Webinar on Managing the Health Commons: An Interim Report

Michael D. McGinnis, Elinor Ostrom, Claudia Brink, Joan Pong Linton, Carrie Lawrence, Ryan Conway

ReThink Health, Fannie E. Rippel Foundation, and Workshop in Political Theory and Policy Analysis, Indiana University

Oct. 21, 2011 – Final Version
DO NOT QUOTE WITHOUT PERMISSION, Comments Welcomed mcginnis@indiana.edu
A Regional Approach to Health Reform

• **Health and medical care are intrinsically local or regional.**

• Researchers have documented a **wide range of regional variation** in many measures of healthcare input measures (especially costs) and the overall quality of medical services within the U.S.

  – When we began examining health policy, we were introduced to officials from two of the communities which were recognized as having managed to achieve unusually **high levels of quality in medical services at below average costs**: **Grand Junction, Colorado** and **Cedar Rapids, Iowa**.

  – The general presumption was that **they did something** that contributed to these positive outcomes, specifically that they had developed **informal mechanisms of collaborative stewardship at the community level**.

• We proposed a research project to learn more about the process of this regional-level stewardship.

  – At the same time, we began investigating **Bloomington, Indiana**, since we had an opportunity to dig even more deeply, here in our local region.
Capacity for Collective Action is the Focus of this Analysis

• For this exploratory study, we presume that better coordination at the local or regional level tends to generate positive health & healthcare outcomes.

• We focus on understanding the factors that facilitate coordination.
  – Since it is not based on a random sample of cases, this study by itself cannot substantiate conclusions about the causal impact of community collaboration on medical services or overall health outcomes.

• Because of our focus on collective action, we do NOT draw explicit comparisons among specific measures of the quality of medical care (such as readmission rates or declines in medical errors) or in overall health outcomes observed in these three communities.
  – Many professional consultants and other organizations work in these specialized areas; our niche lies in macro-level analysis of policy organizations.

• Our key analytical task is to identify the factors that affect capacity for collective action regarding the local/regional regulation of medical services.
Collaboration With Study Communities and Future Projects

In each community we work with a community advisory board to identify interview subjects and to help us evaluate our findings.

– Our interview questions focus on eliciting their own positive and negative experiences with multi-stakeholder collaborations.

– Our cases are NOT a random sample, but instead a convenience sample, chosen because we had access to community leaders.

• We hope to develop the foundation for two follow-on projects:

  – A community self-assessment tool, for use in conjunction with community leadership teams, to help them identify potential issues for further cooperation and the resources they need to develop or enhance to accomplish those tasks.

  – Identification of variables to be included in a rigorous test of the effect of this capacity for collective action on the quality and costs of medical services in a randomized sample of communities in the United States.
Clarification: We Study Coordination of the Medical Services Industry as a Whole, not just Public Health

• Health is **not** a product that can be purchased from suppliers, instead health emerges from **co-production**, with individuals actively contributing to determining their own health.
  
  – Ultimately, a person’s health is a product not just of the medical care he/she receives but primarily of his/her **decisions between healthy and unhealthy behavior**, within the constraints set by genetics, socio-economic status, and environmental factors.
  
  – These decisions can be influenced by the **built environment** within which individuals choose, and public health officials routinely consider how social structures and biophysical conditions affect health.
  
  – **Public health officials** already think in terms of understanding the system as a whole, and appreciate the need to act as responsible stewards of community resources.

• **But in the U.S., public health officials have no authority over the delivery of medical services.** That is where the costs of health care are determined, in decisions made by physicians, hospital administrators, insurance company officials, and employers.
Markets and Common Resources in the Healthcare Industry

Health care (or medical services) can be seen as a private good, involving service transactions between patients and healthcare professionals.

– But these are not merely private goods, given the need for consumers to be actively engaged in producing their own health outcomes (co-production).

– And healthcare markets are typically inefficient in providing the optimal mix of services, for a variety of reasons, such as the difficulty of measuring quality, the technical complexity of evaluating alternative procedures, and a payment structure that make costs far from transparent to consumers and/or professional clinicians.

– In sum, regulation is especially important for healthcare markets.

• Other aspects of health care (especially medical insurance) have properties known in economic theory to create problems related to overuse of services or suffer from adverse selection problems in the client pool – both leading to an upward spiraling of insurance costs.

• Still other aspects are similar to common-pool resources, in which individuals extract resources without full payment, like ER services for a significant subset of the population.

