IMPACTING HEALTH OUTCOMES FOR OLDER ADULTS WITH TYPE 2 DIABETES: A COMMUNITY ORGANIZER AND PEER MENTOR MODEL

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What makes older adults living in rural areas so vulnerable?
Rural residents

- Uninsured
- Obese
- Travel longer distances for care
- Greater distances to grocery stores
- Less support for healthy lifestyles
- High rates of chronic disease, diabetes, and coronary heart disease
27% of older adults live with diabetes\textsuperscript{1}

66% are diagnosed with multiple chronic conditions\textsuperscript{2}

95% of the health care costs for older adults is for chronic disease\textsuperscript{3}
Sustainable health outcomes require:

1. Policy, system and environmental interventions
2. Lived experience of the older, rural residents
3. Individual interventions
How did we capture the lived experience of the older adults in our rural counties?
Community Health Workers!!
Although, not talking about a certification program ....

Community Health Workers (CHWs)
Training/Certification Standards
Current Status

- **Laws/Regulations Establish CHW Certification Program Requirements**
- **Statute Creates a CHW Advisory Board, Taskforce, or Workgroup to Establish Program Requirements**
- **No Law; But Has State-led Training/Certification Program**
- **Medicaid Payment for Certified CHW Services**
- **Pending Legislation**
- **None**

*AK does not have a state-run CHW training program, but statutorily provides community health aide grants for third-parties to train community health aides.*

Last updated: 3/16/2015
# Community Health Workers (CHWs) Training/Certification Standards

## Statutory & Department Program Requirements

<table>
<thead>
<tr>
<th>State</th>
<th>IL</th>
<th>IN</th>
<th>MD</th>
<th>MA</th>
<th>MN</th>
<th>MS</th>
<th>NE</th>
<th>NM</th>
<th>NY</th>
<th>NV</th>
<th>OH</th>
<th>OR</th>
<th>RI</th>
<th>SC</th>
<th>TX</th>
<th>WA</th>
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</thead>
<tbody>
<tr>
<td>Year of Enactment</td>
<td>14</td>
<td>13</td>
<td>14</td>
<td>10</td>
<td>07</td>
<td>12</td>
<td>--</td>
<td>14</td>
<td>10</td>
<td>13</td>
<td>03</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>99</td>
<td>11</td>
</tr>
</tbody>
</table>

### Department or Agency Responsibilities
- Dept. of Health/Public Health: +
- Dept. of Human Services: -
- Board of Nursing: -

### Core Competencies Established
- +
- -
- *

### Health Professional Supervisor Required
- +
- -
- *

### CHW Advisory Board/Taskforce/Workgroup Established
- +
- *
- -

### Continuing Education Required
- +
- -
- *

### Board of CHW Certification to Recommend Standards
- +
- -
- *

### University-run Certification Program
- +
- -
- *

### Background/Criminal Checks Required
- +
- -
- *

### Age Requirements Established
- +
- -
- *

### Out-of-state Certifications Accepted
- +
- -
- *

### Fees Collected to Support Program
- +
- -
- *

### Complaint/Disciplinary Proceedings Established
- +
- -
- *

### Possession of Certification Documentation Required
- +
- -
- *

### Certification Renewal Period
- Two years: -
- Three years: -

* Information in regulations.
* Does not have legislation, but is Department-established.

