Figure 1. Our PerSim system – Wearing the Hololens, the trainee (left) can see, hear, and interact with the virtual patient in a natural, realistic way. Using a tablet, the instructor (right) can control the simulation from a as shown and design new, custom simulations quickly and easily. The whole system is wireless, mobile, and portable.
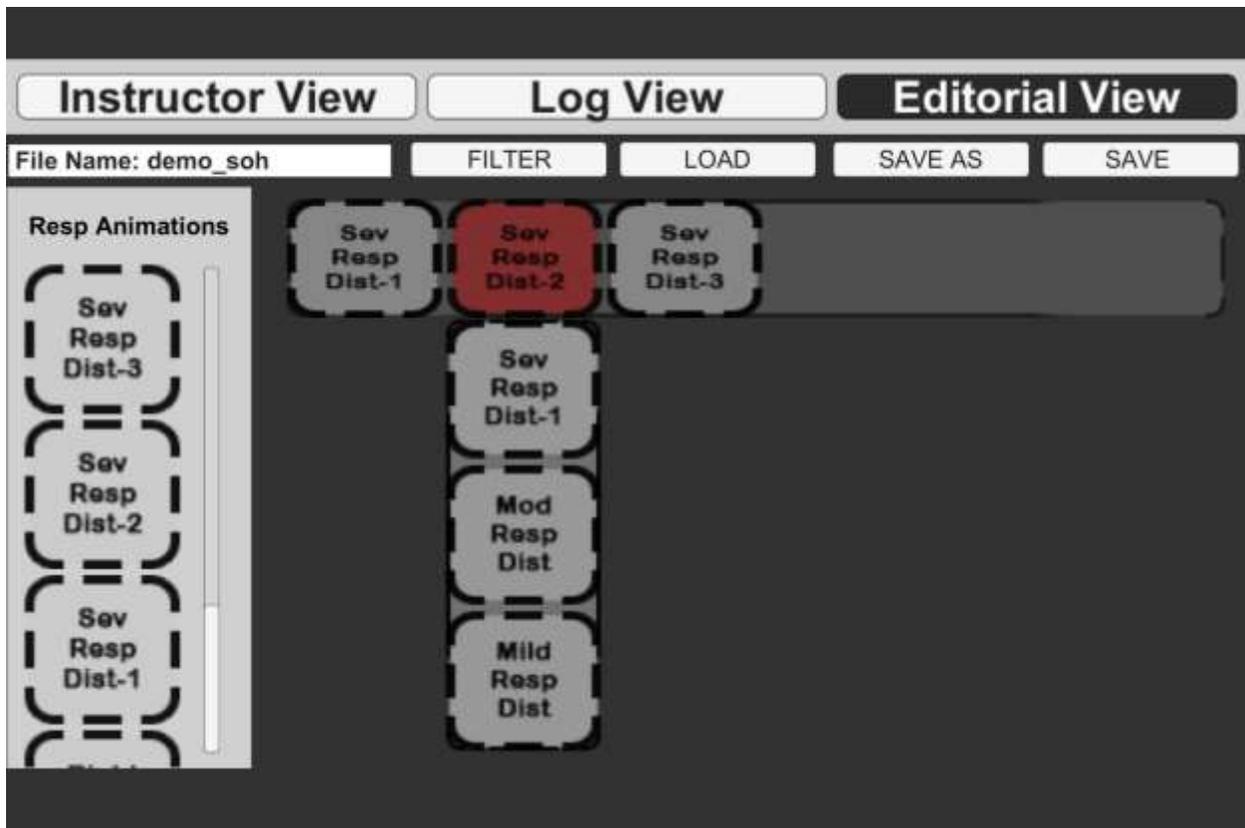
Figure 2. Editorial View: Using a simple drag and drop interface, an instructor and quickly and easily customize current scenarios or design new scenarios, such as a respiratory distress scenario. The column on the left contains models and animations that are the building blocks of many scenarios. Users simply drag from that column into the main work area to create a set of controllable states for the scenario. When finished, the instructor can transmit this instantly to the Hololens for the trainee to participate in.
