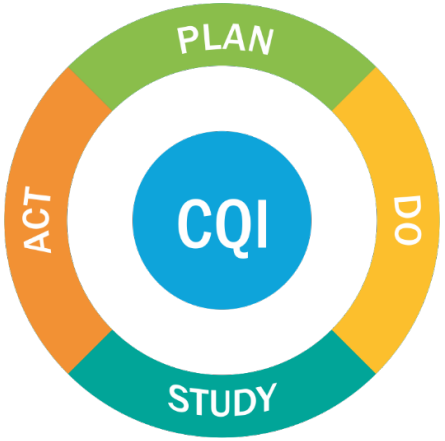
Small Scale CQI Projects:
Where to Start and How to Breeze Through the Finish Line



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Introductions

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Breakout Session Objectives

The session will detail the practicum's eight-month virtual series. By the end of the breakout session the participants will be able to:

- Understand and establish SMART Aims for an appropriately scoped quality improvement project.
- Identify potential changes to test by deploying different quality improvement tools.
- Further understand the multiple "ramps" of Plan, Do, Study, Act (PDSA) cycles.
- Understand the procession to design a procedure to sustain improvements.
- Further understand using data to tell a story, and share the story of their improvement project with stakeholders

Starting from the Beginning…What is CQI?

- Continuous quality improvement (CQI) is the systematic process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions. More simply, one can describe CQI as an ongoing cycle of collecting data and using it to make decisions to gradually improve program processes
- Quality Improvement vs. Quality Assurance

To understand the basics, review the Family Support Orientation Series: Continuous Quality Improvement (CQI) Webinar and access the accompanying documents for your team's work.

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Where to Start, and Why Small?

- Carefully consider scope—large enough to be meaningful and focused enough to make progress
- A process not a system
- A problem linked to an identifiable process
- Small enough to achieve results in 6-12 months
- Select a project where there's will—most importantly, yours, and ideally the organization and others on the team
- Avoid projects where there is a "done/not done" answer (e.g., design dashboard, create a learning event, etc.)
- Frequent and easy data collection (daily, weekly)
- Changes are within the team's (or leader's) direct control/authority

Picking Your Project – Where Do We Look?

10/10/2019 – CQI Practicum Meeting with EMCM CQI Team

- Performance Measure 5: Percent of mothers enrolled in home visiting prenatally or within 30 days after delivery who received a postpartum visit with a healthcare provider within 8 weeks (56 days) of delivery
- Numerator: Number of mothers enrolled in home visiting prenatally or within 30 days after delivery who received a postpartum visit with a healthcare provider within 8 weeks (56 days) of delivery
- Denominator: Number of mothers who enrolled in home visiting prenatally or within 30 days after delivery and remained enrolled for at least 8 weeks (56 days) after delivery

Baseline Data:

- From November 1, 2018 – September 30, 2019
- 37 Births - 27 clients were due for PP check by 8wks / 56days
- By reviewing our healthcare services form, 16/27 clients completed their PP check (59.25%)
  - As a CQI Team, we realized the current NFP form does not ask for the actual PP visit date, but the DCS does require it. So, we added a sticker to our form to include the date. Also, some nurses may have been forgetting to screen for the completion of the PP check. Often times, we are so focused on completed pediatric visits after birth.
- As for birth control, we don't have a lot of solid data... Of the 37 clients with births, we don't record data about their birth control use until 6 months (NFP Demographics update form).

Developing a Goal to Work Towards

- Creating a SMART Aim statement gives your CQI Team a clear goal to work with
- You'll want your SMART Aim to be:
  - Inclusive: brings traditionally marginalized people (particularly those most impacted) into processes, activities, and decision-making in a way that shares power
  - Equitable: includes an element of fairness or justice that seeks to address systemic injustice, inequity, or oppression
- **Importance**: Is the aim aligned with strategic priorities?
- **Clarity**: Will the team know when it has achieved the Aim?
- **Control**: Who controls the process to be changed?
- **Time**: Can the aim be achieved in the time allowed?
- **Resources**: Are there sufficient resources to achieve the Aim?
- **Stakeholders**: Who provided input and who else needs to be involved for success?

EMCM and OCDEL's SMART Aim Statement

Increase the percentage of mothers enrolled in home visiting prenatally, or within 30 days after delivery, who received a postpartum visit with a healthcare provider within 8 weeks (56 days) of delivery by 30% from baseline by April 10, 2020.

Studied Baseline Data: From November 1, 2018 – September 30, 2019 • 37 total births

- 27 clients were due for PP check by 8wks/56 days
- By reviewing our healthcare services form, 16/27 clients who were eligible
- completed their PP check (59.25%)
- **SMART Goal = 77.025%**

