e-transitions: Improving the Transition to Home Health Care Using an Electronic Communication System Available to Physicians, Discharge Planners, Home Health Nurses and Patients

June 5, 2006

Visiting Nurse Service of New York
Weill Medical College of
Cornell University

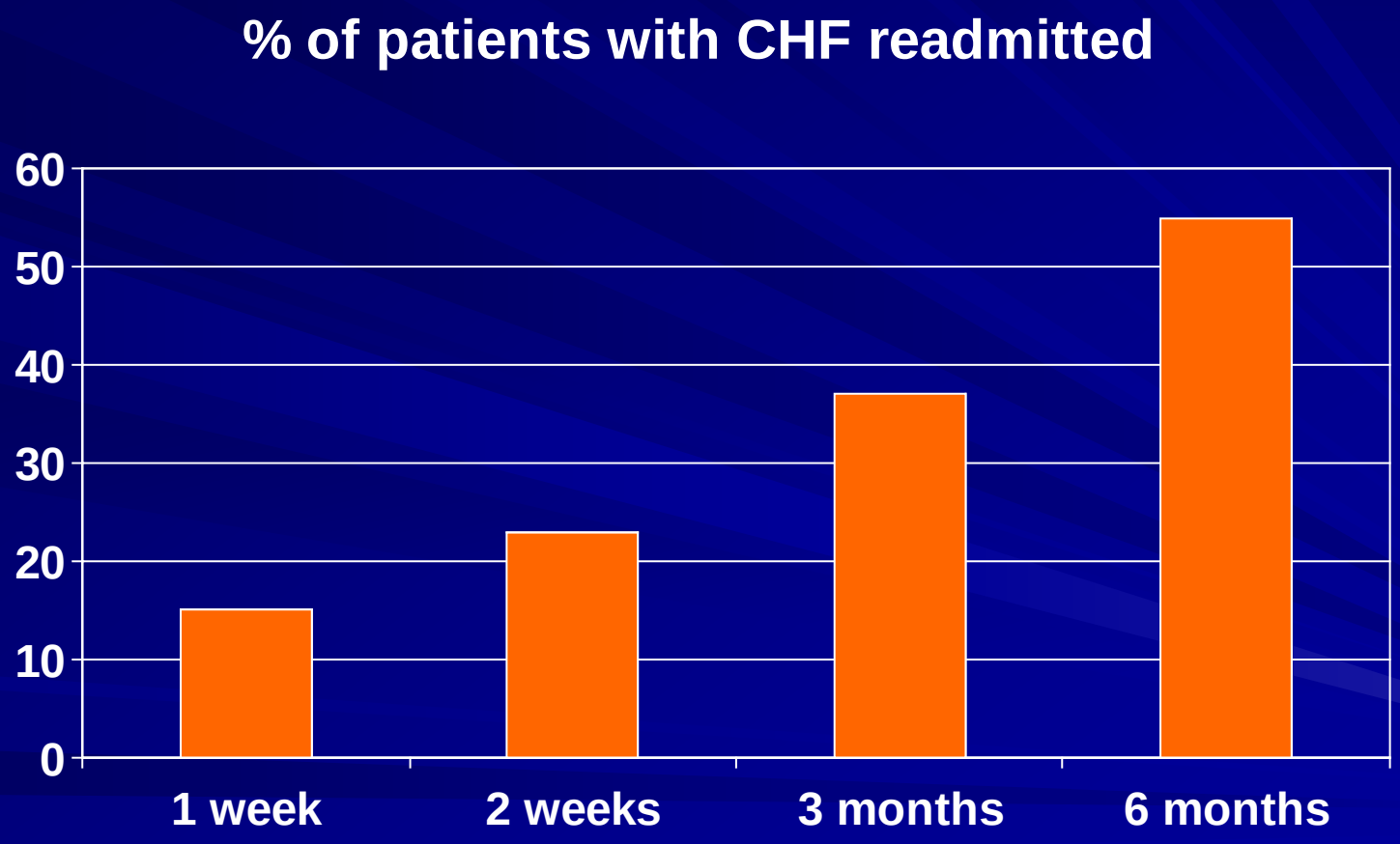
Goals For The Presentation

- Introduce an electronic tool designed to improve care at the time of transition to home health care
- Review some preliminary feedback
- Describe the transition to a web-based tool

Focus on Transition from Hospital to Home Health Care

- Transitions in healthcare problematic
  - Poor information exchange
  - Increased risk for medical errors
  - Often a lack of physician involvement
  - Poor utilization of healthcare resources
    - Avoidable re-hospitalizations

There is Room for Improvement



Current System for Referring a Patient to Agency

- Hand-written form or phone call used to initiate home health referrals
- Rarely involves physician in generating the referral orders (SW or RN initiates)
- Referral documentation rarely part of the permanent medical record

Standard Register ® ZIPSET®

HOME HEALTH SERVICES REQUEST

TYPE OF REQUEST: ☐INITIAL ☐CHANGE OF ORDER

REQUEST

SERVICE REQUEST TO - NAME AND ADDRESS

SERVICE REQUEST FROM - NAME AND ADDRESS: NY Presbyterian Hospital 525 E. 68th Street 10021 | DATE OF REQUEST

REPLY TO - NAME, DEPT. OR CLINIC, TITLE: Social Work | TELEPHONE AND EXT.

PATIENT INFO

PATIENT NAME - LAST, FIRST, MIDDLE | DATE OF BIRTH | ☐MALE ☐FEMALE | RELIGION

ADDRESS - NO. AND STREET, CITY, BOROUGH, STATE | APT. NO. AND FLOOR | TELEPHONE NO.

ADDRESS WHERE PATIENT IS TO BE VISITED - NO. AND STREET, CITY, BOROUGH, STATE (CARE OF - NAME) | APT. NO. AND FLOOR | TELEPHONE NO.

MEDICARE NO. | MEDICAID OR DSS - IDENTIFICATION NO. | CATEGORY | DSS CENTER

OTHER INSURANCE CARRIER | POLICY NO. OR CLAIM NO. | TYPE OF COVERAGE | SOURCE OF PAYMENT ☐HOMECARE ☐OTHER

HOSPITAL OR ECF ADMISSION DATE | HOSPITAL OR ECF DISCHARGE DATE | HOSPITAL OR ECF CASE NO. | OUT PATIENT DEPT. NO.

