Moving the Needle on Diabetes: The Employer Perspective

CURRENT APPROACHES AND POTENTIAL NEW OPPORTUNITIES

By Jeremy Nobel, MD, MPH; Jennifer Weiss, MA; Laurel Pickering, MPH
EXECUTIVE SUMMARY

Northeast Business Group on Health (NEBGH), through its Solutions Center, is engaged in a focused exploration of diabetes in the workplace to determine employers’ prioritization of diabetes within disease management programs, assess current strategies for diabetes management and employee engagement, and identify innovative approaches in these and related arenas moving forward.

Diabetes is a growing epidemic that at present affects close to 10% of the US population. It is estimated that 1 in 3 Americans will have diabetes by 2050 if current growth patterns continue. Employers surveyed by NEBGH report that diabetes is a significant concern within their workplace; the majority rank diabetes within the top three conditions that should be addressed through wellness and disease management programs. When individuals do not adequately manage their diabetes, the health-related consequences can be severe. As a result, employers face extensive direct costs from diabetes-related medical claims. There are also substantial indirect costs from employee absenteeism, reduced productivity, and diabetes-related disability. On a national scale, direct medical costs totaled over $175 billion, with indirect costs accounting for an additional nearly $70 billion.

Employers have relied on a variety of workplace-oriented strategies to help prevent and manage diabetes including health risk assessments to identify those already diagnosed with the disorder, on-site biometric screening to reveal illness as yet undiagnosed, telephonic education and counseling to improve health behaviors, and weight loss and fitness lifestyle modification programs to reduce ongoing risk. But there is recognition that these approaches have not been sufficient in fully addressing the diabetes management challenge. With the understanding that there is no “one size fits all” solution, employers are seeking to integrate into diabetes programs more innovative approaches to clinical care and engagement, identify ways to incentivize employees, dependents and retirees through benefit design, and utilize new business models to add greater value to the care offered for employees while reducing avoidable costs.

Some of the emerging clinical care models include use of on-site and near-site clinics that offer chronic care management, Centers of Excellence that offer a comprehensive and integrated approach to person-centered diabetes treatment, and a transformed primary care approach, sometimes referred to as patient-centered medical homes or PCMH. A growing interest in increasing patient engagement in self-care and professionally delivered care has spurred an expansion of digital health approaches for improved diabetes care, as well as value-based benefit designs (VBBD). Such designs use benefit plan incentives to encourage members’ utilization of high value health care services, to direct them towards high performing providers, and to participate more actively in disease and lifestyle management programs.

As new clinical care and engagement models for diabetes management take hold in the marketplace, new business models and payment arrangements must also be explored that cover the investment required to support innovation, and reward the delivery of improved clinical approaches, enabling them to be sustained.

Any new management program or system optimization will invite examination of Return on Investment (ROI) measurements that assess all program costs and recognize both direct cost and indirect cost reduction. This is an area ripe for innovation as employers report that lack of adequate evaluation tools and an inability to accurately assess the value of current and proposed programs often leads to delay in moving forward.

This report reflects the first phase of NEBGH’s Solutions Center project on diabetes. This phase was designed to confirm that engaging employees in the identification, treatment and management of diabetes is a priority for employers; document current approaches to diabetes control and the extent to which they have succeeded or failed from the employer perspective; and identify new areas of potential opportunity, especially as they relate to new models of clinical care and coordination, new approaches to lifestyle behavior modification, fostering provider accountability through new kinds of relationships and payment methodologies, and new employee communication and engagement strategies.

The project’s next phase will explore—in greater detail—the opportunities highlighted here, examine key features and elements essential for implementation of innovative approaches to diabetes management in the workplace, and develop an actionable framework for employers to endorse and pursue.
Diabetes: An American Epidemic

Diabetes is one of the fastest growing diseases in the United States. Around 26 million Americans—close to 10% of the population—are affected today, with predictions of an increase to 1 in 3 Americans by 2050 if current diabetes growth patterns continue. Beyond those diagnosed with diabetes, estimates show that close to 7 million afflicted individuals go undiagnosed, and upwards of 57 million more are at risk for developing diabetes.

