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Performance Based Budget (PBB) Tobacco Cessation Metrics FY11

NMCPHC, Health Analysis
BUMED, M3/5

Last Updated: 06 Oct 2010

PBB Tobacco Metrics

- **Performance Based Budget (PBB):**
 - BUMED budget initiative providing incentive for quality clinical care

- **History of Public Health Metrics :**
 - **FY08: Planning**
 - M8 introduced Performance-Based Budget (PBB) concept to M3/5
 - M3/5 Clinical Care and Public Health produced list of topics for Evidence-Based Health Advisory Board (EBHAB) consideration
 - EBHAB chose tobacco, Tobacco Cessation Action Team (TCAT) concurred
 - Reasons- no clinical process in place to address tobacco use and tobacco use is the leading cause of most preventable diseases
 - **FY09: Implementation**
 - PBB TC Metric #1 (screening) incentivized, TC Metric #2 (diagnosis) developed and beta tested (5 sites)
 - **FY10: Execution**
 - TC Metric #1 incentivized, roll-out, TC Metric #2 beta tested, TC Metric #3 planning
 - **FY11: Execution**
 - TC Metric #2 shadowed, TC Metric #3 being developed for FY12

M8 Guidance for Metric Development

- Metrics need to incorporate the following:
 - Objective measures of quality clinical performance (outcome measures, no self-reporting)
 - Centrally pulled (commands not required to produce reports)
 - No additional work for the providers
 - Transparent to the Regions and MTFs (posted publically)

PBB Tobacco Metrics

- **Metric #1:** Screening- % of outpatient visits in which tobacco use status was documented (FY09)
- **Metric #2:** Diagnosis- % of reported tobacco users diagnosed with tobacco related ICD-9 (FY10)
- **Metric #3:** Intervention- % of diagnosed tobacco users who were counseled, referred or prescribed a tobacco cessation medication (FY11-12)



Data Source- Clinical Data Mart (CDM)



- Clinical reporting tool for AHLTA outpatient medical records
- Equips Military Health System (MHS) analysts and clinicians with patient-centric data
- Able to develop reports that can be pre-canned and exported for process improvement and status update
- Able to see ICD-9 codes in any position
- Easy to access, requires AHLTA account

Metric Parameters

- Patient Age
 - Limited to patients 18 years and older
- Visit Status
 - Limited to closed visits
- Clinic Type
 - Limited to Outpatient clinics by MEPRS 'B' code
 - Physical and Occupational Therapy Clinics excluded by MEPRS BLA and BLB codes*

Metric #1: Tobacco Screening

- Denominator:
 - # of visits with vitals* for patients ≥ 18 years old, 6 month period
- Numerator:
 - # of visits with vitals* for patients ≥ 18 years old where tobacco use status was recorded**, 6 month period
- Data Source:
 - Clinical Data Mart (CDM), vitals module
- Benchmarks:
 - 90th and 75th percentile of DoD performance
 - BUMED Goal: 95% tobacco screening

*Visits with Vitals=outpatient visits (any clinic type) in which the vitals module was *opened* within AHLTA

**Tobacco Use Status Recorded= yes or no box checked for tobacco use within the vitals module, i.e. field is not 'null'

Metric #1: Tobacco Screening

- **\$__M associated for FY11**
- FY11 Benchmarks (same as FY10)
 - 95% (BUMED goal)
 - 90.2% (DoD 90th percentile)
 - 85.7% (DoD 75th percentile)
- PBB Grading:
 - Child DMIS Performance aggregated to determine Parent Treatment DMIS Performance
 - 6 month periods
 - i.e. February 2010 Performance= Sept 2009-Feb 2010

Metric #2: Tobacco Diagnosis

- Denominator:
 - # of unique tobacco users \geq 18 years old, 12 month period
- Numerator:
 - # of unique tobacco users \geq 18 years old with an ICD-9 code, 12 month period
- Assumption:
 - Clinicians should be diagnosing all adult tobacco users treated at their MTF with an appropriate ICD-9 code, *at least* once a year

*Unique Tobacco User= 'yes' box checked for tobacco use in vitals module at some point within the 12 month period.

