University of Cincinnati
Patient Centered Medical Home
Leadership Decisions

Eric J. Warm M.D., F.A.C.P.
Program Director, Internal Medicine
Associate Professor of Medicine
University of Cincinnati College of Medicine
### Success Characteristics of High Functioning Clinical Microsystems

<table>
<thead>
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Context: Educational Innovations Project

We redesigned our residency to:
1. Improve resident education
1. Improve patient care

Cincinnati EIP

**GOAL 1:** Long Block
**GOAL 2:** Work Hours
**GOAL 3:** Teams
**GOAL 4:** Technology
**GOAL 5:** Curriculum
**GOAL 6:** Portfolios
**GOAL 7:** Career plan
Context: 3 Year Schedule

<table>
<thead>
<tr>
<th>PGY-1: Months 1-12</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGY-2: Months 13-16</td>
<td>Team Leading, Units, Electives</td>
</tr>
<tr>
<td>PGY-2/3: Months 17-28</td>
<td>Long Block</td>
</tr>
<tr>
<td>PGY-3: Months 20-36</td>
<td>Team Leading, Units, Electives</td>
</tr>
</tbody>
</table>
Context: Long Block

- Therapeutic Dyad
- Population Health
- EMR
- Improvement Skills
- Create New Knowledge
- Scholarship

Image: A group of people sitting at tables, engaged in a discussion or activity.
Long Block
Master the continuous healing relationship

Example Weekly Schedule

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 am</td>
<td>Elective</td>
<td>Elective</td>
<td>AME</td>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td>8:30 am</td>
<td>Practice</td>
<td>Practice</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td>1:00 pm</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Practice</td>
<td>Elective</td>
</tr>
</tbody>
</table>

- Residents see patients 3 half days per week on average
- One morning per week reserved for education (Ambulatory Education/Health Care Improvement)
- The rest of the time is elective
Long Block
Master the continuous healing relationship

Team

Mini-Team
Nurse
Resident
Resident
Resident
Resident
Resident
Resident
Resident

Mini-Team
Nurse
Resident
Resident
Resident
Resident
Resident
Resident

Mini-Team
Nurse
Resident
Resident
Resident
Resident
Resident

Mini-Team
Nurse
Resident
Resident
Resident
Resident

Mini-Team
Nurse
Resident
Resident

Support Staff

Social Work
Pharmacy
Administration
### Success Characteristics of our Clinical Microsystem – How We Got There

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Leadership

Strong formal leadership
Important informal leadership from residents and nurses

- Set the tone in the practice
- Establish goals and expectations
- Advocate for the microsystem – leaders on multiple committees throughout hospital
- Rarely make unilateral decisions
Leadership

Strong formal leadership
Important informal leadership from residents and nurses

- Mini-teams are crucible of improvement
- System empowers nurses and physicians to be leaders
Organizational Support
Consistent macro-organizational support of the ambulatory practice

- Funded hospitalist service to allow creation of Long Block
- Sent resident and nurse teams for quality training (Academic Chronic Care Collaborative)
- Senior hospital administrator attends weekly meeting
- “Quid pro quo”
Patient Focus

Weekly team meetings focused on improving patient care

- Most important transformative feature of the practice
- Group of people coming together for a common aim = patients
- Occasionally includes patients
- There is no medical home without the team
Staff Focus
Highly trained nursing staff empowered to make change

- Created an all RN/LPN staff from an all MA staff in a cost neutral way
- Supposition: fewer highly trained staff could do more than more lesser trained staff

“The micro-system should do selective hiring of the right kind of people and integrate new staff into culture and work roles.”

