EXERCISES*

Track: **Clinical**
Tutorial: **Profiling for Clinicians**
Speaker: David Hay

The speaker will be in the hands-on area to answer your questions!

In this exercise we'll to use clinFHIR to create a FHIR profile with some of the associated conformance resources. This is purely intended as an educational exercise – for a real scenario this would be done by FHIR experts using tools like Forge (https://fhir.furore.com/forge), but it's a good way to gain an understanding of what you can do with profiling.

You will build a number of models in this exercise. Be sure to choose a name that is unique on the HAPI-3 server – we suggest prefixing it with your name and a minus (-) sign – like *dhay-myModel*. You will also need to sign in – use your email as the username and a password.

1. Choose a resource to profile
Choose a single resource to create a profile for. You may want to select a resource from the previous days exercises – preferably one that has some 'extra' elements (extensions), doesn't use all the elements, and perhaps has a coded element with a different binding

2. Build a Logical model of the Resource
Using the Logical Modeler, create a model based on a single resource. You have a couple of options:
- Keep the 'copy elements into model' checked, remove the elements you don't want, and add elements for the extensions
- Uncheck the 'copy elements' and create a model directly, mapping to the elements on the base resource

In either case, don't worry about linking new elements to Extension Definitions just yet. Here's a page (*https://fhirblog.com/creating-a-profile*) that goes into some details – and talks about other things you can do.

3. Create / Locate the Extension Definitions
For each of the extensions (new elements) you identified above, either find an existing definition (perhaps using simplifier) or create a new definition in clinFHIR. Go back to your Logical model and set the reference to the extension definition against that element. The link above (https://fhirblog.com/creating-a-profile/) has some details, and here's a page that describes building an Extension Definition: https://fhirblog.com/building-an-extension-definition/

4. Create / Locate the ValueSets
If you want to bind an element to a different ValueSet, then either locate it or create a simple one using clinFHIR. Go back to your Logical model and change the binding for the element to the new ValueSet. Here are some details https://fhirblog.com/creating-a-valueset/

5. Generate the profile
The easiest part – generate the profile from the Logical Model! (it's just a button click from the 'Model' tab). The profile is saved to the Conformance Server with a generated name.

Have fun, and remember to ask for help if you get stuck !

*This exercise will not be evaluated and no prizes are attached to any result.