# Field Report:Initial Operational Findings from a Medicare Coordinated Care Demonstration Site

## The Mind My Heart Program for Patients with Congestive Heart Failure

Phil Beauchene, MHA RN CMPE

Executive Director

Georgetown University Medicare Demonstration Project

# Phil Beauchene, MHA RN CMPE

- Executive Director of Georgetown University's ***Mind $_{My}$ Heart*** Medicare Project, one of 15 US sites demonstrating coordinated care for chronically ill Medicare FFS beneficiaries.
- Formerly served as COO of 130-physician multi-specialty medical group, as Assistant Administrator for Planning and Marketing of a 235-bed community hospital, and in senior staff positions in an integrated delivery network.
- RN clinical practice areas: ER, Med-Surg, and Psychiatry.
- Certified Member-American College of Medical Practice Executives
- Graduate of Bates College, VCU-Medical College of Virginia School of Healthcare Administration
- **PVB2@georgetown.edu**

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# Overview

- Program Goals – *"I'm from the government and I'm here to help"*
- CHF + DM – *Low hanging DM fruit or the disease no one manages?*
- Operational Barriers and Challenges
  - Technology *"Did you turn it off and then on again?"*
  - Patient Recruiting *Turn nurses into HIPAA savvy salespersons!*
  - MD Acceptance *"How do I know you won't steal my patient?"*
  - HR Building/Training *Turn nurses into caring techno geeks!*
- Lessons Learned – Mistakes to Avoid
- Future Opportunities

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# Program Goals

**“I’m from the government and I’m here to help you...”**

# Overview - What Is MindmyHeart 21st Century Cardiac Care™ ?

- Randomized demonstration of coordinated care services for patients with congestive heart failure (CHF).
- Funded by Medicare through May 2006 to learn whether Congress should provide new coverage types
- **Will serve any CHF patient in the DC metro area at <u>no cost</u> to patients, physicians, or hospitals**.
- **No change to existing patient-physician relationships or referral/hospital admitting preferences**.

# Demonstration Overall Objective

To show what excellent coordination of care at home can do for CHF patients

- Patient living better,
- Family more secure,
- Fewer exacerbations,
- Lower cost

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# Demonstration Focus Areas

Does Mind My Heart:

- reduce overall healthcare costs?
    - reduce hospitalizations/ER visits?
- improve patient/physician satisfaction?
- improve patient perceived quality of life?
- improve adherence to best practices ?
    - medical management
    - patient education/self-management
- function efficiently with technology ?

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# Care Management

**Physician Medical Management**

- **Medications**
- **Exercise tolerance**
- **Diet**
- **Family guidance**
- **Office and hospital visits**

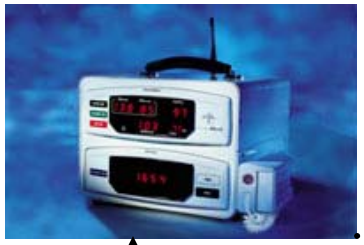
**Patient and Family**

**Patient's Usual Physician(s)**

**Patient's Daily Vital Signs**

- **Weight**
- **BP**
- **Pulse**
- **$O_2$ level**
- **Fatigue and Breathing (subjective)**

**Home Monitor**



**RN Care Manager**
**(by phone and at patient's home)**

**Community Services**

- **Transport Assistance***
- **Medication Assistance***
- **Referral to resources for co-morbid conditions**
- **Liaison with social agencies, churches, etc.**
- **Meals On Wheels, etc.**

**( * Need-based qualification for transport and medication assistance.)**

***The Care Manager makes it all work together***

# Randomized Study Design

## Experimental Group

- Management of CHF by cardiologist or PCP
- Care Manager assigned to patient 24/7
- Home monitoring package
  - Weight, BP, P, $O_2$ plus 2 subjective questions on fatigue and breathing
- Transportation Vouchers
- CHF drug assistance
- Multi-disciplinary team

## Control Group

- Management of CHF by cardiologist or PCP

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# Inclusion Criteria

- FFS Medicare beneficiary (Parts A + B)
- 65 years or older
- Washington, D.C. metropolitan area
- Congestive Heart Failure
  - NYHA CHF Class II, III, or IV.
- Primary physician willing to participate
- Patient willing to have Care Manager assigned and monitor in home
- Exclusions: ESRD, no phone line

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# CHF and Disease Management

**Low hanging disease management fruit, or the disease no one manages?**

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# CHF

- 4.6 Million Americans live with CHF
  - 12/10,000 hospitalizations in persons under 65
  - 325/10,000 hospitalizations in persons 74 + (AHA)
- Within 3-6 months post discharge, 29-47% of patients are readmitted with CHF symptoms
- In last year of life in DC area, average monthly cost of patients with CHF is $2,862
- Pareto's Law Studies of chronic illness costs estimate the sickest 5-10% of patients generate 60-70% of expenses.

