

An Automated Wellbeing and Service Follow-up Solution That Facilitates ED Case Management

Tom Scaletta MD, Medical Director, Emergency Services, Edward Hospital (Naperville, IL)

Description

Edward Hospital discharges 70,000 patients annually from its two emergency departments (EDs). We designed and implemented a cloud-based solution to automatically contact discharged ED patients, pose a series of questions and refer patient responses for case management as required. Patients that do not reply electronically may be contacted by phone.

Aims

- Uncover/address patient issues
- Enhance the patient experience
- Provide timely provider feedback
- Fortify outpatient management

Actions

- Developed questions to assess wellbeing and uncover issues
- Extracted EMR data and automatically uploaded to cloud
- Connected patients to self-assessment portal via email/text link
- Created a call center contact option for patients who do not reply electronically
- Immediately notified ED case managers with all outpatient management issues

Summary of Results

- In the first year, ED-hospital admissions dropped by 20% (and observation cases were cut in half)
- Patient recontact was not the exclusive driver as case managers focused on other means of safe outpatient management
- Organization acceptance of our solution was favorable and other outpatient service areas have requested its use

Standard 5-Question Set for the Emergency Department

How are you feeling today compared to when you were seen in the ER?

- Better
- Same
- Worse

Pop-up: Record your comments, then call the PCP for advice or return to the ER now. Notification: Fax to ED and email to charge nurse group.

Do you have any questions about home care, medications, or follow-up appointments?

- No
- Yes

Pop-up: Record comments, then call the PCP for advice or ER Case Manager (555-555-5555) about follow-up. Notification: Email to case manager.

Please rate the doctor by the level of concern that was shown: attending/resident/midlevel name-

- 5 - Very High
- 4 - High
- 3 - Average
- 2 - Low
- 1 - Very Low

Pop-up: We apologize for this experience. Recorded comments are forwarded to the ER leaders. Notification: Email to medical director.

Please rate the nurse by the level of concern that was shown: nurse name-

- 5 - Very High
- 4 - High
- 3 - Average
- 2 - Low
- 1 - Very Low

Pop-up: We apologize for this experience. Recorded comments are forwarded to the ER leaders. Notification: Email to nurse director.

Would you like to add anything else about your experience?

