Emergency Medicine Clinical Information Manager (Scribe) Program

By Prince P. Raj, MHA and Rock Ferrigno, MD

Wednesday December 11, 2013
09:30AM – 10:45AM
11:15AM – 12:30PM

Session Objectives

To educate health systems, academic medical centers, and community hospitals about the benefits and challenges of implementing a Clinical Information Manager (Scribe) Program

Topics include:
- #1. Operational improvement
- #2. Provider satisfaction
- #3. Patient satisfaction
- #4. Education
- #5. Financial performance
Goals of the Scribe Program

- To facilitate and expedite Emergency Department (ED) patient flow by allowing providers to spend more time on direct patient care and education while concurrently producing more thorough and higher quality documentation.

Scribe Program Presentation Format

- Scribe Program overview
- Goals
  - #1. Operational improvement
  - #2. Provider satisfaction
  - #3. Patient satisfaction
  - #4. Education
  - #5. Financial performance
- Scribe Program overview and goals Q&A
- Case Study #1: Community Hospital (Bridgeport Hospital)
- Case Study #1 Q&A
- Case Study #2 Academic Medical Center: (RR UCLA Medical Center)
- Case Study #2 Q&A
- Funding the Scribe Program and tips for success
- Scribe Program final Q&A
What is a Scribe?

An unlicensed member of the Emergency Medicine (EM) Team whose duty is to assist EM Providers (Physician or Mid-Level) with administrative duties during the course of their ED shift.

Duties include but are not limited to:
• Charting
• Assisting with navigation of the EHR and other IT Systems
• Notifying providers when test results are available for review
• Expediting consults and dispositions

What is a Clinical Information Manager?

A Clinical Information Manager (CIM) is an experienced scribe with at least 1 year of Scribe experience.

CIMs
• Are more knowledgeable about Emergency Medicine and ED patient flow
• Are able to anticipate a provider’s needs
• Understand what is needed to make a disposition and how to manage the expectations of providers, nurses, patients, and families
• Have a better rapport with the EM Team/Family
• Are able to assist with the training of new Scribes
• Are more tech and EHR savvy: May assist with orientation of new providers
Unlicensed status of Scribes

- Scribes/CIMs perform their assigned duties under the direction of EM Providers
- Scribes/CIMs are not permitted to make independent decisions or translations while capturing or entering information into the health record beyond what is directed by the provider
- Scribes/CIMs are not permitted to participate in direct patient care (Hands-off)

Common Scribe documentation duties

- History of the patient’s present illness (HPI)
- Review-of-systems (ROS)
- Past, Family, and Social History
- Physical examination
- Laboratory, EKG and X-ray interpretations
- Progress notes
- Procedure notes
- Disposition
- Clinical impression
- After care instructions
Scribe / CIM training

Paid Training is ~90 days: 3-4 weeks of didactic classroom training followed by 6-8 weeks of training on the ED Floor

- Medical terminology
- Medical shorthand
- Anatomy and Physiology
- EM physician documentation
- EM billing and coding
- EM documentation risk management
- EHR and other IT systems
- ED patient flow and throughput
- Admit, discharge, and transfer process
- Patient / Provider satisfaction
- Mock ED patient scenarios
- EM medical decision making

Who is the ideal Scribe candidate?

- Undergraduate degree (science preferred) with interest in pursuing further graduate medical or health education
  - Medical School
  - PA School
  - Nurses or nursing students with desire to pursue NP/APRN or above
  - MPH/MHA students interested in healthcare performance improvement
  - Experienced EMTs (2-3 years)

- Some prior healthcare experience (volunteering, shadowing, etc.)

- Minimum commitment of 2 years
  - Year 1: Scribe
  - Year 2: Clinical Information Manager (CIM)
What are the qualities of a great Scribe?

