DEPARTMENT OF
HEALTH & HUMAN SERVICES
CENTERS FOR DISEASE CONTROL
AND PREVENTION
ATLANTA, GA 30333

# HACO MRSA Study: Long-term Care Facility (LTCF) Medical Record Review Form (MRRF)

*(This form will be filled out only for residence who are residing at a LTCF after discharge from the hospitalization of interest)*

CENTERS FOR DISEASE CONTROL AND PREVENTION

Study ID: _____

**Section 1: Personal Identifiers – NOT transmitted to CDC, Remove from MRRF and keep for site records**

**LTCF Medical Record Number:** _____ **Phone Number:** (  )_____

**Last Name:** _____ **First Name:** _____

**LTCF Name:** _____

**LTCF Address:** _____

**City:** _____ **State:** _____ **Zip Code:** _____



- IMPORTANT - PLEASE COMPLETE THE BACK OF THIS FORM -

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## Section 2: Study Identifiers (Completed by EIP site and transmitted to CDC)

**1. Study ID:** _____
(if a case, please list STATE ID. For a control, please list the matched case's STATE ID-#)

**1A. Date of Discharge from Hospitalization of Interest:** ____ / ____ / ____ (MM / DD / YYYY)

**1B. Date of initial HACO MRSA culture for case or control's matched-case:** ____ / ____ / ____ (MM / DD / YYYY)

**2. Date of Birth:** ____ / ____ / ____ (MM / DD / YYYY)

**3. Gender:**
☐ Female
☐ Male
☐ Unknown

**4. Date of admission to LTCF after hospitalization of interest:** ____ / ____ / ____ (MM / DD / YYYY)
**(Refer to MDS 3.0 Section A1600)**

**5. LTCF ID where data was abstracted:** _____

**6. Date of data abstraction :** ____ / ____ / ____ (MM / DD / YYYY)

**7. Person who completed the form:** ☐ EIP SO ☐ Facility nurse Initials of Abstractor: _____

## Section 3: Screening Questions

*Case Eligibility:*

**8. Did this LTCF resident stay > 3 calendar days in an alternate acute care facility between discharge from hospitalization of interest on** ____ / ____ / ____ (MM / DD / YYYY) **and date of initial HACO MRSA culture (Date:** ____ / ____ / ____ (MM / DD / YYYY) **)?**

☐ Yes (Go to Q.8A) ☐ No (Go to Q.12) ☐ Unknown **(STOP ABSTRACTION and EXCLUDE RESIDENT!)**

**8A. What is the hospital ID of the acute care facility where resident stayed for 3 or more nights between discharge from hospitalization of interest and initial HACO MRSA positive culture?**

_____

**8A.i. Is the acute care facility participating in this study?**

☐ Yes (Go to Q.8B)

☐ No **(STOP ABSTRACTION and EXCLUDE RESIDENT!)**

**8B. Was the resident admitted back to this *same* LTCF after discharge from the above acute care facility where he/she stayed for 3 or more nights?**

☐ Yes (Go to Q8.B.i) ☐ No ☐ Unknown

**If No or Unknown, STOP abstraction here and go back to new HOI to determine where the resident was discharged.**

**8B.i. *If yes*, what was the date of LTCF admission?**

____ / ____ / ____ (mm/dd/yyyy) (Go to Q12)

***[Please NOTE: you should use this date as the date of admission to LTCF from hospitalization of interest. A new MRRF will need to be filled out for this resident]***

*Control Eligibility:*

**9. Did this resident die between LTCF admission [Date:** ____ / ____ / ____ **] and date of initial HACO MRSA culture [Date:** ____ / ____ / ____ **]?** (MM / DD / YYYY)

☐ Yes, Date of death ____ / ____ / ____ (MM / DD / YYYY) **(EXCLUDE THIS RESIDENT FROM STUDY)**

☐ No (Go to Q.10)

**10. Did the resident have an invasive MRSA infection within the 12 weeks after being discharged from the hospitalization of interest on** ____ / ____ / ____ **?** (MM / DD / YYYY)