MEDICAL INFORMATION

DIAGNOSES

PRIMARY DIAGNOSIS: 91 yo F a/w new atrial flutter 2:1 block and CHF

SECONDARY DIAGNOSIS:

SURGERY AND DATES:

SIGNIFICANT MEDICAL AND SURGICAL HISTORY (INCLUDE FUNCTIONAL LIMITATIONS - ALLERGIES): NONE

PROGNOSIS | THERAPEUTIC GOALS: gait/balance training, assist ADLs

DIAGNOSIS KNOWN BY ☐PATIENT ☐FAMILY ☐OTHER - EXPLAIN ☐NOT KNOWN - EXPLAIN

PHYSICIANS ORDERS

TREATMENTS, MEDICATIONS, DIET, ACTIVITY PERMITTED

Protonix 30mg PO QD
Colace 100mg PO TID
Senna 2 tabs PO qhs
Micrator 17g PO QD
Lasix 20mg PO QD
Aldactone 12.5mg PO QD
~~Toprol XL 100mg PO QD~~
Clonidine 5mg PO qpm
Amiodarone 200mg PO BID

MEDICAL SUPERVISION AT HOME PROVIDED BY - NAME AND ADDRESS OF PHYSICIAN OR CLINIC: Dr. Adelman | TELEPHONE NO.: (212) 746-7000

PATIENT ESSENTIALLY HOMEBOUND ☐YES ☐NO | ESTIMATE OF PATIENT'S NEED FOR HOME HEALTH SERVICES: 6 WKS. / MOS. | THIS PLAN OF CARE IS RELATED TO CONDITION FOR WHICH PATIENT WAS HOSPITALIZED ☐YES ☐NO

I CERTIFY THE PATIENT NEEDS HOME HEALTH SERVICES: SKILLED NURSING ☐ | P.T. ☑ | O.T. ☐ | S.T. ☐ | M.S.S. ☐ | OTHER (SPECIFY) ☑ HHA | PHYSICIAN'S SIGNATURE | DATE 5/24/06

NURSING INFORMATION

NURSING ASSESSMENT AND RECOMMENDATIONS (INCLUDE SYMPTOMS AND REACTIONS TO BE OBSERVED, TECHNIQUES TO BE TAUGHT)

Pt requires RN to monitor vitals, HHA eval and PT home safety eval.

requesting 5/ /06 Start of care.

MEDICATIONS, SUPPLIES, EQUIPMENT NEEDED (SPECIFY ITEMS)

PROVIDED: ☐YES ☐NO

OTHER PROFESSIONAL ASSESSMENTS AND RECOMMENDATIONS ATTACHED (TRIPLICATE): P.T. ☐ | O.T. ☐ | S.T. ☐ | M.S.W. ☐ | M.D. ☐ | OTHER (SPECIFY) ☐ | NURSES SIGNATURE

45571 SR 458

HOSPITAL ORGANIZATION OR PHYSICIAN REQUESTING SERVICE

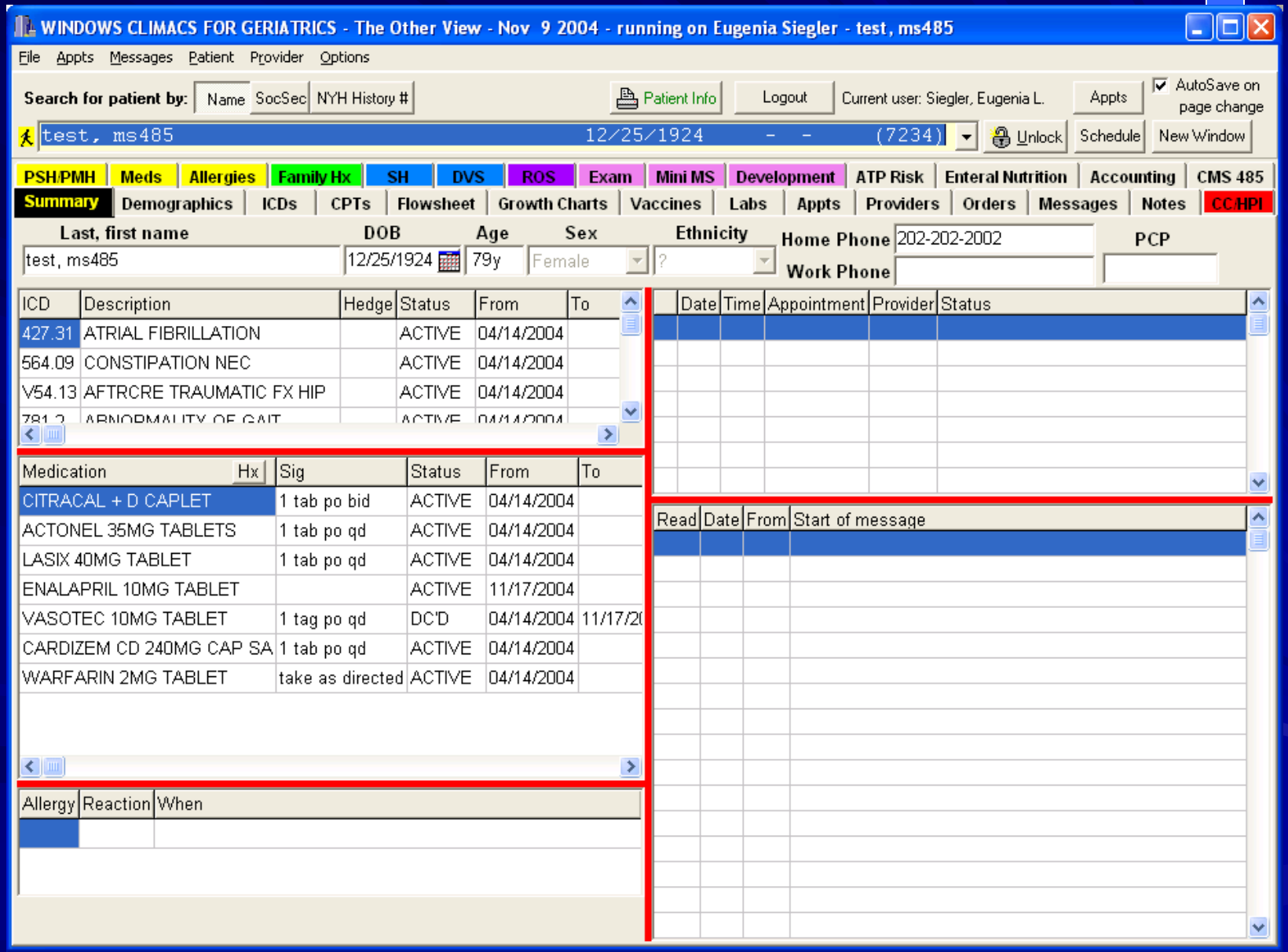
Our Approach

- To restructure the format and initiation of CMS 485 to:
  - Improve accuracy
  - Promote evidence-based patient care
  - Increase physician participation in the plan of care
  - Enhance communication between physician and agency

