

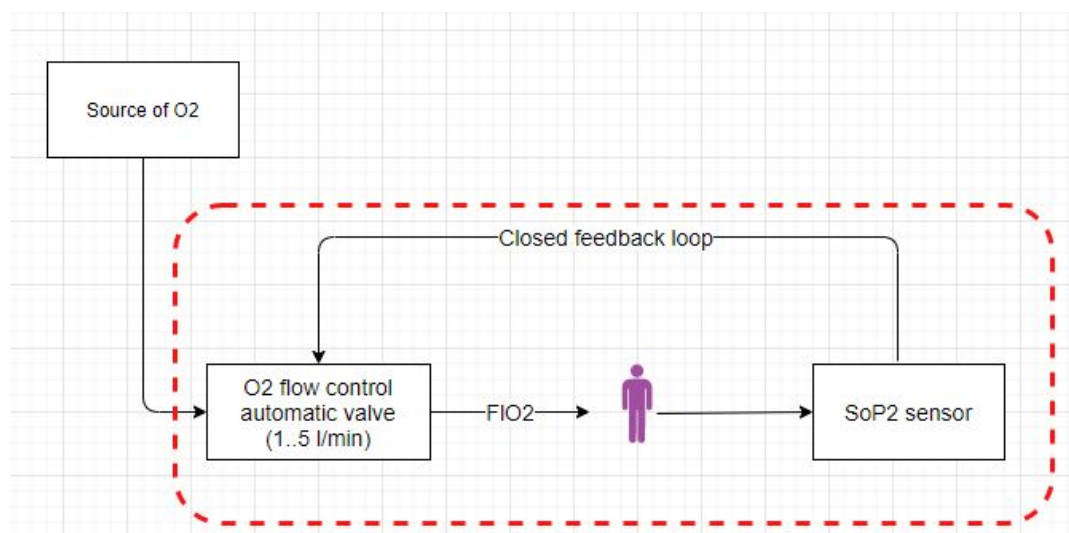
Closed-loop O2 flow control with oximeter

Problems

- In temporary hospitals, medical personnel will be scarce/busy.
- In home care/quarantine scenarios/no hospital bed scenarios, people needing a O2 flow source will be unable to assist themselves in properly regulating the O2 flow.
- In temporary hospital settings many people will also share the same O2 source. Adding/removing patients will disrupt the O2 flow for other patients, requiring constant fine-tuning of O2 flow
- COVID-19 patients may have rapidly developing symptoms with SpO2 decreasing in blood. Medical personnel might not be able to react fast enough.

Brief description:

- What do we offer?
 - Closed-loop integration between:
 - An SpO2 oximeter attached to the patient
 - An automated valve that would regulate oxygen flow
 - Works with ventilators/O2 concentrators or other O2 sources
- What void/necessity does it fill in the current outlook of the pandemic?
 - Relieves pressure on medical personnel to check SpO2 and constantly adjust O2 pressure
 - A safer variant for home care or quarantine needing O2 support
 - Automatic O2 flow adjustment reaction time for patients with worsening symptoms causing SpO2 to drop suddenly.



Questions we need answered from medical experts:

- Would it make sense to have closed-loop flow control? (motorized valve integrated with SpO2 sensor)
- How useful/urgent would be this feature?