- Passionate about medicine and service to the community
- Excellent interpersonal and organizational skills
- Confident and self-motivated
- Ability to maintain equanimity in the face of resistance, indifference, and hostility
- Ability to work in a high-stress environment where teamwork, adaptability, multi-tasking, and attention to detail are imperative
- Willingness to work a flexible schedule that will include evenings, nights, weekends, and holidays

Scribe onboarding process

- Option #1: Medical Staff
- Option #2: Human Resources
  - Scribe job description
  - Background check and proof of eligibility to work in the United States
  - Occupational health screening including respiratory FIT testing
  - Hospital HIPAA and compliance training
  - Mandatory attendance of hospital orientation
Scribe onboarding (continued)

- Create an administrative policy on the use of scribes
  - Must be compliant with CMS and Joint Commission rules and regulations
  - Scribe signature and provider attestation must be included

- Ensure Scribes have the appropriate IT system access and equipment required to perform their job duties
  - Disable order entry and prescription writing
  - Provide individual login credentials specific to the Scribe role
  - Do not share computers or take computers away from other ED Staff

Goals of the Scribe Program

To facilitate and expedite Emergency Department (ED) patient flow by allowing providers to spend more time on direct patient care and education while concurrently producing more thorough and higher quality documentation

- Topics include:
  - #1. Operational improvement
  - #2. Provider satisfaction
  - #3. Patient satisfaction
  - #4. Education
  - #5. Financial performance
Goal #1: Operational Improvement

- Improve overall ED throughput on the front end and during the discharge process
- Reduce door to doctor time (initial waiting time)
- Reduce evaluation to disposition time (subsequent waiting time)
- Expedite dispositions by notifying providers about the availability of test results required to make a disposition and assisting with aftercare instructions as needed
- Reduce overall ED length of stay
- Increase the ED’s capacity to care for additional patients in a more timely manner
- Reduce Left Without Being Seen (LWBS) Rate

Goal #2 and #3: Provider and Patient Satisfaction

**Provider**
- Personal assistant available to help with charting and to navigate several different computer systems
- Ability to see more patients per shift and go home on time
- Reminder for labs and other test results
- Assistance in expediting dispositions and arranging consultations
- Consultants, admitting physicians and PCPs will benefit from improved real-time ED physician charting

**Patient**
- Provider is able to sit, listen, make eye contact, and put the focus where it belongs: on the patient
- More time to speak with patient, family, PCP, consultants, and nursing staff
- More time for patient education
- Shorter door to provider time and treatment area to provider time (decreased waiting time and ED length of stay)
- Assist patient with non-clinical needs (blankets, pillows, ice chips, guiding family to the cafeteria)
- Improved aftercare instructions
  - Consider: Arranging follow-up clinic appointments directly from the ED
Goal #4: Education

**Scribe / CIM**
- Firsthand exposure to clinical setting and practical applications of medicine in dynamic ED Setting
- Mastering medical terminology, acronyms, abbreviations, and shorthand at an early career stage
- Ability to learn from and work side by side with some of the most talented EM Providers
- Adoption of excellent clinical documentation techniques
- 2 year commitment gives them time to decide if graduate medical education is the right fit for them

**Resident / MLP**
- Administrative burden is reduced leaving more time to see additional patients, for teaching by Attending, for patient education and for performing procedures
- Teaching Scribes medicine improves their ability to teach other residents and students
- Scribes may have helpful documentation/coding tips
- Improve competitiveness in NRMP Residency Match

**Attending**
- Scribes may assist in orienting new providers to the ED, the EHR and other IT Systems
- Attendings may learn EHR tips, tricks, and shortcuts from Scribes to further optimize their workflow
- Decreased administrative burden leaves more time for teaching residents/students/Scribes/nurses and for patient education
- Provides an outlet for teaching in the community hospital setting

Goal #5 Financial Performance

- Improved quality of charting leads to better revenue capture for both the professional side (provider) and the facility side (hospital)
- Missed or under-documented procedures may be rectified in real-time
- Facilitated chart completion improves turnaround time for billing/coding
- Enhanced throughput improves the ED’s capacity to care for more patients
- Assist hospital or health system with Core Measure Compliance, meeting Meaningful Use Criteria, EHR migration/transition, and other PI initiatives
- Improved patient satisfaction scores for Value Based Purchasing
- New Program Development: Example Limited ED Bedside Ultrasound Program
Emergency Medicine Clinical Information Manager (Scribe) Program

Questions?