• Public health officials routinely promote population health, which is widely recognized as a public good (a good with positive externalities), where individuals may under-invest in health maintenance from the perspective of society.

We argue that the overall system of health and the delivery of healthcare (medical) services is best understood as a commons that encompasses multiple types of resources and many types of goods and services. Such a commons definitely requires some form of stewardship.

• Collaborative stewardship is effectively a form of self-regulation of a commons.
What is a Commons?

1. A resource or system of resources to which members of a group share access, and which they either (a) consume jointly or (b) use as a common pool from which they extract units for private consumption;

2. This common resource can be exhausted or degraded by over-use (of resources) or under-investment (in resource replenishment and/or contributions to public goods);

3. Efforts to replenish or maintain the relevant resources are costly;

4. And these costs will be paid only by someone with an incentive to consider long-term consequences of current actions.

Examples:
- Natural resource commons (fisheries, common grazing land, forests);
- Constructed commons (irrigation systems, technical infrastructures, information systems)
Health as a Commons (In Need of Self-Regulation)

1. Residents share access to local & regional resources for medical care:
   1) trained healthcare professionals,
   2) hospitals, clinics & test facilities,
   3) financial support (insurance, government programs).

2. Congestion can be common and service degradation can be severe because there is a limited number of clinicians, hospital beds, emergency rooms, insurance programs, etc.

3. These resources can be reallocated to achieve more efficient or equitable outcomes, but any significant reform will face resistance from entrenched interests.

4. Who can act as stewards of these common resources?
   - Research of Lin Ostrom & others on Commons Theory suggests that key stakeholders can work together to craft, monitor, and enforce rules that ensure the continued viability of common resources.
Key Local Stakeholder Groups

1. **Physicians and Other Healthcare Professionals**
   a. Primary care professionals
   b. Specialists in secondary or tertiary care
   c. Other health professions (nurses, pharmacists, dentists, allied health, etc.)
   d. Independent clinicians vs. physician associations or cooperatives

2. **Administrators of facilities** from the following categories:
   a. Specialized clinics and general-purpose hospitals
   b. For-Profit and Non-Profit (including free clinics)
   c. Academic and Community and Government-Owned
   d. Stand-alone or Consolidated Hospital Systems

3. **Insurers** (Private and Public)

4. **Employers** (primarily as purchasers of insurance)

5. **Public health officials** (and state and local program officials)

6. **Health Information Exchanges (HIEs)**

7. **Community Service Organizations (CSOs)**

8. **Individual Citizens** (critical for overall health but limited influence over the details of the medical services industry)

**Note:** Other categories of relevant actors have been excluded in order to simplify analysis.
In This Project We Focused on Healthcare Professionals

• In the short term, collaborative stewardship among professional stakeholders is critical to reducing costs and improving the quality of health care.
  – Among the stakeholder groups we interview are leaders of community organizations, so the concerns of the general public are not totally overlooked in our analysis.

• In the long run, the active participation of ordinary citizens is critical for controlling costs and achieving better health outcomes
  – Especially their choices between healthy and unhealthy behaviors.
  – Health is not a product that can be purchased from suppliers, it emerges from co-production, in which individuals actively contribute to determining their own health.

• In later stages of this project, and in subsequent projects, we plan to expand coverage to citizen interviews, focus groups, and public forums. But we can’t do everything at once.
Is Local Autonomy Plausible in Healthcare Policy?

There are many external drivers of resource allocation, costs, and power

1. Technological innovation in medical testing, treatments, and drugs;
2. National policy initiatives (health insurance reform, ACO program details, changes in Medicare and Medicaid, drug approval, etc.);
3. State policy changes (esp. Medicaid reimbursement, but also changes in legal requirements and certification);
4. Professional standards and best practices, including limits on size of classes in medical or nursing schools;
5. Corporate decisions regarding advertising (esp. for new drugs) and location of and content of products in restaurants & grocery stores;
6. Consolidation and other trends within healthcare delivery, insurance, and related financial sectors;
7. Demographic and cultural changes;
8. Economic upturns and recessions.
Local Levers of Allocation and Power

Important resource allocation decisions are made in local settings:

1. Choices by healthcare professionals concerning career paths or specializations;
2. Corporate decisions to build new facilities or to consolidate;
3. Negotiations between hospitals, physician groups, and insurance plans regarding reimbursement levels and partnerships;
4. Procedures established within hospitals or physician groups (regarding quality control, reducing medical errors, hospitalists, etc.);
5. Consultations among medical professionals (care coordination among physicians-nurses-pharmacists-therapists);
6. **Interactions between individual patients and clinicians** (esp. regarding referrals to specialists or testing facilities);
7. Interactions between patients and employers or government agencies offering health insurance coverage or wellness plans;
8. **Personal choices between healthy and unhealthy behaviors**;
9. How personal choices are shaped by the natural and built environment.
How often are these local resource allocation decisions guided by considerations of long-term effects or systemic stewardship?

