



Releasing Time to Care Celebration & Collaboration

High Flow Equipment Project

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Vancouver General Hospital

Acute Care for the Elderly unit

CP8EF

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Who We Are...

- BP8EF is a 34-bed acute medical unit
- Our patients are often elderly, frail, with complex chronic conditions and communication challenges
- Some of our common diagnoses include:

Dementia	Delirium	Pneumonia	COPD
Influenza	Falls	FTT	Fractures
Bowel Obstruction	Ca w/ or w/o mets	SAD/SAH/I CH	Urosepsis/U TI
Hematuria	Cdiff	CHF	Pain crisis
Stroke	ETOH	HTN	PE/DVT

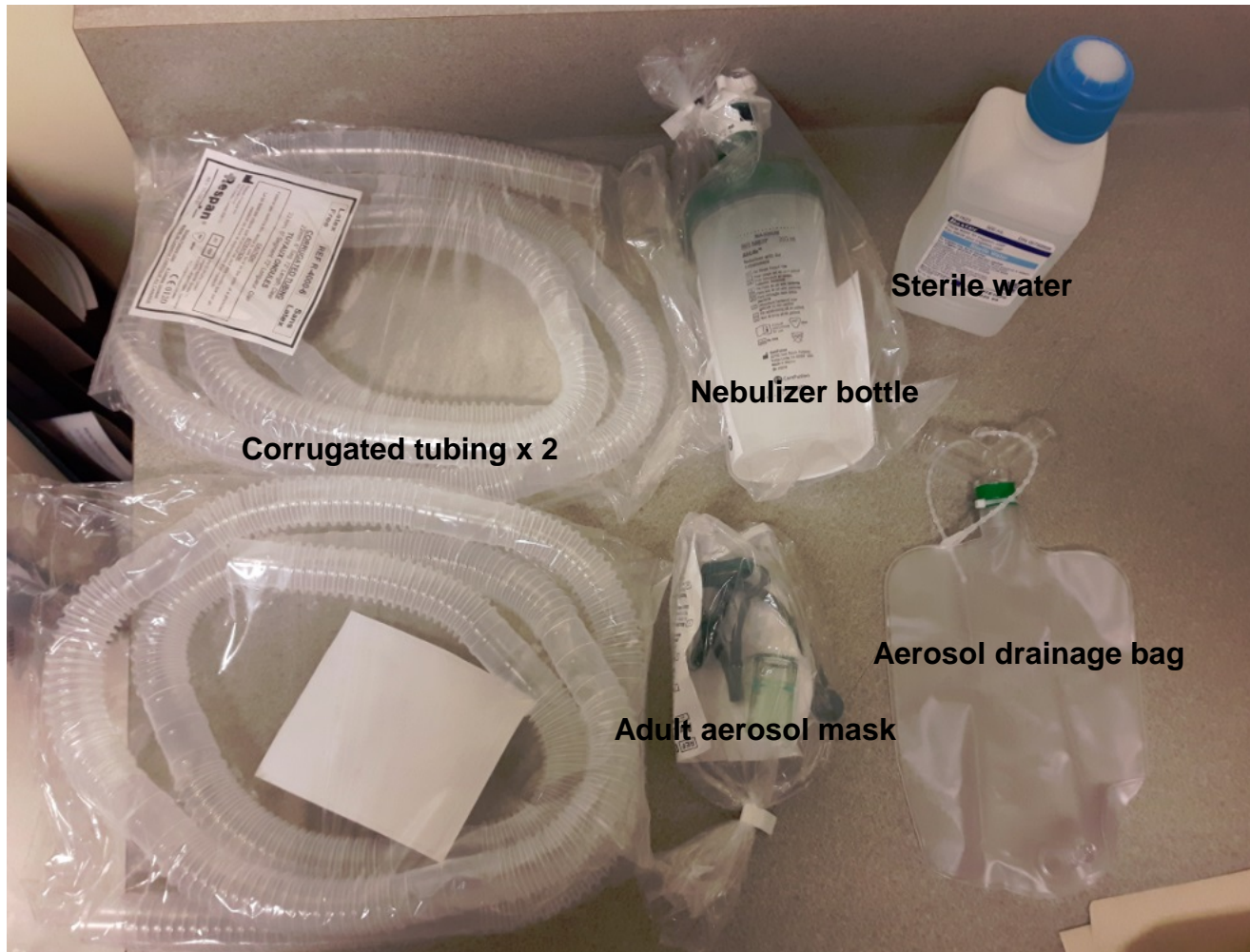


Our Idea (What We Did)...

