

NM Workflow for Creating Teaching File Cases

Please log into the CHANGE HEALTHCARE (formerly McKesson) Study Share Teaching File (TF) early in the year so that the computer section can assign appropriate permissions to your account.

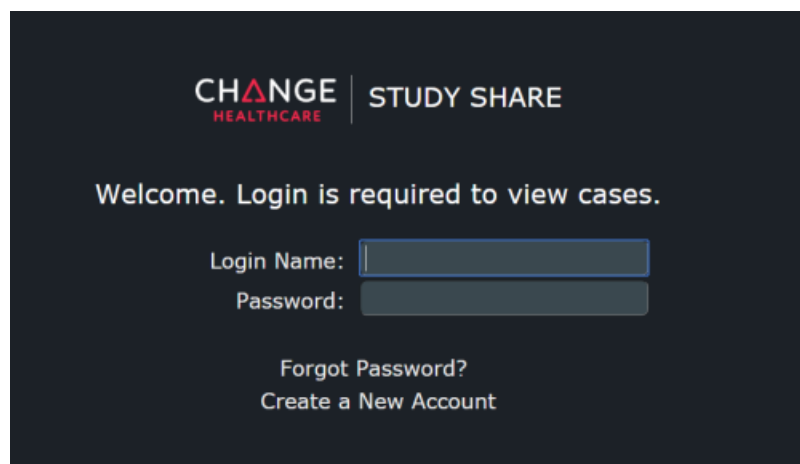
Intro: Access to the Teaching Files:

For full capability, you will need to have adobe flash installed. Adobe flash does not install properly on Chrome, so best to use Internet explorer. If you are on an MIR PC (such as those in the NM resident/fellows room), use Internet Explorer to access the web site below. If you try to edit/create a case and it says that flash is not installed, call the MIR support desk (314-362-8475) and given them the name/number of your pc, and ask them to remote into it and install adobe flash. (It is possible to use the teaching file without adobe flash (“proceed with advanced features disabled”), but some functions will not work, and you may see a “loading” logo that will not go away).

a. MIR Desktop (Option #1 – Preferred)

i. <https://mirweb.mir.wustl.edu>

1. From the left navigation, click on the Teaching Files link.
2. Login with your Wustl Key credentials. The first time, you will need to create a new account. **Note:** Do **NOT** precede your username with MIR\



b. Citrix Receiver / Storefront (Option #2)

i. <https://storefront.mir.wustl.edu>

1. A first time user will require you download the Citrix client. Follow the instructions to download and configure the client.
- ii. Login in with your MIR credentials.
- iii. Click on the Clinical Apps folder.
- iv. Click on Internet Explorer to open a browser.
- v. Navigate to <https://mirweb.mir.wustl.edu>
 1. From the left navigation, click on the Teaching Files link.
 2. Login with your WUSTL KEY credentials.
 3. At the current time, Adobe flash is not working, and you will need to “proceed with advanced features disabled” and the “loading logo” will not go away. We are working to fix this.

Creating the In Progress folder

- 1) **First time only**, create your In Progress folder by

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- From the menu bar, at the top left of the screen, click on Create > New Folder
 - Folder Name: In Progress
 - Click on the Create New Folder link towards the bottom left of the screen. The new folder will automatically be in your private area.
 - From the menu bar, at the top left of the screen, click on Go > Case Manager.
 - Expand My Folders where you should see the In Progress folder you just created.
- 2) **Under My Folders, click on your In Progress folder.**
 - 3) Click on the In Progress folder.

