

Patient Safety Event Reports by Family
Physicians, Staff and Patients:
A Pilot Study

The American Academy of Family Physicians
Developmental Center for Evaluation and Research in
Patient Safety in Primary Care

And

The AAFP National Research Network

The Study Team

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And

A lead physician and a study coordinator in each of
the ten participating practices

AIMS

- To test and refine the AAFP Web-based reporting system
- To test whether family doctors, their staff, and patients will report errors
- To compare patterns of errors reported by physicians, staff, and patients
- To estimate rates of errors in primary care practices as reported by physicians, staff, and patients during intensive reporting periods

METHODS

- Errors Reporting Tools
- Participants
- IRB approval
- Training
- Errors reporting
- Taxonomy
- Coding the reports

REPORTING TOOLS

FORMATS

- Web-based (physicians, staff, patients)
- Telephone (patients only)
- Paper (physicians, staff, patients)

FIELDS

- Patient demographic information
- Description of event
- Consequences of event
- Contributions to event
- What could have prevented event?
- Reporter's assessment of harm

PARTICIPANTS

- Physicians, staff, and patients from 5 family physician offices and 5 family practice residency clinics
- Practices represent rural, urban and suburban sites and include private practices and community health centers

The IRB Approval Process

- With active management, easier than anticipated
- Accomplished within three months
- Only one hospital refusal, despite local IRB approval

Training

- Train the trainer model
- One and a half day meeting in Kansas City in February 2003
- The study team, and one physician and one nurse (or administrator) from each practice
- Provided education on medical errors and training in the study methods
- Interactive and social to form group cohesion
- Established listserv for communications

Errors Reporting

- Participants from each practice reported for a 10-week period from April through June 2003
- Each practice was assigned Intensive Error Reporting Days (all errors they observe) for 5 days during the study, 1 day every other week. (to estimate “maximum reportable error rates”)
- Study staff maintained regular weekly contact with the site coordinators via phone and listserv

Errors Reporting by Patients

- One day every other week per practice
- Solicitation to report errors distributed to all adult patients on the reporting days
- Inviting patients to submit reports via mail, web, or telephone

The Taxonomy

- AAFP/Dovey classification system, developed in prior reporting studies of the AAFP*
- An empirically derived, evolving taxonomy
- Up to five levels of detail
- The categories are not mutually exclusive

AAFP/Dovey Taxonomy - first two levels

■ Process

- Office administration
- Investigations
- Treatments
- Communication
- Payment
- Workforce

■ Knowledge and Skills

- Execution of a clinical task
- Execution of an administrative task
- Wrong diagnosis
- Wrong treatment decision

Coding Reports

- A difficult task!
- Agreement level good among four coders, up to the third level of classification.
- Reports were assigned up to four codes in each of these areas
 - The error report
 - Consequences
 - Contributing factors
 - Possible prevention strategies

PRELIMINARY RESULTS

Results

- 401 physicians and staff signed a consent form and/or participated in site training, 86% of eligible participants
- 854 reports were submitted
 - 325 reports were from physicians
 - 404 from staff
 - 125 from patients

Distribution of Submitted Reports by Reporting Group

	N	%
Physicians	325	38
Staff	404	47
Patients	125	15
Total	854	100

Physician Error Report

Two different patients with urinary symptoms called for advice. The nurse switched the U/A reports and notes about their respective symptoms. I did not look at the U/A on the first patient to verify that it belonged to the patient described on the symptom report. I recommended treatment for yeast infection based on her symptoms and asked for a urine culture but did not treat her. When I was shown this U/A later with the correct symptom report, I gave Macrobid for the possible UTI.

Staff Error Report

Pt called this AM c/o chest pain, concerning pain radiating to right arm SOB & a runny nose. Pain started last nite & has increased in severity. Front office person gave the pt an appt instead of asking a nurse to triage the call. When the pt arrived they were immediately sent to ER by ambulance. If a nurse had spoken to this pt, they would have been sent to ER first.

Resident Error Report

Was given Rx refill authorization request. Did not have time to look at chart and respond until today 6 days later (another resident refilled Rx next day but I did not know that). She was not my patient.

Patient Error Reports

After childbirth labor, a doctor forgot to sew up my episiotomy tear.

I was waiting to have a Chest X-Ray. Nurse called my first name – and blood was drawn. I question the fact I didn't know the Dr. who ordered it. So she took the blood and walked me back to X-Ray. When I was leaving X-Ray she said she had no orders for blood. There were 2 people with the same first name.