Metric #2: Tobacco Diagnosis

- ICD-9 codes:
 - 305.1: Tobacco use disorder
 - 649.x: Tobacco use disorder complicating pregnancy
- Data Source:
 - Clinical Data Mart (CDM)
- **Benchmarks:**
 - **90th and 75th percentile of DoD performance**
 - **BUMED Goal: ___% tobacco diagnosis**

Metric #2: Tobacco Diagnosis

- Metric shadowed for FY11
 - MTF Performance monitored by BUMED, no monetary rewards
- FY11 Benchmarks
 - **___% (BUMED Goal)**
 - 25.8% (DoD 90th percentile)
 - 19.6% (DoD 75th percentile)
- PBB Grading:
 - Child DMIS Performance aggregated to determine Parent Treatment DMIS Performance
 - 12 month periods
 - i.e. October 2009 Performance=Nov 2008-Oct 2009

Metric #3: Tobacco Intervention

- “Outcome” measure
 - Still being defined/developed
 - Implementation expected FY11
- Denominator:
 - # of unique tobacco users \geq 18 years old with a tobacco diagnosis (ICD-9), 12 month period
- Numerator:
 - # of unique diagnosed tobacco users \geq 18 years old with a CPT code for counseling, referral, TC medication 12 month period

Metric #3: Tobacco Intervention

- Intervention Criteria:
 - CPT codes (TBD)
 - Referral
 - TC Medications
- Data Source:
 - Clinical Data Mart (CDM)
- Benchmarks:
 - TBD

Improvement Resources

- **NMCPHC:**
 - CDM “Action List”
 - CDM Provider Report
 - Clinical Epidemiology Webpage
 - PHN Dashboard
- **BUMED:**
 - Outlook Group
 - PBB Reports



CDM Action List and Provider Reports

- Reports available in CDM that provide Tobacco Cessation data stratified by Parent DMIS, Child DMIS, MEPRS Clinic, Provider, and Patient.
 - Prompts allow user customization of report
 - User can enter desired Parent DMIS and select time period of report
 - Report runs in about 1-2 hours
 - Expected to be available FY11 in public folder of CDM

Summary Tab

PBB Tobacco Cessation Metric Report Summary

MTF Detail Report Description

This report presents the smoking cessation metrics being graded for FY 2010. The metrics will be used to grade and reward CONUS performance aggregated to the Parent treatment DMIS ID level. This report contains Parent DMIS, Child DMIS, Clinic and Patient level data, providing an actionable list to aid MTFs on PBB tobacco metric improvement efforts.

Metric Details

Adult Visits: The number of adult encounters within the reporting period selected.

Adult Visits w/Tobacco Use Screening: The number of adult encounters opened in which the vitals module was opened and tobacco-use status was recorded (yes or no box checked - vitals.tobacco is not null) within the reporting period selected.

Unique Adults with Reported Tobacco Use: The number of unique adults who answered positively and had the 'yes' box checked for the tobacco-use status screening within the selected reporting period, even if they had a 'no' recorded within the same period.

Unique Adults Diagnosed w/Tobacco Use (12 mo): The number of unique adults who had the 'yes' box checked for the tobacco-use status and had a documented tobacco related ICD9 diagnosis code at any point within the 12 month

Adult Visits with Vitals: The number of adult encounters in which vitals module was opened within the reporting period selected.

Unique Adults Screened for Tobacco Use: The number of unique adults in which the vitals module was opened and tobacco-use status was recorded (yes or no box checked-vitals.tobacco is not null) within the reporting period selected.

Unique Adults with Reported Tobacco Use (12 mo): The number of unique adults who answered positively and had the 'yes' box checked for the tobacco-use status screening within a 12 month reporting period, even if they had a 'no' recorded within the same period.