☐ Yes (List sterile site: _____ AND **EXCLUDE THIS RESIDENT AS CONTROL**)

☐ No (Go to Q.11)

**11. Did this LTCF resident stay > 3 calendar days in an acute care facility between discharge from hospitalization of interest on** ____ / ____ / ____ **and date of matched-case's initial HACO MRSA culture (Date:** ____ / ____ / ____ **)?** (MM / DD / YYYY)

☐ Yes (Exclude this resident) ☐ No (Go to Q.12)

☐ Unknown **(STOP ABSTRACTION and EXCLUDE RESIDENT!)**

***Complete remaining sections for all residents***

## Section 4: Demographics

***Please fill out according to MDS 3.0 even though this information may be available in the MRRF***

***Race/Ethnicity should be available under Section A1000 of MDS 3.0 Assessment***

**12. Race**
☐ White/Caucasian ☐ Asian
☐ Black/African American ☐ Native Hawaiian/Pacific Islander
☐ American Indian/Alaskan Native ☐ Unknown

**13. Ethnicity:**
☐ Hispanic
☐ Non-Hispanic
☐ Unknown

***Height and Weight should be available under Section K0200 of the MDS 3.0 completed closest to admission.***

**14. Weight at admission to LTCF:** _____ (circle): lbs ☐ Unknown

**15. Height at admission to LTCF:** _____ in ☐ Unknown

## Section 5: LTFC Stay

***Information may be found in Sections A2000/2100 of MDS 3.0 completed closest to date of initial HACO MRSA Culture.***

**16. Was this resident discharged from LTCF before the date of matched-case's/case's initial HACO MRSA culture [Date:** ____ / ____ / ____ **]** (MM / DD / YYYY)

☐ Yes (Go to Q.16A.i) ☐ No (Go to Q.17)

☐ Unknown (Go to Q.17)

**16A.i. If yes, Date of Discharge from LTCF:** ____ / ____ / ____ (MM / DD / YYYY) (Go to Q.16A.ii)

**16A.ii. Where was the resident discharged to?**

☐ Home ☐ Other LTCF ☐ Acute Care Hospital

☐ Unknown ☐ Other *specify*: _____

☐ Long Term Acute Care Hospital (LTACH)

Study ID: _____

## Section 6: Clinical Characteristics

**17. Did this resident have a central venous catheter (CVC) in place on the date of admission to LTCF [Date: ____ / ____ / ____ ]?**
(MM / DD / YYYY)

☐ Yes (Go to Q.17B) ☐ No (Go to Q.17A) ☐ Unknown (Go to Q.17A)

**17A. If no or unknown, did this resident have a CVC inserted after admission to LTCF [Date: ____ / ____ / ____ ] and date of matched-case's/ case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.17B) ☐ No (Go to Q.18) ☐ Unknown (Go to Q.18)

**17B. Indicate CVC type:**

☐ Hemodialysis CVC
☐ Hickman/Broviac
☐ Non-tunneled short-term catheter
☐ PICC
☐ Port-a-cath
☐ Unknown
☐ Other *specify*: _____

**17C. Indicate location of CVC insertion:**

☐ Femoral (Fem)
☐ Internal Jugular (IJ)
☐ Subclavian vein (SC)
☐ Unknown
☐ Other *specify*: _____

**17D. Reasons for CVC insertion**: ***(Check all that apply)***

☐ Blood Transfusion
☐ Chemotherapy
☐ Dialysis
☐ IV antibiotics
☐ IV Fluids
☐ Parenteral nutrition
☐ Unknown
☐ Other *specify*: _____

**17E. Was this CVC still in place on date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.18)
☐ No (Go to Q.17E.i)
☐ Unknown (Go to Q.18)

**17E.i. *If no*, date of CVC removal?**
____ / ____ / ____
(MM / DD / YYYY)

☐ Unable to Determine/Unknown
(Go to Q.17E.ii)