With the workplace serving as a microcosm of our larger society, it’s not surprising that employers across the US experience high numbers of employees, dependents and retirees with diabetes. As a result, Northeast Business Group on Health’s Solutions Center has launched a focused exploration of diabetes to better understand the prevalence of diabetes in the workplace and employers’ views about the urgency of addressing it, and to investigate current and “on the horizon” diabetes management opportunities. In this project’s initial phase, Northeast Business Group on Health (NEBGH) is focusing on the value of both traditional and emerging care delivery approaches from employers’ perspectives, as well as strategies to increase employee engagement around diabetes management programs.

Questions relating to innovative benefit design and payment models and successful means of evaluating return on investment have also been raised. NEBGH held a diabetes roundtable in June 2014, in which participants representing employers, health plans, providers, and benefit consultants assembled to discuss the present and future terrain of workplace diabetes management. Findings from this working session as well as those amassed from one-on-one interviews with a similar cross-section of individuals, and additional research undertaken by NEBGH, serve as the basis for this report, and lay the foundation for a more in-depth analysis of key areas of investigation utilizing NEBGH member-led work streams and additional field research. This work is taking place now, and will result in the identification of the most promising, innovative diabetes interventions employers can champion and implement in the workplace, or through a range of outside services provided by the employer.

Diabetes and its Consequences

Compounding its status as one of the fastest growing conditions in America today, diabetes can have severe consequences if not adequately managed. Diabetes is a chronic condition in which insulin, which typically regulates the movement of sugar into the body’s cells, is not utilized properly: either the body has a resistance to insulin or doesn’t produce enough insulin. Either way, it affects the manner in which the body metabolizes sugar (glucose) and causes a person to have higher levels of glucose in the bloodstream than is normal. These high levels of glucose can harden and damage blood vessels throughout the body with dire results. The damaged blood vessels can cause visual loss or blindness, kidney disease or kidney failure, nerve damage in feet, legs and hands, poor circulation in legs and feet that can lead to amputations, heart disease, and stroke. Additionally, a suppressed immune system in many with diabetes can result in an increase in infections, some of which can be life threatening.

High Costs for Employers—Direct and Indirect

Employers are familiar with the significant costs associated with diabetes. On a national scale, it’s estimated that the financial impact linked to diagnosed diabetes is close to $250 billion. Over $175 billion is accounted for through direct medical expenditures including hospital inpatient care, prescription medicine, diabetes supplies, and physician office visits, and around $70 billion is attributed to indirect costs. Studies show that people with diabetes have medical expenditures that are approximately 2.3 times higher than those without, and insurers have reported spending $5,000 a year for a member with pre-diabetes, $10,000 per member with diabetes with no complications, and $30,000 for an employee with diabetes complications.

Beyond cost-sharing for medical expenses, employers face a very real financial burden from the indirect costs associated with their employees’ diabetes-related absenteeism, presenteeism, disability, early retirement, and early mortality. Some of these detriments may be directly related to an employee’s diabetic condition or may be the byproducts of symptoms tied to having diabetes, such as depression or stress. Regardless of the cause, many employers have reported to NEBGH that it is difficult to fully gauge or measure the indirect cost burden of diabetes, unlike direct costs which are easily measurable through insurance data that provide details on health care utilization and annual health care expenditures. While some employers have indicated that they have adopted the Stanford Presenteeism Scale which looks at employee productivity and health status, or utilized self-reported productivity data from employees, others have suggested that they lack the tools to measure indirect costs. They also acknowledge that they are not always fully aware of individual employees’ health status and the effects of a compromised health situation on an employee’s work, as employees often take time off for unspecified reasons or are inattentive or distracted at work.

Yet, there is general acknowledgement that measuring costs is important both to identify the burden placed on employers and to determine the nature and scale of ameliorative programming and interventions that are warranted. Several employers have pointed out to NEBGH that it is difficult to promote expanded wellness and diabetes management
programs in their organizations unless they can quantify the cost of the problem and use metrics-based economic arguments to justify sustained investment in diabetes programming.

Prevalence of Diabetes Management Programs in the Workplace

NEBGH members have reported that diabetes is a significant concern within their workplace and most rank it within the top three conditions that should be addressed through wellness or management programs. This corresponds to what transpires in companies across the country. Approximately half of US employers (with 50 employees or more) offer health and wellness programs in the form of lifestyle modification and/or disease management, and of those offering disease management programs, diabetes is the most targeted condition. Results from successful diabetes management and treatment programs are noteworthy: regular eye exams and treatment can prevent up to 90% of diabetes-related blindness; foot care programs entailing regular exams and patient education reduce the likelihood of diabetes-related amputations by 85%; treatment focused on controlling blood pressure can reduce diabetes-related kidney failure by 33%; and achieving a 5-7% weight loss through diet and exercise can reduce the possibility of becoming diabetic by 58%. National studies also conclude that for each dollar spent on diabetes management, employers enjoy a $4 return on investment.

