AMERICAN COLLEGE OF EMERGENCY PHYSICIANS
SCIENTIFIC ASSEMBLY
1999

Triage: Is There Still a Place?

Has the concept of sorting patients by severity of illness led to a system of delayed treatment? When beds are immediately available in the department, is it really necessary to have patients sit in the waiting area after a nursing screen? Should all registration be done at the bedside? Papers describe how patients can be "triaged" away from the emergency department. The lecturer will describe the many new concepts and will examine how this function has been performed in other health care systems.

- Discuss the appropriate use of patient triage.
- Discuss the benefits of immediate patient care in the department.
- Discuss the role bedside registration may play in the busy emergency department.
- Discuss the use and abuse involved in triaging patients away from the emergency department.

TH-220
Thursday, October 14, 1999
11:00 AM - 11:55 AM
Room # N251
Las Vegas Convention Center

FACULTY

Thom A Mayer, MD, FACEP

Professor, Emergency Medicine and Pediatrics, Georgetown University School of Medicine, George Washington University School of Medicine, Washington, DC; Chair, Department of Emergency Medicine and Medical Director, Flight Services, Inova Fairfax Hospital, Falls Church, Virginia

Triage: Is there still a place?

Thom A. Mayer, M.D., FACEP, FAAP
Chair, Department of Emergency Medicine
Medical Director, Flight Services
Inova Fairfax Hospital, Falls Church, VA

Triage: Goals of the Discussion

1. Define (reinvent?) triage

2. Explore established triage concepts

   - Advanced triage-advanced initiatives
   - Pain management at triage
   - Triage short form
   - Bedside registration
   - Triage away programs

Triage: Goals of the Discussion

3. Discuss customer service in triage

4. Discuss new concepts - the triage of the future

   - Physician/PA triage
   - Patient "lateralling"
   - Third lobby functions
   - Patient healthcare summaries

Triage Functions

1. Identify severity of illness or injury
   - Patient assessment and documentation utilizing patient's current complaints, signs/symptoms, history, medications, and vital signs
   - Acuity, decision, and categorization of patient
   - Reevaluate patients as indicated
   - Obtain room assignment for critical patients

Triage Functions

2. Provide appropriate stabilizing clinical and non-clinical supportive care
   - Initiate advanced triage/advanced initiative protocols, physician orders, first-aid, laboratory draws, and/or comfort measures as needed
   - Collaborate with other emergency personnel regarding families and social support
   - Take telephone orders from patient's primary physician when there is no communications nurse

Triage Functions

(continued)

2. Provide appropriate stabilizing clinical and non-clinical supportive care
   - Transport critical patients to treatment rooms as needed
   - Perform suture removal or obtain physician/physician assistant input if wound infection or other suture consultation is needed
   - Perform electrocardiographs as needed if monitored beds are not available
   - Medicate patients as needed (eg, fever control, pain

Triage Functions

(continued)

2. Provide appropriate stabilizing clinical and non-clinical supportive care

   - Complete medical record and occurrence reports on patients who leave without being seen
   - Call registration for medical record on appropriate

Triage Functions

3. Communicate clinical and non-clinical information to other emergency providers to transition patient care appropriately

   - Collaborate with charge nurse/team leader and/or charge physician
   - Initiate flow of patient and his or her paperwork to the appropriate area
   - Communicate with the communications nurse about impending arrival of patients to triage

Triage Functions

(continued)

3. Communicate clinical and non-clinical information to other emergency providers to transition patient care appropriately

   - Notify appropriate primary physician about patient's arrival as requested
   - Assist private physicians with locating patients
   - Answer telephone as needed

Triage Functions

4. Provide the first, best opportunity for customer service to patients, families, and the community
   - Act as befits the first professional customer service representative that the public meets
   - Act as befits the first professional caregiver that the patient and/or family meets
   - Assist with phone orders from primary physicians when communications nurse is not present

Triage Functions

(continued)

4. Provide the first, best opportunity for customer service to patients, families, and the community
   - Provide comfort items (pillows, blankets, basins, etc.)
   - Perform point-of-impact intervention
   - Assist in informing patients and families regarding waiting times, follow-up information, and the like (in collaboration with primary care nurses for patients already in treatment areas)

Triage Functions

5. Act as an "ancillary lobby" for the hospital
   - Facilitate flow of department by crowd control/visitor control
   - Assist in keeping family members aware of patient status
   - Assess and facilitate transport of laboring women to labor and delivery
   - Assess and facilitate transport of direct admissions who present to triage
   - Monitor waiting room and give assistance as needed

