04	v7
PTH for CKD	Don't order PTH measurement for patients with stage 1-3 CKD.	JAMA06	v7
Carotid endarterectomy in asymptomatic patients	Don't perform a carotid endarterectomy in asymptomatic patients or for patients without a history of stroke or TIA and without stroke, TIA, or focal neurological symptoms noted in claim.	JAMA08	v7
X-ray for diagnosis of plantar fasciitis/heel pain	Don't order imaging for diagnosis of plantar fasciitis	ACOE03	v7

Q2 2017 RELEASE – SCHEDULED MEASURES (TENTATIVE)

WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Surgery for a torn meniscus	Don't perform arthroscopic partial meniscectomy for degenerative meniscal tear in middle aged patients without symptoms of knee pain.	NEJM01	v7

Q3 2017 RELEASE – SCHEDULED MEASURES (TENTATIVE)

WASTE HEADLINE	WASTE SHORT DESCRIPTION	WASTE MNEMONIC	SOFTWARE VERSION
Antipsychotic medications as a first-line	Don't routinely prescribe an antipsychotic medication to treat behavioral and emotional symptoms of childhood mental disorders in the absence of approved or evidence supported indications.	APA03	v8
Heavy metal screening tests	Don't order heavy metal screening tests to assess non-specific symptoms in the absence of excessive exposure to metals.	ACMT03	v8
Post-operative splinting	Don't use post-operative splinting of the wrist after carpal tunnel release for long-term relief.	AAOS05	v8
Electromyography (EMG) and nerve conduction studies	Don't use electromyography (EMG) and nerve conduction studies (NCS) to determine the cause of axial lumbar, thoracic or cervical spine pain.	NASS04	v8
Thorax CT	Don't order CT Thorax "combined studies" (i.e., CT Thorax with and without contrast).	CMMS01	v8
Inherited thrombophilia evaluation for women	Don't do an inherited thrombophilia evaluation for women with histories of pregnancy loss, intrauterine growth restriction (IUGR), preeclampsia and abruption	SMFM01	v8
Routine and follow-up mammograms	Avoid performing routine and follow-up mammograms of reconstructed breasts after mastectomies	ASPS03	v8
Routine diagnostic laparoscopy for unexplained infertility	Don't perform routine diagnostic laparoscopy for the evaluation of unexplained infertility.	ASRM01	v8
Thrombophilia testing	Don't routinely order thrombophilia testing on patients undergoing a routine infertility evaluation.	ASRM04	v8
Antihistamines or decongestants for otitis media	Don't prescribe antihistamines or decongestants for otitis media with effusion.	NQF04	v8
Systemic corticosteroids	Don't prescribe systemic corticosteroids for otitis media with effusion.	NQF05	v8
Hypercoagulability testing	Don't order hypercoagulability testing for patients with DVT.	JAMA05	v8
PCI for stable coronary disease	Don't do a percutaneous coronary intervention with balloon angioplasty or stent placement for stable coronary disease	JAMA07	v8

Note Q4 2017 Release is dedicated to ICD10 research, code update and research update.