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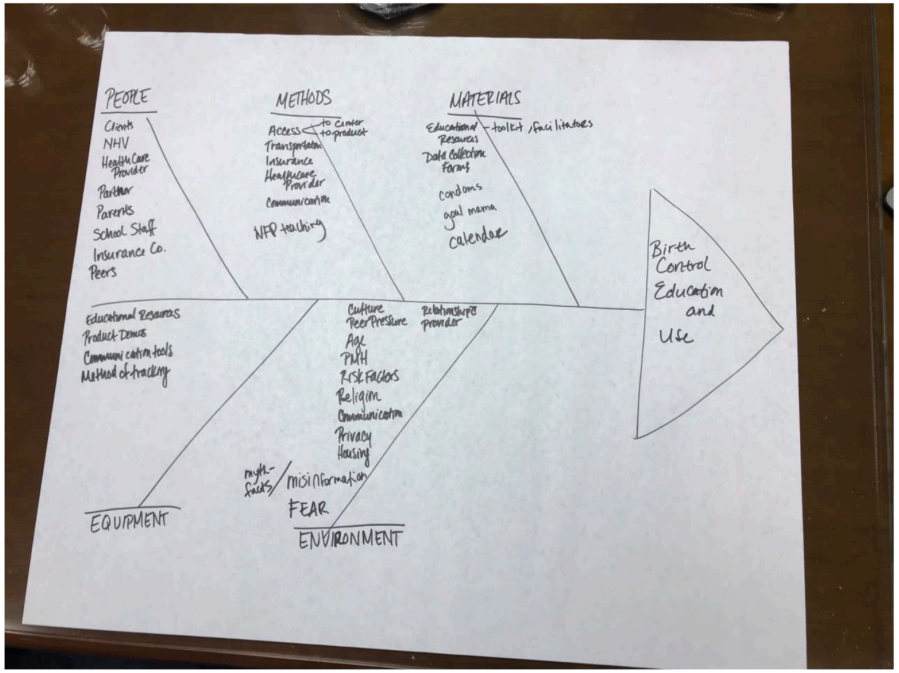
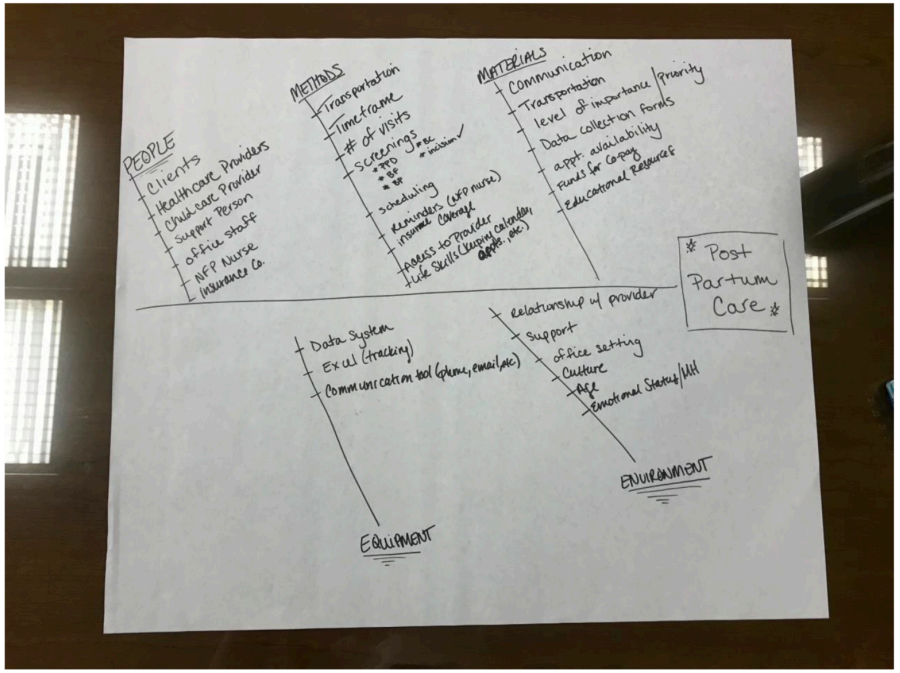
We Picked Our Project...Now What?

- Fishbone Diagrams are a great way to look at everything that goes into a process or project
- The 5 most common areas to assess are:
  1. People
  2. Methods
  3. Materials
  4. Equipment
  5. Environment

You can start broadly and narrow done the ideas as a team…take a look at how EMCM and OCDEL went from big picture to one change idea!

Start With a Big Fish…

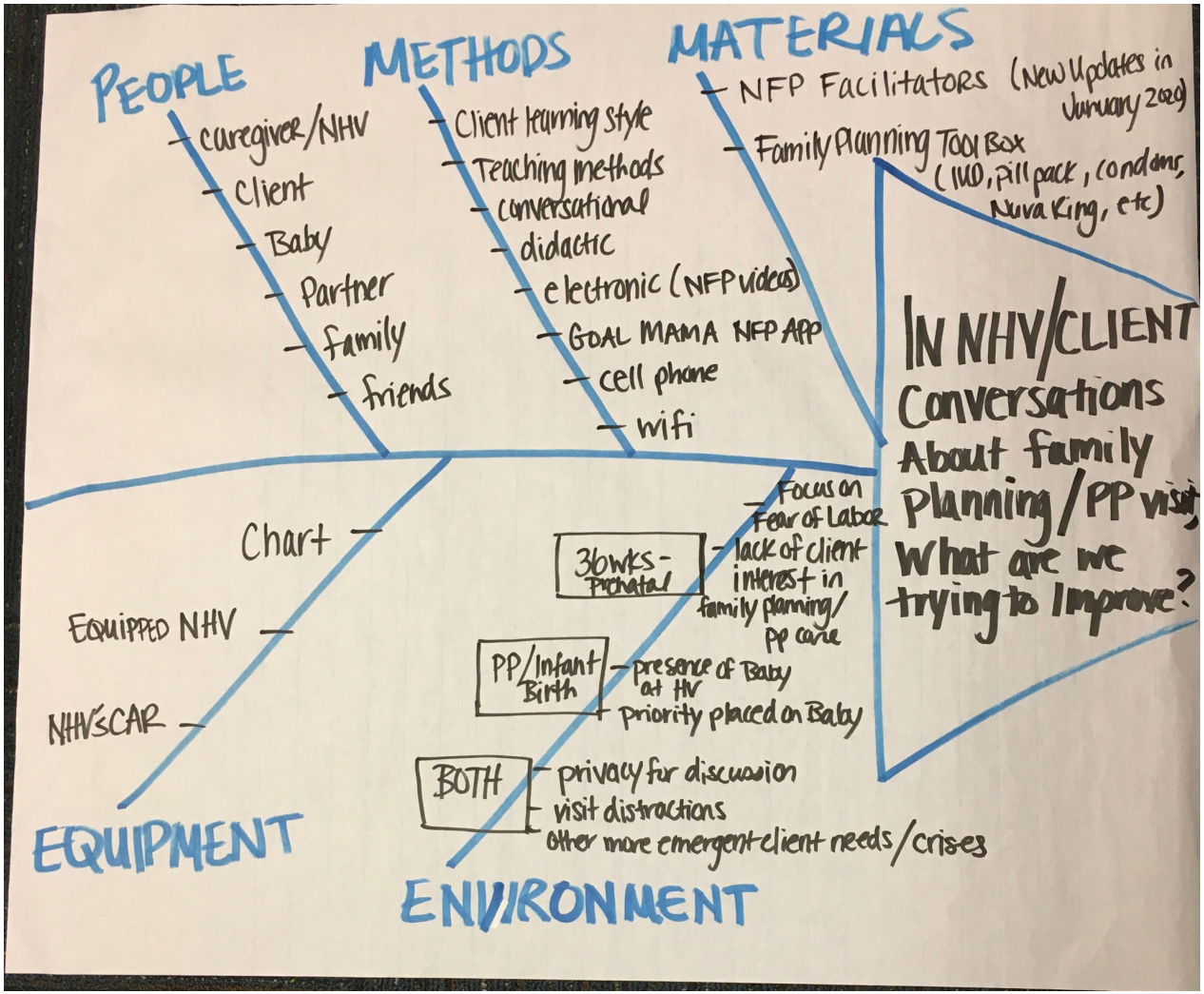




This was our first attempt at a fishbone diagram, you can see the ideas are big and some we do not have control over to test changes.