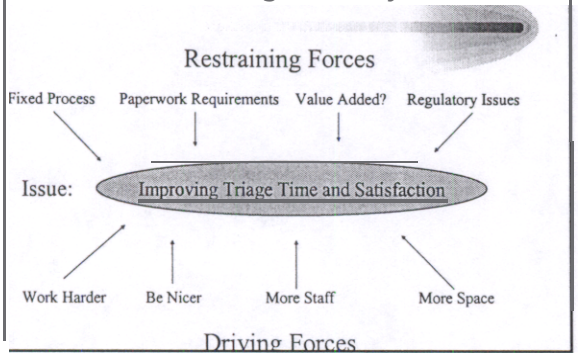
Triage Functions

(continued)

5. Act as an "ancillary lobby" for the hospital

Give directions to patients, families, and visitors
Assist patients into and out of cars as needed
Assist patients with wheelchairs as needed
Obtain additional stretchers and wheelchairs when needed
Perform crisis intervention with families/others

Lewin's Force Field Analysis and Change Theory



Key Concept

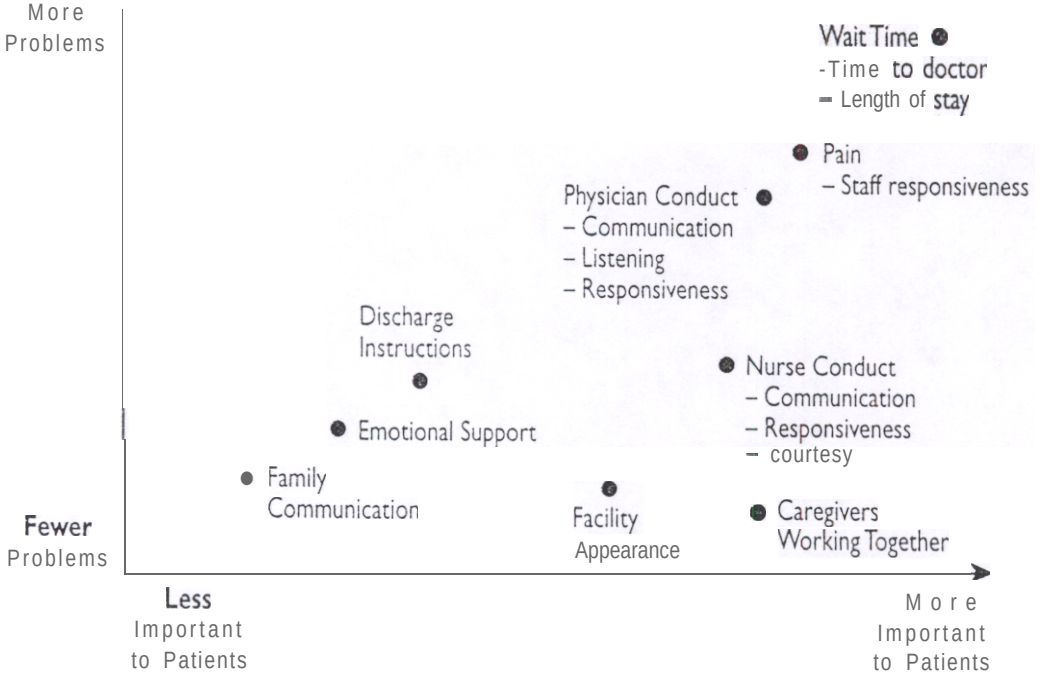
-We can talk all we want about functions but they want to get back there!

–For the patient it's "get me to a

1. room
2. doctor

Most Important and Most Problematic

Patient Assessment of Problems in EDs



Customer Service and Triage

You never get a second chance to make a first impression

Customer Service and Triage

1. "You came to the right place!"
2. "Thanks for coming to see us!"
3. Establish/negotiate expectations
   - Process expectations
   - Service expectations
   - Time expectations

Volume I

Expediting Time to Physician

I	II	III
Minimizing Up-front delays	Liberating Physician Time	Speeding Physician Interventions
#1 Triage Short Form	#3 Charting Scribe	#6 EP Efficiency Profiling
#2 Bedside Registration	#4 Preformatted Charting	
	#5 Dedicated Communications Nurse	

Volume II

Expediting Diagnosis

IV	V	VI
Eliminating Unnecessary Tests	Leveraging Wait Times	Speeding Test Executions
#7 X-ray ordering guidelines	#9 Preemptive order guidelines	*Laboratory Reform*
#8 Ancillary usage profiling	#10 Gridlock bed turnover	#11 Dedicated phlebotomist
		#12 Lab turnaround time guarantees
		Radiology Reform
		#13 Dedicated x-ray technician
		#14 EP first look

Volume III

Expediting Inpatient Admission

VII	VIII
Speeding Admission Orders	Speeding Inpatient Bed Placement
#15 Hospitalist admission	#18 Bed-control bypass
#16 EP admit authority	#19 Instant bed status alerts
#17 Preemptive bed request	#20 No-delay nurse report