**Allocation of human capital**
- Availability of primary care
- Physician training & recruitment
- Referral patterns (for specialty care)
- Hospital-physician relations
- Care transitions

**Healthcare facilities & physical capital**
- Coordination of emergency care
- Quality improvement and cost-cutting procedures (e.g., reducing medical errors)
- Facility construction
- Consolidation of hospital systems
- Market concentration; anti-trust

**Financial issues**
- Cost of chronic and end-of-life care
- Cost of care for uninsured patients
- Safety net for catastrophic bills
- Reimbursement and rates for care

**Public/population health**
- Emergency preparedness
- Preventive care
- Pre-natal care
- Dental care
- Mental health care
- Health promotion (tobacco, obesity, etc.)
- Improving the built environment

**Information systems**
- Quality monitoring
- Format for electronic records
- Privacy of personal health records
- Health information exchange networks

**Other issues**
- Employment & economic conditions
- Equity; urban/rural disparities
- Legal culture (malpractice, regulation)
Understanding the Dynamics of Collaborative Stewardship

The range of participation and cooperation will expand or contract as new issues come under consideration

– Benefits of adding a new member, vs. higher transaction costs
– Costs of removing existing members, vs. lower transaction costs

Once achieved, sustainability of cooperation is always at risk

– Group members with access to a commons have conflicting interests in use of that resource, and differing capabilities in affecting outcomes.
– Individual participants will continue to pursue their own self-interests, even while they are cooperating on other matters.
– This tension never goes away.

Sustainability of self-regulatory stewardship efforts requires supporting conditions from both structure and process.
We draw factors from four bodies of research/practice

1. **Commons Research** on small-scale communities where
   - Individual survival is dependent on continued access to that resource;
   - Family ties often generate concerns for long-term future sustainability,
   - Social ties among users are typically dense and salient,
   - Resource users are close to the action, facilitating monitoring and effectiveness of social sanctions.

2. **Collective Action Theory**: “best practices” for forming teams of collaborators who are not so closely linked,

3. **Inter-Organizational Relations**: where participants are agents representing the interests of private, public and voluntary organizations as well as more informal groups.

4. **Healthcare Policy**: factors specific to this policy area, including the unusually high prevalence of *compassion* as an influence on those who choose to enter the healthcare professions.
Examples from Collective Action Theory

Generic process for collective action

– A group meets regularly to discuss their shared concerns and to
– Identify specific goals that they can accomplish together,
– Allocate tasks to members and follow up on implementation,
– Reassess the situation frequently and consider changes in plan,
– Enhance social ties and practices of effective communication within group,
– Inspire and nurture leaders from within the group to sustain these efforts.

Specific example: Relational Coordination in multi-speciality teams in patient-centered care, from Jody Gittell, High-Performance Healthcare, 2009.

– Communication is frequent and problem-focused,
– Participants have Shared Goals, Shared Knowledge, and Mutual Respect
Examples from Inter-Organizational Relations


- Have committed sponsors and effective champions at many levels,
- Build leadership, legitimacy, and trust,
- Engage in deliberate planning but remain flexible and resilient,
- Use resources to cope with power imbalances, conflict, and shocks,
- Remain responsive to key stakeholders & build on distinctive competencies,
- Engage in regular reassessments, and
- Have an accountability system that uses a variety of methods to track and interpret data on inputs, processes, and outcomes.
Some Complications Related to Health and the Delivery of Medical Services

- **Preventive care** is critical for health and for reduction of costs in the long term, but the medical care system focuses on treating people only after they become sick.
- Individuals seek a **personal relationship** with their primary care provider, but physician incentives discourage long consultations.
- **Technological innovation** drives higher costs.
- **Third-party payers and bundled reimbursement policies** separate cost considerations from patient and physician decisions, so having better information is critical for reform.
- There is **no obvious institutional home for regulation** of medical services at the local/regional level.
- **Compassion** as a potential resource to support improved collaboration.
Conditions for Collaborative Stewardship of a Health Commons