This was done *before* we established what we wanted to test…increasing conversations!

EMCM and OCDEL's Fishbone Diagram



Let's Say You Don't Like to Draw…

Consider developing a Change Idea Worksheet as a Team in a CQI Meeting! It can also be just one of the "Large Bones" you want to focus on.

Change Idea Worksheet

Overarching change idea or change concept (might be from large bone of fish)	Specific change idea (might be from smaller bones of fish)	Theories and predictions as to how this will help accomplish aim
EXAMPLE: Mothers hesitant to be screened	*EXAMPLE: Test doing screening at a later home visit after building relationship with caregiver*	*EXAMPLE: If we take time to build a relationship with caregiver, they will be less hesitant to do screening*

EMCM and OCDEL's Change Idea Worksheet

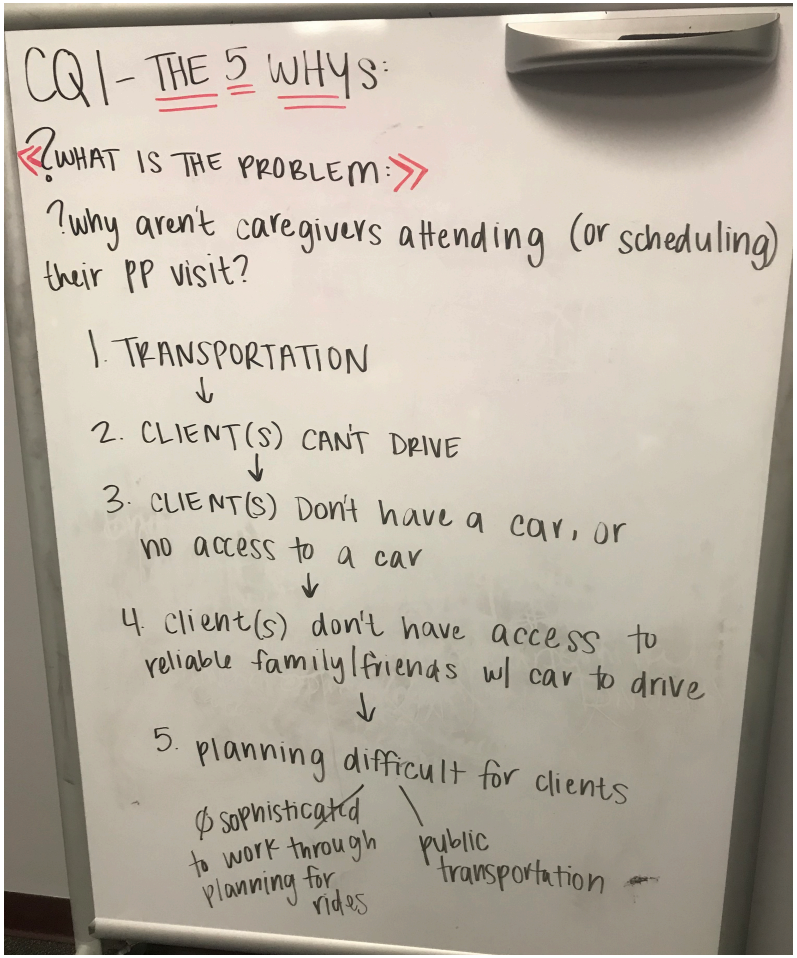
Change Idea Worksheet

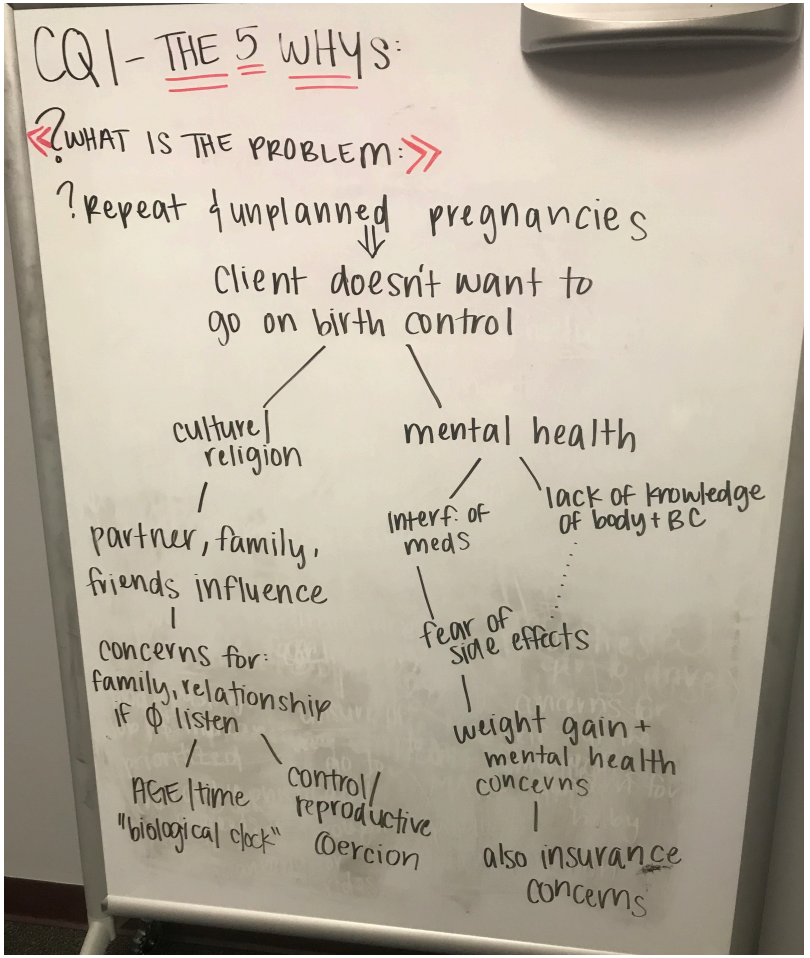
Overarching change idea or change concept (might be from large bone of fish)	Specific change idea (might be from smaller bones of fish)	Theories and predictions as to how this will help accomplish aim
EXAMPLE: Mothers hesitant to be screened	*EXAMPLE: Test doing screening at a later home visit after building relationship with caregiver*	*EXAMPLE: If we take time to build a relationship with caregiver, they will be less hesitant to do screening*
Caregivers are not attending the PP visits	Test NHVs increasing the conversations and education on PP visits, and Family Planning.	If we…talk about the PP visit and Family Planning (birth control) before and/or after the birth of the child, It will result in…the caregiver will be more likely to attend their PP visit because they know what to expect and have identified ways around potential barriers addressed with NHV.
Caregivers hesitant to discuss Family Planning and use birth control	Use updated NFP Facilitators, better examples (videos and pictures). NFP Facilitators geared towards partners (boyfriends, etc.)	If we…talk to caregivers about the myths and facts of birth control, It will result in…the caregiver being more educated and making an informed decision on family planning, BC and birth spacing.
NHVs recognize discussing PP visits and Family Planning are difficult conversations	Test NHVs increasing their access to up to date resources (NFP Facilitators – Jan 2020)	Predict the NHVs will feel more equipped with the resources from NFP, and feel more comfortable with having the conversations with the caregivers. Feel more prepared with additional graphics, updated pictures, and instruction guides. Ensure that NHVs have all available – what resources do the nurses feel most comfortable? Are the most current resources being used as equipment?

