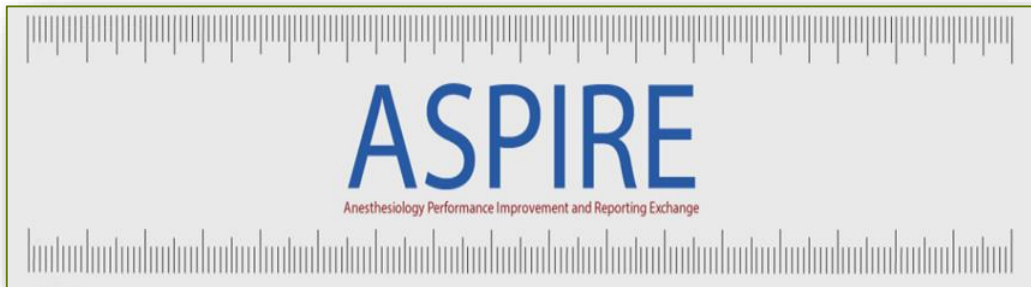


SPARROW ANESTHESIA SERVICE UPDATES



Outline

- Poor Quality Measures For Sparrow Anesthesia Services
 - ✓ PULM 02
- Reviewed Measures With Anesthesia Staff
- Illustrate Steps Used To Improve Adherence to Measure



PULM 02

Reviewed Anesthesia Staff On:

1. PULM 02 Measures
2. Where To Find IBW In EPIC
3. Changing Default Vent Settings On Anesthesia Machines



PULM 02

1

Success: Median tidal volume ≤ 8 ml/ kg ideal body weight IBW

Threshold: 90% Anesthesia department at 64%

Inclusions:

- Patients undergoing endotracheal intubation.

IBW

Exclusions:

- ASA 5 and 6 cases
- Patients < 12 years of age
- Patients <20kg.
- Patients ≥ 18 years old with a height <121.9cm (48 in) OR >213.4cm (84 in)
- Patients 12-17 years old with a height <91.4cm (36 in) or >213.4cm (84 in)
- Cases without a documented sex
- Cases without a documented height
- Cases in which patients are mechanically ventilated for less than 45 cumulative minutes.
- One lung ventilation procedures as indicated by intraoperative notes or note details mapped to one of the following MPOG concepts:
- 50501: Thoracic: Single-lung ventilation
- 50202: Thoracic: Single-lung ventilation, side detail

2

Preprocedure Vitals

BP: 130/75

Resp: 18

Temp: 36.6 °C

Height: 162.6 cm (64") (02/07/18)

BMI: **30.2**

Last edited 02/07/18 0607 by TM

Pulse: 91

SpO2: 92

Weight: 79.7 kg (175 lb 12.8 oz) (02/07/18)

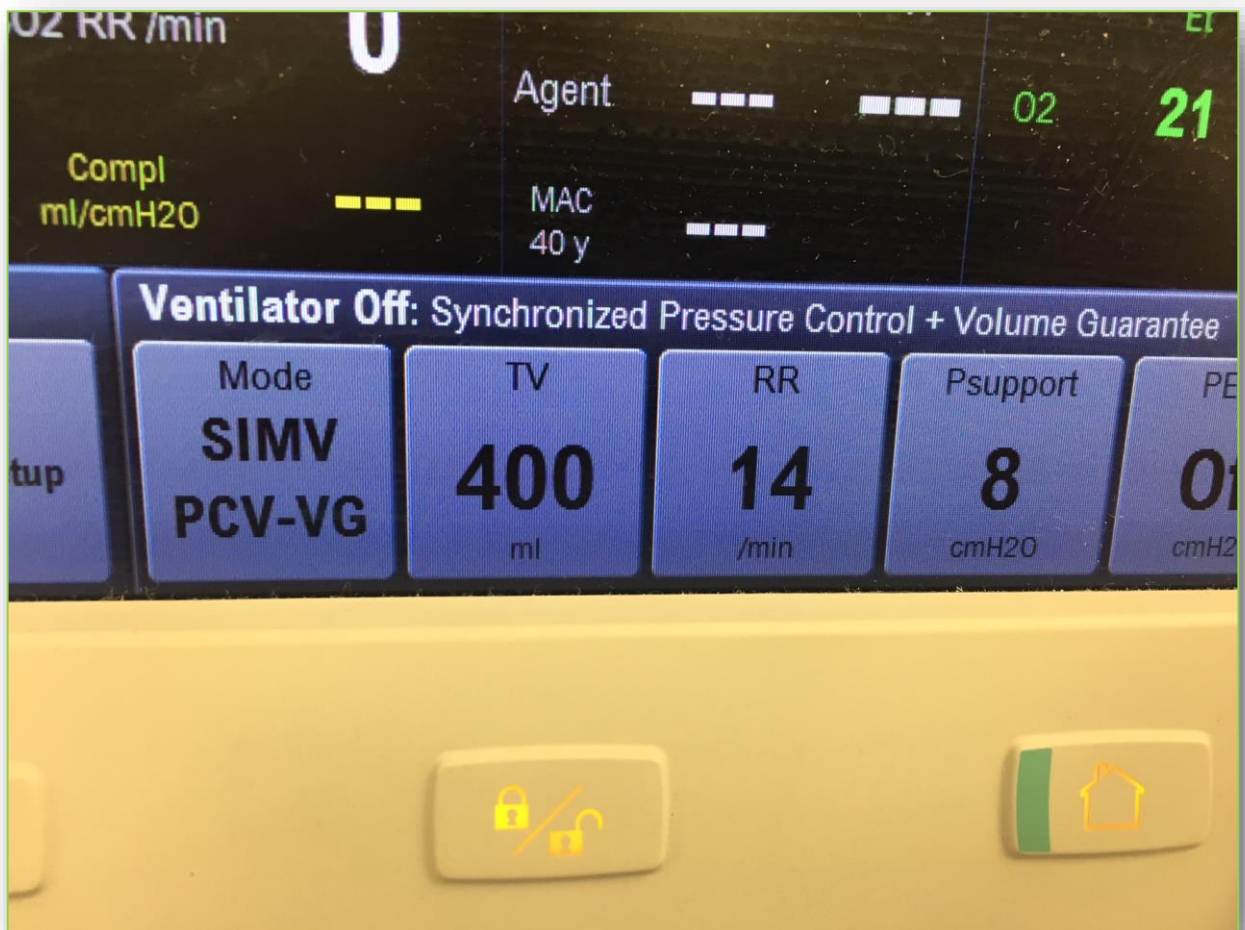
IBW: 59.2 kg (130 lb 9.5 oz)