Advanced Triage/Advanced Initiatives

Definition:

To improve employee and patient satisfaction through implementation of an empowerment strategy allowing for earlier diagnosis, intervention, and treatment

Preemptive Order Guidelines in Brief

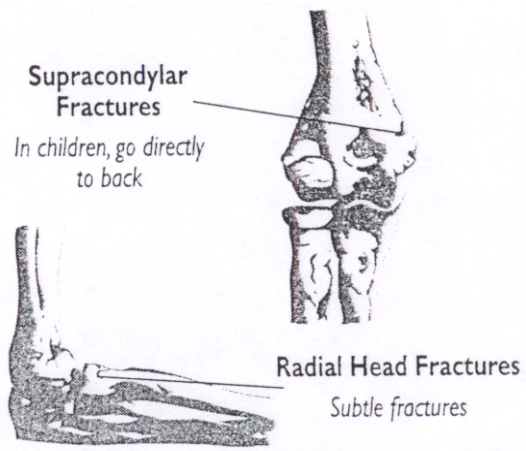
Nurses Able to Order Tests at Triage

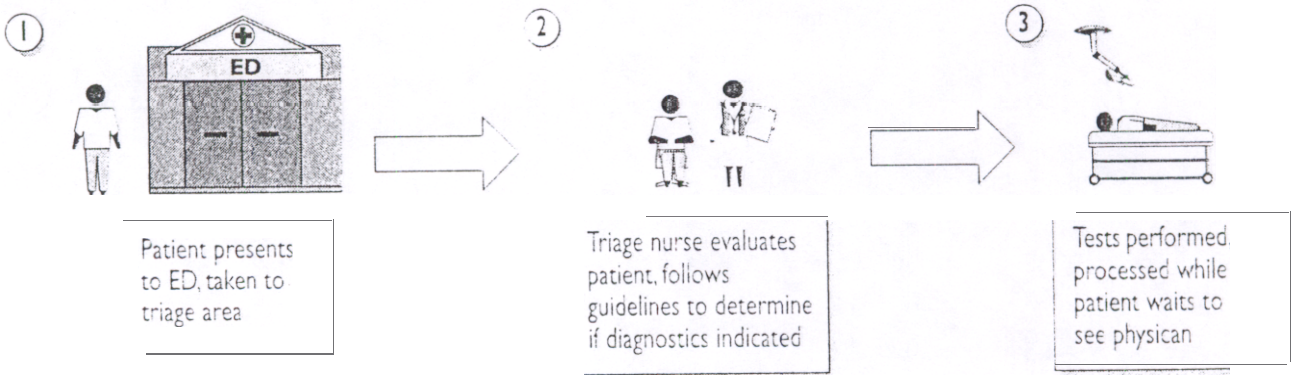
Suspected Elbow Fractures

- Radial head fractures are often subtle dull aches in elbow, pain difficult to localize—always get *an x-ray* on these patients

  "Fat-pad" signs are common early clues

  Beware of supracondylar fractures of the humerus in children; these are *dire emergencies* and should go directly back for evaluation





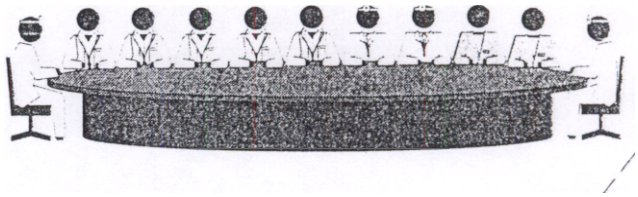
1. Patient presents to ED, taken to triage area
2. Triage nurse evaluates patient, follows guidelines to determine if diagnostics indicated
3. Tests performed, processed while patient waits to see physican

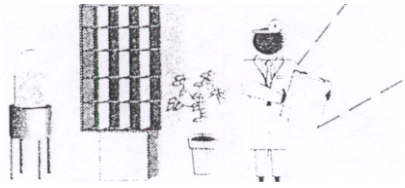
Guideline Development at Fairfax Hospital

1. Department establishes "triage assessment team" reponsible for development implementation of preemptive order guidelines: team meets for three to four hours every ocher week

Team Members	
• Department Chair	• ED Senior Registrar
• Department Vice Chair	• Two Staff Nurses
• Nurse Manager	• Two Emergency Physicians
• Assistant Nurse Manager	• Clinical Nurse Specialist

2. Team focuses on protocols for extremity trauma due to volume of presentations. develops draft guidelines that allow staff to quickly evaluate need for radiograph