What To Do After Establishing Your Test of Change

- The 5 Whys helps to identify the root cause of a problem....not just the symptoms
- Ask “why?” about five times to get to the root cause
  - Write down the specific problem
  - Ask why the problem happens
  - Write down the answer
  - If answer is not the root cause of the problem in step 1, ask “why” again and write down the answer
  - Repeat step 3 until all agree that you have identified the root cause

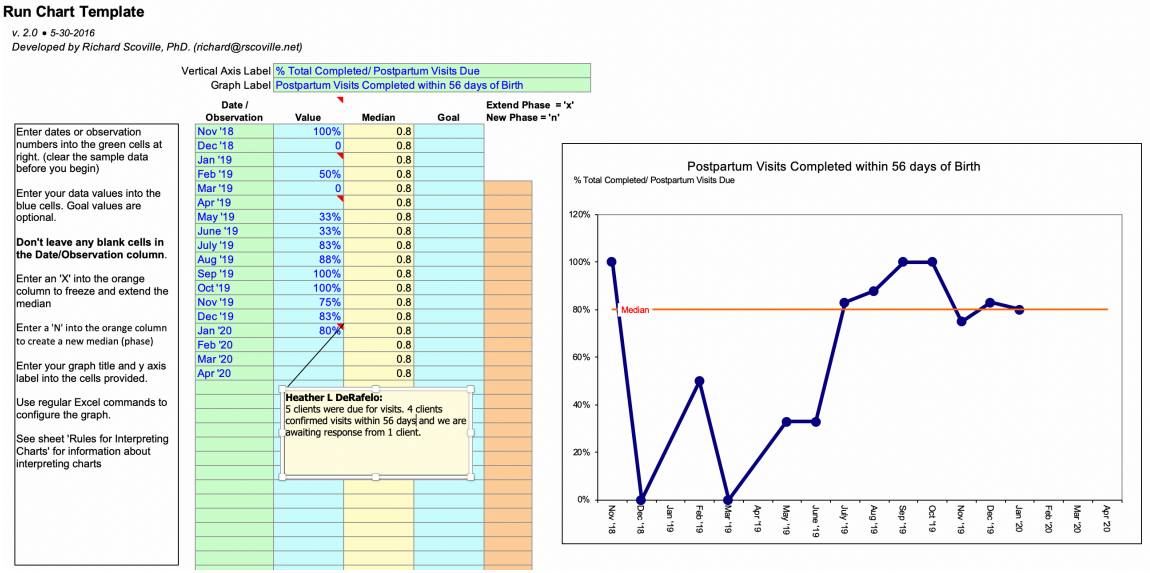
EMCM and OCDEL's 5 Whys





Run Charts

Run charts are a helpful way to visualize your data and see how it varies over time. Plotting your data on a run chart can be helpful for identifying a CQI topic. After you initiate your CQI project, run charts are also helpful to determine if the change strategies you are testing are effective.



Run Chart Template

v. 2.0 • 5-30-2016

Developed by Richard Scoville, PhD. (richard@rscoville.net)

Vertical Axis Label: % Total Completed/ Postpartum Visits Due

Graph Label: Postpartum Visits Completed within 56 days of Birth

Enter dates or observation numbers into the green cells at right. (clear the sample data before you begin)

Enter your data values into the blue cells. Goal values are optional.

Don't leave any blank cells in the Date/Observation column.

Enter an 'X' into the orange column to freeze and extend the median

Enter a 'N' into the orange column to create a new median (phase)

Enter your graph title and y axis label into the cells provided.

Use regular Excel commands to configure the graph.

See sheet 'Rules for Interpreting Charts' for information about interpreting charts

Date / Observation	Value	Median	Goal	Extend Phase = 'x' New Phase = 'n'
Nov '18	100%	0.8		
Dec '18	0	0.8		
Jan '19		0.8		
Feb '19	50%	0.8		
Mar '19	0	0.8		
Apr '19		0.8		
May '19	33%	0.8		
June '19	33%	0.8		
July '19	83%	0.8		
Aug '19	88%	0.8		
Sep '19	100%	0.8		
Oct '19	100%	0.8		
Nov '19	75%	0.8		
Dec '19	83%	0.8		
Jan '20	80%	0.8		
Feb '20		0.8		
Mar '20		0.8		
Apr '20		0.8		

Heather L DeRafelo:
5 clients were due for visits. 4 clients confirmed visits within 56 days and we are awaiting response from 1 client.

Don’t Forget Who the Project is For!

Because this project was surrounding the caregiver, we thought it was important to garner their feedback.

1. What stops you from going to Dr. appointments?
   a. Anything that would help?
2. Do you remember going to your PP check?
3. Any advice for new Moms about PP check?
4. Thinking about your pregnancy and birth, when do you think would be the best time to talk & begin thinking about birth control?
5. When would be the most convenient time to get birth control (before leaving the hospital, at your postpartum visit, other)?

Other Measurements!?

- **Outcome Measures** – Outcome measures are used to determine if there is a change as a result of the change strategy tested.
- **Process Measures** - Process measures are used to understand how a change strategy was implemented.
  - Process measures help assess whether a change strategy was implemented with fidelity, but cannot be used to determine the effectiveness of a change strategy.
  - Process measures are also useful when change strategies are scaled up to carry out bigger tests. Scaling up means carrying out tests of the change strategy on a larger scale, with more home visitors, clients, and home visits. Continued monitoring of implementation helps to maintain the effects of the change strategy once it is scaled up.
- **Balancing Measures** - Balancing measures are used to identify any unintended consequences of the change strategy.
  - It can be challenging to anticipate unintended consequences of a change strategy, making it hard to identify balancing measures. Only one or two balancing measures may be used initially, with more added as the change strategy is scaled up and new unintended consequences are identified.