Last updated: 3/16/2015
The Grant

- 5 year, 2.5 million dollar grant
- Vulnerable older adult and low socio-economic adult populations disproportionately affected by diabetes in Bullitt, Henry and Shelby counties
- Addresses secondary health interventions for people already diagnosed with diabetes
- All interventions are evidence based
• Health Promotion and Disease Prevention Programs and Services
  • Chronic Disease Self Management
  • Matter of Balance
  • Arthritis Foundation Fall Prevention
  • Health Rhythms
  • Medication Management
• Information, Assistance, and Education Services
• In-Home Care, Case Management & Assessment
• Congregate and Home Delivered Meals
• Transportation

• Skills in developing logic models
• Community engagement
• Need assessments
• Program Implementation and Evaluation
• Strong working history with KIPDA
Major Activities of the Five Year Grant

1. Convene and mobilize a coalition
2. Conduct a comprehensive needs assessment
3. Develop a strategic plan
4. Implement interventions
5. Evaluate process and outcomes
Goals of Grant

TAKE SMALL STEPS
- Eat more fruit and vegetables
- Maintain a healthy weight
- Reduce smoking
- Exercise more

TAKE CHARGE
- Increase monitoring of daily glucose levels
- Take medications as prescribed
- Get recommended care from doctors (A1C test, cholesterol test, eye exam, foot exam, flu vaccine)

GET BIG REWARDS
- A1C levels below 7
- Blood pressure below 130/80
- Cholesterol levels below 100 (LDL)
Community Engagement

From CDC’s Principles of Community Engagement

BEFORE STARTING A COMMUNITY ENGAGEMENT EFFORT . . .

1. **Purposes and goals of effort**? Populations/communities to engage?

2. **Get to know the community** – economic conditions, politics, norms, values, demographics, history, previous history of engagement efforts, perceptions of organizing entity
What DID we Already Know About our communities...

<table>
<thead>
<tr>
<th>Location</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullitt County</td>
<td>11.9%</td>
</tr>
<tr>
<td>Henry County</td>
<td>11.4%</td>
</tr>
<tr>
<td>Shelby County</td>
<td>10.8%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>9.8%</td>
</tr>
<tr>
<td>U.S.</td>
<td>9.3%</td>
</tr>
</tbody>
</table>
Obesity (CDC, 2012)

<table>
<thead>
<tr>
<th>Location</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullitt County</td>
<td>32.6%</td>
</tr>
<tr>
<td>Henry County</td>
<td>31.5%</td>
</tr>
<tr>
<td>Shelby County</td>
<td>33.8%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>33.2%</td>
</tr>
<tr>
<td>U.S.</td>
<td>34.9%</td>
</tr>
</tbody>
</table>
What DID we Already Know About our communities...

- Dearth of diabetes education and support
  - No diabetes education classes except 1 or 2/year in Bullitt
  - No support groups except Bullitt
  - No diabetes educators
  - Few smoking cessation classes
- Food deserts
- Lack of public transportation
- Limited exercise opportunities
But we needed to know so much more..

Guided by Socio-Ecological Model
Community Engagement

For engagement to occur, it is necessary to . . .

3. Go into the community, establish relationships, build trust, work with the formal and informal leadership, and seek commitment from community organizations and leaders to create processes for mobilizing the community.

4. Remember and accept that community self-determination is the responsibility and right of all people who comprise a community. No external entity should assume it can bestow on a community the power to act in its own self-interest.
So, how do you build trust, seek commitment and kindle community self-determination?

Engagement Spectrum framework by International Association for Public Participation (IAP2)
## 6 Community Health Worker Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Example Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotora (same culture &amp; linguistics, SES)</td>
<td>Member of Care Delivery Team (e.g. medical home)</td>
<td>Care coordinator/manager model (liaison, provide health resources, make appts, deliver appt reminder, coach)</td>
</tr>
<tr>
<td>Health Educator Model</td>
<td>Outreach and enrollment model (conduct intensive home visits, help individuals enroll in government programs)</td>
<td>Community Organizer and Capacity Builder Model (promote community action)</td>
</tr>
</tbody>
</table>

Our Two Different Types of CHWs

1. Community Organizer:
   - Mostly macro & mezzo-oriented work, some micro work
   - Trusted member of community
   - Served as a liaison between health/social services and the community
   - Promoted community action
   - Motivated communities to seek policy and social changes
   - Built relationships with public health organizations, grassroots orgs, health care providers, faith based groups, university & govt agencies
Our Two Different Types of CHWs

II. Peer Mentor:
- Mostly micro work, supported by community organizer
- Successful management of their diabetes, lives in community, similar characteristics
- Trained in motivational interviewing
- Provides social support
- Assists with solving problems
- Assists with goal setting
- Supports self-efficacy
- Connects to resources
- Connects to “community of carers”
Community Engagement

FOR ENGAGEMENT TO SUCCEED . . .

