Residencies as a high leverage policy target: Learnings from the I³ and I³ PCMH Collaboratives

Warren Newton, MD MPH
University of North Carolina
May 17, 2011
Key Points

• Residencies are an ideal target for policy, in terms of number and vulnerability of patients, residents’ future practices and the role of faculty in their communities

• It is possible to significantly improve quality of care in academic settings

• Investment in faculty development, learning networks and some direct costs is necessary and extremely cost effective
Building Quality into Residencies

• Quality chasm across continuum of care
• “Orders of Magnitude” more difficult to improve quality in academic settings
• Quality collaboratives promising...
I³ Rationale

• A collaborative limited to residencies
• Regional setting allows face to face meetings and local knowledge
• Priority was *practice redesign*, but also addressed teaching/curriculum
• I³= *Impact* to the power of three—current patients, residents’ practices, community practices faculty consult with
Timeline and Methods

Capstone 1
- Leadership
- Change Model
- Collaboratives

Learning Sessions
- Sharing data & improvement plans
- Training in practice redesign
- Sharing educational ideas & improvement plans

Capstone 2
- Other residencies
- Other specialties

Application: starter plan
- Site visits
- Baseline data
- Charter

Collaborative Periods 1–4

Fall/Winter 2005
- Summer 2006
  - Oct 06
  - Mar 07
  - Apr 07
  - Sep 07
  - Oct 07
  - Mar 08
  - Apr 08
  - Sep 08
  - Spring 09

Incentives:
- academic collaborative
- 2 year duration
- 10K pay for participation
- MOC IV credit
- staff and resident development
I³ Results

• 10 NC and SC Family Medicine Residencies, with 140,000 patients with 400,000 patient visits/year; 252 residents, 93 faculty

• Diabetes—significant improvement in quality of care in testing, exam, foot exam, blood pressure control, self management

• CHF- significant improvement in use of Beta-blockers, ACE inhibitors, self management, 38% drop in hospitalizations
CHF Outcomes of I3

Percent of patients sampled admitted to hospital in the previous 12 months

Baseline  Learning  11-06  12-06  01-07  02-07  04-07  05-07  06-07  07-07  08-07  09-07  Learning  11-07  12-07  01-08  02-08  03-08  04-08  05-08  06-08  07-08  08-08  Final

0%  20%  40%  60%  80%  100%
I^3 PCMH Collaborative

- 880,000 visits annually
- 55% minority
- Medicare 30%, Medicaid 31%, Uninsured 30%
- 295 Attendings, 793 residents
Progress toward NCQA PCMH recognition from the collaborative mid-point forward
I$^3$ Cost Effectiveness

- I$^3$: $1.2M over four years led to significant improvement in quality of care for DM and CHF for 440k patient visits/year; 38% drop in hospitalizations, estimated $13.5M savings
- I$^3$ PCMH: $300K over 2.5 years, PCMH applications for 22/25 residencies with 880K visits per year
- Indirect impact (residents’ future practices, community practices seeking help from faculty)
Proposed Next Step: I³ ACO

• Focus: managing populations, improving patient experience, reducing ED, CT/MRI use, and readmissions and coordinating care
• 25 primary care residencies
• Methods: Regional collaborative, face to face meetings + monthly data submission and call/webinar; residents/students participate
• Academic collaborative for dissemination
• Incentives: MOC IV credit, payment for data collection, staff/resident development
CHF Outcomes of I3

Percent of patients sampled with EF ≤ 40% on Beta-blocker therapy
CHF Outcomes of I3

Percent of patients sampled with EF ≤ 40% on ACEI or ARB therapy