Impact of a medical home intervention on utilization and spending

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Policy Context

- Dominant payment model for physician services is fee for service; the fee schedule rewards high-tech services disproportionately.
- Poor fit with expectation that primary care physicians will coordinate care, use low-tech interventions to prevent acuity.
- Primary care incomes have stagnated, creating a workforce crisis.
- Across the continuum care is fragmented, uncoordinated with expensive consequences particularly around care transitions (hospital discharge, nursing home transfers).
A model of payment and care delivery has been proposed to transform primary care: the patient-centered medical home (PCMH)

- AAFP/ACP/APA Joint Principles:
  - Whole person orientation
  - Coordinated and integrated care
  - Quality and safety
  - Enhanced access
  - Payment system that rewards value

- There is a nationally recognized accreditation standard that has de facto become a more concrete definition: largely measures access and the infrastructure needed to coordinate care (IT)

- Broadly, a set of structures, processes that improve access and reliability of care, a focus on individual patient needs – and payment to support all of the above
PCMH initiatives are proliferating

- Dozens of private and public (and public/private) PCMH pilots have been launched in the last 2 years.
- All major national carriers are sponsoring some kind of pilot or initiative.
- Medicare demonstration.
- Numerous existing and emerging Medicaid initiatives.
- Very high aspirations for impact:
  - On access
  - On quality
  - On cost
What is the evidence base?

- Body of literature on value of primary care at a system level (cross-sectional)

- Published studies of impact of Wagner’s Chronic Care Model (team-based, patient-centered care)

- Reports of successful initiatives that shared some elements of what we currently think of as the PCMH
  - Community Care of North Carolina
  - Group Health of Puget Sound

- Many evaluations of pilot initiatives underway
Geisinger Health System PCMH initiative

- Geisinger is an integrated delivery system with a (non-exclusive) HMO in central Pennsylvania

- Known for innovative care delivery; IT sophistication

- ProvenHealth Navigator (Geisinger’s PCMH); Phase I launched October 2006, final set of 11 practices implemented January 2008

- All of the elements of the PCMH prototype – and more (i.e., generalize with caution)

- The pilots have been in practices owned by Geisinger and patients covered by Geisinger Health Plan – Medicare Advantage
ProvenHealth Navigator – major incremental components

- Team-based care and expanded services (instead of referral)

- Population health management/case management moved from plan to practice (complete with data, modeling, and case managers)

- Payments:
  - Participation incentives of about $7 pmpm
  - Pay for performance for cost and quality:
    - shared savings 50/50 relative to predetermined actuarial spending target contingent on performance on 10 quality metrics – e.g., meet 50% of the quality goals, get 50%*50% of the savings
Evaluation

- Claims-based analysis of hospital admissions, readmissions, and spending, excluding pharmacy costs because Part D occurred in the middle

- Messy quasi-experimental design: propensity score matched comparison cohort selected from non-Geisinger practices because of concern about spillover effects

- 2 years pre and 3 years post-intervention data (post is not quite right since the PHN was phased)
Inpatient admissions 2005-2008 PHN intervention practices vs. comparison
Inpatient readmissions 2005-2008 PHN intervention practices vs. comparison

![Graph showing inpatient readmissions from 2005 to 2008 for PHN intervention practices and comparison groups. The graph compares the number of readmissions per 1000 members per year.]
Total spending excluding Rx 2005-2008 PHN intervention practices vs. comparison
Conclusions and Limitations

- Even in an integrated delivery system where the governing entity has all the right incentives there are substantial opportunities to reduce high-cost acute events.

- Point estimates on cost suggest net savings – and shared savings were paid out – although these effects are n.s.

- Exactly which component of the PHN caused the results is unclear – incentives? Care manager? Information from the plan?

- Imperfect comparison group requires some caution in interpretation although the causal “story” – effects on hospitalization, timing of changes relative to intervention phase – are suggestive.

- Generalizability of Geisinger is limited (which cuts both ways).