Community paramedic and community health worker program improves care for underserved patients

HealthRise program – part of global effort to prevent premature death

Regions Hospital HealthRise demonstration project

In 2015, the Regions Hospital Foundation received a three-year grant from the Medtronic Foundation’s HealthRise program to reduce premature death from heart disease and diabetes among underserved communities in the St. Paul area.

HealthRise is a five year, $17 million global effort to expand access to quality chronic disease care among underserved populations worldwide and to support health initiatives in communities where Medtronic employees live and give.

The HealthRise program aims to contribute to the World Health Organization’s goal of reducing premature death (before age 75) associated with non-communicable diseases by 25 percent by 2025.

Regions Hospital was one of three HealthRise demonstration projects in Minnesota. Grants also funded projects in Brazil, India and South Africa.
Why HealthRise matters

Nearly 90 percent of all deaths in the United States are caused by chronic diseases such as diabetes and cardiovascular disease. Poverty is closely linked to these diseases.

FACTORS THAT DETERMINE HEALTH

- 10% PHYSICAL ENVIRONMENT
- 20% MEDICAL CARE
- 30% HEALTH BEHAVIORS
- 40% SOCIAL AND ECONOMIC

Current health disparities

HISPANICS

50% more likely to die from diabetes or liver disease than whites

AFRICAN AMERICANS

1.7 times more likely to have diabetes compared to whites

61.2% of African Americans and 59.7% of Hispanics have uncontrolled high blood pressure. This compares to 51.9% of whites.

Program model

Regions Hospital partnered with St. Paul Fire Department and Minnesota Community Care to add seven community paramedics (CP) and three bi-lingual community health workers (CHW) to the primary care team.

- 111 patients who had a diagnosis of diabetes and/or high blood pressure
- Patients were not eligible for home care and had barriers to care such as transportation, food access and medication access
- Home visits one to four times a month by a community paramedic and a community health worker
- Appointments and group classes at Minnesota Community Care

COMMUNITY PARAMEDIC SERVICES

- Non-emergency medical care such as physical exams
- Medication reviews to ensure they are up-to-date, the correct dose and safe
- Monitoring for blood pressure, pulse, temperature, blood glucose
- Consults with clinic physician, nurse, pharmacist to adjust care plan if needed
- Home evaluations for safety hazards
COMMUNITY HEALTH WORKER SERVICES

- Referrals to resources to address social determinants of health such as housing, food and transportation
- Referrals to resources for medication, health insurance
- Support to help patients self-manage care

Preliminary results*

Throughout HealthRise, community paramedics and community health workers made 900 home visits to 111 patients. Preliminary data shows:

<table>
<thead>
<tr>
<th>Hypertension</th>
<th>Percent of patients (number of patients)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with any decrease in systolic blood pressure</td>
<td>61.9% (13)</td>
</tr>
<tr>
<td>Patients with 10% decrease in systolic blood pressure</td>
<td>61.9% (13)</td>
</tr>
<tr>
<td>Patients with a change in blood pressure categories</td>
<td>47.6% (10)</td>
</tr>
<tr>
<td>Patients with blood pressure under control (last blood pressure under 140/90)</td>
<td>47.6% (10)</td>
</tr>
</tbody>
</table>

*Sample size is 21 patients who had two or more blood pressure readings throughout the program. Time between first and last reading ranged from 4 months to 1.5 years.

<table>
<thead>
<tr>
<th>Blood glucose (A1C)</th>
<th>Percent of patients (number of patients)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with any decrease in A1C</td>
<td>78.6% (33)</td>
</tr>
<tr>
<td>Patients with 10% decrease in A1C</td>
<td>54.8% (23)</td>
</tr>
<tr>
<td>Patients with a change in A1C categories</td>
<td>30.9% (13)</td>
</tr>
<tr>
<td>Patients with A1C under control: (last A1C less than 8%)</td>
<td>14.3% (6)</td>
</tr>
</tbody>
</table>

*Sample size is 42 patients who had two or more A1C readings throughout the program. Time between first and last reading ranged from 4 months to 1.5 years.

Made possible by:

In partnership with:
Other community-based programs in HealthPartners organization

REGIONS HOSPITAL COMMUNITY PARAMEDIC PILOT

In 2018, Regions Hospital completed a three-year pilot program with the St. Paul Fire Department. A community paramedic (CP) visited the homes of patients who recently left the hospital, had barriers visiting a doctor and did not qualify for traditional home care. Preliminary results show a significant decrease in both Emergency Department visits and hospital readmissions.

In 2019, the program expanded through a gift to the Regions Hospital Foundation from the Fred C. and Katherine B. Andersen Foundation.

HEALTHPARTNERS COMMUNITY HEALTH WORKER PROGRAM

HealthPartners health plan implemented a community health worker program in 2015. The program was designed to have the CHW act as a culturally competent mediator between providers of health services and Medicaid members, improving health through education and support. In 2018, this program enrolled 276 Medicaid members and their families, completed 925 interventions, and made 1,507 contacts.

METHODIST HOSPITAL GOOD TO BE HOME PROGRAM

Since 2014, Methodist Hospital has partnered with local fire departments to help patients make a safe transition from hospital to home. Community EMTs (emergency medical technicians) perform a home safety check, make sure patients know how to take medications, get follow-up care and connect them to community resources such as food from a food shelf.

HEALTHPARTNERS INSTITUTE STUDY TO ASSESS IMPACT OF COMMUNITY HEALTH WORKERS

A four-year $1.9 million grant from the National Institute on Aging will assess the effectiveness of community health workers. In partnership with the University of Minnesota and Hennepin Healthcare, HealthPartners Institute will analyze data from hospitals in the Minneapolis-St. Paul metropolitan areas to identify areas where people are at risk of heart disease. Researchers will use simulations to model what health and cost benefits could be if one or more community health workers were assigned to those areas.
A HealthRise success story

For more than 10 years, Pamela was able to manage her diabetes with medication. Then, her blood sugar levels climbed to almost three times higher than normal. That increased her chance of having a stroke or heart attack, losing her vision or damaging her kidneys. To help, her nurse practitioner recommended the HealthRise program.

Community Paramedic Shelly Brown met with Pamela every two weeks. Shelly and Pamela discussed her habits, diet and what could be driving the higher numbers. Shelly discovered that Pamela’s gluten-free diet included items such as white rice, corn, tortillas and other corn products. All of which were causing her blood sugar to spike.

Shelley helped Pamela change her diet, and through consultation with her healthcare provider, arranged a more effective medication. As a result of this support and partnership, Pamela’s blood sugar returned to normal.

Learn more:

- Medtronic Foundation’s HealthRise program
- Regions Hospital HealthRise program

Sources:
1. World Health Organization
2. Centers for Disease Control and Prevention
3. American Diabetes Association
4. Institute for Research and Poverty
5. Center for Disease Control and Prevention