



# What is Medical Home and Why Does Connecticut Need This Model?

---

HealthFirst Authority

Quality, Access, and Safety Workgroup

Richard C. Antonelli, MD, MS

Assoc Prof Pediatrics, Univ Conn  
School of Medicine

April, 2008



# Definition of Medical Home

---

- Care that is:
  - Accessible
  - Family-centered
  - Comprehensive
  - Continuous
  - Coordinated
  - Compassionate
  - Culturally-effective




# Definition of Medical Home

---

- And for which the primary care provider shares responsibility with the family.

AAP/ AAFP/ NAPNAP/ ACP/ AOA



Joint Principles of the PCMH  
AAP, AAFP, ACP, AOA  
March 2007

---

- **Whole person orientation**
- **Personal physician**
- **Physician directed medical practice**
- **Care is coordinated and/or integrated**
- **Quality and safety**
- **Enhanced access to care**
- **Payment to support the PC-MH**



# Patient-Centered Medical Home Joint Principles Statement

---

- Major Focus of Advocacy for All Primary Care Specialties
- Personal physician/ relationship
- Quality
- Access
- Equity
- Financing



# Issues

---

- Can Primary Care Survive?
  - Capacity of current workforce
  - Attracting new providers to workforce
  
- Why Do We Need Medical Home?
  - Highest quality with least disparity to access occurs when Medical Home available

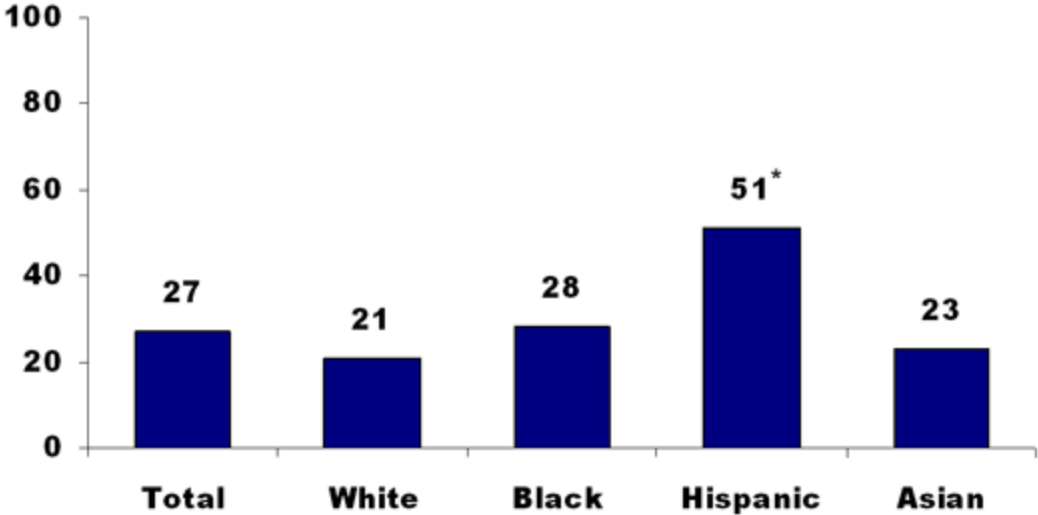


# What About Disparity?

---

**Almost 2.5 times as many Hispanics  
as whites report having no doctor.**

**Percentage of adults ages 18 to 64 reporting no regular doctor, 2006**



\* Compared with whites, differences remain statistically significant after adjusting for age, income, and insurance.  
Source: The Commonwealth Fund. Health Care Quality Survey. 2006.