- The Problem: Finding high flow equipment in an emergency situation has always been an issue because:
 - There are 6 individual components to the system
 - The look of the equipment has recently changed
 - Some staff may be unfamiliar with all components (students, new grads, casuals/floats, LPN/PCA/OT/PT/SLP)
- The Plan: Decrease the time needed for a staff member to locate each individual piece of the high flow equipment system



High Flow Equipment





Where to even start?





Our findings...

- Mock emergencies on CP8EF with regular RN staff were held to see how long it takes to find all of the equipment

	Found all equipment?	Total time	Additional estimated time
RN #1	No	2:50	0:45
RN #2	No	2:45	0:45
RN #3	Yes	1:00	0:00

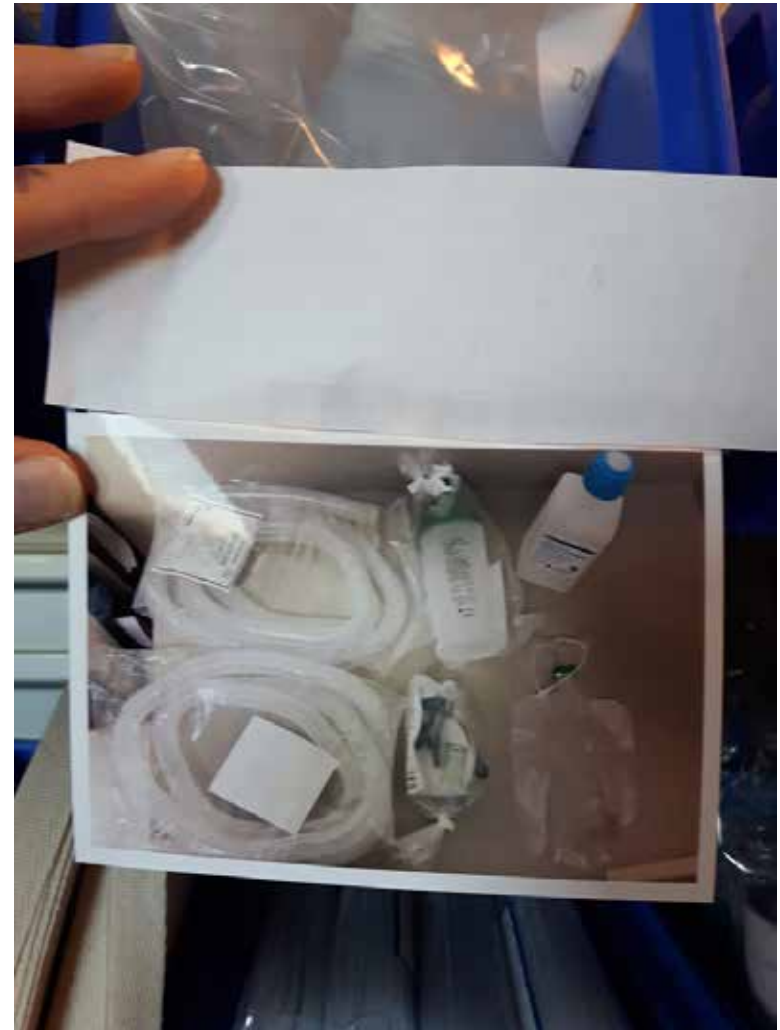
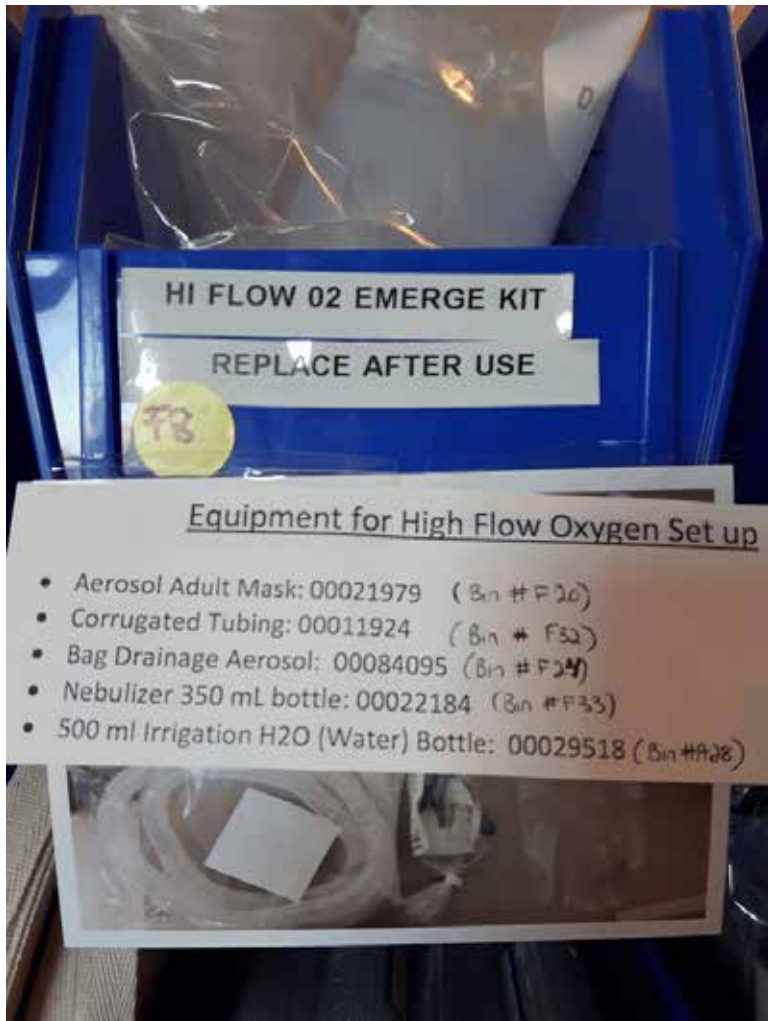
- Average for the 3 RNs: 3 minutes and 9 seconds
- 7 out of 7 non-RN staff members responded “no” in a short survey asking whether or not they would be able to identify the six pieces of equipment needed to set up high flow oxygen