Creating a New Case

- 4) From the menu bar, at the top left of the screen, click on Create > New Case.
 - a. Give it a title that contains the diagnosis
 - b. In the “add to folder”, click the + to expand your name, then select your in-progress folder
 - c. Click Save changes near the top.
- 5) **Fill out the Case Properties screen.** After you add a title to the case that includes the diagnosis, then fill out the remainder of the page, including patient name (which will be automatically hidden later). For Patient Number, use the patient MRN (MPI). Enter the primary image date. The age should be calculated for you based on study date and birthdate. Use the pop-up menus for anatomy and pathology.
- 6) **Add keywords,**
- 7) Your first keyword in the “Case Properties” screen should be “NM”. In addition to any other keywords that you enter, please include one of the following 4-letter codes (note they all end in “nm”) to designate the type of nuclear medicine study:

bvnm = Blood Volume
bmmn = Bone Marrow Scintigraphy
bsnm = Bone Scintigraphy
brnm = Brain Scintigraphy
canm = Cardiac Blood Pool Scintigraphy
clnm = Cerebral Spinal Fluid Leak
cinm = Cisternography
csnm = CSF Shunt Scintigraphy
rcnm = Cystography-Radionuclide
ganm = Gallium Scintigraphy
genm = Gastric Emptying Scintigraphy
ginm = Gastrointestinal Bleeding Scintigraphy
hpnm = Hepatic Blood Pool Scintigraphy
hsnm = Hepatobiliary Scintigraphy
iwnm = Indium -111 WBC Scintigraphy
lsnm = Liver-Spleen Scintigraphy
lmnm = Lymphoscintigraphy
msnm = Meckel's Scintigraphy
mbnm = MIBG Scintigraphy
mcmn = Misc Study
minm = Myocardial Imaging
otnm = Octreotide Scintigraphy
osnm = Oncoscint Scintigraphy
panm = Parathyroid Scintigraphy
penm = Perfusion (only) Scintigraphy

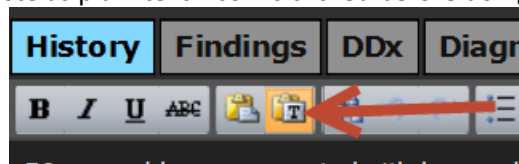
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psnm = Peritoneal Shunt Scintigraphy
pbnm = PET Brain (Nontumor) Imaging Studies
pcnm = PET Cardiac Imaging Studies
ptnm = PET Tumor Imaging Studies
prnm = Proscint Imaging
rbnm = Red Cell Mass or Survival
rsnm = Renal Scintigraphy
sgnm = Salivary Gland Scintigraphy
stnm = Schilling Test
sinm = Spleen Imaging
tsnm = Testicular Scintigraphy
trnm = Thyroid Scintigraphy
vqnm = Ventilation Perfusion Scintigraphy

- 8) Scroll to the bottom and set the “additional properties” to Nuclear Medicine, and then select the study type based on the type of NM exam. For now, this is in addition to the above 4-letter code, as it is being de-bugged.
- 9) **Click on “Save Changes” near the top. You should do this frequently.**
- 10) Skip adding an ACR numeric anatomy and pathology code. It is being phased out in favor of radlex terms
- 11) **Add radlex terms.** Start to type anatomy entries (eg, skull, spine, liver) and the system will propose official terms to use. More than one can be entered/selected, one at a time. Do the same for pathology.
- 12) **Click on “Save Changes”.**
- 13) **Click on Save and View case to exit.**
- 14) **Continue editing your case** by clicking on the upper right menu, and click edit (not quick edit)
- 15) **Click on the Case Text tab**, and complete the sections as follows:

It is best to prepare your text in advance in MS-word, since it provides spell-checking.

Note that formatting is by default preserved when you copy/paste from MS-word. To strip the formatting, make sure the “paste as plain text” icon is clicked before doing the paste operation.



History – just a short history that does not give away the diagnosis.

If you have hidden images, add the sentence

If in training mode, click on Reveal Findings below when ready to see additional images.

You may “game” the case by asking questions, and clicking on the “page break” icon at the far right of the formatting menu, to hide any text that follows.

Findings – Radiopharmaceutical dose, followed by description of the findings that does not give away the diagnosis.

Diagnosis – the full case diagnosis.

General discussion – divide this section into two parts:

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- Full patient history:
- Discussion:

Enter the case discussion, with optional teaching points, and optional differential diagnosis. Do not plagiarize, but you may reference publications (Smith, 2005). (We are not currently using the category “specific discussion”.)