Implementing prevention and management interventions that engage workers to be more proactive about their health—within a worksite culture that supports wellness—can make a big difference in forging greater pathways to health for employees with diabetes.

NEBGH members have indicated that implementing prevention and management interventions that engage workers to be more proactive about their health—within a worksite culture that supports wellness—can make a big difference in forging greater pathways to health for employees with diabetes.

THE CURRENT DIABETES LANDSCAPE

Companies have employed a variety of strategies to help prevent and manage diabetes in the workforce over the last several decades. Programs and services have been provided on-site through employers themselves, through insurance plans that provide access to medical care for diabetes through the health benefit, through third party disease management companies, and through community-based partners. The nature of diabetes-related interventions range from screening programs to determine which employees have diabetes, to primary care initiatives that offer an integrated and comprehensive approach to care, third party disease management programs that communicate with and “coach” employees, and lifestyle/behavioral modification programs delivered on- or off-site.

Screening programs: Employees can be screened for diabetes or for diabetes-related risk factors using health risk assessment questionnaires, baseline A1C screening, blood pressure checks, cholesterol and weight screening, and lipid profiles. Many companies have voluntary programs where employees are incentivized to be screened through an offer of cash, a reduction in co-pays, or other financial rewards. Screening may occur at an on-site or near-site clinic and an employee’s “positive” test results may trigger an invitation to participate in a diabetes management program. Some companies do not rely solely on these kinds of screening tools but also use claims information to flag employees with diabetes. Beyond using screening results to develop diabetes management plans for individual employees, aggregate data from screening procedures can inform employers about the prevalence of diabetes in their workplace and provide insight into the percentage of employees at risk for developing diabetes.

Traditional medical care initiatives (via benefit coverage): Employees have access to primary care through their health plans which includes visits to primary care physicians, podiatrists, ophthalmologists, and endocrinologists. Some health plans have systems to identify members’ gaps in care, and provide text-based or other messaging (phone, e-mail) to remind them to schedule a doctor’s appointment. With the knowledge that depression and stress often accompany the diagnosis and management of diabetes, some employers encourage employees to seek out psychological support and stress management in addition to primary care services. Some even pair employees with a social worker for several sessions prior to their enrollment in any diabetes management programs, with the belief that social support will increase the likelihood of the employee’s adherence to a diabetes management plan.
Additional care coordination/care management: Offered by on-site staff or through third party medical management organizations or through health plans, employees are provided with in-person, on-line, or telephonic diabetes education and skill building resources around self-care, medication therapy management to explain how best to use prescription drugs as part of the diabetes treatment regimen, and nutrition and fitness counseling. Education and support is offered either on an individual basis or within a group setting.

Lifestyle/behavior modification programs: Employers have offered weight loss and fitness programs on-site, as well as partnered with community-based entities. One such example is the ability to direct employees to certain YMCAs that provide these services within the Diabetes Prevention Program (DPP) framework.

Incentivizing Participation in Diabetes Management Programs

Incentives have long been a part of traditional engagement strategies around diabetes management. Beyond the incentives already mentioned to encourage participation in screening procedures, financial bonuses including cash, commodities, waived co-pays for medicine and supplies, and reduced-cost gym memberships have also been used variably to reward employees for utilizing health care services, for remaining in structured diabetes management programs over a certain period of time, and for reaching milestones like a one point drop in A1C (a measure of diabetes control) levels. Questions have been raised by NEBGH employer members as to what incentivizes people to sign up for programs versus what helps sustain program participation in the long term. Some members were clear that incentives to “get people in the door” were worthwhile but since improved outcomes were the ultimate goal, a closer examination of how to incentivize extended program engagement might be useful. Several members mentioned the value of offering participation in wellness programs to spouses and children with the acknowledgement that managing a condition like diabetes is a full-time proposition and family involvement helps extend wellness objectives beyond the workplace.

