

# Don't Forget the Resident at Neonatal Resuscitations

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## Background

A 2011 study from Journal of Graduate Medical Education found that provider comfort with neonatal resuscitation directly correlated with the number of opportunities given to practice resuscitation. However, at our facility residents miss out on this opportunity due to the resident not being aware of the resuscitation team attending a delivery.

## Objective

The purpose of this quality improvement project was to increase the number of residents attending neonatal resuscitations.

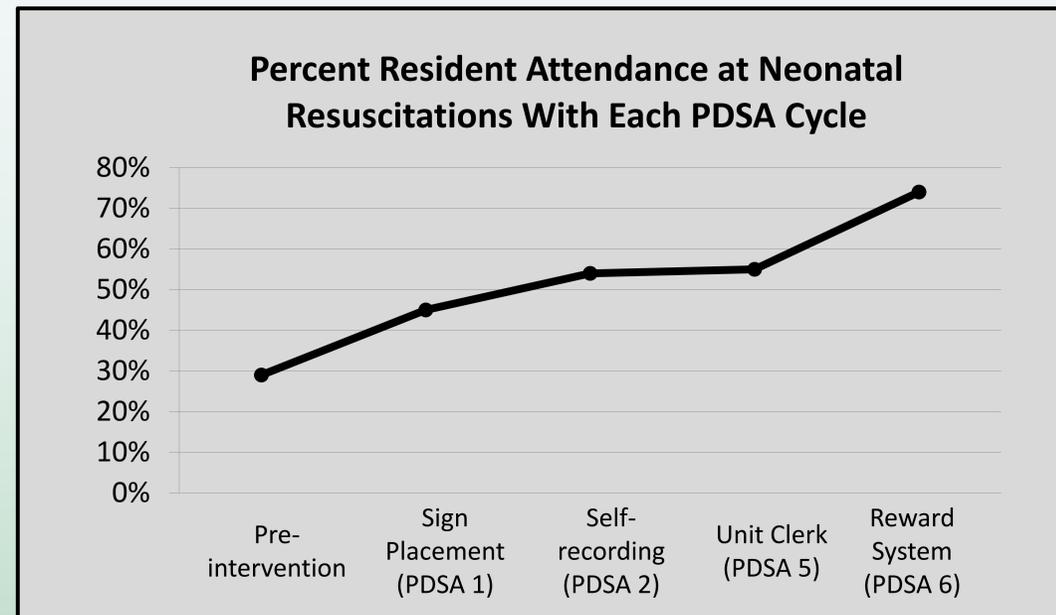
**Aim 1:** Determine what percentage of neonatal resuscitations were attended by resident physicians.

**Aim 2:** Determine if attendance changed after simple interventions were instituted.

**Aim 3:** Continue providing opportunities for more experience with resuscitations to increase attendance to 85%.

## Method

This continuing quality improvement project examined 37 months of data. Fourteen months of baseline data was analyzed for percent of resident attendance at neonatal resuscitations. Once established, 6 PDSA cycles: Signage, Self-Reporting, Schedule Change/Phone, Paging System, Unit Clerk, Nurse Reward were completed, with a seventh pending.



## Results

The initial percent of attended resuscitations during working hours was 29%. After PDSA 1, it increased to 45% (p-value <0.001) using Chi-square analysis. A Chi-square subgroup analysis was done to verify the change in attendance from pre-intervention (27%) to PDSA 1 (46%) for the data from March through November, confirming the change as statistically significant (p-value <0.001). Although each PDSA cycle did not show statistically significant increase, the overall percentages did increase. When comparing pre-intervention to current resident attendance, there is a statistically significant increase (29% vs. 74%, p-value <0.001).

## Conclusions

This project is an example of how a simple change can make a significant impact on opportunities for resident education. Due to other resident obligations such as lectures and continuity clinics, the attendance is not expected to reach 100%. In the future, we plan to conduct a survey of residents to determine if PDSA cycle 3 (schedule change and phone placement) helped to offer more opportunity and responsibility at night as well as more opportunity to assist and observe normal newborn deliveries. Our ultimate goal is to achieve 85% attendance which includes the next PDSA for a new paging system which will allow direct communication with residents, leaving their response as the only hindrance to attending neonatal resuscitations.

PDSA Cycle	Average Attendance	% Improvement from prior PDSA cycle	P value
1. Sign Placement	45%	16%	<0.001
2. Self Recording	54%	9%	0.2097
3. Schedule Change	Survey pending	Survey pending	Survey pending
4. Paging System	PDSA failure	PDSA failure	PDSA failure
5. Unit Clerk	55%	1%	>0.999
6. Reward System	74%	19%	0.3328
7. Permanent Paging system	TBD	TBD	TBD