

Nursing Home to ER: Electronic Universal Transfer

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ABSTRACT

Nursing Home to Emergency Room: Electronic Universal Transfer

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Purpose of the Study: Develop and demonstrate the value of an electronic universal transfer summary in transferring information from skilled nursing facility to acute care hospital. **Methods:** Over a three year period, Gurwin Jewish Nursing & Rehabilitation Center selected and implemented a web-based electronic medical record (EMR) and Computerized Physician Order Entry (CPOE) system designed for long term care. Gurwin worked with its vendor, Optimus EMR, to customize its existing transfer summary to include medical information recommended by AMDA. Gurwin also surveyed emergency room and hospital-based physicians to determine what medical information they desired from nursing homes when patients were transferred to the hospital. Data were collected about nursing home workflow processes surrounding transfer of patients to the acute care setting pre and post EMR implementation (fall 2005 and summer 2008). **Summary of results with data and supporting statistics:** Surveyed acute care physicians requested the following information from nursing homes: medical reason for transfer, updated medication, allergy and problem lists, advance directives, next of kin, recent laboratory tests, baseline cognitive and functional status, and name and contact information for the referring physician. The revised Optimus transfer report, or abbreviated EMR (aEMR), includes this information and documentation of skin and wounds. It allows both nurses and physicians to incorporate clinical notes. The aEMR takes minutes to produce and has significantly streamlined the transfer process. The mean time for medical staff to complete a Transfer Form has been reduced by 22.1 minutes per transfer, (from 33 mean min. pre-EMR to 10.9 mean min. post-EMR), a 66.7% decrease in time spent. The nursing workflow process is similarly shortened: mean time to complete a Transfer Form has been reduced by 12.9 min., a 66.8% decrease, and the redesigned process has reduced mean time for nurses to collect and copy documents for inclusion with the Transfer Form by 21 min., an 81.3% decrease. **Conclusions:** The aEMR not only improves the workflow of transferring a nursing home resident to the acute care hospital, it also enhances patient safety by providing emergency medicine physicians with legible, accurate information that facilitates medication reconciliation, adherence to advance directives, and better communication across sites of care.

PROJECT NEED

Nursing homes are a major component of health services for the elderly. Twenty-four percent of hospital patients aged 65-74 and 43% of those over 85 are discharged from the acute hospital to another institution. About 19% of patients return to acute care within 30 days and as many as 42% within 24 months. (1-3) Implementation of technology to facilitate transfer of information across settings via a universal care-planning tool is needed to improve transitional care. (4,5) One of the major limitations of such transfer of medical information is that most long-term care electronic health records lack a "medical module." They capture MDS data, but do not include important information for medical staff working in the nursing home setting.

METHODS

Over a three year period, Gurwin Jewish Nursing & Rehabilitation Center selected and implemented a web-based electronic medical record (EMR) and Computerized Physician Order Entry (CPOE) system designed for long-term care. Gurwin worked with its vendor, Optimus EMR, to customize its existing transfer summary to include medical information recommended by AMDA. Gurwin also surveyed emergency room and hospital-based physicians to determine what medical information they desired from nursing homes when patients were transferred to the hospital. Data were collected about nursing home workflow processes surrounding the transfer of patients to the acute care setting pre- and post-EMR implementation (fall 2005 and summer 2008).

RESULTS:

TABLE 1:

DECREASED PHYSICIAN TIME TO COMPLETE TRANSFER FORM

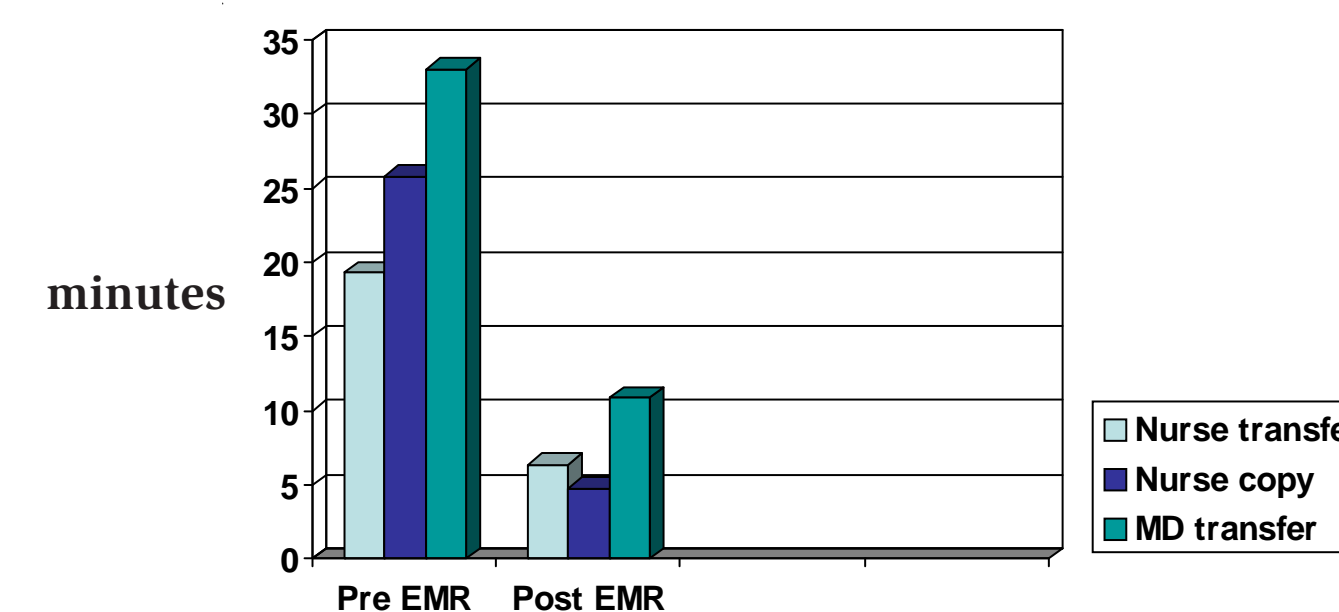
	Pre-EMR Oct. - Nov. 2005	Post-EMR May - Aug. 2008	IMPACT
SAMPLE	9 MDs/ 1 NP 22 transfers	8 MDs/ 23 transfers	
MEAN	33.0 minutes	10.9 minutes	-22.1 minutes
MIN. - MAX.	10-50 minutes	10-20 minutes	

TABLE 2:

DECREASED NURSING TIME TO COMPLETE TRANSFER

	Pre-EMR Oct. 2005	Post-EMR July - Aug. 2008	IMPACT
SAMPLE	7 transfers 6 units	17 transfers 10 units	
MEAN TIME TO COMPLETE FORM MIN.-MAX.	19.3 minutes 10-30 minutes	6.4 minutes 5-10 minutes	- 12.9 minutes
MEAN TIME TO COLLECT & COPY DOCUMENTS FOR TRANSFER MIN.-MAX.	25.8 minutes 15-60 minutes	4.8 minutes 2-10 minutes	-21 minutes

FIGURE 1: Nurse & Physician Time to Transfer SNF Resident to ER



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FIGURE 2:

Sample Page from Transfer Form: Medical & Nursing Reason for Transfer

Gurwin Jewish Nursing and Rehabilitation Center
Commack, NY

Resident Transfer Sheet
This Report Contains Data From the Last 7 Days

Resident: **Optimus, Resident B**

Transfer Information (Some fields need manual coding)

Discharge or Transfer Date: Will Present Primary Care Physician Continue to Care for this Resident? Type of Transportation

Transfer From: Gurwin Jewish Nursing & Rehabilitation Center
68 Hauppauge Road
Commack, NY 11725
631-715-2000

Transfer To: University Hospital@ Stony Brook
Nicholls Road
Stony Brook, NY 11794
631-689-8333

Receiving Physician: Palmer, Lucy, Pulmonology, 631-715-2000

MD - Condition on Discharge: 62 year old woman with multiple sclerosis, depression, anxiety, djd, developed acute shortness of breath, edema of left lower extremity, and pleuritic chest pain earlier today. She also complained of fever, chills and cough productive of colorless phlegm. Temp 39 degrees C. Pulse 100. Respirations 28, BP 110/60. On exam, she is diaphoretic and pale. Neck - no JVD, lungs - coarse crackles right base, cor - regular rate and rhythm, no S3, no murmurs, abdomen - soft, non-tender, active bowel sounds, extremities - bilateral lower extremity edema Left > Right, cyanotic finger tips and toes, O2 saturation on room air 86%, 92% on 2 Liters.

