A Comprehensive Heart Failure Management Program for the Portland VA Medical Center

A Collaboration of Primary Care, Specialty Care, Nursing and Pharmacy

This Presentation

- Adapted and shortened from a more detailed “sales” presentation made to Portland VA leadership at an ACA retreat in August, 2005.
- I am happy to send the full slide set if it will be of use to you
- Email me: greg.larsen@va.gov

What is Wrong With the Status Quo at PVAMC, 2005?

- For CHF in-patients:
  - 29% readmission rate within 30 days
- For CHF out-patients:
  - Inadequate dosing of life saving drugs
    - ACE Inhibitors
    - Beta Blockers

State of CHF Drug Titration

Chart review of 179 CHF patients by Bing Bing Liang, Pharm. D., 2004

Drug	% Receiving	% at Target Dose
ACE	77%	49%
Beta Blocker	77%	6%
Both	39%	4%

Structural Barriers: Primary Care

- Structural Primary Care Capacity (panel size):
  - 1.7 visits per patient per year
- Many competing priorities in any visit
  - Alerts, mandates, screening, patient concerns, etc
  - Clinic not designed for frequent drug titration

- Thus, Limited Capacity for "Short Cycle" Returns
  - Post-Discharge: "See PCP in 1 week"
  - Ongoing medical monitoring: "titrate medications every 1-2 weeks"

Structural Barriers in Cardiology: Current CHF Clinic Activity

- Projected Yearly Cards Clinic:
  - CHF new patient visits: 160
  - CHF return visits: 565
  - CHF post-hospital f/u visits: 264
  - Total 989 visits

- Primary Care CHF Visits: 2,548 visits
  (Portland only)
- Visit "Gap": 2,548 – 989 = 1559 visits

The Case for A Comprehensive CHF Management Program

Why do CHF Programs work?

- They rescue the most vulnerable
  - recently hospitalized patients
  - Chronic NYHA Class 4 patients
- They titrate life saving drugs to full doses
  - Some CHF patients are not on life prolonging drugs at all
  - Of those who are, most are not on doses shown to provide the life saving benefit

The Proposal

CHF Clinic Structure

- Most activities already ongoing, most FTE already in place, but scattered and under-supported. Thus, we propose:
  - A weekly clinic
  - Supervised by Cardiologist, CHF ANP
  - Educational—pre-clinic conference weekly
  - Consultative for new patients
  - Focused on effective diuresis and up-titration of life saving medications ("The Spin Cycle")
  - Multidisciplinary: "Primary care CHF care for Primary Care patients"
  - Staff supported for between-clinic continuity and drop-in care

The Pivotal Role of Primary Care

- We believe this to be PVAMC's first integrated collaboration between Primary Care and Medical Subspecialty practitioners for the care of a specific population of patients
- The plan: to have 2 PCP's (MD or ANP) at a time rotate into the CHF clinic for a limited time (3 months)
- A Heart Failure "Practicum":
  - "Heart Failure Care, for Primary Care, by Primary Care"
  - Learn the critical importance of diagnosing the cause of CHF in every patient
  - Learn in detail the algorithms of CHF drug management
  - Improve the care of CHF patients in the outpatient setting
  - Become resources and role models for CHF care after returning full time to primary care

How to Balance PCP Workload?

- A Negotiation with Primary Care Leadership
- Suspend requirement to see new PCP patients while in CHF clinic
- Encourage Self-Referral: send your challenging patients to yourself in CHF clinic
  - Still caring for your patient panel while not in your routine clinic

The Use of a Hospitalist: A Focus on Recently Discharged CHF Patients

- Most CHF patients who relapse do so in the first 3 weeks
- 6 PVAMC Hospitalists rotate in seeing recently discharged CHF patients to insure they have successfully made the transition from inpatient to outpatient status (~ 6 pts per week)
  - Begin med titration
  - Address other medical concerns
  - Plan for further CHF clinic visits for continued medicine up-titration

The Pivotal Role of Nurses in the CHF Clinic: Med Reconciliation

- Every CHF patient will have his medications reviewed by a nurse prior to meeting with a practitioner
  - "What medicines do you actually take?"
  - "What doses do you actually use?"
  - "Do you have a scale?"
  - "Do you have a home Blood Pressure Cuff?"
- We plan to allow 20 minutes for each review
- Start IV's, give diuretics in clinic
- Follow up lab test results, call patients
- Troubleshoot unanticipated problems
- Educate patients

