Quality Initiative at a Breast Imaging Center: Interventions to Reduce No-Show Rates

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Disclosures

- Nothing to disclose.
Purpose

• To improve the workflow and productivity of our Breast Imaging Center, primarily by decreasing the no show rate.

Background

➢ An internal review demonstrated large proportion of exams were not being performed
➢ An interdisciplinary team of radiologists, technicians, nurses, administrators, and clerical staff was established
➢ Primary goal of streamlining workflow
➢ Root problems were discussed and analyzed
➢ No Show rate was set as the primary endpoint
➢ A variety of interventions were proposed and discussed
**Breast Imaging Center Fishbone Diagram**

**REGISTRATION**
- Paper work
- Waiting for referring physician orders
- Input data to computer

**PATIENT**
- No show
- Late for appointment
- Left prior to seeing doctor
- Patient Anxiety
- Patient Comfort

**TECHNICAL**
- Equipment unavailable
- Equipment Failure
- US Unit unavailable

**STAFF**
- Nurse
- Mammography Technician
- US Technician
- Radiologist
- Clerical

**PROCESS**
- Flow of Patients
- Escort to changing area
- Screen changed to diagnostic
- MD Assessment/Reassessment
- Consent for biopsy
- Patient Preparation
- Language interpreter
- Scheduling

**COMMUNICATION**
- Patient Preparation

**Decreased Productivity**

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**Potential Interventions**

- Reminder calls the day before an appointment.
- Send "Sorry we missed you!" appointment letters to patients.
- e-mail appointment reminders.
- Update contact information when patient comes for appointment.
- Print future appointments on a business card to give to the patient before they leave your office.
- Have patients verbally repeat the date and time of their next appointments, whether they are in the office or on the phone.
- Charge for No-Shows and same-day cancellations.
- Clearly explain, and have new patients sign, a written no-show policy.
- Schedule appointments within a reasonable time-frame.
Methods

- It was decided to institute pre-appointment phone calls
- Clerical training sessions were held
- Scripted phone dialogues with reminders of the items required at the time of appointment were utilized
- Translational services were made available
- A dedicated e-mailbox and phone line were created so that patients could cancel or reschedule appointments.
- Standardized forms were used to document the results of patient phone calls

Log Form

Mammography Clinic Logs

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>Middle:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment Date:</td>
<td>Appointment Time:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of study:</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>AP/BV</th>
<th>IB/NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Please circle all that apply)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reminder: Phone Call</th>
<th>Patient phone number was in the system:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient's preferred language:</td>
<td>Spanish</td>
<td>English</td>
<td>Other</td>
</tr>
<tr>
<td>Interpreter service was used:</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Patient was spoken to:</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Message was left:</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Message left with:</td>
<td>Person</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Patient called back to confirm:</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

| Patient confirmed appointment: | Yes | No |
| Patient confirmed time of appointment: | Yes | No |
| Reminder to bring photo ID: | Yes | No |
| Reminder to bring proof of address: | Yes | No |
| Reminder to bring prescription: | Yes | No |

| Day of Appointment: | Patient arrived: | Yes | No |
| Exam was performed: | Yes | No |
| Patient is an adult: | Yes | No |
| Reason why exam was not performed: | No Show | Yes | Prevented |
| Missing ID: | Yes | No |
| Missing Prescription: | Yes | No |

| Patient Rescheduled: | Yes | No |
| Date: | |

Log Form Image
Methods

- Pre-intervention data was collected over a 6-month period from August 2014 through February 2015.
- We prospectively recorded post-intervention data during March and April of 2015.
- We created 2x2 contingency tables to analyze the statistical significance of our data.
- Two-tailed P values were calculated using Fisher’s exact test.

Baseline Data

- 79.0% showed up
- 21.0% no show
Comparative Data

Results Patient Appointments

<table>
<thead>
<tr>
<th>Patients</th>
<th>Baseline</th>
<th>Post-Intervention</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showed Up</td>
<td>2868</td>
<td>907</td>
<td>3775</td>
</tr>
<tr>
<td>No Shows</td>
<td>762</td>
<td>69</td>
<td>831</td>
</tr>
<tr>
<td>Total</td>
<td>3630</td>
<td>976</td>
<td>4606</td>
</tr>
<tr>
<td>%No Show</td>
<td>21.0%</td>
<td>7.1%</td>
<td>-13.9%</td>
</tr>
</tbody>
</table>

P value is less than 0.0001
Conclusion

• Through systematic pre-appointment phone calls and documentation, we were able to achieve very significant improvement in the no-show rate. We anticipate applying similar methodologies and techniques in an effort to improve no-show rates in other key sections within our radiology department, our institution, and beyond.
Thank you!!!