



Subject: Facilities Enterprise Analytics | Value per Square Foot (Methodology Documentation)

Document Link: <https://facilities.health.mil/Repository/getFile/21668>

Reference:

- Workload—M2 Data SQL Query (see “M2 Workload SQL Query” section of this document)
- DMIS ID Square Feet -- DMLSS-FM Source of Truth (SOT) : <https://facilities.health.mil/repository/getFile/11527>
- Square Feet (SF) Calculation: <https://facilities.health.mil/repository/getFile/16600>
- DMIS Routing File Source of Truth (SOT) – Identifies the MHS MTF’s and DMIS ID: <https://facilities.health.mil/Repository/Download/11655> (Routing file SMA POC’s if you have questions or want to request updates to the routing file: <https://facilities.health.mil/Repository/Download/17359>)

Details:

Value per Square Foot (SQFT) Calculation:

1. The Value/SQFT index for an individual MTF is calculated as follows:

$$Index = \frac{Value (\$)}{Square Feet (SF)}$$

$$Index = \frac{(\sum RVU \times Value_{RVU}) + (\sum RWP \times Value_{RWP}) + (\sum APC \times Value_{APC})}{\sum MTF SF}$$

- a. **Numerator:** The Total Value is defined as the sum total workload completed within the Direct Care (DC) Military Treatment Facility (MTF) by DMIS ID within a Fiscal Year (FY) multiplied by the Value Rate

- i. **Value Rate:** DHA’s established dollar value per workload unit

1. The “Value Rate” is determined annually by DHA’s Business Analytic Council (BAC). The BAC sets the rates for each workload unit of measure, see the example table listed below:

DC MTF Workload Value Rate per Unit				
	RWP*	APC	RVU	MH Bed Day**
CY16 =	\$ 9,159	\$75.552	\$35.9335	\$925

*Includes \$1,594 in Professional add-on

** Includes \$61 in Professional add-on

- ii. **Workload:** The MTF’s workload is defined using the following units of measure:
 1. RWPs = Relative Weighted Products, represents the inpatient workload;
 2. APCs = Ambulatory Procedure Codes, measure outpatient surgery workload



3. RVUs = Relative Value Units, accounts for the outpatient workload and ;
 - Together these workload units are multiplied by their respective “Value Rate” and summed to determine the MTF’s “Total Value” produced
 - **Source:** Master Data Repository (MDR), utilizing the (M2) SQL query, each MTFs workload is extracted and calculated to determine the MTFs “Total Value” metric numerator

b. **Denominator:**

- i. **Square Feet:** Determine the MTFs “Net and Gross” Square feet:

1. **“Net Square Feet (NSF)”**; calculated by summing all “Room_Size” associated with the MTF (DMIS ID)

$$MTF\ NSF = \sum_1^n Room_Size\ for\ the\ Asset$$

2. **“Gross Square Feet (GSF)”**; calculated as a ratio (DMIS Ratio) of the total NSF associated with the MTF to the GSF of the MTF (See: <https://facilities.health.mil/Repository/getFile/16600>)

$$DMIS\ Ratio = \frac{\sum NSF\ for\ the\ DMIS\ (MTF)}{\sum Total\ Building\ Net\ Square\ Feet\ (NSF)}$$

$$MTF\ GSF = \sum_1^n (DMIS\ Ratio\ x\ Total\ GSF)$$

Source: DMLSS-FM rooms have a DMIS ID associated with them. This DMIS ID is used to identify the SF associated for the asset based on this room MTF (DMIS ID) association.

Additional “Value per SQFT” Reports Available at: <https://facilities.health.mil/repository/getFile/19288>

1. MTF Frequency Distribution Cure Report
2. Service Level Summary
3. eMSM (6+2) Reports
4. MTF Level Reports
5. Encounters Report
6. Average Daily Patient Load (ADPL) Report
7. Occupied Beddays (OBD) Report



Filters:

The following defaults are used.

1. Size unit of measure code (“Size_UM_Code”) = SF (Square Feet)

Error Handling:

1. MTFs with Value but, without SF are excluded
2. MTFs with “blanks” or “significantly” wrong SF are excluded
3. MTFs with SF but, no workload are excluded

M2 Workload SQL Queries:

Inpatient Workload (RWP) Query

*** Query Name:SIDR ***

** Query Properties:

Universe:MHS MART (M2)

Last Refresh Date:3/29/17 11:34 AM

Last Execution Duration: 1

Number of rows: 5,577

Retrieve Duplicate Row: ON

** Query Definition:

Result Objects: FY, Tmt DMIS ID, Tmt DMIS ID Name, Tmt DMIS ID HSSC Region, Patient Category, ACV Group, Medicare Eligibility, Dispositions, MS-DRG RWP

Filters (FY In List 2,016 & Tmt DMIS ID DHP Code In List Y)

Outpatient Workload (RVU & APC) Query

*** Query Name:CAPER ***

** Query Properties:

Universe:MHS MART (M2)

Last Refresh Date:3/29/17 11:34 AM

Last Execution Duration: 48

Number of rows: 55,039

Retrieve Duplicate Row: ON

** Query Definition:

Result Objects: FY, Tmt Parent DMIS ID, Tmt Parent DMIS ID Name, Tmt DMIS ID, Tmt DMIS ID Name, Tmt DMIS ID HSSC Region, Patient Category, ACV Group, Medicare Eligibility, Encounters, Provider Aggregate Work RVU, Provider Aggregate PE RVU, Provider Aggregate Total RVU, APC Aggregate Weight

Filters (FY In List 2,016

AND Tmt DMIS ID DHP Code In List Y

AND Appointment Status Code Not Equal 1;7;9

AND Compliance Status In List R

AND Countable Visit In List 1