Unique Adults Counseled for Tobacco Use: The number of unique adults who had the 'yes' box checked for the tobacco-use status, had a documented diagnosis with a tobacco related ICD9 code and had documentation for counseling on tobacco use within the 12 month period.

Metric Definitions

#1:Tobacco Screening (FY09): $\% = [(\# \text{Visits w/Tobacco Screening}) / (\# \text{Visits with Vitals})] * 100$

#2:Tobacco Diagnosis (FY10): $\% = [(\# \text{Adults Diagnosed w/Tobacco Use}) / (\# \text{Adults Tobacco Users})] * 100$

#3:Tobacco Counseling (FY11): $\% = [(\# \text{Adults Counseled for Tobacco Use}) / (\# \text{Adults Diagnosed w/Tobacco Use})] * 100$

Summary Tab (cont'd)

Report Parameters

1. The Reporting Period:

The reporting period of the MTF Detail Report will be based on the appointment date range selected by the user. This reporting period will be from the first day to the day prior to the last day, inclusive. For FY08, enter: 1 October 2007 12:00 AM and 1 October 2008 12:00 AM for 'Appointment Start Date' and 'Appointment End Date' prompts, respectively, to obtain a report for 1 October 2007 through 30 September 2008.

Metric#1: Performance will be shown for the same time period selected in the initial prompts, however, MTFs will be graded on rolling 6 month periods. To get an accurate snapshot of your performance in relation to PBB grading, enter the most recent 6 month time period into the prompt.

Metric#2: Performance will be shown for 12 month periods, as it will be graded. Regardless of the date range entered into the prompts, the report will generate a retrospective 12 month performance based on the "Appointment End Date" selected by the user. For example, if the 6 month period of 1 April 2007 12:00 AM and 1 October 2007 12:00 AM is selected, the values for Metric #2 and #3 will be based on the 12 months prior to 1 October 2007: 1 October 2006 12:00 AM - 1 October 2007 12:00 AM.

2. The tobacco-use ICD9 codes:

This is the semicolon delimited list of ICD9 codes that will be counted. The recognized tobacco-use ICD9 diagnosis codes for FY10 are:

305.1;649.00;649.01;649.02;649.03;649.04

305.1: Tobacco use disorder

3. The tobacco-use counseling codes:

These methods are still being determined, and no PBB grading will be implemented until FY11. This is the semicolon delimited list of proposed CPT4 codes that will be counted in this MTF Detail report as of 1 October 2009: 99406, 99407, 96153, 99078, S9453, D1320.

99406: Smoking and tobacco use cessation counseling visit (3-10 minutes), intermediate

99407: Smoking and tobacco use cessation counseling visit (>10 minutes), intensive

96153: Health and Behavior Intervention, each 15 mins, face-to-face or group (2+)

99078: Physician educational services rendered to patients w/in a group setting.

S9453: Group tobacco cessation classes, non-physician

D1320: Tobacco counseling for the control and prevention of oral disease

4. Parent Treatment DMIS ID:

The Parent Treatment DMIS ID Code of the desired Parent Treatment DMIS for which the report is being run.

Metric Filters/Exclusions

1. **Clinic Type:** Tobacco metrics are limited to DoD MEPRS B code clinics.

2. **PT/OT Clinics:** Because the PT and OT cannot diagnose patients, they cannot validly contribute to the metric numerator/denominator. BLA% and BLB% MEPRS Clinics are excluded from tobacco metrics.

3. **Closed Visits:** Tobacco metrics are limited to closed visits.

4. **Patients <18 years of age:** Tobacco metrics are limited to only those of legal age for Tobacco use.