Barriers to Success

These traditional approaches and attendant incentives have all been helpful in leading workers to adopt healthier lifestyles and behaviors, reduce their A1C levels, and become better educated and more skilled in managing their diabetes. NEBGH members acknowledge that there is no “one size fits all” solution and that there is still a long way to go. As one wellness director put it, “Diabetes is still there no matter what we do.”

Employee engagement is one of the predominant concerns for employers. While “engagement” has become a buzzword for employee motivation, productivity and satisfaction at work, in the wellness sphere, engagement refers more specifically to participation in the kinds of core interventions mentioned above: screening, diabetes management programs, primary care initiatives, and lifestyle modification programs. These interventions are only as successful as the number of employees engaged in them. In fact, it is not uncommon for employers to use employee engagement and participation rates as their sole measure of the success of a program. A common belief among many NEBGH members is that one key to increasing engagement is to provide employees with an initial high-touch component within the intervention, such as face-to-face, one-on-one counseling and education with a service provider like a certified diabetes educator, nurse, or wellness specialist. Once employees believe that a professional is invested in their health, they strengthen their own commitment to meeting markers of success. And once that relationship is established, relying on lower cost, low-touch options such as group education and remote follow-up and monitoring is more feasible. A roundtable participant who works for a health system described its “high-touch” approach of connecting employees to dieticians that “match their personality” by getting input from the employees regarding what they were looking for in a dietician.
Building trust and creating a culture of wellness are domains in which there is some overlap. Employees may only accept their employer or health plan’s involvement in their health care and lifestyle decisions if they trust that employers and plans will engage in actions that are in their best interest. As one employer member said, “Employees don’t trust employers and so we can have all the programs in the world, but are we the right entity to provide them?” To address this issue, NEBGH members have suggested relying on third party entities like population health service companies to engage with employees, or to have health care providers drive the programs, as these intermediaries are typically more trusted than health plans or the company itself.

A longer-term strategy identified by diabetes experts and echoed by employers is to create a culture of wellness in the workplace. This relates to developing a workplace culture that is consistent with the company’s overall wellness goals and offering services and benefits that align with this underlying philosophy. Examples include evaluating the worksite to upgrade to healthier food in the cafeteria and in vending machines, creating indoor and outdoor walking areas to promote fitness, developing “wellness teams” consisting of employees that offer recommendations on making the worksite more wellness-friendly, and ensuring that health plans cover the necessary services for successful diabetes management. As one expert put it, it’s about creating “workplace health consciousness.” But he went on to explain that this requires “a lot of socializing of the idea…making sure that people are comfortable with it—it takes time.” And overcoming what one member called “denial” is part of this – “When everyone you see has a BMI of 30+ [a marker for obesity], why would that be considered ‘bad’ for you if you don’t actually feel bad?”

NEBGH members raised the notion that the culture should also be responsive to the inherent diversity of the employees and make accommodations accordingly. As one wellness director explained, it made more sense to develop healthier versions of the ethnic foods employees were drawn to in the cafeteria, versus trying to change the kinds of foods that employees should eat.

**INNOVATION IN DIABETES MANAGEMENT**

With the background knowledge that the incidence and prevalence of diabetes is growing and that traditional diabetes management techniques have been only partially successful in the workplace, NEBGH has surveyed employers and experts, and analyzed studies to identify innovative approaches to diabetes care in the workplace. These innovations have come in the form of new approaches to how diabetes care is delivered that include enhanced clinical models like group visits and a deliberate focus on patient engagement, value-based purchasing and contracting strategies that identify and reward high-performing providers, and use of benefit designs that guide employees toward such providers as well as subsidize medications for those who participate in diabetes management initiatives.

**New Care Models—Clinical Care and Patient Engagement Strategies**

New and innovative care coordination models have been introduced but unfortunately are rarely being used by employers to better serve their employees with diabetes. These models include using patient-centered medical homes for integrated care, incorporating on-site or near-site primary care clinics, engaging community-based pharmacists in care management, and incorporating digital health to increase access to care and boost engagement levels.