MD - Reason for Transfer: Rule out Pulmonary Embolus, Rule out Pneumonia

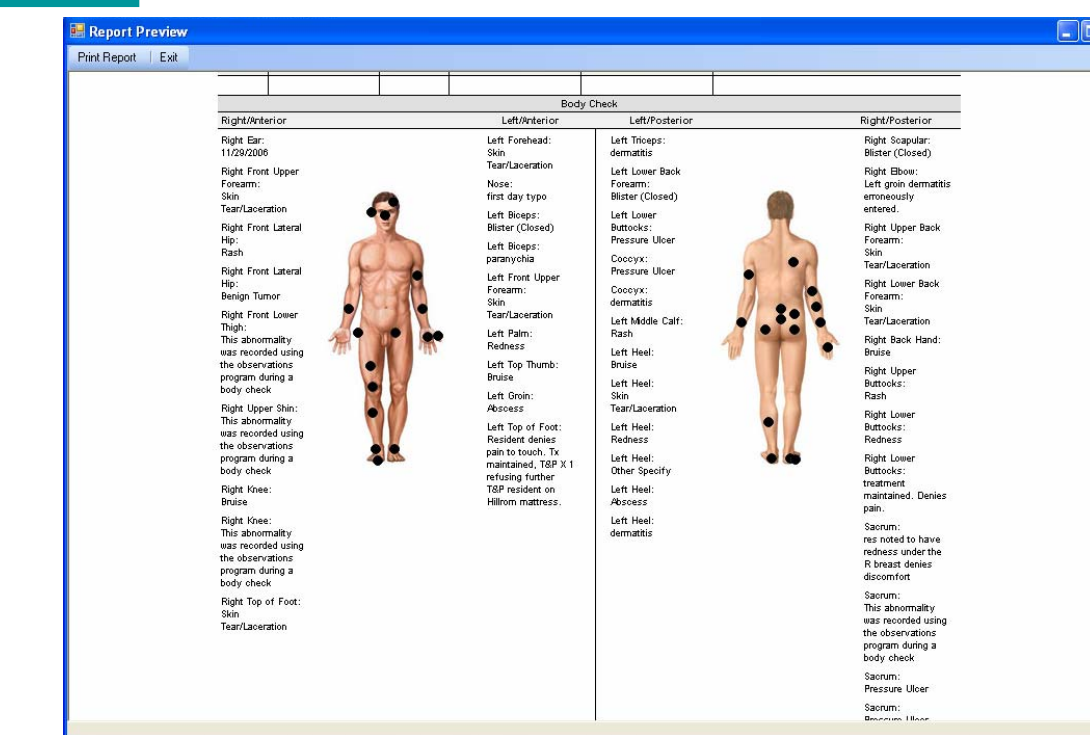
Nurse - Reason for Transfer: Patient c/o chest pain and shortness of breath today.

MD - Other Comments: Patient is DNR/DNI. On-call physician: Dr. Fields 631-715-2503; regular physician: Dr. Blau 715-2140

Nurse - Other Comments:

Was resident Informed of Medical Condition? Was the Next of Kin Notified of the Transfer?

FIGURE 3: Documentation of Skin & Wounds at Time of Transfer



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- Gurwin Jewish Healthcare Foundation

RESULTS SUMMARY

1. What do acute care doctors want in the transfer summary?

- medical reason for transfer
- updated medication list
- current treatment orders
- allergy and problem lists
- advance directives
- health care proxy contact information
- recent laboratory tests - last 7 days
- baseline cognitive and functional status
- immunization status
- ventilator settings
- name and contact information for referring physician
- latest ECG

2. aEMR saves doctors & nurses time

The aEMR improves workflow and saves time for doctors as patients are transferred from the Skilled Nursing Facility to hospital (Table 1, Figure 1). The nursing workflow process is similarly shortened (Table 2, Figure 1).

3. Special features of aEMR (Figure 2 & Figure 3)

- Incorporates all information requested by acute care doctors, except the ECG
- Allows physicians to incorporate clinical notes from off-site location
- Can be printed, faxed electronically or viewed via a web portal
- Provides timely, complete and legible transfer summaries
- Facilitates medication reconciliation when eMAR included in transfer materials.
- Documents skin and wounds at time of transfer

4. The aEMR gets rave reviews from ER doctors!

- "Notes are complete, well-organized and easy to use in the chaotic ER environment."
- "Extremely helpful to get these transfer notes from Gurwin. No other facility provides such good information."
- "Nothing is missing, so Gurwin's transfer notes save time."
- "The list of medications is critical, and improves our ER process."

5. The ER doctors preferred the print copy!

CONCLUSIONS

The aEMR not only improves the workflow of transferring a nursing home resident to the acute care hospital, it also enhances patient safety by providing emergency medicine physicians with legible, accurate information that facilitates medication reconciliation, adherence to advance directives and better communication across sites of care.