Improve Access to Care for the Initial Patient Visit to the Gastroenterology Clinic

Cohort # 21 Team 6

Presenters: Hope Hubbard, MD & Chris Dominguez, MD

Educating for Quality Improvement & Patient Safety
The Team

- Dr. Hope Hubbard
- Dr. Chris Dominguez
- Ramon R. Gallegos, RN (clinic manager)
- Kathryn Smith-Gonzalez, (Access Plus Call Center)
- Jennifer Pasapera (medical assistant)
- Irma Rodriguez (support service supervisor)
- Facilitator – Sherry Martin

Sponsor -- Dr. Glenn Gross, Division Chief of Gastroenterology
Our Project

• Improve access to care for the initial patient visit to the gastroenterology clinic at the Robert B. Green Campus.
Potential Benefits

• Improve morbidity from a variety of common GI illnesses
  – GERD
  – Inflammatory bowel disease
  – Chronic constipation

• Diagnose unexplained symptoms and potentially limit mortality due to underlying malignancy
  – Chronic abdominal pain
  – Dysphagia
  – GI bleeding

• Assist primary care providers in managing these patients. Increasing access to care in our clinic can strengthen relationships with our referring providers and potentially expand network of referrals from new providers.
The Case for Change...

• 48 year old African American woman presented to an outside hospital with abdominal pain. CT scan of the abdomen revealed a 6 cm mass in sigmoid colon. She was discharged and then followed up with outpatient primary care at UHS downtown clinic.
The Case for Change...

• She was referred to GI clinic for the sigmoid mass on 8/15/2016.

• She was seen in the GI clinic on 10/17/2016 where a colonoscopy was ordered and scheduled to occur 4 days after the appointment.

• She rescheduled the colonoscopy for 11/21/2016.
The Case for Change...

- Large mass in sigmoid colon, biopsies consistent with moderately differentiated invasive adenocarcinoma.

- Underwent successful sigmoid colectomy (12/2016) with no evidence of metastasis.
The Case for Change...

• Four month gap between initial abnormal CT scan and definitive therapy for colon cancer (August => December 2016)

• Could she have been seen sooner in the GI clinic? (2 month delay between consult and appointment)

• Could we have expedited her care by sending her directly to a diagnostic colonoscopy where she had a known colon mass?
AIM Statement

To improve access to care and appointment wait times in the Robert B. Green gastroenterology clinic by reducing the number of patients in the new visit queue from 240 to 190 and decreasing time to 3rd new patient visit to <30 days by January 2018.
How did we come up with that number?

• To facilitate access to care Dr. Hubbard (who normally treats hepatology patients) saw general GI consults in clinic from October 2016 to January 2017.
• It was observed that for every five new consults there was one which could have been seen in endoscopy rather than clinic. This included consults for GI bleeding such as “rectal bleeding” or “hematochezia”.
• Based on this observation, we decided to attempt to decrease the GI clinic queue by 20%.
Patient Access Measures at UHS

• Queue (number of patients waiting for a new visit) as of August 2017: **240**
  – Goal set by UHS: queue \(\leq 50\)

• Days to 3\(^{rd}\) new patient visit: **64** (as of August 2017)
  – Goal set by UHS: \(< 30\) days
Strategies to Improve Access

• Improve triage process
  – Route appropriate patients to open access endoscopy rather than clinic
  – Remove duplicate consults to GI and Hepatology
  – Improve slot utilization by re-routing established patients to follow up slots

• Decrease no-show rate

• Improve provider availability
Let the Diagnostic Journey Begin
Cause and Effect

**People**
- Referring MDs
- Consulting MDs
- Consult Reviewers/LVNs
- Schedulers
- Patients

**Plant**
(FLOW-Simplify)
- Labs/CT/MRI suite
- Call center
- Ribert B. Green
- Clinic

**Process, Policies,**
- Initial diagnostic work
- Insurance
- Access Plus
- Consult review

**Equipment, Machines**
- Computers
- Rooms in clinic
- Labs, imaging, studies
- EMR
- Monitors

**Long wait times to new patient visits in addition to a long queue resulting in decreased access to care in the General GI Clinic**
To improve access to care and appointment wait times in the Robert B. Green gastroenterology clinic by reducing the number of patients in the queue from 240 to 190 by 1/9/2018.

