

Experience at the Arctic Bay Nursing Station on the coast of Baffin Island

Joseph C.F. Vipond



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Setting

The action takes place at Arctic Bay Nursing Station, a 2-nurse station 750 km north of the Arctic Circle on the north coast of Baffin Island. Town of 650. Mid-November. Sun rises 10 am, sets 2:45 pm, approximately.

Cast

JOE, as visiting doctor, up from Iqaluit for a week-long clinic
 TRACY, as pediatric resident extraordinaire
 THE KID, as cause of all the trouble
 THE EXTENDED FAMILY, as a big part of his support, at the bedside almost continuously
 GAIL, as nurse in charge and Mom to all
 JOANNE, as the courageous nurse
 MYRNA, as the relief nurse, always smiling
 RAY, as transport paramedic and troubleshooting king
 STEVE, as the pilot willing to do anything to get The Kid out
 THE OTHER PILOT, as the other pilot
 DR. REID, the voice of calm at the other end of the phone
 THE FLOOR-LAYING TEAM, as themselves



It all begins on Saturday, a day of rest from clinic duties in which I go on a 7-hour hike among the amazing mesas and frozen bays surrounding the town. But that is another story. Suffice to say I return a wee bit tired from this adventure of postholing through knee-deep snow in -24°C weather with a -34°C wind chill. Happy to settle in watching *Panic Room* on the VCR.

1830: Call to see a 2-year-old boy. Was seen earlier today by Myrna; is getting worse. O_2 sats of 82% on room air; fever; respiratory distress. Looks sick, working hard to breathe. Three-day history of same. X-ray: bilateral pneumonia, all lobes. On 5 L by mask: 91%. Doesn't want to keep mask on. No-brainer: call for medivac. Looking relatively stable, no need to call Tracy, the peds resident, because he probably won't need to be tubed.

1900: Call to medivac goes out.

2000: Not looking quite so stable; it may be a good thing for Tracy to join the medivac team. Call medivac back. They haven't left yet; ETD 2100. Ask for Tracy to be notified.

2100: Tracy calls in. Medivac still hasn't left. Maybe they can swing it in half an hour.

2130: Medivac call to say they will probably leave at 2150. ETA 0030, with a half-hour ride from the airport.

2300: The Kid is sick but stable. Go to bed for a catnap; it's going to be a late night. Gail, Myrna and Joanne watch over him.

0100: Wake up. The Kid is looking worse. Definitely will need to be tubed before transport.

0215: Transport team arrives. At last.

0230: Time to tube. I ask to have a try, because I've tubed a child before. You are supposed to use a straight blade, right? Easy to bag. Pre-oxygenate, sedate, paralyze. Look down, see epiglottis, cover epiglottis, see cords, and epiglottis flips in the way. Try again. Same thing. Try again. Same thing. Sats dropping, now 85%. Decide to bag.

0231: Can't bag.

0231 and a bit: Trying not to panic. Sats in the 70s.

0233: Sats still lousy, but he's breathing again.

0235-45: Attempts by Tracy and the paramedic, Ray. No go, both times.

0250: Decide we may be doing things a bit wrong. One last attempt. Try ketamine, no paralytic. I decide to try with a curved blade. (Go with what you know.) No problem.

0300: Baffin Regional Hospital in Iqaluit tells us they're being evacuated on account of a formaldehyde spill. Patients are being sent home or flown down to Ottawa. No way we can fly until we have confirmation that the rendezvous pediatric transport team from CHEO is on its way up. The team can't seem to find a flight nurse to join them; search in progress. No ETD. Pilots tell us they should be back at the plane by 0400 to have any hope of starting it up in this weather.

0315: Ventilator doesn't seem to be working. Gives only 0.1-0.2 seconds for inspiration. Team decides bagging is probably better for the time being.

0320-0430: Various manoeuvres (IV starts, x-rays, catheterization, etc.) as we wait for permission to send the team.

0430: Team departs. Pilots look moderately optimistic the plane will start, despite the late departure. Happy to see them off.

0500: Sleep, glorious sleep.

0900: Knock on door. "Baby's back," says Gail. What baby? "The one you sent off this morning. And he's not doing well. Better come and see."

0905: Go down and see. Sats are 80-85% on 100% O₂ by bagging. X-ray results not good. The team figures the problem is atelectasis due to poor volumes of bagging. Increased volumes attempted; sats restored to 97% before the hour is out.

0930: The story is revealed. They got to the airport in a temperature of -31°C and wicked winds. Took an hour to wrestle the battery into place (they need to keep it warm while the engine is off, so it's kept inside a building). Mild frostbite to Steve's hands and feet. Get out to the runway to find visibility down to 3 runway lights. They need 16 to take off. Back in the van to return to the clinic.

