Using Technology to Improve the Efficiency of Your Office Practice

Welcome to the fourth module in the New Business of Medicine Series, Using Technology to Improve the Efficiency of Your Office Practice
Pre-Test Question 1

Which of the following is not a technique commonly used to identify waste in practices that hinder efficiency?

a. Constraint Analysis  
b. Perspective mapping  
c. Flow mapping  
d. Focus groups  
e. Interruption analysis

Pre-Test Question 2

How can tape/zone method be used during interruption analysis?

a. To determine how to physically group office resources and manpower  
b. To limit the number of interruptions physicians encounter  
c. To outline the best way to bill  
d. To improve physician-patient interactions
Pre-Test Question 3

How can cycle time analysis improve office efficiency?

a. It can speed up delivery of supplies  
b. It can identify steps in processes that are unnecessary the majority of the time  
c. It can eliminate the need for a consultant  
d. It assists physicians in more efficient decision making

Pre-Test Question 4

How long should a daily production plan “huddle” take?

a. 5 minutes  
b. 10 minutes  
c. 15 minutes
Pre-Test Question 5

What can a patient portal (website) do to improve efficiency and patient outcomes?

a. Display office policies
b. Link to patient education material
c. Link to appointment scheduling
d. Make office forms available
e. Market special services
f. All of the above

Pre-Test Question 6

Which of the following is often left out of ROI calculations when determining the cost effectiveness of technology investments?

a. Software costs
b. Hardware costs
c. Training fees
d. Software maintenance costs
e. Losses incurred during implementation
Pre-Test Question 7

Which of the following is not an important part of creating an efficient ideal care team?

a. Meeting regularly
b. Meeting in a “huddle” for daily planning
c. Reducing interruptions
d. Surveying patients on their experiences and satisfaction
e. Increasing documentation of processes
f. Standardizing processes and procedures then linking roles/responsibilities to them

Module 4: Using Technology to Improve the Efficiency of Your Office Practice
Objectives

Upon completion of this educational activity, participants should be better able to:

- Unmask opportunities to improve office efficiency
- Use process improvement techniques and technology to improve office efficiency
- Explain to colleagues the benefits process and technology may bring to their office practices

Patient Efficiency

Question: When you visit your doctor’s office, how often is it well organized, efficient, and does not waste your time?

Results: Patients are keenly aware of waits and delays in physician offices and can accurately report on their experience. The good news is that with some effort to make improvements practices can see good results.

Source: Lyn Ho, MD. Seven Strategies for Creating a More Efficient Practice, Simple, low-cost technologies and strategic outsourcing have helped this solo physician practice efficiently, even without any staff. Sept 2007 AAFP
Key Concepts to Improve Efficiency

- Use continuous flow: streamline key processes – e.g. prescription refills
- Optimize rooms & equipment: co-locate equipment
- Manage your bottlenecks: detailed cycle time analysis
- Anticipate patient needs at appt: huddle agenda
- Optimize the care team: interruption analysis
- Synchronize pt, provider, info: Start AM & PM appts on time

Step 1: Identifying Waste

- Methods to Identify Waste
  - Flow mapping/spaghetti diagram
  - Constraint analysis
  - Interruption analysis
  - Cycle time
  - Focus groups/patient advocates
Flow Mapping/Spaghetti Diagram

- Flow mapping: Examines a patient visit in entirety
  - Look at a variety of visits
  - Careful observation “through the patient’s eyes”
- Details to look for
  - Constraints/bottlenecks
  - Total cycle time and patient-provider time
  - Customer service
  - Facility barricades, equipment inadequacies
  - Paperwork
  - Waste, duplication, rework
  - Value-added and non-value added activities
  - Handoffs

Flow Mapping Example

<table>
<thead>
<tr>
<th>Pt arrives</th>
<th>Check in</th>
<th>Vitals</th>
<th>Exam room</th>
<th>Check Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register</td>
<td>Take chart</td>
<td>Provider reviews chart</td>
<td>Take encounter form</td>
<td></td>
</tr>
<tr>
<td>Arrive</td>
<td>Call patient back</td>
<td>Provider visit</td>
<td>Collect co-pay</td>
<td></td>
</tr>
<tr>
<td>Verify insurance</td>
<td>BP, Ht, Wt, +/- Temp</td>
<td>Phlebotomy</td>
<td>Print receipt</td>
<td></td>
</tr>
<tr>
<td>Print encounter</td>
<td>Room pt</td>
<td>Neb, BG, EKG</td>
<td>Make referrals</td>
<td></td>
</tr>
<tr>
<td>Match encounter to chart</td>
<td>Notify provider</td>
<td></td>
<td>Schedule return</td>
<td></td>
</tr>
<tr>
<td>Chart to MA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Spaghetti Diagram

- Draw a floor plan
- Watch one person perform their work, noting where they go and what they do
- Do this for each person in the process of focus
- Map the process steps

Interruption Analysis

- Can be performed by any individual in the practice
- Card method or tape/zone method
- 3x5 card in the pocket
  - Brief description of interruptions
  - Create categories
  - Use categories as column headings and count with tick marks the frequency over a short period of time
- Tape/zone
  - Make a note every time you leave your zone
Interruption Analysis Examples

- Provider
  - Chart info missing
  - Supplies missing
  - Supplies in poor proximity to the work
  - No team member available
- Nurse
  - Chart info missing
  - Lack of equipment/tools
  - Lack of information
- Administrative Assistant
  - Lack of information
  - Too many conflicting tasks
  - Cumbersome or missing tools

