Emergency Department (ED) Performance Improvement Project (PIP)

Objectives

• Describe overall requirements of a Quality Assessment Performance Improvement (QAPI) Program

• Describe recommended elements of Performance Improvement Projects (PIPs)

• Describe the process of designing, developing, and measuring a PIP utilizing the example of the Emergency Department (ED) PIP by Hospice and Palliative Care of Greensboro (HPCG)

What is QAPI?

• QAPI is a combination of two quality management systems: Quality Assurance (QA) and Performance Improvement (PI).
  – QA focuses on standards for quality of service and outcomes, and a process throughout the organization for assuring that care is maintained at acceptable levels in relation to those standards.
  – PI (also called Quality Improvement - QI)
    • is the continuous study and improvement of processes with the intent to better services or outcomes,
    • prevent or decrease the likelihood of problems,
    • identify areas of opportunity,
    • test new approaches to fix underlying causes of problems or barriers to improvement.
Why Do We Do QAPI?

§ 418.58: Condition of Participation, added in 2008
The hospice must develop, implement, and maintain an effective, ongoing, hospice-wide data-drive QAPI program. The hospice’s governing body must ensure that the program: reflects the complexity of its organization and services; involves all hospice services (including those under contract or arrangement); focuses on indicators related to improved palliative outcomes; and takes action to demonstrate improvement in hospice performance. The hospice must maintain documentary evidence of its QAPI program and be able to demonstrate its operation to CMS.

The 5 Elements of QAPI

Design and Scope

(a) Standard: Program scope
- Show measurable improvement in indicators related to improved palliative outcomes and hospice services
- Must measure, analyze, and track quality indicators, including adverse patient events, in order to assess care, services, and operations
Feedback, Data Systems, and Monitoring

(b) Standard: Program data
Must utilize quality indicators in the design of its program
Must use data collected to monitor service effectiveness and safety and identify opportunities and priorities for improvement
Frequency and detail of the data collection must be approved by the hospice’s governing body

Systemic Analysis and Systemic Action

(c) Standard: Program activities
- The hospice’s performance improvement activities must:
  - Focus on high risk, high volume, problem prone areas
  - Consider evidence, prevalence, and severity of problems in those areas
  - Affect palliative outcomes, patient safety and quality of care
- The hospice’s performance improvement activities must:
  - Track adverse patient events, analyze their causes and implement preventive actions
  - Take action aimed at performance improvement
  - Measure/track success of action to ensure that improvements are sustained

Performance Improvement Projects (PIPs)

(d) Standard: Performance Improvement Projects (PIPs)
- Hospices must develop and document PIPs
  - The number and scope of PIPs conducted annually must be based on the hospice’s needs, scope, complexity, and past performance
  - The documentation must include what PIPs are being conducted, the reasons, and the measurable progress.
Governance and Leadership

(e) Standard: Executive responsibilities
Governing body ensures:

• That an ongoing program for QI and patient safety is defined, implemented, and maintained, and is evaluated annually.
• The QAPI efforts address quality of care and patient safety, and all improvement actions are evaluated for effectiveness.
• That one or more individual(s) is designated to lead QAPI efforts.

What is QAPI Really About?

QAPI represents a continuous process of doing business with the expectation of achieving optimum results by involving all levels of the organization.

Performance Improvement Projects

Should contain:

(PIPs)

• A description of the activities to be conducted
• The frequency of activities
• Person/s designated to conduct the activities
• Methods of data collection
• Acceptable limits for findings / threshold
• Plans to re-evaluate if findings fail to meet acceptable limits
• Any other activities required under state or federal laws or regulations
PIPs

- PIPs are identified areas in which improvement can be made, specifically: high risk, high volume, and problem prone.
  (Area of improvement: costs/service/staffing)
- Involve various team members that will be directly impacted by the change.
  (Encourage honest feedback with respect to opinion differences)
- Record and acknowledge outcomes to use as building blocks to achieving improvement.
- Respect ‘time’ to not exhaust valuable opportunity.
- Be open to the unexpected happening…..

