

CMS Forms, CMS-672 and the Matrix

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The Matrix – introduced by CMS in November 2017

The Matrix (as of now still not given a form number) is the new form that Survey will be using as of November 2017 to replace the roster/matrix CMS-802.

Please be sure that you obtain a copy of their instructions and read them thoroughly. You will notice that the official instructions contain no links to questions on the MDS. Per information we have read, this is to encourage you to evaluate the resident based upon *ALL sources of information* available to you. As with the CMS-802, *your responses should reflect each of the residents as of the day of survey.*

Please note, The CMS Instructions for the Matrix were revised in January 2018. Items F5 and F8 were changed from a valid answer of X to signify a trigger, to a specific answer for the stage of ulcer and type of feeding tube. The first time you run the matrix after this change (2018.3), the X will be removed from either of these fields if it had been previously marked in this fashion. You may manually select the correct answer. Once this update has been installed, closing the MDS and electing to send the information forward to the Matrix will automatically update these fields.

Logic of the System

You must be familiar with the CMS instructions for both of these forms. Even though the official CMS instructions give no links to the MDS, where questions match the language of the Matrix, we have created links *for informational purposes only*. **These are suggestions only and meant to give you a starting point for your evaluation. You MUST update this information using whatever other sources are available to you on the day of survey.**

As you complete MDS assessments, the system will prompt you to decide whether or not the MDS data should be used to update the 672 and/or Matrix or neither. The decision should be based on the current frequency with which the 672 and /or Matrix are being manually adjusted.

If these forms are being manually updated weekly, it is possible that the data in the MDS is older and less current than the manually updated information entered recently into either form (i.e. the data that you entered manually into the form yesterday will be more current than the MDS that you closed today with an ARD from days/weeks ago.). In this case, the user may answer “NEITHER” when prompted by the question,

On the other hand, if the 672 and/or Matrix are being updated monthly or less frequently, you may select 672, Matrix, or Both at which point the information from the assessment will be brought into the forms.

Remember, it is the responsibility of the facility to provide correct information regardless of the values in the MDS 3.0. And, all answers must be reflective of the status for each resident as of the date of survey. A completed MDS does not contain information from today and so may no longer be reflective of the resident. The UTI shown on a quarterly done 10 weeks ago may no longer be relevant today and the pneumonia that the resident now has will not have been on that “old” MDS that is reflected on the CMS form. You will have to answer many questions manually and check ALL responses brought over for accuracy before providing the State with this data. Fields indicated in the 672 as “manual” in the HCFA instructions must be entered by the user as there is no crosswalk for these items.

Links to MDS Questions

CMS-672

The **CMS-672** form dictates exactly which MDS information correlates to which fields on the form. Our forms follow these same guidelines when you elect to link to the CMS-672 at the close of the MDS assessment. You will need to update to reflect the resident’s status as of the date of survey.

The MATRIX

The Matrix instructions do not list any MDS questions as they want you to review ALL sources of information available to you. We provide this information to you simply as a starting point for your analysis. You **MUST** review the entire medical record for each resident and update as appropriate.

These are NOT official CMS instructions. We have created the link with the MDS using the questions listed below. **Use the information we present to you on the Matrix form only as a starting point and review with other sources/documentation to finalize your answers.** If you do not wish to use this MDS data for the MATRIX, answer the question shown above either “CMS-672” or “neither”.

- **F1, Residents Admitted within the Past 30 days**
Resident(s) who was admitted to the facility within the past 30 days and currently resides in the facility
- **F2, Alzheimer's/Dementia**

Resident(s) who have a diagnosis of Alzheimer's disease or dementia of any type.

Trigger: I4200 or I4800 marked
No Change: I4200 and I4800 not marked
No change: I4200 and I4800 dashed or skipped

- **F3, MD, ID or RC and no PASARR Level II**

Resident(s) who have a serious mental disorder, intellectual disability or a related condition but does not have a PASARR level II evaluation and determination.