References – here is where your references go.

16) **Add your images** by clicking on the “File upload” tab. Make sure images are free of HIPAA information (including birthdates, study dates, patient IDs etc). Then browse to find your images, add captions, and decide when you want the image displayed, using

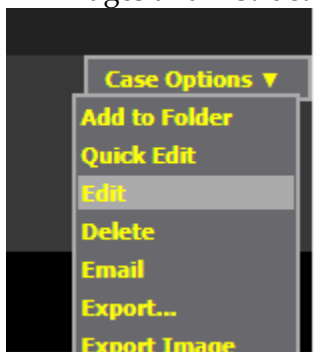
- Always – for most images
- Hide until xyz – for images that are initially hidden.

Make sure none of your images have patient name, MPI, study date or other HIPAA information. If you spot such info after your upload, you can delete the image, fix it on your PC, and re-upload. Or you can black it out using an “advanced feature” of the teaching file site (provided you have not disabled the advanced features for lack of adobe flash).

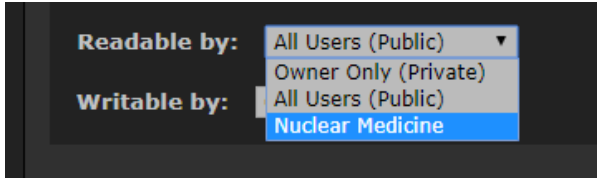
- If you see one or more with HIPAA
 - In case options (upper right) select edit
 - Click on the tab CASE IMAGES
 - Scroll the screen to the problem image
 - Click on BLACK MARKER
 - Click/drag to draw a rectangle of areas to be deleted. I found you need to be generous in your region, starting a bit higher than the text being hidden.
 - Click save, and then click OK. Note this cannot be undone.
 - Repeat for other images as needed.

17) **Save your changes**, then click on the case number at the top or click “Save and View case” to view your case. Re-edit as many times as needed. To get to back to your case, navigate to your in-progress folder, click on the purple name of the case, and then choose edit from Case Options.

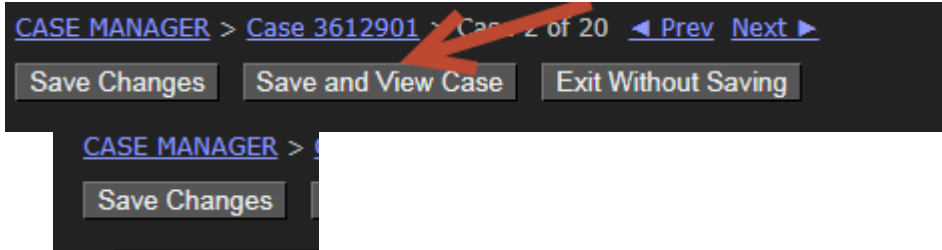
18) **When done, you need to copy the case into the attending folder, and remove it from your folder.**
a) While viewing the case in edit mode), click on case properties, then change both “readable by” and “writable by” to Nuclear Medicine”. Save and View case. See below images and instructions.



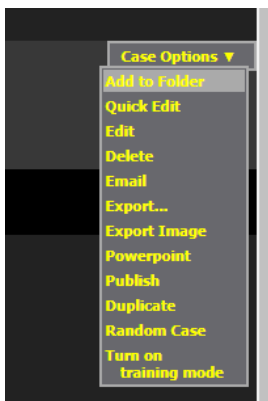
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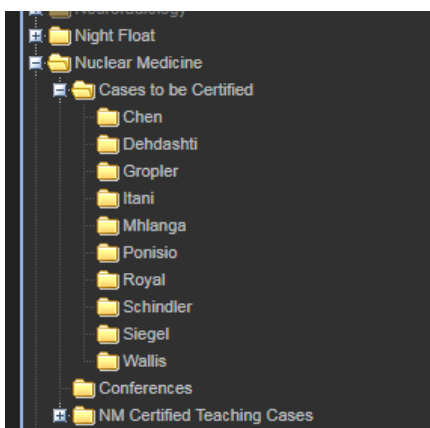
Then click **Save and view case**



b) Click on “add to folder” at upper right, and select Nuclear medicine -> cases to be certified -> Attending name (the attending is the one who originally read the case).