Unusual Error Reports

The courier who delivers our x-rays to the hospital for reading put the x-ray (soft)case on top of the car while packing car with other items. Forgot they were there and drove off with x-rays still on top of car. Apparently x-rays blew off into the ditch and over the weekend during intensive spring cleanup, a volunteer found some of the x-rays and took them to the hospital. Some of the x-rays were returned, but not all. Will need to contact the 5 patients whose films are involved and re-do x-rays.

Unusual Error Reports

Patient was in for an initial visit with complaint of fatigue. Weight noted to be 250 pounds on the chart. He returned, after labs, etc., back for report and plan. Was weighed again and found to be 323 pounds. Turns out he told his weight to the aide who just wrote it down without actually weighing patient.

Process Errors

Office Administration

Error Classification	% Error Codes - Physicians (N=206)	% Error Codes - Staff (N=265)	# Error Codes - Patients (N=16)
Filing system	9	7	0
Chart complete/ available	18	21	1
Patient flow	5	6	3
Message handling	4	5	0
Appointments	8	15	1
Maintenance of practice site	3	2	3

Investigations

Error Classification	% Error Codes - Physicians (N=206)	% Error Codes - Staff (N=265)	# Error Codes - Patients (N=16)
Laboratory	10	5	1
Diagnostic imaging	5	2	0
Other investigations	2	0.4	0

Treatments

Error Classification	% Error Codes - Physicians (N=206)	% Error Codes - Staff (N=265)	# Error Codes – Patients (N=16)
Medications	17	13	2
Other treatments	2	1	0

Communication

Error Classification	% Error Codes - Physicians (N=206)	% Error Codes - Staff (N=265)	# Error Codes - Patients (N=16)
With patients	3	10	2
With non-physician colleagues	0.5	0	0
With physician colleagues	3	1	0
Between whole healthcare team	4	3	0

Payment & Workforce

Error Classification	% Error Codes - Physician (N=206)	% Error Codes - Staff (N=265)	% Error Codes - Patients (N=16)
Payment	1.9	4.9	1
Workforce	0.5	2.3	0

Knowledge & Skills

Error Classification	% Error Codes - Physician (N=206)	% Error Codes - Staff (N=265)	# Error Codes - Patients (N=16)
Execution of a Clinical Task	2.4	1.5	1
Execution of an Administrative Task	0.5	.8	0
Wrong Diagnosis	0.5	0	1
Wrong Treatment Decision	0.5	0	0

Top 6 Error Codes Assigned to Resident Reports (N=34)

Error Classification	% of Error Codes
Chart completeness and availability	27
Patient flow	15
Medications	15
Maintenance of physical buildings/ surroundings/ practice site	9
Laboratory	9
Communication between whole health team	9

Rank Order of Top Error Codes

Error Classification	Physician	Staff	Patients
Charts	1	1	3
Medications	2	3	
Laboratory	3	7	
Filing	4	5	
Appointments	5	2	
Patient Flow	6	6	1
Diagnostic Imaging	7	11	
Communication: Team	8	10	
Messages	9	8	
Communication: Patients		4	3
Maintenance: Building			1

Rank Order of Consequence Codes

Consequence Classifications	Physicians (N=270)	Staff (N=327)
Patient put at heightened risk	1	4
Discovered & resolved error	2	1
Physician time	3	11
Delay in receiving care	4	6
Patient time	5	3
Sub-optimal care	6	
Patient not fully investigated	7	
Nurse/ staff time	8	2
Patient upset or anxious	9	5
Delay in starting treatment	9	11

Rank Order of Contributing Factors

Contributing Classifications	Physicians (N=270)	Staff (N=309)
Lack of attention to detail	1	2
Busy day	2	3
Team communication failure	3	
Provider careless	4	
Don't know	5	1
Provider failed to follow protocol	6	9
Task not completed	7	6
None		4
Provider in a hurry		5
Anxious/difficult patient		7

Rank Order of Prevention Strategy Codes

Prevention Classifications	Physicians (N=219)	Staff (N=278)
Double-checking system	1	1
No strategy offered	2	1
Following protocol	3	5
More staff training/ education	4	
Better communication- pt info	5	
More diligence by physician	6	6
More attention to detail	7	3
Taking time to slow down		4
Better organized system	7	
More diligence by admin. staff	7	7

Preliminary Conclusions

Preliminary Conclusions

- ❑ Family physicians and their staff will report medical errors during a ten week study period
- ❑ Types of error reports are similar between physicians and staff
- ❑ The most common reported errors by physicians and staff are related to medical records
- ❑ Few knowledge and skills errors were reported
- ❑ This was not a good method for soliciting patient reports

Just the Beginning!

Discussion. . . .