Questionnaire for Submitting a Physiologic Birth Improvement Story

The following questions will help the members of the BirthTOOLS subcommittee incorporate structured case studies of successful quality improvement activities. You have indicated that you have made a change in your care setting that relates to physiologic birth. Please provide answers to the following questions about your change project. We welcome as much detail as you are willing to provide. If we use your success study in the toolkit, we will contact you to approve the final content and obtain necessary institutional permissions. Once you have completed the questionnaire, please email it to birthtools@acnm.org for submission!

What did you set out to change or improve?

When Highland Hospital was accepted into the first cohort of the Healthy Birth Initiative: Reducing Primary Cesareans Project, our goal was to reduce our NTSV cesarean delivery rate via implementation of one of the three bundles supporting physiologic birth. The unwarranted variation in NTSV cesarean rates across the United States is widely acknowledged as problematic and is a significant contributor to maternal morbidity. Although Highland's baseline rate of 13% in 2015 is lower than the national average, we were motivated to optimize our patient care and contribute to the body of knowledge by participating in the HBI:RPC Project. Analysis of our indications for primary cesareans in 2014 and 2015 identified fetal indications as the primary driver. Accordingly, we chose to support physiologic birth by implementing the Intermittent Auscultation bundle. We believe that doing so may help us decrease the number of C/S done for Cat II tracings that could be candidates for ongoing expectant management. It is also likely that use of IA, which allows women more freedom of movement, will promote spontaneous progress in labor and contribute in this way to lowering the NTSV C/S rate.

How did you change it? *What new policy, process, or practice did you put in place?*

When we initiated this project, our use of Intermittent Auscultation (IA) was infrequent at best. There were no published guidelines or criteria for the use of IA, no routine assessment of women for IA eligibility, no training of providers and staff in ordering and performing IA, minimal knowledge of or firsthand experience with IA among staff and providers, and only one Doppler on the unit. In short, IA was not part of the culture of our nursing unit or our provider group, save one CNM who came to us from an out-of-hospital birth background.

In order to change it, we decided on a series of educational and practical steps leading to rollout of IA several months later. We began in March 2016 by surveying the Maternal Child Health providers and L&D nurses regarding their attitudes toward and experience with IA. This provided a starting point from which to begin education and training.

The questions asked were:

1. I am a ...OBGYN< RN<CNM< PEDIATRICIAN<Other

2. I am _____to learning about how to use and implement IA for low risk women in labor. (very open, somewhat open, not open, and not sure
3. Have you ever used IA in clinical practice? yes /no
4. Were you trained in how to do/interpret IA during your medical/midwifery/nursing training? Yes<No< don't remember
5. I feel _____ ordering IA for low risk women. (very comfortable, somewhat comfortable, not sure, somewhat uncomfortable, very uncomfortable, N/A)
6. I feel _____ doing IA with low risk patient in labor (actually holding the doppler and counting) (Same answers as #5)
7. I would feel _____if IA were being used during a labor/birth that i was attending. (Same answers as #5)
8. What is IA? Using EFM to monitor FHT at specific intervals of time < a 20 minute NST q hour < using doppler or fetoscope to listen to FHT as specific intervals of time
9. IA for low risk women is listening >>>>>> q 30 min in early, q 15 in active and shouldn't be used in 2nd stage<q 1hr in early, q 30 in active, and should not be used in 2nd < q 1 hr in early, q 30 in active, q 15 in 2nd< q 2 hr in early, q 30 min in active, q 15 in 2nd stage.
10. I feel knowledgeable about what criteria should be used to switch a patient from IA to Continuous EFM. < agree< disagree<unsure

We then made a presentation during our department's monthly Grand Rounds in which the benefits of and evidence for IA were introduced to the OB and CNM providers. This was soon followed by small-group instruction of the RNs over seven sessions, which included didactic content and hands-on practice with a live model (recruited from prenatal clinic).

The co-leaders of the project began developing tools for use on the unit, such as algorithms for initiation, discontinuation, and resumption of IA. Dopplers were purchased and stocked with "cheat sheets" outlining the practice and documentation of IA. Because much of our charting at Highland is still on paper, stickers were created and placed on nursing flow sheets with keys to abbreviations for documenting IA.