**17E.ii. Check the reason(s) for which CVC was removed? (Check all that apply):**

☐ End of intravenous therapies
☐ Exit site infection
☐ Fever
☐ Unknown ☐ Other *specify*: _____

**17E.iii. After this CVC was removed, did the resident have another CVC placed before date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.17E.i.v.) ☐ No (Go to Q.18) ☐ Unknown (Go to Q.18)

**17E.vi. *If yes*, what date was this second CVC inserted?**
____ / ____ / ____ (Go to Q.17E.v.)
(MM / DD / YYYY)

☐ Unknown (Go to Q.18)

**17E.v. How long was the second CVC in place up to date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?**
(MM / DD / YYYY)

_____ days or _____ week ☐ Unknown ☐ Still with the CVC

**18. Did this resident have any wounds at admission to LTCF [Date: ____ / ____ / ____ ] or develop any wound(s) between admission and date of case's/ matched-case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge/transfer from LTCF (whichever is earliest)?**
(MM / DD / YYYY)

***(Use MDS 3.0 Sections M0210, M1030, and M1040 completed closest to admission AND closest to date of initial HACO MRSA culture or discharge/transfer from LTCF (whichever is earliest).***

☐ Yes (Go to Q.18A) ☐ No (Go to Q.19) ☐ Unknown (Go to Q.19)

**18A. *If Yes,* complete the following table using the Key by filling in corresponding # in the table:**

| Time | Type | Location | Debridement Performed prior to case's/matched-case's initial HACO MRSA culture? | Did the wound heal prior to case's/matched-case's initial HACO MRSA culture? |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**Key:**

**Time:**
1-On admission
2-After admission

**Type:**
1-Decubitus/Pressure Ulcer
2-Diabetic Ulcer
3-Surgical Wound
4-Traumatic Wound
5-Skin Abscess/Boil
6-Other, specify
7-Unknown

**Location:**
1-Arm/Hand
2-Belly
3-Chest
4-Forefoot
5-Head/neck
6-Heel
8-Sacral/buttock
9-Shoulder
11-Leg
12-Hip
10-Other, specify
7-Unknown

**Debridement:**
1-Yes
0-No
7-Unknown

**Healed:**
1-Yes
0-No
7-Unknown



- IMPORTANT - PLEASE COMPLETE THE BACK OF THIS FORM -

Study ID: _____

**18B. List the date the resident last received wound care on any wound between admission to LTCF [Date: ____ / ____ / ____ ] and date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is earliest)? (Please use the resident's LTCF medical record) Date: ____ / ____ / ____** ☐ Unknown / not documented
(MM / DD / YYYY)

## Section 7: Antimicrobial Exposures

**19. Was the resident admitted to LTCF on ANY (PO or IV) antimicrobial therapy?** ☐ Yes (Go to Q.19A) ☐ No (Go to Q.20) ☐ Unknown (Go to Q.20)

**19A. If yes, check all antimicrobials the resident was admitted with?**

- ☐ Amikacin
- ☐ Amoxicillin
- ☐ Amox/clav
- ☐ Amp/sulb
- ☐ Azithromycin
- ☐ Aztreonam
- ☐ Cefazolin
- ☐ Cefepime
- ☐ Cefotaxime
- ☐ Cefoxitin
- ☐ Ceftazidime
- ☐ Ceftriaxone
- ☐ Cefuroxim
- ☐ Cephalexin
- ☐ Cefpodoxime
- ☐ Ciprofloxacin
- ☐ Clindamycin
- ☐ Clarithromycin
- ☐ Daptomycin
- ☐ Dicloxacillin
- ☐ Ertapenem
- ☐ Gentamicin
- ☐ Imipenem
- ☐ Levofloxacin
- ☐ Linezolid
- ☐ Metronidazole
- ☐ Meropenem
- ☐ Moxifloxacin
- ☐ Nafcillin
- ☐ Nitrofurantoin
- ☐ Norfloxacin
- ☐ Penicillin
- ☐ Piperacillin/tazo
- ☐ Rifampin
- ☐ Tobramycin
- ☐ Tigecyclin
- ☐ TMP/SMZ
- ☐ Vancomycin
- ☐ Other *specify*: _____

