**Smart Checklist Group Meeting**

**Wednesday November 13, 2013**

1. Status report about Smart Checklist framework development effort
2. Demonstration of the framework on a portion of the infusion therapy process model
3. Possible next goals
   * Process modeling
   * Framework development
   * Possible research directions
4. Short status report (5 min, from 2:10-2:15)
   1. Show Smart Checklist architecture
   2. Quickly report the status of the Infusion Therapy process modeling effort – several iterations with DocBox folks resulting in Little-JIL and BPMN models.
   3. Developed first prototype of the Smart Checklist application (show highlighted components on architecture).
5. Demo (1:45 hr, from 2:15-4:00)
   1. Show highest-level Little-JIL diagram of the Infusion Therapy process
      1. Focused on Set Up Infusion Pump subprocess
   2. Show Little-JIL diagram for Set Up Infusion Pump (less elaborated) process
   3. Open Smart Checklist application
      1. Smart Checklist currently supports:
         1. Single human performer, single process
         2. Past and current/immediately next (no “farther” future yet)
      2. Open legend, mention training is assumed
   4. Go through scenarios from Set Up Infusion Pump subprocess, less elaborated:
      1. Scenario 1: Nominal case (no patient hazards and no exceptions) stopping to explain new features as they appear
      2. Scenario 2: With patient hazards and no exceptions
      3. Scenario 3: With patient hazards and exception (patient failed assessment test)
   5. Go through scenarios from Setup Infusion Pump process, “perform pump safety check” elaborated:
      1. Scenario 1: No patient hazards, IV line is leaky exception (LAST!!!)
   6. Have ready blood transfusion and parallel step examples, in case they want to see
   7. Discussion of Smart Checklist—interleaved with the Demo and after (1 hr, from 4:00-5:00, combined with the next agenda item)
6. Possible Next Goals (1 hr, from 4:00-5:00)
   * Process modeling
     + Do several more iterations to polish process definition, followed by validation of models by domain experts
     + Make a larger part of the Infusion Therapy process executable and hooking it up to the Smart Checklist.
     + Set up meeting/Skype call with DocBox folks to review newest Little-JIL model
   * Framework development:
     + Changes/additions MDPnP/DocBox/MGH folks would like us to make to the GUI
     + Changes we can propose to the GUI:
       - Context
         * Non-leaf activities show more context
         * More support for visualization of artifacts/resources, exception handling
       - Providing more support for preferences/options for customizing the GUI
         * Color
         * Amount of hierarchy shown
         * Timestamps (show/hide)
         * Leaves shrink/collapse after being finished
   * Possible research directions:
     + Explore:
       - Supporting multi-agents, multi-processes – Show communications and waiting time
       - Recognizing when an automated agent completes an activity and hence the human performer completes that activity
       - Supporting undo of the last activity performed
       - Prospection – designing and implementing prospection service, so that future process state can be added to the Smart Checklist.
     + Develop an evaluation plan