



Beyond the Four Walls
Community is Critical to Workforce Health

EXTENDED CORPORATE HEALTH STRATEGY



BUSINESS CASE STUDY: General Dynamics Bath Iron Works

Company Overview

Sector: Manufacturing (Shipyards specializing in design, building, and support of surface combatants for the U.S. Navy)

Number of Employees: 5,700

Headquarters: Bath, Maine

Initiative Overview

Department: Integrated Health Services

Geography: Bath, Maine

Time Frame: 2014-Present

Background

Since 1995, Bath Iron Works (BIW), headquartered in Bath, Maine, has been a subsidiary of General Dynamics, the fifth-largest defense contractor in the world. BIW recently began to offer the National Diabetes Prevention Program (DPP) to its employees and spouses. BIW and L.L.Bean, another major employer in the area, recognized that the disease burden in the community affects current and potential employees and family members. Therefore, BIW and L.L.Bean began to partner with the local health system to offer the DPP class to non-BIW affiliated participants.

Vision & Goals

After the first year of program implementation (2014), BIW plans to increase the number of participants in the program and evaluate the impact of the program on employees and their spouses. Going forward, BIW will cooperate with its partners, as well as the state and federal government, on any efforts to evaluate the impact of the program on the larger community.

Extended Corporate Health Strategy

BIW extends the DPP, offered to its employees and their spouses, to the wider community in partnership with community-based organizations, fellow employers, and the local health system. While in its early stages, BIW’s strategy reflects the business’s leadership to address the needs of the community in which it has a large manufacturing presence.

Community Choice Driven By:

- **Where Employees Live and Work:** The majority of BIW employees live in the communities immediately surrounding the shipyard as well as in the neighboring communities of Lewiston and Augusta, and are patients of local hospital systems in their areas.
- **Overlap of BIW’s Employee Population with Other Employers:** L.L.Bean, a sponsoring partner for DPP, sources many employees from a similar geographic area as BIW. The two employers identified a shared interest of reaching communities where their employee and dependent populations live and work.

Assessing Community Risk & Disease Burden

Employee Health	Community Health
<ul style="list-style-type: none"> • BIW provides opportunities for employees/spouses to get screened onsite and in the community for: <ul style="list-style-type: none"> ○ Blood pressure ○ Height and weight ○ Body mass index (BMI) ○ Body fat percentage ○ Total cholesterol and HDL “good” cholesterol ○ Blood glucose level and Hemoglobin A1C ○ Sleep Score • After employees and/or spouses get screened, they meet with a health coach to review their personal health numbers. • Employees and spouses can sign up to work with a health coach on a regular basis and take steps to meet personal health goals. • BIW identifies employees and spouses eligible for the DPP that it plans to offer on-site. 	<ul style="list-style-type: none"> • The Healthy Maine Partnership assesses community risk and disease burden. BIW does not conduct a systemic community health needs assessment, but relies on the Healthy Maine Partnership data. • Partnering health systems utilize electronic medical record data to identify BIW patients at risk of diabetes. • Partnering health systems identify community members needing a primary care provider.

Program Reach

- **Employees:** The BIW Fit for Life program is an onsite health and wellness program that includes health coaching, on-site biometric screening, and the opportunity to participate in a DPP, which takes place in health care and other community settings.
- **Dependents/Spouses:** Dependents and spouses have access to community-based health screenings, health coaching and benefits offered to BIW employees, including the DPP.
- **Community:** BIW dedicates resources to allow employees and the community to access the DPP at two major health systems in the area; and a third health system that partners with BIW already had an existing exemplar diabetes prevention program.

Engaging Stakeholders

Partner	Role & Resources Allocated
BIW	<ul style="list-style-type: none"> • BIW and L.L.Bean paid for the initial DPP facilitator training. Since the initial training, a local health system has trained additional coaches, which is estimated at \$5,000 in costs. • BIW shares the costs of each DPP class (\$200 per participant) if at least 8-9 people in the class or 50% of participants are employees or spouses. If the class does not have BIW affiliated participants, the health system covers the whole cost of the class. • BIW offers up to a \$200 value incentive per BIW participant that qualifies by meeting program goals. BIW contracts with Mid Coast Hospital to administer their onsite wellness program.
L.L.Bean	<ul style="list-style-type: none"> • Funded and co-facilitated half of the first DPP class. • L.L.Bean also offers DPP classes specifically to their employees and dependents.
Government Agencies	<ul style="list-style-type: none"> • The BIW wellness manager serves on the board of the Healthy Maine Partnership, which is led by the Maine Department of Health and Human Services, the Maine Center for Disease Control and Prevention (CDC), the Maine Office of Substance Abuse, and the Maine Department of Education. • The State of Maine funds the Healthy Maine Partnerships. The partnerships represent all 16 counties in Maine and focus on policy and environmental changes around tobacco use, physical activity, nutrition, obesity, substance abuse and chronic diseases.
YMCA	<ul style="list-style-type: none"> • The National YMCA has signed on to be a sponsor of the program. A local YMCA has agreed to train staff to facilitate the DPP. • The YMCA coordinates with St. Mary’s Regional Medical Center to expand DPP outreach in the community.
Local Health Systems	<ul style="list-style-type: none"> • St. Mary’s shares in the cost of implementing the DPP at their site and hosts a class of which 80% are community members and 20% are BIW employees. • Mid Coast Hospital hosts the DPP with up to half of participants being community members not affiliated with BIW, and contributes a co-facilitator for the program. • Central Maine Medical Center (CMMC) provided free training to five BIW staff through grant funds. • Martin’s Point Health Care lends space for DPP implementation.
TrestleTree	<ul style="list-style-type: none"> • BIW contracts with TrestleTree to provide onsite coaching to employees and spouses, and to facilitate DPP classes to BIW employees and spouses.