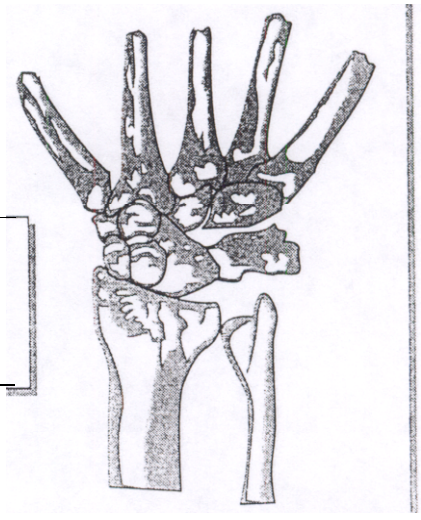
Focusing on the Extremities

Suspected Wrist Fractures

- Usually discrete tenderness and/or deformity
- If localized here and no tenderness above, just wrist film is okay
- Colle's or Smith's Fractures--usually discrete to the distal radius and ulna (styloid)
- Examine the hand carefully
  1. If no bony tenderness beyond wrist or joint, just *wrist* film
  2. Any bony tenderness beyond distal radius/ulna. order hand and *wrist*

Remember: Always check *a* joint above and a joint below!

To the Point
Guideline outlines clear parameter for ordering films



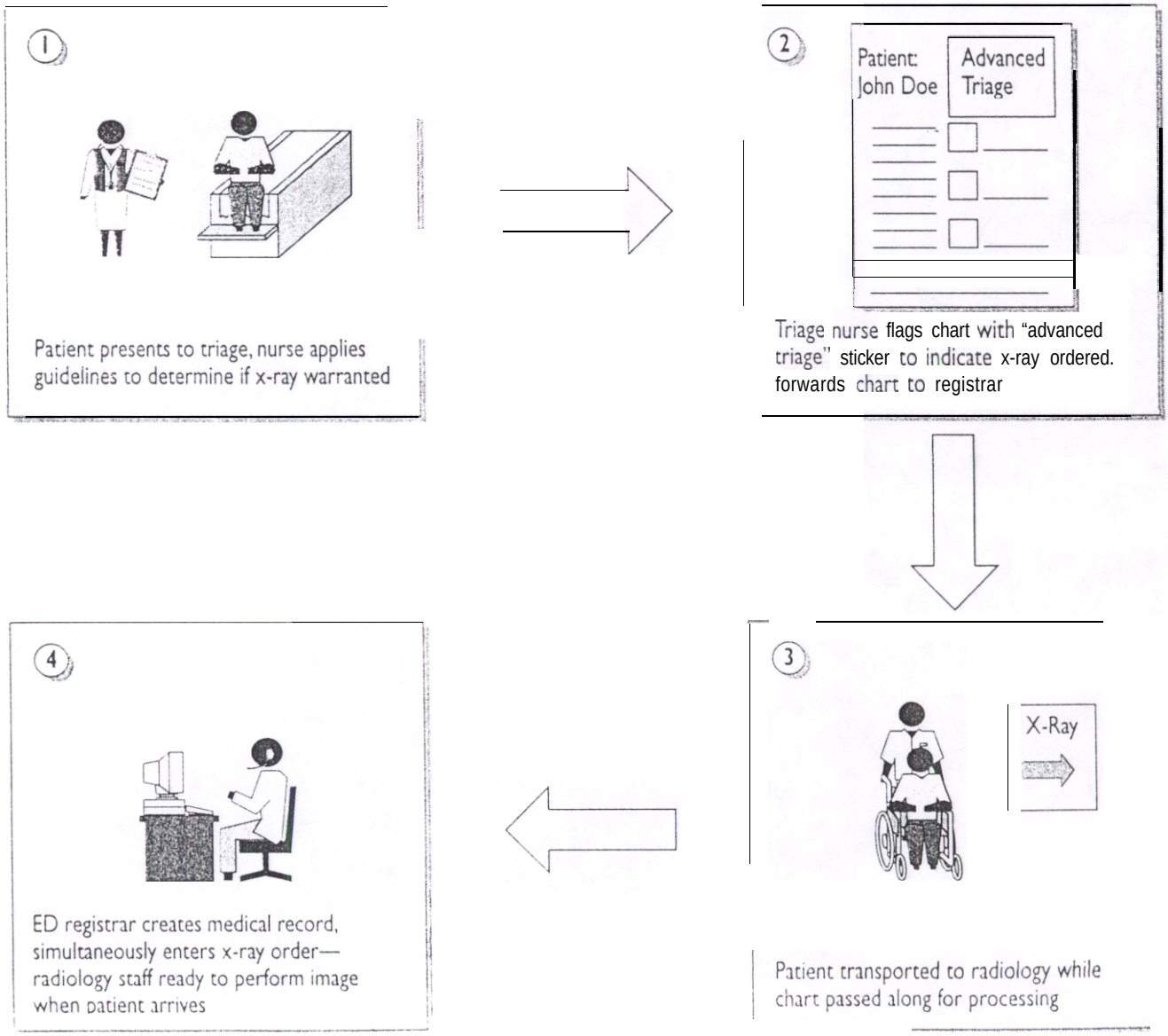
Casting a Wide Net
Expansive guidelines for extremity injuries mean more patients exposed to potential time savings