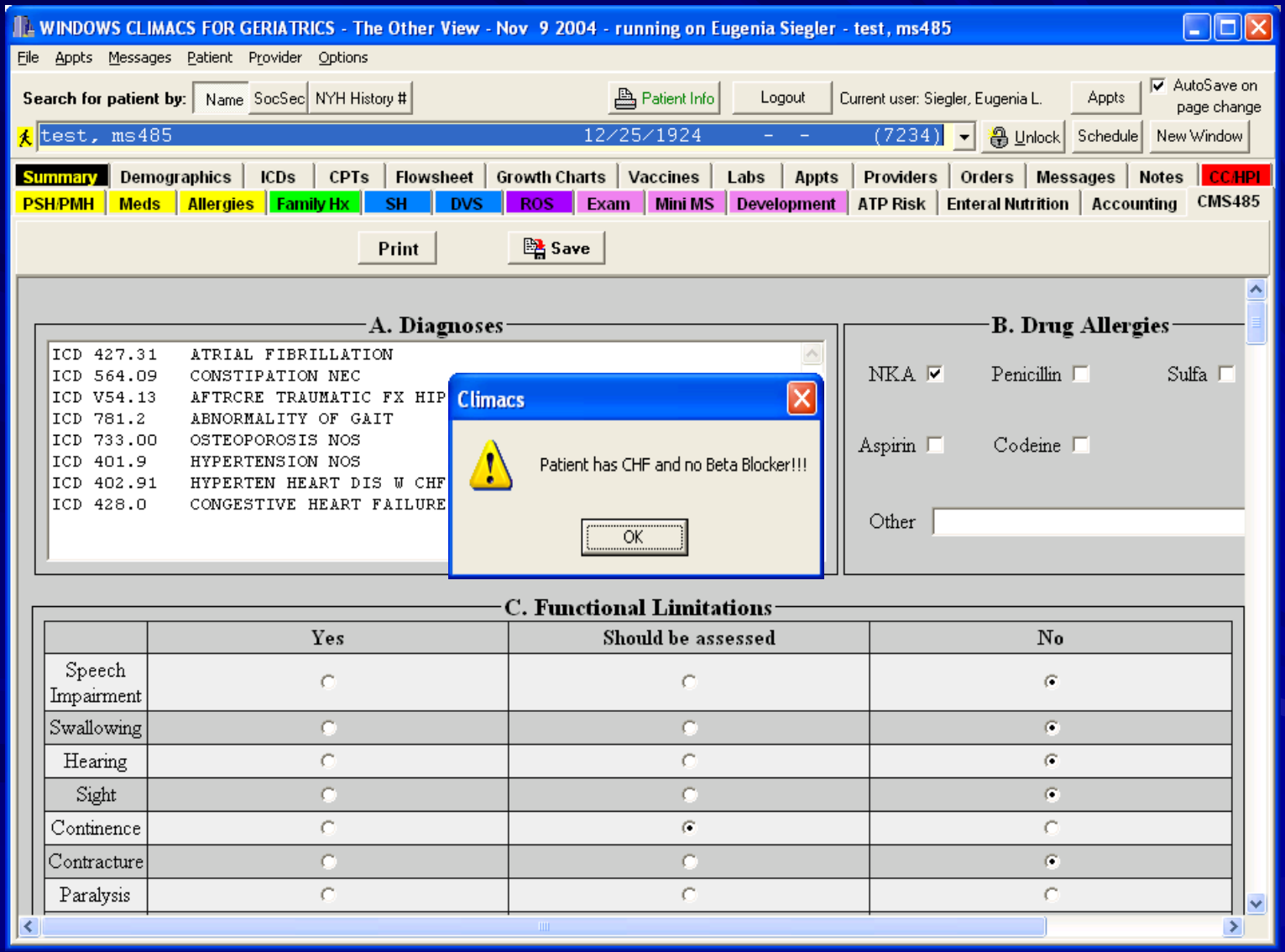
Methods

- Developed a computer generated CMS 485 from Cornell electronic health record (“e-485”)
- Automated uploads (demographics, medications, diagnoses, and patient allergies)
- Expanded content of CMS 485 to include diagnosis-specific home care orders and triggers for physician contact
- Added evidence-based decision support tools and order sets
- Completed form becomes part of patient’s electronic health record

Creating an e-485



Example of Evidence-based popup screen



Physician Impressions

- Favorably received
- Takes 3 minutes to complete on average
- Accessible as part of the medical record
- Easy learning curve
- Allows MD to bill for managing home health care patient

Home Health Agency Impressions

- Received favorably by nurses:
  - Ease of reading – handwriting vs. typed
  - Format – easy to follow
  - More comprehensive orders
  - Titration orders allow co-management of patients between nursing and medicine

Electronic Transitions

- Getting the Data from the Hospital EMR or Physician's Office to the HHA
- Enhancing the Communication Physicians and Nurses
- Bringing Caregivers into the Process

Web-based System

- Beginning stages of 2-year project to create a more flexible and generalizable web-based system:
  - Will allow electronic communication of automated 485
  - Subsequent communications between physicians and home health agency staff
  - Physicians will be able to sign plans of care, revisions and new orders electronically

Web-based System (cont'd)