# Trying Hard Is Not Enough

---

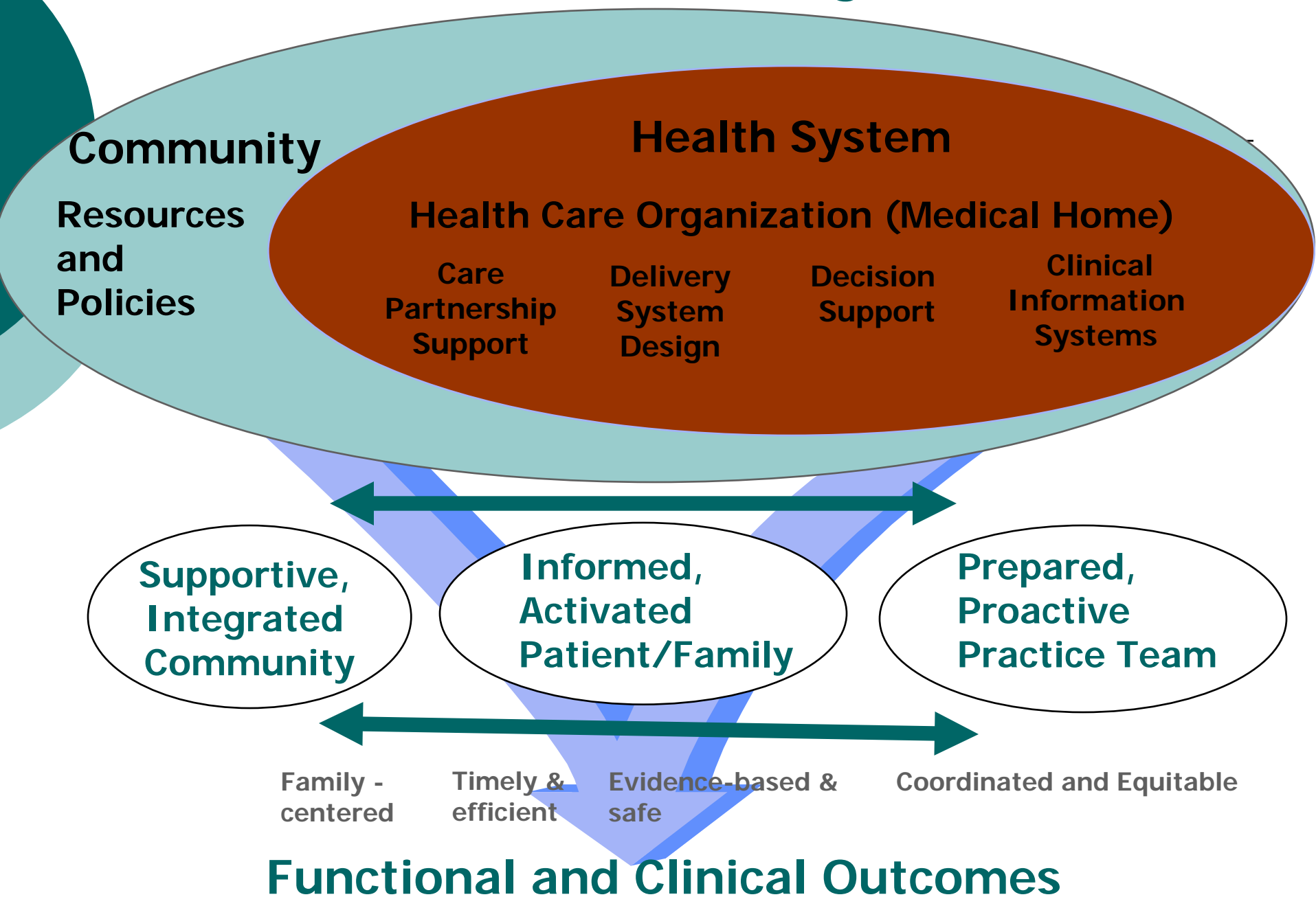


# Is Medical Home Enough?

---

- Medical Home demands system re-design:
  - Financing
  - Quality measurement
  - Regulatory support
  - State and Federal policy support

# Chronic Care Model (Wagner, et al)





# What is Care Coordination?

---

A process that facilitates the linkage of children and their families with appropriate services and resources in a coordinated effort to achieve good health.

