Improving Access to Urgent Skin Screening Appointments at University of Texas M. D. Anderson Cancer Center Cancer Prevention Center

Submitted by Duke K. Rohe
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• M. D. Anderson Cancer Center
  – Inpatient facility with 510 operating beds.
  – 167,500 patient days per year.
  – 965,000 outpatient visits per year.

• Cancer Prevention Center
  – Provides cancer risk assessment, counseling, and screening exams for most common types of cancer in adults.
  – Approximately 28,000 visits in FY09.
The Project Team

- Margaret Bell
- Patrick Browning
- Joan Clifford
- Dr. Carol Drucker
- Emily Russell
- Sally Scroggs
- Analyn Uy
The Problem

• Cancer Prevention Center (CPC) patients were unable to schedule skin screening appointments in a timely manner.
  – Patients were scheduled for skin screening appointments on a first come, first served basis rather than according to medical need.
  – Because the demand for appointments was beyond capacity, the wait time for appointments ranged from 70–140 days.
  – Patients with urgent needs were waiting three months for care.

• Because of the extended wait time for appointments, patients were going elsewhere for care. This was resulting in a high no-show rate for clinic sessions. CPC was losing precious time slots, resulting in decreased access to care.
Project Goals

• Decrease the wait time for urgent appointments in the CPC dermatology area by 10 percent from July to December 2007.
  – Measured by days from patient’s call to work-in date on Excel spreadsheet.
  – Baseline wait for an appointment ranged from 70–140 days.

• Bring patients in for urgent care in fewer than seven days.
Root Cause Analysis (cont’d.)

• The problem required action on multiple points simultaneously and from multiple levels of staff.
• An efficient means of identifying appointment slots that would not be used due to cancellation or rescheduling of appointments of low-risk patients was needed.
• Three main areas of focus:
  – Patients prioritized according to risk by nurses and physicians, who developed and oversaw medical criteria for prioritization.
  – Forms developed to communicate risk to scheduling clerk.
  – Appointment types changed to accommodate risk.
• Process flow maps identified areas of change for patient scheduling clerks (PSC):
  – Development of communication system to prioritize patients by risk.
  – Development of a wait list with data sufficient to prioritize.
  – Development of tools and/or forms for PSCs and nurses to obtain essential data from callers.
  – Development of system of appointment types to help with work-ins and new missed appointment process.
Additional Analysis of the Problem

• Information system and process changes were undertaken to facilitate the improvement needed. All levels of dermatology staff were involved in the changes. Communication at all levels was a critical element that had to be addressed.

• The development of the process to work in prioritized patients with urgent problems was the most innovative and significant change for patient access. This process was a catalyst for all other changes, and it was standardized to ensure compliance.
  – As patients were seen, they were prioritized under the new methods, thus culling out low-risk individuals and allowing more slots for higher-risk patients.
  – Patients with true medical needs were given priority for all cancellation slots. These slots were the only available appointments for months in the practice’s very packed schedule.
  – This allowed the practice to initiate the new system at a time when schedules were already full.

• The original project timeframe was six months; however, the full impact of the project would not be realized until one year from its start date, as patients’ appointments are scheduled one year out.
Addressing Root Causes

- Three-pronged approach:
  - Develop a process to work in patients with urgent problems.
  - Develop a process to differentiate appointment types.
  - Revamp the missed appointment process.
- A fishbone diagram was used to identify critical areas of concern. A flow process was then diagrammed.
- A spreadsheet was used to track data such as patient calls, needs, and wait times.
- A standard process of identifying medical needs, with four levels of priority, was developed by Dr. Drucker.
- New appointment types were developed to fit the medical needs.
- Multiple forms were developed for patient scheduling clerks to obtain data for a database to track the level of need.
- Implementation included steps to restrict use of cancellation slots to designated medically urgent patients.
Addressing Root Causes

- Two new forms were developed:
  - Customer Service Request form to communicate appointment request.
  - Data collection form to allow patient scheduling clerks to collect data necessary to identify the medical need and select the appropriate appointment type.
- Televox, an automated appointment reminder system, was used to call patients at home at night. The system gave patients the option to cancel appointments over the phone. Appointments cancelled via Televox ranged from 4 to 13 percent. The open slots were used to fit in urgent patients.
- The process of handling missed appointments was reviewed and changed. The new method of prioritization by medical need opened up appointments for high-risk patients.
- Communication tools were developed for patient scheduling clerks, nurses, and physicians.
- Appointments were tracked for a month to predict the impact of the new classification system.
- The entire process of handling missed appointments was redesigned. In addition, moving-range charts were done to track long-term impact. A graph was completed to track days to urgent appointment. An environmental study was done to allow future review of impact on staff.
- The process changes were piloted with one physician, then rolled out to the other three physicians in the practice.
Return on Investment

- Patient access to urgent medical appointments improved by 91 percent (from 70–140 days to fewer than 48 hours).
- Wait list eliminated.
- Risk and potential liability reduction for delayed treatment of $40,000–$240,000 per case of melanoma.
- Missed appointments dropped by 9.5 percent, which paid back the new Televox reminder system in under a month.
- Insurance verification staff time savings ranged from 20–40 minutes per patient.
- Nurses saved approximately 60 minutes of documentation/communication time per patient.
- Scheduling clerks saved approximately 10–20 minutes per patient.
Return on Investment (cont’d.)