- Nurses and physicians will be able to leave notes for one another on secure website
- Enables physicians who lack electronic health record the capability to participate
  - Manually entering data
  - Accessing system via any web browser

e-transitions Model

Patient/Caregiver

Community-Based Physician

e-transitions

HHA Clinical Record System

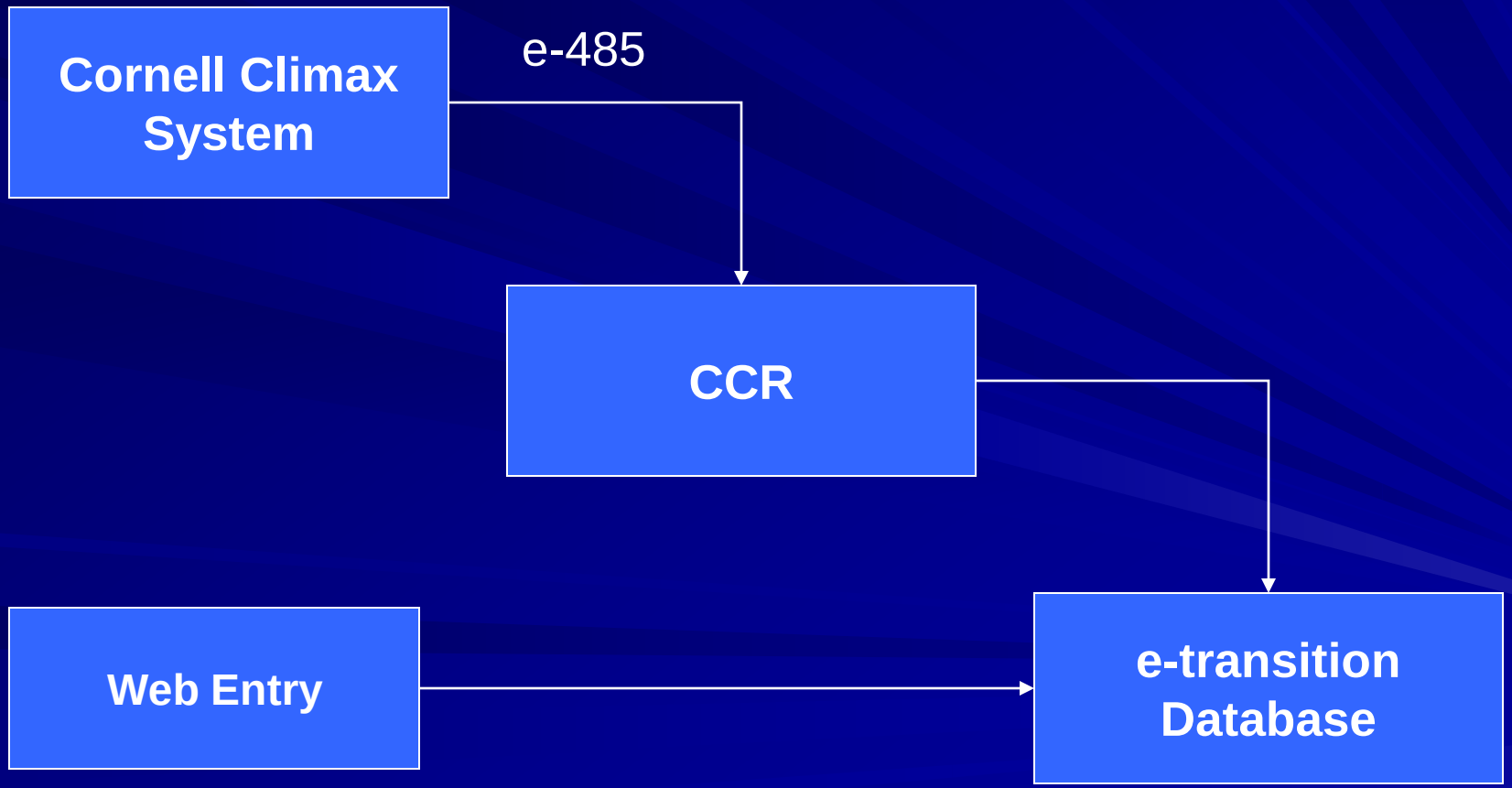
Hospital-Based Providers

HHA Field Nurse/ Therapist

What Is e-transitions?

- Secure internet website
- Database (EMR)
- Protocols for data exchange
- System to notify physicians and nurses about changes and updates via e-mail
- Resource for patients and caregivers

Data Communication Continuum of Care Record (CCR)