### Primary Drivers
- Eliminate consults from the queue for established patients
- Remove eligible patients from the clinic queue to the endoscopy queue
- Remove eligible patients who have duplicate consults to GI and Hepatology
- Improve the show rate for new patient visits
- Improve utilization of mid level providers

### Interventions
- Screen the consult to determine if patient has been seen in GI clinic within the past 3 years (2)
- Triage nurses will screen the new consult for an isolated diagnosis of GI bleeding which can be routed to endoscopy (2)
- Send referring physician a notification of eligibility for endoscopy so that order can be changed (2)
- Screen consults for duplicate GI and Hepatology referrals and place appropriate patients in the Hepatology queue. (2)
- Medical staff to call patients prior to visit and remind them of their appointment (2)
- Expand the type of patient referrals the mid-level providers can see in GI clinic (4)

### Measures
- Days in the queue
- Number on the queue
- Days in the queue
- No show rate
- Number on the queue
Reasons to be seen in GI clinic

Total charts reviewed: **573**

Referrals represented in pareto: **300**
Intervention 1: Eliminate names from the queue for patients already established in clinic (1)

• Review chart on Sunrise to determine if patient has been seen in GI clinic within the past 3 years
• Look for previous GI clinic visits
• If established patient...
  – remove name from new patient queue
  – transfer to reminder list for a follow up appointment
Intervention 2: **Remove eligible patients from the clinic queue to the endoscopy queue (2)**

- Triage nurses to screen new consults for a diagnosis of ONLY GI bleeding (e.g., “rectal bleeding” or “hematochezia”)
- Notify referring physician about eligibility for endoscopy
Intervention 3: **Remove eligible patients who have duplicate consults to GI and Hepatology (1)**

- Screen consults for duplicate GI and Hepatology referrals and place appropriate patients in the Hepatology queue.

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**GI consults**

4 Irma Rodriguez [Irma.Rodriguez@uhs-sa.com]

To: Hubbard, Hopethe H
Cc: Domínguez, Cristian Enrique

Good afternoon Dr. Hubbard,

All these patients were worked on, none of them are in the queue as of Friday 01/05.

Thank you,

Irma
Intervention 4: Improve utilization of mid level providers (4)

- Expand the type of patient referrals the mid-level provider can see in GI clinic
- Mid-level provider formerly only saw Hepatology consults
- Expanding mid-level role with increased slot utilization for general GI consults
  - Direct supervision from GI faculty
  - CME credits at formal gastroenterology courses to expand fund of knowledge
Intervention 5: Improve the show rate for new patient visits (1)

• Medical staff to call patients prior to visit and remind them of their appointment
Calling the no shows

Total patients called: 82
Unable to contact: 33

I forgot!
Examples of unavoidable conflicts

• Unable to take off from work
• Involved in car accident
• Relative sick
• Death in the family
• Was having an RA flare and did not have the energy to come to appointment
• Having surgery
• Death
No show rates by day

### Phase Limits

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<th>Phase</th>
<th>LCL</th>
<th>Avg</th>
<th>UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intrvn</td>
<td>0.0%</td>
<td>20.6%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Post-intrvn</td>
<td>0.0%</td>
<td>17.2%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

Method: Normal approximation
Z-Value: 1.04
Fisher’s exact

P-Value: 0.149
0.175
No show rates by week

SPC p-Chart: GI Clinic % No-Show by Week (Jul-Dec 2017)

UCL
Avg = 0.188
LCL

SPC p-Chart: GI Clinic % No-Show by Week (Jul-Dec 2017)

Pre-Intrvn
Post-Intrvn
NPV Queue

SPC Individuals Chart: GI Clinic New Patients Waiting Queue (Aug 2017 - Jan 2018)

Note: 2 samples were excluded.
Number of days to 3\textsuperscript{rd} NPV

Number of patients

Time of the year

Jun-17, Jul-17, Aug-17, Sep-17, Oct-17, Nov-17, Dec-17
ROI Strategy

• Create more slots to see more patients
• More patients seen → more absolute revenue generated
• The charge for each patient is $144.60, however, the average reimbursement is $29.67
  – Sample of 30 new patients in GI clinic
• Some patients will require procedures which will create downstream revenue
ROI Strategy

• GI clinic demonstrates erratic behavior in the number of patients seen
• Difficult to predict if more patients are seen
• Therefore it is difficult to calculate a trend and to know if we are seeing more patients
• **Bottom line, we are seeing patients earlier!**
• In theory, should increase number of patients seen in clinic
What have we learned?

• “Bleeding” diagnoses were NOT a significant reason for consult
  – Sending these patients to endoscopy did not have the impact we suspected in decreasing the queue

• Multiple “new patients” were actually established
  – Established patients who don’t follow up may be referred back as “new patients”
  – Scheduling established patients into a follow up slot can have a positive impact on reducing the new patient queue.
What have we learned?

• National Conferences are annual outliers
  – Clinic panels are cancelled every year in order for physicians to attend
  – Cancelling clinics that have been booked has a detrimental impact on the increasing the queue

• It is difficult to make a significant reduction in the no-show rate despite reminders from the automated system and physician calls.
What's next?

- Ongoing communication between triage nurses and referring providers concerning direct access to endoscopy

- Have a physician periodically review consults to ensure they are being screened appropriately

- Develop a clinic policy to address how to manage established patients in the new patient queue and repeated no-shows from the same patients
What's next?

• Have the medical assistant call the no shows after every clinic
  – Help patients make a new follow up appointment
  – Help patients obtain necessary studies/labs/imaging
  – This will prevent follow up patients to end up on the queue

• Present data to the administration for a more sustainable intervention, i.e. increase in clinic providers!
Thank you!