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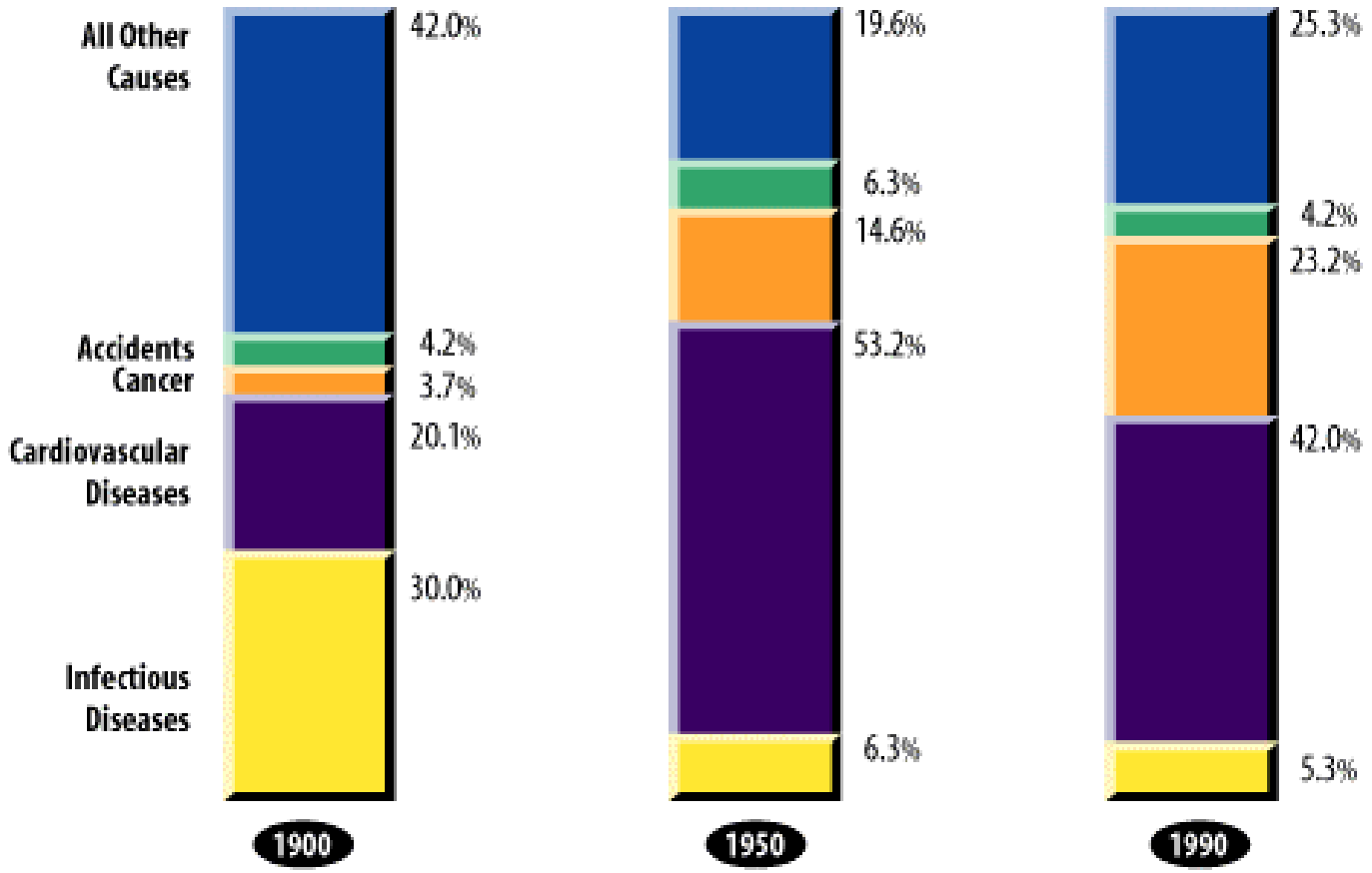
# The Epidemic of Chronic Illness

## Changes in the leading causes of death




Source: Chronic Care in America – Robert Wood Johnson Foundation, 1999

# Care Management / Care Coordination

## Case Management

**Chronically ill patients at high risk for suffering adverse and expensive outcomes, often with multiple illnesses, who require long term management**

## Disease Management

**Chronically ill patients whose main health problems involve a single illness or diagnosis, and for whom interventions tend to be shorter**

Mathematica Policy Research, Inc. "Best Practices in Coordinated Care." Submitted to: Health Care Financing Administration, Division of Demonstration Programs, by Mathematica Policy Research, Baltimore, MD, March 22, 2000.

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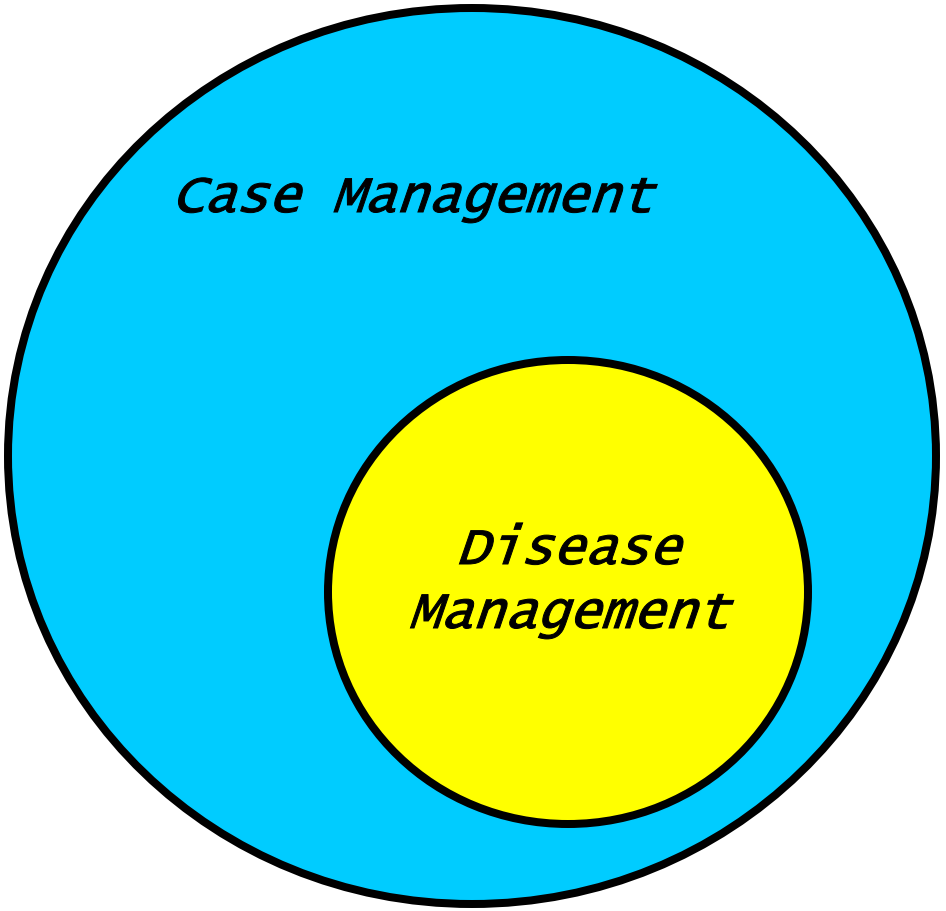
# Care Management

