The Role of the Medical Director in Quality Assurance Performance Improvement

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Medical Director
Centra PACE
Lynchburg, Virginia
Speaker Disclosures:

Dr. Sellers has disclosed that she has no relevant financial relationship(s).
Role

Definition:
The set of behaviors an organizational member is expected to perform and that he/she feels obligated to perform.
Objectives

1. Know the PACE regulations related to Quality Assurance Performance Improvement (QAPI)
2. Describe the role of the medical director in the design, implementation and the monitoring of QAPI.
3. Discuss the Basic Principles of Quality
PACE Medical Director

42 CFR Part 460 states:
“The Organization must employ or contract with in accordance with 460.70 a medical director who is responsible for the delivery of participant care, clinical outcomes and the implementation as well as oversight of the quality assurance and performance improvement program.”
PACE QAPI Coordinator

The QAPI coordinator would be responsible for day-to-day quality issues, collecting data, analyzing data, detecting trends, coordinating IDT members, PACE staff, and contract providers in planning QAPI activities, disseminating reports on activities to them, and compiling comments related to participant/caregiver satisfaction and concerns.
The PACE organization must develop, implement, maintain, and evaluate an effective data-driven QAPI program.
Definitions

- **Quality Assurance** addresses primarily negative outcomes
- **Performance Improvement** seek opportunities to improve care by improving upon satisfactory outcomes
- **Continuous Quality Improvement** builds on previous improvements and uses a systematic process including data analysis to enhance performance
Quality Management: Definition

• Organizational activities designed to:
  – Continually improve performance and productivity levels.
  – Improve the efficiency and predictability of the care process.
  – Reduce unnecessary care and waste.
  – Contain costs.
  – Improve patient outcomes and quality of life.

--Dimant
**The Big Picture**

**System**
- Group of related *interdependent* processes working together to achieve a common goal
- Made up of a culture, structure and boundary

**Process**
- Sequence of tasks aimed at accomplishing a goal
- Produce data which can be analyzed

**People**
- Have beliefs, values, interests, needs
- Have roles which are made up of functions and tasks
20.3 - Internal QAPI Activities

PACE organizations must use a set of outcome measures to identify areas of good or problematic performance and take actions targeted at maintaining or improving care based on these outcome measures. CMS expects PACE organizations to use the most current clinical practice guidelines and professional standards in the development of outcome measures applicable to the care of PACE participants.

(Rev. 2, Issued: 06-09-11; Effective: 06-03-11; Implementation: 06-03-11)
First Step: Select performance goals

• Census Growth
• End of life care
• Grievances
• Appeals
• Participant satisfaction
• Effectiveness of contract services
• Promptness of service delivery
Second Step: define success

- Routine Immunizations
- Grievances and Appeals;
- Enrollments;
- Dis-enrollments;
- Prospective Enrollees;
- Readmissions;
- Emergency (Unscheduled) Care;
- Unusual Incidents; and,
- Deaths.
### Centra PACE Southside Farmville Key Quality Indicator Report
April, 2014

#### Census Growth
- **Total Participants:** 126, 38, 36
- **No. of Referrals:** 69, 51, 157
- **Enrollments:** 6, 3, 8
- **Disenrollments:** 0, 0, 0
- **Prospective Enrollments that Declined:** 0, 0, 0
- **Permanent LTC Placement:** 1, 0, 0
- **Percentage LTC Placement:** 4%, 10%, 0%
- **Permanent ALF Placement:** 5, 0, 0
- **Percentage ALF Placement:** 4%, 0%, 0%
- **Deaths:** N/A, 1, 2
- **Participated:** 1, 1140, 4169

#### End of Life
- **Participants w/ DNR:** N/A, 95%, 95%
- **End of life planning:** 100%, 100%

#### Grievances
- **Number of Grievances:** Target 0, Apr’14 0, YTD 0
- **Grievance Rate per 1000 Part. Days:** Target 0.2, Apr’14 0.18, YTD 0.48
- **No. Grievances Resolved:** Target 0, Apr’14 0, YTD 0
- **Grievances Resolved w/ seven days:** Target 95%, Apr’14 50%
- **Resolution Trend Jan’13 to Mar’14:** TDB
- **Leading Grievance Type:** TDB
- **Other Meeting Individual needs:** 0, 0, 0

