Medical Homes, Medical Neighborhoods, and the Transformation of Health Care

Vermont Blueprint for Health
April 9, 2014

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This is a health system
Tom Daschle, testifying to Senate Health Committee, Jan 2009: “Every country starts at the base of the pyramid with primary care, and they work their way up until the money runs out. We start at the top of the pyramid, and we work our way down until the money runs out…And so we have to change the pyramid. We have to start at the base.”
Health Care: A Perilous Journey*

Cardiologist

Orthopedist

Physical Therapist

Radiologist

SNF

*From Tom Bodenheimer, NEJM 2008;358(10):1064
VT Blueprint Annual Report 2013

“a program for integrating a system of health care for patients, improving the health of the overall population, and improving control over health care costs by promoting health maintenance, prevention, and care coordination and management.” (accents added)
VT Blueprint Assets

- Advanced primary care models (PCMH)
- Community Health Teams
  - Vermont Chronic Care Initiative
  - Support and Services at Home
  - Integrated addiction medicine-primary care
- Practice coaches (Primary Care Extension Program)
- Aligned payers
  - Payment
  - Data
Some Reflections

• Advanced primary care is a journey, not a destination
• From the triple aims to the quadruple aims: attention to the primary care workforce
• Advanced medical neighborhoods and ACOs
• Beyond a medical model of population health: integrating health care and public health
Making change in complex adaptive organizations is difficult
**The Report Card Syndrome**

### PCMH 2011 Content and Scoring

<table>
<thead>
<tr>
<th>PCMH1: Enhance Access and Continuity</th>
<th>Pts</th>
<th>PCMH4: Provide Self-Care Support and Community Resources</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Access During Office Hours**</td>
<td>4</td>
<td>A. Support Self-Care Process**</td>
<td>6</td>
</tr>
<tr>
<td>B. After-Hours Access</td>
<td>4</td>
<td>B. Provide Referrals to Community Resources</td>
<td>3</td>
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<tr>
<td>C. Electronic Access</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Continuity</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>E. Medical Home Responsibilities</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Culturally and Linguistically Appropriate Services</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>G. Practice Team</td>
<td>2</td>
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<tr>
<td></td>
<td>20</td>
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</tr>
</tbody>
</table>

**PCMH2: Identify and Manage Patient Populations**

| A. Patient Information              | 3   | PCMH5: Track and Coordinate Care                   | Pts |
| B. Clinical Data                    | 4   | A. Test Tracking and Follow-Up                     | 6   |
| C. Comprehensive Health Assessment  | 4   | B. Referral Tracking and Follow-Up**               | 6   |
| D. Use Data for Population Management** | 5 | C. Coordinate with Facilities/Care Transitions    | 6   |
|                                       | 16  |                                                      | 18  |

**PCMH3: Plan and Manage Care**

| A. Implement Evidence-Based Guidelines | 4   | PCMH6: Measure and Improve Performance               | Pts |
| B. Identify High-Risk Patients        | 3   | A. Measure Performance                              | 4   |
| C. Care Management**                  | 4   | B. Measure Patient/Family Experience                | 4   |
| D. Manage Medications                 | 3   | C. Implement Continuously Quality Improvement**    | 3   |
| E. Use Electronic Prescribing         | 3   | D. Demonstrate Continuous Quality Improvement      | 3   |
|                                       | 17  | E. Report Performance                               | 2   |
|                                       |     | F. Report Data Externally                           | 20  |

**Must Pass Elements**
## NCQA PCMH status of 46 LA Community Health Centers and Quality of Diabetes Care

<table>
<thead>
<tr>
<th></th>
<th>NCQA PCMH Level 1</th>
<th>NCQA PCMH Levels 2-3</th>
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</thead>
<tbody>
<tr>
<td>HgbA1C checked last 12 months</td>
<td>84%</td>
<td>84%</td>
</tr>
<tr>
<td>LDL checked last 12 months</td>
<td>70%</td>
<td>72%</td>
</tr>
<tr>
<td>HgbA1C &lt;8</td>
<td>59%</td>
<td>57%</td>
</tr>
<tr>
<td>LDL &lt;100</td>
<td>54%</td>
<td>49%</td>
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</tbody>
</table>