• More appointments were available due to improved production that resulted from fewer missed appointments and use of cancellation slots. This resulted in:
  – 751 additional new patients per year averaging $509 per patient = $382,259
  – 40 additional follow-up patients averaging $509 per patient = $20,360
  – 939 additional screening appointments averaging $280 per patient = $262,920
  – 1,502 additional procedures in dermatology = $351,468
  – 259 additional colonoscopies (downstream revenue) = $776,482–915,306
  – Up to 2 percent newly diagnosed breast cancers in female patients screened (downstream revenue) = $280,000–1,400,000
  – Time savings ≈ $76,478
  – Pathology (downstream) = $312,416

Total Potential New Income = $2,182,383 (minimum)
Return on Investment (cont’d.)

• All the additional patients and treatments were done with existing staff and facilities.

• The final result was to standardize the practice and decrease variation, resulting in:
  • Increased business.
  • Predictable work days for physicians.
  • Significantly fewer interruptions.
  • All staff starting each day without an overwhelming work load from the previous day, having a lunch period, and going home at a reasonable time.
Monitoring and Evaluating Over Time

• Monitoring is done monthly as a part of regular tracking of benchmarks.

• Tracking data are all pulled from a central institutional repository:
  – Volumes of patients seen per physician per session.
  – Missed appointments per session.
  – Televox cancellations.
  – New patients per session.
  – Overtime per employee, revenue per procedure.

• The CPC dermatology area continues not only to sustain but expand its success.
  – Process was piloted with one dermatologist; now all dermatologists use it.
  – Data show results continue to exceed expectations.
Dermatology New Patients Average by Month
Dermatology Missed Appointment Average per Month
Dermatology Average Patients per Session

[Data and charts showing trends and ranges for individual values and moving ranges over time.]
Patient Prioritizing Method

Patients will be prioritized based on the following criteria with priority 1 being the most urgent.

**Priority 1**
- Bleeding lesion
- Infection
- Severe itch/pain
- Adverse medication reaction

Schedule the patient’s appointment within 1-2 weeks of notification of patient concern. Email the appropriate provider requesting an overbook time if there is no opening available in this time frame.

**Priority 2**
- New mole/freckle
- Suspicion of skin cancer (patient has a h/o of skin cancer)
- Increased frequency of outbreaks
- Changing moles
- Re-growth at recent treatment site (treatment occurred in the past 30 days)

Schedule the patient’s appointment within 1 month of notification of patient concern. If there is no opening during this time, schedule patient for the next available appointment and add to the cancellation list.

**Priority 3**
- AK re-growth
- New growth, concern about skin cancer (pt. has no h/o skin cancer)

Schedule the patient’s appointment within 2 months of notification of patient concern. If there is no opening during this time, schedule patient for the next available appointment and add to the cancellation list.

**Priority 4**
- Patient convenience

These patient requests will be individually handled and accommodated when possible.
# New Lesion Questionnaire

1. Date: ____________  
   Current Apt. Date: ____________

2. Name: ____________________________

3. MR#: ____________________________

4. Contact #: ________________________

5. Provider: _________________________

6. Problem: _________________________

   ______________________________________

7. How long has this been present? ____________

8. Patient Availability: ____________________________

9. Is the patient experiencing any pain, severe itching, bleeding, or evidence of infection?  
   Yes or No

10. Has the patient seen another provider for this issue? If so:  
    a. When was the patient seen? ____________
    b. Was a biopsy taken? Yes or No  
       i. If a biopsy was taken, give patient the outside pathology address so that the slides may be sent to MDACC.  
       ii. Give patient fax number so that pathology slides maybe sent to Undiagnosed Dermatology Clinic.
2. MA Process—Short term

Patient misses appointment

RN determines type of appointment

Skin screening LOW

Pending Status:
1. RN designates as MA-P on schedule
2. CSR submitted with CPC stamp

Database status: MA-P letter generated by front desk team

Skin screening HIGH

Pending Status:
1. RN designates as MA-HD on schedule and selects appropriate factors
2. CSR submitted using CPC stamp

Database status: MA-HD letter generated by front desk team

Undiagnosed Derm-Site Specific or Complete

Follow up by RN:
1. RN designates as MA-RN on schedule
2. 3 calls within 2 weeks
3. Provider review

If patient reached:
1. CSR submitted using CPC stamp

If patient not reached:
1. AA sends letter Certified Mail
2. Provider dictates

Database status: MA-RN-CO when patient contacted and appointment resolved or when Certified Mailer is returned from patient
UNDIAGNOSED DERMATOLOGY APPOINTMENT TYPES AND MISSED APPOINTMENT PROCESS

1. New Appointment codes and Types
   a. New Patients
      i. New Patient/Consult Skin Screening
         1. This is for patients who have no problems or issues
            and are coming in just for a screening
            a. Example: Cancer Manager
      ii. New Patient/Consult Undiagnosed Derm Complete
          1. For patients who have a skin lesion which is
             suspicious or concerning for skin cancer.
   b. Follow-up patients
      i. Skin Screening Low
         1. For patients who have no high-risk conditions and
            are coming for an annual screening exam.
      ii. Skin Screening High
          1. For patients who have one of the conditions
             expressed in the high-risk letter and are seen for a
             periodic screening exam.
      iii. Skin Screening w/Mole Mapping
           1. This appointment will be designated by the
              provider.
      iv. Undiagnosed Derm Complete
          1. For patients who are under treatment for a specific
             problem or being followed up for their treatment; a
             complete skin exam is done --includes annual
             screening visit if appropriate.
      v. Undiagnosed Derm Site Specific
          1. For patients who are under treatment for a specific
             problem or being followed up for their treatment.
             A complete skin exam is NOT done.
Time to Urgent Appointment FY08
For More Information

- Learn more about University of Texas M. D. Anderson Cancer Center: [www.mdanderson.org](http://www.mdanderson.org).
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