**BACKGROUND CONDITIONS (STRUCTURE)**

1. Local autonomy is recognized
2. Group membership flexible and expandable
3. Sufficient physical, human, and social capital
4. Regular forums and multiple channels for communication
5. Sense of community & shared values

**SUPPORT PROCESSES OF INTERACTION**

1. Leadership emerges from local group
2. Stewardship team builds norms
3. Open discussion in a secure environment
4. Routine monitoring of actions and outcomes
5. Share information widely
6. Graduated sanctions allow rule violators to regain trust of others
7. Members of stewardship group maintain commitment of home organizations
8. Leverage core competencies of all partners
9. Respect vital interests of all stakeholder groups and organizations
10. Maintain focus on core mission & avoid chasing after new programs

**ENABLE RESULTS**

1. Record of success in realizing specific and practical goals.
2. Trust is developed and reinforced.
3. Rules fit local conditions.
4. Rules seen as fair and reasonable.
5. Continuous learning and innovation.
Case Studies: Preliminary Findings
Institutional Diversity in Study Sites

• **GJ (Grand Junction, Colorado):**
  – National reputation for excellence in high quality, low cost care
  – County and regional leadership board in place for decades,
  – Coordination led by locally-based insurance/HMO plan (Rocky), but some recent defections because of cost increases,

• **CR (Cedar Rapids, Iowa):**
  – “Gang of Six” led by key hospital administrators and private employers
  – Community collaboration inspired by major flood a few years ago,
  – Recent misunderstandings concerning new cancer clinics,
  – Concern about influence of university hospital in neighboring county

• **BL (Bloomington, IN):**
  – Extensive community cooperation, including voluntary clinic (VIM)
  – Leadership in health information exchange,
  – Healthcare market dominated by single hospital (with home office in state capital), major physicians alliance, and dominant employer (in Bloomington)
  – State-level competition among consolidated hospital systems
### Initial Application of Resource Design Principles (Oct. 2010)

<table>
<thead>
<tr>
<th>Commons: Design Principles</th>
<th>Grand Junction Health Care System</th>
</tr>
</thead>
</table>
| 1. Clear boundaries (resource and users) | • **Physical barriers** help create sense of shared community  
• Routine collaboration of health care professionals |
| 2. Local **autonomy** recognized | • FTC consent decree in 1998 (**anti-trust exemption**) |
| 3. **Participation** in collective choice | • Leadership by primary care physicians  
• Risk-sharing in physician payment system (salaried) |
| 4. **Monitoring** by participants | • Locally developed system for patient health information  
• **Physician cost profiles** available to consumers & clinicians  
• Local clinician training |
| 5. Graduated **sanctions** | • Informal (esp. lack of patient referral) |
| 6. **Dispute resolution** mechanisms | • Informal committee of local physicians and other healthcare professionals resolve disputes |
| 7. **Nested enterprises** | • To be evaluated by research |
| 8. **Congruence** with local conditions and fairness | • **Equal payment** for Medicare, Medicaid, insured  
• Attention paid to high-cost care, especially end-of-life care, and high-return care, like prenatal care  
• Reward primary care physicians for hospital visits  
• Limit number of facilities to efficiencies of scale |

Source: Rearrangement of slide from **Oct. 10, 2010** presentation, Michael McGinnis
## Background Conditions/Structure

<table>
<thead>
<tr>
<th>Local autonomy is recognized</th>
<th>Grand Junction</th>
<th>Cedar Rapids</th>
<th>Bloomington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relatively isolated; FTC consent decree</td>
<td>Problematic role of CON requirements</td>
<td>10 county region; Dominant hospital part of state-wide system</td>
<td></td>
</tr>
</tbody>
</table>

| Group membership flexible and expandable | Long established leadership consortium | Gang of Six slowly expanding; Cedar Rapids Healthcare Alliance | ACHIEVE team (CDC) |

| Sufficient physical, human, and social capital | yes | yes | yes |

| Regular forums and channels of communication | Yes; Board Interlock | “Supermarket Syndrome” | yes, for public health |

| Sense of community, and commitment to shared values | yes | Yes (especially after 2008 flood) | yes |
## Processes/Interactions (1)

