Implementation: A statewide survey of family practices in Virginia

- Most practices implemented some but not all elements of the patient-centered medical home (PCMH)
  - Only 1% implemented the full PCMH model

- Most common element: Plan for continuity of care: 87%
  - Clinical guidelines: 77%
  - Patient surveys: 48%
  - Electronic health records: 38%
  - Clinical performance measurement: 28%
  - Patient disease registries: 19%

PCMH outcomes are mixed

- Providing patient education, post-discharge follow-up and enhanced access to primary care produced immediate savings for congestive heart failure and for asthma by reducing re-hospitalization and emergency department use.
- Savings not found in a similar program for patients discharged from VA hospitals.
- Results are also mixed for programs for patients with diabetes.

Care coordination and Medicare patients

- Three year study of Medicare patients with congestive heart failure, coronary artery disease and diabetes
- Participated in 15 care coordination programs
  - Nurses provided health education and phone monitoring to improve adherence with appointments and communication with PCPs
- Patients in 13 of the 15 programs showed no significant difference in hospitalization rates

- Peikes, Chen, Schore, Brown. JAMA. 2009;301:603-618
Financing the medical home model: enhanced reimbursement

- Enhanced reimbursement is needed to support longer visits that include patient education, care coordination, and enabling services to improve adherence.
- Enhanced reimbursement would also compensate greater responsibility and risk associated with chronic disease management in primary care.
- This model is called an “advanced medical home”

- Professional organizations are advocating for standards to establish “advanced medical home” status to demonstrate eligibility for higher rate.
Preliminary findings from pediatric medical home model

- The degree to which the medical home model was implemented objectively verified using the “Medical Home Index (MHI)”
- Practices with higher MHI scores for organizational capacity, care coordination, and chronic disease management had lower emergency department use among their patients with chronic disease
- Small sample sizes
- Further study needed to establish economic and clinical benefits

Elements of the Medical Home Index

- Organizational capacity
- Chronic condition management
- Care coordination (for children with special healthcare needs and their families)
- Community outreach
- Data management
- Quality improvement

- English, Spanish and short-form versions available online at: http://www.medicalhomeimprovement.org/
States implementing a medical home model

- Over 30 states have patient-centered medical home projects
  - Eight in SCHIP: CO, LA, ME, MN, NH, PA, RI, VT
  - MN will soon require medical homes from commercial insurers
- Emphasis on prevention
- Financial incentives
- Oldest model implemented in NC’s Medicaid program

“Carolina Access”

- Established 1991 with CMS 915(b) waiver
- Went statewide in 1998
- Coordinated care for Medicaid patients
- As of 2007: 14 regional community health networks
- More than 3,000 physicians
- Local health departments, hospitals, social service agencies and community providers
- Designed to improve care for ~760,000 Medicaid enrollees
The North Carolina model

- Enhanced fee-for-service reimbursement
  - Additional $2.50 per member/per month (pm/pm)
- Local networks receive $3 pm/pm for case management and chronic disease management
- Nurse advice phone line (“HealthDirect”)
- Refrigerator magnet with local pediatric office and HealthDirect phone numbers
- Extended clinic hours (6:00-10:00 PM)
- Case managers
- Physician champions
Outcomes of the NC model: asthma

- Decreased pediatric ED visits by 17% in first year (fiscal year 1999)
- During first four years Medicaid utilization data showed a $27.5 million savings in reduced ED and hospital use for asthma
- 2007: NC state legislature mandated expansion to special needs populations including elderly, blind and disabled
CHF New York Program data: Savings from guidelines-based asthma care, hospitalization and emergency department use.

Clinical outcomes, % of patients at baseline and follow-up, N=202
Savings to the health care system

- Estimated cost in New York City for each asthma hospitalization = $7,000
  - Source: Age and region-weighted NYS Dept. of Health Data
- Estimated cost per emergency room visit = $500
  - Source: Regional-weighted federal MEPS data
- Estimated savings per patient with asthma per year = $4,525
- Estimated cost of implementation in the primary care visit: $420 per patient with asthma per year
  - Analysis for patients 36 months and older only, in 2004 dollars.

Some caveats on studies to establish savings attributable to medical home

- Savings in NC statewide program and CHF New York Program are for patients with asthma, an ambulatory sensitive condition with immediate response to appropriate treatment and management
  - May not apply to all pediatric patients
- The medical home model was designed for children with special health care needs (which includes children with chronic conditions)
  - High risk, medically underserved children are also a special health care needs population
Medical home and health reform

- House Tri-Committee “America’s Affordable Health Choices Act of 2009” (H.R. 3200) allows development of innovative payment mechanisms including medical home in the public option

- Senate HELP Committee “Affordable Health Choices Act” would provide grants to improve health system efficiency, including community health teams to support a medical home model
Conclusions

- Developing and testing diverse medical home models is consistent with current trends in national health care reform.

- Preliminary data suggest that enhanced medical home models will improve clinical outcomes, reduce costs and lead to a more efficient and responsive health care system.
  - Currently available data apply to special needs pediatric populations with medical and/or psychosocial risk factors.
Additional on-line resources

- **American Academy of Pediatrics**
  - [http://www.medicalhomeinfo.org/](http://www.medicalhomeinfo.org/)

- **American College of Physicians**
  - Policy Brief
    - [http://www.acponline.org/advocacy/where_we_stand/policy/adv_med.pdf](http://www.acponline.org/advocacy/where_we_stand/policy/adv_med.pdf)
  - Frequently Asked Questions

- **Society for General Internal Medicine**
  - Bibliographies
    - [http://sgim.org/userfiles/file/AMHandouts/AM07/handouts/WE03.pdf](http://sgim.org/userfiles/file/AMHandouts/AM07/handouts/WE03.pdf)
    - [http://www.sgim.org/userfiles/file/AMHandouts/AM07/handouts/WE05.pdf](http://www.sgim.org/userfiles/file/AMHandouts/AM07/handouts/WE05.pdf)
For more information

- Visit our website:
  http://www.childrenshealthfund.org/