#### Appeals
- **Number of Appeals:** Target 0, Apr’14 0, YTD 0
- **Appeal Rate per 1000 Participant Days:** Target 0.0, Apr’14 0.0, YTD 0.0

#### Participant Satisfaction (Quality of Life)
- **Overall Satisfaction Rate of Excellent or Good Responses:** Target 20.4%, Apr’14 96%, YTD 96%
- **Satisfaction with Transitions:** Target 20.4%, Apr’14 76%, YTD 76%

#### Pharmacy
- **Accuracy of MAR: Percentage of Correct Medications Reviewed:** Target TBD, Apr’14 100%
- **Percent with Treat Score Decline Jan’13 to Oct’13:** TBD

#### Functional Status
- **Percent of appropriate participants w/ increase from int. assessment to dx:** Target TBD, Apr’14 N/A, YTD m2, n2
- **Percent who decline of 3+ pts at 3mo:** Target TBD, Apr’14 100%, YTD 100%, n2, m2

#### Effectiveness Contract Services
- **Percentage of personal care assistants:** Target Jan’14 2013, Apr’14 83%
- **Percentage of participants with >5% change at 30 days:** Target TBD, Apr’14 0%, YTD 0%
- **Percentage of participants with >7.5% change at 30 days:** Target TBD, Apr’14 0%, YTD 0%
- **Percentage of participants with >10% change at 185 days:** Target TBD, Apr’14 0%, YTD 0%

#### Nutrition
- **Reference:** Apr’14 TBD
- **Weight change Fall’13 to Apr’14:** TBD

#### Social/Behavioral Functions
- **Percentage of Recreation Therapy Goals either Met or On Going:** Target TBD, Apr’14 TBD

#### Prominence of Service Delivery
- **Percentage of Approved Participant/Family Requests Documented in chart:** Target TBD, Apr’14 TBD

#### Vaccination Rates (Physiological & Clinical Well-being)
- **Pneumococcal:** Target TBD, Apr’14 2, YTD 7%
- **Percentage Vaccinated:** Target TBD, Apr’14 80%
- **Percentage Vaccinated(min 80%):** Target TBD, Apr’14 67%
- **Percentage Vaccinated:** Target TBD, Apr’14 89%
- **Percentage Vaccinated:** Target TBD, Apr’14 79%
- **Percentage Vaccinated:** Target TBD, Apr’14 2%
- **Percentage Vaccinated:** Target TBD, Apr’14 7%
- **Percentage Vaccinated:** Target TBD, Apr’14 7%
- **Percentage Vaccinated:** Target TBD, Apr’14 7%
- **Percentage Vaccinated:** Target TBD, Apr’14 7%
- **Percentage Vaccinated:** Target TBD, Apr’14 7%

#### Falls
- **Number of falls:** Target TBD, Apr’14 TBD, YTD TBD
- **Falls Rate per 1000 Participant Days:** Target TBD, Apr’14 TBD, YTD TBD
- **Falls Rate per 1000 Participant Months:** Target TBD, Apr’14 TBD, YTD TBD
- **Falls with Severe Injury:** Target TBD, Apr’14 TBD, YTD TBD

#### Medication Errors
- **Number of Errors:** Target TBD, Apr’14 TBD, YTD TBD
- **Medication Errors per 1000 Participant Days:** Target TBD, Apr’14 TBD, YTD TBD

#### Pressure Ulcers
- **Number of Participants w/ Acquired Pressure Ulcers:** Target TBD, Apr’14 TBD, YTD TBD
- **Acquired Pressure Ulcers Trend Jan’13 to Oct’13:** TBD

#### Emotional/ Mental Health Status
- **Depression Scale Completed at Initial Assessment:** Target TBD, Apr’14 TBD, YTD TBD
- **Number of Participants Eligible:** Target TBD, Apr’14 TBD, YTD TBD
- **No Depression Scale Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **No Depression Scale Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD

#### Hospital Days
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **No. of Hospital Days:** Target TBD, Apr’14 TBD, YTD TBD
- **Hospital Days Per 1000 Pt Days:** Target TBD, Apr’14 TBD, YTD TBD
- **No. of Psychiatric Hospitalizations:** Target TBD, Apr’14 TBD, YTD TBD
- **No. of Psychiatric Hospital Days:** Target TBD, Apr’14 TBD, YTD TBD
- **Psychiatric Days Per 1000 Pt Days:** Target TBD, Apr’14 TBD, YTD TBD
- **No. of SNF Admissions:** Target TBD, Apr’14 TBD, YTD TBD
- **SNF Days:** Target TBD, Apr’14 TBD, YTD TBD
- **SNF Days Per 1000 Pt Days:** Target TBD, Apr’14 TBD, YTD TBD
- **No. of NF Admissions (Med Resp):** Target TBD, Apr’14 TBD, YTD TBD
- **NF Days Per 1000 Pt Days:** Target TBD, Apr’14 TBD, YTD TBD
- **No. of ALF Admissions (Med Resp):** Target TBD, Apr’14 TBD, YTD TBD
- **ALF Days Per 1000 Pt Days:** Target TBD, Apr’14 TBD, YTD TBD

#### Provider Visits per 1000 Participant Days
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD
- **Jan’13 to Apr’14:** Target TBD, Apr’14 TBD, YTD TBD

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Prepared by K.S. Woodley C. F. Brooks 05/12/14
## Spark Lines

<table>
<thead>
<tr>
<th>Infection Control</th>
<th>Target</th>
<th>Dec'14</th>
<th>YTD</th>
<th>Infection Rate Jan'12 to Dec'14</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTI</td>
<td>≤2</td>
<td>3</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Infections per 1000 participant days</td>
<td>0.34</td>
<td>0.62</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>
Seven Basis Principles of Quality

- Focus on Mission
- Continuous Improvement
- Focus on Processes & Systems
- Empower Front-Line
- Maintain Strong Partnerships
- Leadership Commitment
- Focus on Data

Schamp, R: NPA Medical Director’s Handbook
Continuous Improvement

Step 1: Understand the Process
Step 2: Identify the Problem
Step 3: Attend to the Problem
Step 4: Course of Action
Step 5: Monitoring & Feedback
The Model for Continuous Improvement - PDCA

- **Plan**
  - 1. Identify outputs, customers and their expectations
  - 2. Describe current process
  - 3. Measure and analyze
  - 4. Focus on an improvement opportunity
  - 5. Identify root causes
  - 6. Generate and choose solutions
  - 7. Map out a trial run
  - 8. Implement the trial run
  - 9. Evaluate the results
  - 10. Draw conclusions
  - 11. Standardize the change
  - 12. Monitor; hold the gains

- **Act**
- **Do**
- **Check**

START
Quality Improvement

• Beyond “projects” to an integrated strategy.
  – Quality and continual improvement need to be a formal part of every PACE organization
  – Executive commitment to quality.
  – Can not overlook the cultural/psychological issues of quality improvement.

• Medical Director can not do this alone.
Empowering Front Line Staff
Participant Assessments

- Physiological and clinical well-being
- Functional status
- Cognitive functioning
- Emotional/mental health status
- Effectiveness and safety of staff-provided and contract-provided services
Data
## EVENT REPORTING SYSTEM

All fields on this form that are underlined are required fields.

### Event Info

- **Select Event Type**
- **Select Event Category**
- **Select Event Indicator**
- **Date Of Event (mm/dd/yyyy)**
- **Time Of Event (hh:mm AM/PM)**
- **Facility where Event Occurred**
- **Department Involved**
- **Primary Location**
- **Patient Involved Details**
  - Add
  - Delete
  - Edit
- **Event Details**
- **Reporter's Outcome Code**
  - Add
  - Delete

### Reported By

- **Reporting Facility**
- **Reporting department**
- **Date Reported (mm/dd/yyyy)**: 10/13/2014
- **Time Reported (hh:mm AM/PM)**: 03:42 PM
- **Reporter's Name**
- **Reporter's contact Number**
- **Reporter's email**
Root Cause Analysis

• Fishbone Diagrams
• Show the causes of a certain event. A Fishbone or Ishikawa diagram can be useful to break down (in successive layers of detail) root causes that potentially contribute to a particular effect.
Pressure Ulcer Reduction

Mission Statement: Reduce the percent of participants, who acquire any pressure ulcer after enrollment into the PACE program or a pressure ulcer that is present upon enrollment worsens. This rate includes all pressure ulcers regardless of the location or stage when it is initially identified.