Fairfax's Extremity X-Ray Guidelines

- Acromioclavicular Joint
- Shoulder
- Humerus
- Elbow
- Forearm
- Wrist
- Knee
- Tibia/Fibula
- *Ankle
- Scapula
- Hand
- Foot

Source: Mayer T, et al., "Advanced Interventions: Improving Patient Satisfaction," *Topics in Emergency Medicine* June 1997; 19: 27; CIC interviews.

Triage Process Redesigned to Accommodate Guidelines

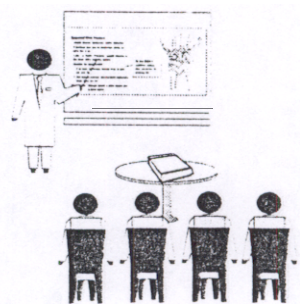


Hardwiring Orders at Triage

1

Staff Training

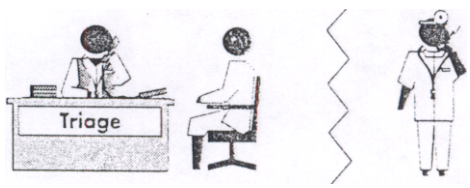
Development team responsible for training staff in use of guidelines—physicians receive training during staff meetings, nurses attend mandatory educational sessions hosted by department chair



2

Troubleshooting

Triage nurses "go live" with protocols; development team members available to answer process-related and clinical questions remind staff to use guidelines