PIP Action Plan

- HPCG utilizes Deming’s PDSA Cycle.
- The PDSA cycle is a method for testing change by planning, trying, observing, and acting on what is learned. It frequently takes multiple PDSA cycles to achieve desired results.
- Prioritize activities by doing PDSA cycles.

PDSAs

Break the process down in cycles:
- **Plan**: Predict what will happen with the change.
  (who, what, when, why, data to be collected)
- **Do**: Test the change on a small scale.
  (Document any problems and unexpected observations.)
- **Study**: Compare the data to your predictions.
  (Summarize what was learned, good/bad.)
- **Act**: Make changes, based on what was learned from test.
Maintaining Focus (Plan)

- A key step to the planning process is establishing an Aim Statement.
- An Aim Statement is an clear description of a team’s desired outcomes, which are expressed in a measurable and time-specific way. It answers the question: What are we trying to accomplish?
- Establishing an Aim is important to keep the focus.

Testing the Change (Do)

Why test change before implementing it?

- It involves less time, money and risk
- Is a powerful tool for learning; from both ideas that work and those that don’t
- It is safer and less disruptive for patients and staff
- Getting people involved during the testing and developing phase can result in less resistance at implementation

Analysis of Process (Study)

Based on the AIM statement and data gathered determine if:

- The plan resulted in an improvement? By how much/little?
- Was the action worth the investment?
- Do you see trends?
- Were there unintended side effects?
Implementation (Act)

Standardize the improvement and begin to use it regularly

OR

Develop a new and different plan that might result in success.

What is HPCG’s ED PIP About?

Finding ways to ensure the patient receives the right care to meet their needs, and reduce the number of unnecessary ED visits and transportation costs.

What Was the Problem/Need?

- High costs of transportation
- High costs of ED visits
- Many of the patients going to the hospital have goals that indicate they don’t want further hospitalizations
- HPCG tracking hospitalizations since 2011 (already had a lot of data)
- ED PIP formed in October of 2014 to address these issues
PIP Members

• Quality & Compliance
• Finance
• Clinical Staff
  • Inpatient facility
  • On-call
  • Home Care
  • Long-term Care (LTC)
• MD
• RN
• Social Worker
• Aide

What Were the Numbers?

October 2013-September 2014
• # of patients who went to ED: 320
• # of ED visits: 457 (199 were not admitted)
  (4.18 visits per 1000 days)
Oct 2013-April 2014
• Transport costs: $109,736.47
  ($1,767 per 1000 days)

Time of Day ED Visits

2014-2015

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Call</td>
<td>56%</td>
</tr>
<tr>
<td>Week End</td>
<td>28%</td>
</tr>
<tr>
<td>Unknown</td>
<td>16%</td>
</tr>
</tbody>
</table>
On-Call ED Visit Hours
2014-2015

Reasons for ED Visits
2014-2015

Symptom Management ED Visits
2014-2015
Top 3 Diagnoses of HPCG Patients Using ED
2014-2015

- Heart/CHF/Cardiac
- Alzheimer's/Dementia
- COPD/Respiratory

Who Sent Patient to Hospital
2014-2015

- Patient/Family: 57%
- Facility: 18%
- MD Office: 15%
- HPCG: 8%
- Unknown: 2%

Disposition
2014-2015

- Home (Facility or Residence): 69%
- Beacon Place (Inpatient Facility): 8%
- Died: 14%
- Other: 9%
Other Things to Consider

- A higher percentage of full or limited codes go to the hospital (8% of HPCG hospice patients are full/limited codes vs. 22% of HPCG hospitalized patients).
- There is a seasonal effect – fall and spring have more admissions than winter and summer.
- HPCG’s average length of stay continues to decrease over time.
- Falls are a big issue for Long Term Care patients.
- On average, there is <1 day contact between HPCG visit and ED visit.
- There are a number of patients that have repeat hospitalizations (“frequent flyers”)

ED PIP AIM

“To Reduce Emergency Department Visits by 10% per patients served in a 3 month time span.”