Education and Training
Residents and nurses trained together in quality improvement techniques

Education and Training
Residents and nursing trained together in quality improvement techniques

- Train the residents and staff together in quality improvement concepts

Team Interdependence

Multiple contributions to open agenda for team meeting

- Example: Planned Visit for diabetic
  - Data Manager – identify patient with high A1C
  - Clerical staff – call patient and arrange visit
  - Registration staff – verify financial status
  - Check in person – bring patient back
  - Nurse – review meds and flow sheet; FS A1C
  - Physician – discuss/adjust meds and plan
  - Social worker – identify barriers to care
  - Educator – teach about diet, lifestyle choices

- Flatten hierarchy:
  - there are leaders, but...
  - team works best when everyone has a say that matters
Team Interdependence
Multiple contributions to open agenda for team meeting

- Need other teams for continuum of care
- Our practice currently has:
  - Surgeons
  - Podiatrist
  - Cardiologist
  - Women’s Health
Information Technology
Use of an electronic medical record and registry

- Create and sustain super-users within the practice
  - We created our own training modules

- Foster good relationships with IT department

- Push for best technology for the practice – disease registries

- Minimize data gathering by outside sources – internal process is more reliable and flexible

- We collect
  - Quality data
  - Financial data
  - Satisfaction data
  - Visit Volume data
Process Improvement
Improvement is within control of team

- Commitment to continuous improvement turns ‘home renters’ to ‘home owners’
- Old: “Things will never change”
- New: “Put it on for the team meeting”

“Everyone in healthcare really has two jobs when they come to work every day: to do their work and to improve it.

Batalden and Davidoff -- Qual Saf Health Care 2007;16:2-3
Performance Pattern

Regular sharing of quality, satisfaction, and financial data

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<tbody>
<tr>
<td>A1C &gt; 9 Goal 15% or less</td>
<td>20.1%</td>
<td>22.6%</td>
<td>22.27%</td>
<td>2159%</td>
<td>22.32%</td>
<td>2120%</td>
<td>2114%</td>
<td>2114%</td>
<td>9.35%</td>
</tr>
<tr>
<td>A1C &lt; 7 Goal 40% or more</td>
<td>24.1%</td>
<td>33.90%</td>
<td>38.53%</td>
<td>40.0%</td>
<td>40.78%</td>
<td>39.97%</td>
<td>39.26%</td>
<td>40.60%</td>
<td>10.30%</td>
</tr>
<tr>
<td>BP &gt; 140/90 Goal 35% or less</td>
<td>26.46%</td>
<td>29.1%</td>
<td>29.75%</td>
<td>28.38%</td>
<td>30.86%</td>
<td>29.9%</td>
<td>29.33%</td>
<td>28.27%</td>
<td>15.20%</td>
</tr>
<tr>
<td>BP &lt; 130/80 Goal 25% or more</td>
<td>47.93%</td>
<td>44.0%</td>
<td>39.77%</td>
<td>44.68%</td>
<td>42.28%</td>
<td>42.4%</td>
<td>43.46%</td>
<td>43.25%</td>
<td>40.40%</td>
</tr>
<tr>
<td>Eye Goal 60% or more</td>
<td>15.1%</td>
<td>217%</td>
<td>27.03%</td>
<td>29.50%</td>
<td>30.67%</td>
<td>34.20%</td>
<td>33.64%</td>
<td>34.42%</td>
<td>10.30%</td>
</tr>
<tr>
<td>Smoking Goal 80% or more</td>
<td>48.33%</td>
<td>52.7%</td>
<td>57.14%</td>
<td>58.40%</td>
<td>60.85%</td>
<td>75.16%</td>
<td>75.03%</td>
<td>76.56%</td>
<td>10.00%</td>
</tr>
<tr>
<td>LDL &gt; 100 Goal 37% or less</td>
<td>9.90%</td>
<td>10.65%</td>
<td>12.37%</td>
<td>12.39%</td>
<td>12.66%</td>
<td>12.3%</td>
<td>12.1%</td>
<td>11.57%</td>
<td>17.80%</td>
</tr>
<tr>
<td>LDL &lt; 100 Goal 36% or more</td>
<td>50.85%</td>
<td>50.97%</td>
<td>51.74%</td>
<td>52.44%</td>
<td>52.66%</td>
<td>53.04%</td>
<td>52.44%</td>
<td>51.50%</td>
<td>40.40%</td>
</tr>
<tr>
<td>Neph Asses Goal 80% or more</td>
<td>91.1%</td>
<td>89.79%</td>
<td>91.04%</td>
<td>91.86%</td>
<td>91.56%</td>
<td>92.90%</td>
<td>92.02%</td>
<td>92.38%</td>
<td>5.00%</td>
</tr>
<tr>
<td>Foot Goal 80% or more</td>
<td>38.76%</td>
<td>46.59%</td>
<td>52.1%</td>
<td>54.56%</td>
<td>56.56%</td>
<td>68.7%</td>
<td>70.62%</td>
<td>71.93%</td>
<td>42.00%</td>
</tr>
<tr>
<td>Total Points Goal 75 points</td>
<td>52.37%</td>
<td>49.33%</td>
<td>51.40%</td>
<td>52.29%</td>
<td>52.08%</td>
<td>59.79%</td>
<td>61.04%</td>
<td>65.63%</td>
<td>65.00%</td>
</tr>
<tr>
<td>DM Patients</td>
<td>41.79%</td>
<td>23.74%</td>
<td>29.50%</td>
<td>31.35%</td>
<td>32.92%</td>
<td>37.17%</td>
<td>38.96%</td>
<td>39.38%</td>
<td>208.25%</td>
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- We collect and share:
  - Quality data
  - Financial data
  - Satisfaction data
  - Visit Volume data