During this time, the department's policy on fetal monitoring was revised to reflect our belief that IA should be the standard of care for low-risk laboring women. We added detailed guidelines for use of and eligibility for IA, as well as exclusion criteria and indications to revery to CEFM. IA was added to our electronic order set under fetal monitoring options, with the intervals clearly specified for each stage of labor. IA could now be ordered with one click, eliminating both the need to type in the order freehand and variation in the orders.

In June 2016, we began including brightly-colored IA assessment sheets in our admission packets (much of our charting still takes place on paper). These served two purposes: they reminded providers to consider IA as a fetal monitoring option for eligible women, and they were used for data collection to determine how often patients were assessed for IA. Data review in early July indicated that our assessment of NTSV women for IA jumped from the single digits in March, April, and May to 66.7% in June.

The official rollout of IA took place in July of 2016. Although our rate of IA use among NTSVs in July was only 4.8%, the rate of assessment for IA in this population was 78.1%. Subsequent months have shown varying rates of IA use among NTSVs, ranging from 4.3% to 23.5%. Assessment for IA is now consistently documented in over 80% of the NTSV patients admitted to our unit.

Who was involved in making the change and what was each person's role?

Our interdisciplinary team of co-leaders included the Chief of OB, the Nurse Director for Maternal Child Health, an assistant Nurse Manager, the lead CNM, and a staff CNM. Our administrative and executive support came from the Chair of MCH and the VP of Patient Care Services.

The nurse co-leads were instrumental in securing needed equipment and posting educational materials throughout the unit. They authorized time for all nurses to attend a 2-hour IA training and provided space for the training.

The CNMs and OB Chief were primarily responsible for surveying, educating, and following up with all providers of OB/midwifery care. The staff CNM conducted all the nurse trainings and the hands-on provider refresher. The lead CNM, OB Chief, and Nurse Manager revised the Fetal Monitoring Policy and moved it through approvals into publication. The CNMs developed the IA assessment sheets, fetal monitoring algorithm (adapted from other sources), and "cheat sheets" in our Doppler kits.

The unit clerks distributed and collected the IA assessment sheets. All OB providers on L&D participated in filling out the assessment sheets. The lead CNM received raw data on NTSV deliveries and C/S rates from the department's data analyst. The lead CNM performed retrospective chart review for all NTSV deliveries and compiled and uploaded the data required by the HBI:RPC Project.
Most recently, the data analyst incorporated the HBI:RPC collaborative's data points into the department's electronic OB database. Rolled out in November 2016, this has greatly improved the quality of the data collected on NTSV deliveries and streamlined the collection and uploading process.

How did you determine if the change worked? *What data did you collect? How did you define "success"? How did you ensure your change didn't have any unintended negative consequences?*

We have yet to discover if the implementation of IA will result in a decrease in our NTSV cesarean rate. There has been no change to date from our baseline of 13%. Since we implemented IA six months ago, our rates of assessment for and use of IA have increased. However, our use of IA as the predominant method of fetal monitoring throughout labor is still relatively low. Our physiologic birth rate is quite variable from month to month and does not appear to have increased consistently.

The balancing measure selected by the HBI:RPC Project is 5-minute Apgar scores <7. This has not increased in our NTSV population. Whether the introduction of IA has had unintended negative consequences in a broader sense cannot be determined at this time. A repeat survey of provider and staff attitudes towards IA is planned for 2017.

One very positive change we have observed is that our hospital's participation in the HBI:RPC Project has opened up widespread discussion in our department of the benefits of physiologic labor and birth. This, in turn, has led to an opportunity for our provider group to explore the

differences and similarities between the practice of midwifery and the practice of medicine. Attention to communication between the disciplines has increased considerably, and a conscious decision has been made to pursue a model of interprofessional collaborative practice.

What was the biggest barrier to making the change?

Initially, the biggest barrier to implementing IA was staffing. Highland opened a new acute care tower in April of 2016, and this move coincided with our preparations to roll out IA. Responsibility for the unit's move fell largely to nursing leadership, thus creating an understandable limitation to that group's availability for planning. Once the move was completed, the census and delivery volume increased by 25%, yet core staffing did not immediately change. As staff struggled to keep up with the increased demands, it was difficult to secure time for RNs to train. The 1:1 staffing that would be required for IA was not possible.