Emergency Department Scribe Program

Case Study #1

Bridgeport Hospital

Community Hospital

Located in Bridgeport, Connecticut

Caring for Your Life
The ED Scribe Program at Bridgeport Hospital was intentionally designed to be in alignment with all 4 dimensions of Yale New Haven Health System’s Strategic Plan

- Employer of Choice
- Provider of Choice
- Patient Safety, Quality, & Operational Improvement
- Financial Performance
Emergency Department Scribe Program

Results: Provider Satisfaction

Caring for Your Life

Source: Cerner
Provider Satisfaction (Employer of Choice)

13,407 Charts = 26.2%

Period 2 (Scribe)
2.0 % Volume Increase

# of Scribe Charts
Monthly ED Census
Emergency Department Scribe Program

Results: Patient Safety, Quality, and Operational Improvement (PSQOI)

Caring for Your Life

ED Median Arrival to Provider time (All Patients)

Δ= ↓18%
↓11 minutes

Source: Cerner

Operational Improvement (PSQOI)
Urgent Care & Pediatric ED
Median Door to Discharge Time (Length of Stay)
(Treat and Release Only)

121 minutes  110 minutes

Δ= ↓ 9%
↓ 11 minutes

Source: Cerner

Number of ESI Acuity 2 Patients Waiting greater than 1 hour

Total= 544
Total = 168

Δ= ↓ 69%
↓ 376 patients

ESI Acuity 2: “A high risk situation; acutely confused/lethargic/disoriented; or in severe pain or distress”

Source: Cerner

PSQOI: Patient Safety
**Percentage of All ED Patients in the Waiting Room greater than 1 hour**

- **Total**: 7700
- **Δ**: ↓ 5.5%
- **↓ 2664 Patients**

**Source**: Cerner

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**Percentage of ED Patients that Leave Without Being Seen (LWBS)**

- **Total**: 2215
- **Δ**: ↓ 1.1%
- **↓ 526 patients (↓ 23.7%)** despite 2.0% volume increase

**Source**: Cerner
Emergency Department Scribe Program

Results: Patient Satisfaction

Patient Satisfaction
ED Press Ganey: Std Overall Percentile by date of visit

Mean: 18th Percentile
Mean: 34th Percentile

Δ = ↑ 16 Percentile Points
↑ 1.6 Raw Score

Source: Press Ganey 40K or More DB
Patient Satisfaction
ED Press Ganey: Std Doctor Percentile by date of visit

Mean: 37th Percentile
Mean: 36th Percentile

Δ = ↓ 1 Percentile Point
↓ 0.3 Raw Score

Source: Press Ganey 40K or More DB Provider of Choice

Patient Satisfaction
ED Press Ganey: Likelihood of Recommending Percentile by date of visit

Mean: 21st Percentile
Mean: 37th Percentile

Δ = ↑ 16 Percentile Points
↑ 1.6 Raw Score

Source: Press Ganey 40K or More DB Provider of Choice
Emergency Department Scribe Program

Results: Financial Performance

Caring for Your Life

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>Period 2 (Scribe) vs. Period 1 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of LWBS Patients:</td>
<td>↓ 23.7% (526 Patients)</td>
</tr>
<tr>
<td>% LWBS Patients of Total ED Volume:</td>
<td>↓ 1.1% (4.4% to 3.3%)</td>
</tr>
<tr>
<td>Average ED Professional Charge/Patient:</td>
<td>↑ 2.7%</td>
</tr>
<tr>
<td>Average ED Revenue/Patient: (Professional + Facility)</td>
<td>↑ 11.8%</td>
</tr>
<tr>
<td>Average Professional RVU’s/Patient:</td>
<td>↑ 10.5%</td>
</tr>
<tr>
<td>New Program Development:</td>
<td>ED Observation Status</td>
</tr>
</tbody>
</table>