Some new models for providing diabetes-related care are housed within physician practices which are paid for achieving targets in diabetes care improvement, and consist of a coordinated team of interdisciplinary providers including diabetes educators, nurses with access to dietitians, pharmacists, social workers, and of course, the practice physician. Sometimes referred to as a patient centered health home model (PCMH), this care model emphasizes greater communication between the patient and the providers, a more integrated approach to health care provision, and more frequent follow-up visits, with attention paid to meeting clinical goals. The model often incorporates a focus on patient self-management where participants are provided with skill-building sessions on nutrition, weight loss, and diabetes self-care. Few NEBGH members have embraced the PCMH model while some others have discussed their plans to investigate it or attempt to contract with Accountable Care Organizations (ACOs), another care model offering greater coordination with a focus on improving outcomes and reducing costs. One member spoke about how her agency structured its provider network to offer both an “open network” option and a PCMH option. Employees could join either network though were encouraged to choose the PCMH network with an incentive of waived co-pays. While NEBGH members may see the potential value of PCMH as an improved model of care, there are still concerns about whether current payment structures can be adequately adjusted to encourage doctors and other providers to
participate in PCMH, and whether there will be a sufficient availability of this model in the health care sphere to make it a viable option for employees.

Some employers have begun to invest in on-site and near-site primary care clinics which provide readily-available and convenient primary care services for employees. Employers may incentivize employees to use these clinics not only for minor medical concerns but for regular primary care to prevent and manage chronic conditions. To make on-site clinics financially feasible, companies require a critical mass of employees; those that don’t have the numbers can turn to near-site clinics whose services and costs are shared by multiple organizations.

Pharmacists are viewed by many consumers as trusted providers and they should be considered important – but are currently underutilized – resources for health promotion who can potentially improve employee health with counseling around medication management and diabetes education, and by directing patients to affordable, low-cost equipment and supplies. With drugstore chains like Walgreens, CVS Health, and Rite Aid more engaged in providing patient education, it may now become easier for employers to integrate pharmacist counseling into their diabetes management programs. And as is the case with other diabetes-related services, some employers may choose to incentivize employees to seek pharmacist counseling by reducing their co-pays for health services and supplies. A variation on this theme is the use of “convenience” clinics in chain drugstores by employees. Called “minute clinics” or “immediate care” clinics, these sites offer lower-cost primary care through nurse practitioners and don’t require appointments to be seen.

Digital Health

Digital health occupies an interesting space because it serves both as a tool for service delivery and an important instrument for patient engagement. Digital technologies have multiple applications in diabetes management. Telemedicine, for example, is an invaluable resource for people in remote or rural areas with little access to specialists. This technology has been used to provide a range of services from diabetes education and nutrition consultations to providing primary care where doctors provide on-line, video chat medical consultations. In NEBGH’s roundtable, members noted how telemedicine has proven to be a useful resource for companies with large numbers of employees working remotely.

Digital health also encompasses new mobile tools that offer smartphone-based screening capabilities where, for example, users are asked questions that assess their risk for diabetes which they respond to by sending a text. Based on their answers, users are connected to appropriate resources such as online social forums on diabetes, or phone numbers for local health clinics. There are apps that provide motivational, behavioral, and educational coaching to help patients self-manage their diabetes treatment plan, and apps which offer nutrition tips and exercise goals and send reminders to the user to take prescribed medications at the appropriate time. Other apps have been designed to work in conjunction with diabetes-related equipment such as wireless glucose meters: one such app, for example, records and monitors the user’s blood glucose readings, maps out the results on a graph, and transmits the results directly to the user’s primary care provider for real-time analysis.

As one participant at the NEBGH roundtable asserted, technology can be viewed not just as an information-building tool but also as a relationship-building tool among people with diabetes and between people and their healthcare providers.

Some predictive health analytics experts have touted the future possibilities of apps that maintain all of one’s data relating to diet, fitness, glucose levels, health status, medication intake and other relevant information in one place. They explain that eventually these apps will also offer decision-making support for each stage of diabetes care to specifically address the decision fatigue that people with diabetes often face.

“Gamification” is the application of typical elements of play within a digital arena, and it is being used to increase engagement around good practices related to diabetes care. Examples of gamification approaches include a platform that turns diabetes management into a game by giving the user points or achievement badges for completing diabetes management tasks such as recording meals or checking blood glucose levels; another is a medication adherence platform that combines financial incentives, education, and reminders to get people to take their medicine. The software verifies prescription refills, and users are rewarded for adhering to a treatment plan.