Implemented Vent Setting Changes

3

- Drop Ventilation TV (Default Settings) From 500 to 400 ML



Default Vent Settings 400 ml Tidal Volume (TV)

- Monthly Gradual Improvement Towards Targeted Goal

February - Not Implemented

PUL-01

✓ 96%

Target 90%

PUL-02

✗ 67% Target 90%

March - Implemented

PUL-01

✓ 98%

Target 90%

PUL-02

✗ 73% Target 90%

April – Continued Implementation

PUL-01

✓ 96%

Target 90%

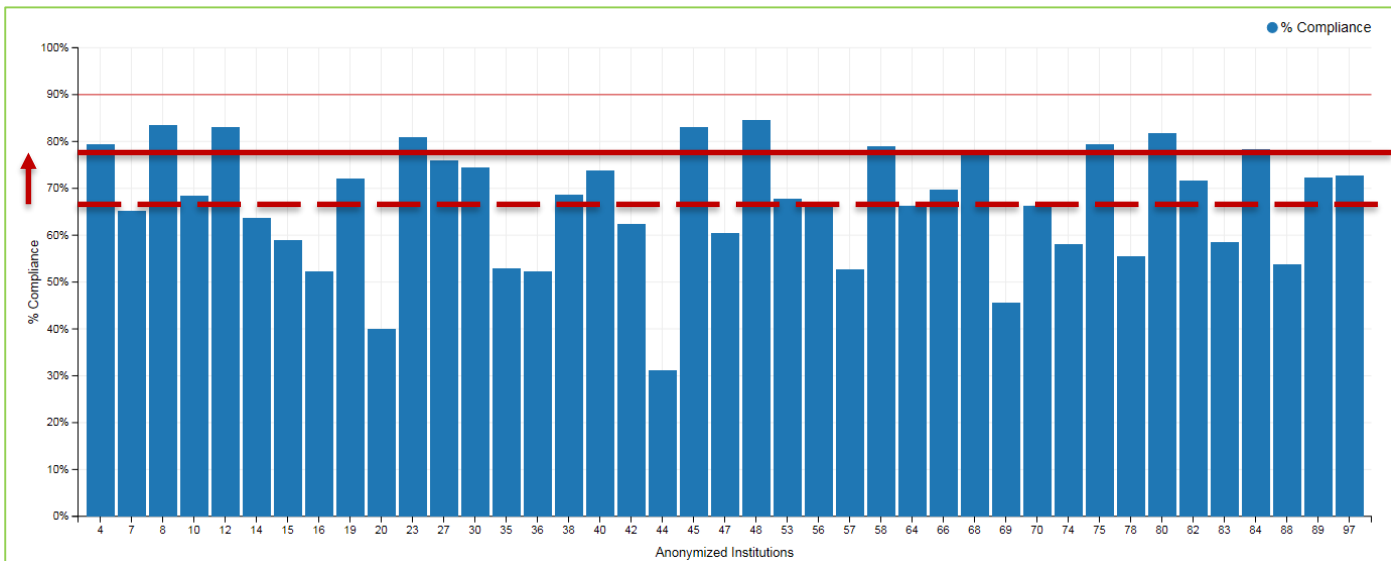
PUL-02

✗ 76% Target 90%




PULM 02 Ranking

- Compliance By Institution



PULM 02 Next Step

- Add Aspire's IBW/TV Chart To All OR Anesthesia Machines
- Monitor For Improvements



