



Facilitating Full Employment Opportunity for Employees with Cancer: A Call to Action



Introduction

Presently, the risk of an American man developing cancer over his lifetime is less than one in two.¹ For an American woman, the risk of developing cancer over her lifetime is a little more than one in three.²

By 2030, the number of new cancer cases in the United States will increase by 45 percent, largely as a result of the aging of the nation's population.³ These Americans, many of whom are actively employed, on medical leave or desire to return to work, are part of a growing community of cancer survivors – approximately 14.5 million survivors⁴ – who are physically, emotionally and financially affected by the life-altering diagnosis that cancer presents. Successfully navigating through these challenges requires an ecosystem of support: expert medical care, surgery, radiation and chemotherapy; family and caregiver coaching and counseling; financial resources to address the cost of care; and employer policies and best practices to provide continued employment, workplace accommodations and an inclusive work environment to maximize employee contributions.

Remaining at work through cancer treatment or returning shortly after offers much more than financial security to survivors. It enables employees to achieve a sense of normalcy, to engage with co-workers, to make meaningful contributions to their company's business goals and to regain confidence as valuable citizens. Despite these benefits, cancer survivors have higher rates of unemployment than their peers. Many do not return to the workforce, representing billions of lost dollars in disposable income, government taxes and potential revenue to both large and small businesses.

For these reasons, ensuring full employment opportunities for cancer survivors is a critical business issue - not just for the individual, but also for policymakers, the business community and for private and public employers.

This paper examines the impact of a cancer diagnosis on employment and provides specific recommendations for immediate consideration and adoption by federal and state policymakers.

Who is a cancer “survivor”?

The National Coalition for Cancer Survivorship defines someone as a cancer survivor from the time of diagnosis and for the balance of life.

This paper adopts and relies upon this definition.

Executive Summary

Advances in cancer treatment and diagnoses have improved survival rates for cancer survivors and reduced the burden of treatment, allowing them to work during active medical treatment or return to work more quickly when treatment is complete. Despite these advances, employment-related issues are among the many challenges people face when receiving a cancer diagnosis. These challenges may arise from the moment of diagnosis and persist throughout treatment and years into survivorship. Some of these challenges may include concerns about discrimination in initially seeking work, being promoted and changing jobs.

Remaining at work during cancer treatment, or returning to work as a survivor, is important both to the individual and to society at large. Benefits for the survivor extend beyond receiving a paycheck and having insurance coverage. Studies show that continued employment provides psychosocial benefits, including maintaining a sense of normalcy, enjoying the social support of colleagues and boosting self-esteem and quality of life. Research also confirms that people with serious illnesses who have strong social networks enjoy better health outcomes.

For society, keeping people with cancer working brings the economic benefits of productivity gains and income generation.⁵ Businesses that enable an employee to continue working avoid the costs of replacing a valued employee, including the time spent looking for and training a replacement. Those employers also realize boosts in overall employee morale and productivity.⁶

Did You Know?

Almost half of adult cancer survivors in the U.S. are younger than 65. They represent individuals with the greatest current and future employment opportunity.

Disability costs associated with cancer are high, representing \$7.5 billion in lost productivity alone.

Despite the rapidly growing number of cancer survivors among the U.S. workforce, relatively few resources are available to help employers navigate the legal and human issues confronted when an employee has cancer. Research and education are needed to close the significant gap in identifying and sharing best practices for facilitating workplace transitions for cancer survivors. Policymakers, business leaders and both large and small employers have opportunities to support cancer survivors and reduce the employment challenges they face, but action is needed.

Recommendations for federal and state policymakers include:

- **Review the Family and Medical Leave Act** to identify potential opportunities to better meet the needs of people with cancer or other chronic conditions and their caregivers while balancing employers' interests.
- **Assure that job re-training programs and grants include opportunities for people facing a career change as a result of surviving cancer** or coping with other chronic conditions.

- Numerous job re-training programs exist by Executive Order and are included in federal and state legislative proposals. These programs and proposals should include opportunities for job training and educational grants for cancer survivors and others requiring a career change as a result of their illness.
- **The U.S. Office of Personnel Management (OPM) and State personnel authorities should identify and adopt best practices in the support of employees facing cancer.**
 - OPM and State personnel authorities should ensure that policies support cancer survivors, including ensuring direct-line managers have the tools needed to address the questions and issues that arise.
 - OPM and State personnel authorities should publicly share information on best practices in managing workplace transitions relating to cancer treatment and survivorship to support broader replication in the private sector.