These digital gaming platforms can be customized for a company’s entire workforce with challenges designed in which employees can “compete” against each other on an individual or team basis. Some gaming challenges involve activities that an employee might engage in with their family (cook a healthy meal with your family) or personal goals that they can do on their own or with a colleague (run a 10K in a local race). A substantial amount of research has pointed to the significant role social networks can play in influencing people’s behavior and lifestyle choices, and many of these models reflect this principle.

As one participant at the NEBGH roundtable said, “We’ve got to get smarter in the digital ecosystem... [we need to] develop different station stops based on someone’s abilities and interests, and adapt technologies to exactly where people are.”
While there is a lot of excitement around digital health’s potential for diabetes management and engagement, there are reasons to be circumspect. Employers’ concerns typically arise around the issue of the digital divide among employee populations, as well as questions about long-term adoption of digital technology and whether quantified data leads to sustainable behavior change. There is also apprehension about finding the right digital tool for each person who may use technology. As one participant at the diabetes roundtable said, “We’ve got to get smarter in the digital ecosystem... [we need to] develop different station stops based on someone’s abilities and interests, and adapt technologies to exactly where people are.”

Value-based Benefit Designs

One approach to insert more value into the health care equation is the incorporation of value-based benefit design (VBBD). VBBD is the use of benefit plan incentives to encourage members’ utilization of high value health care services, high performing providers, and disease and lifestyle management programs. For example, VBBD might offer lower cost-sharing outlays or other financial incentives for employees who do one or more of the following: select ‘preferred’ health care providers with a history of positive outcomes on diabetes; seek care at a diabetes Center of Excellence (COE) where there is a melding of innovative medical care, cutting edge research, and clinical excellence; obtain care through patient centered medical homes which emphasize integrated care; participate in diabetes management programs; or choose medications and diabetes supplies that are effective, lower-cost alternatives to others offered.

The potential benefits from VBBD include sustained improvements in adherence to medications and treatment guidelines, greater access to coordinated care, greater participation in diabetes management through use of incentives, and use by employees of high-performing physicians and hospitals for improved diabetes care.

New Performance-based Payment Models

The design and deployment of new clinical care and engagement models for diabetes management will likely require payment models that acknowledge the cost of developing these new approaches by rewarding positive outcomes with financial gains to the providers who deliver them. In these new business models, health plans develop, or contract with, performance-based provider networks and negotiate performance-based payment rates. To incentivize selection of these high-value providers, employees see their cost-sharing burden reduced if they choose services from these providers.

Employers are also assessing new business models that have been promoted through the Affordable Care Act. These include a shift away from fee-for-service and use of an accountable care model that ties provider reimbursement to reductions in the total cost of care for a complex patient population. NEBGH views such new business models as promising options for further consideration by employers seeking innovative approaches in providing and paying for care.

A Word about Return on Investment (ROI)

If new diabetes management programs and care models are to be truly optimized, an ROI methodology must be developed that assesses all program costs, and recognizes both direct cost and indirect cost reduction. With the projected growth in diabetes cases and the need for increased interventions, there will also be a greater need for reliable metrics on cost and benefits. Some NEBGH members feel the current tools for ROI assessment aren’t sufficient, which constitutes a significant barrier for present-day evaluation. It does, however, open up an opportunity for employers to collaborate with evaluation experts on design and development of more useful measurement tools.
MOVING FORWARD: NEW OPPORTUNITIES FOR EMPLOYERS

NEBGH Solutions Center’s initial exploration of diabetes management in the workplace points to continued reliance among employers on traditional methods of identifying employees with diabetes and traditional strategies for helping employees manage their illness. Missing is recognition as well of programs to address the “tip of the iceberg” problem – the challenging fact that many more employees are at risk for developing diabetes over the next several years than currently have the disease. Also missing is direction for employers on how to identify and guide employees towards high-performing physicians and health systems that specialize in integrated diabetes care, or apply new strategies for helping employees better self-manage diabetes, including using digital tools and incentives, and promoting ways to overcome emotional barriers, which might involve use of social media and other types of “communities.” Experts stress that without more sophisticated methods of identifying at-risk employees and better programs to prevent and manage diabetes, this epidemic – and the costs and devastating complications for patients and their families – will only to continue to grow.