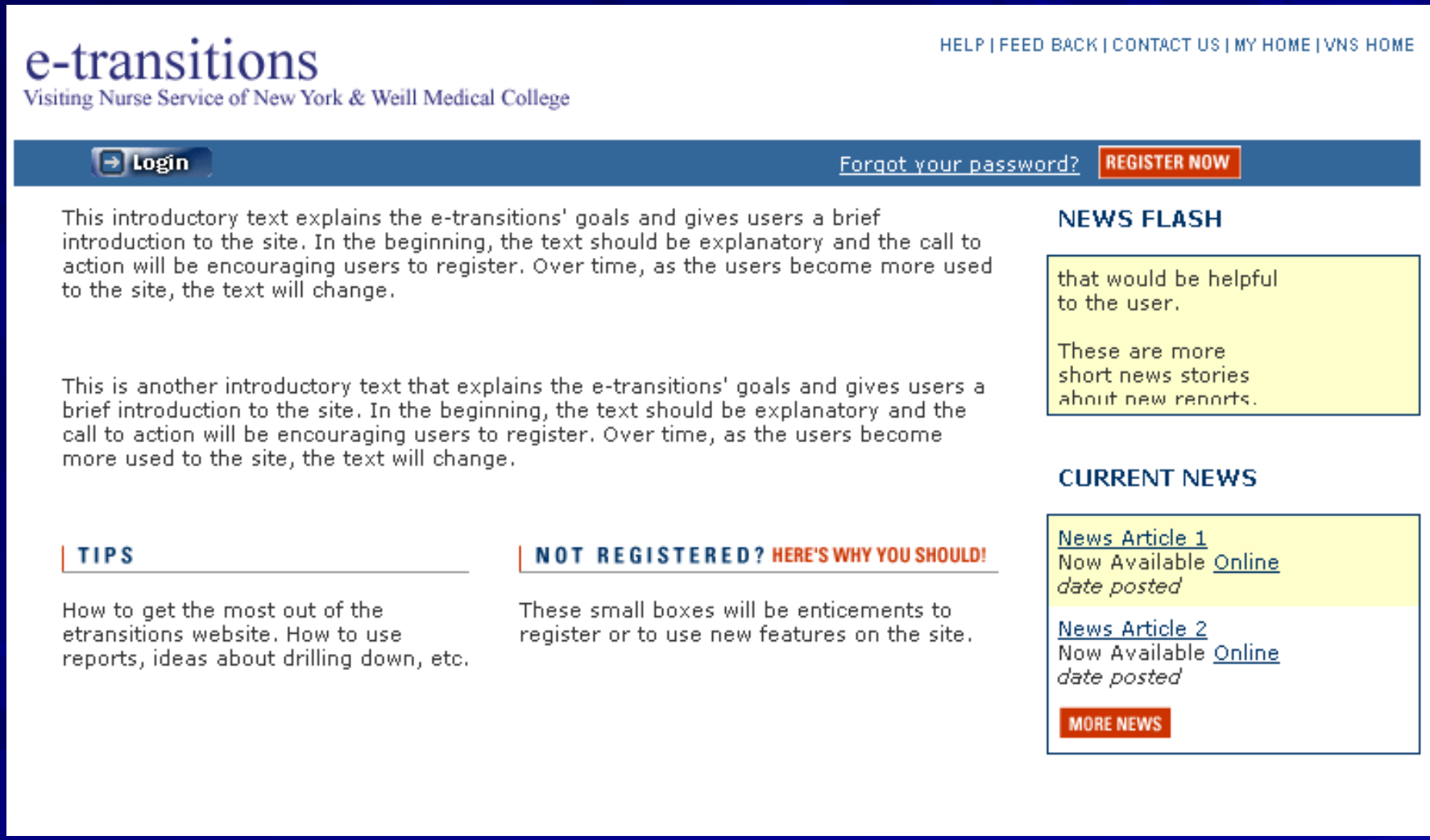
Components of the CCR

- Patient Identifier
- Date/time
- To
- Purpose
- Comments
- Signatures
- Body

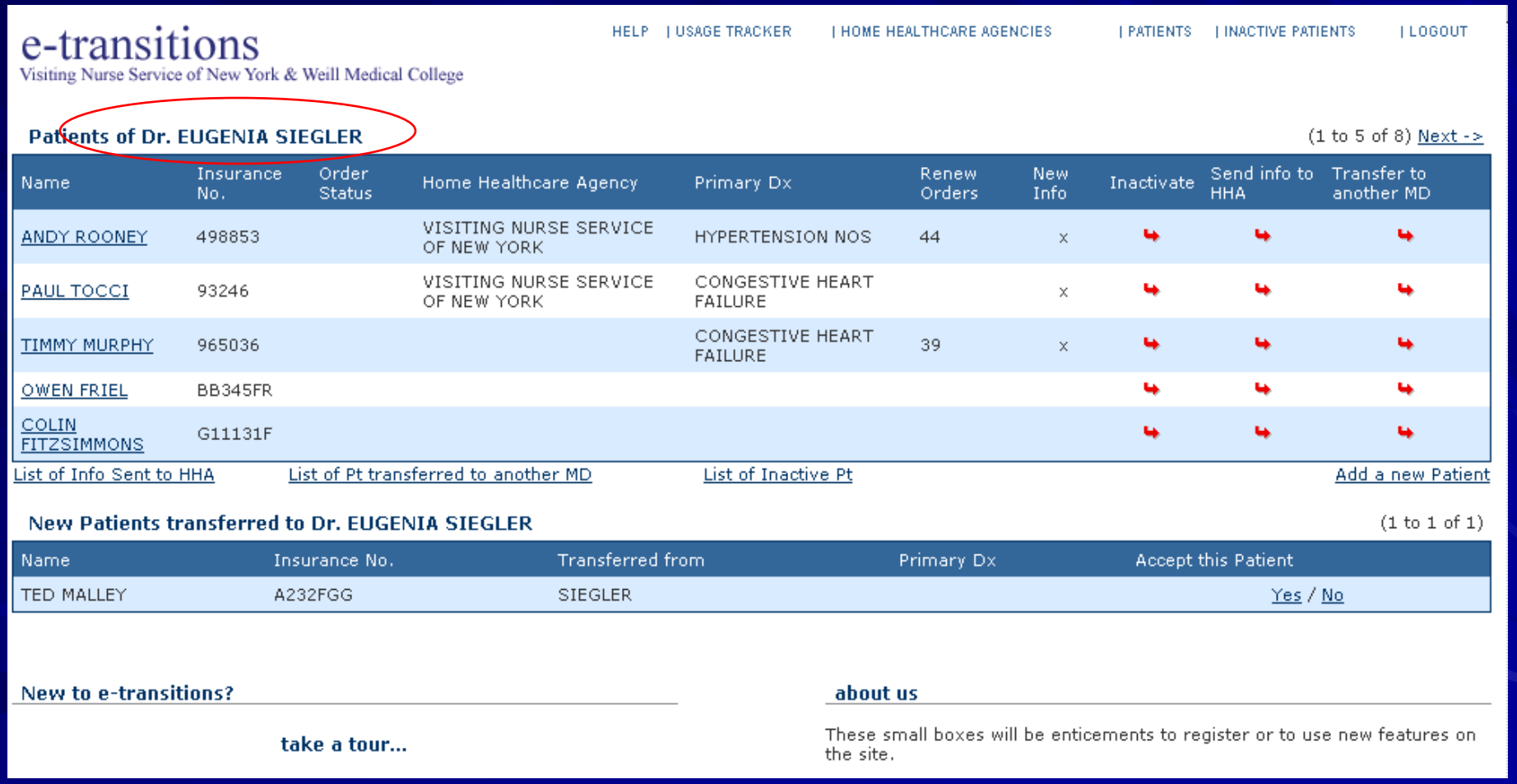
Body of CCR

- Payer
- Advance Directives
- Support
- Functional Status
- Problems
- Family History
- Alerts
- Medications
- Medical Equipment
- Vital Signs
- Plan of Care
- More