- Introduction
- Parent DMIS Summary
- Child DMIS Summary
- Clinic Summary
- No Tobacco Screening
- Not Diagnosed

MTF Summary Tobacco Cessation Report

Parent MTF DMIS:

Data Refresh: 08/20/2010

Appointment Date between: 8/1/2009 12:00:00 AM and 8/1/2010 12:00:00 AM

Report Date: 8/23/10

Child DMIS ID	MTF Name	# Adult Visits	# Adult Visits with Vitals	# Adult Vitals Visits w/Tobacco Use Screening	# Unique Adults with Reported Tobacco Use	# Unique Adults Diagnosed w/ ICD-9 for Tobacco Use	# Unique Adults Counseled on Tobacco Use	% Vitals Visits with Tobacco Screening	% Tobacco Users Diagnosed	% Diagnosed Tobacco Users Counseled
		81,695	46,270	35,948	4,603	1,266	156	77.69%	27.50%	3.39%
		87,438	47,792	37,699	3,020	674	79	78.86%	22.32%	2.62%
		6,784	3,159	2,597	407	79	1	82.21%	19.41%	0.25%
		24,453	13,179	11,313	1,492	256	27	85.84%	17.16%	1.81%
		7,790	4,777	4,544	568	224	5	95.12%	39.44%	0.88%
		3	0	0	0	0	0	0.00%	0.00%	0.00%
Sum:		208,163	115,177	92,091	10,090	2,499	268	79.96%	24.77%	2.66%

*Screening is determined from the vital signs section of AHLTA.

*NOTE: Counts and percentages within this tool will not represent exact performance based on PBB grading. This report is meant to serve as a resource for monitoring clinic, and patient level performance and determining where improvements can be made.

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The report includes adult patients only (age 18 and older)



Clinic Summary Tobacco Cessation Report

Parent MTF DMIS

Data Refresh: 08/20/2010

Appointment Date between: 8/1/2009 12:00:00 AM and 8/1/2010 12:00:00 AM

Report Date: 8/23/10

Child DMIS ID	Clinic	# Adult Visits	# Adult Visits with Vitals	# Adult Vitals Visits w/Tobacco Use Screening	# Unique Adults with Reported Tobacco Use	# Unique Adults Diagnosed w/ ICD-9 for Tobacco Use	# Unique Adults Counseled on Tobacco Use	% Vitals Visits with Tobacco Screening	% Tobacco Users Diagnosed	% Diagnosed Tobacco Users Counseled
	GR ACUPUNCTURE	11	7	6	0	0	0	85.71%	0.00%	0.00%
	GR AUDIOLOGY CL	1,302	0	0	0	0	0	0.00%	0.00%	0.00%
	GR CHIROPRACTIC CL	1,592	1,437	874	50	0	0	60.82%	0.00%	0.00%
	GR DERMATOLO CL	451	92	84	31	0	0	91.30%	0.00%	0.00%
	GR FAM PRACTICE	43,894	24,039	18,732	1,496	833	18	77.92%	55.68%	1.20%
	GR GEN SURG CL	1,654	771	753	152	0	0	97.67%	0.00%	0.00%
	GR INT MED CL	3,300	1,911	1,848	229	55	0	96.70%	24.02%	0.00%
	GR MEDICAL EXAM	470	461	461	153	7	0	100.00%	4.58%	0.00%
	GR MENTAL HLTH	6,866	3,207	2,449	335	175	0	76.36%	52.24%	0.00%
	GR MENTAL HLTH VTC	112	82	75	13	7	0	91.46%	53.85%	0.00%
	GR NUTRITION CL	1,067	858	718	42	3	0	83.68%	7.14%	0.00%
	GR OCCUP HEALTH	2,045	1,739	1,491	291	26	0	85.74%	8.93%	0.00%
	GR OPTH CLINIC	5	5	0	0	0	0	0.00%	0.00%	0.00%
	GR OPTOMETRY CL	4,983	4,338	1,333	332	0	0	30.73%	0.00%	0.00%
	GR ORTHO CLINIC	14	0	0	0	0	0	0.00%	0.00%	0.00%
	GR OTOLARYNG CL	606	283	277	42	9	0	97.88%	21.43%	0.00%

*Screening is determined from the vital signs section of AHLTA.