ASPIRE
Anesthesia Performance Improvement and Reporting Exchange

IDEAL BODY WEIGHT (IBW) / TIDAL VOLUME CHART													
MALES							FEMALES						
HEIGHT			IBW Male	6 ml/kg	7 ml/kg	8 ml/kg	HEIGHT			IBW Female	6 ml/kg	7 ml/kg	8 ml/kg
Feet	Inches	cm					Feet	Inches	cm				
4' 0"	48	121.92	22.4	130	160	180	4' 0"	48	121.92	17.9	110	120	140
4' 1"	49	124.46	24.7	150	170	200	4' 1"	49	124.46	20.2	120	140	160
4' 2"	50	127	27	160	190	220	4' 2"	50	127	22.5	140	160	180
4' 3"	51	129.54	29.3	180	200	230	4' 3"	51	129.54	24.8	150	170	200
4' 4"	52	132.08	31.6	190	220	250	4' 4"	52	132.08	27.1	160	190	220
4' 5"	53	134.62	33.9	200	240	270	4' 5"	53	134.62	29.4	180	210	230
4' 6"	54	137.16	36.2	220	250	290	4' 6"	54	137.16	31.7	190	220	250
4' 7"	55	139.7	38.5	230	270	310	4' 7"	55	139.7	34	200	240	270
4' 8"	56	142.24	40.8	245	290	330	4' 8"	56	142.24	36.3	220	250	290
4' 9"	57	144.78	43.1	260	300	350	4' 9"	57	144.78	38.6	230	270	310
4' 10"	58	147.32	45.4	270	320	360	4' 10"	58	147.32	40.9	250	290	330
4' 11"	59	149.86	47.7	290	330	380	4' 11"	59	149.86	43.2	260	300	350
5' 0"	60	152.4	50	300	350	400	5' 0"	60	152.4	45.5	270	320	360
5' 1"	61	154.94	52.3	310	370	420	5' 1"	61	154.94	47.8	290	330	380
5' 2"	62	157.48	54.6	330	380	440	5' 2"	62	157.48	50.1	300	350	400
5' 3"	63	160.02	56.9	340	400	450	5' 3"	63	160.02	52.4	310	370	420
5' 4"	64	162.56	59.2	350	410	470	5' 4"	64	162.56	54.7	330	380	440
5' 5"	65	165.1	61.5	370	430	490	5' 5"	65	165.1	57	340	400	460
5' 6"	66	167.64	63.8	380	450	510	5' 6"	66	167.64	59.3	360	410	470
5' 7"	67	170.18	66.1	400	460	530	5' 7"	67	170.18	61.6	370	430	490
5' 8"	68	172.72	68.4	410	480	550	5' 8"	68	172.72	63.9	380	450	510
5' 9"	69	175.26	70.7	420	500	570	5' 9"	69	175.26	66.2	400	460	530
5' 10"	70	177.8	73	440	510	580	5' 10"	70	177.8	68.5	410	480	550
5' 11"	71	180.34	75.3	450	530	600	5' 11"	71	180.34	70.8	420	500	570
6' 0"	72	182.88	77.6	470	540	620	6' 0"	72	182.88	73.1	440	510	580
6' 1"	73	185.42	79.9	480	560	640	6' 1"	73	185.42	75.4	450	530	600
6' 2"	74	187.96	82.2	490	570	660	6' 2"	74	187.96	77.7	470	540	620
6' 3"	75	190.5	84.5	510	590	680	6' 3"	75	190.5	80	480	560	640
6' 4"	76	193.04	86.8	520	610	690	6' 4"	76	193.04	82.3	490	580	660
6' 5"	77	195.58	89.1	530	620	710	6' 5"	77	195.58	84.6	510	590	680
6' 6"	78	198.12	91.4	550	640	730	6' 6"	78	198.12	86.9	520	610	700
6' 7"	79	200.66	93.7	560	660	750	6' 7"	79	200.66	89.2	530	620	710
6' 8"	80	203.2	96	580	670	770	6' 8"	80	203.2	91.5	550	640	730
6' 9"	81	205.74	98.3	590	690	790	6' 9"	81	205.74	93.8	560	660	750
6' 10"	82	208.28	100.6	600	700	800	6' 10"	82	208.28	96.1	580	670	770
6' 11"	83	210.82	102.9	620	720	820	6' 11"	83	210.82	98.4	590	690	780
7' 0"	84	213.36	105.2	630	740	840	7' 0"	84	213.36	100.7	600	710	810

Modified from ARDSNet & National NIH
 Males IBW Calculation: $50\text{kg} + 0.91\text{kg} * (\text{height in cm} - 152.4)$
 Females IBW Calculation: $45.5\text{kg} + 0.91\text{kg} * (\text{height in cm} - 152.4)$