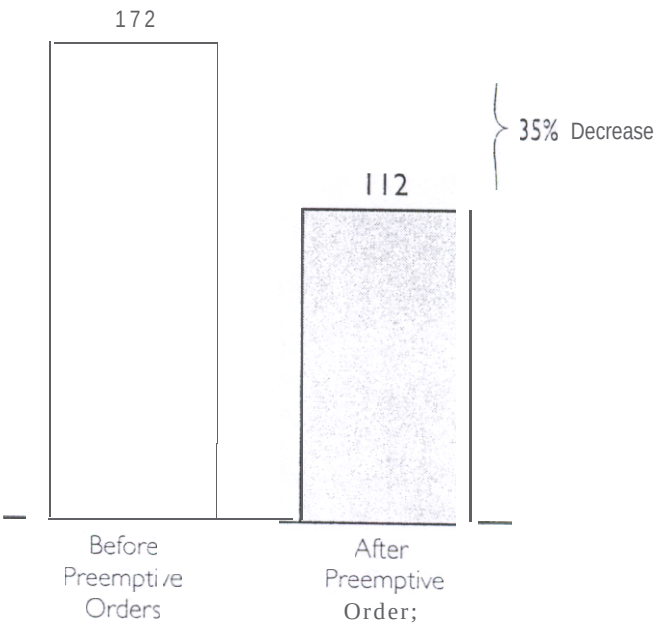


3

Physician Oversight

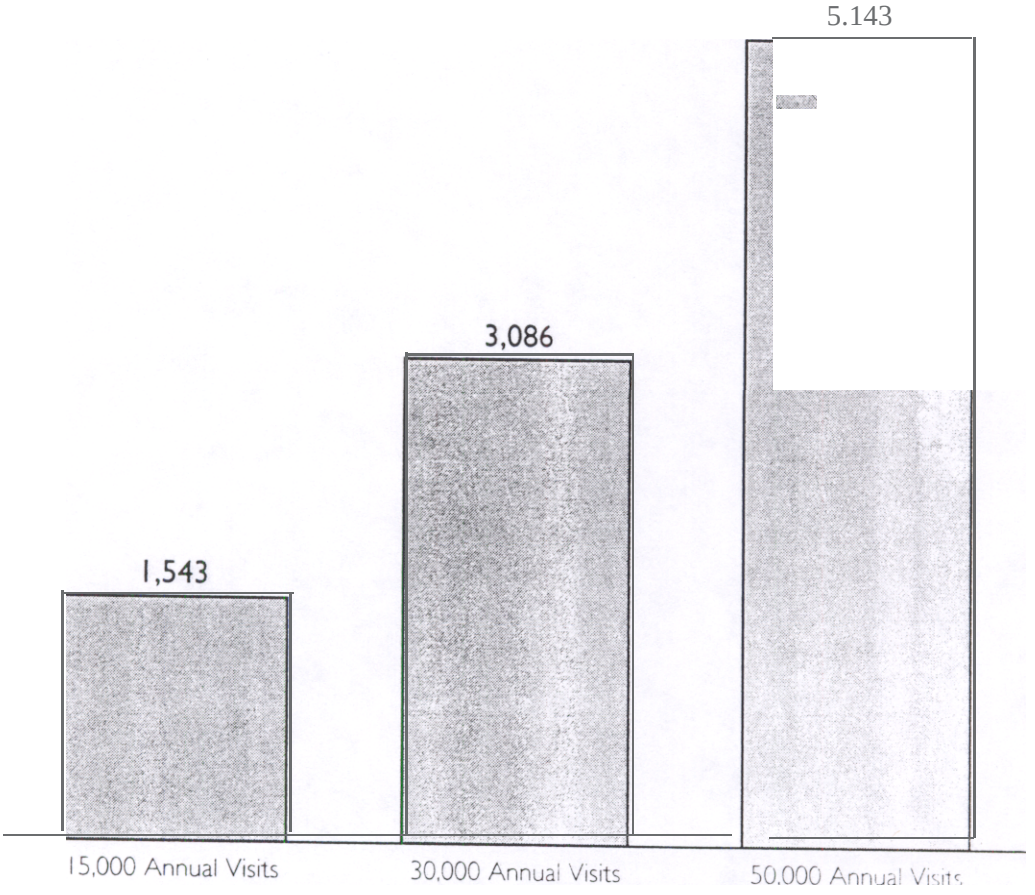
To minimize over-ordering by nurses, physicians conduct one-on-one educational interventions when triage nurse orders x-ray that is not clinically indicated

Dramatic Improvement at Fairfax Hospital

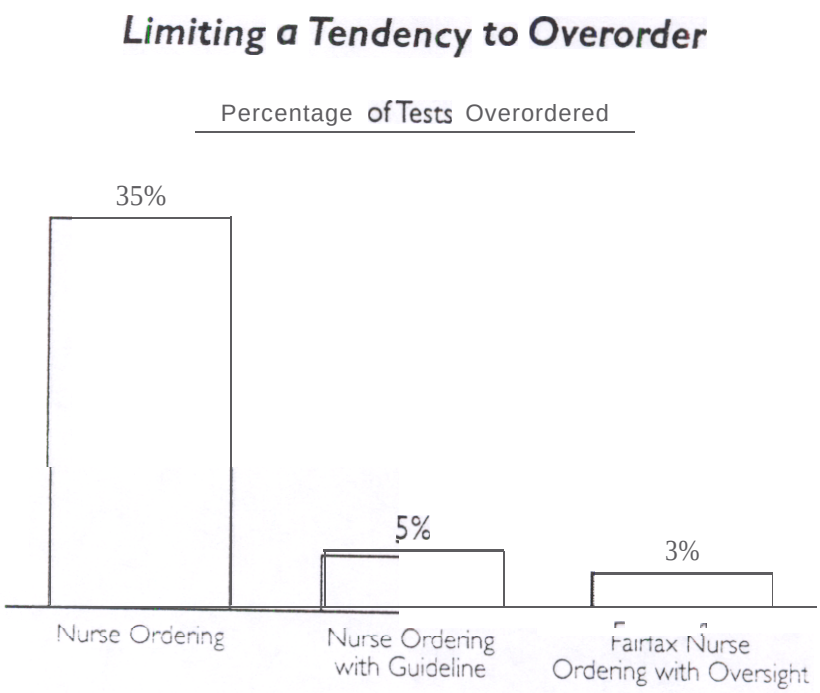


Practice Provides Substantial Time Savings

Potential Bed Hours Saved



Limiting a Tendency to Overorder



Assessing Applicability of Triage Short Form

Member Self-Test

Current Triage Practices		Yes	NO
#1	Is triage staffed by only one nurse across majority of the day!		
#2	Is if standard practice for your triage nurses to conduct comprehensive patient assessments (e.g.. document full patient history, take down complete set of vital signs)!		
#3	Across any given day, is it common for patients to experience significant waits prior to being triaged?		
#4	Do your primary treating nurses commonly pressure triage nurses to conduct full patient assessments!		
Downstream Concerns			
#5	Is there a free ED bed typically available 70 percent of the rime!		
#6	Are providers in the back quick to perform full assessments, initiate treatment after patient is placed into an ED bed!		
	Total "Yes" Scores		