This white paper will examine seven specific questions related to ensuring full employment opportunities for employees with cancer:

1. How have the “War on Cancer” and medical advances affected cancer survivorship and employment?
2. How does cancer affect the U.S. workforce and employment?
3. How does working benefit cancer survivors?
4. Why should employers work to retain employees coping with cancer?
5. What factors affect a survivor’s ability to work and what can employers do to help?
6. What are the legal and policy parameters that influence what a business owner can do?
7. What information is available to assist employers and promote employment among cancer survivors?

Questions to Advance Awareness and Action

1. How have the “War on Cancer” and medical advances affected cancer survivorship and employment?

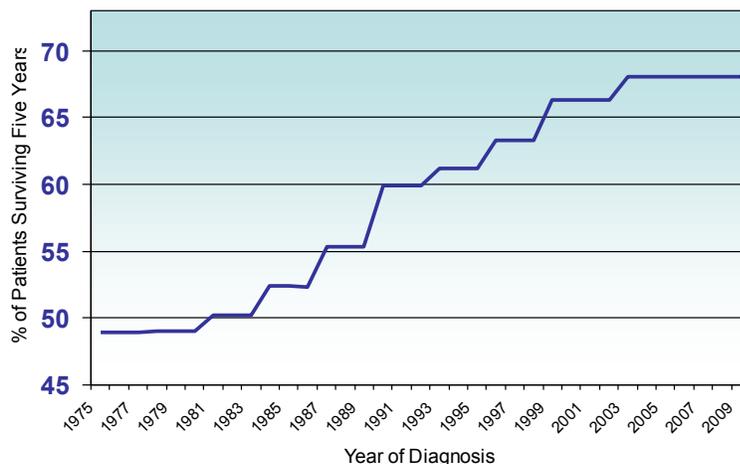
Declaring a “War on Cancer,” including passage of the National Cancer Act of 1971, marked a major public health policy effort that has helped to improve our understanding not only of how cancers develop and spread, but also how to prevent and treat numerous cancers. During their lifetimes, one in two men and almost one in three women will be diagnosed with cancer. In addition, approximately 40 percent of the people diagnosed with cancer each year are working-age adults.⁷ As a result of the human toll cancer exacts, total annual health care spending exceeded \$38 billion in 2011 and accounted for more than 33 million days of disability.⁸

With advances in cancer treatments and consequent increases in survival rates, more cancer survivors are alive today than ever before. In fact, as of January 1, 2014, approximately 14.5 million Americans had a cancer history—almost a 500 percent increase⁹ in the number of cancer survivors since 1971 when the National Cancer Act was enacted.¹⁰ Despite greater understanding about cancer prevention, more than one and a half million new cancer cases will be diagnosed in 2014.¹¹

The public and private investments in understanding cancer and developing better diagnostics and treatments have led to these dramatic improvements in survivorship and created a national infrastructure for research. Today, there are 66 National Cancer Institute-designated Cancer Centers in 33 states. The National Cancer Institute and the National Institutes of Health fund 325,000 researchers at more than 3,000 universities, hospitals and other facilities.¹² In addition, biopharmaceutical companies are investigating more than 1,000 potential medicines to treat a variety of cancers,¹³ and the majority of them involve novel approaches to targeting cancers.¹⁴

5-Year Survival Rates for Cancer in the U.S.

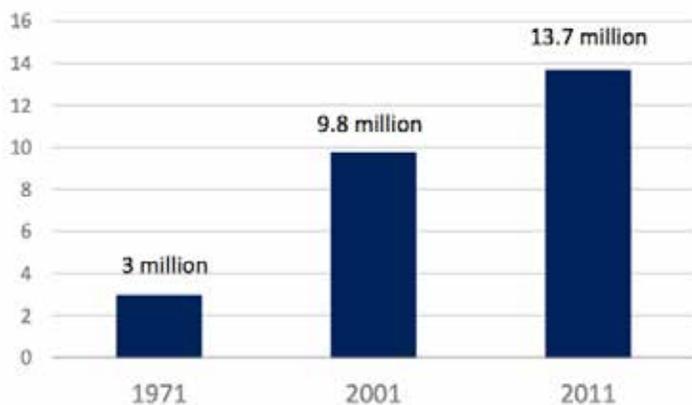
Source: National Cancer Institute



Given the advances in early detection and treatment of cancer and the aging of the U.S. population, a risk factor for cancer, the number of cancer survivors is projected to increase by more than 30 percent during the next decade, to approximately 18 million people.¹⁵ Despite greater understanding about cancer prevention, more than one and a half million new cancer cases will be diagnosed in 2014.¹⁶