Home Page


e-transitions
Visiting Nurse Service of New York & Weill Medical College
HELP | FEED BACK | CONTACT US | MY HOME | VNS HOME
Login
Forgot your password?
REGISTER NOW
This introductory text explains the e-transitions' goals and gives users a brief introduction to the site. In the beginning, the text should be explanatory and the call to action will be encouraging users to register. Over time, as the users become more used to the site, the text will change.
This is another introductory text that explains the e-transitions' goals and gives users a brief introduction to the site. In the beginning, the text should be explanatory and the call to action will be encouraging users to register. Over time, as the users become more used to the site, the text will change.
TIPS
How to get the most out of the etransitions website. How to use reports, ideas about drilling down, etc.
NOT REGISTERED? HERE'S WHY YOU SHOULD!
These small boxes will be enticements to register or to use new features on the site.
NEWS FLASH
that would be helpful to the user.
These are more short news stories about new reports.
CURRENT NEWS
News Article 1
Now Available Online
date posted
News Article 2
Now Available Online
date posted
MORE NEWS

Physician Patient List



e-transitions
Visiting Nurse Service of New York & Weill Medical College

HELP | USAGE TRACKER | HOME HEALTHCARE AGENCIES | PATIENTS | INACTIVE PATIENTS | LOGOUT

Patients of Dr. EUGENIA SIEGLER

(1 to 5 of 8) Next ->

Name	Insurance No.	Order Status	Home Healthcare Agency	Primary Dx	Renew Orders	New Info	Inactivate	Send info to HHA	Transfer to another MD
ANDY ROONEY	498853		VISITING NURSE SERVICE OF NEW YORK	HYPERTENSION NOS	44	x			
PAUL TOCCI	93246		VISITING NURSE SERVICE OF NEW YORK	CONGESTIVE HEART FAILURE		x			
TIMMY MURPHY	965036			CONGESTIVE HEART FAILURE	39	x			
OWEN FRIEL	BB345FR								
COLIN FITZSIMMONS	G11131F								

List of Info Sent to HHA | List of Pt transferred to another MD | List of Inactive Pt | Add a new Patient

New Patients transferred to Dr. EUGENIA SIEGLER

(1 to 1 of 1)

Name	Insurance No.	Transferred from	Primary Dx	Accept this Patient
TED MALLEY	A232FGG	SIEGLER		Yes / No

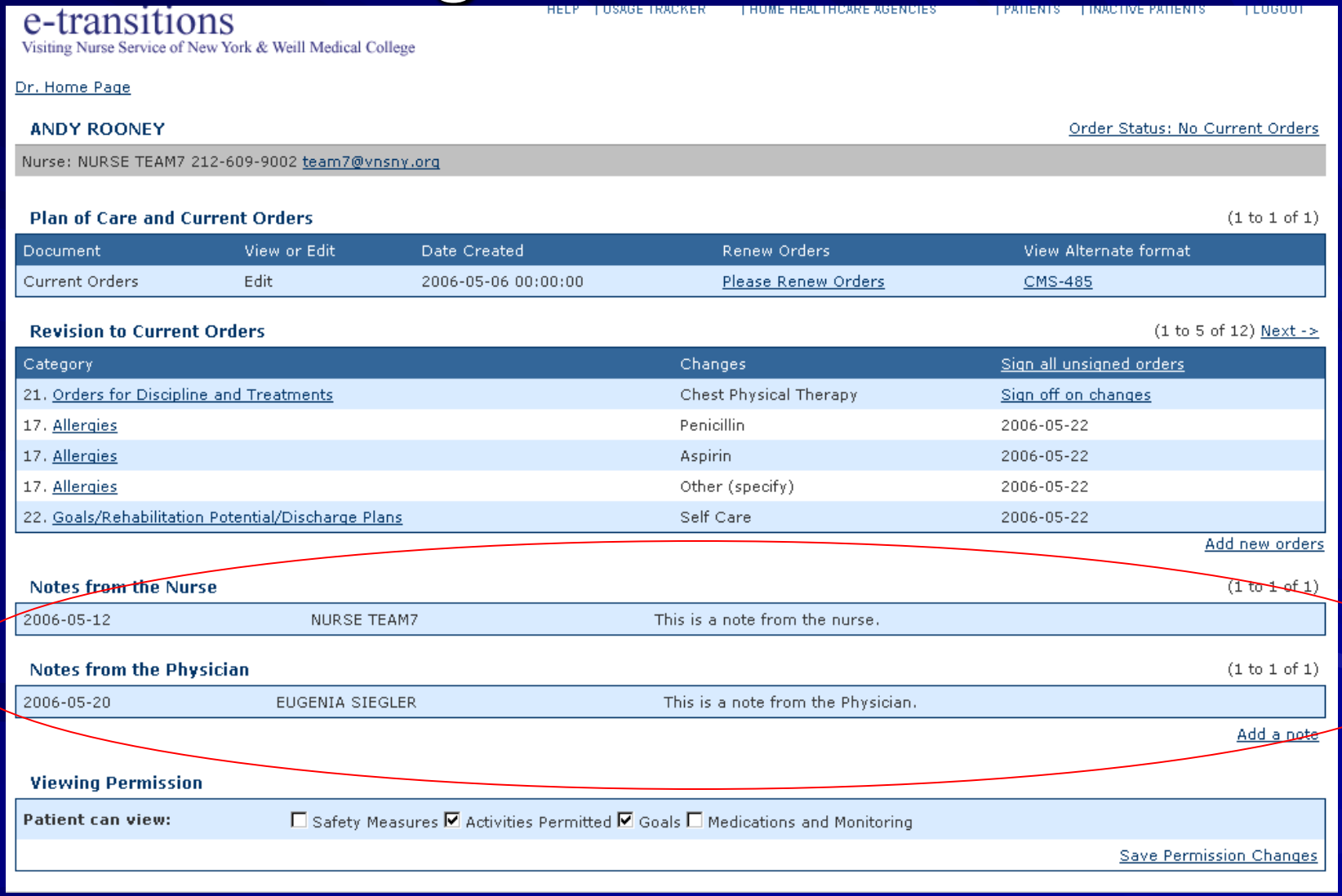
New to e-transitions?

take a tour...

about us

These small boxes will be enticements to register or to use new features on the site.

