

Is the A3 Report the Swiss Army Knife for the Mid-Career Neonatologist?

During CPQCCs most recent multicenter QI collaborative, we requested that all 28 participating NICUs develop an A3 report reflecting their QI work. We used these A3 reports to help scrutinize the details of each site's QI work in an efficient way. We also used the reports to guide content for the collaborative. Through this exercise, we learned a valuable lesson that may be helpful to mid-career neonatologists.

We learned that the A3 report is a valuable — yet underutilized — QI tool for a range of NICUs from small community sites to large academic NICUs. Many sites embraced this concept and found it to be a vital driver of their improvement work.

A3 thinking/problem solving and the A3 report is a Lean tool developed by Toyota in the 1960's. Toyota's managers were required to present their work updates in this format. Interestingly, the goals of the managers at that time were similar to the goals of today's mid-career neonatologists. We cannot effectively do our work alone. At some point, you need to be able to succinctly share your work by linking the initial problem to the solutions in progress while inviting others to ideate and execute plans among a large group. This is a huge challenge to navigate.

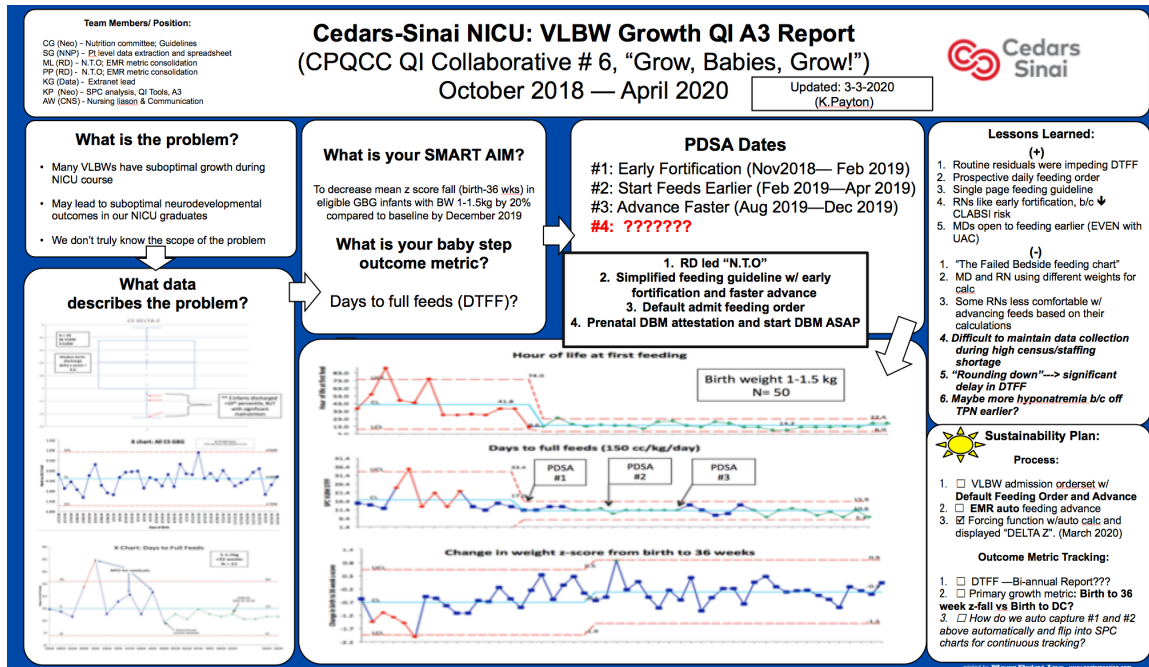
It's helpful to reflect on the origin of the name "A3". The name A3 comes from the largest piece of paper that was available to be faxed at the time. However, these managers presenting their work also needed to draw some boundaries around their content. Perhaps they benefitted by not having the option of presenting a large number of powerpoint slides—truncating the pieces of a cohesive work effort into disjointed concepts displayed separately. The Toyota managers needed to consolidate the key points from extremely complex work into a single package. Mid-career neonatologists are frequently faced with this challenging task.

Successful QI projects are able to execute three tasks effectively (below). The A3 effectively addresses these three tasks.

1. Solve problems — innovative thinking, ideating, brainstorming
2. Communicate — sharing ideas, disseminating best practices to all ("Yokoten"), inviting multiple disciplines into the work
3. Document — writing down "the story", keeping records over time, tracking and preserving the collective intelligence of hundreds of stakeholders

Whether you are planning to make improvements for internal purposes, or your goal is to publish a novel QI implementation project, the A3 report may provide more value than any other QI tools. The A3 does not replace all the other commonly used QI tools. It provides a place for them. It is a visual display conveying the work of all the other tools.