Triggers: A1500=1 and A1510a marked
A1500=1 and A1510b marked
A1500=1 and A1510c marked (added because of ambiguous directions)
I5700 or I5800 or I5900 or I5950 or I6000 or I6100 marked
A1550a or A1550b or A1550c or A1550d or A1550e marked
No Change: A1510b dashed or skipped
A1550a or A1550b or A1550c or A1550d or A1550e dashed or skipped
A1500 or A1510a or I5700 or I5800 or I5900 or I5950 or I6000 or I6100 dash/skip
Removed: All unmarked

- **F4, Medications**

Resident(s) receiving any of the following medications: (I)=Insulin; (AC)=Anticoagulant (e.g. Direct thrombin inhibitors and low weight molecular weight heparin [e.g., Pradaxa, Xarelto, Coumadin, Fragmin]. Do not include Aspirin or Plavix), (ABX)=Antibiotic, (D)=Diuretic, (O)=Opioid, (H)=Hypnotic, (AA)=Antianxiety, (AP)=Antipsychotic, (AD)=Antidepressant, (RESP)=Respiratory (eg., inhaler, nebulizer).
NOTE: Record meds according to a drug's pharmacological classification, not how it is used.

(I)=Insulin	N0350a (number of insulin shots)
(AC)=Anticoagulant	N0410e (number of days receiving Anticoagulants)
(ABX)=Antibiotic	N0410f (number of days receiving Antibiotics)
(D)=Diuretic	N0410g (number of days receiving Diuretics)
(O)=Opioid	N0410h (number of days receiving Opioids)
(H)=Hypnotic	N0410d (number of days receiving Hypnotics)
(AA)=Antianxiety	N0410b (number of days receiving Antianxiety meds)
(AP)=Antipsychotic	N0410a (number of days receiving Antipsychotics)
(AD)=Antidepressant	N0410c (number of days receiving Antidepressants)
(RESP)=Respiratory	not linked

All done in this manner:

Triggered: N0350a > 0
Removed: N0350a = 0
No Change: N0350a blank, dashed or skipped

- **F5, Facility Acquired Pressure Ulcers(s) (any stage)**

Resident(s) who have a pressure Ulcers at any stage, including suspected deep tissue injury (Mark as I, II, III, IV, U for unstageable, S for SDTI) Note: Not enough information is in the MDS to do Stage 1 to determine which are in house only.

Triggered: (M0300b1 - M0300b2 > 0) or (M0300c1 - M0300c2 > 0) or (M0300d1 - M0300d2 > 0) or (M0300e1 - M0300e2 > 0 or (M0300f1 - M0300f2 > 0) or (M0300g1 - M0300g2 > 0)
No Change: M0300b1 or M0300c1 or M0300d1 or M0300e1 or M0300f1 or M0300g1 are blank, dash or skip
Removed: All above equations = 0

- **F6, Worsened Pressure Ulcers at any stage**

Resident(s) with a Pressure ulcer at any stage that have worsened.

Triggered: M0800a > 0 or M0800b > 0 or M0800c > 0
No change: M0800a or M0800b or M0800c blank, dashed or skipped
Removed: All above = 0

This question has been removed as of October 1, 2018. Therefore, there is insufficient information for the system to trigger this for you. Prior data in this field will NOT automatically be removed. You will have to review and set this value manually going forward.

- **F7, Excessive Weight Loss without Prescribed Weight Loss Program**

Resident(s) with an unintended (not prescribed weight loss program) weight loss >5% within the past 30 days or >10% within the past 180 days. Excluded residents receiving hospice services.

Triggered: K0300 = 2 and O0100k2 not marked
Removed: (K0300 = 0 or 1) or (K0300 = 2 and O0100k2 marked)
No change: K0300 or O0100k2 blank, dashed or skipped

- **F8, Tube Feeding**

Residents(s) who receive enteral (E) or parenteral (P) feedings.

Triggered: K0510a2 or K0510b2 marked
Removed: K0510a2 and K0510b2 not marked
No Change: K0510a2 or K0510b2 dashed or skipped

- **F9, Dehydration**

Resident(s) identified with actual hydration concerns (e.g., receives enteral, parenteral and/or IV feeding/fluids, or is dehydrated) takes in less than the recommended 1500ml of fluids daily (water or liquids in beverages and water in foods with high fluid content, such as gelatin and soups).