EMCM and OCDEL's Measurements

Measure Type	Measure	**Operational Definition** -Define the specific components of this measure. Specify the numerator and denominator if it is a percent. If it is an average, identify the calculation for deriving the average. When a measure reflects concepts such as accuracy, complete, timely, or an error, describe the criteria to be used to determine "accuracy." The more detail, the better!	**Reporting Period (Daily, Weekly, Monthly)**	**Data Collection** Do you collect this already? If yes, how / where? If no, who can? How? Where?
Outcome Measure	Percentage of mothers enrolled in home visiting prenatally, ~~or within 30 days after delivery~~, who received a postpartum visit with a healthcare provider within 8 weeks (56 days) of delivery	Numerator: Number of mothers enrolled in home visiting at EMCM NFP prenatally ~~or within 30 days after delivery~~ who received a postpartum visit with a healthcare provider within 8 weeks (56 days) of delivery. Denominator: Number of mothers who enrolled in home visiting at EMCM NFP prenatally ~~or within 30 days after delivery~~ and remained enrolled for at least 8 weeks (56 days) after delivery.	Data Collected: At least 56 days postdelivery, analyzed monthly by CQI Team due to volume of clients.	This measure is already being assessed at one point in time per eligible caregiver. Data Collection: Paper charts, data entered into PA Family Support Data Collection System, and NFP's data collection system.
Process Measure	Percent of caregivers who have a conversation with their NHV about the PP visit and Family Planning	Denominator: Number of mothers who enrolled in home visiting at EMCM NFP prenatally and have delivered. Numerator: Number of mothers enrolled in home visiting at EMCM NFP prenatally who had a conversation with their NHV about the PP visit and Family Planing by the first home visit post-delivery.	Data Collected: NFP addresses birth control use at 28 weeks. EMCM will now also record on the excel sheet if the conversation about the PP visit and BC will occer at 36 weeks or post delivery.	Part of this measure is already being assessed at one point in time per eligible caregiver. Data Collection: Paper charts, data entered into PA Family Support Data Collection System, and NFP's data collection system.
Balancing Measure	Percent of children enrolled in home visiting who received the last recommended visit based on the American Academy of Pediatrics (AAP)	Numerator: Number of children enrolled in home visiting at EMCM NFP who received the last recommended well child visit based on the AAP schedule. Denominator: Number of children enrolled in home visiting at EMCM NFP.	Start: 3 Months Post Birth - 6, 9, 12, 15, 18, 21, 24*, *NFP ends at 24 months post birth*	This measure is already being assessed. Data Collection: Paper charts, data entered into PA Family Support Data Collection System,

How Do We Look at the Process Measures?

- A process map, also known as a “flow chart”, is a visual representation of the sequence of steps in a process. Understanding the process as it currently operates is an important step in developing ideas about how to improve

- Prioritize one process related to your project
  - For example, if you are working on home visit completion, perhaps pick one of the following processes: Re-scheduling a canceled visit, scheduling the first home visit for new clients, early engagement processes (determining eligibility, reaching client for first time, etc.)

- Create a process map, with main steps of the existing process laid out. This does not have to be pretty, just get your ideas out there!

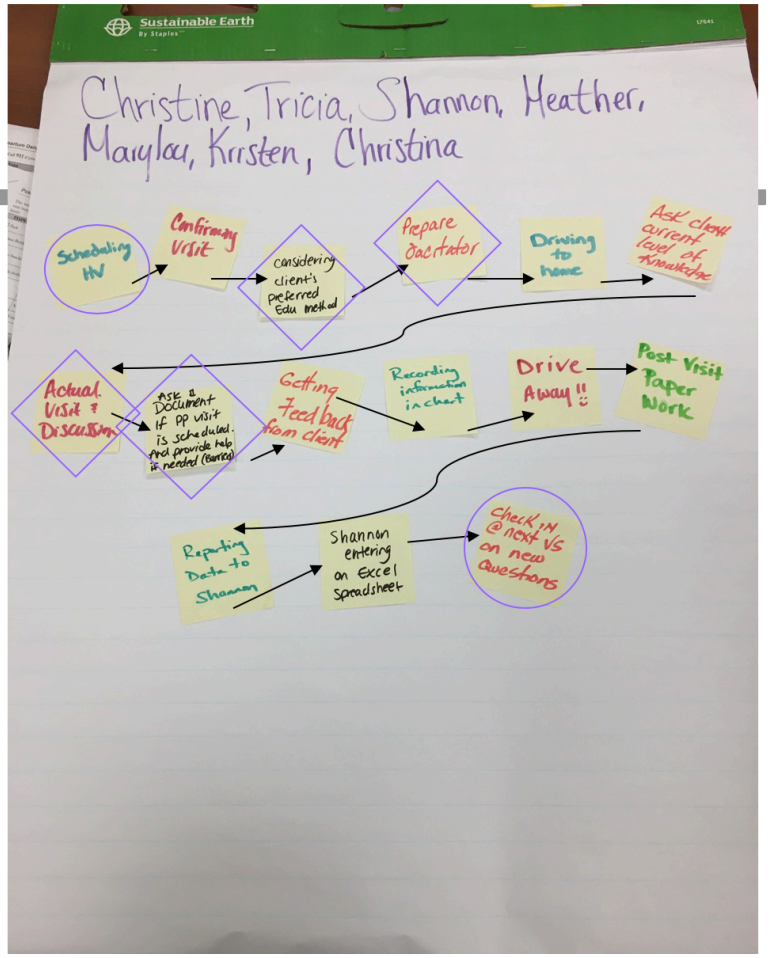
EMCM and OCDEL's Process Mapping

Process Map

1. Scheduling home visit
2. Confirm visit
3. Consider client's preferred education method
4. Prepare (NFP) Facilitator
5. Drive to home
6. Ask client current level of knowledge
7. Actual visit & (PP and family planning) discussion
8. Gather feedback from client
9. Record information in chart
10. Drive away
11. Post visit paper work
12. Report data collected to Shannon M.
13. Shannon enters (quantitative) data onto Excel spreadsheet
14. Check in (with caregiver) at next visit on new questions