Surgery, chemotherapy and radiation remain the traditional triad of cancer treatment. Advances in all three areas have enabled greater precision in targeting the cancer and have reduced the pain, disfigurement and other side effects associated with treatment. More than 80 percent of survival gains for cancer survivors is attributable to new treatments,¹⁷ and the increased effectiveness of treatments has shifted the focus of many cancer interventions to emphasize quality of life in addition to survival.¹⁸ As a result, more cancer survivors are able to work while undergoing treatment with less downtime and to return more quickly to work after treatment.¹⁹ Most survivors return to work within one to two years of diagnosis and treatment.²⁰

U.S. Cancer Survivors Over Time, Millions



Source: N Howlader, AM Noone, et al. (eds). SEER Cancer Statistics Review, 1975-2011, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2011/, based on November 2013 SEER data submission, posted to the SEER web site, April 2014.

Treatment advances have also improved the survival rates for childhood cancers. In 1975, a little more than half of all children diagnosed with cancer before age 20 survived at least five years. Due to research advances, by 2010 more than 80 percent of children diagnosed with cancer before age 20 survived at least five years.²¹ Future employment concerns exist for childhood cancer survivors, including worries about discrimination and coping with the residual effects of treatment.²²

2. How does cancer affect the U.S. workforce and employment?

Almost half of adult cancer survivors are younger than 65, working-age adults for whom the effects of cancer and cancer treatment can affect current and future employment.²³ Businesses and public and private employers of all sizes are affected. Almost 85 percent of employees with cancer work in organizations with fewer than 500 employees.²⁴ The disability costs of cancer are significant. In 2011, cancer caused more than 33 million days of disability and \$7.5 billion in productivity losses in addition to medical costs.²⁵ The growth in the number of cancer survivors, particularly among working-age adults, presents public policy challenges for lawmakers and a need for greater awareness among employers.

Even though remaining employed may offer financial stability, health insurance coverage, improved self-esteem and social supports, a cancer diagnosis often may prompt an individual to leave work, downgrade a position or retire early, though remaining employed may offer financial stability, health insurance coverage,

“I don’t look as well as I did, and sometimes I think that everybody can tell. . . I wanted to move on from where I was, but I felt stuck.”
– Tara, breast cancer survivor

Source: Cancer and Careers, “Tara’s Story: The Job Hunt”

improved self-esteem and social support.²⁶ Employment is beneficial not only for the economic impact it has on the individual, the business itself and the economy overall, but it is also linked to higher quality of life. Media stories about cancer diagnoses and the commitment to continue working among high-profile executives including Steve Jobs, Warren Buffet and JP Morgan’s Jamie Dimon²⁷ demonstrate

that an individual’s reasons for working involve more than receiving a paycheck. Work is often central to self-identity and self-esteem, involves social relationships and is indicative of a person’s abilities and talents.²⁸

Though survival rates are increasing and many survivors are doing well, cancer can have long-lasting effects on the survivor—including fatigue, pain, depression and functional limitations—that can be a significant cause of absence from work, unemployment and early retirement.²⁹ Functional limitations can include mobility limitations from surgery. For example, a breast cancer survivor may have limited arm mobility as a result of surgery. This has implications for certain work settings.³⁰ Overall, up to one in twenty cancer survivors report experiencing work limitations in the immediate years after their initial diagnoses, particularly after treatment interventions.³¹

Cancer survivors also can face challenges with medical care follow-up, managing the long-term residual effects of treatments, monitoring for recurrence and an increased risk for additional cancers.³² Survivors may potentially face economic challenges, including limitations in work and daily activities, obtaining affordable and adequate health care coverage, access to health care and increased medical care costs.³³