AAP 2005



# Care Coordination- ACP

---

- Ensuring communication among specialists and PCP and families
- Tracking if referrals happen
- System to prevent errors among multiple providers
- Tracking Test Results



# What Is Case Management?

---

- Began in era of managed care as mechanism of ensuring access to appropriate benefits package of services: utilization review approach.
- Any effective, sustainable community-based Medical Home system must support linkages between practice-based CC and community-based CM!



---

# What Constitutes CC in a Pediatric Medical Home, and What Does It Cost?

# National Study of Care Coordination Measurement in Medical Homes

Antonelli and Antonelli, 2004

---

## Focus of Encounter – Aggregate Data –

<u>Primary Focus</u>	<u>% Encounters</u>
Clinical / Medical Management	67%
Referral Management	13%
Social Services (ie. Housing, food, clothing...)	7%
Educational / School	4%
Developmental / Behavioral	3%
Mental Health	3%
Growth / Nutrition	2%
Legal / Judicial	1%



**Outcome Prevented – Aggregate Data** Antonelli and Antonelli, 2004

---

The CCMT allows only one outcome prevented per encounter.

**32% of total 3855 CC encounters prevented something.**

Of the 1232 CC Encounters where prevention was noted as an outcome:

<u>Outcome Prevented</u>	<u># CC Encounters</u>	<u>Percentage</u>
Visit to Pediatric Office / Clinic	714	58%
Emergency Department Visit	323	26%
Subspecialist Visit	124	10%
Hospitalization	47	4%
Lab / X-Ray	16	1%
Specialized Therapies	8	1%

**62% of RN CC Encounters prevented something.**

**33% of MD CC Encounters prevented something.**

**RNs are responsible for coding 81% of the Emergency Department preventions and 63% of the sick office visit preventions.**



# Implications for Policy and Practice

---

- With the advent of Patient-Centered Medical Home, all primary care provider organizations are focusing on CC as critical function
- Payers and purchasers are looking at P4P to incentivize CC
- CC for adult chronic condition CC is very different from pediatric CC



# Implications for Policy and Practice

---

- Disease-specific CC (aka, chronic condition management/ CCM) should be quite implementable
- However, pediatric CC is not identical to adult CC
- Mechanisms of operationalizing and measuring CC functionality at MH practice level are being developed and tested in CT and across US
- CC as a discipline must be developed in order to achieve high performing health care system



# Gathering Supports for Meaningful System Change for CC

---

- The Commonwealth Fund project to develop care coordination (CC) as an integral component of pediatric primary care
- Family-based care coordination measurement study
- Multi-site study of CC in clinical settings supporting transition for YSHCN



# Measuring CC as a Practice-Based Function

---

- CC can be integrated into on-going QI activities within a practice, or a network
- Outcomes of effective CC provision can be benchmarked and linked to “pay for performance”: as long as resources are provided to support CC as a dedicated function



# What Can Be Measured re: CC?

---

## ○ Adult Medical Home

- Screening rates for disease and risk factors
- Screening for secondary disabilities
- Presence of registry and its utilization
- Development of Care Plans (these have CPT codes already)
- Mechanism for linkage from practice-based CC to community-based CM
- Training opportunities for CC'ers
- ED and in-patient utilization for patients with chronic conditions

# What Can Be Measured re: CC?

---

- Pediatric Medical Home
  - Parent/ youth partners in QI at practice level
  - Developmental and behavioral screening
  - Screening for secondary disabilities (much less prevalent than adult practice)
  - Presence of registry and its utilization
  - Development and deployment of Care Plans (these have CPT codes already)
  - Mechanism for linkage from practice-based CC to community-based CM
  - Training opportunities for CC'ers
  - ED and in-patient utilization for patients with chronic conditions




# Stakeholders

---

- Families
- Employers (Leapfrog Group, National Quality Forum)
- Providers
- Community-Based Organizations
- Payers: Medicaid and Commercial (PCPCC)
- State and Federal Agencies
- Legislators