Decision point

Start/End of Process



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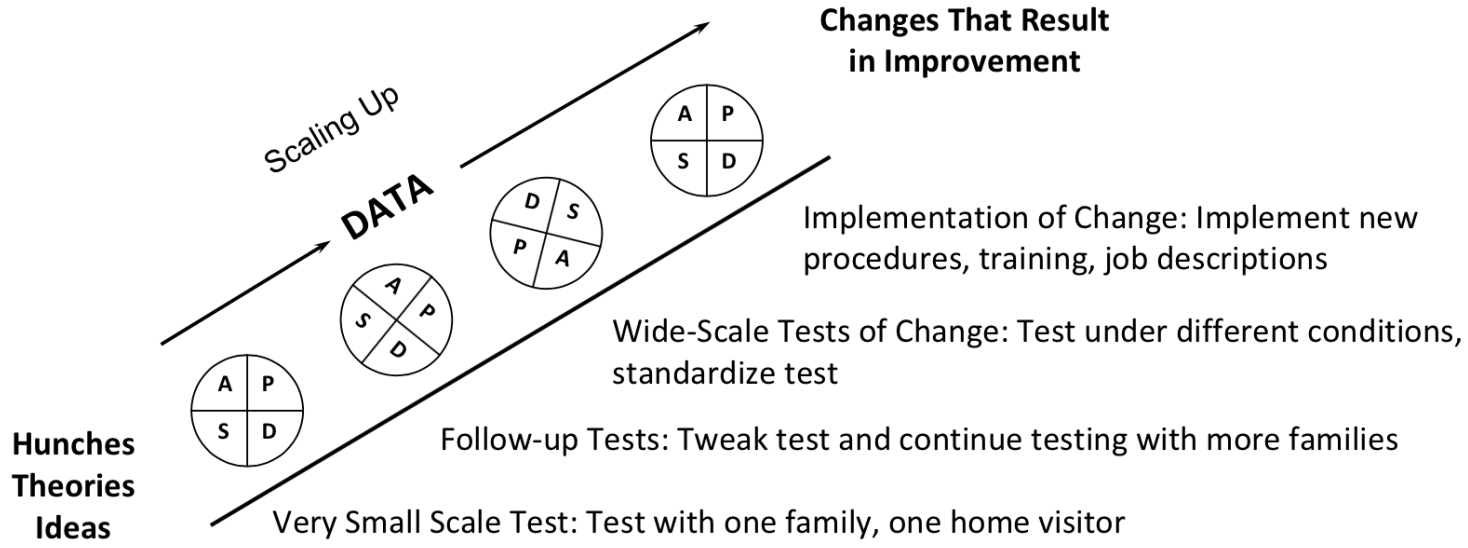
PDSA Cycles…What Does This Mean?

PDSA Ramps



PDSA CYCLES: In addition to designing early cycles to be small and fast…Think ahead! What's next if this change works? What scale would we test it on next? Small test does NOT equal small results! "Failed" cycles are good learning opportunities when small.

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Ramp Planning

- EMCM and OCDEL completed the Ramp Planning during a CQI Meeting
- Do not be afraid to give your CQI Team quick turnarounds for testing. Think 1-2 months, even weeks!

Cycle #1	Cycle #2	Cycle #3
What: **Who (population):** **When:** **Prediction:** **If we…** **It will result in….** **Results:** **Act:** ❑ **Adapt:** ❑ **Abandon** ❑ **Adopt**	**What:** **Who (population):** **When:** **Prediction:** **If we…** **It will result in….** **Results:** **Act:** ❑ **Adapt:** ❑ **Abandon** ❑ **Adopt**	**What:** **Who (population):** **When:** **Prediction:** **If we…** **It will result in….** **Results:** **Act:** ❑ **Adapt:** ❑ **Abandon** ❑ **Adopt**

Ramp Planning…Looking Ahead as a Team

What: Increase the % of caregivers who have a conversation with their NHV (Nurse-Home Visitor) about the PP visit and family planning.

Who (population): Caregiver A and B.

When: 11/19/19 – 1/2/2020.

Prediction: We predicted that the caregiver will feel more comfortable with scheduling and attending their PP visit within 56 days post-delivery.

If we… talk about the PP visit and Family Planning (birth control) before and/or after the birth of the child
It will result in…. the caregiver will be more likely to attend their PP visit because they know what to expect and have identified ways around potential barriers addressed with NHV.

Does adding an additional conversation about the PP visit at the 36 week visit and/or first baby visit PP increase the likelihood of a caregiver attending their PP visit within 56 days of delivery?

Results: 100% of PP visits due were completed. (1/1). – Caregiver B. Caregiver A is not due yet, and team will consider this data when collected. Moving forward to larger test of change (more caregivers) in Cycle 2.

Act:

- ❑ **Adapt:**
- ❑ **Abandon**
- ❑ **Adopt**

CQI Team identifies that positive feedback was given, and Caregiver B did attend the PP visit, Caregiver A seems like they will as well. Will follow up with data collection on Caregiver A.

Continue with conversations at 36 weeks and/or first baby visit with larger scale of clients. Continue to collect data add to run chart – look for trends if needed.

CQI Team was pleasantly surprised by feedback given to the NHVs by caregivers. Please see PDSA worksheet.

Cycle 2 and Cycle 3 Thoughts

PA MIECHV CQI Team (EMCM & OCDEL)	
Cycle #2	**Cycle #3**
What: Increase the % of caregivers who have a conversation with their NHV (Nurse-Home Visitor) about the PP visit and family planning. **Who (population):** All current EMCM NFP (in network or out of network) caregivers who are currently pregnant or within 56 days of post-delivery. **When:** 1/3/2020 – 2/3/2020 (1 month). Currently ongoing. **Prediction:** The CQI Team discussed the following predictions: • With a larger pool of caregivers, the success rate may not be as high as Cycle 1, how do we prepare to sustain gains? • However, identify that the success will still be higher than baseline data! We hope and expect success! • NHVs do not feel the changes are a lot of "extra" work – just documenting changes/efforts is different. The conversations are being had, and NHVs feel comfortable discussing the topics with their caregivers. CQI Team feels this will lead to success as there will not be burnout! Continued staff buy-in. • There are pregnant caregivers due for PP visits in January – will be able to assess success rates. Will be able to continue observations as Caregiver A is due for PP visit in January. **If we…**talk about the PP visit and Family Planning (birth control) before and/or after the birth of the child with all eligible EMCM NFP caregivers **It will result in….** all eligible EMCM NFP caregivers being more likely to attend their PP visit, because they know what to expect and have identified ways around potential barriers or concerns/questions addressed with their NHV. **Results:** Unable to assess at this time, as the Cycle is currently ongoing. Will assess data as needed though next month during CQI Team meetings, and consider feedback from NHVs. **Act:** N/A	**What:** The PA CQI Team discussed that after Cycle 2 ends, or prior to ending, it will be determined what actionable steps to take for Cycle 3 and testing a new change. CQI Team will take into consideration both data and caregiver/NHV feedback. **Who (population):** All current EMCM NFP (in network or out of network) caregivers who are currently pregnant or within 56 days of post-delivery. **When:** TBD. **Prediction:** **If we…** **It will result in….** **Results:** **Act: N/A**

What Did We Learn In Cycle 1?