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Metric #1: MTF Tobacco Cessation Report - Visits with Tobacco Screening

MTF DMIS:

Data Refresh: 08/20/2010 19:44

Appointment Date between: 8/1/2009 12:00:00 AM and 8/1/2010 12:00:00 AM

Report Date: 8/23/10

# Adult Visits with Vitals	115,177	% of Visits with Tobacco Screening	79.96%
# Adult Vital Visits with Tobacco Use Screening*	92,091	% Prevalence of Tobacco Use based on Visits with Screening	20.24%
With Reported Tobacco Use ('YES' checked)	18,636		
Without Reported Tobacco Use ('NO' checked)	73,455		
# Adult Vital Visits with Unknown Tobacco Use	23,086		

Patients with Unknown Tobacco Use (not screened)*

Patient's Full Name	Patient Age	Appointment Date	MEPRS Clinic	Primary Dx	Dx Description
	26.0	1/22/10	BHCA	V70.5	VISIT FOR: EXAMINATION OF SUBPOPULATION
	26.0	1/20/10	BGAA	V04.81	VACCINES PROPHYLACTIC NEED AGAINST INFLUENZA
	46.9	10/6/09	BHGA	V70.5	VISIT FOR: PRE-EMPLOYMENT PHYSICAL
	41.5	10/20/09	BEAA	836.2	ACUTE MENISCAL TEAR
	41.4	10/1/09	BEAA	836.2	ACUTE MENISCAL TEAR
	41.4	9/25/09	BEAA	836.2	ACUTE MENISCAL TEAR
	41.3	8/24/09	BEAA	836.2	ACUTE MENISCAL TEAR
	59.3	8/25/09	BEAA	726.70	METATARSALGIA
	37.9	4/23/10	BHGA	V81.2	VISIT FOR: SCREENING EXAM CARDIOVASCULAR DISORDERS
	40.6	1/20/10	BGAA	V04.81	VACCINES PROPHYLACTIC NEED AGAINST INFLUENZA
	40.3	10/27/09	BGAA	V04.81	VACCINES PROPHYLACTIC NEED AGAINST INFLUENZA
	35.3	5/27/10	BFDA	296.00	BIPOLAR DISORDER
	35.3	5/12/10	BFDA	296.00	BIPOLAR DISORDER

*Screening is determined from the vital signs section of AHLTA using the Appointment Date Range selected.

*NOTE: Counts and percentages within this tool will not represent exact performance based on PBB grading. This report is meant to serve as a resource for monitoring clinic, provider, and patient level performance and determining where improvements can be made.

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The report includes adult patients only (age 18 and older)



The report includes adult patients only (age 18 and older)

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- Bookmarks
- Introduction
- Parent DMIS Summary
- Child DMIS Summary
- Clinic Summary
- No Tobacco Screening
- Not Diagnosed

Metric #2: MTF Tobacco Cessation Report - Screened for Tobacco Use and not Diagnosed