Diabetes Physician Recognition Score

![Diabetes Physician Recognition Score Chart](chart.png)
Performance Pattern
Regular sharing of quality, satisfaction, and financial data

Hoxworth Internal Medicine
Press Ganey Overall Patient Satisfaction Score

Year

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Long Block
Excellent Care in a Clinical Microsystem

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The Ambulatory Long-Block: Training in a Clinical Microsystem
Eric J. Warm MD, Brian Revis, Shahid Rahman MD, Tiffiny Diers, MD, Eric Coons RN5, Kellie Schweitzer LPN, and Cathy Heneghan, RN, in press

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<th><strong>NCQA PCMH Standard</strong></th>
<th><strong>University of Cincinnati Ambulatory Long Block</strong></th>
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<td><strong>Access and Communication</strong></td>
<td>Keeps written standards for patient access and communication; reviews data weekly regarding access, visit volume and communication</td>
</tr>
<tr>
<td><strong>Patient Tracking and Registry Functions</strong></td>
<td>Uses a disease registry (MQIC®) with searchable data fields; organizes clinical information and uses registry data to identify important diagnoses and conditions; generates lists of patients and reminds patients and clinicians of services needed</td>
</tr>
<tr>
<td><strong>Care Management</strong></td>
<td>Uses evidence based guidelines for multiple conditions (e.g. diabetes, depression, hypertension, hyperlipidemia); uses electronic flow sheet to generate reminders to clinicians; uses non-physician staff to manage patient care (e.g. insulin titration, self management goal follow-up calls); coordinates care for patients who receive care in inpatient facilities (e.g. shared medication reconciliation sheet)</td>
</tr>
<tr>
<td><strong>Patient Self-Management Support</strong></td>
<td>Assesses language preference and other communication barriers (multiple translators, including for the deaf); actively supports patient self-management (e.g. extensive interprofessional instruction of physicians and staff, use of ancillary staff including pharmacotherapy clinic; printed medication reconciliation and instruction sheet for every visit; follow-up phone calls for support)</td>
</tr>
<tr>
<td><strong>Electronic Prescribing</strong></td>
<td>Uses an electronic system to write prescriptions (Centricity®), including automatic safety/interaction checks and cost checks</td>
</tr>
<tr>
<td><strong>Test Tracking</strong></td>
<td>Tracks test and identifies abnormal results systematically; uses electronic system to order and retrieve tests</td>
</tr>
<tr>
<td><strong>Referral Tracking</strong></td>
<td>Tracks referrals using electronic system</td>
</tr>
<tr>
<td><strong>Performance Reporting and Improvement</strong></td>
<td>Measures and reports clinical performance by physician and across the practice (data reviewed monthly by care team, quarterly by hospital senior administration); surveys patient experiences using Press-Ganey and homegrown satisfaction surveys; sets performance goals and takes action to improve performance; produces reports using standardized measures (e.g. Diabetes Physicians Recognition Program measures)</td>
</tr>
<tr>
<td><strong>Advanced Electronic Communications</strong></td>
<td>Uses electronic care management support; currently in process of obtaining electronic patient portal</td>
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