

Case Study

Community Fitness Initiative helps lower childhood obesity rates

Abstract

Childhood obesity is a national epidemic with alarming statistics. Children who are overweight or obese are more likely to remain so into adulthood, putting them at higher risk for chronic health conditions. Childhood obesity has also been linked to poor educational performance and higher risk for depression, according to the CDC and the National Survey of Children's Health.

In early 2006, leaders of Lexington Regional Health Center in Lexington, Neb., learned through annual school measurements that childhood obesity rates in their area were well above national averages. Leaders from the hospital, local school district, city and a local community foundation quickly organized to address this critical situation. After initial planning and cross-organizational collaboration, they jointly launched the Community Fitness Initiative in 2007.

The initiative is led by Lexington Regional Health Center and involves a diverse group of community volunteers with a common goal: improving the quality of life in Lexington through the development of sustainable wellness programs. Within four years, the percentage of obese elementary-aged children in Lexington dropped from 76.2 percent to 58.2 percent, and participation in fitness activities exceeded expectations.

Opportunity

Lexington (pop. 10,230) is a rural community located in southern Nebraska. Half of the area's population is Hispanic, a group shown to have significantly higher obesity rates than non-Hispanic groups according to the National Survey of Children's Health. Furthermore, 20 percent of Lexington residents live in poverty, and research has shown a link between poverty and higher incidences of overweight and obese children.

When stakeholders at Lexington Regional Health Center learned local childhood obesity rates were well above the national average – nationwide, approximately 17.5 percent of children ages 6-11 are obese, compared to Lexington's findings that 76.2 percent of children in its elementary schools were obese – they quickly formed a community partnership called the Community Fitness Initiative (CFI) to address the issue. CFI is led by hospital staff and includes partners from Lexington Public Schools, the City of Lexington and the Lexington Community Foundation. With students as the target audience, the program aims to improve the quality of life in Lexington through the development and implementation of sustainable wellness programs.

BMI Statistics for Lexington Public Elementary Schools



- Obese: BMI at or above 95th percentile for children of same age and sex
- Overweight: BMI above 85th percentile but below 95th percentile for children of same age and sex

“By providing fitness activities as well as wellness education, we are positioning our students for a lifetime of good health.”

– Rael Woehrle
Director of Pharmacy
Lexington Regional
Health Center

Partnership Approach

CFI, an all-volunteer organization, is funded entirely through donations and grants. The CFI steering committee, which is responsible for strategic decisions, consists of nurses, a pharmacist, other professionals in health care and education, as well as parents and community members, including a liaison from the Hispanic community. A physician champion from Lexington Regional Health Center serves on the steering committee and is instrumental in programming activities. A smaller work group coordinates ongoing projects.

CFI operates as a non-profit affiliate of the Lexington Community Foundation, which is required for grant funding. In addition to monetary donations, the community foundation provides exposure to potential donors.

Lexington Public Schools provides venues for many of the CFI-sponsored activities, including use of the gymnasium and exercise equipment. The school system also connects children and their parents to CFI, distributing educational materials and providing statistics such as body-mass index (BMI) and program participation rates to CFI.

The City of Lexington provides support in the form of free or low-cost advertising through its website and newsletter, as well as use of city-owned facilities at a discounted price.

CFI receives in-kind support from local partners such as Culligan Water and Walmart, who have provided water and merchandise to support the programming. Other organizations such as Two Rivers Public Health Department and the University of Nebraska at Kearney provide epidemiological information along with additional programming and grant opportunities.

Key Steps

- 2006 – Lexington Regional Health Center learns of high childhood obesity rates in the area based on annual BMI measurements in Lexington Public Schools.
- 2006 – Lexington Regional Health Center contacts Lexington Community Foundation and establishes CFI as a 501(c)(3) subsidiary of the foundation.
- 2007 – CFI implements programming in Lexington Public Schools at the beginning of the school year, starting with communication to parents and followed by child health report cards, numerous fitness activities and camps that further promote improved fitness.
- 2007 – CFI begins collecting BMI data and activity participation rates to measure success.
- 2010 – CFI transitions to activity participation rates as a sole measure of success.
- Ongoing – Work group meets monthly to coordinate ongoing projects and needs.
- Ongoing – Steering committee meets periodically to discuss new or changing projects.

“The Community Fitness Initiative gives youth in our community the tools they need to build a healthy lifestyle, now and throughout their lives.”

– Patricia Samway, Director of External Affairs
Lexington Regional Health Center

Results

The percentage of Lexington Public Elementary students considered obese based on BMI measurements dropped from 76.2 percent in 2006 to 58.2 percent in 2010. The percentage of overweight students dropped from 68.9 percent to 58.9 percent in the same time period. CFI has since stopped measuring BMI and now uses program and activity participation as a measure of success. Of the approximately 1,150 elementary students in the school system in the 2016-17 school year, more than 400 registered for and/or participated in events such as wrestling camp, dance camp, annual CFI pool day, and volleyball and football teams—up from fewer than 300 participants in 2011. The initiative also counts a community garden among its successes, which promotes healthy eating as well as peer-to-peer education on produce harvesting, canning and healthy eating.

Lessons Learned

Focus on health: Rather than focus on sensitive subjects such as weight and obesity, CFI focuses on healthy lifestyles and physical activity, resulting in a more positive outlook on participation in activities that benefit children’s health.

Adapt: Collecting and reporting BMI data required a significant amount of volunteer time. Program leaders now gauge its success by participation in scheduled events, making tracking and reporting more manageable.

Be patient: Be aware the measurable results may not occur in the timeframe expected. Actual results in both physical health as well as community participation take time.

Be flexible: Volunteer organizations can be difficult to manage due to competing priorities in volunteers’ lives. Be prepared to adjust plans and make changes when needed.

Choose a champion: CFI recruited a physician champion to support its efforts. This individual has been extremely active on the steering committee and in programming activities.

Community Partners

Lexington Regional Health Center is a 25-bed critical access hospital with more than 260 employees. Its team of health care professionals is committed to providing advanced medical treatment, outstanding customer service, and exceptional health and wellness education to the community it serves.

Lexington Public Schools are committed to providing quality of life and education to the area’s growing diverse population by developing capable and responsible lifelong learners. With the cooperation of family, school and community, Lexington Public Schools prepares students for the global challenges and opportunities of the future.

The Lexington Community Foundation encourages and strengthens philanthropy to provide a permanent source of funding for opportunities to improve the quality of life, strengthen the sense of community and benefit future generations in Lexington, Neb.

The City of Lexington, located in southern Nebraska, is a culturally diverse community of 10,230 people. It is the county seat of Dawson County, Neb.

About Bryan Health

Bryan Health is a Nebraska-governed, nonprofit health system that cares for patients, educates tomorrow’s health care providers, motivates our community with fitness and health programs, and collaborates to continually improve how we serve others.

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