## A Combination of Case Management and Disease Management Approaches

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# Potential of Care Management

- Results from previous studies:
  - Rich et al (1989) - 90 day readmission rate decreased from 46% to 33%
  - Rich et al (1995) - 27% reduction in hospital readmission rate
  - Shah et al (1998) – 50% reduction in hospital admission rates
- Demonstrated ability to prevent readmissions for the same diagnosis within 30 days of discharge

# CHF and DM – A Few Observations

- Fragmentation -Who actually manages the CHF?
  - Check the patient's medication bottles!
- Persuading physicians to accept best practices
  - Mandates or persuasion?
- Helping nurses to step into new roles as coordinators and facilitators rather than as direct caregivers

# Operational Barriers and Challenges

- **Technology**
- **Patient Recruiting**
- **MD Acceptance**
- **HR Building/Training**

# Technology

Using 2 main systems:

- Canopy Systems, Raleigh NC
  - Web-based electronic medical record and case management software
  - **www.canopysystems.com**
- HomMed, LLC, Brookfield, Wisconsin
  - Home monitor measures weight, BP, P, $O_2$ and 2 subjective questions (other peripherals available)
  - Transmits data by pager to a secure server which is then accessed by dial-up connection
  - **www.hommed.com**

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# Technology

## Canopy- EMR/Case Management Software

- Thin client – all your data is at the vendor. Need paper backup if system down.
  - Solution – Data mining and standard reporting
- Connectivity – need to connect to read/update patient chart. Dial-up not fast enough.
  - Short term solution – home DSL lines for Care Managers, catch WiFi areas on the road (Starbucks)
  - Long term solution – thick client version of Canopy that could be entered on tablets, PDA's, then synched
- Interface with HomMed – requires constant rechecks when one system or the other releases new software

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Canopy - Microsoft Internet Explorer

Administration | Tasks | Pt Episode List | Pt Encounter List | Patients | Screening | Reports | My Preferences | Help | Log Off

**Smith, Ed** AGE: **65 (07/07/1936)** Medical Record ... **558394** FIN: **Commercial**

Search Patient

FIND | LIST | ADD NEW | CURRENT

Summary | Providers | Directives | Diagnoses | Medications | Allergies | Surgical | Labs | Vitals | Resources | Notes | Pt Reports | Episodes | Assessments | Problems | Plan of Care | Forms | Encounters

## Providers

Admitting Physician
Brown, Frank
Attending Physician
Marx, Dr. Mark

## Diagnoses

CHF
Hypertension (Benign)
NIDDM

VIEW ID's

Notes: General | Directive | Diagnosis | Medication

Last: Smith
First: Ed
Middle:
Address: 113 Any Street
City: Anytown
State: Pennsylvania ZIP: 55555
County:
Phone Number: ( 555 ) 555-5555 ext.
Gender: Male
DOB: 07/07/1936

Normal Location
Site: Private Residence
Unit:
Room / Bed:

Current Location
Site:
Unit:
Room / Bed:

CM Status: Active
Financial Class: Commercial

**Emergency Contact** Name: Mrs. Smith Spouse
Phone: 555-5555 Note:

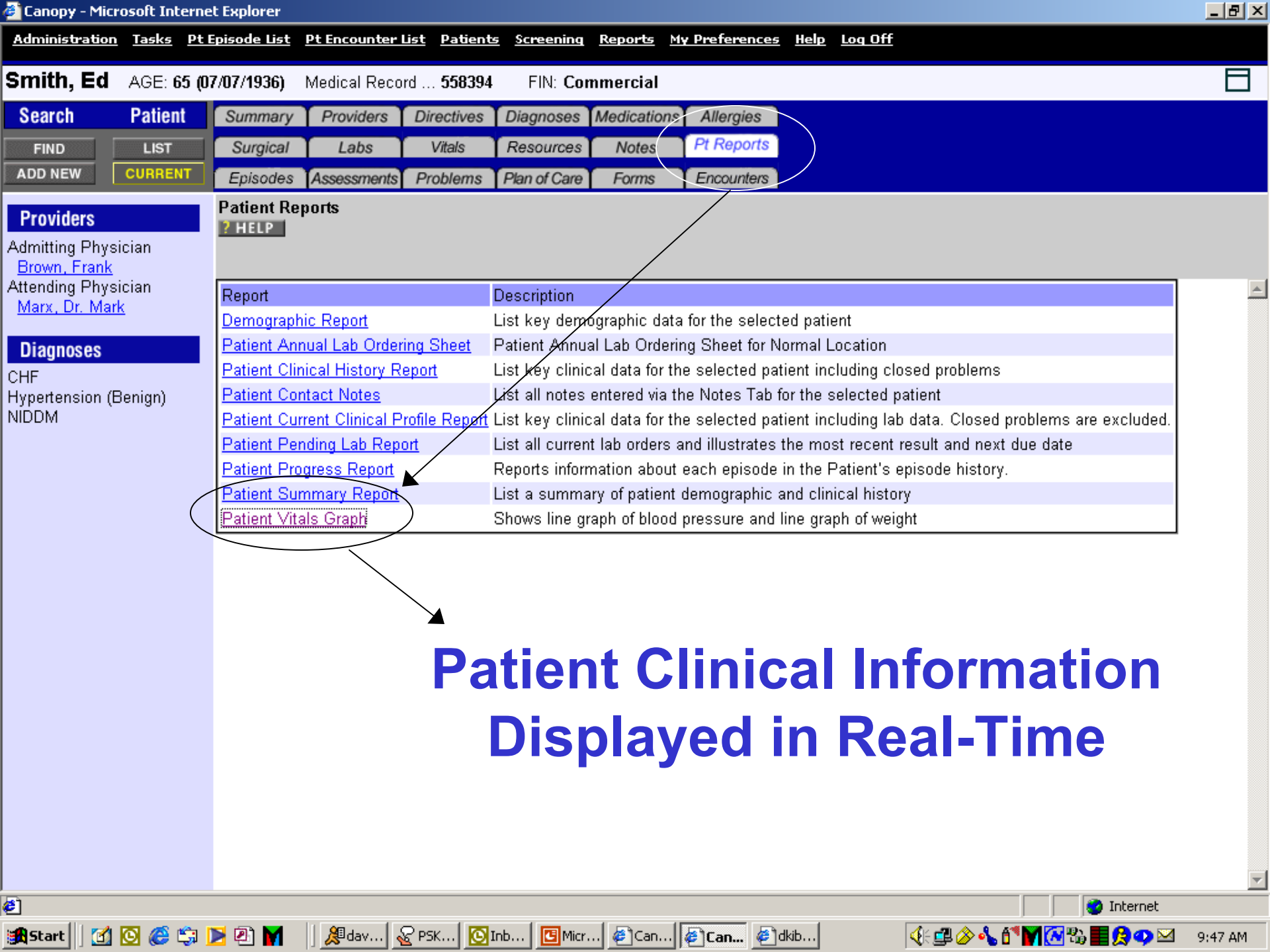
☐ This is a Training/Test Patient

UPDATE CANCEL

Canopy Central

Internet

Start | davidki... | PSK331... | Inbox - ... | Microso... | Canopy... | Canop... 9:38 AM


Canopy - Microsoft Internet Explorer
Administration Tasks Pt Episode List Pt Encounter List Patients Screening Reports My Preferences Help Log Off
Smith, Ed AGE: 65 (07/07/1936) Medical Record ... 558394 FIN: Commercial
Search Patient
FIND LIST
ADD NEW CURRENT
Summary Providers Directives Diagnoses Medications Allergies
Surgical Labs Vitals Resources Notes Pt Reports
Episodes Assessments Problems Plan of Care Forms Encounters
Providers
Admitting Physician
Brown, Frank
Attending Physician
Marx, Dr. Mark
Diagnoses
CHF
Hypertension (Benign)
NIDDM
Patient Reports
? HELP
Report
Description
Demographic Report
List key demographic data for the selected patient
Patient Annual Lab Ordering Sheet
Patient Annual Lab Ordering Sheet for Normal Location
Patient Clinical History Report
List key clinical data for the selected patient including closed problems
Patient Contact Notes
List all notes entered via the Notes Tab for the selected patient
Patient Current Clinical Profile Report
List key clinical data for the selected patient including lab data. Closed problems are excluded.
Patient Pending Lab Report
List all current lab orders and illustrates the most recent result and next due date
Patient Progress Report
Reports information about each episode in the Patient's episode history.
Patient Summary Report
List a summary of patient demographic and clinical history
Patient Vitals Graph
Shows line graph of blood pressure and line graph of weight
Patient Clinical Information Displayed in Real-Time
Internet
Start
9:47 AM