<table>
<thead>
<tr>
<th></th>
<th>Grand Junction</th>
<th>Cedar Rapids</th>
<th>Bloomington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership emerges from local group</td>
<td>Yes (but “nifty 50” is aging)</td>
<td>yes</td>
<td>Yes, for community issues</td>
</tr>
<tr>
<td>Stewardship team develops and reinforces norms</td>
<td>yes</td>
<td>At risk</td>
<td>In process of development</td>
</tr>
<tr>
<td>Open discussion in a secure environment</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routine monitoring of actions and outcomes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share information widely</td>
<td>Yes (physician profiles)</td>
<td></td>
<td>Coordinator keeps participants informed</td>
</tr>
<tr>
<td>Graduated sanctions allow rule violators to regain trust of others</td>
<td>Cadre of “arm twisters” (violators tend to leave area)</td>
<td>Remains to be seen</td>
<td>No clear examples of rule violations</td>
</tr>
</tbody>
</table>
## Processes/Interactions (2)

<table>
<thead>
<tr>
<th></th>
<th>Grand Junction</th>
<th>Cedar Rapids</th>
<th>Bloomington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members of stewardship group maintain commitment of home organizations</td>
<td>yes</td>
<td>In process of development</td>
<td>Buy-in for ACHIEVE team programs</td>
</tr>
<tr>
<td>Leverage core competencies of all partners</td>
<td>yes</td>
<td>Not Clear Given Cancer Center Dispute</td>
<td>No: for-profit hospital seems isolated</td>
</tr>
<tr>
<td>Respect vital interests of all stakeholder groups and organizations</td>
<td>yes</td>
<td>Not clear given Cancer Clinic dispute</td>
<td>Repeated disputes between physician association and health plan</td>
</tr>
<tr>
<td>Maintain focus on core mission &amp; avoid chasing after new programs</td>
<td>Yes (several initiatives to recruit and retain primary care physicians)</td>
<td>yes</td>
<td>Concerns with program sustainability</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th></th>
<th>Grand Junction</th>
<th>Cedar Rapids</th>
<th>Bloomington</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Record of success in realizing specific and practical goals.</strong></td>
<td>Long record</td>
<td>15 Successful Collaborations Since 1971, including capital for community clinics</td>
<td>Success in health promotion; less so in medical services (except VIM &amp; HIE)</td>
</tr>
<tr>
<td><strong>Trust is developed and reinforced.</strong></td>
<td>General “annealing” from boom-bust economic cycles, but not w/r health care per se</td>
<td>Remains to be seen</td>
<td></td>
</tr>
<tr>
<td><strong>Rules fit local conditions.</strong></td>
<td>Equal payment for physicians</td>
<td>Is success sustainable?</td>
<td>Physicians express concern with fee for service, lack of primary care</td>
</tr>
<tr>
<td><strong>Rules seen as fair and reasonable.</strong></td>
<td>Yes (but recent concern with health plan costs)</td>
<td>In dispute</td>
<td>Concern with poverty and access</td>
</tr>
<tr>
<td><strong>Continuous learning and innovation</strong></td>
<td>Yes; regular “lessons learned” sessions</td>
<td>Assessment tools developed by providers, NGOs, county government</td>
<td></td>
</tr>
</tbody>
</table>
Next Steps

• **Consultations** with Community Advisory Boards in late Nov. or early Dec.

• **Focus groups** in Bloomington, concept map techniques

• Bloomington **public forum** in spring

• Work with **Sam Joseph** on “soft systems analysis” to explore “mental maps” of participants (drawing on ownership in international development programs)

• Systematic evaluation of themes from interviews, using **NVIVO** and other Qualitative Analysis Software

• Analyses of **social network connections** from interviews and other data sources (including archives)

• Develop and field test **self-assessment tool** with all three communities, for potential use elsewhere
Format for a Community Self-Assessment Tool

[1] Ask representatives of local stakeholder groups familiar with past or ongoing efforts of collaborative stewardship,

[2] whether or not their interactions on each of these topical areas:
1. Allocation of human capital
2. Healthcare facilities and physical capital
3. Financial issues
4. Public/community health
5. Information systems
6. Other issues (employment, equity, legal culture)

[3] show evidence of the presence of these facilitating conditions:
• Background Conditions/Structure
• Processes of Interactions
• Results

[4] and use their answers to help them identify gaps in their capacity for collaborative stewardship of their local/regional health commons.
This research project on Managing the Health Commons is part of

ReThink Health (http://www.rethinkhealth.org/), a collaborative research and action initiative funded by

The Fannie E. Rippel Foundation (http://www.rippelfoundation.org/).