Triggered: K0510a2 or K0510b2 or J1550c marked
Removed: K0510a2 and K0510b2 and J1550c not marked
No change: K0510a2 or K0510b2 or J1550c dashed or skipped

Note: MDS question K0710B deals with the average fluid intake by IV or tube feeding. It looks at amounts below or above 501cc/day. This field on the CMS form is looking at 1500ml. You will have to evaluate your Resident Observation documentation or Notes to make a final determination.

- **F10, Physical Restraints**

Resident(s) who have a physical restraint in use. A restraint is defined as the use of any manual method, physical or mechanical device, material or equipment attached or adjacent to the resident's body that the individual cannot remove easily which restricts freedom of movement or normal access to one's body (e.g., bed rail, trunk restraint, limb restraint, chair prevents rising, mitts on hands, confined to room, etc.). Do not code wander guards as a restraint.

Triggered: P0100a or P0100b or P0100c or P0100d or P0100e or P0100f or P0100g or P0100h = 1 or

2
No Change: P0100a or P0100b or P0100c or P0100d or P0100e or P0100f or P0100g or P0100h = blank, dashed, or skipped
Removed: All = 0

- **F11, Fall(s) (F) or Fall(s) with injury (FI) or major injury (FMI)**

Resident(s) who have fallen in the facility in the past 90 days or since admission and have incurred an injury or not. A major injury includes bone fractures, joint dislocation, closed head injury with altered consciousness, subdural hematoma. Use (F) to identify residents with a fall(s), (FI) to identify a resident who has sustained an injury excluding major injury, and (FMI) to identify a resident who has sustained a fall(S) with major injury

(F) Falls J1900a = 1 or 2
(FI) with injury J1900b = 1 or 2
(FMI) with major injury J1900c = 1 or 2

All done as follows:

Triggered: J1900a = 1 or 2
Removed: J1900a = 0
No Change: J1900a = blank, dash or skipped

- **F12, Indwelling Urinary Catheter**

Residents(s) with an indwelling Catheter (including suprapubic catheter and nephrostomy tube.

Triggered: H0100a marked
No Change: H0100a dashed or skipped
Removed: H0100a blank

- **F13, Dialysis**

Residents(s) who are receiving (H) hemodialysis or (P) peritoneal dialysis either within the facility (F) or offsite (O)

Note: O0100j2 = X only says has dialysis

Triggered: O0100j2 marked (only marks that dialysis is being given)
No Change: O0100j2 dashed or skipped
Removed: O0100j2 blank (removes dialysis mark, as well as, what type and location marks)

- **F14, Hospice**

Resident(s) who have elected or are currently receiving hospice services.

Triggered: O0100K2 marked or A1800='07' or A2100='07'
Removed: O0100K2 not marked and A1800<>'07' and A2100<>'07'
No Change: Either above not met

- **F15, End of Life/Comfort Care/Palliative Care**

No link

- **F16, Tracheostomy**

Resident(s) who have a Tracheostomy

Triggered: O0100e2 marked

Removed: 00100e2 not marked
No Change: 00100e2 dashed or skipped

- **F17, Ventilator**

Resident(s) who are receiving invasive mechanical ventilation.

Triggered: 00100f2 marked
Removed: 00100f2 not marked
No Change: 00100f2 dashed or skipped

- **F18, Transmission-Based Precautions**

Resident(s) who are currently on Transmission-based Precautions.
no link

- **F19, Intravenous therapy**

Resident(s) who are receiving intravenous therapy through a central line, peripherally inserted central catheter, or other intravenous catheter.
No link

- **F20, Infections**

Resident(s) who has a communicable disease/contagious Infection (e.g., MDRO-M, pneumonia-P, tuberculosis-TB or viral hepatitis-VH, or c-diff-C) OR has a healthcare-associated infection (e.g., wound infections-WI or UTI)

"M" MDRO	I1700	"WI" Wound Infection	I2500
"P" Pneumonia	I2000	"UTI"	I2300
"TB" Tuberculosis	I2200		
"VH" Viral hepatitis	I2400	"C" c-diff – no link	

All done as follows:

Triggered: I1700 marked
Removed: I1700 not marked
No Change: I1700 dashed or skipped

Maintain Data

Every time the user selects the option **MAINTAIN CMS 672 DATA** or **MAINTAIN MATRIX DATA** under **CMS FORMS**, the system will update the resident list from the current census and will bring in all new residents, new rooms and units, etc. The data entered in the fields will not be affected by the census update.