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FIND

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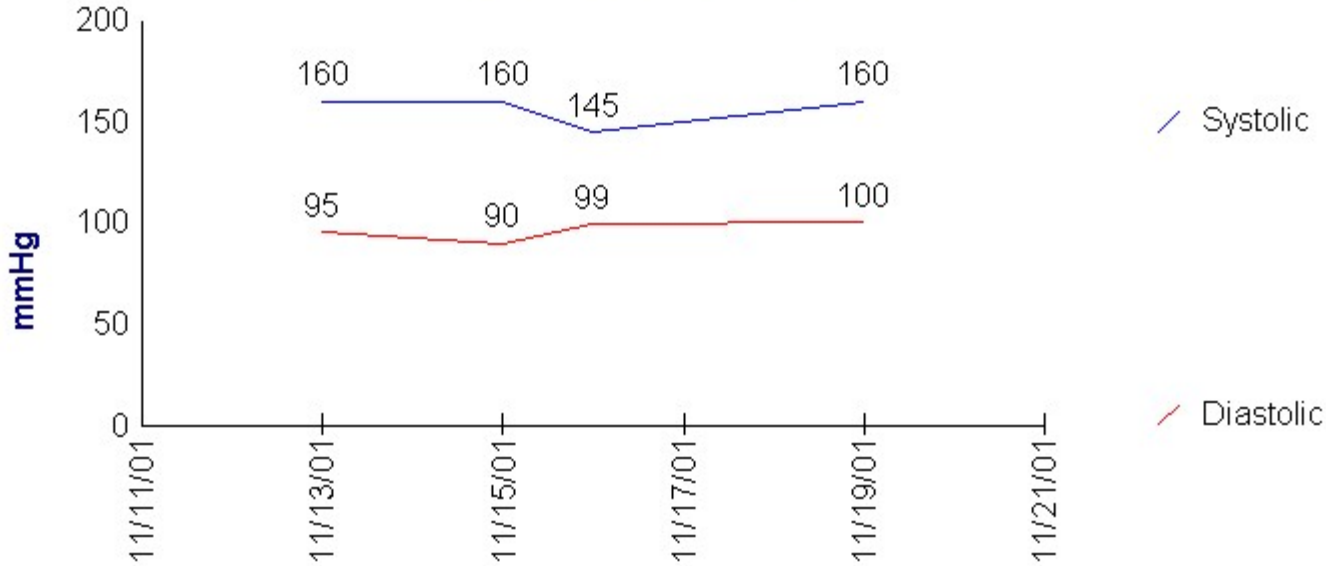
dkibbe - Microsoft Internet Explorer

NavBar First Prev Next Last Goto Page 1 of 2 100% Search Download/Print

**Patient Name:** Ed Smith

## Blood Pressure




Done

Internet

# Technology

Advantages of Canopy EMR

- Date and time-stamping of all encounters allows for accountability and productivity monitoring
- HIPAA-secure and confidential data transmissions
- Interface with other systems – HomMed monitor
- Internet platform – real time updates, multiple simultaneous access to the EMR
- Internet and intranet resources available for the Care Manager in the field.

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# Technology

**HomMed Monitor**

- Teaching elderly patients to use technology
- Clarify it is not an emergency response aid
- High rate of alerts initially, then steadies
- Monitor Fatigue – compliance rate is outstanding (98%) , but patients get “tired”.
- Previously mentioned interface between HomMed and Canopy
- Paper contingency if system down