PCMH-PPC: NCQA, AAFP, ACP,  
AAP and AOA  
Medical Home Qualifying Criteria

---

Linked to Reimbursement

# NCOA

<p><b>Standard 1: Access and Communication</b>            Has written standards for patient access and patient communication**            Uses data to show it meets its standards for patient access and communication**</p>	<p>Pt 4 5 <b>9</b></p>	<p><b>Standard 5: Electronic Prescribing</b>            A. <b>Uses electronic system to write prescriptions</b>            B. <b>Has electronic prescription writer with safety checks</b>            C. <b>Has electronic prescription writer with cost checks</b></p>	<p>Pts 3 3 2 <b>8</b></p>
<p><b>Standard 2: Patient Tracking and Registry Functions</b>  <b>Uses data system for basic patient information (mostly non-clinical data)</b>  <b>Has clinical data system with clinical data in searchable data fields</b>  <b>Uses the clinical data system</b>            Uses paper or electronic-based charting tools to organize clinical information**            E. Uses data to identify important diagnoses and conditions in practice**            F. <b>Generates lists of patients and reminds patients and clinicians of services needed (population management)</b></p>	<p>Pt 2 3 3 6 4 3 <b>21</b></p>	<p><b>Standard 6: Test Tracking</b>            A. Tracks tests and identifies abnormal results systematically**            B. <b>Uses electronic systems to order and retrieve tests and flag duplicate tests</b></p>	<p>Pts 7 6 <b>13</b></p>
<p><b>Standard 3: Care Management</b>            A. Adopts and implements evidence-based guidelines for three conditions **            B. <b>Generates reminders about preventive services for clinicians</b>            C. <b>Uses non-physician staff to manage patient care</b>            D. <b>Conducts care management, including care plans, assessing progress, addressing barriers</b>            E. <i>Coordinates care//follow-up for patients who receive care in inpatient and outpatient facilities</i></p>	<p>Pt 3 4 3 5 5 <b>20</b></p>	<p><b>Standard 7: Referral Tracking</b>            A. Tracks referrals using paper-based or electronic system**</p> <p><b>Standard 8: Performance Reporting and Improvement</b>            A. Measures clinical and/or service performance by physician or across the practice**            B. <b>Survey of patients' care experience</b>            C. Reports performance across the practice or by physician **            D. <b>Sets goals and takes action to improve performance</b>            E. <b>Produces reports using standardized measures</b>            F. <b>Transmits reports with standardized measures electronically to external entities</b></p>	<p>PT 4 <b>4</b></p> <p>Pts 3 <b>3</b> 3 3 2 1 <b>15</b></p>
<p><b>Standard 4: Patient Self-Management Support</b>            A. <b>Assesses language preference and other communication barriers</b>            B. <b>Actively supports patient self-management**</b></p>	<p>Pt 2 4 <b>6</b></p>	<p><b>Standard 9: Advanced Electronic Communications</b>            A. <b>Availability of Interactive Website</b>            B. <b>Electronic Patient Identification</b>            C. <b>Electronic Care Management Support</b></p>	<p>Pts 1 2 1 <b>4</b></p>



# National Noteworthy Models of Medical Home and Care Coordination

---

- Minnesota Medicaid Transformation
- North Carolina
- PACE: case management/ CC for adults with chronic conditions