1000: We try the ventilator again. The blessed thing works.

1100: Steve has been busily pulling weather info off the Web. "This isn't supposed to happen," he says. "This low just came out of nowhere; 110 miles east of here the weather is absolutely still. That's not supposed to happen. And the system is moving east. That's not supposed to happen either. I just don't understand it. And the barometric pressure keeps dropping. That's not good." The other pilot adds "I don't think I've ever seen a barometric pressure so low."

1130: We realize that one of our main problems will be meds. The transport kit has a limited supply and, surprisingly enough, the nursing station has virtually no ICU medications. Talk about oversight. We ration the paralytics.

1300: The weather office catches up to reality and a blizzard warning is issued for today and tonight.

1400: The day is spent figuring out how things work, getting in contact with the pediatric ICU and Dr. Reid down at the children's hospital in Ottawa, and organizing a system of watching over The Kid.

1700: Baffin Regional Hospital finally reopens. Noted, then back to work.

2200: Tracy is finally convinced to go to sleep, after being up way, way too long.

2400: I go to sleep. The Kid is stable and in the good hands of the nurses. I rest peacefully. The plan is to give the pilots a good night's rest and try again in the morning.

0500: Bounce up, full of adrenaline. Go down to check on The Kid; he's fine. Check on the weather. Blizzard warning extended through to Wednesday. Not good. It's only Monday morning. We check our supplies. Not good.

0600: Lie in bed. Can't sleep.

0700: Get up. Why bother trying?

0730: The floor-laying team shows up to continue work. We gently suggest they go away.

0800: Arctic Bay PICU rounds begin.

0900-1200: The Kid is getting progressively more restless. Man, can he fight. Megadosing on ketamine, we are quickly running out of supplies. We switch to a morphine drip. The dose rapidly escalates. He's decided to buck, thrash his head, arch his back, bite on the tube ... all despite doses that would normally knock down a horse (or a muskox, as the case may be). Our morphine drip is at 150% of the normal maximum dose, and we use the rest of our fentanyl and midazolam, plus 2 shots of our precious rocuronium. We're afraid he might extubate himself, and almost come to hope he does, provided he still breathes fine afterwards.

1100: The weather saga continues. The wind is unrelenting, shaking the building and blowing snow through the sides of the window in our mini-ICU. Steve still describes the weather situation as "unbelievable," in the true sense of the word. He wants to go to the airport to check things out for himself. This is complicated; there is no one at the airport, and the person who looks after it is at the Nanasivik mine and doesn't have a key. The roads aren't plowed, and we can't confirm they are in the process of being plowed: the plowman, who has a satellite phone, for

some reason can't be reached. There is some talk of driving Steve to the end of the plowed road, then snowmobiling the rest of the way. Except the RCMP snowmobile can't be used because they think some local may have put an unknown substance in the gas tank. Alternatives are pursued.

1200: A funky little video teleconference occurs between us and Dr. Reid, complete with slide show showing chest x-rays and The Kid. He gives us a little pep talk and boosts our spirits.

1400: Steve returns from the airport. It was worse than he imagined. The runway was invisible from the airport building. When he walked out onto the runway, his visibility was down to one light. "On the bright side," he says, "it's only -15°C out." Yippee.

1600: Steve thinks there is a possibility of going out tonight. Winds are dropping. Despite the forecast, he says, "If they get to 20 km per hour I think it's a go." He decides to go back out, giving us instructions to leave on a moment's notice. "When I call, you've got to be out there in exactly 30 minutes. No fooling."

1710: We get the call to go.

1711: We lose one of our two IV lines.

1712: Oh shit.

1715: Searching frantically for another site, we poke at anything remotely blue under his skin. Get one in his upper arm ... lose it. Think about a cutdown. I take one last look at a spidery thin vessel in his volar wrist, and go for one last try with a 24 gauge. Flashback ... thread ... thread ... it's not threading. A last-ditch effort to flush it through the suspected valve with saline ... it's in. Oh, glorious day.

1735: The van departs.

1830: We get word the plane has left the ground.

2030–2230: Watch *Panic Room*.

Easily the most challenging medicine I've ever been up against, and the best example of teamwork that I've ever been a part of. Every single person in "The Cast" — and especially The Kid — worked incredibly hard. Reports are The Kid made it to Ottawa and did well, being extubated a week later. Some difficulties with sedation. (No kidding.) A bit of barotrauma from our inadequate ventilator, but otherwise back to 100% by the end. Good on him.

Joseph Vipond resides in Fairmont Hot Springs, BC.

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