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Aligning Delivery & Financing Systems to Advance a Culture of Health: New and Expanded Research

Glen P. Mays, University of Kentucky

Available at: https://works.bepress.com/glen_mays/255/
Aligning Delivery & Financing Systems to Advance a Culture of Health: New and Expanded Research

Glen Mays, PhD, MPH
University of Kentucky
Mission: Widen the lens beyond health care & public health systems

Rigorous research to identify novel mechanisms for aligning delivery and financing systems in medical care, public health, and social & community services in ways that improve health and wellbeing, achieve efficiencies in resource use, and reduce inequities.

www.systemsforaction.org
A Framework for Building a Culture of Health

Action Area 1: Making Health a Shared Value

Action Area 2: Fostering Cross-Sector Collaboration to Improve Well-Being

Outcome: Improved Population Health, Well-Being, and Equity

Action Area 3: Creating Healthier, More Equitable Communities

Action Area 4: Strengthening Integration of Health Services and Systems

Multiple systems & sectors drive health...

Proportional Contribution to Premature Death

- Genetic predisposition: 30%
- Behavioral patterns: 40%
- Social circumstances: 15%
- Environmental exposure: 5%
- Health care: 10%

Mission: Widen the lens beyond health care & public health systems

- Delivery Systems + Financing Systems
- Health Sectors + Social/Community Sectors
- Prevention + Treatment
- Health + Wellbeing
- Individuals + Populations
- Equity + Efficiency
Wide lens: implicated sectors

- Public health
- Medical care: ACOs, PCMCs, AHCs
- Income support
- Nutrition and food security
- Education and workforce development
- Housing
- Transportation
- Criminal justice
- Child and family services
- Community development and finance
Research priority areas

- Organization and financing of multi-sector system alignment strategies
- Health and economic impact of multi-sector system alignment strategies
- Impact of multi-sector system alignment strategies on health equity
- Role of information and decision support strategies in multi-sector system alignment strategies
- Role of incentives in multi-sector system alignment strategies
Study **novel mechanisms** for aligning systems and services across sectors

- Innovative alliances and partnerships
- Inter-governmental and public-private ventures
- New financing and payment arrangements
- Incentives for individuals, organizations & communities
- Governance and decision-making structures
- Information exchange and decision support
- New technology: m-health, tele-health
- Community engagement, public values and preferences
- Innovative workforce and staffing models
- Cross-sector planning and priority-setting
Signature research projects

- **University of Chicago**: Randomized trial of a Comprehensive Care, Community and Culture program

- **Arizona State University**: Analysis of medical, mental health, and criminal justice system interactions for persons with behavioral health disorders

- **IUPUI**: Evaluating integration and decision support strategies for a community-based safety net health care and public health system

- **University of Kentucky**: Measuring multi-sector contributions to public health services and impact on population health.
S4A applications by implicated social/community sectors

- Housing
- Transportation
- Comm dev/land use
- Criminal justice/legal
- Environment
- Mental/behavioral health
- Substance abuse
- Disability services
- Food/nutrition assistance
- Income support
- Employment/training
- Child/family services
- Education
- Aging

N=170
Examples of Innovations in Multi-sector System Alignment Strategies
The connection between social needs and medical outcomes

- Unmet social needs have large effects on medical resource use and health outcomes

- Most primary care physicians lack confidence in their capacity to address unmet social needs

- Linking people to needed health and social support services is a core public health function that can add health and economic value

Shier et al. *Health Affairs* 2013
### Key components of leading models of health/social service integration

<table>
<thead>
<tr>
<th>Intervention Process</th>
<th>VBH</th>
<th>SCO</th>
<th>CCP</th>
<th>Mercy</th>
<th>GRACE</th>
<th>CMP</th>
<th>EDPP</th>
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<td>Interdisciplinary care team</td>
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<td>Specialized intervention protocols</td>
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<td>Specialized training for service providers</td>
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<td>Ongoing monitoring</td>
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<td>Coaching in self-management</td>
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<td>Link to or communication with primary care</td>
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<td>Link with primary care physician or practice</td>
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<td>Use of electronic health records</td>
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Shier et al. *Health Affairs* 2013
## Key components of leading models

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<td>Medication management</td>
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<td>Mental health services</td>
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<td>Referral to or arrangement</td>
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<td>Referral to or arrangement</td>
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<td>Caregiver support</td>
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New CMS Initiative: Accountable Health Communities

- Screen community-dwelling Medicare and Medicaid beneficiaries to identify unmet health-related social needs
  - Housing instability and quality;
  - Food insecurity;
  - Utility needs;
  - Interpersonal violence; and
  - Transportation needs.