An A3 Example – CPQCC: Grow, Babies, Grow!



Here are 5 tips for using the A3 report in your work:

1. Start early and use any format that gets you moving forward. I like to use paper first. Word docs and powerpoint slides can restrict your ability to innovate by imposing too much structure.
2. Have you ever spent more time formatting your presentation than writing the content? Don't worry about formatting and cosmetics. This kills the productivity of the A3.
3. Strategically involve bedside staff and leadership from multiple disciplines. Harness the power of the Ikea affect here. Invite others to edit and give notes on the A3. This is EVERYONE's work
4. Market it. Post it. Sell it! Evidence supports that dashboards improve performance. The A3 conveys similar content and engages everyone visually in a similar way.
5. Use it as an archive and cross-pollinate content and lessons into other QI projects.

It can seem daunting to begin an A3 report, but consider jumping into this if you have not tried it. It will ultimately save you time and effort. Mid-career neonatologists can benefit from using the A3 process and the A3 report for managing QI projects. They can also use this method for any other challenging projects that must be addressed efficiently.

In summary, the A3 report is a single big picture synopsis of hundreds of details of your QI work. It bundles diagnosis of the problem, problem solving, team building, and documentation into a single document. It begins as a working document. It can be the workbench for all your QI tools. From this workbench it evolves into a living document that is constantly changing and being updated. It preserves vital information linking pieces to the whole. Problem solving starts here and continues here through rapid cycle changes building and adding new knowledge along the way. As you share this process with others, it blossoms to reflect the collective intelligence of all stakeholders involved. This workspace becomes an archive documenting weeks, months, and years of QI efforts.

Click on the image here to review and download an A3 template developed for NICUs working on complex problems.

A3 Report Template (Title of your project, start and end dates)		<small>Team Members/ Position / Role:</small>	
<p><small>INSTRUCTIONS</small></p> <ol style="list-style-type: none"> 1. Complete this template by filling in the text boxes considering the red text as guides. 2. Modify as needed to fit your problem. 3. The goal is a "big picture" review of your work. 4. Include control charts or other data visualization as able. 5. Don't worry about formatting and aesthetics. 		<ol style="list-style-type: none"> 1. List all team members. 2. Be clear about roles and responsibilities. 3. This can be helpful to discuss as a group. 4. Who is responsible for statistical process control charts? 5. Who is responsible for marketing your work to your NICU? 	
<p>What is the problem?</p> <ol style="list-style-type: none"> 1. Dissect the problem from multiple perspectives 2. Describe with supporting details 3. Why is this important? 4. What benefit is expected from the solution? 	<p>What is your SMART AIM?</p> <ol style="list-style-type: none"> 1. Specific 2. Measurable 3. Achievable 4. Realistic 5. Timely 	<p>PDSA Cycle # 2: (Dates)</p>	<p>Lessons Learned:</p> <ol style="list-style-type: none"> 1. List your lessons learned in any format that you think is most beneficial. 2. Consider which PDSA cycle this lesson originated. 3. How did you discover these lessons? 4. What's your process for capturing lessons learned? 5. How will you disseminate these lessons?
<p>What data describe the problem?</p> <ol style="list-style-type: none"> 1. Ideally, control charts or other graphics should be included here 2. Did your baseline data provide accurate information to inform your work? (For example, Did you have enough data to make conclusions?) 	<p>PDSA Cycle # 1: (Dates)</p> <ol style="list-style-type: none"> 1. A single annotated control chart may be ideal here 2. Perhaps your PDSA table or map can be inserted here? 3. Including dates is helpful. 4. Show how your PDSA cycles are linked and build upon each other. 	<p>PDSA Cycle # 3: (Dates)</p>	<p>Sustainability Plan:</p> <p>Process and Outcome Metric Tracking:</p> <ol style="list-style-type: none"> 1. How can you "hardwire" your successful processes? 2. Is this plan feasible and/or sustainable? 3. Is it possible to automate this? 4. How can you build this into regular daily activities/standard work? 5. Who will be responsible for this?
	<p>What data describe progress toward your SMART AIM?</p> <ol style="list-style-type: none"> 1. Perhaps a single control chart may be ideal here 2. Are there issues or concerns about your original aim? 3. Can you visually link changes to improvement? 		

We hope this helps you to continue to do the great work you are doing!

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For more QI tools and information please visit:

- [MidCaN QI Page](#)
- [MidCaN Collaboration Page](#)
- [Section on Neonatal Perinatal Medicine QI Group](#)
- [TECaN QI Page](#)