MTF DMIS

Data Refresh: 08/20/2010 19

Appointment Date between: 8/1/2009 12:00:00 AM and 8/1/2010 12:00:00 AM

Report Date: 8/23/10

Patient's Full Name	Patient Age	Appointment Date	MEPRS Code	Primary Dx	Dx Description
	56.4	5/13/10	BGAA	719.46	JOINT PAIN, LOCALIZED IN THE KNEE
	56.6	6/29/10	BEAA	836.0	ACUTE MENISCAL TEAR MEDIAL
	38.9	1/21/10	BHGA	V70.5	ASSESSMENT OF PATIENT CONDITION WORK STATUS
	31.5	5/10/10	BAAA	346.90	MIGRAINE HEADACHE
	31.6	6/28/10	BHAA	V65.3	PATIENT EDUCATION - DIETARY
	29.2	11/16/09	BAAA	274.9	GOUT
	29.7	6/2/10	BEDA	739.2	SEGMENTAL DYSFUNCTION OF THORACOLUMBAR REGION
	29.7	6/4/10	BEDA	739.1	SEGMENTAL DYSFUNCTION OF CERVICOTHORACIC REGION
	23.3	6/1/10	BKAA	075	INFECTIOUS MONONUCLEOSIS
	20.7	12/4/09	BKAA	372.03	CONJUNCTIVITIS ACUTE VERNAL
	20.8	1/14/10	BKAA	784.0	HEADACHE
	21.0	4/1/10	BFDA	305.00	ALCOHOL ABUSE
	21.1	4/19/10	BFFA	V79.1	VISIT FOR: SCREENING EXAM ALCOHOLISM
	21.1	4/28/10	BKAA	691.8	ATOPIC DERMATITIS
	33.8	9/25/09	BBAA	V25.2	VISIT FOR: STERILIZATION
	48.5	6/16/10	BKAA	719.42	JOINT PAIN, LOCALIZED IN THE ELBOW
	23.5	10/27/09	BHAI	465.9	UPPER RESPIRATORY INFECTION
	23.9	3/22/10	BHAI	V70.5	VISIT FOR: MILITARY SERVICES PHYSICAL
	62.4	10/8/09	BBAA	577.0	ACUTE PANCREATITIS DUE TO GALLSTONES
	62.6	12/7/09	BAAA	780.60	FEVER

*NOTE: Counts and percentages within this tool will not represent exact performance based on PBB grading. This report is meant to serve as a resource for monitoring clinic, provider, and patient level performance and determining where improvements can be made.

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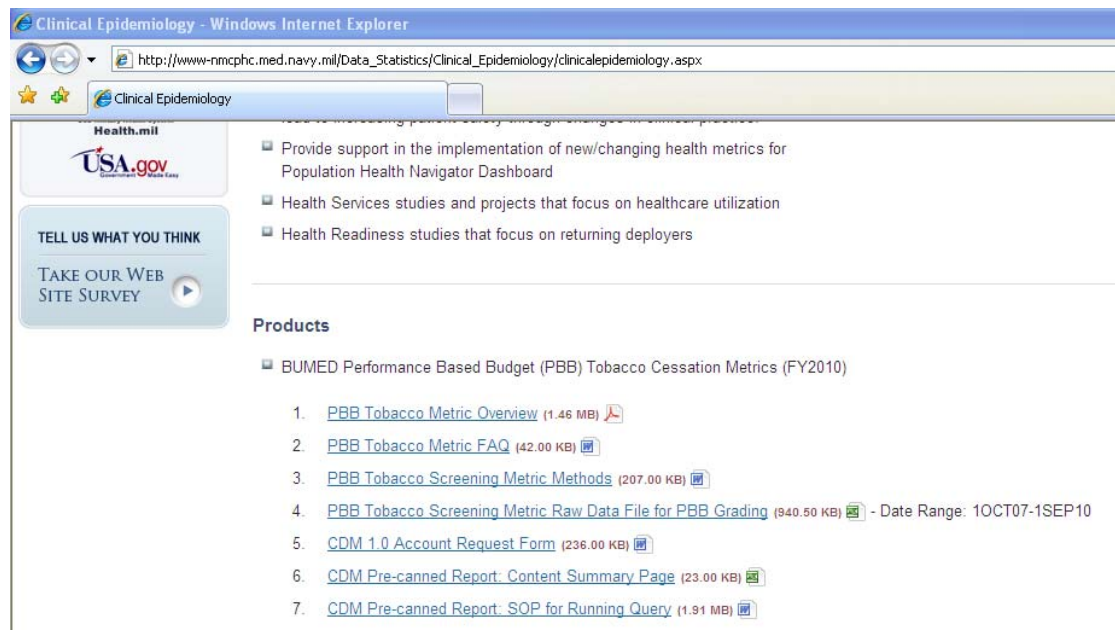
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CDM 1.0 Account