Physician - Patient View Including Communications



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Dr. Home Page

ANDY ROONEY — Order Status: No Current Orders

Nurse: NURSE TEAM7 212-609-9002 team7@vnsny.org

Plan of Care and Current Orders (1 to 1 of 1)

Document	View or Edit	Date Created	Renew Orders	View Alternate format
Current Orders	Edit	2006-05-06 00:00:00	Please Renew Orders	CMS-485

Revision to Current Orders (1 to 5 of 12) Next ->

Category	Changes	Sign all unsigned orders
21. Orders for Discipline and Treatments	Chest Physical Therapy	Sign off on changes
17. Allergies	Penicillin	2006-05-22
17. Allergies	Aspirin	2006-05-22
17. Allergies	Other (specify)	2006-05-22
22. Goals/Rehabilitation Potential/Discharge Plans	Self Care	2006-05-22

Add new orders

Notes from the Nurse (1 to 1 of 1)

2006-05-12	NURSE TEAM7	This is a note from the nurse.

Notes from the Physician (1 to 1 of 1)

2006-05-20	EUGENIA SIEGLER	This is a note from the Physician.

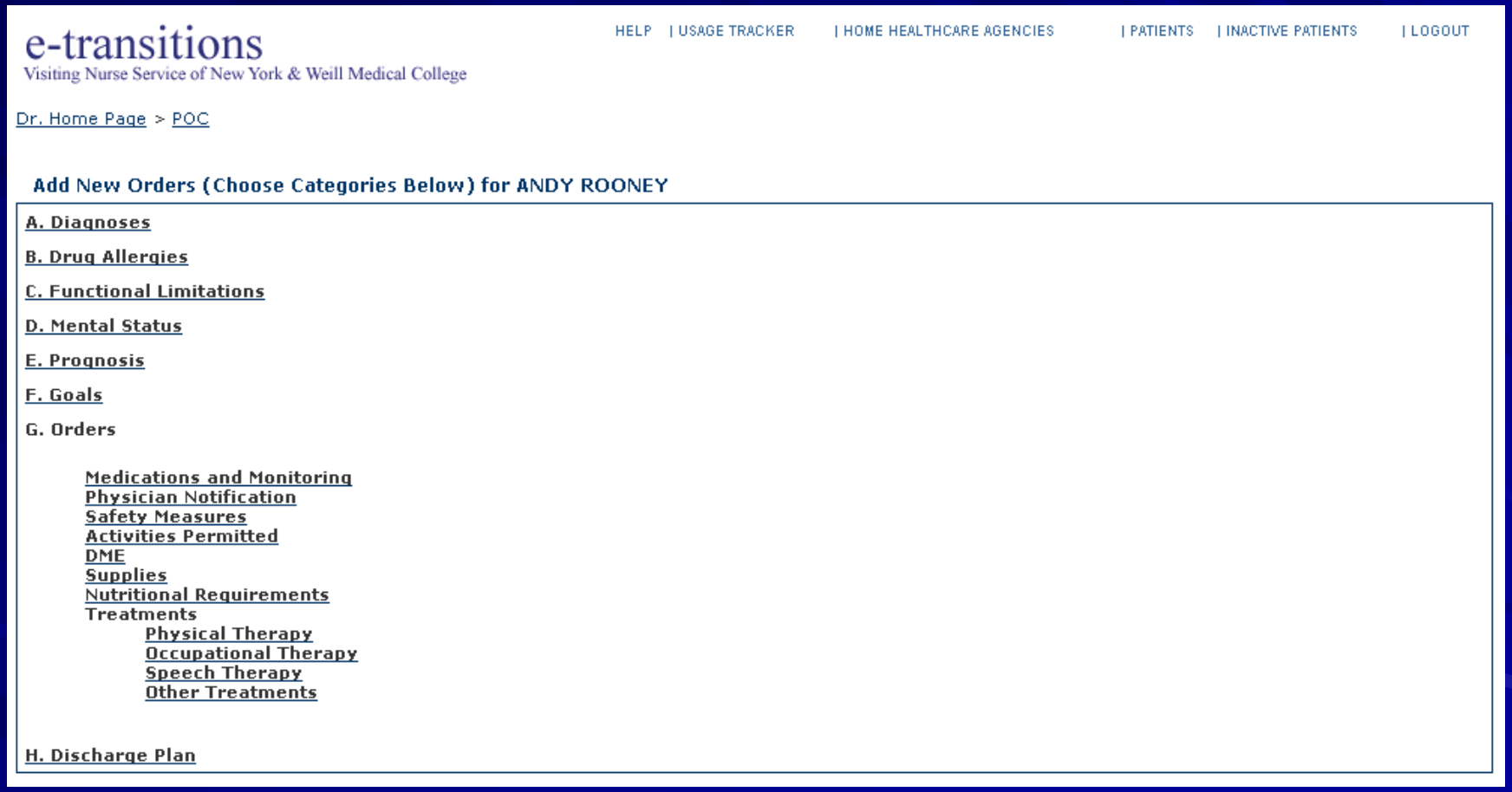
Add a note

Viewing Permission

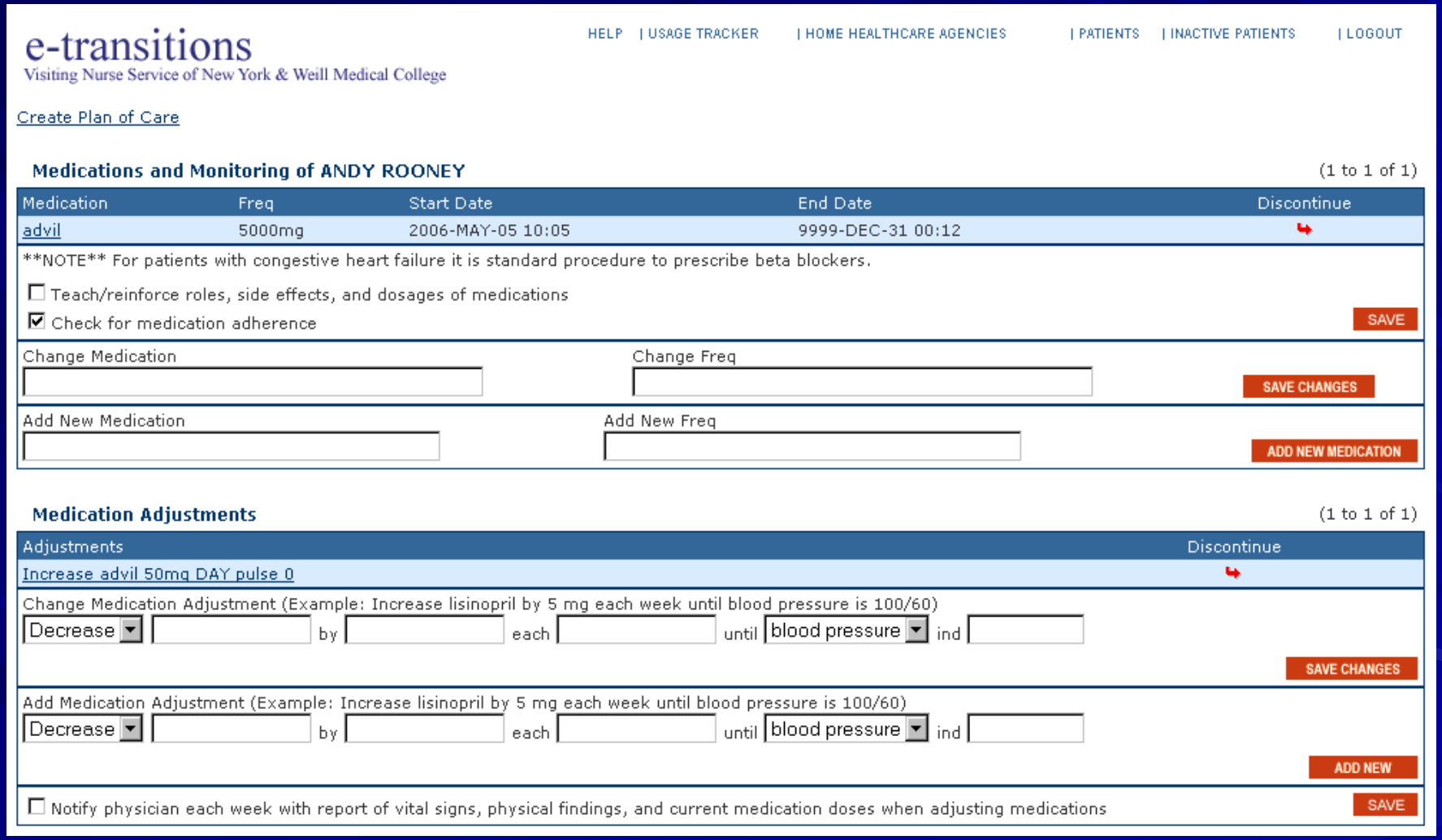
Patient can view: ☐ Safety Measures ☑ Activities Permitted ☑ Goals ☐ Medications and Monitoring

Save Permission Changes

Physician – Add Orders



Physician – Medication Adjustments and Monitoring



Basic CMS 485 Information

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HELP | USAGE TRACKER | HOME HEALTHCARE AGENCIES | PATIENTS | INACTIVE PATIENTS | LOGOUT

= MD signature required

CMS 485

Physician: EUGENIA SIEGLER 212-746-1772 rocco.napoli@vnsny.org

1. Patient's HI Claim No.	2. Start of Care Date	3. Certification Period	5. Provider No.
498853	2006-01-01	From: 2006-01-01 To: 2006-03-01	337008

6. Patient's

Name: ANDY ROONEY

Address: 32 WEST 45TH STREET

City: NY State: NY

Zip: 10029 Tel: 212-333-7888 Map

7. Provider's

Name: VISITING NURSE SERVICE OF NEW YORK

Address: 1250 BROADWAY

City: NY State: NY

Zip: 10001 Tel: 212-609-9001 Map

8. Date of Birth: 1919-12-18

9. Sex: M

10. Medications

advil 5000mg

11. ICD-9-CM	Pricipal Diagnosis	Date
079.53	HIV-2 INFECTION OTH DIS	04/28/2006
12. ICD-9-CM	**Surgical Diagnosis**	**Date**
None Selected	None Selected	None Selected