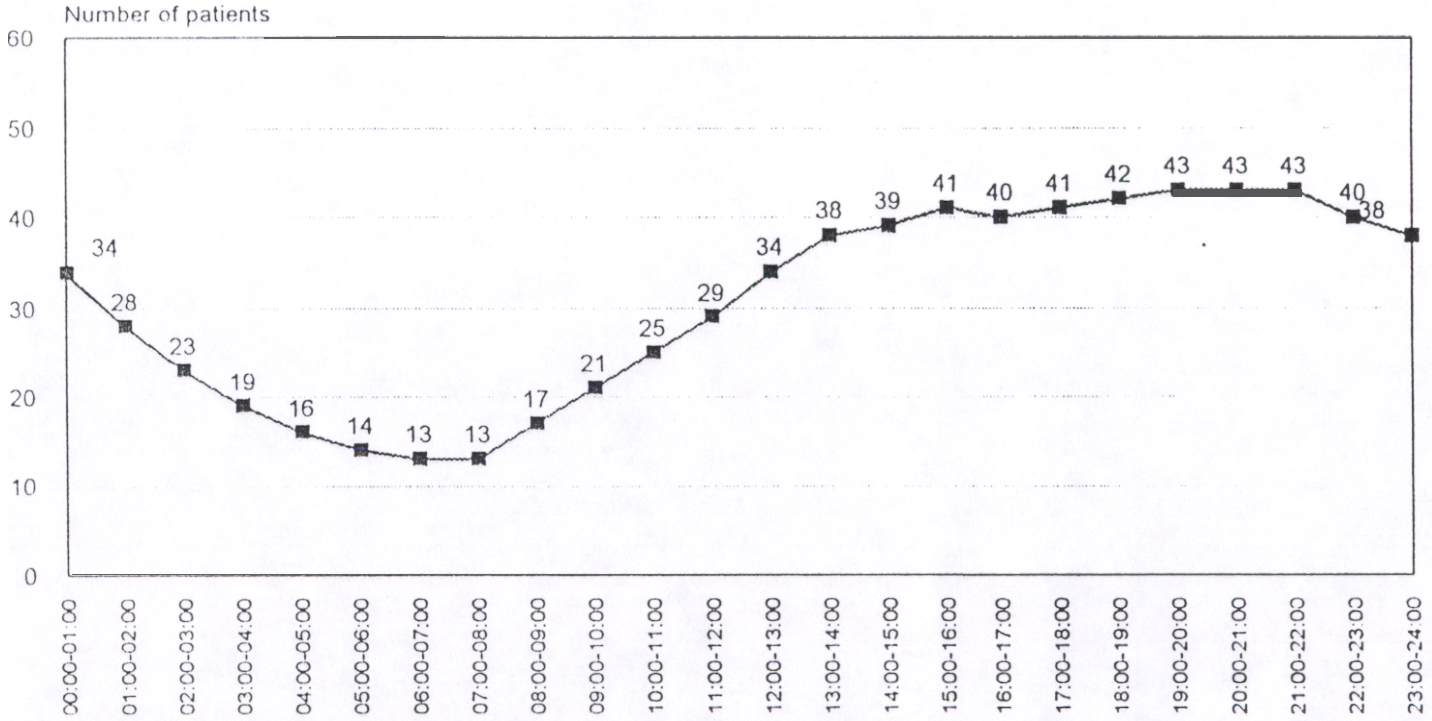
Interpreting Self-Test Results

General Applicability: *Primary benefit of practice* is streamlining *triage* process to include *capture* of *patient information truly necessary* in making *prioritization decisions. Three* ***or more*** *affirmative responses* to *questions #1–4 suggest strong* potential *"fit" with improving patient throughput.*

Additional ***Considerations:*** However, *practice* contingent on bed, *provider availability; negative* responses *to* questions *#5–6* suggest *that hospital* should focus *initial* reform *efforts* further *downstream* in *care process.*

EDIT - Fairfax Hospital Emergency Department

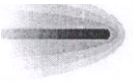
Patient Workload - First Quarter 1998



Data obtained from Phamis Alpha Emergency Dept. Log

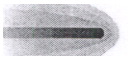
Number of patients seen during this time period = 3713 Number in analysis = 3484. Number not included due to incomplete time information = 229

Pain Management at Triage



- Standing orders
- Elopement issue
- Liability issues
- Wound management and irrigation

Bedside Registration



"The cattle gates were up at the airline counter ."

Bedside Registration

Customer focused

Major culture change (Who is running the department?)