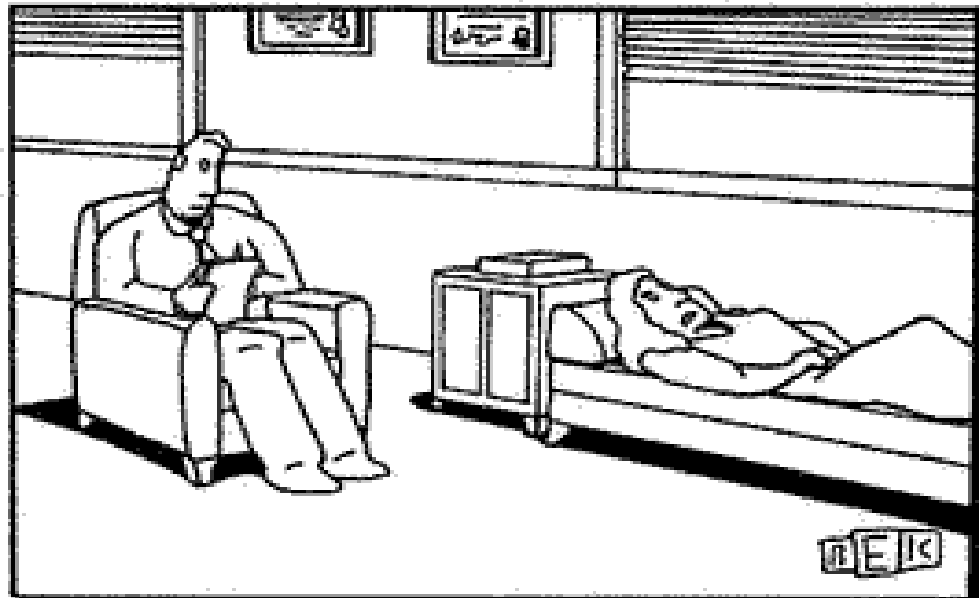


## Recommendations for System Re-Design

---

- Results Based Accountability
- Healthcare systems need QI infrastructure and supports
- CT-CHIP means of providing that infrastructure for pediatric healthcare
- Build capacity in Primary Care
- Build capacity in Subspecialty Care
  - Co-management in Medical Home
- System to support CC
- EHR
- Align incentives with goals

ALL RIGHTS RESERVED  
<http://www.cartoonbank.com>



*"Well, I do have this recurring dream that one day I might see some results."*

# Useful Websites

---

- <http://www.medicalhomeinfo.org>: American Academy of Pediatrics hosted site that provides many useful tools and resources for families and providers
- <http://www.medicalhomeimprovement.org>: tools for assessing and improving quality of care delivery, including the Medical Home Index, and Medical Home Family Index
- [www.abimfoundation.org](http://www.abimfoundation.org): excellent review of state of CC in adult medicine

# References

---

- Antonelli, R., Stille, C., and Antonelli, D., Care Coordination for Children and Youth With Special Health Care Needs: A Descriptive, Multi-Site Study of Activities, Personnel Costs, and Outcomes, accepted for publication, *Pediatrics*, 2008.
- McPherson, M., Arango, P., Fox, H., et al. (1998). A new definition of children with special health care needs. *Pediatrics*, 102,137–140
- U.S. Department of Health and Human Services. [www.hhs.gov/newfreedom](http://www.hhs.gov/newfreedom), accessed April 26, 2005
- Committee on Children with Disabilities, American Academy of Pediatrics. (1999). Care coordination: Integrating health and related systems of care for children with special needs. *Pediatrics*, 104(4, Part 1), 978–981
- Committee on Quality of Health Care in America, Institute of Medicine. (2001). Crossing the quality chasm: A new health system for the 21<sup>st</sup> century
- Friedman, Mark, “Trying hard is not enough”; excellent reference on “Results-Based Accountability”.

# References (cont)

---

- Committee on Identifying Priority Areas for Quality Improvement, Institute of Medicine. (2003). Priority areas for national action: Transforming health care quality. Adams, K. and Corrigan, J. Editors.
- Antonelli, R. and Antonelli, D., Providing a Medical Home: The Cost of Care Coordination Services in a Community-Based, General Pediatric Practice, *Pediatrics, Supplement*, May, 2004.
- Antonelli, R., Stille, C. and Freeman, L., Enhancing Collaboration Between Primary and Subspecialty Care Providers for CYSHCN, Georgetown Univ. Center for Child and Human Development, 2005
- Connor DF, McLaughlin TJ, Jeffers-Terry M, O'Brien WH, Stille CJ, Young LM, Antonelli RC. Targeted child psychiatric services: a new model of pediatric primary clinician--child psychiatry collaborative care. *Clin Pediatr (Phila)*. Jun 2006; 45(5):423-434.