Of additional concern to policymakers, unemployment rates for cancer survivors are much higher than for the population overall.³⁴ In fact, cancer survivors are 1.4 times more likely to be unemployed than

people without cancer.³⁵ Surviving cancer also may affect entering the job market for the first time after diagnosis. For example, a recent study of female cancer survivors first entering the labor market two to six years after diagnosis found their overall employment rates were 12 percentage points lower, full-time employment rates were 10 percentage points lower and usual hours of work were five hours per week fewer than those of their peers.³⁶

3. How does working benefit cancer survivors?

Cancer survivors report significant benefits from continuing to work. The ability to continue earning income and retaining employer-based health insurance coverage are tangible incentives to maintaining employment during cancer treatment. Work provides psychosocial benefits as well. For many survivors, returning to work is an indication of their recovery and regained normalcy,³⁷ and employment is associated with a higher quality of life overall.³⁸ In fact, cancer survivors have rated being able to work as the third most important aspect of quality of life compared with healthy people, for whom ability to work ranked sixth.³⁹ Conversely, the loss of work is associated with lower quality of life and self-esteem as well as poorer financial circumstances.⁴⁰

Having a social support system is also linked to better outcomes for people facing serious illness, such as cancer.⁴¹ A recent survey of cancer survivors confirms these findings. The vast majority of cancer survivors return to work after treatment, saying that continuing work after diagnosis aids recovery by offering normalcy, career advancement, distraction, social support, income and insurance.⁴² More than half of those surveyed reported taking no time off or only a few days off before returning to work after diagnosis. Those newly diagnosed or currently in treatment were most eager to continue work. Almost 73 percent felt employment gave them a sense of purpose and was tied to their identity.⁴³

“Work is very important, because it gives you a reason to get up in the morning. It gives you some place to go. . . It keeps your mind off your diagnosis.”

— Elizabeth, breast cancer survivor

Source: Cancer and Careers, “I Am a Cancer Survivor and Worked through It”

4. Why should employers work to retain employees coping with cancer?

In addition to the desire to support a colleague, there are economic reasons why an employer should work to retain employees with cancer. The “turnover costs” associated with losing an employee can be significant. Losing the employee’s experience and knowledge of the job, customer relationships and other skills add costs for employers. Also, employers may have to hire temporary employees, spend time and incur costs searching for a replacement and spend time and money training a new person for the job. Costs may also include decreased customer satisfaction and lost revenue, particularly in service industries.⁴⁴

Losing valued employees is expensive for employers, and research shows that employers with high employee retention rates perform better overall. In fact, a meta-analysis of turnover rates and

organizational performance showed that high employee turnover has a large and significant negative effect on performance.⁴⁵ Even in traditionally high-turnover industries, such as restaurants, improving retention can boost financial results. For example, Taco Bell analyzed turnover rates at stores and profitability and found that stores in the top 20 percent for employee retention had double the sales and 55 percent higher profits than the 20 percent of stores with the highest employee turnover rates.⁴⁶

In general, the costs of employee turnover vary depending upon the income level of the employee. Evaluations of the cost of turnover for workers earning \$50,000 a year or less—which covers 75 percent of all workers in the U.S.⁴⁷—find turnover costs average 20 percent of salary.⁴⁸ Very highly paid workers and those at a senior or an executive level tend to have much higher turnover costs, up to 213 percent of salary.⁴⁹

In comparison, studies of the costs associated with making accommodations needed to retain an employee facing cancer are much lower and provide indirect benefits. Research analyzing the benefits gained by making disability-related accommodations found direct and indirect benefits for large and small employers.⁵⁰ Direct benefits included retaining a qualified employee, increased worker productivity and eliminating the costs of training someone new for the job. Indirect benefits noted included improved coworker interactions, increased company morale and a boost in overall productivity.⁵¹

5. What factors affect a survivor's ability to work and what can employers do to help?

Both individual and job-related factors influence whether a cancer survivor continues to work after diagnosis or how quickly a survivor returns to work. By understanding these factors, employers can meet work-related responsibilities and support continued employment of an employee coping

“For so many people, our work is what defines us. And to walk away from something you spent your whole life building wasn’t an option, and I know it’s not an option for most women.”