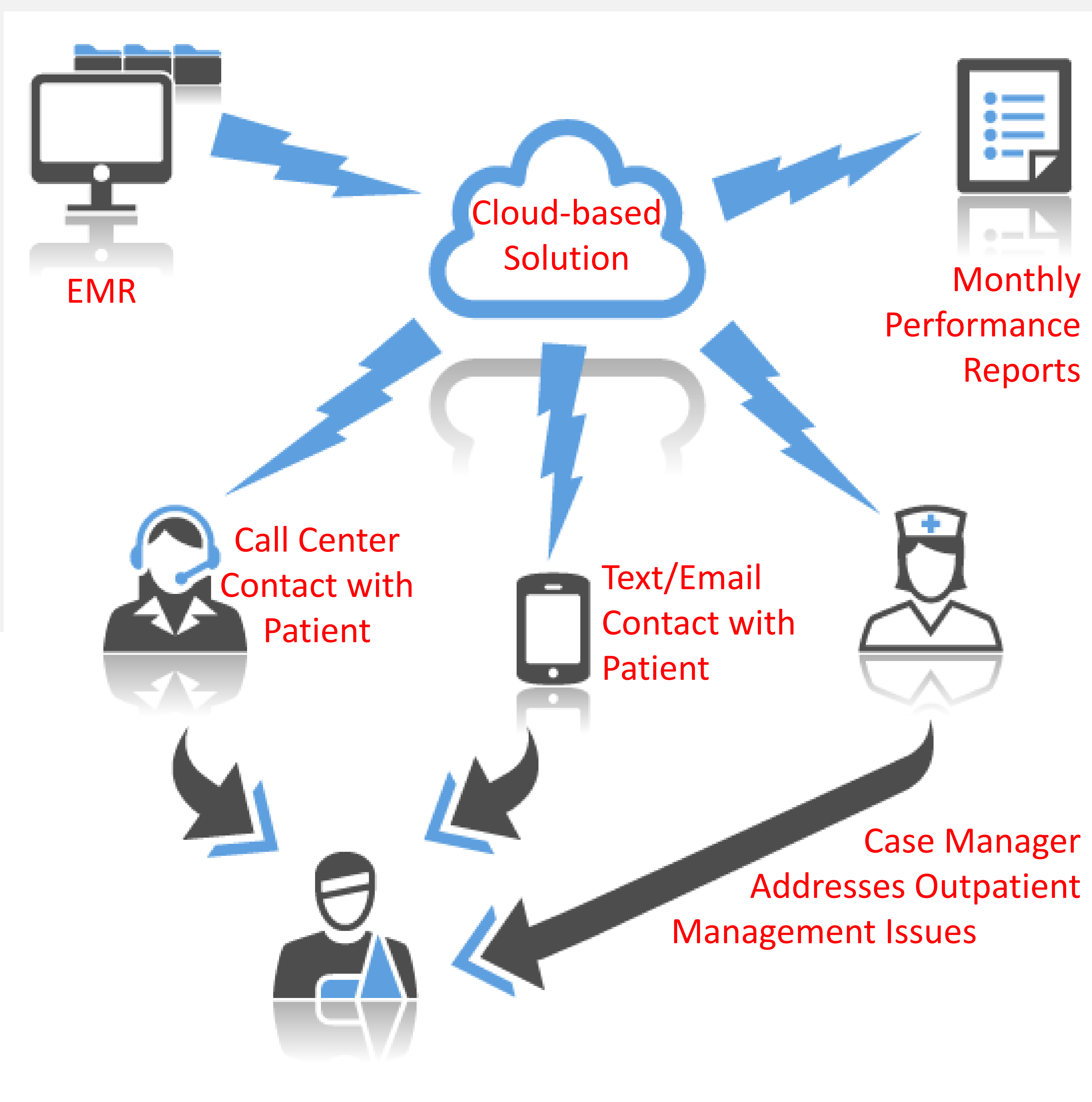
- No
- Yes

Pop-up: We apologize for this experience. Recorded comments are forwarded to the ER leaders. Notification: Email to administrator.

*This question cannot be modified if external benchmarking is desired.

Copyright © 2013, Smart-ER LLC. All rights reserved. Patent pending.

5-Question Set Presented to Patients via Text or Email



28 Data Elements for Daily Transfer from EMR to Cloud

- for the Emergency Department
- The following data elements are requested by Smart-ER to facilitate patient wellbeing checks after an emergency department visit. Our preferred format is comma-separated and with each field visible question marks. The ideal date, time, phone number syntax is indicated below. Should your system not support this format or syntax or if you have any questions about this request, please contact Smart-ER technical support at tech@smart-er.net. Once available, please send a sample file to tech@smart-er.net. Please also enable an automatic extract to be placed on a designated folder on your server each morning containing data from the prior calendar day. Smart-ER will then setup an SFTP connection to our secure cloud.
1. Patient ID/Unit number
 2. Account ID/Account number
 3. Patient Name
 4. Arrival Date [YYYY-MM-DD]
 5. Arrival Time [HHMM]
 6. Disposition Type (e.g., home, transfer, observation, inpatient, expired, LWIS, AMA)
 7. Disposition time [HHMM]
 8. Date of Birth [YYYY-MM-DD]
 9. Gender
 10. Zip code
 11. Phone Number - Home [(xxx)xxx-xxxx]
 12. Phone Number - Work [(xxx)xxx-xxxx]
 13. Phone Number - Cell [(xxx)xxx-xxxx]
 14. Email Address
 15. Triage Chief Complaint
 16. ED Primary Diagnosis
 17. Emergency Physician (name as 'last, first' or any ID)
 18. Nurse ID/Name (name as 'last, first' or any ID)
 19. Resident ID/Name (if applicable, name or ID in any format)
 20. Midlevel ID/Name (if applicable, name or ID in any format)
 21. Other Provider (if applicable, name or ID in any format)
 22. ESI/Triage Level
 23. Financial Class
 24. Native Language (this will drive surveys in a language other than English)
 25. Primary Care Physician (name or ID in any format)
 26. ED Site (applies to clinics with EDs in multiple sites)
 27. ED Section (applies to sections within a specific ED)
 28. Opt-out Flag ("Y" or "N" to exclude certain patients from being contacted)
- *Required Data Elements

Typical Presentation of Follow-Up Question Presented on a Mobile Device

Question 1 of 5

How is your child feeling today compared to when you were seen in the ER?

Better

Same

Worse

Comments

There is redness all around her eye and it won't open. She is crying a lot and has a fever.

Next

Monthly Report of Emergency Physician Performance

Emergency Physician Month-End Report

Hospital: [Redacted] Dr. [Redacted]
December 2012

Utilization	Value	Group mean/range
Admission rate	21.2%	Group mean/range (26.5%/18.3%-34.7%)
Transfer rate	0.0%	Group mean/range (0.7%/0.0-2.1%)
TAT - discharges	97 min	Group mean/range (88/72-113)
TAT - admissions	144 min	Group mean/range (150/129-241)
3-day return/admitted	0	Group mean/range (1/0-2)

Efficiency	Value	Group mean
Hours worked	88.5	Group mean PPH 2.05 (67%tile)
Patients seen	185 (2.10 PPH)	Group mean WPH 2.01 (78%tile)
WLU ¹ mean	1.05 (2.21 WPH ²)	

¹PHI = patients per hour
²WLU = workload units, which normalizes when disproportionate hours worked in higher or lower acuity areas. Triage level is used as a surrogate for patient acuity such that ED1 = 2 - WLU; 1.4, ED3 = WLU; 1.0 and ED4 or 5 = WLU; 0.7.

³PHI = workbase units per hour

Satisfaction

Telephone contact	17
Self-assessment (email)	25
Self-assessment (SMS)	0
Total contacted	42

Q: "Please rate the doctor by the level of concern that was shown:"
A: "Very High" 32 (76%/91%tile) Group mean/range (71%/63%-79%)

Comments (n=5)

- He was the best!
- Would have liked for the doctor to explain about diagnosis in detail.
- Doctor could have been more thorough and nothing was accomplished.
- Good with explanation of problem
- Wonderful, concerned!

Copyright © 2013, Smart-ER LLC. All rights reserved. Patent pending. Page 4/51