NEBGH’s ongoing Solutions Center diabetes project is aimed squarely at this problem. New, innovative thinking is needed to effectively tackle the diabetes epidemic, and this report lays the groundwork. Solutions Center work streams are currently underway as part of the next phase of this project; that work will result in identification of the most promising strategies for employers in the areas of new care models, new employee engagement models, and new provider payment models, that taken together can form a framework of design elements for use as the basis of “breakthrough” diabetes management programs.
How do employers think about diabetes? What types of diabetes prevention and management programs do employers offer, and how successful are they? What types of tools and programs do employers think are necessary to combat diabetes in the future?

In July 2014, NEBGH Solutions Center surveyed member employers – representing more than 500,000 employees of primarily large, self-insured national organizations. Nearly half of the senior benefits professionals who responded said diabetes is one of their top three concerns, and 85% currently have a diabetes prevention or management program in place (or plan to start one in 2015). However, employers were split down the middle in terms of their satisfaction with the effectiveness of these programs, and the majority of employers said they’re not sure whether such programs deliver a good return on investment.

Survey highlights include:

- **Indirect costs:** Employers feel that disease-related disability because of diabetes-related complications is the most important indirect cost associated with diabetes (89%), followed by loss of productivity (39%) and absenteeism (34%).

- **Identifying diabetes risk:** Screening of employees through examination of medical claims was used by most employers for identifying diabetic employees or those at risk (79%), with many also using biometric screening (56%) and Health Risk Assessment (45%). Employees who are identified are most often encouraged to participate in programs, with a few employers offering economic incentives for doing so.

- **Measuring success:** Respondents were asked how they measure their program’s success, and by far, the most common measure was participation rates (79%), followed by overall total claims costs for those with diabetes (50%). Achievement of clinical measures was cited by 36% of respondents.

- **Emotional barriers:** By far, employers pointed to employee reluctance to engage in lifestyle modification and other self-care programs because of stigma, embarrassment and lack of motivation. These emotional barriers contribute to low participation in diabetes programs; low awareness of the importance of diabetes that keeps employees from actively seeking out available programs was cited as another major obstacle.
Digital health technology: Despite media attention and corporate promotion of new digital tools to help manage diabetes – on-line websites with game features, smart phone apps, glucose meters that automatically upload data, text-message reminders, and social networks – nearly none of the employers surveyed are making use of any of these. (One third of respondents did indicate they use telehealth and/or video physician consults.)

But – interestingly – when asked which elements of a potential roadmap or tools for diabetes employers would be most interested in, more than half want to know how best to use the growing array of digital health solutions.

Advice on calculating the ROI of diabetes management programs and guidance on value-based insurance design also ranked high.

Value-based benefit design: Half of employer respondents did not have benefit designs in place designed to incentivize participation and/or use of diabetes care.
### What’s Needed for Successful Diabetes Programs

<table>
<thead>
<tr>
<th>Element</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes management program that overlaps with lifestyle management program</td>
<td>73.3%</td>
</tr>
<tr>
<td>Buy-in and support from senior management</td>
<td>60.0%</td>
</tr>
<tr>
<td>Using culturally appropriate approaches that recognize diverse beliefs, attitudes and behaviors</td>
<td>60.0%</td>
</tr>
<tr>
<td>Diabetes management programs that are aligned with diabetes health benefits offered to employees</td>
<td>66.7%</td>
</tr>
<tr>
<td>Having a culture of wellness and an environment that promotes healthy choices (i.e. healthy food in the vending machines, accessible stairs, or fitness centers on-site)</td>
<td>80.0%</td>
</tr>
</tbody>
</table>

### REFERENCES

Roundtable Participants

- Cynthia Tobia
  Director - Compensation, Benefits & HRIS
  Horizon Blue Cross Blue Shield of New Jersey

- Jennifer Hyeuk Lee
  Director, Health & Wellness
  Prudential Financial, Inc.