**20. Did the resident receive antimicrobial therapy in the 4 weeks prior to date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ]**
(MM / DD / YYYY)

☐ Yes (Go to Q.20A) ☐ No (Go to Q.21) ☐ Unknown (Go to Q.21)

**20A. *If yes,* please fill out table below:**

| Antimicrobial Name | Route (PO/IV) | Start date (mm/dd/yyyy) | Was active by the time of case's/matched-case's invasive HACO MRSA culture ? | If no, end date (mm/dd/yyyy) | Indication |
|---|---|---|---|---|---|
| | | | ☐ Yes ☐ No ☐ Unknown | | |
| | | | ☐ Yes ☐ No ☐ Unknown | | |
| | | | ☐ Yes ☐ No ☐ Unknown | | |
| | | | ☐ Yes ☐ No ☐ Unknown | | |
| | | | ☐ Yes ☐ No ☐ Unknown | | |
| | | | ☐ Yes ☐ No ☐ Unknown | | |
| | | | ☐ Yes ☐ No ☐ Unknown | | |

Study ID: _____

## Section 8: Functional Status

**21. What was the resident's functional status at LTCF admission; *as reported in Section G of MDS 3.0 on Admission, 'self performed'?*:**

***You will use the number as reported in MDS 3.0. The coding is provided here just for your reference***

**0. Independent**
**1. Supervision**
**2. Limited assistance**
**3. Extensive assistance**
**4. Total dependence**

Bed mobility *(Section G0110 A on MDS 3.0):* _____

Transfer *(Section G0110 B on MDS 3.0):* _____

Locomotion on unit *(Section G0110 E on MDS 3.0):* _____

Dressing *(Section G0110 G on MDS 3.0):* _____

Eating *(Section G0110 H on MDS 3.0):* _____

Bathing *(Section G0120 A on MDS 3.0):* _____

## Section 9: Additional Healthcare Exposures

**22. Did this resident have any ED visit between LTCF admission [Date: ____ / ____ / ____ ] and date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (which ever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.22A) ☐ No (Go to Q.23)

☐ Unknown (Go to Q.23)

**22A. If yes, how many ED visits did this resident have during this time period:** _____

**23. Did this resident have any surgery performed in an operating room between LTCF admission [Date: ____ / ____ / ____ ] and date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.23A) ☐ No (Go to Q.24)

☐ Unknown (Go to Q.24)

**23A. If yes, what was the surgical procedure?**

Type: _____

**23A.i. On what date did this occur?**

Date: ____ / ____ / ____
(MM / DD / YYYY)

***Use MDS 3.0 Section O0100 Letter J Column "While a Resident" to answer the following question***

**24. Did this resident receive dialysis between LTCF admission [Date: ____ / ____ / ____ ] and date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge whichever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.24A) ☐ No (Go to Q.25)

**24A. What type of dialysis did this resident receive?**

☐ Peritoneal (PD) ☐ Hemodialysis (HD)

☐ Unknown

***Use MDS 3.0 Section O0100 Letter E and F Column "While a Resident" to answer the following question.***

**25. Did this resident receive tracheostomy, ventilator, or respirator care between LTCF admission [Date: ____ / ____ / ____ ] and date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?** ☐ Yes ☐ No
(MM / DD / YYYY)

## Section 10: History of MRSA Infection

**26. Did this resident have a positive MRSA culture from a *non-sterile* site between LTCF admission [Date: ____ / ____ / ____ ] and date of matched-case's/case's initial HACO MRSA culture [Date: ____ / ____ / ____ ] or discharge (whichever is the earliest)?**
(MM / DD / YYYY)

☐ Yes (Go to Q.26A) ☐ No ☐ Unknown

**26A. *If yes,* list the date and site of most recent positive MRSA Culture *(please note that this resident is eligible for the sub-study)*:**

____ / ____ / ____ Culture Site: _____
(MM / DD / YYYY)

Comments: _____