EVALUATION OF THE INTERNAL MEDICINE CLINIC SUPPORT WEBSITE

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BACKGROUND

- Many patient care processes require residents to be physically present in ACC clinic.

- Examples include:
  - making subspecialty appointments
  - ordering add-on labs
  - ordering diagnostic tests
  - requesting nurse assistance with contacting patients
BACKGROUND

• Current system is paper based
• Problems include:
  - residents spend only a half day in clinic per week
  - residents sometimes have to come in on non-clinic days to place orders
  - potential for delaying patient care
  - potential effect on patient satisfaction
  - increased work load for clinic staff
• Proposed Solution: The division of General Internal Medicine developed a Clinic Support Website (CSW) through which electronic orders can be placed from off-site locations for onward transmission to clinic staff
QUESTIONS

• What is the fidelity of completion for orders placed through this website?

• Will the service be a useful tool to Internal Medicine Housestaff?

• In what ways can use of the website be streamlined and made more user-friendly?
PLAN

• Evaluate the effectiveness of using the clinic support website to electronically transmit orders to clinic staff.

• Perform a preliminary assessment of resident satisfaction with the new system.

• Identify areas of improvement
Specific issues to address

- Evaluate fidelity of three specific links on the clinic support website i.e. how often are the transmitted orders carried out. The links to be assessed are:
  1. Add-on labs
  2. Specialty Clinic Referrals
- Evaluate resident satisfaction with the system using a focus group of residents who will use the system consistently for 4 weeks and provide feedback via questionnaire.
- Identify changes that could make the system more effective and user friendly.
Prediction

• The electronic transmission of orders through the three selected website links will significantly ease the burden experienced by residents when trying to access the chosen clinical support services

• Fidelity of order completion will be at least 90% for the selected websites
Plan description

• Internal Medicine residents with outpatient clinics in the month of May 2008 will be oriented to the clinical support website and encouraged to use it.

• Requests placed via the website for specialty clinic referrals, add-on labs, and nurse assistance will be electronically tracked. Copies of these requests will be sent to Dr Aderoju via e-mail.
Plan description

• Fidelity of completion for these orders will be determined using the A2K and WEBCIS systems for verification.
• A five point scale will be used to evaluate resident satisfaction with the system.
• Feedback will be solicited from residents and clinical staff using the system for suggestions to improve/streamline the process.
Three different pathways for referrals

1. Patients must call specialty clinic to make appointment
2. Internal Medicine can schedule appointment for patient
3. Appointment goes under review by the specialty department physician who decides when appointment can be scheduled
Clinics where patients must call to schedule their own appointment:

<table>
<thead>
<tr>
<th>SPECIALTY CLINIC</th>
<th>PHONE</th>
<th>FAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Clinic</td>
<td>966-2115</td>
<td></td>
</tr>
<tr>
<td>Dental School</td>
<td>966-2805</td>
<td></td>
</tr>
<tr>
<td>Psychiatry</td>
<td>966-5217</td>
<td></td>
</tr>
<tr>
<td>Orthopedics / Spine</td>
<td>962-6637</td>
<td>966-7956</td>
</tr>
<tr>
<td>General Neurology / Sleep</td>
<td>966-4401</td>
<td>966-6501</td>
</tr>
<tr>
<td>Dermatology</td>
<td>966-2485</td>
<td>843-6357</td>
</tr>
</tbody>
</table>
Clinics that require referrals to go under physician review:

• General Surgery
• GI/ Hepatology
• Plastic Surgery
• Podiatry
• Rheumatology
• Urology
• Specialty Neurology Clinics

* Scheduling process can take up to 2 weeks
Referrals by Provider Type

Number of Referrals

May 4 - 10  May 11 - 17  May 18 - 24  May 25 - 31

Resident  Attending

May 4 - 10: Resident 10, Attending 11
May 11 - 17: Resident 8, Attending 14
May 18 - 24: Resident 13, Attending 13
May 25 - 31: Resident 18, Attending 12
• All 115 requests for specialty appointments made through the CSW from 05/04 to 05/31 were processed by the ACC Internal Medicine Staff

• 283 requests were placed through the paper based system during the same time period
Other Links…

- 6 requests received for lab add-on 05/04 to 05/31 with 100% fidelity of order completion

- Unable to evaluate fidelity of Nurse Assistance link because e-mail copy of requests did not come through
# Survey Results

<table>
<thead>
<tr>
<th></th>
<th>Agree strongly</th>
<th>Agree Somewhat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website helpful tool</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Made my job easier</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Will improve patient satisfaction</td>
<td>70%</td>
<td>10%</td>
</tr>
<tr>
<td>Will improve quality of care</td>
<td>80%</td>
<td>10%</td>
</tr>
<tr>
<td>Will use in clinic in lieu of paper based system</td>
<td>90%</td>
<td></td>
</tr>
</tbody>
</table>
Comments from users

• Very helpful! Can even do it from home and get confirmation emailed to you. Love it!
• I hope we can continue to have referrals for different imaging like ct, mri etc
• **Painful to enter in name, mr and note date**
• Was an excellent addition. My pt made the appointment and I received confirmation the appt was scheduled.
• Helpful if lab values come back after a patient has left that requires specialty follow-up
• Easy to use and nice to see confirmation
Problems identified

- MRN entered wrong by requesting physician
  solution: physician education
- Zeros filled in to complete mandatory 8 digits instead of check digit.
  solution: add annotation indicating that check digit required
Problems Identified

• Selection of wrong specialty clinic from pull down menu due to incomplete list of specialty clinics

solution: Erika Bynum supplied updated list to IT
Problems identified

- Patients leaving clinic without phone number for clinics that require patient call, requiring clinic staff (Erika Bynum) call patient at home

solution: Pop-up box added so physicians can pass number on to patient.
Problems identified

• Low awareness and understanding of this system among housestaff. Occasional use of inappropriate links to place orders

Solution: Will add tutorial on clinical support website to clinic orientation pre-clinical conferences for residents
Other problems

• Podiatry appointments not scheduled due to limited types of insurance accepted
• Some clinics require faxed requests which may further delay scheduling
• Requiring patients to call or specialty MD review are factors beyond the control of the Internal Medicine Clinic system
Next Steps

• Expand use of CSW to entire housestaff body
• Consider a larger survey following expansion to further evaluate acceptability and assess for further improvement
• Expand links offered to include other ancillary services
Acknowledgement

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