



# ABPMR Outstanding PIP

Of the hundreds of self-directed Practice Improvement Projects (PIPs) accepted for ABPMR Part IV credit, a few stand out as exemplary. Here, our resident Quality Improvement expert, board director Chris Garrison, M.D., points out exactly what these physiatrists did right so you can learn from their success.



## PROJECT DETAILS

**Project Leader:** Meredith Adams, D.O.

**PIP title:** CVA Stroke Center of Excellence: To Eat or Not to Eat, That is the Question!

**Dates of physician participation:** Dec. 1, 2009 to Aug. 31, 2010

### PLAN

Identify an area in clinical care that needs improvement.

#### What is the clinical problem you are trying to improve?

Patients admitted with CVA were often started on parenteral nutrition at initial admit until they could be seen by ST, leading to increased patient risk and greatly increased cost.

#### How did you identify this as a problem?

ST noticed this as a common problem and brought it to my attention as rehab director.

#### What data (objective measurements) do you have that supports this as a problem?

Chart review showed that **61%** of patients admitted to the hospital with CVA were started on either oral or enteral nutrition.

#### What is your opportunity statement?

##### State the goal you hope to achieve.

Our goal is that **over two months, 75%** of patients diagnosed with CVA will be started on either **oral or enteral nutrition within 24 hours** of diagnosis, resulting in an approximately **10x cost savings**.

#### What is the underlying cause of the problem?

We initially did a **fish diagram** and then a **gap analysis** of factors we felt contributed to patients unnecessarily being started on parenteral nutrition to determine where we needed to focus our efforts to help change practices in the hospital. We found that there were **no clear guidelines** for ST on CVA admit charts, and the ED physicians and RNs **lacked education** on signs of dysphagia and the difference between TPN vs. tube feeds.

#### What change(s) did you implement?

We implemented an ED policy of putting new care path orders on all CVA admit charts with ST already pre-checked for swallow eval, educated RNs about signs of dysphagia, educated physicians about the difference in TPN vs. tube feeds, and ensured an ST saw the patient within 24 hours of diagnosis.

#### What specific data/measure will you use to evaluate the success of this project? Where and how will you obtain the data?

We will use patients' paper charts as the source of our data, obtained via retrospective chart review. This will show whether we reach a goal of nearly 15% improvement in performance.

Describe the desired outcomes and the requirements needed to achieve them.

### NOTES FROM DR. GARRISON

Important to record current state

Opportunity statement uses elements of a SMART Aims Statement:  
S - Specific  
M - Measurable  
A - Agreed Upon  
R - Realistic  
T - Time-bound

Good planning ensures a successful project: Note the straightforward analysis — looking for gaps in care delivery

This project implemented several changes at once — others may do just one, or one at a time

Simple comparison of data before and after implementation in a specific time frame

### NOTES FROM DR. GARRISON

Note the important parts of implementation: Describe the team, and then the steps you took together.

#### How did you implement the change and who was involved in the process?

Most of the implementation of the change was done by **me, the speech therapist, and the stroke coordinator**. The following steps were taken to implement the changes:

- Went to established RN and physician education sessions (dysphagia screen education) on the floors of the hospital
- Spoke at the physician internal medicine department meetings
- Worked with the ED director, RNs, and care coordinators to make sure the new care path was being used on all new CVA admits
- Worked with the hospital to allow ST to be pre-checked for swallow eval on the CVA order set.
- Ensured ST saw patient within 24 hours of diagnosis by making sure RNs notified STs by pager upon CVA admit

### DO

Describe the corrective actions to be taken.

### STUDY

Describe the measurements used to assess the success of the plan.

#### Did you achieve your goal reported in your opportunity statement? What data have you collected over what period of time to support your conclusion?

We **did see an improvement** of approximately 8%, **but did not reach our goal** (close to 15% improvement) over the duration of my data collection for this project, which was from December 2009 to August 2010. We saw spikes in improvement each time we implemented more measures, which declined slightly within a month of the measure being implemented.

We collected monthly data on:

- Percentage of patients started on oral or enteral nutrition within 24 hours
- Percentage of patients on (enteral) tube feeds
- Percentage of patients on TPN or PPN

We graphed the results and noted on these graphs the points in time at which we implemented various efforts to improve the outcomes.

#### How did this project impact your practice or performance?

Our actions did improve the problem and our changes continue to be in place now with ongoing improvement. I learned that it's very difficult to change culture within a hospital and requires a multi-disciplinary approach as well as a willingness to change and improve. I became much more vocal to my physician peers and nursing staff about the importance of early ST evaluation, as well as other early and important stroke interventions.

I practice in a hospital with no acute rehab unit, so much of our staff is unfamiliar with what a full rehab team can assist with, even in acutely ill patients. We have since become a certified stroke center, so we are seeing much greater effort across the hospital to improve stroke care. I remain on the multi-disciplinary stroke team and continue to push for earlier, more aggressive rehab intervention of all disciplines.

### NOTES FROM DR. GARRISON

A straightforward description of the results — even if the goals are not attained. Explain and compare to the opportunity statement whether win/lose/draw.

Nice analysis of what happened and what might happen in the future

### NOTES FROM DR. GARRISON

This deep analytic description provides further examples of a future state of the project and the patients it serves.

#### Will you continue with the changes you've implemented?

Yes, our changes remain in place five years later.

#### Do you plan any additional changes? Are there other issues that have become apparent during your project?

We need more readily available speech therapists who can quickly be at the bedside to assess swallow after CVA diagnosis. We also **need to begin a better educational process** for families and patients affected by dysphagia. Many push for TPN or PPN because of societal biases against feeding tube (PEG, NGT, etc.) placement. If they are better informed of the risks and costs involved, as well as the simple placement and removal of feeding tubes, they would likely be much more agreeable to tube feeding for dysphagia after CVA.

#### If your project was successful, how do you plan on sustaining your success? What will prevent system/process breakdown and failure to maintain your success?

We need to **continue to educate** incoming new nurses and physicians as staff turns over. I believe this is best taught by the rehab team rather than nurse to nurse.

### ACT

Describe the changes to your practice as a result of this project.

Well done and congratulations on your project being selected by the ABPMR as an outstanding practice improvement project, Dr. Adams!