CMS-672

Select **MAINTAIN CMS-672 DATA** from the menu and indicate a unit for processing. Pressing **F2** on the unit field will display a pick-list of defined units for selection. A screen showing the names of all residents on that unit will then appear. You will need to do this for each unit in the facility that will be under survey.

RESIDENT LIST WINDOW

After the unit has been identified, a screen will appear listing the residents residing on that unit.

CMS-672 Resident Census and Conditions Maintenance

List	Payor/ADL	A-B	C-D	E	F-G					
RESIDENT CENSUS AND CONDITIONS OF RESIDENTS										
Name	Unit	Room	F75	F76	F77	F78	F79	F80	F81	F82
LOV	02	210A						X		
SEL	02	211A							X	
COV	02	213A						X		
WIN	02	216A							X	
TUF	02	218A							X	
RAV	02	219A								
BRC	02	221A							X	
BOV	02	222B							X	
BAL	02	224A								
HAF	02	226B							X	
CRI	02	229A							X	

To select a resident, click on the resident’s name to highlight it light blue. If the resident’s name is not visible, use the scroll bar down the right side to scroll the list. The tabs along the top of the window contain the fields on the CMS-672 form.

ENTERING DATA

When the correct resident is chosen, click on one of the tabs of the form to fill in the correct information. For example, the **A-B** tab of the 672 contains the following:

CMS-672 Resident Census and Conditions Maintenance

List	Payor/ADL	A-B	C-D	E	F-G
CENSUS AND CONDITIONS FOR: LOVE, BEN					
A. Bowel/Bladder Status			B. Mobility		
F94	<input type="checkbox"/>	With indwelling or external catheter	F100	<input type="checkbox"/>	Bedfast all or most of time
F95	<input type="checkbox"/>	Of total number of residents with catheters, how many were present on admission. <input type="checkbox"/>	F101	<input checked="" type="checkbox"/>	In chair all or most of time
F96	<input checked="" type="checkbox"/>	Occasionally or frequently incontinent of bladder	F102	<input type="checkbox"/>	Independently ambulatory
F97	<input type="checkbox"/>	Occasionally or frequently incontinent of bowel	F103	<input type="checkbox"/>	Ambulation with assistance or assistive device
F98	<input checked="" type="checkbox"/>	On urinary toileting program	F104	<input type="checkbox"/>	Physically restrained
F99	<input type="checkbox"/>	On individually written bowel training program	F105	<input type="checkbox"/>	Of the total number of residents with restraints, how many were admitted or readmitted with orders for restraint <input type="checkbox"/>
			F106	<input type="checkbox"/>	With contractures
			F107	<input type="checkbox"/>	Of the total number of residents with contractures, how many had a contracture(s) on admission? <input type="checkbox"/>

ENTERING DATA

When the correct resident is chosen, click **EDIT** or one of the tabs of the form to fill in the correct information. For example, the **Fields 1-6** tab of the Matrix contains the following:

The screenshot shows the 'CMS Matrix Maintenance' window with the 'Fields 1-6' tab selected. The title bar reads 'SAMPLE MATRIX MATRIX FOR RESIDENT: JONAS'. The form contains several sections with checkboxes:

- F1 Resident Admitted within the Past 30 days | 03/13/2018
- F2 Alzheimer's/Dementia
- F3 MD, ID or RC & No PASARR Level II
- F4 Medications
 - Insulin (I)
 - Antibiotic (ABX)
 - Opioid (O)
 - Antianxiety (AA)
 - Antidepressant (AD)
 - Anticoagulant (AC)
 - Diuretic (D)
 - Hypnotic (H)
 - Antipsychotic (AP)
 - Respiratory (RESP)
- F5 Facility Acquired Pressure Ulcer(s) (any stage)
- F6 Worsened Pressure Ulcer(s) at any stage

At the bottom left, a red warning message reads: 'Caution. Warning. Disclaimer. Information pulled from the MDS is based upon historic data and may not accurately reflect the status of the resident today. It is meant only to give you a starting point. Please review carefully.' At the bottom right, there are 'Next' and 'Done' buttons.