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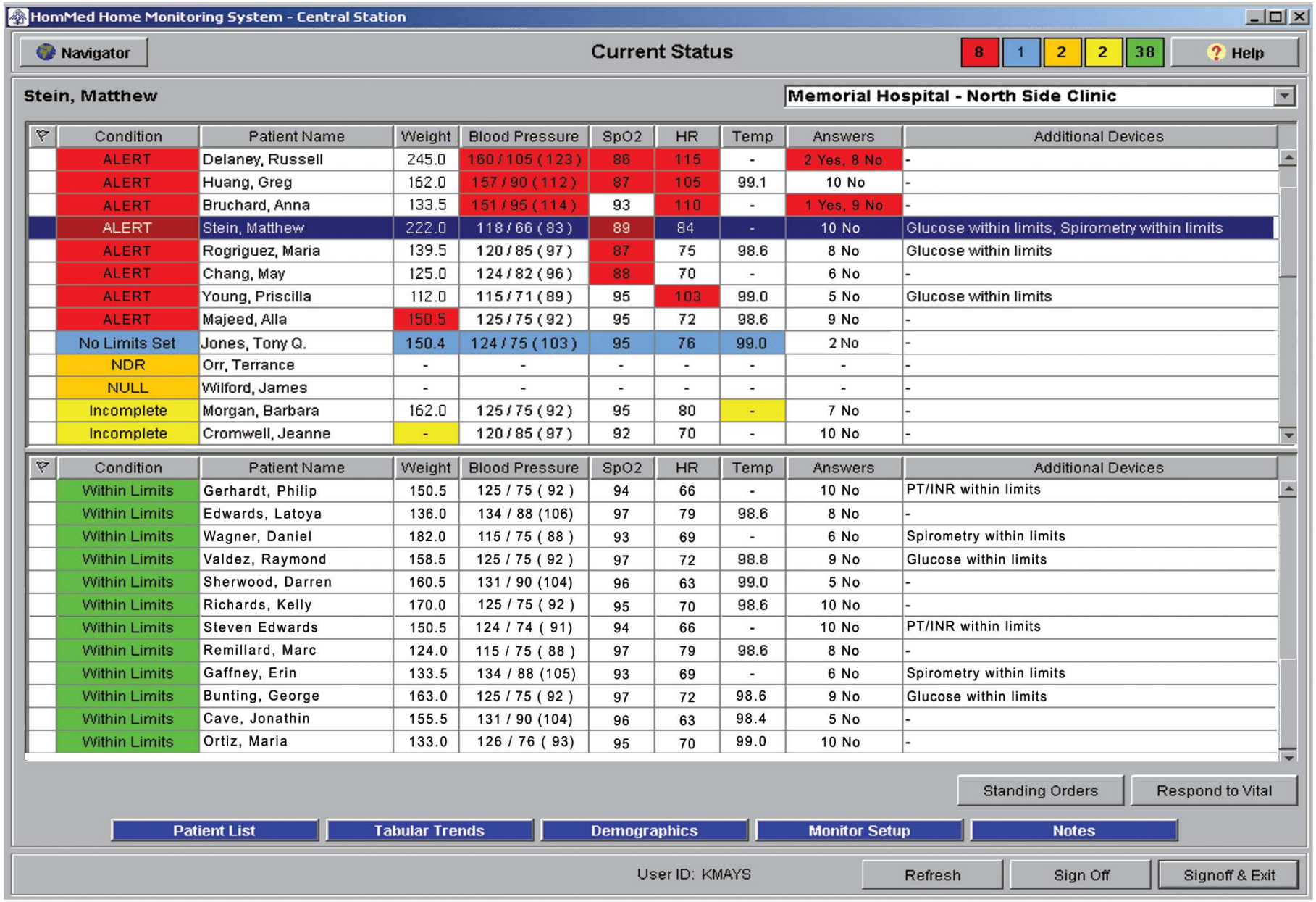
HomMed Home Monitoring System - Central Station
Navigator
Current Status
8
1
2
2
38
Help
Stein, Matthew
Memorial Hospital - North Side Clinic
Condition | Patient Name | Weight | Blood Pressure | SpO2 | HR | Temp | Answers | Additional Devices
ALERT | Delaney, Russell | 245.0 | 160 / 105 ( 123 ) | 86 | 115 | - | 2 Yes, 8 No | -
ALERT | Huang, Greg | 162.0 | 157 / 90 ( 112 ) | 87 | 105 | 99.1 | 10 No | -
ALERT | Bruchard, Anna | 133.5 | 151 / 95 ( 114 ) | 93 | 110 | - | 1 Yes, 9 No | -
ALERT | Stein, Matthew | 222.0 | 118 / 66 ( 83 ) | 89 | 84 | - | 10 No | Glucose within limits, Spirometry within limits
ALERT | Rogriguez, Maria | 139.5 | 120 / 85 ( 97 ) | 87 | 75 | 98.6 | 8 No | Glucose within limits
ALERT | Chang, May | 125.0 | 124 / 82 ( 96 ) | 88 | 70 | - | 6 No | -
ALERT | Young, Priscilla | 112.0 | 115 / 71 ( 89 ) | 95 | 103 | 99.0 | 5 No | Glucose within limits
ALERT | Majeed, Alla | 150.5 | 125 / 75 ( 92 ) | 95 | 72 | 98.6 | 9 No | -
No Limits Set | Jones, Tony Q. | 150.4 | 124 / 75 ( 103 ) | 95 | 76 | 99.0 | 2 No | -
NDR | Orr, Terrance | - | - | - | - | - | - | -
NULL | Wilford, James | - | - | - | - | - | - | -
Incomplete | Morgan, Barbara | 162.0 | 125 / 75 ( 92 ) | 95 | 80 | - | 7 No | -
Incomplete | Cromwell, Jeanne | - | 120 / 85 ( 97 ) | 92 | 70 | - | 10 No | -
Condition | Patient Name | Weight | Blood Pressure | SpO2 | HR | Temp | Answers | Additional Devices
Within Limits | Gerhardt, Philip | 150.5 | 125 / 75 ( 92 ) | 94 | 66 | - | 10 No | PT/INR within limits
Within Limits | Edwards, Latoya | 136.0 | 134 / 88 (106) | 97 | 79 | 98.6 | 8 No | -
Within Limits | Wagner, Daniel | 182.0 | 115 / 75 ( 88 ) | 93 | 69 | - | 6 No | Spirometry within limits
Within Limits | Valdez, Raymond | 158.5 | 125 / 75 ( 92 ) | 97 | 72 | 98.8 | 9 No | Glucose within limits
Within Limits | Sherwood, Darren | 160.5 | 131 / 90 (104) | 96 | 63 | 99.0 | 5 No | -
Within Limits | Richards, Kelly | 170.0 | 125 / 75 ( 92 ) | 95 | 70 | 98.6 | 10 No | -
Within Limits | Steven Edwards | 150.5 | 124 / 74 ( 91) | 94 | 66 | - | 10 No | PT/INR within limits
Within Limits | Remillard, Marc | 124.0 | 115 / 75 ( 88 ) | 97 | 79 | 98.6 | 8 No | -
Within Limits | Gaffney, Erin | 133.5 | 134 / 88 (105) | 93 | 69 | - | 6 No | Spirometry within limits
Within Limits | Bunting, George | 163.0 | 125 / 75 ( 92 ) | 97 | 72 | 98.6 | 9 No | Glucose within limits
Within Limits | Cave, Jonathin | 155.5 | 131 / 90 (104) | 96 | 63 | 98.4 | 5 No | -
Within Limits | Ortiz, Maria | 133.0 | 126 / 76 ( 93) | 95 | 70 | 99.0 | 10 No | -
Standing Orders
Respond to Vital
Patient List
Tabular Trends
Demographics
Monitor Setup
Notes
User ID: KMAYS
Refresh
Sign Off
Signoff & Exit

# Technology

**RN Care Managers - Electronic Road Warriors**

- **Laptop configured for WiFi, home DSL, shortcuts to Canopy and HomMed**
- **Cell phones**
- **Home DSL lines or cable connections**
- **Home printer/scanner/fax machines**