Now that staffing has risen to meet our increased volume, the biggest barrier is simply the ingrained culture of CEFM. We plan to address this in the coming year via chart audits of cases in which IA was ordered by the provider but not carried out, followed by targeted refresher training and coaching for those RNs who opt out of IA for the sake of convenience. We plan to standardize training for all new staff and providers and to underscore the message that IA is the standard of care for low-risk laboring women. We will increase our prenatal preparation of women regarding options for fetal monitoring, and we hope that consumer demand will soon exert some influence on unit culture.

If you had one piece of advice for someone who wanted to make a similar change in their setting, what would you advise?

One piece: Implement change in stages, gradually and methodically, beginning with foundational elements such as education of staff and providers regarding evidence and rationale for the change you wish to make.

Additional very important pieces: Assess readiness of the unit prior to finalizing your strategy for implementation. Ensure availability of all stakeholders for regular meetings to review progress and challenges. Enlist nurse champions from the floor and secure protected time for them.

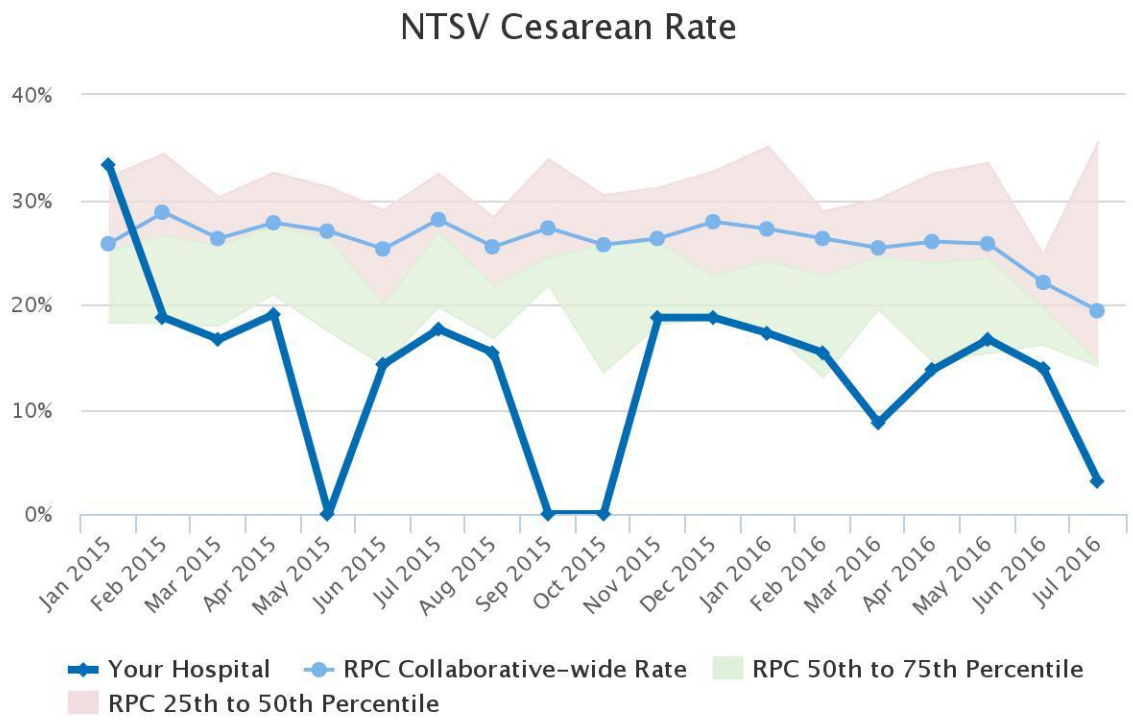
Did you use BirthTOOLS during the process of making the change? If so, how?

Absolutely! We drew on BirthTOOLS' materials heavily, including the HBI:RPC bundles, background information on QI and physiologic birth, and lists of resources and relevant publications.

If you have data or other evidence that your change was successful, please provide that data.

Due to the recent change in data collection systems, our November and December data regarding IA look quite different from the data gathered earlier in our implementation. As previously mentioned, we have not yet seen an overall change in NTSV C/S rates despite a

modest increase in IA use. We hope that year-end data for 2017 will demonstrate the desired reduction in NTSV C/S.



If you have a tool or policy that was developed during the process of making your change and are willing to share this with the site, please do so.

Coming soon via separate email.

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