Goals:
2015 Goal is to reduce the Centra rate to ≤1.5% of PACE participants will acquire a pressure ulcer in any given month or have a pressure ulcer present on admission worsen. This is a stretch goal.
2014 FMV Rate: 2.6% per month
2014 LYN Rate: 2.1% per month

Team Members
Dawn Stanley, FMV Int Ctr Mgr
Kendra Kerr, Int LYN Ctr Mgr
Renee Gilliam, FMV Clinic Coord
Jenny Link, LYN Clinic Coord,
Cassandra Hurt, FMV HCC
Carol Arthur, LYN HCC
Meagan Waller, FMV Dietician
Brenda Meredith, LYN Dietician
Verna Sellers, MD
Kimberly Woodley, Facilitator
Chrissitee Brooks, Outcomes Specialist

Do
- Revise nutrition criteria for Risk Assessment Tool: Brenda/Meagan
- Update Risk Assessment Tool and distribute: Kimberly
- Trial Tool in January for all semi-annual & annual assessments at both sites: Renee & Jenny
- Analyze results: Kimberly

Check
Current Metrics
December, 2014

<table>
<thead>
<tr>
<th>Site</th>
<th>Percentage of Participants w/ Acquired Pressure Ulcers during month.</th>
<th>Prevelence of Participants w/ Acquired Pressure Ulcers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMV</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>LYN</td>
<td>2.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Centra PACE</td>
<td>1.9%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Centra PACE Pressure Ulcer Risk Assessment

<table>
<thead>
<tr>
<th>SENSORY PERCEPTION</th>
<th>ability to respond meaningfully to pressure- related discomfort</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Impairment</td>
<td>Responds to verbal commands.</td>
</tr>
<tr>
<td>3. Slightly Impaired</td>
<td>MMSE 26 to 30 or unable to communicate in any manner.</td>
</tr>
<tr>
<td>2. Moderate Impaired</td>
<td>MMSE 11 to 20 or requires physical examination.</td>
</tr>
<tr>
<td>1. Severe Impaired</td>
<td>MMSE 0 to 10 or unable to respond to any stimulus.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COGNITIVE IMPAIRMENT</th>
<th>ability to think severely limited or not present.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Limitation</td>
<td>Able to feed self without problems.</td>
</tr>
<tr>
<td>3. Slightly Limited</td>
<td>MMSE 26 to 30 but unable to communicate.</td>
</tr>
<tr>
<td>2. Moderate Limited</td>
<td>MMSE 11 to 20 or unable to communicate.</td>
</tr>
<tr>
<td>1. Severe Impaired</td>
<td>MMSE 0 to 10 or unable to communicate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOISTURE</th>
<th>degree to which skin is exposed to moisture (include feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Moisture</td>
<td>Moist not present.</td>
</tr>
<tr>
<td>3. Occasionally moist.</td>
<td>Skin occasionally moist.</td>
</tr>
<tr>
<td>2. Very Moist</td>
<td>Skin frequently moist.</td>
</tr>
<tr>
<td>1. Extremely Moist</td>
<td>Skin always moist.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>degree of physical activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Activity</td>
<td>Able to walk.</td>
</tr>
<tr>
<td>3. Slightly Limited</td>
<td>MMSE 26 to 30 but unable to communicate.</td>
</tr>
<tr>
<td>2. Moderate Limited</td>
<td>MMSE 11 to 20 or unable to communicate.</td>
</tr>
<tr>
<td>1. Severe Impaired</td>
<td>MMSE 0 to 10 or unable to communicate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOBILITY</th>
<th>ability to change and control body position</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Limitation</td>
<td>Able to use wheelchair.</td>
</tr>
<tr>
<td>3. Slightly Limited</td>
<td>MMSE 26 to 30 but unable to communicate.</td>
</tr>
<tr>
<td>2. Moderate Limited</td>
<td>MMSE 11 to 20 or unable to communicate.</td>
</tr>
<tr>
<td>1. Severe Impaired</td>
<td>MMSE 0 to 10 or unable to communicate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NUTRITION</th>
<th>Nutrition risk assessment will be assessed by RD at continual numerical assessment. Given on a scale of 1-4 as a skin care condition.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Risk</td>
<td>Adequate food resources.</td>
</tr>
<tr>
<td>3. Slightly Limited</td>
<td>MMSE 26 to 30 but unable to communicate.</td>
</tr>
<tr>
<td>2. Moderate Risk</td>
<td>MMSE 11 to 20 or unable to communicate.</td>
</tr>
<tr>
<td>1. Severe Risk</td>
<td>MMSE 0 to 10 or unable to communicate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRICION &amp; SHEER</th>
<th>warranty related to position in bed or change in position control.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. No Assistance</td>
<td>Needs assistance in repositioning.</td>
</tr>
<tr>
<td>3. Slightly Limited</td>
<td>MMSE 26 to 30 but unable to communicate.</td>
</tr>
<tr>
<td>2. Moderate Assistance</td>
<td>MMSE 11 to 20 or unable to communicate.</td>
</tr>
<tr>
<td>1. Severe Assistance</td>
<td>MMSE 0 to 10 or unable to communicate.</td>
</tr>
</tbody>
</table>

