SAMPLE QUALITY IMPROVEMENT PROJECT PROCESS

1. **FORM A QUALITY IMPROVEMENT COMMITTEE REPRESENTATIVE OF THE ORGANIZATION, INCLUDING THE MEDICAL DIRECTOR AND OPERATIONAL LEADERSHIP**
   This committee must take ownership of agency issues and commit to addressing them. The best way of doing this is by documenting the commitment in writing.

   We, Bill Johnson - VP of Operations, Maggie Smith - Medical Director, Christina Jones- Training Coordinator, Steven Fernandez – Quality Assurance Director, Charles McGrath- Paramedic, and Kelly Williams- EMT, are committed to improving patient care by our organization.

2. **IDENTIFY AN IMPORTANT PROBLEM AND CREATE A WRITTEN AIM STATEMENT**
   An aim statement answers the question of "what is trying to be accomplished?" The QI committee should develop well defined, evidence-based, and patient-centric outcomes that should be addressed by an improvement project. An effective AIM Statement should meet the SMART criteria for goals/objectives: Specific, Measurable, Achievable, Relevant, and Timebound.

   90% of patients with suspected stroke will have a blood sugar measured and documented within six months.

3. **USE AN EXISTING QUALITY MEASURE OR IF NECESSARY, CREATE A QUALITY MEASURE**

   Quality Measure Statement
   Title: A description of what the measure relates to:
   New York State Department of Health, Bureau of Emergency Medical Services and Trauma Systems- New York State Quality Standards- Standard 2019 DQS 06: Stroke and TIA patients receiving Blood Glucose Monitoring.

   Denominator: The total population to which a measure applies.
   - *Response Type of Service Requested (eResponse.05) is equal to 911 Response (Scene)*
   - *Provider Primary Impression (eSituation.11) is equal to: Stroke (Cerebral infarction, unspecified) **or** TIA (Transient cerebral ischemic attack, unspecified)*

   Numerator: The total population receiving the measure.
   - *Procedures Performed (eProcedures.03) is equal to: Glucose measurement, blood (procedure)*

   Exclusions/Exceptions: A condition that removes a defined group of patients from the denominator because the measure would not appropriately apply to them.
   - *None*

4. **CREATE A STARTING POINT AND BEGIN TO MEASURE YOUR PERFORMANCE**

Use automated software from your ePCR vendor, the ImageTrend NYS Bridge, or your Regional Program Agency to do a review for a given timeframe. It is important to select collection methods which meet the needs of the intended quality improvement project. Data should describe the desired outcome and the collection process should not be onerous.
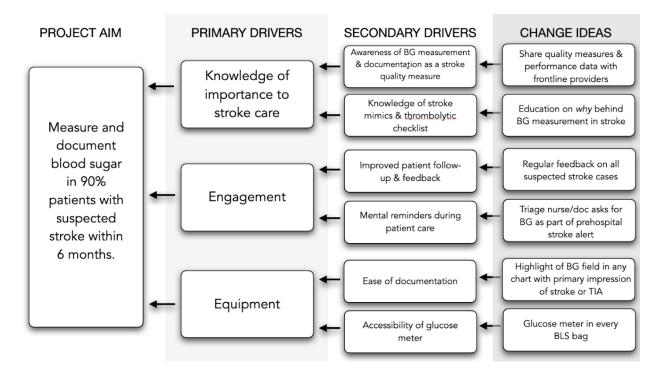
To find the percent of 911, stroke or TIA patients receiving Blood Glucose Checks:

$$\frac{65 \text{ patients met glucose measurement}}{100 \text{ patients met 911 } \textbf{and} \text{ Stroke or TIA criteria}} = 0.65 \qquad 0.65 \text{ x } 100 = 65\%$$

Therefore, 65% of all 911, Stroke or TIA patients received a blood glucose check, identifying an important area for improvement.

5. **WHAT CHANGE CAN WE MAKE THAT RESULTS IN IMPROVEMENT?**

Use a driver diagram to brainstorm potential changes that you can make to improve performance.
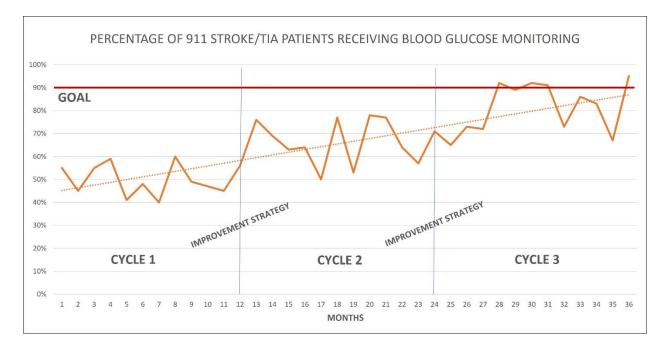
6. **TEST YOUR CHANGE IDEAS WITH PDSA CYCLES.**

- *Plan*: This requires making a prediction of what will happen and why and developing the plan for testing it including a plan for collecting the data.
- *Do*: Execute the plan and test the change. Document problems or observations.
- *Study*: Review the test, analyze the results, and identify learnings.
- *Act* Based on what you learned in the study step - If the change did not work, go through the cycle again with a different plan using what you learned in the first round. If successful, incorporate lessons learned from the test into broader changes. Use what was learned to plan new improvements and begin the cycle again.

Remember to start small:
1. Discuss your ideas with the EMS clinicians: have you identified the correct barriers? Are there any that you did not think of? Do they have other ideas?
2. Trial interventions first with a small group (e.g. one crew, one station) before implementing more widely.

7. **GRAPH DATA OVER TIME ON A RUN CHART**

Track your data with a run chart to measure improvement over time.

8. **CONTINUE THE PDSA CYCLE AND EVALUATE OPPORTUNITIES FOR IMPROVEMENT WITH THIS AND OTHER MEASURES**
   Consider the ideas in the psychology of change section and adapt to changes in technology, the environment, the workforce, society, and the industry. Consider dashboards as a way to provide insight to current performance. They may include color indicators to describe data that meets a goal, is in process, or not meeting a goal. Be sure to plot them over time in a run-chart to see trends.

9. **SHARE YOUR AGENCY'S NEWLY ESTABLISHED "BEST PRACTICES" WITH NEIGHBORING AGENCIES, PROGRAM AGENCIES, REGIONAL COUNCILS, ETC…**