# MRI REPORT AND REFERRAL FORM - BRAIN

**Instructions:** To be completed by the Brain Reading Center for every MRI scan, including indicating whether or not any alerts or notifications were reported previously.

## ADMINISTRATIVE INFORMATION

0a. Read Date: [ ] / [ ] / [ ]

0b. Staff ID: [ ] [ ] [ ]

## RESULTS

**Note:** The following incidental findings do not require an alert or physician notification:

- White matter ischemia
- Old infarcts
- Microhemorrhages
- Superficial siderosis
- Atrophy
- Lacunar infarcts
- Noncritical stenosis
- Remote bleeds

1. Are there any alerts or physician notifications present:
   - Y ☐ Yes
   - N ☐ No [GO TO ITEM 5]

2. Urgent Alerts
   - a. Acute Infarction
   - b. Subacute Infarct
   - c. Acute Subdural or Epidural Hematoma
   - d. Subarachnoid Hemorrhage
   - e. Acute Intraparenchymal Hematoma
   - f. Local Comments (including location)
     ________________________________
     ________________________________
     ________________________________
   - g. Other Brain RC Comments (not checked above)
     __________________________________________________
     __________________________________________________
     __________________________________________________
3. Conditionally Urgent Alert
   a. Obstructive Hydrocephalus .......................................................... ☐ ................. ☐ .................. ☐ (Y/N) B
       b. Significant Space Occupying Lesion (ie. tumor) .......... ☐ ................. ☐ .................. ☐ (Y/N) B
   c. Aneurysm ..................................................................................... ☐ .................. ☐ .................. ☐ (Y/N) V
       d. Luminal Occlusion, Dissection, or Thrombus (nonaneurysmal) .......................................................................................... ☐ .................. ☐ .................. ☐ (Y/N) V
   e. Local Comments (including location)
       ___________________________________________________________________
       ___________________________________________________________________
   f. Brain RC Comments (including location, changes, and alerts not checked above) ______________
       ___________________________________________________________________
       ___________________________________________________________________
   g. Vascular RC Comments (including location, changes, and alerts not checked above) ___________
       ___________________________________________________________________
       ___________________________________________________________________

4. Physician Notification Recommended
   a. AV malformation .................................................................................. ☐ .................. ☐ (Y/N) V
   b. Pseudoaneurysm .................................................................................. ☐ .................. ☐ (Y/N) V
   c. Critical Stenosis (>50%) ........................................................................ ☐ .................. ☐ (Y/N) V
       d. Benign Tumor with no Mass Effect ............................................... ☐ .................. ☐ (Y/N) B
       e. Communicating Hydrocephalus ................................................... ☐ .................. ☐ (Y/N) B
       f. Other (specify in comments) .......................................................... ☐ .................. ☐ (Y/N) B
g. Brain RC Comments (including location, changes, and notifications not checked above) __________
_________________________________________________________________________________
_________________________________________________________________________________

h. Vascular RC Comments (including location, changes, and notifications not checked above) ______
_________________________________________________________________________________
_________________________________________________________________________________

5. Letter Type:  0 □ No Change *
                 1 □ Change *
                 2 □ No prior scan – normal **
                 3 □ No prior scan – alert/abnormality **

If “Change” or “No prior scan – alert/abnormality”, report results as:

5a. __________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
INSTRUCTIONS FOR THE MRI REPORT AND REFERRAL FORMS (LMR/BMR)

Objectives of MRI Alert Notification and Results Letter

Procedures:
To identify changes on the MRI exam since the participant's previous MRI exam(s) in order to minimize redundancy in recording and reporting alerts and incidental findings already reported at a previous exam(s), and avoid inconsistencies between notifications and letters from the MRI exam(s) that might cause participant confusion and stress. Some participants will have never completed an MRI exam. Other participants will have completed an MRI exam but no abnormalities were detected. For these participants, the columns ‘change since prior scan’ and ‘reported at prior scan’ should be ignored. The results report will know what to pick up based on the answer to item 5 in the BMR form.

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 the MRI Results History report in CDART. 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 item 1, 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 via the MRI Results History report in CDART. 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. The identification of a "change" can be based on either a scan at a prior visit or a baseline ACHIEVE MRI. 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 scan at a prior visit or a baseline ACHIEVE MRI.

    - 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 ARIC scans who have not had a prior MRI.