— Kristen, cancer survivor

Source: Cancer and Careers, “Hope and Help to Employees with Cancer”

with cancer. Not surprisingly, a non-supportive work environment has a direct negative effect on return-to-work rates among cancer survivors.⁵²

Factors influencing ability to work that are personal to the individual include: survivor’s age, type and intensity of treatment, personal finances, education level, health care coverage, transportation options and the immediate and residual side effects of treatment.⁵³ Employers have limited

influence over many of these factors, although survivors have reported that paid time off to attend medical appointments and a return-to-work meeting with their employers facilitated remaining at work or returning after treatment.⁵⁴ Other job-related factors positively influencing a survivor’s return to work are a positive attitude from co-workers and discretion over the number of hours and nature of the work undertaken.⁵⁵

Employers have greater ability to influence the job-related factors that facilitate continued employment for cancer survivors. Fatigue is a common, significant side effect of cancer treatment. Flexibility on when and where work happens can be an important support for survivors, because it allows them to stay productive while managing fatigue.⁵⁶ Such flexibility is also important to survivors in managing the multiple appointments needed during treatment.⁵⁷ Treatment may also involve physical changes that could affect work and require accommodations.⁵⁸ Survivors point to the physical demands of the job, accommodations available in meeting work demands and support from colleagues and supervisors as key considerations in facilitating continued employment and return to work after treatment.⁵⁹

For individual supervisors, understanding their roles in assisting employees is also important. Employer perceptions of an employee's ability to work after receiving cancer treatment also influenced employment for survivors. The abilities of cancer survivors to handle work demands will likely change over time and may include residual effects that linger after treatment, perhaps permanently. For example, significant impairment may occur in the first months of treatment, but improve in the months afterward.⁶⁰

Understanding the long-term consequences of cancer that may lessen over time or remain permanently, such as fatigue and cognitive problems, assists both supervisors and survivors and allows for honest communication.⁶¹

Additional research is needed to understand the factors that encourage employment for cancer survivors and, perhaps even more urgently, how employers can meet survivors' needs and balance work demands effectively. The need for educational resources for survivors, employers and health care practitioners is particularly acute. Research among cancer survivors indicates that although survivors experience cancer symptoms at work, they do not tend to seek reasonable

Employer Attitudes and Unintended Discrimination

Craig White, a researcher and two-time cancer survivor, conducted two studies of employer intentions and actions in interviewing and hiring cancer survivors. In the first, managers overwhelmingly stated that an applicant's having a history of cancer would not matter and rated survivors similarly in terms of job suitability.

In the second, however, differences appeared. Research assistants posing as applicants for jobs at 121 retail stores who disclosed having cancer and showing gaps in work history associated with treatment, received fewer offers of employment.

“Organizations should include health status in training practices,” advised White. “We need to train people to be aware of attitudes so they can know what they are doing. It’s a tough hill to climb because there are so many negative stereotypes about us . . .”

Source: K Clark, “Winning the Battle but Not the Job,” SIOP, Apr. 30, 2014. Available online at http://www.siop.org/article_view.aspx?article=1256.

accommodations. Moreover, they look to cancer advocacy organizations instead of to employers or medical practitioners for information regarding their individual employment-related concerns.⁶²

6. What are the legal and policy parameters that influence what a business owner can do?

Federal and state laws provide protections for employees coping with cancer. The laws vary in applicability depending on the size of the employer, with small employers often excluded. They also differ in scope, with many states adopting additional protections for state residents or those working in the state. State laws can vary greatly in terms of protection for people facing cancer, including in defining “disability,” providing paid sick or medical leave, or requiring employers to provide disability insurance coverage.⁶³ It is important to note that federal and state laws set minimum requirements for employers covered by the laws. Employers can and do offer benefits beyond the legal requirements.

The two major federal laws affecting employment for cancer survivors are the Americans with Disabilities Act (ADA) and the Family and Medical Leave Act (FMLA). The ADA prohibits discrimination in hiring and employment practices against people with disabilities, often including cancers, and applies to any employer with more than 15 employees. The FMLA applies to employers with more than 50 employees and allows for unpaid leave relating to serious health conditions for a limited time and protects that employee’s position while the employee is on leave. Almost two out of three people in the U.S. labor force work for employers covered by the FMLA.⁶⁴