**Superb support from Georgetown University Imaging Science Information Services department (ISIS)**

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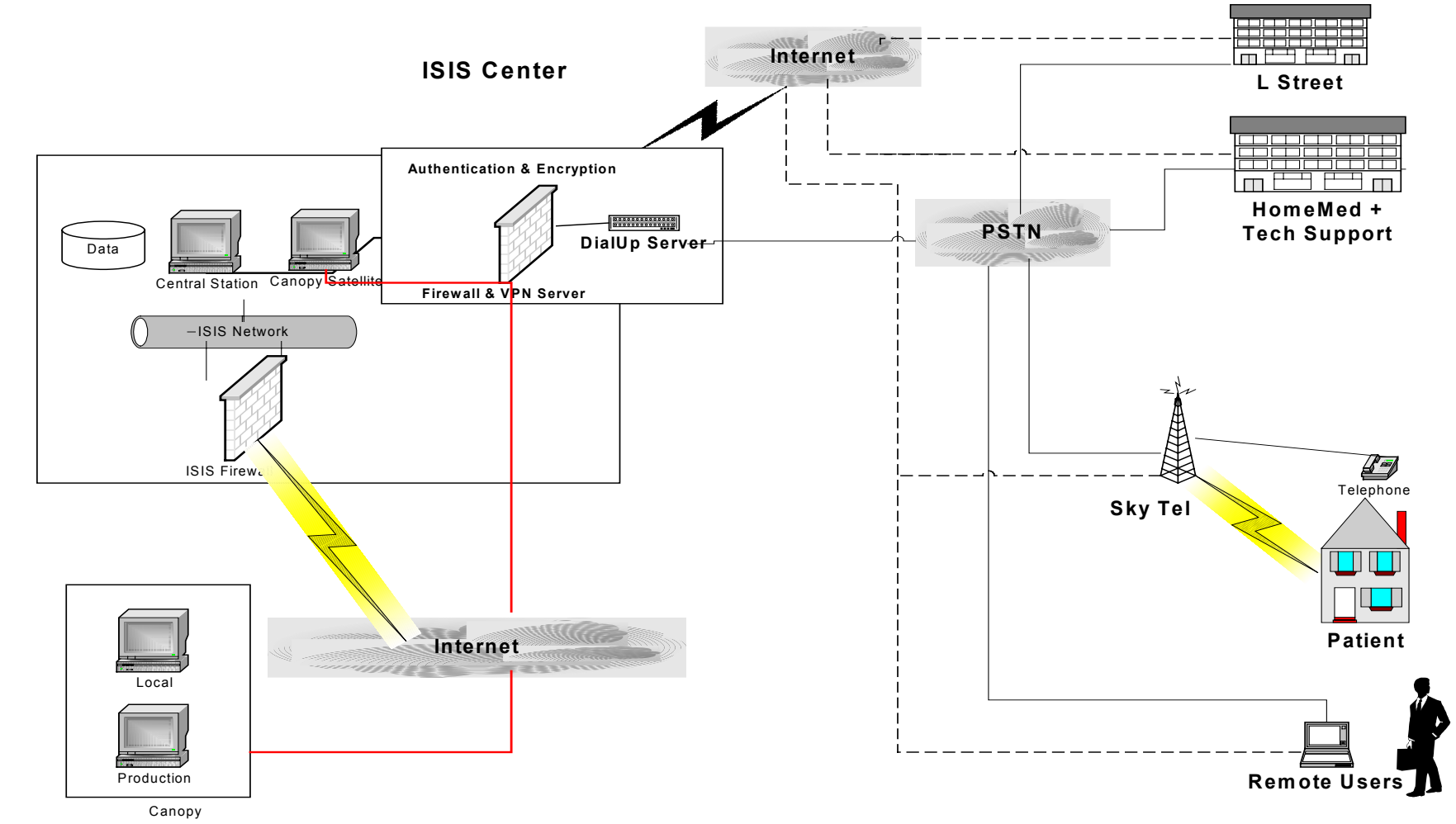
# Technology - Connectivity




**Suggested Architecture**
**ISIS Center**

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# Patient Recruiting

**“And who is paying for this again?”**

# Patient Recruiting

**Specific challenges we encountered**

- Establishing credibility (true of any start-up)
- Reassuring patients that they will not be charged or lose benefits for care management
- Model requires MD consent to recruit their patient – cumbersome but effective in long run
- Elderly mistrust of initial telephone contact "I'll need to check with my doctor when I see him next month" Time delays.

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# Patient Recruiting

**Patient Identification Methods**

- Search of hospital discharge records (HIPAA)
- Presentations to groups of physicians, NP/PA's, hospital discharge managers, Visiting Nurses
- Write-ups in hospital and community newsletters
- Ads in *Washington Post* Health section and article and ad in the *Senior Beacon*
- Presentations at senior retirement communities
- Personal selling to physicians

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## *Medicare Patients*

***Do you have Congestive Heart Failure (CHF)? (Enlarged heart? Heart not "pumping" well?)***

**We want to help you get to the heart of your Congestive Heart Failure!**

Medicare has asked us to help carry out a demonstration of care management services for patients with CHF.

If selected, you will receive at no cost:

- **Your own RN Care Manager**
- **An electronic home monitor that measures weight and blood pressure daily**
- **Transportation and limited pharmacy assistance (for patients with financial need)**
- **All while remaining with your own physician and preferred hospital**

To qualify, you must:

- **Have documented CHF, either alone or with other conditions**
- **Have had a hospital stay within the past year**
- **Be 65 or older**
- **Be enrolled in Medicare Part A and Part B (this program does not affect your Medicare coverage)**
- **Live at home in the DC metro area, including MD/VA suburbs**

For more information, call **202-785-6666 or 1-866-466-0600** (toll-free).

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# Physician Acceptance

***"How do I know you aren't going to steal my patient or tell me how to practice?"***

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# Physician Acceptance

**Challenges**

- DC is a very busy medical community with lots of research studies. Hard to develop awareness of a brand new program.
- Resistance to for-profit or health plan DM programs. Keep needing to emphasize not-for-profit and government research connection.
- Resistance to "having to do one more thing and not getting paid for my time"
- Fear of losing patients to academic medical center physicians.