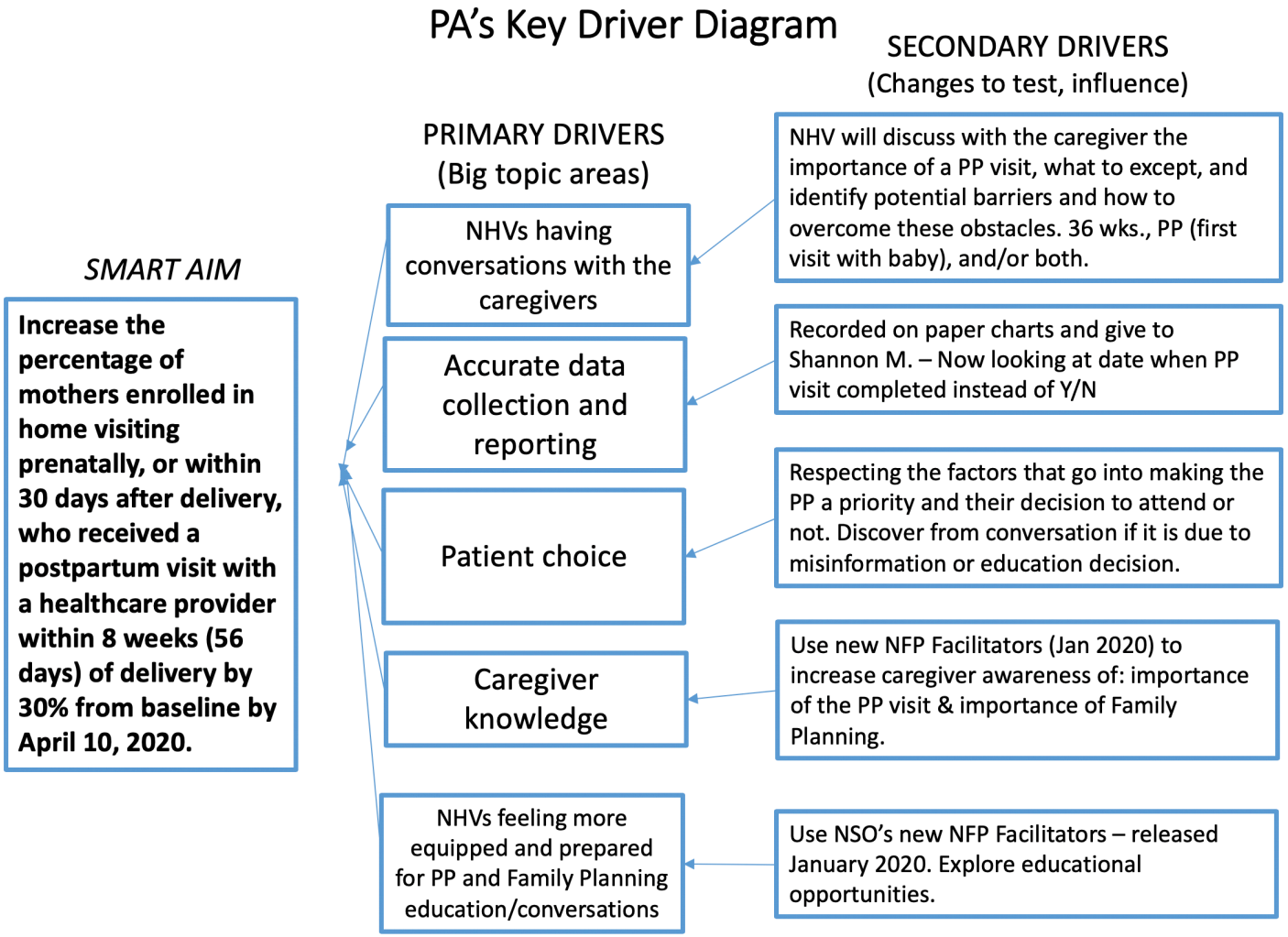
Starting **SMALL** was helpful!

Act ☐ **Adapt** ☐ **Adopt** ☐ **Abandon**	What changes are to be made to the process (decisions made/action to take)? 100% of PP visits due were completed. (1/1). – Caregiver B. Caregiver A is not due yet, and team will consider this data when collected. Moving forward to larger test of change (more caregivers) in Cycle 2. Some caregivers like handouts, and other caregivers do not like handouts. NHV will idenfity with client what style of learning they prefer, conversational versus reviewing a handout together, and use this method when reviewing the education with the client. CQI Team identifies that even if the NFP Facilitators are/are not used the same message is being relayed to all caregivers during this project. CQI Team identifies that positive feedback was given, and Caregiver B did attend the PP visit, Caregiver A seems like they will as well. Will follow up with data collection on Caregiver A. Changes: No changes, continue to Cycle 2 on a wider scope. Only "changes" would be to add 36 weeks (PP and Family Planning) conversation on to-do lists. Action: Continue with conversations at 36 weeks and/or first baby visit with larger scale of clients. Continue to collect data add to run chart – look for trends if needed.