Under the ADA, cancer qualifies as a protected disability on a case-by-case basis. The ADA protects individuals from losing their jobs due to disability and sets guidelines for employers regarding required reasonable accommodations that allow an employee with a disability to fulfill job requirements.⁶⁵ The word *reasonable* is key and employees cannot make requests of their employer that would cause the employer “undue hardship” in complying. What constitutes an “undue hardship” is determined by the nature of the employee’s job and the employer’s resources.⁶⁶

Though worries about the expenses involved in making accommodations may concern employers, a comprehensive survey of employers found that most accommodations cost the employer nothing, while those incurring costs reported that accommodations typically involved a one-time cost of \$500.⁶⁷ Employers providing accommodations reported doing so to retain or promote a current employee and, as a result, increased the employee’s productivity and avoided costs for finding and training a new employee.⁶⁸

The International Foundation of Employee Benefit Plans’ survey, which focused on women working with breast cancer, found that employers were typically more than willing to provide accommodations. With regard to scheduling, the survey reported that about 85 percent allowed an employee with breast cancer to reduce her hours, 79 percent permitted a flexible schedule, 47 percent made telecommuting an option for the employee and 62 percent agreed to short breaks during the day for resting and recovering. Employers said they also made arrangements to alter the employee’s workload, including assigning different work (58 percent), altering deadlines or other previously agreed upon schedules (60 percent) and allowing job sharing (28 percent).⁶⁹

While the ADA offers protections for people while working, the FMLA allows employees to take up to 12 weeks of unpaid leave from work without losing their positions for certain serious health conditions, including cancer. The FMLA also protects the jobs of people with a cancer diagnosis. However, not everyone qualifies for FMLA protection. An employee must have worked for the employer for at least 12 months prior to the FMLA request and have worked more than 1,250 hours in that calendar year. In addition, employers who have fewer than 50 employees do not have to follow FMLA regulations.

The leave is allowed if, “a serious health condition . . . makes the employee unable to perform the essential functions of his or her job.”⁷⁰ The FMLA allows employees to take the leave intermittently. For example, an employee could take two weeks off to recover from surgery and use the remaining leave one or more days a week during other cancer treatments. The employee’s job is protected during the leave period.

Certain family members acting as caregivers for a family member with a serious health condition can also qualify for FMLA leave. Specifically, the FMLA authorizes leave for employees “to care for the employee’s spouse, child, or parent who has a serious health condition.” The FMLA specifies which family members can qualify for FMLA leave as a caregiver to include parents, children and spouses. Notably, siblings, grandparents, in-laws, other family members and non-relatives are not included.⁷¹

Some employers may offer short and/or long-term disability insurance that pays a portion of an employee’s salary during a disability period defined by the specific policy. Five states—California, New York, New Jersey, Rhode Island and Hawaii—have disability coverage mandates for employers.⁷² Otherwise, individuals may purchase private disability insurance policies, which will vary on the extent of coverage and conditions for coverage by individual policy.

What do reasonable accommodations look like for cancer survivors?

A machine operator who was undergoing radiation therapy for cancer was accommodated by having his workstation moved to avoid additional radiation exposure in the plant.

A secretary with cancer suffered fatigue from chemotherapy causing difficulty in maintaining a full-time work schedule. Her employer allowed her to work part-time and to take rest breaks while working.

An engineer working for a large industrial company had to undergo radiation treatment for cancer during working hours. Her employer provided a flexible schedule to attend treatment and continue to work full-time.

Source: B Loy, “Accommodation and Compliance Series: Employees with Cancer,” Job Accommodation Network, (March 2013). Available online at <http://askjan.org/media/Cancer.html>.

7. What information is available to assist employers and promote employment among cancer survivors?

As described earlier in this report, there are several laws relevant to cancer and employment issues, but the support cancer survivors' need extends beyond legal requirements. A supportive workplace is mutually beneficial to the cancer survivor and the employer. Survey research among cancer survivors shows that survivors do not look to their employers or health care providers as a primary source of information relating to employment issues and coping with cancer. Employers lack information about work-directed interventions⁷³ and how to handle survivors' common questions regarding remaining at and returning to work.