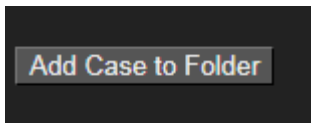


You can now navigate to the appropriate attendings folder



Select the attending, and press Add case to folder

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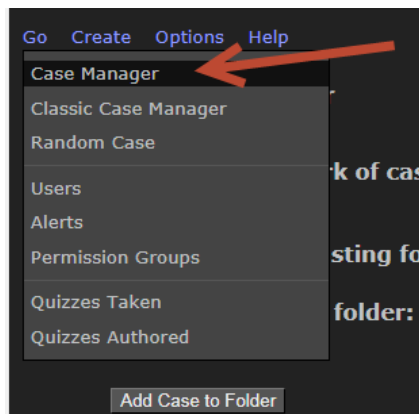


c) Finally, remove the case from your “in progress”, but do not delete the case. To do this do NOT click on delete at the top right of the screen. Instead

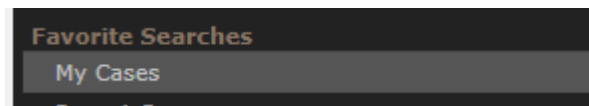
Click on Go



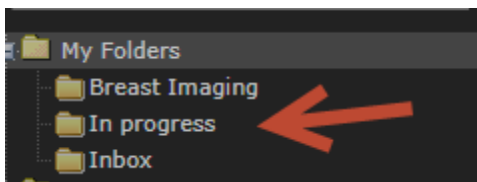
Click on Case Manager



It will default to “my cases”



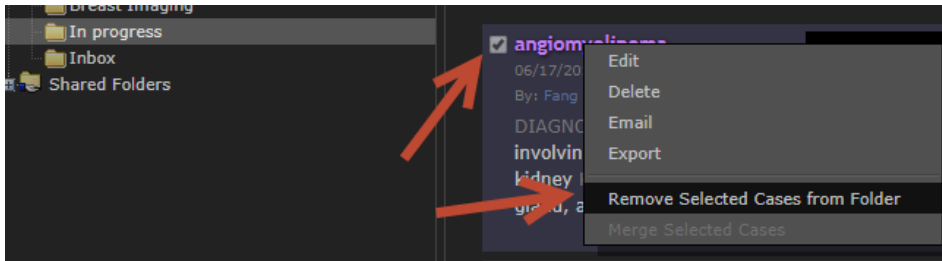
Then click on My folders, and navigate to In progress



You should see the entire contents of your in progress folder.

In the progress folder, click on the case checkbox (red arrow) and then right-click on purple case name, and select “remove selected cases from folder”. DO NOT click delete.

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This will remove it from the “in progress folder,” but it will still be listed in the “my cases” folder, since you were the original author.

The changes that were made to allow this to work again were made on a per user basis, so please verify that it now works for you.

19) **You are done. Send the attending an email to let him/her know.** The case is now in the attending’s folder, and no longer in your “in progress” folder.

20) After a certifier has reviewed your case, you will receive an automated email telling you whether the case was certified or rejected. Certified cases will automatically be made public; rejected cases will remain private.

Attendings – you will find cases to review and certify in the “cases to be certified” folder, in the subfolder with your name. See intro text at top for which browser to use (IE) and how to resolve issues with adobe flash. You can use the “paste as plain text” to fix any font issues (see above item 15). You can remove HIPAA from images (see above item 16). You should add yourself as an author as follows:

- If not already in edit mode, in case options (upper right) select edit
- Click on case properties
- Scroll down to Authored by, and click edit
- Find the attending name, and click the check box to add as an additional author
- At the top, choose submit.

Once you are happy with the case, from the edit menu, choose certify