To enter values for the resident, simply click on the box to indicate that a condition exists for that resident and a checkmark will appear. To remove a checkmark, click on the field again and the checkmark will disappear. Check all conditions on the current tab and then click **NEXT** or directly on the next tab to respond to those questions.

LINKS FOR ADDITIONAL DATA

On this Matrix option, you will see buttons on the right side of the window. These buttons will take you to other parts of the system so that you can review your data. **Remember, if you are using the option to pull information from the MDS, you must still review all of your sources/documents and update this form to reflect the condition of each resident on the day of survey. You are expected to use all sources of information available to you, not just the last MDS assessment.**

- Matrix Summary – will list the current diagnoses, history of hospice, total liquid amounts recorded in Resident Observations over the last seven days, weight risk values for 5% - 7.5% - 10%, and Care Center information for tube, ostomy, catheter, and special diet.
- Care Center Summary will bring up the report to show Notes, Vital Signs, Resident Observation Alerts, Mobility/ADLs, Bowel/Bladder, and Dietary documentation for your selected resident.
- Notes is a quick link to Progress Notes. You may review and/or create new notes for your selected resident depending on your rights level for that module.
- MDS will link to the Edit MDS screen so you can review MDS information for your selected resident.
- Care Plans will take you to the current care plan for your selected individual.
- Infection will take you to the Infection Control documentation for your selected resident.
- Accident/Incident is a quick link to that module.

- Vitals will allow you to review any vitals information maintained either through Progress Notes or Resident Observations.

In addition to this information, you will want to review medication documentation, labs, doctor notes or therapy notes if not maintained in Progress Notes, etc. Review ALL sources of information available to you.

SAVING THE DATA

When you have completed entering the Matrix data for the resident, click on the **LIST** tab to return to the resident list. Either select another resident for editing or click on the **FINISH** button to save all the data and exit the option.

Printing and Locking Either Option

Printing from the Maintain Data Screen

When ready to print the CMS-672 or Matrix data, simply return to the **LIST** tab and click the **PRINT** button. The report will display on the screen and can be printed or saved as an Adobe pdf. The printed report will provide the correct characters, such as F, N, IT, C, etc. in the printed report. Printing of prior locked data can be done through Reports, see below.

Lock the Data for Survey

At any time, the values which exist in the fields under **MAINTAIN CMS -672 DATA** or **MAINTAIN MATRIX DATA** can be “locked” or frozen. You will probably wish to “lock” only once a year at the time of survey. Then, at any future date you will be able to print a report showing the data on that “locked” date.

Be sure that you have done the MAINTAIN option for the CMS-672 for ALL units or the MATRIX for ALL residents. This will update and give you a current census to work with.

Select either the **LOCK CMS-672 DATA FOR SURVEY** or **LOCK MATRIX DATA FOR SURVEY** menu option. You will then need to supply the date to be associated with the “locked” data.

Maintain CMS Locked Data

Once data has been “locked”, it is no longer automatically updated with the current census nor is it updated with information from the MDS. Instead, it is locked with the census on that lock date and only available for manual manipulation. This allows you to make the last-minute updates to the forms for survey without worrying about someone inadvertently updating from the MDS.

Select either the **MAINTAIN LOCKED CMS-672 DATA** or the **MAINTAIN LOCKED MATRIX DATA** from the menu. Enter a unit for processing on the 672 or leave blank to look at all units. Select a resident option (only those admitted in the last 30 days, only those admitted prior to the past 30 days, all residents, or per unit) for the Matrix. Pressing **F2** on the UNIT field will display a pick-list of defined units for selection.

Next enter the date of the locked data to view. Pressing **F2** while positioned in the date field will bring up a pick-list of all “lock” dates. Select the correct data to view.

A screen showing the names of all residents on that unit or all units will then appear. View data in the same manner as maintaining the current data.

