Remote Clinical Pharmacy Consults via an Electronic Health Record

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Many patients in primary care benefit from comprehensive medication management, but there are also many that do not take medications and are healthy.

Many clinics do not have the workload to employ a full-time clinical pharmacist.

Computers and telephones allow connection with patients/providers from anywhere in the world.
Development of a Remote Model

- **July 2011**: Park Meadows Family Medicine
  - Located ~ 15 miles from the main campus
  - 100 patient visits/week spread among 5.4 FTEs
  - Onsite time investment → 1-2 days/wk for 3-4 months
  - Prospective clinical pharmacy medication review
    - Targeted patients most likely to benefit from medication review (e.g. diabetes, or multiple medications)
    - Performed comprehensive medication review (CMR)
    - When drug therapy problem identified, “Clinical Pharmacy Consultation” note placed into the EHR prior to patient appointment

Evaluation: 1-year results

- 49 vaccines given
- 23 chronic disease drugs started:
  - statins (19)
  - antihypertensives (2)
  - bisphosphonate (1)
  - diabetes agent (1)
- 24 major DI’s resolved
- 31 unnecessary drugs stopped:
  - Niaspan (6), Lovaza (5), gemfibrozil (5), fenofibrate (5), Zetia (4), Vytorin (1)
  - Terazosin (1), Cymbalta (1), clopidogrel (1), Colcrys (1), triamterene/HCTZ (1)

118 hours of clinical pharmacist time
Annual Estimated Savings: $52,215

Current remote model

- **Lone Tree, Westminster, Boulder Family Medicine**
  - 18 MDs, 3 NPs, ½ day at each site, PGY-2 residents
  - Contact through EHR and face-to-face to perform prospective medication review, medication consultation, drug information questions, medication education

- Clinical initiatives
  - Complex patient registry
  - Transitions of Care
  - Targeting patients with ASCVD
  - Improving PCMH metrics (e.g. pneumococcal vaccine)
  - Population Health, pay-for-performance metrics
Optimizing the pharmacist interaction in the healthcare team

- Physician
  - Trust
  - Professional relationship
  - Communication
- Patient
  - Trust
  - Professional relationship
  - Communication
- Pharmacist
  - Access to EHR
  - Two-way Communication
  - Collaborative working relationship

Optimal collaboration