Measuring Cycle Time

- Identifies movement toward the goal of improved efficiency
  - Operational definition = the time in minutes from when a patient arrives in your office until they leave after all is done
  - Sampling strategy example: the patients scheduled at 10A and 3P once per week for each provider
  - Average the cycle times per provider per month and plot as a time series
Cycle Time Analysis Example

<table>
<thead>
<tr>
<th>Step</th>
<th>Feet</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front door to check-in</td>
<td>38</td>
<td>0.5</td>
</tr>
<tr>
<td>Wait at check-in</td>
<td>0</td>
<td>2.5</td>
</tr>
<tr>
<td>Check-in</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Wait at chair in waiting room</td>
<td>12</td>
<td>0.1</td>
</tr>
<tr>
<td>Sit in waiting room</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Walk to nursing staging area</td>
<td>25</td>
<td>0.5</td>
</tr>
<tr>
<td>Vitals</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Walk to exam room</td>
<td>15</td>
<td>0.5</td>
</tr>
<tr>
<td>Sit in exam room</td>
<td>0</td>
<td>14.5</td>
</tr>
<tr>
<td>Interaction with provider</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Walk to check-out</td>
<td>35</td>
<td>0.5</td>
</tr>
<tr>
<td>Wait at check-out</td>
<td>0</td>
<td>3.5</td>
</tr>
<tr>
<td>Check-out</td>
<td>0</td>
<td>1.5</td>
</tr>
<tr>
<td>Totals</td>
<td>125</td>
<td>68.1</td>
</tr>
<tr>
<td>Value-added time</td>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

Step 2: Creating an Efficient Office

High level concepts to achieve an efficient office:

- Optimize the care team
  - High functioning care teams
- Co-location
- Continuous flow
  - Focus on decreasing cycle time
- Visit planning
- Production planning
- Standardization
High Functioning Care Teams

A care team is the right mix of people coming together with the right tools to deliver the right care for a defined population of patients.

Attributes of a Highly Functional Care Team (p<.01)

• Clear expectations and available tools
• Easy to understand and discuss processes of care
• Information is available when needed
• Everyone on the staff is valued; Respect and sharing
• Feedback of performance and opportunities to grow
• Positive attitudes of co-workers

Source: (24 Practices) from John H. Wasson – Dartmouth, personal communication

Co-Location

• Proximity facilitates process
  • Secretary and nurse
  • Provider and nurse
  • All
Continuous Flow

- Tools to Use:
  - From the interruption analysis
  - Everything you need frequently is within arm’s reach – examples:
    - Electronic health records including real registry
    - Broadband internet connection with bookmarked medical knowledge sites, patient education materials
    - Hanging file with top 20 forms
  - Do the work as it comes along (including non-visit care)
  - It’s the intra-day equivalent of Open Access
    - “Do this twenty minute’s work in this twenty minutes.”
  - Continuous flow saves time (“hidden supply” arises)
  - Continuous flow decreases errors and increases satisfaction

Visit Planning

- Anticipate the reason for the visit

  - Create standard protocols for visit with specific needs – ED follow-up, planned visit in chronic disease, etc

  - Provider note at the end of dictation specifying key elements of follow-up visit “At the next visit we will review fasting lipids, check blood pressure, monofilament exam, neuro consult (Dr. Jones), and verify retinal exam”

- Use Huddles to identify patient-specific needs
  - Pre-session chart review
    - What to do if patient does not show
    - Look for gaps in chronic disease or preventive care
    - Obtain all necessary information and equipment prior to patient arrival
Production Planning

• Serves as an extension of visit planning
• In production planning the care team extends the logic to plan for the entire half day (‘clinical session’) to full day.
• This includes planning for
  • Bottlenecks
  • Patient Surges (patient scheduled for 15 min though actual time will be 45 min, and/or anticipating walk-ins during flu seasons)
• Goal is to thoughtfully plan the application of the team as a multi-faceted resource to meet the needs of the session or day

Standardization

• Standardize work
  • Scripting common scenarios:
    • “Your provider is not here today…”
    • “Provider X is no longer accepting new patients…”
• Standardize rooms and equipment
  • What should be in the room?
  • Where should it be placed?
  • Who will make sure it is there?
• Standardize procedures
Summary

• Create your ideal care team
  • Work toward a common goal
  • Meet regularly
  • Huddle
  • Plan for the work
• Get good information on how you are doing
  • Ask your patients what they want and need – and figure out how to deliver
  • Data on process and outcomes

Moving Ahead

• Use the Model for Improvement to test your hypotheses and sustain improvements (go to www.ihi.org and search on “model for improvement”)
• Have regular meetings (go to www.ihi.org and search on “efficient meetings” to improve the value of your meetings)
• Listen to those doing the work
Additional Resources

- Cycle time, measurement and graphing tools available on www.ihi.org, look under “Access” and “Tools”
- The Machine that Changed the World – Womack, Roos, and Jones
- Lean Thinking – Womack and Jones
- Learning to See – Shook, available from the Lean Enterprise Institute
- Theory of Constraints – Goldratt
- The Goal – Goldratt
- Lean.org – Lean Enterprise Institute
- www.clinicalmicrosystem.org – great tools in “the Green Book”

Please click the ‘Continue’ button below to take the post-test and evaluation.

Continue