Correcting for Census Discrepancies

At the bottom of the window you will see **INSERT** and **DELETE** buttons. Use these buttons to add or delete residents if your census is not correct. For example, a resident may be entering or discharging as survey walks in the door. Medical Records may not have had the opportunity to update the census with that information before you need to lock the data. Press the INSERT button and then select the resident to add from the pop-up list. To delete a resident, highlight them in the CMS-672 or Matrix list and then press the DELETE button.

Reports

Printing of the 672 and Matrix data for both the current maintained or any locked data can be accomplished. In addition to printing from within the Maintain functions, you also have a PRINT menu option for these forms.

Print CMS-672 (Resident Census/Conditions)

Select the **PRINT CMS-672 DATA** menu option. A report configuration screen will appear.

- Report on what Survey Date? Leave this field blank to report on data for the current census or type in a survey date to print locked data. Press the **F2** key to view and select a survey date.
- Report on individual data collected? Default is **No**. Answering **Yes** will result in a second report being generated that will detail the data for each resident included in the report.
- Report on data for a specific unit? Leave blank to combine all units on one report or enter a valid unit number. Press the **F2** key to display a pick-list of unit numbers.

Click on **OK** to produce the report. Please be patient. Due to the large number of calculations and print formatting the report may take a few minutes to display.

Print CMS-MATRIX

Select the **PRINT MAINTAINED MARTRIX DATA** or the **PRINT LOCKED CMS-MATRIX DATA** menu option. A report configuration screen will appear.

- You have the same sort options as you do with Maintain – only those newly admitted within the past 30 days, only those with admission dates prior to the past 30 days, all residents, or only those specific to a unit.
- Report on a specific unit? Press the **F2** key to display a pick-list of unit numbers or you may leave it blank to capture all units.
- For survey date? (Will appear only when printing LOCKED data.) Press the **F2** key to display a list of all locked dates.

Reminder

The word “triggers” is sometimes applied to the MDS/Care Plan, Quality Measures, and to the CMS forms. The forms look at the data differently and are not calculated in the same way. Please refer to the CMS instructions for the specific forms to see what is included for each of the items.

The CMS-672 is not designed to pull every field from the MDS so you will have to manually complete it. The Matrix is to use all sources of information, not just the MDS. It is up to you to review ALL fields to be sure they have current data. Even if they were updated from the MDS yesterday, that information may be “old” for any given resident.

Anticipating Survey – an option

This is just one of many options you can create when preparing for survey. Please set *your* policy according to the needs of your facility.

1. If you are within your survey window, when closing the MDS do NOT have the data flow through to the CMS forms – answer NEITHER. From now until survey, you will be updating manually.
2. Use the MAINTAIN function (first option) to manually update the information. This can be done once a week for fairly stable residents or more often (daily) if you have residents who are changing rapidly. If you have assigned responsibility per unit, each unit may have their own schedule.
3. Make sure the census is current for the facility. Have all admissions, discharges, and room changes been completed? Try to update quickly during this period. When survey walks in, you do not want to spend a great deal of time making sure the census is correct. Remember, you only have one hour to produce a Matrix report for all current residents who are new admits within the last 30 days.
4. When the survey team arrives, use the Maintain (first option) in order to pull in the current census. For the 672, be sure to run for each unit. For the Matrix, be sure to include all residents.
5. Lock the data using today’s date, the date of survey. Once the data is locked then the MDS data can once again be directed to flow through to the forms upon assessment completion.
6. Maintain the Locked Data. Be sure all of your residents are in the list (was the census current when you locked it?). Now carefully review each resident, evaluate all sources of information, and update the fields so they reflect the current status of each person. If you have been trying to keep this current in the weeks leading up to survey, the job will be easier.
7. Print the form through the PRINT option by specifying the locked date (and whether you need within 30 day admits or all residents for the matrix) and present to survey.

For More Information

CMS-672

<https://www.cms.gov/Medicare/CMS-Forms/CMS-Forms/Downloads/CMS672.pdf>

The MATRIX

<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Downloads/Matrix-with-Instructions-Content-Unchanged.pdf>