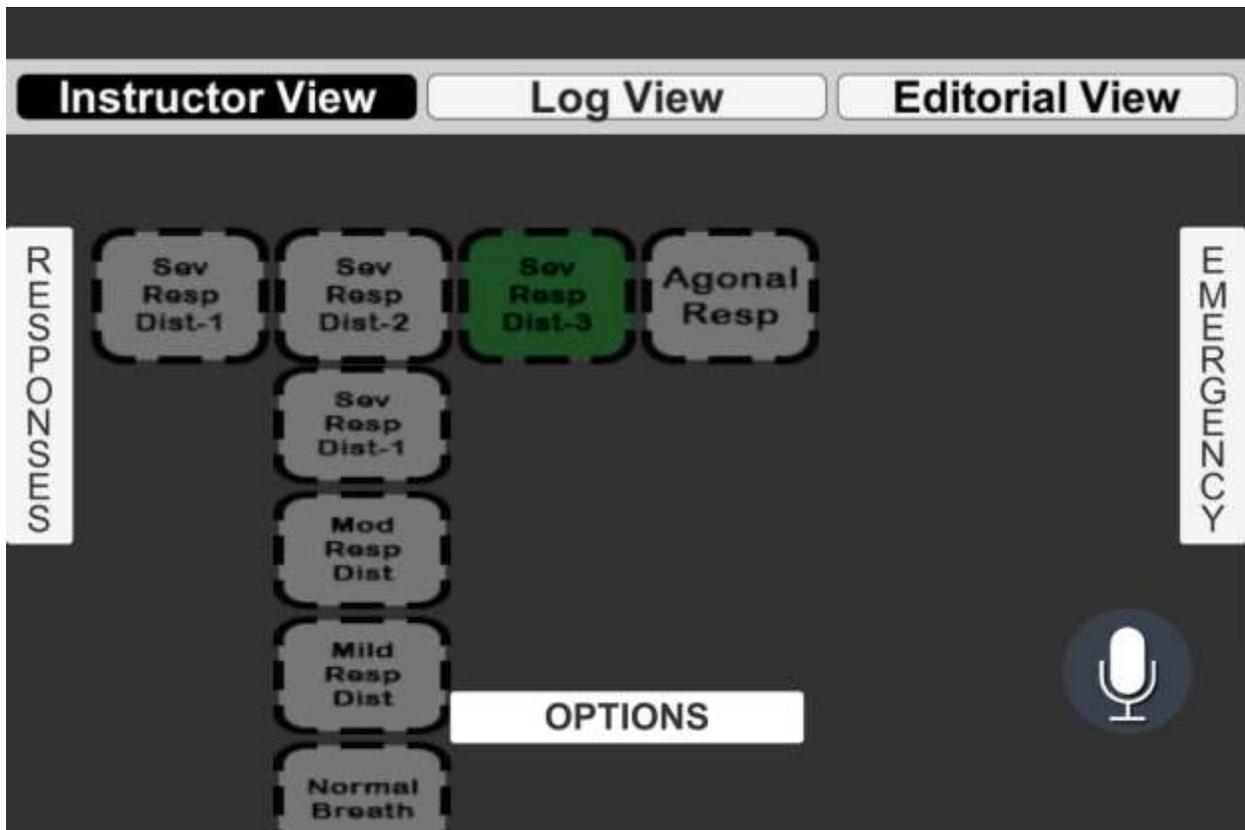
Figure 3: Instructor View: the instructor can interactively control in real time the scenario they designed. By simply touching a state, the system automatically updates what the trainee sees and hears.

Figure 4. Trainee view: This is this trainee's view from the Hololens. In this respiratory distress scenario, the virtual patient can, for example, call for help, display various levels of respiratory distress, sweat, and become cyanotic, depending on how the instructor decides to control the simulation.