How We Did It...

- The educators on CP7 had been working on a similar project and so we partnered with them to create emergency high flow bags with all of the equipment inside
- We obtained large ziplock bags and placed inside all the components of the high flow system
- A bin was designated in the clean utility room for the bags and clearly marked
- Staff were notified of the initiative via email, in-services on the ward, and an updated section of our RT2C board







What Worked Well...

- Collaborating with CNE Doris, who had already initiated the project on CP7 and purchased the bags as well as printed out the equipment list
- This was an easy initial RT2C project that took less than two short days (started by Lisette and Beza, completed by Isabelle)
- It is not a controversial project; every single staff member we talked to stated it is a good idea



Challenges...

- Finding the best place to put the bag
 - We decided not to put it on the crash cart as people tend to be hesitant to take things off of the cart
- Finding staff who had the time to participate in the mock emergencies to collect data
- Ensuring that staff replace the contents of the bag when they have used it after an emergency situation
 - This has been a challenge in the past for other safety equipment bags
 - A reminder tab has been placed on the bin however it remains to be seen if this will be effective
 - A sporadic audit completed on Oct 15, 2017 showed that the two high flow bags had been refilled and were ready for a subsequent use, for the time being the bags are being replenished!



Impacts...

- Remember that 100% of non-RN staff polled stated they would not be able to identify all of the high-flow equipment components
- We tested non-RN staff members after implementation of our project and found that they can now identify the bags. Non-RN staff can now assist in a high-flow emergency!
- Furthermore, we wanted to see how long it would take them to find our “high-flow bag” in our equipment room and got some exciting data!!