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# Physician Acceptance

**Gaining Physician Trust**

- Good care – the absolute requirement
- Useful data and observations – graphical trends delivered just in time for patient office visit
- Reimbursed case conferences with physician – brief but focused. Review monitor parameters, meds, and findings from the multi-disciplinary team
- Reduced number of "nuisance" calls from patients and NO nuisance calls from nurses.
- Absolutely no changes to patient's existing physicians, specialists, and hospitals. No stealing!
- Letter from Medicare Administrator Scully

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Graphic Trends Report for Stein, Matthew

## Patient

| PATIENT NAME | DOB | SSN | MEDICAL ID | EXPORT ID | SITE |
|---|---|---|---|---|---|
| Stein, Matthew | 03/25/1928 | 123-45-6789 | 123-45-6789 | | Your Hospital |

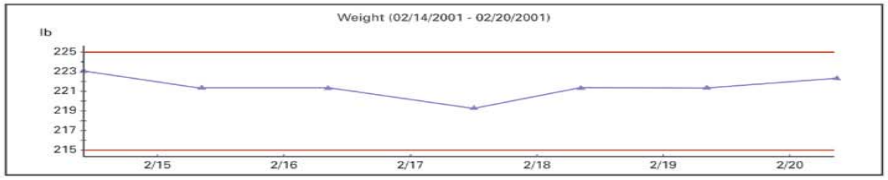
| ADDRESS | PHONE | GENDER | RACE | HEIGHT | MONITORING PERIOD |
|---|---|---|---|---|---|
| 1234 Main St.<br>Anytown, USA | 262-555-5555 | Male | Caucasian | 74 | 02/14/2001 - 02/20/2001 |

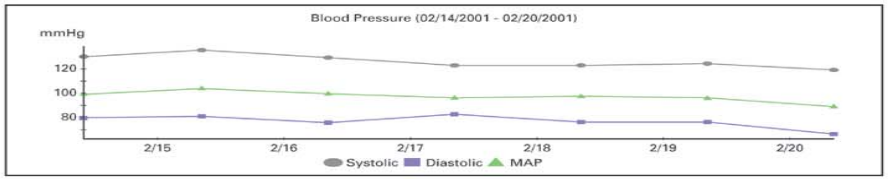
| PHYSICIAN NAME | ROLE | ORGANIZATION | PHONE | FAX |
|---|---|---|---|---|
| Physician, Joe | Primary | Your Hospital | 414-555-5555 | 414-555-5555 |

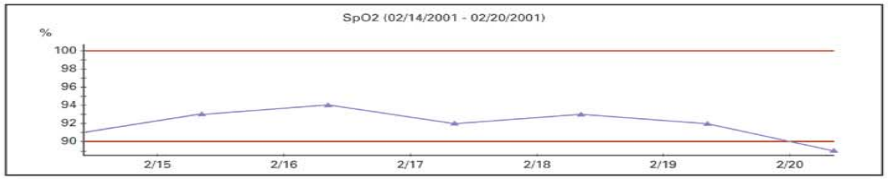
## Medications

| MEDICATION | DOSAGE/COMMENTS |
|---|---|
| Digoxin | 0.25 mg PO QD (KMAYS 02/01/2001 14:03) |
| ASA | 81 mg PO QD (KMAYS 02/01/2001 14:03) |
| Atenolol | 25 mg PO QD (KMAYS 02/01/2001 14:03) |
| Lasix | 40 mg PO QD (KMAYS 02/01/2001 14:03) |

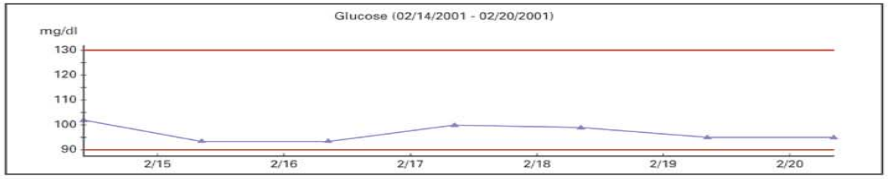
## Graphs








Personal and Confidential

Page 1 of 1

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# Staff Recruiting and Training

**“So then I remembered that I could get into HomMed by going through the VPN at ISIS” Care Manager**

# Staff Recruiting and Training

- Need 3 areas of expertise to be a Care Manager:
  - Cardiology nursing background
  - Home health background (probably most important)
  - Case management
- Plus comfort with computers and technology
- Can't find too many people with all these qualifications, need to fill in the gaps with OJT
- Not a job for a brand new nurse

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# Staff Recruiting and Training

**Strategies Used**

- Mentoring
- Training by company reps
- Thorough orientation (3 month process)
- Opportunistic training
- Detailed procedures
- Reminding nurses not to nurse the monitors but the patients

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# Lessons Learned
# Mistakes to Avoid

# Lessons Learned

- Prophet has no honor in his own land
- Choose a model that integrates more into the physician's office
- Build physician commitment early
- Be persistent
- Multiple fishing holes vs. 1-2 big ponds
- Winston Churchill – best commencement speech ever

# Future Opportunities

- Results of this demonstration and others ongoing will determine if Medicare will recommend new benefits to Congress
- All within context of proposed changes in Medicare –stay tuned
- If model successful, should provide new business line to integrate in an IDN, probably with your home health agency