Data Collection

Business Impact	Community Impact
<p>Employee/ Spouse Health</p> <ul style="list-style-type: none"> • Number of participating employees/spouses in DPP • Adherence to tracking health data, including physical activity levels and nutritional intake, which are shared with health coaches weekly • Achievement of weight loss goals • Pre- and post-program A1c levels 	<p>Process Outcomes (in Progress) for DPP Participants</p> <ul style="list-style-type: none"> • Reduction in modifiable risk factors for Type 2 Diabetes • Improved Diabetes self-management • Increased control of Hemoglobin A1c, blood pressure, cholesterol, and smoking • Percent weight loss • Increase in activity level to 150 minutes of exercise per week

Program Evaluation & Results

Community Impact: Process

- In partnership with L.L.Bean and St. Mary’s and Mid Coast Hospitals, BIW launched 3 DPP cohorts of 104 participants total between May 2014 and February 2015.
- Approximately 75 of the 104 are BIW employees or spouses.
- In its first class of 11 participants, BIW observed that participants improved their weight loss by an average of 7% and each person that had an A1c test improved their score.

Community Impact in Development

- BIW plans to continue to extend DPP to the community by launching additional classes and expanding the program to more than 90 BIW participants over the first half of 2015.
- BIW and its partners plan to evaluate the impact of the DPP on the community. All local health systems that implement the DPP collect data and share it with the CDC at state and national levels.
- Currently, the program is focusing on BIW family members and existing patients within the health system, but the partners plan to expand program outreach to the broader community.
- The health systems and BIW are developing a partnership with the YMCA to serve as a DPP site for BIW employees, St. Mary’s patients, and other community members.

Business Impact: Process

Employee Health

- Conducted on-site biometric screening for 42% of employees.
- Health risk assessment process identified families who did not have primary care providers and referred them to local providers.

Engaging Health System & Local Businesses

BIW engaged previously disconnected systems and employers in a community is inspiring programs such as the DPP to be offered to the community, fostering professional relationships across sectors (L.L.Bean, BIW, the health system), and enabling partners to identify shared goals.

BIW Calculated Business Return on Investment from the DPP

1. The number of DPP participants (90) that would develop diabetes in absence of the intervention/lifestyle change was estimated.
 - Based on the CDC estimate that 5-15% of pre-diabetics will develop diabetes each year, BIW assumed that 40 out of 90 participants would develop diabetes within 5 years, based on an even distribution of cases over time.

2. The annual cost per member per month of treating diabetes was calculated.
 - The cumulative number of cases (40) was multiplied by the average per member per month cost for a diabetic, adjusting for annual inflation. Since DPP reduces diabetes onset by 58%, BIW projected the number of participants who would develop diabetes with DPP would be 16. The business calculated the annual healthcare costs for these diabetics.
3. The cost of the DPP program was determined to estimate the return on investment (ROI).
 - Coaches received free training to be able to teach the classes, and BIW does not count the in-kind cost of the coaches' time for teaching the class. BIW invests \$200 per participant in incentives if they 1) complete all weekly tracking, and 2) lose 7% body weight.
4. A Net Present Value calculation was conducted across the sum of the 5 years of savings.

Business Impact Goals in Development

- BIW plans to build capacity to evaluate the effects of the DPP on employees, including assessing the impact of wellness programs on productivity. BIW intends to share program results with BIW leadership and other business units from General Dynamics, as well as communicate results with its local DPP partners.
- Both St. Mary's and BIW identified funding for DPP as a challenge to sustainability. By demonstrating results and impact on participant health and potential savings for the businesses, the hope is to determine the best funding for these initiatives, which will likely be shared by employers, healthcare payers, and the healthcare system.
- To increase the program's sustainability, BIW and the health care systems plan to use participants that have completed the DPP to be trained as facilitators.

This case study was adopted from a semi-structured qualitative interview and publicly available information. To learn more about the link between workforce and community health and the strategies businesses are implementing to invest in community health, read the Vitality Institute's report "Beyond the Four Walls: Why Community is Critical to Workforce Health."

To access the report and additional case studies, visit www.thevitalityinstitute.org/communityhealth or look us up on social media @VitalityInst #Beyond4Walls.