Many paths to the same solution

All ED's do bedside registration

Bedside Registration

1. By hand (duplicative)
2. Hardwired
3. Rolling cart approach
   $10,000-$20,0000
   Back-up systems essential
   - Compatible with hospital MIS

Bedside Registration - Sources of Resistance

1. Culture change
2. Capacity constraints
3. IS resistance

Triage Away

1. Concept "You came to the wrong place."
2. Rapid diagnostic and treatment unit versus clinic
3. Key components
   - Somewhere to send them
   - Double standards of care issue
   - Protocol driven
   - Ongoing monitoring and QI
   - Explicit approval and involvement of risk management

Potential Advantages of Triage-Away Programs

- Severity of illness or injury can be accurately and reproducibly assessed at triage
- Multiple patients present to ED's with minor problems
- Triage-away programs save time
- Triage-away programs save money
- Triage-away programs send patients to more appropriate health care institutions
- Triage-away systems are safe
- Triage-away systems are legal
- Triage-away systems are ethical because they conserve resources for appropriate ED patients

Limitations of Triage-Away Systems

- There is great variability among physicians, nurses, and even computer programs in correctly assessing level of acuity and severity
- Because of this, triage-away is unsafe
- Once triage has occurred, it is just as easy to go ahead and treat the patient
- Physician/nurse agreement on triage decisions was only fair in the one study
- There is no accepted acuity rating scale for ED patients, rendering studies difficult if not severely constrained

Limitations of Triage-Away Systems

(continued)

- Admission is not a good measure of specificity because many ED patients require care, but not admission
- Triage-away programs deny care to medically disenfranchised patients
- Triage-away programs do not take into account the marginal cost of healthcare and the benefits thereof
- Triage-away programs rest on questionable ethical grounds, at best

Demand Management

-Revolutionary wave of the future

or

– Healthcare rationing by inconvenience

Evolving Concepts of Triage

1. Physician/PA at triage
2. Patient "lateralling"
3. The hospital's "second lobby"

Physician/PA at Triage

1. Bodies coming down stream
2. Do the unexpected
3. Order entry
4. Process issues - Who is going to do this stuff?
5. Two processes
   - Rooms available
   - No rooms at the inn

Physician/PA at Triage

(continued)

6. Continuity issues
   - Screening MD
   - Treating MD
   - QI feedback - patient satisfaction
7. Liability issues

Triage - Second Lobby Function

1. Decor/physical plan
2. Resources
3. Ambiance
4. Expresso bars
5. Whose budget?

Triage - There is still a place!

1. Shared experiences
2. Questions

Assessing Applicability of Preemptive Order Guidelines

Member Self-Test

	Yes	No
Opportunity		
#1 Are nonurgent patients commonly waiting in excess of 30 minutes to see a physician!	_____	_____
#2 Is average time to physician for nonurgent patients currently greater than x-ray turnaround time!	_____	_____
#3 Do emergency physicians typically order all diagnostic tests for patients in the emergency department!		
staff Roles		
#4 Are emergency physicians willing to cede greater clinical responsibility to nurses!	_____	_____
#5 Does triage nurse conduct full patient assessment prior to placing patient in bed!	_____	_____
#6 Are triage nurses generally aware of which tests are appropriate for patients with different chief complaints!	_____	_____
#7 Is it possible to redesign order-entry so ancillary rests can be ordered prior to the establishment of patients' medical records!	_____	_____
Guideline Development and Compliance		
#8 Are emergency physicians willing to take part in guideline development efforts!	_____	_____
#9 Are emergency physicians and staff able to reach consensus on best practice!	_____	_____
#10 Do emergency department nurses generally exhibit compliance with all guidelines and care paths currently in place!	_____	_____
#11 Will the emergency physician-nurse relationship in the department allow for retrospective review and education when rests are ordered inappropriately!	_____	_____
Total "Yes" Scores	_____	

Interpreting Self-Test Results

General Applicability: Primary benefit of practice is reducing overall LOS in the emergency **deportment** by stacking time to physician, ancillary turnaround. Six or more affirmative responses to the questions above suggest practice has strong potential "fit" for improving patient throughput at your institution.

Direct Indicators: While the total number of positive responses serves as a rough guide to practice applicability, members responding "yes" to question #2 are positioned to exact greatest benefit from preemptive order guidelines as they are able to fully embed x-ray turnaround into up-front wait for physician.

Major Vendors Providing Telephone-based Nurse Triage Services

CareWise,Inc (206/448-6432)
11000 NE 33rd Place, Suite 200
Belleview, WA 98004

Health Decisions International, LLC (800/403-0099)
1667 Cole Boulevard
Building 19, Suite 350
Golden, CO 80401

Major Vendors Providing Telephone-based Nurse Triage Services

Access Health Services (800/829-2550)
310 Interlocken Parkway, Suite A
Broomfield, CO 80021

National Health Enhancement (800/345-3342)
Systems, Inc.
3200 North Central Avenue
Phoenix, AZ 85012

Major Vendors Providing Telephone-based Nurse Triage Services

United HealthCare Corporation (612/797-4954)
6300 Olson Memorial Highway
Golden Valley, MN 55427

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Advanced Triage – Advanced Initiatives

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Physician Triage

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