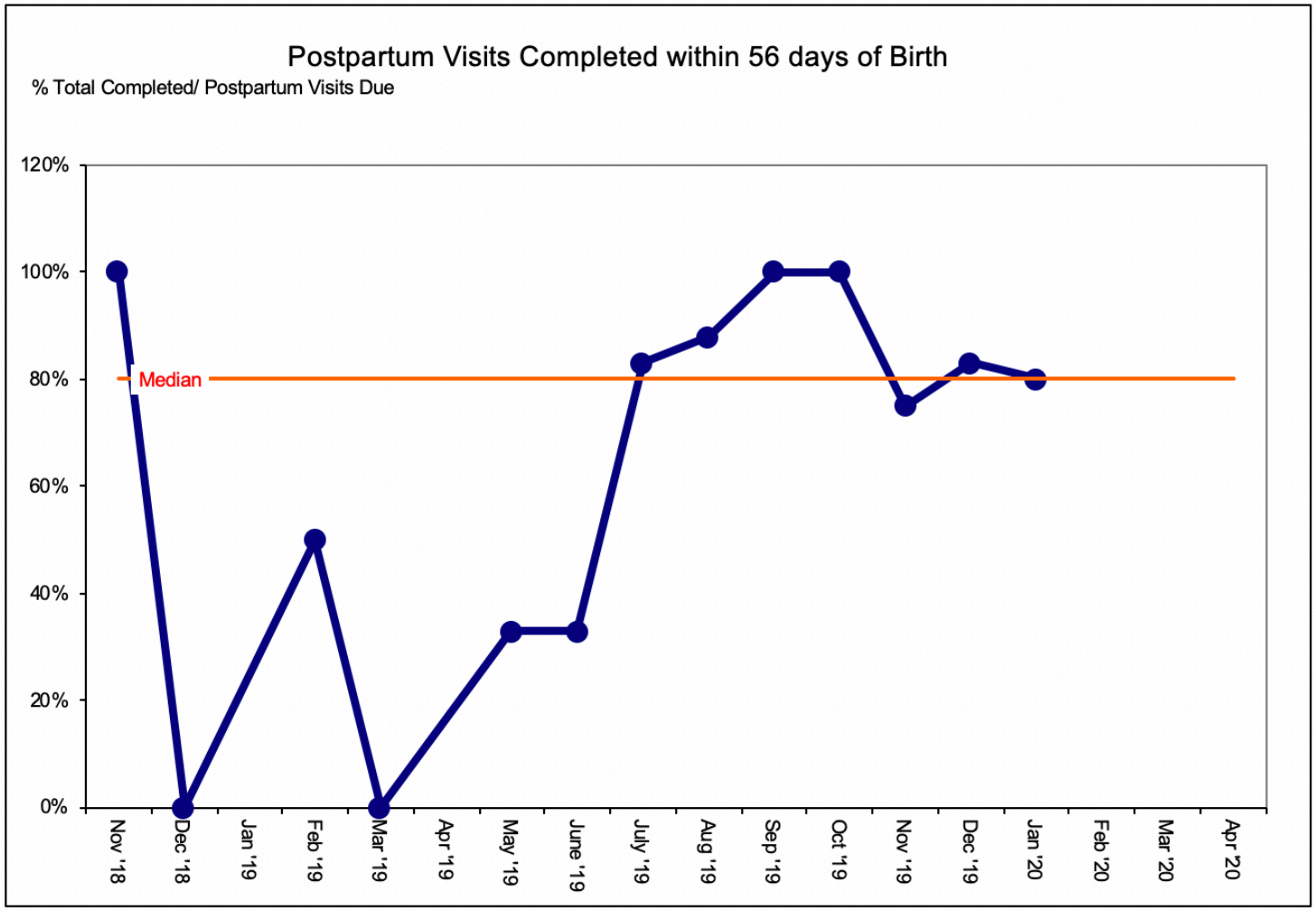
Done With Cycle 1…What Now?!

- Before “expanding” your CQI project in Cycle 2, work as a CQI Team to discuss other ways to look at what tests of change could be carried out by creating a Key Driver Diagram (KDD)
- What you do in Cycle 2 is determined by if you decided to adopt, adapt or abandon
- Review your project’s strengths, what is surprising? When reviewing, what other ideas does the group come up with?
- Remember – it’s more than okay to abandon a change idea if needed
  - This is why Cycle 1 should start small!

EMCM and OCDEL's KDD



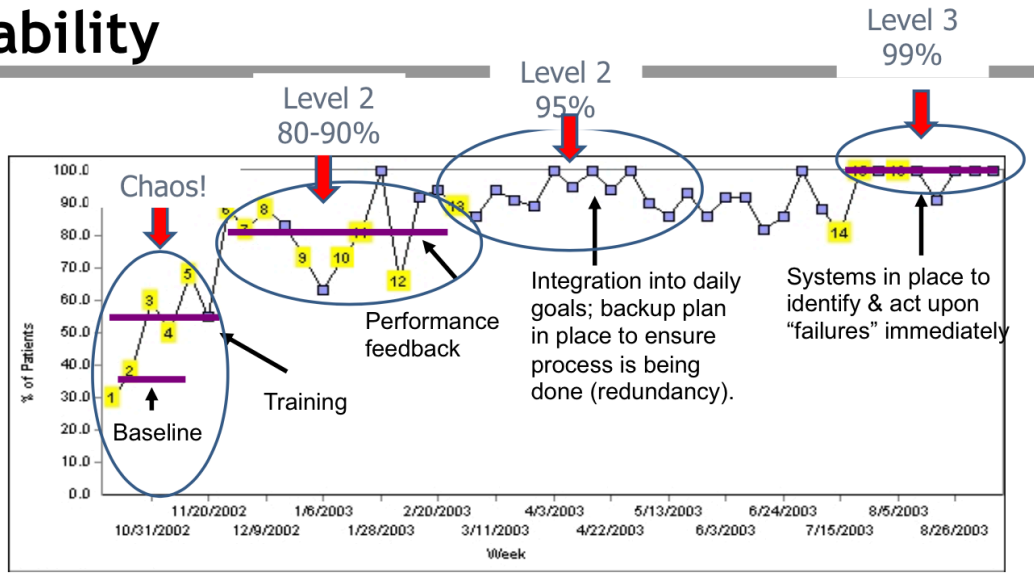
Cycle 2 Updates…



Reliability Testing

- Level 1 - Vigilance and Hard Work (Low)
- Level 2 - Designed to Identify & Prevent “Failures” (Medium)
- Level 3 - Behavioral Design. These concepts are more complex and achieve higher results (High)

Example: Designing a Process for Reliability



What is the INTENSITY of your tests of change?

Thank You EMCM! Where Are We Now?

Current Updates on Our CQI Project

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Sustaining the Gains

- Even after a CQI Project ends, maintaining the improvements achieved is an important part called sustaining the gains...identify how you'll do this when your CQI Project is coming to an end
- Sustaining the Gains means intentional and strategic efforts are done to make sure the improvements achieved during the course of a CQI project are lasting
- Continue to make Data Driven or informed decisions

What does EMCM and OCDEL plan to do now?

Using Data to Tell a Story

- Use personal stories and data to tell your program's story to the community or stakeholders

Helpful Webinars:

- Storytelling and Data Visualization (HV-ImpACT Webinar)
  - May 2017: This Home Visiting-ImpACT webinar explores use of compelling stories to construct a successful narrative, and contains an innovative four-step visualization process for effectively telling your story.
- Beyond Reporting: Making the Most of Your MIECHV Data (HRSA Webinar)
  - February 2015: Considers the potential opportunities for sharing benchmark and research findings outside traditional stakeholder groups.

Questions?