Financial Performance
<table>
<thead>
<tr>
<th>Category</th>
<th>Past 12 Months</th>
<th>TREND</th>
<th>Goal</th>
<th>Category</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare Core Measures:</td>
<td></td>
<td></td>
<td></td>
<td>Medicare Outcomes 7/11 to 6/12</td>
<td>BH</td>
</tr>
<tr>
<td>Heart Attack Composite Score</td>
<td>98%</td>
<td>Stable</td>
<td>100%</td>
<td>Heart Attack 30-Day Survival</td>
<td>BH US Median</td>
</tr>
<tr>
<td>Heart Failure Composite Score</td>
<td>97%</td>
<td>Stable</td>
<td>100%</td>
<td>Heart Failure 30-Day Survival</td>
<td>88.64% 88.61%</td>
</tr>
<tr>
<td>Pneumonia Composite Score</td>
<td>93%</td>
<td>Stable</td>
<td>100%</td>
<td>Pneumonia 30-Day Survival</td>
<td>89.51% 88.18%</td>
</tr>
<tr>
<td>Surgery Composite Score</td>
<td>98%</td>
<td>Stable</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VBP &quot;Clinical Process of Care&quot;</td>
<td>97%</td>
<td>Worse</td>
<td>100%</td>
<td>AHRQ Measures 6/11 to 5/12</td>
<td>BH CT Mean</td>
</tr>
</tbody>
</table>

| Infection rates:                        |                |        |             |                                         |           |
| Colon infections                        | 0.9%           | 0%     | Improving   | Vascular Catheter infection              | 0.05% 0.05% |
| Hysterectomy infections                 | 2.8%           | 10%    | Worse       | Blood Clots in select cases              | 2.3% 0.9% |

| Code Data:                              |                |        |             |                                         |           |
| Full Cardiac Arrest -                   | 22%            | 29%    | Improving   | Cardiac angioplasty or stent mortality   | 2.9% 2.0% |
| Survival to Discharge (24 hrs)          | 9.5/1000       | <1.8/1000 | &lt;1.8/1000 | Failure to Rescue (After Post-surgical Complication) | 13.5% 13.8% |
| MICU Urinary Tract Infections           | 2.6/1000       | &lt;2.4/1000 | &lt;2.4/1000 | Accidental Laceration                    | 0.52% 0.27% |
| C difficile-diarrhea rates               | 2.4/1000       | &lt;10/1000 | &lt;10/1000 | AHRQ Mortality Measures                  |           |

| Hospital Throughput Measures            |                |        |             |                                         |           |
| Median ED Door to Doc (T&R)             | 57 min         |        | &lt;45 min  | Deaths in Surgery patients with tracheostomy on ventilator | 12.5% 12.0% |
| Median ED Door to Discharge (all)       | 171 min*       | 163 min** | 145 min    | Bowel obstruction in uncomplicated patients | 4.0% 0.5% |
| Median Door to Doctor Admitted          | 43 min         | 33 min | &lt;45 min  |                                         |           |
| Median Door to Floor Admitted           | 418 min*       | 415.5 min** | &lt;360 min | Better Than Benchmark/Improving          |           |
| ED Left without being Seen              | 2.2%           | 0.9%   | &lt;2%      | Worse Than Benchmark                    |           |
Emergency Department Scribe Program

Special thanks to:

- The Bridgeport Hospital ED Family
- Hope Juckel-Regan
- Bill Jennings
- Bob Trefry
- Lyn Salsgiver
- Mike Ivy, MD
- Gayle Capozzalo
- Jean Ahn
- Marna Borgstrom
- Rick D’Aquila
- Mike Werdmann, MD
- Ryan O’Connell, MD
- John Roney
- Ken Forte
- Krissy Borgognone
- Matt McDonough
- Jill Comerford
- Jillian Jweinat
- DJ Harris
- YNHHS Administrative Mentors