ACT:
- Determine if Risk Assessment tool is Adequate.
- Needs revision?
- Second trial to confirm usefulness?
- Determine scoring
- Develop interventions for each risk level
Effective QAPI Programs

Assess current performance.

Establish a baseline for improvement efforts.

Ensure that improvement gains are held.

Predict future performance.

Assess improvement efforts.

Focus on Process
PACE Audit Agenda

Administrative
Clinical
Chart Review
Home visit
Bus Rides
Interviews
DMAS and CMS representatives
Quality Management vs Risk Management

- An essential component of an effective quality improvement program is risk assessment and management
- Ideally-proactive
- Reality-reactive
Overview Risk Management

Define

Analyze

Reduce Risk
Risk Management Includes

- An integrated process of defining and monitoring specific areas of risk and
- Developing and implementing a comprehensive plan to PREVENT, MITIGATE and/or RESPOND TO RISK
References

- http://www.npaonline.org/website/download.asp?id=1783&title=PACE_Final_Rule_-_12/08/06
Thank you

Verna.sellers@centrahealth.com
The Right Tool for the Right Job!
Flowcharting

- To allow a team to identify the flow or sequence of events in a process; helps picture the process.
  - Shows where simplification / standardization possible.
  - Compares / contrasts actual vs. ideal flow, thus identifying improvement opportunities.
  - Facilitates agreement on the steps of a process & examines impact of activities of process performance.
  - Identifies areas for data collection and analysis.
IT’S A BUNCH OF SHAPES CONNECTED BY LINES.
Facility Stay Flow Chart

Participant Sick
Can't go home
Prt./Family Agrees
to go to a Facility

Prt in Hospital
HCC/Navigator Talk
w/Prt Family

Hospital Case
Management and
PACE SW Coordinate
Going to Facility

MD Determine Level of Care based on input from Therapy, RN, Hospital Notes, etc.

Prt in ED
Available RN Coordinate
DR. SELLERS NEED TO EDUCATE

Prt in PACE Clinic

RN/MD contacts SW to Coordinate

SW Coordinates with Clinic, Therapy, & Transport

MD determines level of care with input from SW/Therapy/RN

MD determines number of days
(Woodland ≥ 7 days)
SW/Therapy/RN

Woodlands
SW in conjunction w/ Dept. Asst. create authorization form and obtain sign. GG or MB

Dawn/HHC/SW FAX infor to Woodland to determine bed availability

Other Facilities
Fax basic info to other facilities Dawn/SW/HHC

Send Authorization Number

MD/RN talk with Prt/Family

Bed is Obtained
Describing the Process

- Include all members of the team
  - They can tell you what is stopping them from doing their job.
  - Also gives you an opportunity to see if they:
    - Know what should be done.
    - Know how to do it.
    - Understand why it is important.
    - Think their way is better than the required way.
The SIPOC tool is particularly useful when it is not clear:

