03/19/2019 -- MRI Core Call Agenda Items:

1. Review February 2019 Teleconference Minutes (Appended Below)
   a. Minutes will be posted to LONI website. -
      http://adni.loni.usc.edu/methods/documents/

   Minutes: Approved

2. ADNI Deliverables – Past Due

   Minutes: Danielle had asked sites to visit LONI to confirm when last deliverables were
   sent/received. In the meantime, Danielle will create a report of what data we have, but encourages all
   sites to upload their most current data sets to Mike Donahue and LONI. (Some sites have data hasn’t
   been updated for a year or more)

3. Updated MRI scanner/subject spreadsheet [attachment]
   a. List is now a subject level list (1 row for each timepoint).
   b. List is generated programmatically by query of Mayo database any changes are
      highlighted and categorized.
   c. Any changes in software/hardware are noted as minor (green)/major (red)
   d. Any changes in head coil are noted minor/major
   e. Subject change over from ADNI2 to ADNI3 is noted in as study (orange)
   f. Mayo QC Values have been added to spreadsheet for T1, T2* and fMRI

   Minutes: Reviewed by Bret, please look over, any suggestions are welcome.

4. Analysis Site QC
   a. At the last call, the MRI core agreed that analysis sites would send in their QC
      quarterly to LONI
   b. Quarterly deliverables will have at least two values:
      i. 1) numeric metric
      ii. 2) QC value(s) relevant to processing

   Minutes: As discussed at the last call
5. **Advanced Philips protocols are being compiled.**
   a. R5.3 Systems and higher
      i. 3DpCASL
      ii. MB DTI
      iii. MB rsfMRI

Minutes: Noted, in addition to above we will be implementing multi echo GRE.

6. **ADNI3 Analysis Site Slides -- Due in April**
   a. Dr. Jack will need slides from each Analysis group summarizing ADNI3 to date.

Minutes: Dr. Jack – requests 2 slides per analysis group summarizing what has been do up to date for ADNI3.

What kind of questions:
1. Correlation between MR and clinical metrics (could be clinical group membership, MMSE, CDR, etc).
   a. Cross-sectional.
   b. Predict clinical change.
   c. Correlation with contemporaneous clinical change

2. Effect of technical factors on correlations in #1 above.
   a. Protocol (ADNI2/ADNI3)
   b. Scanner
   c. Headcoil
   d. Software/Hardware

3. Comparison of Advanced vs. Basic accuracy/effect size for correlations in #1 abov.
   a. DTI
   b. fMRI
   c. Different versions of ASL

**DUE DATE: Preliminary version 4/16 (at next call)**

Discussion on spreadsheet for ADNI3 analysis.
4 classes of Major changes:
a)Vendor
b) HeadCoil
c) Software Major
d) Protocol ADNI2 vs. ADNI3
DeCarli – Some Major Changes are different that others
Jack: Have A,B,C,D types of major. Based on above.
Harvey: In short term. Treat all major changes as major then dig down later.

7. ADNI2 Data Lock – Targeting Early June

Minutes: Noted – Dr. Jack – What this means for MRI Core:, all analysis sites need to have ADNI2 data analysis done, QC’d and posted on LONI. Begin creating standardized lists (collections) for users.

8. ADNI3 Breakdown
   a. 60/60 Certified Systems
   b. 962 subjects received. (17 Failed Studies)
      i. 185 Subjects scans with Siemens VE11C
      ii. 404 Subject scans VB17-VE11B
      iii. 159 Philips 3.2.3 – 5.4.0
      iv. 47 Subject scans with GE 24x
      v. 167 Subject scans with GE 25x-27x
   c. Experimental Sequence Breakdown
      i. 2D PASL vs. 3D PASL vs. 3D pCASL
         1. Axial 2D PASL – 285
         2. Axial 3D PASL – 389
         3. Axial 3DpCASL - 220
      ii. Axial rsfMRI vs. Axial MB rsfMRI
         1. rsfMRI – 806
         2. MultiBand fMRI - 155
      iii. Axial DTI vs. Axial MB DTI
         1. DTI – 893
         2. MultiBand DTI – 160

Minutes: Noted