



# Do NOT Resuscitate (DNR): How Problem Solving and Technology Led to Supporting Compliance and Ethics



Ann Alway, MS, RN, CNS, CNRN; Nancy Dunn, MS, RN; Harriett Martin, AA, RN; Jessica Reese, BSN, RN, CMSRN; Rebecca Cowin, RN; James Crawford, BI Data Analyst II; Noel Caddy, IS Analyst II

**Problem:** Unnecessary treatment of a DNR patient upset a patient, the family and compromised the organization in supporting patient safety and dignity.

**What Should Be Happening:** No patient who chooses to be DNR should be resuscitated. DNR wristbands should be applied on the patient within 4 hours of physician order 100% of the time.



**What is Actually Happening:** On average 1-2 times a year, a DNR patient is wrongly resuscitated or experiences some form of life sustaining measure. DNR wristbands are being placed 33% of the time in critical care units and 56% of the time in medical surgical units.

**Root Cause:** Failure to adhere to the policy standard to place the wristband within 4-hours or order.

**Hypothesis:** If we design a method to document that the DNR wristband has been placed within 4-hours of the order being written, we will never have a DNR patient resuscitated unnecessarily.

**Countermeasures:** A team of clinical nurses, Epic experts and nursing consultants convened to design two countermeasures to support the nurse to meet the standard.

**EPIC flowsheet row** to capture documentation of the band placement.



**Best practice alert (BPA)** to fire at 4-hours post DNR order if documentation was missing. It continues to fire every time the chart is opened until documentation is verified.



**Process Metrics Results:** The gap was closed for 3 weeks in the test units, but was not sustained. For the 3 months after the EPIC change was spread to all units, a gap of 49% was measured.

**1st Check and Adjust Countermeasure:** An Epic Workbench report pushed to the unit charge nurses at 4pm and 4am. This reduced the gap to 23%.

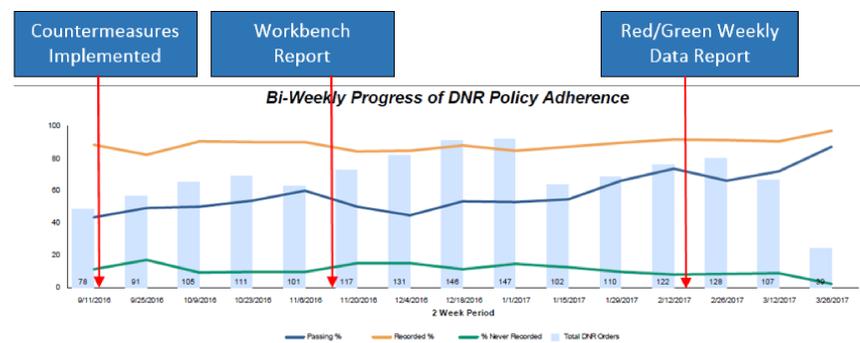
**2nd Check and Adjust Countermeasure:** A red/green weekly report (hoping to instill a sense of competition) sent to unit managers weekly, resulted in further reduction of the gap.

Period	Change		3/16 - 3/22		3/9 - 3/15		Data Total				
	Pass	Record	Pass	Record	Pass	Record	Orders	Passed	Failed	Recorded	Not Recorded
3W	10.00	30.00	50.00	50.00	60.00	80.00	2	1	1	1	1
4N IP Rehab	50.00	50.00	50.00	50.00	100.00	100.00	2	1	1	1	1
5N	41.43	47.14	28.57	42.86	70.00	90.00	7	2	5	3	4
5S	N/A	N/A	-	-	100.00	100.00	-	-	-	-	-
6N	20.00	20.00	100.00	100.00	80.00	80.00	4	4	0	4	0
6S	N/A	N/A	-	-	33.33	100.00	-	-	-	-	-
CVCU	40.00	0.00	100.00	100.00	60.00	100.00	1	1	0	1	0
D5	32.73	10.91	72.73	90.91	40.00	80.00	11	8	3	10	1
ICU	-6.67	-8.89	60.00	80.00	66.67	88.89	10	6	4	8	2
IMCU	-2.78	-13.89	75.00	75.00	77.78	88.89	4	3	1	3	1
NTCU	-20.83	-9.72	66.67	77.78	87.50	87.50	9	6	3	7	2
OVERALL	-0.79	-11.32	64.00%	76.00%	64.79%	87.32%	50	32	18	38	12

**3rd Check and Adjust Countermeasure:** Members of Shared Leadership recommended standard work to further educate and close the gap completely – release target date 4/15/17.



STANDARD WORK: Placement of DNR Wristband
<b>Purpose:</b> To assure that patients with a DNR order have a DNR wristband in place within 4 hours of the order placement.
<b>Inputs:</b> DNR order, DNR wristband, DNR wristband Best Practice Alert (BPA), DNR Wristband Epic flowsheet row, DNR workbench report.
CONTENT in SEQUENCE



**Outcome Metric Results:** Health care teams respected all DNR orders since implementation of the project.

**Conclusions:**

- The project is still in check and adjust for our process metric (to reach 100% compliance with band placement within 4-hours of MD order).
- It takes many plan-do-check-adjust (PDCA) cycles to close and sustain the closure of a gap. Following your data over time is crucial.

**Future state:**

- An additional compliance issue surfaced during this project. Several patients were found to be lacking a code status order all together, which per policy is to be addressed within 24 hours of admission. An SBAR, including data collected, was forwarded to Medical Staff.

**Key Learnings:**

- Value of bringing in frontline staff to assess knowledge gap/issues with compliance.
- Early creation of standard work to support the process/expectation.
- Assessing individual outliers for barriers (electronic or man).

**Success Factors:**

- Collaboration of teams (EPIC, Nursing Case Peer Review, Patient Safety, Practice Council/Shared Leadership).
- Nursing Case Peer Review Committee making this problem solving for patient safety a priority for the organization and allocating adequate resources.

**Next steps:**

Work toward sustainment and writing a Magnet Exemplar.

For more information contact Jessica Reese at [Jessica.Reese@SalemHealth.org](mailto:Jessica.Reese@SalemHealth.org)