%'s adjusted for underlying differences between CHCs

Source: Clarke RMA et al. Tool Used To Assess How Well Community Health Centers Function As Medical Homes May Be Flawed. Health Affairs 2012; 31(3):627-635
“A multipayer medical home pilot, in which participating practices adopted new structural capabilities and received NCQA certification, was associated with limited improvements in quality and was not associated with reductions in utilization of hospital, emergency department, or ambulatory care services or total costs over 3 years.”
PCMH studies continue to demonstrate impressive improvements across a broad range of categories including: cost, utilization, population health, prevention, access to care, and patient satisfaction, while a gap still exists in reporting impact on clinician satisfaction.

An Annual Update of the Evidence, 2012-2013
January 2014

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Kevin Grumbach, MD
Figure 2. 2012 Total Expenditures per Capita

- PCMHs started by December 31 2012
- Comparison Group

<table>
<thead>
<tr>
<th>Category</th>
<th>Commercial (Ages 1-17) Years</th>
<th>Commercial (Ages 18-64) Years</th>
<th>Full Medicaid (Ages 1-17) Years</th>
<th>Full Medicaid (Ages 18-64) Years</th>
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</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>$1,692</td>
<td>$2,078</td>
<td>$4,121</td>
<td>$4,150</td>
</tr>
<tr>
<td>Expenditure (Significantly)</td>
<td>*$1,692</td>
<td>*$4,643</td>
<td>*$4,121</td>
<td>$7,462</td>
</tr>
<tr>
<td>Expenditure</td>
<td></td>
<td></td>
<td></td>
<td>$7,604</td>
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</tbody>
</table>

* Blueprint is significantly different from the Comparison group at the 95% confidence level.
Developing the building blocks of the high-performing primary care practice

- We visited 23 high performing practices
- Intensive visits to 7 West Coast practices
- Discussions/observations of clinicians, RNs, MAs, front desk
- The practices look different from the outside but similar inside
- From our observations, we extracted 10 Building Blocks -- the foundation of these practices
- The Building Blocks are a guide to improvement for primary care
- Similar to Safety Net Medical Home Initiative change concepts
10 Building Blocks of High-Performing Primary Care

1. Engaged leadership
2. Data-driven improvement
3. Empanelment
4. Team-based care
5. Patient-team partnership
6. Population management
7. Continuity of care
8. Prompt access to care
9. Comprehensive-ness and Care Coordination
10. Template of the future

T Bodenheimer et al AnnFamMed March 2014
Right People on the Team
Operating at Top of Their Skills
With Teamwork

- Team structure
  - Personnel and positions
  - Stable teamlets

- Team culture
  - Culture shift
  - Co-location
  - Defined workflows and roles – workflow mapping
  - Standing orders/protocols
  - Training, skills checks, and cross training
  - Ground rules
  - Communication – huddles, meetings, constant interaction
It Takes a Team to Make Primary Care Work
A primary care physician with a panel of 2500 average patients would spend:

- 7.4 hours per day to deliver all recommended preventive care (Yarnall et al. Am J Public Health 2003;93:635)
- 10.6 hours per day to deliver all recommended chronic care services (Ostbye et al. Annals of Fam Med 2005;3:209)
# Burnout By Specialty

![Bar chart showing burnout by specialty](chart.png)

**Gen Int Medicine**

**Family Medicine**


Mean burnout, US employed adults
Family Medicine Residency Positions and Number Filled in Match by U.S. Medical School Graduates

The Choice

- Teams
- Concierge Medicine
The Triple Aims
Quadruple

- Better patient experience
- Better health
- Lower cost
- Joyful and sustainable careers in primary care
Team structure and culture are associated with lower burnout in primary care practices

R Willard-Grace, D Hessler, E Rogers, K Dubé, T Bodenheimer, K Grumbach

Journal of the American Board of Family Medicine, March 2014
Study Design & Methods

• 16 San Francisco primary care clinics (DPH and UCSF)

• Survey measures:
  • Maslach Burnout Inventory (MBI) (outcome)
  • One-item measures of team structure (predictor)
  • Seven-item measure of team culture developed by study team (predictor)