- Michael Beaudoin
  Health Promotion Manager
  PSEG

- Barbara Schultz, RN
  Director, Employee Health
  Valley Health System

- Mark Tomassone
  Executive Director, Health & Welfare
  Columbia University

- Kate Botley
  Benefits Chief of Staff
  1199 National Benefit Fund

- Michelle Alexander, MD
  Medical Director
  Consolidated Edison of NY

- Mary Jo Maloney, RN
  Assistant Director, Care Management Co.
  Montefiore Medical Center

- Nancy Horsting, RN
  Clinical Manager
  Montefiore Associates

- Kristen Carlucci, RD
  Nutrition Expert
  Pitney Bowes

- Candace Guaglianone
  Intern
  Pitney Bowes

- James Brewer
  Workspace Consultant
  Steelcase

- Gina Nanchanatt
  Clinical Pharmacist
  Horizon Blue Cross Blue Shield of New Jersey

- E. David Perez, MD
  Market Medical Executive - NY-NJ
  Cigna

- Kathy Parsons
  Director, Disease Management
  EmblemHealth

- Chris Dawson
  Senior Area Vice President
  Gallagher Benefit Services

- Erin O’Connor
  Partner
  Cammack Health LLC

- Bruce Song
  Account Director
  AstraZeneca

- Christophe Segalini
  Executive Director, US Diabetes
  Market Access Strategy
  AstraZeneca

- Elisabeth Veciarelli
  Organized Customer Strategic Account Executive
  Boehringer-Ingelheim

- Michael Cohen
  NY Metro Strategic Account Executive
  Boehringer-Ingelheim

- Fred Verde
  Managed Markets Director
  AstraZeneca

- Virginia Peddicord
  Corporate Account Executive
  Merck

- Jim Prodafikas, PhD
  Medical Affairs Director, Health Systems,
  US Medical Affairs
  Merck

- Dallen Allred
  Co-Founder
  Artemis Analytics

- Grant Gordon
  Co-Founder
  Artemis Analytics
About NEBGH

Northeast Business Group on Health (NEBGH) is an employer-led coalition of healthcare leaders and other stakeholders. We empower our members to drive excellence in health and achieve the highest value in healthcare delivery and the consumer experience.

Collaboration is the key to everything we do. As an independent, trusted partner to all of our constituencies, NEBGH is in the unique position of bringing together diverse interests to work in pursuit of common goals. We're active in New York, New Jersey, Connecticut, and Massachusetts, and our members include large, national employers representing two million+ working Americans. In addition to employers, membership includes major health plans, health systems, benefit consultants, and suppliers of healthcare-related products and services — all speaking with one voice for quality, accountability, and value in healthcare.

About NEBGH’s Solutions Center

The Solutions Center is NEBGH’s unique data-gathering and discovery platform for developing initiatives that can really “move the needle” when it comes to critical healthcare issues. Focused on employers as a catalyst for change, the Solutions Center’s mission is to identify the most promising, innovative opportunities for improving health outcomes, and create a framework with the potential for transforming results and changing the national dialogue.

Key to the Solutions Center’s methodology is “real-time data collection”—a proprietary process wherein a cross-section of employers, health plans, benefit consultants, and other stakeholders convene in a structured roundtable setting to gather information about existing knowledge, tools, and approaches; surface and articulate issues of key concern and interest from the employer perspective; and generate new ideas worthy of further, more in-depth investigation. Few other organizations are capable of bringing together major stakeholders with such diverse interests and facilitating an “activated community” in which these stakeholders work cooperatively in pursuit of a common goal. Through this process, information often not accessible elsewhere is captured, and innovative ways of addressing healthcare issues are formulated through the spontaneous exchange of experiences and ideas.

Acknowledgements

NEBGH and the Solutions Center gratefully acknowledge these companies for their financial support of this project and all of the activities that contributed to the production of this report:

AstraZeneca
Boehringer Ingelheim
MERCK

We also recognize these organizations as important stakeholders in the quest for safe, high-quality and value-driven health care in the Northeast and nationally.

In addition, we would like to express our gratitude to the stakeholders listed from employer organizations, health plans, and benefit consulting organizations who participated in our Solutions Center roundtable on diabetes and hence, made this project possible. Their enthusiastic and insightful participation and collaborative spirit were critical to the success of this investigation.

The authors are solely responsible for the conduct of the research, analyses, and content of the manuscript. We also recognize Erin O’Connor and Cynthia Tobia for their thoughtful review of a draft of this report, Adria Subbiondo for her contribution to editing, as well as Robert Murphy, for developing the report’s formatting, graphic design and layout.
NEBGH works with employers in:

- NEW YORK
- NEW JERSEY
- CONNECTICUT
- MASSACHUSETTS

Northeast Business Group on Health
61 Broadway, Suite 2705
New York, NY 10006

Phone: 212-252-7440 x223
Fax: 212-252-7448
www.solutionscenter-nebgh.org
www.nebgh.org