- **For CDM Application and Questions:**
 - Contact MHS Help Desk
 - 1-800-600-9332 (CONUS)
 - 1-866-637-8725 (OCONUS)
- **Fax Completed Form to:**
 - ATTN: EIDS Access
 - 866-551-1249

NMCPHC Resources: Clinical Epidemiology Webpage

- <http://www-nmcp hc.med.navy.mil>
 - Data & Statistics
 - Clinical Epidemiology
 - Scroll down to “Products”

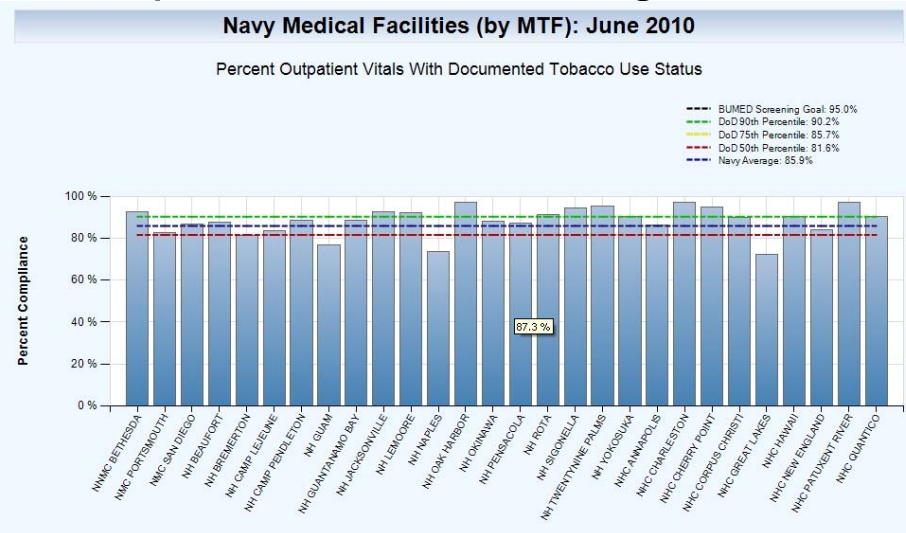


The screenshot shows a Windows Internet Explorer browser window displaying the Clinical Epidemiology webpage. The address bar shows the URL: http://www-nmcp hc.med.navy.mil/Data_Statistics/Clinical_Epidemiology/clinicalepidemiology.aspx. The page content includes a "Health.mil" logo, a "USA.gov" logo, and a "TELL US WHAT YOU THINK" survey button. Below these are three bullet points: "Provide support in the implementation of new/changing health metrics for Population Health Navigator Dashboard", "Health Services studies and projects that focus on healthcare utilization", and "Health Readiness studies that focus on returning deployers". The "Products" section lists seven items, including "BUMED Performance Based Budget (PBB) Tobacco Cessation Metrics (FY2010)" and various reports and forms.

NMCPHC Resources:

PHN Dashboard

- <http://www-nmcp hc.med.navy.mil>
 - Data & Statistics
 - Population Health Navigator
 - Under “PHN Resources”
 - Click “Population Health Navigator Dashboard”



BUMED Resources

- Global Outlook Group
 - “PBB Tobacco Cessation”
- PBB Progress Reports
 - Summary of monetary rewards for all PBB metrics, by Parent DMIS ID.

Questions

Please direct all PBB Tobacco Metric Questions to:

health-analysis@nehc.mar.med.navy.mil

Within the email subject line, specify the topic of your question using the topics below so it can be appropriately directed:

- PBB Tobacco Metric Grading and Monetary Rewards
- PBB Tobacco Metric Clinical Guidance
- PBB Tobacco Metric Methods and Development