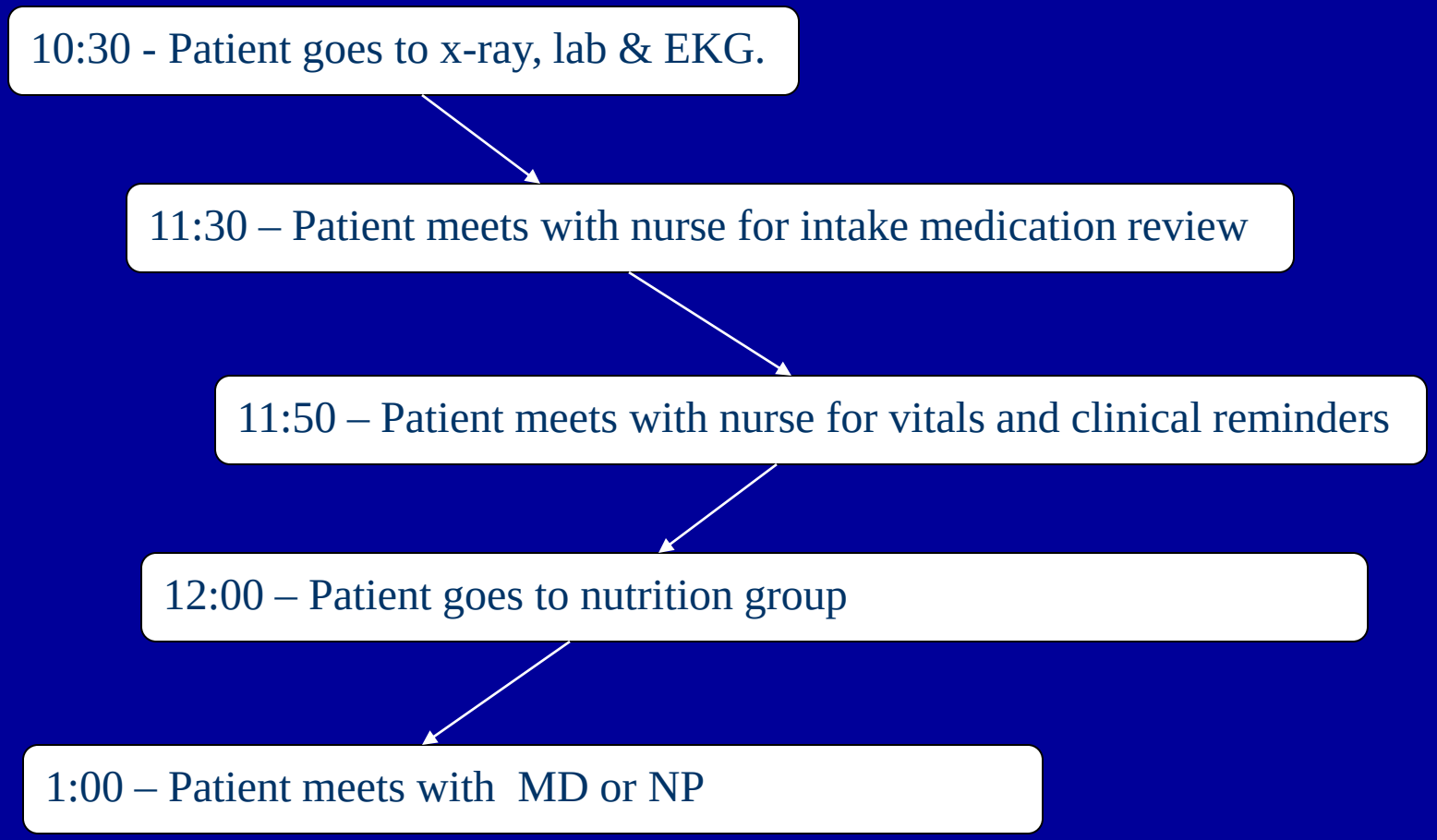
Pharm D's and "The Spin Cycle"

- Recruited from both College of Pharmacy and PVAMC staff
- A great teaching clinic for Pharm D. residents
- CHF patients must be adequately diuresed in order to be adequately managed
  - "If they are wet, spin them dry"
- Means more, not less, clinic visits
- Pharm D.s will lead in this f/u activity:
  - CHF PCP's – to learn the details of medicine use/adjustment
  - CHF Nurse Practitioner
- Requires meticulous attention to detail
  - Blood tests, vital signs, blood tests
- Once they are "dry", Other CHF medicines can be up-titrated—remain with Pharm D's in the Spin Cycle