Questions?
Emergency Medicine Clinical Information Manager (Scribe) Program

Case Study #2

UCLA Ronald Reagan Medical Center

Academic Medical Center

Located in Los Angeles, California

<table>
<thead>
<tr>
<th>Health System:</th>
<th>UCLA Health System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Type:</td>
<td>Academic Medical Center</td>
</tr>
<tr>
<td>Teaching Affiliation:</td>
<td>Primary Residency Site for UCLA – Olive View Residency</td>
</tr>
<tr>
<td>Trauma Accreditation:</td>
<td>Level I</td>
</tr>
<tr>
<td>Annual ED Volume:</td>
<td>46,000</td>
</tr>
<tr>
<td>Average Daily ED Volume:</td>
<td>126</td>
</tr>
<tr>
<td>Rapid Assessment Team:</td>
<td>No</td>
</tr>
<tr>
<td>Mid-Level Providers:</td>
<td>No</td>
</tr>
<tr>
<td>Electronic Health Record:</td>
<td>Medhost</td>
</tr>
<tr>
<td>ED Physician Documentation:</td>
<td>Paper Charts</td>
</tr>
<tr>
<td>Length of Analysis:</td>
<td>36 Months: FY 12 (Scribe Period) vs. FY 10</td>
</tr>
<tr>
<td>ED Volume Change:</td>
<td>6.3% Volume increase</td>
</tr>
<tr>
<td>Scribe FTE’s:</td>
<td>7.7 (15 Total Scribes)</td>
</tr>
<tr>
<td>Hours of coverage/day:</td>
<td>44 Hours/day</td>
</tr>
</tbody>
</table>
Emergency Department Annual Volume

↑ 6.3% FY 12 (Scribe Period) vs. FY 10
or ↑ 7 patients per day

Source: Medhost
ED Operations

Emergency Medicine
Clinical Information Manager (Scribe) Program

Results: Provider Satisfaction
Total ED Charts Completed with Scribe Assistance
FY 12 vs. FY 10

24,028 charts = 55%

Source: Medhost

Provider Satisfaction

Emergency Medicine
Clinical Information Manager (Scribe) Program

Results: Operational Improvement
ED Median Arrival to Resident Time (Minutes)  
FY 12 vs. FY 10

Source: Medhost  
Operational Improvement

↓ 5 minutes or 11.4%

ED Median Treatment Area to Resident Time (Minutes)  
FY 12 vs. FY 10

Source: Medhost  
Operational Improvement

↓ 11 minutes or 37.9%
ED Left Without Being Seen (LWBS)
Total Patients
FY 12 vs. FY 10

11% or 121 patients despite 6% volume increase

Number of LWBS Patients

Source: Medhost
Operational Improvement

Emergency Medicine
Clinical Information Manager (Scribe) Program

Results: Patient Satisfaction
Patient Satisfaction
ED Press Ganey: Std Overall Percentile
by date of visit

14 percentile points
1.6 Raw Score

Source: Press Ganey Large PG DB
Press Ganey Percentile
n=957                      n=945                   n=895                    n=732
42nd Percentile                                    56th Percentile

Patient Satisfaction
ED Press Ganey: Std Doctor Percentile
by date of visit

17 percentile points
1.6 Raw Score

Source: Press Ganey Large PG DB
Press Ganey Percentile
n=957                      n=945                   n=895                    n=732
51st Percentile                                     68th Percentile
ED Press Ganey: Likelihood of Recommending Percentile by date of visit

Source: Press Ganey Large PG DB

Patient Satisfaction

Results: Financial Performance
Financial Performance FY 12 (Scribe) vs. FY 10 Variance

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<th>FY 10 Variance</th>
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19/28 Residents responded 68%

R3: 6/12
R4: 9/12
EM/IM: 4/5
Patient/Physician (Resident) Satisfaction

**When I work with a CIM.... I have more time to spend on direct patient care.**

- **Strongly agree**: 9
- **Agree**: 9
- **Neutral**: 0
- **Disagree**: 1
- **Strongly disagree**: 0

**When I work with a CIM.... My bedside manner is improved.**

- **Strongly agree**: 8
- **Agree**: 6
- **Neutral**: 5
- **Disagree**: 0
- **Strongly disagree**: 0
Patient/Physician (Resident) Satisfaction

When I work with a CIM....
I am more organized during my shift.