5. **Partnering with the community** is necessary to create change and improve health.

6. All aspects of community engagement must recognize and **respect community diversity**. Awareness of the various cultures of a community and other factors of diversity must be paramount in designing and implementing community engagement approaches.

7. Community engagement **can only be sustained by identifying and mobilizing community assets, and by developing capacities and resources for community health decisions and action**.

8. An **engaging organization** or individual change agent must be prepared to **release control of actions or interventions to the community**, and be flexible enough to meet the changing needs of the community.

9. Community collaboration requires **long-term commitment** by the engaging organization and its partners.
Major Activities of the Five Year Grant

- Convene and mobilize a coalition
- Conduct a comprehensive needs assessment
- Develop a strategic plan
- Implement interventions
- Evaluate process and outcomes
Building trust, learn from community

Community Organizers led coalition development and needs assessment.
Our Coalition

KIPDA Rural Diabetes Coalition
Diabetes has no boundaries

In collaboration with the University of Louisville
Funding provided by the Centers for Disease Control and Prevention
Coalition partners

KIPDA
Kentuckiana Regional Planning and Development Agency

University of Louisville

Bullitt County

Emergency Medical Services

Norton Healthcare

KentuckyOne Health

BAPTIST HEALTH

American Diabetes Association

Dare to Care
Food Bank

Kentucky Public Health

Prevent. Promote. Protect.

North Central District Health Department

Henry Shelby Spencer Trimble

Improving Lifestyles.

KDH
Kentucky Diabetes Prevention and Control Program

KDEP
Kanawha-Charleston Health Department

Kentucky Diabetes Network, Inc.

National Diabetes Education Program

KHC
Kentuckiana Health Collaborative

EMINENCE APOTHECARY

EMIONI APOTHECARY

RITE AID

rite aid

Bluegrass Drug Center

Andrews Pharmacy

NOVO NORDISK

PASSPORT Health Plan

Kroger

Sanofi

Lilly

The Friedell Committee
For Health System Transformation

KIPDA Rural Diabetes Coalition
Diabetes has no boundaries

In collaboration with the University of Louisville
Funding provided by the Centers for Disease Control and Prevention
Assessment and Strategic Planning

Photovoice

World Cafés
Major Activities of the Five Year Grant

- Convene and mobilize a coalition
- Conduct a comprehensive needs assessment
- Develop a strategic plan
- Implement interventions
- Evaluate process and outcomes
Our Community Health Worker Model:
Community Organizer & Peer Mentor
Our Community Health Worker Model: Community Organizer

Tri-county coalition: Regional resources & partners – coordination & partnership
Coalition county chapters: Local partners & community members with diabetes
Our Community Health Worker Model: Community Organizer

Coalition members: Advocating for healthy changes in local communities
Community Organizers: Experts in local diabetes/health resources. Connect patients, providers, & other agencies to diabetes resources.
Organizational, community, and societal interventions:

- Patient Packets for health care professionals
- Local advocacy for infrastructure improvement (i.e. sidewalks)
- Continuing medical education opportunities for health care professionals
- Statewide advocacy efforts to support diabetes programs
- Local restaurant menu improvements
- Farm to food bank programs
- Coordination of diabetes education opportunities, filling of gaps, establishment of new services (i.e. support groups) through pulling partners together
- Annual tri-county walk
Community Organizers: Facilitate and coordinate non-clinical diabetes self-management education classes, support groups, resources
Personal interventions

