Innovations in health care delivery: Overview and framework

Ateev Mehrotra

Department of Health Care Policy
Harvard Medical School
Innovations in delivery have changed medical landscape

- Specialty visits via tele-medicine
- Phone visits
- Medical kiosks
- Doctor’s offices
- Urgent care centers
- Emergency departments
- Retail clinics
- eVisits
- Home monitoring
- Nurse-managed health centers
- Physician messaging via personal health records
Unifying themes across the innovations

- Convenience
  - Location
  - Hours
- Use of technology
  - Internet
  - New monitoring tools
- Different provider interaction
  - Non-physicians
  - Asynchronous
In some cases, patients “voting with their feet”

- Retail clinics report >20 million visits to date
- Kaiser Permanente Northern California reports >10 million “virtual visits” in 2013
Many see great promise in innovations

Improve access
• All patients
• Underserved

Improve quality
• By improving access
• Superior to face-to-face care

Decrease costs
• Lower cost option than existing providers
• Deter complications
Concerns about the innovations

• Quality, quality, quality
• Innovations serve those with access
• Undermine primary care relationships
  – Less preventive care
  – Less chronic illness care
• Increase health care spending
  – “Too convenient”
  – Overuse
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<tr>
<th>Issue</th>
<th>Positives</th>
<th>Concerns</th>
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| Access & PCP Relationships | • Improve access for all patients  
                                 • Underserved | • Undermine patient-doctor relationships  
                                 • Deter preventive & chronic illness care |
| Quality                | • Equal to existing providers  
                                 • Superior in some cases | • Harmful to patients                           |
| Costs                  | • Lower cost option  
                                 • Decrease overall costs | • Increase health care spending                  |
Mixed impact on access

- Tela-doc use often off-hours
- Many Tela-doc users no prior health care contact
- Almost 2/3 of retail clinic patients reported no primary care provider
- Tela-doc users may not live in underserved communities
- Almost 90% of retail clinics in urban areas and relatively few retail clinics in underserved communities

Uscher-Pines, Mehrotra, Health Affairs, 2014
Mehrotra et al., Health Affairs, 2008
Rudavsky, Mehrotra, JABFM, 2010
Quality of care in retail clinics is the same or better as found in other settings

Mehrotra et al., Annals of Internal Medicine, 2009
Innovations not always equal or superior

Antibiotic prescribed day of visit or next 2 days

Sinusitis

Pain when urinating or UTI

eVisits
Office Visits

Mehrotra et al., JAMA Internal Medicine, 2012
Significant per episode cost savings at retail clinics

Mehrotra et al., Annals of Internal Medicine, 2009
Challenges

• Much potential, often little use
• Evidence on impact on access, costs, and quality limited
• Barriers to growth
  – Regulatory
  – Financial / payment
  – Legal
  – Clinical
  – Technical