• Who supplies inputs to the process?
• What specifications are placed on the inputs?
• Who are the true customers of the process?
• What are the requirements of the customers?
SIPOC Diagram

• identify all relevant elements of a process improvement project before work begins
• defines a complex project that may not be well scoped
• similar and related to process mapping or flowcharting but provides additional detail.
SIPOC Diagram

- Suppliers
- Input
- Process
- Outcome
- Customer
### SIPOC
**Participant Attending Center on an Unscheduled Day**

<table>
<thead>
<tr>
<th>Suppliers</th>
<th>Inputs</th>
<th>Process</th>
<th>Output</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Needs to Attend Day Center on Unscheduled day due to Clinic Appointment, DME Need, or Transport to Outside Provider</td>
<td>Clinic (On Call Nurse)</td>
<td>Clinic Nurse/Tech (or On Call Nurse) OR Therapist (LPTA or CODA) Initiates Telephone List</td>
<td>Clinic Schedule Adjusted (if Initiated)</td>
<td>Satisfied Participant with Immediate Future Needs being Met.</td>
</tr>
<tr>
<td></td>
<td>Therapy</td>
<td></td>
<td>DME Coordination (if Initiated)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
<td>Establish Pick Up/ Take Home Times with Transport Coordinator</td>
<td>Assign Pick Up/Drop Off Times</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home Care Coordinator</td>
<td></td>
<td>Adjust PCA hours with Agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meals</td>
<td></td>
<td>Meal: Current Diet/ Take Home/ “box lunch”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Staffing</td>
<td></td>
<td>Maintain 6:1 Ratio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participant Notification</td>
<td>Complete Remainder of Notifications</td>
<td>Participant Notified of Plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Notification (if applicable)</td>
<td></td>
<td>Family Notified of Plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Work</td>
<td></td>
<td>If Clinic initiated: respite maybe required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pharmacy</td>
<td></td>
<td>Medication Delivery Coordination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospital Resources</td>
<td></td>
<td>Schedule Resource &amp; Transport to CSCH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outside Providers</td>
<td>Send out Follow Up Email when Complete</td>
<td>Outside Providers Appointment</td>
<td></td>
</tr>
</tbody>
</table>
Pareto Chart

• **How do I do it?**
  – Decide on problem to be analyzed.
  – Brainstorm or collect data to select problems or causes to be analyzed.
  – Choose unit of measurement and timeframe for the study.
  – Collect data (real time or historical).
  – Compare relative frequency of each problem or cause.
  – Graph the frequencies with a cumulative % line to interpret the results.
Participant Falls at Lynchburg Site
January 1, 2014 to December 31, 2014
n=230

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Falls</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>160</td>
<td>46%</td>
</tr>
<tr>
<td>Nursing Facility</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Assisted Living</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>PACE Center</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PACE Bus</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Dialysis</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
<td></td>
</tr>
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Data Analysis - Control Charts

• Graphical representation of data over time.

• Time ordered plot of a set of data in it’s naturally occurring order with the median of the data drawn in as a reference line.

• Ignoring the time element implicit in every data set can lead to incorrect statistical conclusions.
Quality Improvement: Control Chart
Root Cause Analysis

- Fishbone Diagrams
- Show the causes of a certain event. A Fishbone or Ishikawa diagram can be useful to break down (in successive layers of detail) root causes that potentially contribute to a particular effect.
Fishbone Diagram
Fishbone Diagram

- **Type of Patient**
- **Dietary Staffing**
- **Food Not Appetizing**

**CNA assistance with meals**

**Weight Loss**
Fishbone Diagram

Type of Patient
- Hospice
- Obese patient on diet
- Ortho Rehab

CNA assistance with meals
- Short staffed
- High toileting needs
- Holiday call-offs

Inadequate training
- Lack of interest
- Wages not competitive
- Holiday call-offs
- Don’t understand importance

Dietary Staffing
- Wages not competitive
- Holiday call-offs

New Dietician

Food Not Appetizing
- Poor presentation
- Wrong Temperature
- Monotonous Menu

Weight Loss