- Stanford Diabetes Self-Management Program
- NDEP New Beginnings Program
- ADA’s Live Empowered Program (faith based initiative)
- Kentucky DPCP’s Diabetes 101 class
- Cooper-Clayton Method to Stop Smoking
- Share our Strength’s Cooking Matters Program
- Biggest Loser Competitions
- University of Kentucky’s Taking Ownership of Your Diabetes Program
- Diabetes support groups in every county
Our Community Health Worker Model: Peer Mentors

Peer Mentors: Experts in motivating patients. Provide one-on-one support & connect to resources & support network.
- **Increased self-efficacy to manage diabetes** (pre: avg of 6.3, post: 7.8, p=0.001)

- **Increased consumption of fruits and vegetables** (pre: avg of 3.8 days/wk, post: 4.95 days/wk, p=0.001)

- **Increased frequency of exercise** (pre: avg of 2.7 days/wk, post: 2.9 days/wk, p=0.001)

- **Increased blood sugar monitoring** (pre: 3.95 days/wk, post: 5.01 days/wk, p=0.001)

- **Maintained high adherence to medication** (pre: 6.4 days/wk, post: 6.7 days/wk, ns)
Peer Mentors

Initial Objective
Assist mentee in reaching goals

Ultimate Objective
Connect mentee to community to support healthy living
Premise of the Program

- Mentees have little support for healthy lifestyle
- Strongly held generational and cultural norms
- Even if had education, some individuals prefer/need one on one support
- Equalitarian relationship

- Mentor:
  - Reduces information overload
  - Models behavior
  - Normalizes healthier lifestyles
  - Assists in incremental changes
Structure of the Program

- **Program Intake**
- **Story Sharing**
- **S1:** Social Support
- **S2,4,6,8:** Topics* as Prioritized by Mentee (face to face)
- **S3,5,7,9:** Phone Check Ins
- **2 Phone Check Ins**
  - final month

*healthy eating, exercise, psychological distress, talking with doctor, glucose testing, etc.
Mentees’ experience

<table>
<thead>
<tr>
<th>Highly satisfied with program</th>
<th>Gained self-efficacy</th>
<th>Gained sense of empowerment</th>
<th>Greater social support perceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased fruits and vegetables consumption</td>
<td>Increased blood glucose testing</td>
<td>Increased exercise</td>
<td>Increased health status</td>
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</table>
Pre and Post A1C levels

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
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</thead>
<tbody>
<tr>
<td>A</td>
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<td>7.1</td>
</tr>
<tr>
<td>B</td>
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<td>8.0</td>
</tr>
<tr>
<td>C</td>
<td>8.2</td>
<td>7.5</td>
</tr>
<tr>
<td>D</td>
<td>8.6</td>
<td>7.6</td>
</tr>
<tr>
<td>E</td>
<td>7.4</td>
<td>6.1</td>
</tr>
<tr>
<td>F</td>
<td>12.6</td>
<td>6.9</td>
</tr>
</tbody>
</table>
Major successes of Community Health Worker Model

- Connect members to immediate and community-based resources and social support to help them implement changes
- More efficient use of resources, increased effectiveness due to peer leader advantage
- Reduced clinical measures, and prevented complications
Sustainability After Grant Funding

- Funding after CDC Grant – KIPDA
- Relying on strong community partnerships for referral and DSMP class facilitation
- Barriers
  - Depending on unpredictable and age restricting state funds
  - Retaining a presence in the communities after KRDC work ended
Our hopes for the future

- Hospitals & Physician Groups
- Insurance Companies & Health Plans
- Foundation & Government Grants
- Government funding
- Community Donations

Diabetes is a **PERSONAL** diagnosis
Diabetes is a **FAMILY** diagnosis
Diabetes is a **COMMUNITY** diagnosis...

**TOGETHER**, we can win the battle!
Questions?

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