Timeline of Activities
Timeline of Activities

October 2015
- Met with staff at Al Fletcher 3U to begin piloted "Personal Emergency Plan" forms (start date 11/1/15)
- EMS shadowed Admission to get a better understanding of our process.

November 2015
- EMS and PA shadowed EMS to educate staff about hospice.

January 2016
- Paramedic attended clinical staff meeting to educate about EMS.

February 2016
- Sharing "Impact Case" information with Cone Health Hospital.

April 2016
- EMS and PA in Al Fletcher 3U to drive in helping new facilities in place.

June 2016
- Healthcare of LTC facilities staff in regional program.

Example of My Personal Emergency Plan Form

Label on DNR/MOST Forms
What Has Been Accomplished?

![Graph showing ED Visits per 1000 Patient Days]

Another Look: Accomplishments

![Graph showing ED Visits per 1000 Patient Days comparison]

Pilot Facility Accomplishments

![Table showing Personal Emergency Plan in Pilot Facilities]

<table>
<thead>
<tr>
<th></th>
<th>FY 14-15</th>
<th>FY 15-16*</th>
</tr>
</thead>
<tbody>
<tr>
<td># ED Visits 1000 Days</td>
<td>5.09</td>
<td>3.171</td>
</tr>
<tr>
<td>% Change</td>
<td>-66%</td>
<td>-73%</td>
</tr>
</tbody>
</table>

* To June 30, 2016
**What are the Numbers Now?**

The 15/16 FY thus far has resulted in a 27% decrease from the 14/15 FY and a 33% decrease from FY 13/14.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>ED Visits</th>
<th>Visits per 1000 patient days</th>
<th>Patients using ED</th>
<th>% Change from Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/15 – 6/16*</td>
<td>242</td>
<td>2.82</td>
<td>209</td>
<td>-27%</td>
</tr>
<tr>
<td>10/14-9/15</td>
<td>460</td>
<td>3.88</td>
<td>291</td>
<td>-7%</td>
</tr>
<tr>
<td>10/13-9/14</td>
<td>457</td>
<td>4.18</td>
<td>320</td>
<td>NA</td>
</tr>
</tbody>
</table>

* Only 9 months of data

<table>
<thead>
<tr>
<th>Transportation Cost per 1000 patient days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2016-May 2016</td>
</tr>
<tr>
<td>June 2015-December 2015</td>
</tr>
<tr>
<td>Jan 2015-May 2015</td>
</tr>
</tbody>
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**Did We Meet Our AIM?**

AIM: “To Reduce Emergency Department Visits by 10% per patients served in a 3 month time span.” Some considerations:

- While the PIP began in October, our first intervention was in late November, so the earliest the PIP would have an impact would be December 2014
- Thus, we compared January 2015 – March 2015 to the same 3 months the year before using the old metric, per patients served, and calculated a 12% decrease, thus meeting our AIM

<table>
<thead>
<tr>
<th>Month</th>
<th>% Change from Previous FY</th>
<th>PEP Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>January – March 2014</td>
<td>8.7% per patients served</td>
<td>7.6% per patients served</td>
</tr>
<tr>
<td>January – March 2015</td>
<td>12% decrease</td>
<td>12% decrease</td>
</tr>
</tbody>
</table>

**Other Considerations**

In studying the data, we also found some correlation between Personal Emergency Plan Completion Rates and ED rates as follows:
What is Next?

- Partnering with Guilford County EMS on coordinating care for HPCG patients that call 911.
- Implementing Personal Emergency Plans in Assisted Living facilities and possibly Skilled Nursing Facilities.
- Continuing to educate staff about ED PIP and the effectiveness of the Personal Emergency Plan.
- Updating our AIM statement.

Sustaining the Change

- There is a correlational relationship between reducing patient ED visits and transportation costs.
- Continuous education is imperative to maintaining staff involvement and their understanding of the need to make changes.
- Highlighting the different outcomes of each small change (numerous PDSA cycles) improves awareness and new opportunities.
- Encouraging improved care coordination with outside agencies (EMS and Long Term Care Facilities) will improve quality of life outcomes for HPCG patients.

Questions?

Continuous improvement is better than delayed perfection.

Mark Twain