- Referral to increase awareness of community services

- Navigation services to assist high-risk beneficiaries with accessing community services

- Encourage alignment between clinical and community services to ensure community services are available and responsive to the needs of beneficiaries
Example: Using community health workers, peer navigators, lay advisors

- **Targeting**: identifying individuals with unmet health and social needs
  - Reaching hard to reach (urban & rural settings)
  - Mitigating “woodwork” effects

- **Tailoring**: matching services and supports to consumer needs, preferences, values
  - Education & self-management support
  - Direct service provision
  - Referral
  - Care coordination & navigation
Some Promising Examples
Arkansas Community Connector Program

- Use community health workers & public health infrastructure to identify people with unmet social support needs
- Connect people to home and community-based services & supports
- Link to hospitals and nursing homes for transition planning
- Use Medicaid and SIM financing, savings reinvestment
- ROI $2.92

Source: Felix, Mays et al. Health Affairs 2011

www.visionproject.org
Economic impact of Arkansas CCP

By Holly C. Felix, Glen P. Mays, M. Kathryn Stewart, Naomi Cottoms, and Mary Olson

THE CARE SPAN

Medicaid Savings Resulted When Community Health Workers Matched Those With Needs To Home And Community Care

![Graph showing Medicaid spending per recipient over time, comparing Comparison Group and CCP Participants.]
# Service Use and Spending in Arkansas CCP

<table>
<thead>
<tr>
<th>Per Recipient Medicaid Use/Spending</th>
<th>CCP Participants</th>
<th>Comparison Group</th>
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<tbody>
<tr>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
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<tr>
<td>Any inpatient utilization</td>
<td>8.6%</td>
<td>9.7%</td>
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<tr>
<td>Annual inpatient spending</td>
<td>$23,186</td>
<td>$127,105</td>
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<tr>
<td>Any outpatient medical utilization</td>
<td>78.6%</td>
<td>77.6%</td>
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<td>Annual outpatient spending</td>
<td>$12,442</td>
<td>$27,744</td>
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<tr>
<td>Any nursing home utilization</td>
<td>1.1%</td>
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<td>Annual nursing home spending</td>
<td>$25,882</td>
<td>$74,854</td>
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<tr>
<td>Any HCBS utilization</td>
<td>55.1%</td>
<td>39.8%</td>
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<tr>
<td>Annual HCBS spending</td>
<td>$6,107</td>
<td>$12,042</td>
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**p<0.05
Cost Neutrality Estimates in Arkansas CCP

Three Year Aggregate Estimates

- Combined Medicaid spending reductions: $3.515 M
- Program operational expenses: $0.896 M
- Net savings: $2.629 M
- ROI: $2.92
Some Promising Examples
Wellcare Health Connections Program

- Screen Medicaid and dual Medicare-Medicaid members for unmet social service needs
- Triggered by hospitalization, ED use, or physician referral
- Maintain electronic inventory of available community services
- Referrals with telephone-based navigation
- Telephone follow-up to determine receipt and ongoing needs
- Implemented in KY and 9 other southern states
Some Promising Examples
Wellcare Health Connections Program

- 9000 participants over 2 year demonstration period

![Bar chart showing various services and referrals]
Some Promising Examples

Wellcare Health Connections Program

- Spending declined by $464 per person per year for participants compared to non-participants
- Reduced ED use and hospitalizations accounted for spending reductions
- No significant change in outpatient utilization
Some Promising Models
Kentucky’s Homeplace Program

Ratio of CHWs to Populations at Risk

Childress MT. 2013. http://uknowledge.uky.edu/cber_researchreports/1/
Some Promising Models
Kentucky’s Homeplace Program and COACH4DM

Results: Delivery of Diabetes Self Management

Dearinger et al. 2013; Kegley et al. 2013
Some Promising Examples

Hennepin Health ACO

- Partnership of county health department, community hospital, and FQHC
- Accepts full risk payment for all medical care, public health, and social service needs for Medicaid enrollees
- Fully integrated electronic health information exchange
- Heavy investment in care coordinators and community health workers
- Savings from avoided medical care reinvested in prevention initiatives
  - Nutrition/food environment
  - Physical activity
Complex Resource Use Patterns Are Common in CHW Programs

- **Lower** inpatient care and readmissions
- **Lower** emergency care
- **Lower** skilled nursing/institutional LTC
- **Higher or stable** outpatient care
- **Higher** use of home and community-based services/supports
- **Higher** use of social services

Comprehensive models use CHWs as part of larger care teams

- **Established teams**: use same core members for a defined geographic area
  - Vermont Blueprint
  - Geriatric Resources for Assessment and Care of Elders (GRACE)
  - Hennepin Health ACO

- **Ad hoc teams**: tailor teams to individual consumer based on needed services/supports
  - Arkansas CCP
  - Kentucky Homeplace
Special implications & considerations in using CHWs for system alignment

- Efficiencies in worker training
- Efficiencies in providing direct services & linkage/referral roles together
- Skills in identifying unmet needs (targeting function)
- Direct service provision may require more intensive staffing and lower client to staff ratios
- Positive spillover benefits on caregivers
- Positive effects on CHW employment and career development
- Advantages in working as part of interdisciplinary teams
- Advantages in embedding in defined health care/public health delivery systems
For More Information

Systems for Action
National Coordinating Center
Systems and Services Research to Build a Culture of Health

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