13. ICD-9-CM	**Other Pertinent Diagnosis**	**Date**
None Selected	None Selected	None Selected

14. DME and Supplies

Level 1 mattress
Hospital Bed
Home Oxygen (liters/min)

15. Safety Measures

Perform Home Safety Assessment

Assess Nutritional Requirements
Other Nutritional Requirements (Vitamin K)

16. Nutritional Requirements

17. Allergies

Penicillin

Basic CMS 485 Information

18.A. Functional Limitations	18.B. Activities Permitted
Bowel/Bladder Contracture Hearing Paralysis Other (test)	Assess Need for PT Evaluation PT Evaluation Complete Bedrest Bedrest BRP UP as tolerated Transfer Bed/Chair Exercise Prescribed Partial Weight Bearing Independent at Home Crutches Wheelchair Walker

19. Mental Status	20. Prognosis
Lethargic	Poor

21. Orders for Discipline and Treatment

Nursing

Visit 3 days/week for 4 weeks
Teach patient to monitor daily weights
At each, visit assess: pulse, blood pressure, weight, heart rate and rhythm, lung sounds, and lower extremity edema and perfusion
Monitor and teach signs and symptoms of worsening heart failure
Assess heart failure medications
Educate about low sodium diet

Physical Therapy

Chest Physical Therapy

Occupational Therapy

Speech Therapy

Other Treatment

Physician Notification

Notify physician for Systolic BP < 120 or > 80
Notify physician for weight loss 10 lb in 2 days

Basic CMS 485 Information

22. Goals/Rehabiliation Potential/discharge Plans

Goals

Pt/caregiver will be knowledgeable about disease; behaviors needed to manage condition; signs and symptoms of complications; prescribed diet; signs and symptoms of an emergency and know appropriate actions
Pt/caregiver will demonstrate proper administration of medication
Pt/caregiver will identify purpose dose schedule
Pt/caregiver will demonstrate treatment as prescribed

Discharge Plans

Self Care

Process Evaluation of Web-based System (e-transitions)

- Interviews with operations staff at VNSNY (e.g., Central Admissions Unit managers)
- Two clinician focus groups:
  - Physicians at Cornell and in community
  - Nurses at VNSNY
- Phone interviews with patients and/or caregivers

Acknowledgements

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