



## INSTRUCTIONS FOR THE MRI REPORT AND REFERRAL FORMS (LMR/BMR/VMR)

### Objectives of MRI Alert Notification and Results Letter

#### Procedures:

To identify changes on the MRI exam since the participant's previous MRI exam in order to minimize redundancy in recording and reporting alerts and incidental findings already reported at a previous exam, and avoid inconsistencies between notifications and letters from the MRI exams that might cause participant confusion and stress. *Some participants, for example some of the ARIC ACHIEVE baseline participants, all of the ACHIEVE de novo baseline participants, and some of the ARIC Sleep participants, will not have prior MRI results attached to the LMR. For these such participants, the columns 'change since prior MRI' and 'Reported from prior MRI' should be ignored. The results report will know what to pick up based on the answer to item 5 in the BMR and VMR forms.*

#### Local Radiologist Responsibilities:

For this procedure, it is assumed that the local radiologist will not have access to the previous MRI images. The local radiologist will have access to the previous results that were reported to the participant, via CDART (attached to the LMR form). He/she will be responsible for completing the appropriate portions of the LOCAL MRI form (entries not grayed-out) on the day of the MRI exam. If an Urgent Alert is identified or a Conditionally Urgent Alert (either an alert for a participant without a prior scan or an alert not reported at the previous exam) is identified, the local radiologist will call the FS contact number provided on the LOCAL MRI form. The FS will then contact the PI and facilitate a conversation between the PI and the local radiologist on the day of the MRI exam. If a Conditionally Urgent alert was present at the previous MRI exam, the local radiologist will record the appropriate entry but take no further action. If 'no' is selected for Q1, the form should be saved and closed with no further action required.

#### MR Reading Center Responsibilities:

Each RC will be responsible for completing the appropriate portion of the MRI form (entries not grayed-out) based on review of the current MRI exam images, the corresponding previous MRI exam images (via the RC's own archive), and the previous Results, accessed through CDART (attached to the LMR form). This review should be completed within 2 weeks of receipt of the current MRI exam. The MRI form is filled out as follows:

**0a. Read Date – The reading is considered complete once the Read Date has been entered. A form with a Read Date entered will generate participant results, so do not enter the date until the form has been completed through item 5a.**

*Urgent Alerts, Conditionally Urgent Alerts, and Physician Notifications are recorded by the Mayo (BRAIN) and JHH (VASCULAR) RCs.*

- Disagreements with local Alert and Physician Notification entries adjudicated by RC PI:
  - a. RC communicates with FS PI (Contact local radiologist at discretion of RC)
    - Communicate to participant or PCP as needed by FS PI.
- Was an Alert (Urgent or Conditional) or Physician Notification identified (use reconciled findings entered by RC)?

- a. **No:** The MRI form item 5 “No Change” Letter Type is selected.
  - The previous MRI Results Letter is reviewed to ensure consistency.
    - Inconsistencies are checked by review of the previous MRI exam and reported to the FS PI when deemed clinically important.
  
- b. **No; no prior scan—exam normal:** The MRI form item 5 “No prior scan -- normal” Letter Type is selected.
  
- c. **Yes:**
  - Urgent Alert is identified: The MRI form item 5 “Change” Letter type is selected and a Results Letter is generated that contains wording using the same scripts for these entries as used at previous MRI exam. No additional wording is needed for item 5a corresponding to this entry.
  
- d. **Yes; no prior scan—alert/abnormality identified:** The MRI form item 5 “No prior scan – alert/abnormality” Letter Type is selected and wording is provided in 5a for the Results Letter by the Reading Center PI. **Please note that the text in 5a is copied verbatim into the results report that goes to the participant, so this should be considered when deciding what to include in the text.**
  - Conditionally Urgent Alert or Physician Notification is identified: The previous MRI exam is reviewed and changes since the previous exam are assessed. Change since previous MRI identified?
    - **Yes:** Changes described in sections 3f or 4g on the BRAIN MRI form or sections 3g or 4h on the VASCULAR MRI form. The identification of a "change" can be based on either a Visit 5 scan (for vascular/PET/Sleep) or on a baseline ACHIEVE MRI (once 3-year follow-up for ACHIEVE MRI has begun). **The MRI form item 5 “Change” Letter type is selected and wording is provided in 5a for the Results Letter by the Reading Center PI. Please note that the text in 5a is copied verbatim into the results report that goes to the participant, so this should be considered when deciding what to include in the text.**
      - RC communicates with FS PI if the change was a Physician Notification. (A change in a Conditionally Urgent Alert should have already been communicated to the FS PI by the local radiologist.)
        - Communicate to participant or PCP as needed by FS PI.
    - **No:** The MRI form item 5 “No Change” Letter Type is selected. The identification of "no change" can be based on either a Visit 5 scan (for vascular/PET/Sleep) or on a baseline ACHIEVE MRI (once 3-year follow-up for ACHIEVE MRI has begun).
      - The previous MRI exam Results Letter is reviewed to ensure consistency.
        - Inconsistencies are checked by review of the previous MRI exam and reported to the FS PI when deemed clinically important.

Note that "no prior scan"—either normal or alert/abnormality as applicable—will be used for **all** baseline de novo ACHIEVE scans, any baseline ACHIEVE scans in the ARIC cohort who have not had a prior MRI, and any Sleep participants who have not had a prior MRI scan.