Given the importance of having a supportive work environment in ensuring employment opportunities for cancer survivors, there is a critical need for educational resources for employers. To help address this gap, an innovative collaboration involving Cancer and Careers, WellPoint, SEDL, Pfizer, oncology and employment experts and the U.S. Business Leadership Network has been launched with the goal of offering a comprehensive toolkit for employers. The toolkit includes practical information about making a workplace transitions plan, understanding employer roles and employee expectations, learning about accommodations for employees coping with cancer and navigating the legal requirements involved. Several employers are currently using the toolkit as part of a pilot program. The results of the pilot and a final toolkit are anticipated in June 2015 and can be obtained by contacting Jennifer Hausman, Public Health Program Director, WellPoint (jennifer.hausman@wellpoint.com).

Conclusion

Advances in cancer treatment have led to a large and growing number of cancer survivors within the U.S. workforce. The economic consequences of surviving cancer highlight the importance of developing comprehensive programs that improve employment opportunities for employees willing and able to work and decrease the economic burden of cancer survivorship in the United States. Public and private employers of all sizes have a vested interest in understanding not only the legal aspects involving an employee undergoing cancer treatment, but also how to be supportive to facilitate positive results for their workforce.

Interventions are needed to address the higher than average unemployment rates among cancer survivors. For policymakers, supporting policies that facilitate gainful employment among cancer survivors offers both economic and health benefits for the individuals and the nation as a whole.

In conclusion, we respectfully advance the recommendations cited earlier in this white paper as solutions to address the opportunity represented by cancer survivors in the workplace:

- **Review the Family and Medical Leave Act** to identify potential opportunities to better meet the needs of people with cancer or other chronic conditions and their caregivers while balancing employers' interests.
- **Assure that job re-training programs and grants include opportunities for people facing a career change as a result of surviving cancer** or coping with other chronic conditions.

- Numerous job re-training programs exist by Executive Order and are included in federal and state legislative proposals. These programs and proposals should include opportunities for job training and educational grants for cancer survivors and others requiring a career change as a result of their illness.
- **The U.S. Office of Personnel Management (OPM) and State personnel authorities should identify and adopt best practices in the support of employees facing cancer.**
 - OPM and State personnel authorities should ensure policies support cancer survivors, including assuring direct-line managers have the tools needed to address the questions and issues that arise.
 - OPM and State personnel authorities should publicly share information on best practices in managing workplace transitions relating to cancer treatment and survivorship to support broader replication nationally.

These policy recommendations represent critical steps in addressing the burden of cancer relating to employment. Businesses, government and policy leaders have the opportunity to leverage these advances to ensure full employment opportunity for employees with cancer.

References

¹ DevCan: Probability of Developing or Dying from Cancer Software, Version 6.70, Statistical Research and Applications Branch, National Cancer Institute, 2013.

² Ibid.

³ American Society of Clinical Oncology, "The State of Cancer Care in America," (2014). Available online at <http://www.asco.org/practice-research/cancer-care-america#recommendations>, accessed September 4, 2014.

⁴ National Cancer Institute, Office of Cancer Survivorship, "Statistics," (2014). Available online at <http://cancercontrol.cancer.gov/ocs/statistics/statistics.html>, accessed September 4, 2014.

⁵ AGEM de Boer, T Taskila, et al, "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.

⁶ TI Solovieva, DL Dowler, and RT Walls, "Employer Benefits from Making Workplace Accommodations," *Disabil Health J.* 2011; 4(1): 39-45.

⁷ NJF Steiner, CT Nowels, and DS Main, "Returning to Work after Cancer: Quantitative Studies and Prototypical Narratives," *Psychooncology.* 2010; 19(2): 115-124.

⁸ DH Tang, DS Alberts, et al, "Health Care Expenditures, Hospitalizations, and Productivity Associated with Cancer in US Employer Settings," *JOEM.* 2012; 54(12): 1453-1460.

⁹ National Cancer Institute, Office of Cancer Survivorship, "Statistics," (2014). Available online at <http://cancercontrol.cancer.gov/ocs/statistics/statistics.html>, accessed September 4, 2014.

¹⁰ M Valdivieso, AM Kujawa, T Jones, et al., "Cancer Survivors in the United States: A Review of the Literature and a Call to Action," *Intl J Med Sci.* 2012; 9(2): 163-173.

¹¹ American Cancer Society, "Cancer: Facts and Figures 2014," (2014).

¹² American Cancer Society, "National Cancer Act Marks Milestone," Dec. 22, 2011. Available online at <http://www.cancer.org/cancer/news/news/national-cancer-actmarks-milestone>, accessed September 4, 2014.

