

The Dartmouth-Hitchcock  
Leadership Preventive Medicine  
Residency Program

# DHLPMR

- Offers combined training in Preventive Medicine and other residencies and fellowships at Dartmouth-Hitchcock Medical Center and Concord Hospital
- Two additional years of training
- First graduate in 2005; 22 graduates to date

# Why DHLPMR?

- To attract and develop physicians capable of leading the change and improvement of the systems where people and health care meet.
- In conjunction with existing clinical residency and fellowship programs, participants' academic, applied leadership and practicum experiences in preventive medicine will focus on ***measuring outcomes and improving the technical, service, and cost excellence of care for patients and populations.***

# Another Way of Looking at It...

- Our residents
  - Focus on a defined population of patients served by DHMC
  - Understand their outcomes and processes of care; identify opportunities for improvement
  - Lead change for the improvement of care for these patients
  - Develop and disseminate knowledge about the effects of their interventions
  - Develop specific competencies
    - ACGME/ABMS
    - DHLPMR

# DHLPMR Core Competencies

- Leadership—including design and redesign—of small systems in health care.
- Measurement of illness burden in individuals and populations.
- Measurement of the outcomes of health service interventions.
- Leadership of change for improvement of quality, value and safety of health care of individuals and of populations.
- Reflection on personal professional practice & linkage of that reflection to ongoing personal and professional development.

# Why Preventive Medicine?

- Populations
- Measurement
- Systems
- Leadership

# Design of the Experience – Year 1

- First Year
  - Most of the coursework for MPH degree
  - Structured rotations to help resident
    - Define a patient population of interest
    - Investigate current outcomes and gaps in care
    - Consider possible improvements, plan change and assessments
  - Two presentations to Practicum Review Board
  - Ongoing clinical work

# Design of the Experience – Year 2

- Practicum
  - Year-long experience in the leadership of change for improvement of care
  - Final presentation and approval by PRB
  - Publication/scholarly presentation
- Finish MPH coursework
- Ongoing clinical work
- Public Health experience

# Faculty Support

- Designated coaches
  - Not always in same department as resident
  - Both junior and senior faculty
  - Experience/commitment to improving care
  - Intellectual curiosity and teaching skills
- Clinical faculty/staff familiar with microsystem
- Improvement specialist – help with statistics, design, qualitative and quantitative methods, inference
- Program management group

# LPM “didactics”

- Activities include
  - Leadership seminar
  - Writing seminar
  - Critical Issues/Public Health courses
  - Workrounds
  - Journal club
- Themes
  - Evidence, Context, Measurable Improvement
  - Planning and Execution
  - Inference, Attention to methods
  - Publication and dissemination, Scholarship

# Cross-pollination

- Very interesting (and productive!) for residents from diverse fields to work together
- Equally beneficial to have the chance to work with faculty from a variety of specialties
- Attraction for other faculty and residents
- Work with other residency programs (LPM resident role in home department, microsystems workshop, etc.)
- Work with non-physicians

# Specialty Combinations to Date

Anesthesia

Pain Medicine

Family Medicine

Gastroenterology

Infectious Disease

Internal Medicine

Neurology

Ob-Gyn

Pathology

Pediatrics

Pulmonary-Critical  
Care

Psychiatry

Surgery

# Practicum Work

- ***Sedation practices\****
- ***Obesity dx and counseling\****
- Teen clinic\*
- ***Care plans for complex patients\****
- ***Pediatric immunizations***
- Coordination of care for pancreatic cancer\*
- ***Colonoscopy practice (withdrawal time)\****
- ***Community-acquired pneumonia\****
- ***Use of epidurals for post-op pain control***
- Screening in GIM
- Inpatient diabetes care\*
- ***Outpatient diabetes care\****
- ***Hand hygiene\****
- ***Outpatient antibiotic therapy***
- Platelet supply
- ***Major depression care\****
- ***DVT prophylaxis***
- Advance directives
- ***Trauma care***
- ***HIV screening\****
- ***Pediatric obesity\****
- ***Early response team***

# After LPM...

Of our 22 graduates in the last three years:

- Eleven are in faculty positions
  - Most have dedicated research/academic time focused on improving care
- Two are in non-academic practice with dedicated time for improvement and system redesign
- Five are completing other training programs

# Community of Practice and Inquiry

- Residents and coaches...
  - Attract other residents and faculty
  - Connect the work back to the frontlines
- Program provides...
  - Venue to gather and inquire authentically into the work we do
  - Support for writing and publication
  - Deep exploration of leadership
  - A way to link improvement and the scholarship of improvement with the future of the institution

# Lessons Learned

## (in our residents' own words)

- Role of the physician is evolving from treating patient to patient to treating a population of patients consistently with the best evidence. Our job is to ensure ALL patients receive the right care at the right place, and at the right time...not just when we remember to
- Understand your data and your clinic processes; there is variation among units (teams) within the same department. Study representative tests from different processes and use the “clues” you find along the way to make change
- Moving the last 3% is really, really hard -- changing this is a different process
- Level of intervention must match readiness to change; small steps and plenty of dialogue create trust

# More Lessons...

- Proximity does not make a team
- Defining common language is not pre-work, it is the work
- Complexity is useful – experimentation, adaptation, social networks and relationships create change
- Be conscious of everything you do, and question everything others tell you should be doing
- Ask patients.
- Supporting data and “evidence” are not enough until you have evaluated them for yourself in the context of your microsystem
- Empower those doing the day to day work.
- Standardize the “simple” work.
- Always think about sustainability

# Challenges

- Volume
- Recruitment
- Continuing coach/faculty development development
- Nurturing scholarly productivity
- Balancing learner's experience and institutional agenda
- Responding to others' interest (US, Sweden, UK)