- Strongly agree: 9
- Agree: 5
- Neutral: 2
- Disagree: 3
- Strongly disagree: 3

Patient/Physician (Resident) Satisfaction

When I work with a CIM....
My work related morale (satisfaction) as a UCLA EM Resident is better.

- Strongly agree: 9
- Agree: 7
- Neutral: 3
- Disagree: 2
- Strongly disagree: 3
Patient/Physician (Resident) Satisfaction

When I work with a CIM....
I feel less stressed during my shift.

- Strongly agree: 11
- Agree: 6
- Neutral: 1
- Disagree: 1
- Strongly disagree

Patient/Physician (Resident) Satisfaction

When I work with a CIM....
I am able to complete more of my charts,
in real time, before leaving my shift.

- Strongly agree: 13
- Agree: 5
- Neutral: 1
- Disagree
- Strongly disagree
Patient/Physician (Resident) Satisfaction

When I work with a CIM....
I have more time to communicate my plan of care to the Patient/Family.

Strongly agree: 8
Agree: 7
Neutral: 2
Disagree: 2
Strongly disagree: 2

Patient/Physician (Resident) Satisfaction

When I work with a CIM....
I have more time to communicate my plan of care to the patient's PMD and/or Consultants.

Strongly agree: 9
Agree: 6
Neutral: 2
Disagree: 2
Strongly disagree: 2
Operational Improvement

When I work with a CIM…. I can see more patients per shift.

- Strongly agree: 13
- Agree: 4
- Neutral: 2
- Disagree: 1
- Strongly disagree: 0

Operational Improvement

When I work with a CIM…. the CIM frequently anticipates the next steps needed to make a disposition and helps me to expedite patient flow.

- Strongly agree: 7
- Agree: 6
- Neutral: 4
- Disagree: 1
- Strongly disagree: 0
Emergency Medicine
Clinical Information Manager (Scribe) Program

Special thanks to:

• The RR UCLA ED Family
• UCLA-Olive View EM Residents
• Larry Baraff, MD
• Marshall Morgan, MD
• Lynne McCullough, MD
• Scott Votey, MD
• Brandon Koretz, MD
• Elizabeth Lancaster
• Bonnie Cheung
• Janet Rimi
• Shannon O'Kelley
• Tom Rosenthal, MD
• The High ED Utilizer Committee
• ED Discharge Phone Call Nurses

Questions?
Funding the Scribe Program

- Opportunity for a strategic partnership between Hospital and ED Group
  - Set realistic targets and goals
  - Come to an agreement
  - Improvements in throughput, decreased LWBS, and patient satisfaction are priceless
- Stop telephone dictation
- Attempt to off-set Scribe cost with new programs or business development
  - Observation Status in the ED
  - Rapid Assessment Team to decrease LWBS
  - ED Limited Bedside Ultrasound
- Consider grant writing

Tips for a successful program

- Ensure that the ED Team is ready to accept a new team member
- Offer reasonable rates for this dynamic role and consider giving benefits
- Only hire Scribes willing to commit for 2 years and give raise in year 2
- Do not take shortcuts with training
- Conduct frequent chart reviews (varying Scribe:Provider combinations)
- Provide honest and open feedback
  - Provider to Scribe; Provider to Manager, and Scribe to Manager
- Buy more computers/equipment if needed, do not share or take computers away from other staff
  (Unit Clerks, Registration, Hospitalists, etc.)
More tips for a successful program

- Providers require training on how to work with Scribes too
- Onboard new providers with Scribe assistance but the new provider should be able to function without a Scribe
- Do not put trainees with providers who are not supportive of the program
- For Residents and MLPs: Using a Scribe is a privilege, not a right. Earn it and do not abuse it. You are responsible for reviewing and completing your charts in a timely manner. Remember, your Attending’s license is on the line.

Emergency Medicine Clinical Information Manager (Scribe) Program

Questions?
Emergency Medicine Clinical Information Manager (Scribe) Program

Thank You!