- Casual LPN: 4.4 seconds
- Regular PCA: 3.3 seconds
- Float LPN: 2.6 seconds
- Regular Social Worker: 2.1 seconds

Average time to locate high-flow oxygen equipment: 3.1 seconds



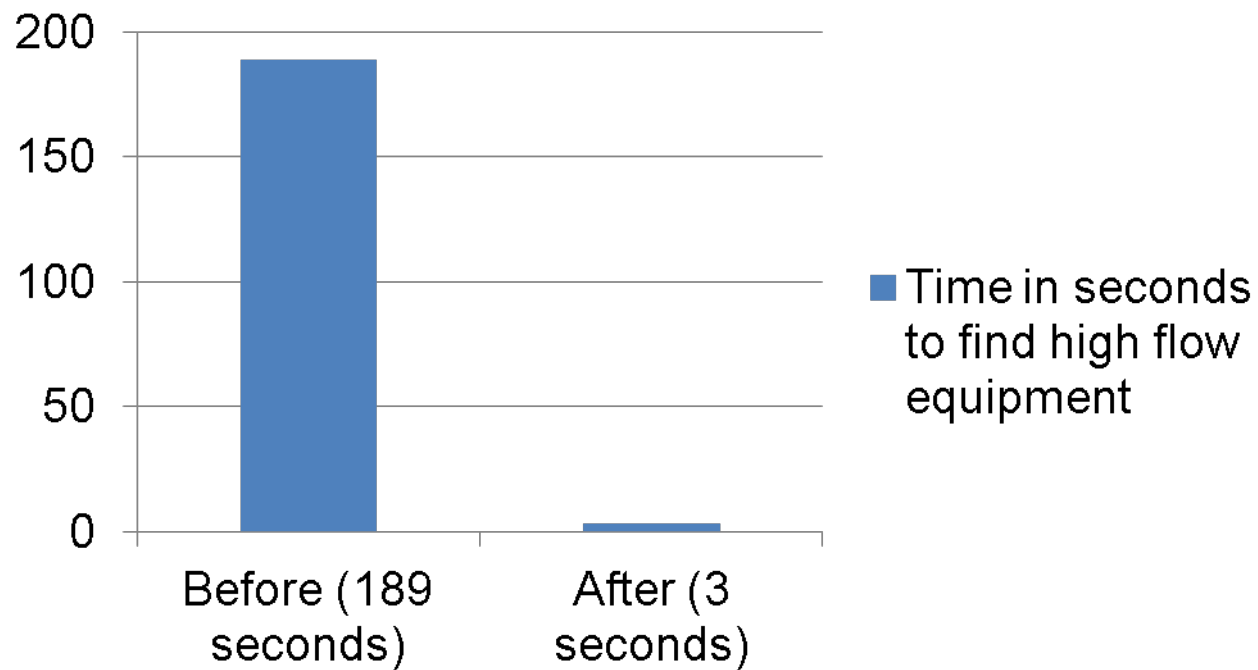
Impacts (continued)...

- Our high flow bag has been used at least 3 times since implementation on Sept 7, 2017
 - Ø Twice in pre-code situations
 - Ø Once on a de-satting patient who then remained on high-flow for a prolonged period
- Having the bags accessible cuts down approximately 3 minutes of a patient being hypoxic while waiting for high flow equipment
- We hypothesize that the negative effects of 3 minutes oxygen deprivation on the brain, heart, liver and other organs will likely be minimized and chances of recovery from hypoxic emergencies will increase



Impacts (continued)...

Time in seconds to find high flow equipment





Impacts (continued)...

- How can we re-invest the time (3 minutes) we have released? In a high flow emergency situation, there are several interventions we can now initiate much more quickly:
 - Ø Inserting an IV
 - Ø Initiating medications
 - Ø Deep suctioning
 - Ø Chest physio
 - Ø Calling for STAT tests or bloodwork
 - Ø Liaising/calling the physician, RT, CCOT team
 - Ø Comforting family
 - Ø Brainstorming to find the cause and tailoring interventions



What Makes Us Proud...

- The feedback from staff on our ward so far has been overwhelmingly positive
 - “Why haven’t we done this before?”
 - “This is so much easier”
 - “I know I will definitely be using this at some point”
 - “Such an easy way to improve patient outcomes”
- After presenting our project to other RT2C teams at one of our VGH joint meetings, several teams decided to implement the bags on their wards as well



Thank you for your time!

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