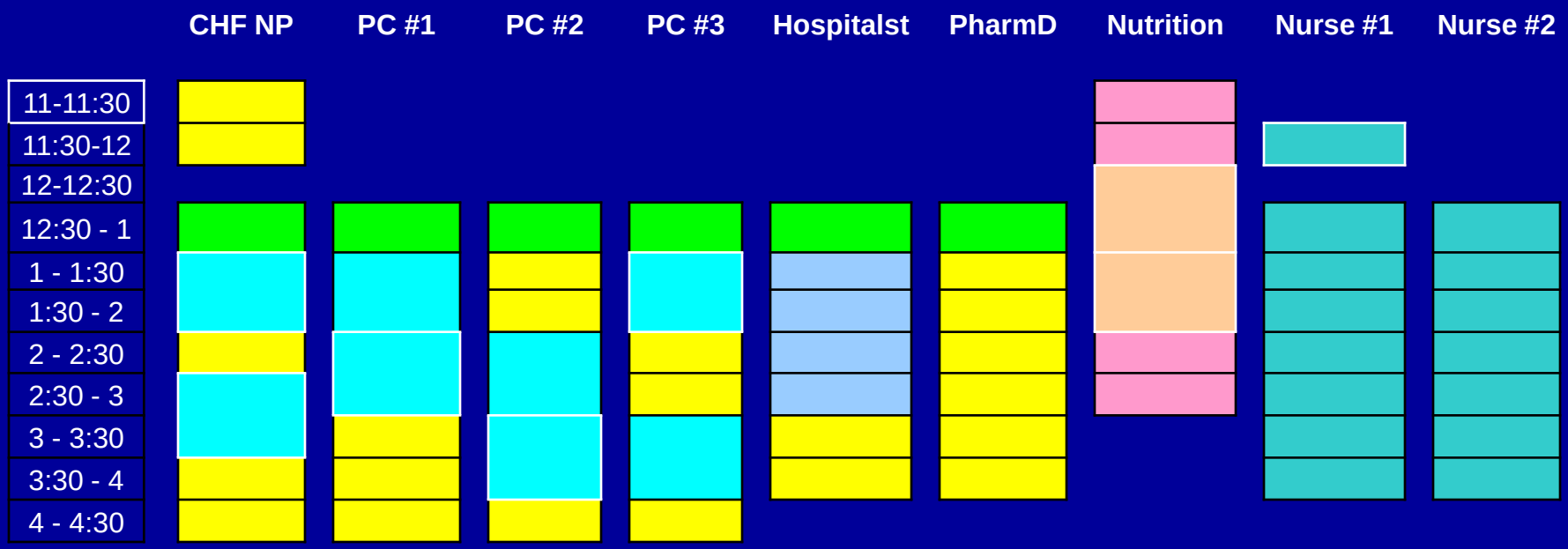
Proposed CHF team and their duties:

1 Cardiologist (.15 FTE)– provides consultative advice for all other providers in clinic
1 Cardiology CHF NP (1 FTE) - 2 new and 5 followup patients
1 Hospitalist (.15 FTE)- 4 new and 2 followup recently discharged CHF pts
2 Primary Care providers (.15 FTE each)– each provider will see 2 new and 3 followup patients
2 Pharm D s(.3 FTE)– each w six 30 min followup patients for med. titration
1 Nutritionist (.15 FTE)– two 60 min group appointments and four 30 min individual appointments
1 Nurse (.5 FTE CDU)– manages clinic flow, administers medications, inserts IVs,, assists with intake medication reviews, vital signs,does f/u in "Nurse clinic" between CHF clinics
1 Nurse (.5 FTE DHSM)– eleven 20min intake medication reviews, clinical reminders; phone f/u, ad hoc patient visits between clinics
1 Nurse (.15 FTE PC) – eleven 20 min intake medication reviews during clinic; phone clinic followup and other f/u between CHF clinics
1 Health Tech/MA (.15 FTE)– takes vital signs, does clinical reminders, administers Minnesota LWHF scale, puts patients in rooms

Typical New patient flow



Proposed Comprehensive CHF Program Clinic



Appointment types:

30 min CHF conference
60 min new appointments
30 min new appointments
30 min followup appointments
60 min group nutrition appointments
30 min individual nutrition appointments
20 min individual medication reviews

 # Appointments

12 new

22 followup

4 individual nutrition

2 nutrition groups

34 individual med review

Measuring Our Outcomes

- Mortality
- Re-Admission rate
- Percent of patients at optimal drug doses
- Functional Status/QOL: Minnesota Living With Heart Failure Survey
- CHF Clinic Provider satisfaction/feedback
- Need help from Quality Mgmt Service to collect the data