• GEE modeling to account for clustering at clinic level
Interaction between team structure and team culture on exhaustion for clinicians (adjusted for covariates)*

* Median split used to define low vs. high team culture.
From Medical Homes to Medical Neighborhoods

- High performing primary care necessary but not sufficient
- Need the entire system to work together in a coordinated, integrated, patient-centered manner
Care Integration
Coordination Problems with Medical Tests or Records, by Number of Doctors Seen

Data collection: Harris Interactive, Inc.
Source: 2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.
Focus Groups on Patient Experiences of Integrated Care

- “Everybody should be on the same page... in the long run it decreases medical costs to the medical system, because you’re not running duplicate tests”
- “If my doctor sends me to [another doctor] and I say, “did you talk to my doctor?” and they say “no”... So they need to go back to the drawing board, back to start, til you get the same answer from that doctor and that doctor because they’re integrated together.”

**Comprehensiveness** – or “Bringing services into primary care”

- Colocation of additional services into primary care
- Capacity building of primary care providers

**Coordination** – or “Building relationships with services outside of primary care”

- Defining and developing a network of service providers
- Improving patient navigation and engagement
- Improving communication and collaboration

Proportion of specialists reporting it somewhat/very difficult to identify the consultation/clinical question

- Medicine
- Surgical

% of responses

- eReferral
- Prior Method
- Structural Integration
  - e.g., Kaiser Permanente, Health Partners of Minnesota, Veterans Administration
- Functional Integration
  - With or without structural integration
- Informational Integration
  - e.g., HIE
- Financial Integration - Shared Financial Risk
  - Global risk/full capitation
  - Shared savings
  - Bundled episode payments
ACOs: 1990s managed care redux or transformation to functionally integrated, patient-centered, socially responsible, primary care-based medical homes and neighborhoods?
Population Health
Adult Population Risk Distribution

- Generally Healthy (35%)
- At Risk for Poor Health (20%)
- Chronic Conditions (40%)
- Severe Problems (5%)

40-50% costs
Adult Population Risk Distribution

Population Health Strategies:
1. Manage patients effectively and efficiently at each level
2. Keep patients from moving up the pyramid
3. Ensure a good medical home
Tailor Care Model to Population Strata

Share the Care Teams: From Universal Coverage to Universal Care

COMMUNITY-BASED
- Community-Based Care Manager Teams
- IHSS Worker Training
- Care Transitions
- Self-Management Classes
- New Work Force

CLINIC-BASED
- Nurse
- Health Work
- Complex Care Teams
- Provider
- MA
- PCP/MA Teams

Health Coaches
- Provider
- MA
- PCP/MA Teams

Panel Management
- Prompt Advice
- Urgent Care Access
Population Health
Beyond the Medical Model

- Social Determinants
- Public Health
- Medical Care
- Fundamental Conditions
- Behaviors & Exposures
- Caring for Patients
PROBLEM:

Childhood Obesity

**Family/community**
- Poverty
- Inadequate subsidized health Insurance for the poor
- Families limited income
- Unavailability of healthy food choices in local stores, schools and restaurants

**Individual**
- Unhealthy diet
- Parental knowledge and behavior (time with kids, food prep, own eating and exercise habits)
- Too much screen time (TV, computer)

**SES/Policy**
- Marketing by fast food industry
- Unsafe neighborhood/streets
- City planning Policies that limit green space in some cities and neighborhoods
- Lack of funding for education
- No opportunities for exercise in school or recreation areas
- Health services lack of knowledge of nutrition, High costs for treatment
- Parental knowledge and behavior (time with kids, food prep, own eating and exercise habits)
- Insufficient physical activity
- Too much screen time (TV, computer)

**Lack of funding for education**
“The Upstream Doctors”

Tools to help clinicians address social determinants of health

www.HealthBegins.org
A PRACTICAL PLAYBOOK

HOW CAN THE PRACTICAL PLAYBOOK HELP WITH YOUR INTEGRATION PROJECT?

https://practicalplaybook.org/
Summary

- Advance primary care with the 10 Building Blocks
- Promote teamwork
- Attend to the quadruple aims
- Create functionally integrated medical neighborhoods
- Think broadly about population health
The Blueprint for Health

Blueprint Communities
Healthy