¹³ "Cancer Medicines: Value in Context," Pharmaceutical Research and Manufacturers of America (PhRMA), May 2014. Available online at: <http://www.phrma.org/sites/default/files/pdf/cancer-chart-pack-5-22-14.pdf>, accessed September 4, 2014.

¹⁴ G. Long and J. Works. "Innovation in the Biopharmaceutical Pipeline: A Multidimensional View." Boston, MA: Analysis Group, January 2013. Available at www.analysisgroup.com/uploadedFiles/Publishing/Articles/2012_Innovation_in_the_Biopharmaceutical_Pipeline.pdf, accessed September 4, 2014.

¹⁵ CDC, "Medical Costs and Productivity Losses of Cancer Survivors – United States, 2008-2011," *MMWR.* 2014; 62(23): 505-510.

¹⁶ American Cancer Society, "Cancer: Facts and Figures 2014," (2014).

¹⁷ E. Sun, et al., "The Determinants of Recent Gains in Cancer Survival: An Analysis of the Surveillance, Epidemiology, and End Results (SEER) Database," *Journal of Clinical Oncology.* May 2008 Suppl (Abstract 6616). American Cancer Society. "Cancer Facts & Figures 2013."

- ¹⁸ DH Tang, DS Alberts, et al, "Health Care Expenditures, Hospitalizations, and Productivity Associated with Cancer in US Employer Settings," *JOEM*. 2012; 54(12): 1453-1460.
- ¹⁹ T Slear, "The War on Cancer: More Americans Are Surviving. Here's Why." *AARP The Magazine*, Apr/May 2012. Available online at www.aarp.org/health/conditions-treatments/info-03-2012/more-americans-surviving-cancer.html.
- ²⁰ AGEM de Boer, T Taskila, et al, "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.
- ²¹
- ²² Institute of Medicine and National Research Council. *Childhood Cancer Survivorship: Improving Care and Quality of Life*. Washington, DC: The National Academies Press, 2003, p. 141.
- ²³ AGEM de Boer, T Taskila, et al, "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.
- ²⁴ DH Tang, DS Alberts, et al, "Health Care Expenditures, Hospitalizations, and Productivity Associated with Cancer in US Employer Settings," *JOEM*. 2012; 54(12): 1453-1460.
- ²⁵ Ibid.
- ²⁶ Ibid.
- ²⁷ E Glazer, "J.P. Morgan CEO Jamie Dimon Diagnosed with Throat Cancer: J.P. Morgan Chief to Remain Actively Involved During Treatment," *Wall Street Journal*, July 1, 2014.
- ²⁸ M Wells, B Williams, et al., "Supporting 'Work-Related Goals' Rather Than 'Return to Work' after Cancer? A Systematic Review and Meta-Synthesis of 25 Qualitative Studies," *Psycho-Oncology*, 2013; 22(6): 1208-1219.
- ²⁹ AGEM de Boer, T Taskila, et al., "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.
- ³⁰ C Bradley, D Neumark, et al., "Short-term Effects of Breast Cancer on Labor Market Attachment: Results from a Longitudinal Study," *J Health Econ*. 2005; 24: 137-160.
- ³¹ DH Tang, DS Alberts, et al, "Health Care Expenditures, Hospitalizations, and Productivity Associated with Cancer in US Employer Settings," *JOEM*. 2012; 54(12): 1453-1460.
- ³² Ibid.
- ³³ CDC, "Medical Costs and Productivity Losses of Cancer Survivors – United States, 2008-2011," *MMWR*, 2014; 62(23): 505-510.
- ³⁴ AGEM de Boer, T Taskila, A Ojajarvi, et al, "Cancer Survivors and Unemployment: A Meta-Analysis and Meta-Regression," *JAMA*. 2009; 301(7): 753-762.
- ³⁵ AGEM de Boer, T Taskila, et al, "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.
- ³⁶ J Moran and PF Short, "Does Cancer Reduce Labor Market Entry? Evidence for Prime-Age Females," *Med Care Res & Rev*, 2014; 71(3): 224-42.
- ³⁷ SJ Tamminga, AGEM de Boer, et al., "Return-to-work Interventions Integrated into Cancer Care: A Systematic Review," *Occup Environ Med*. 2010; 67: 639-648.
- ³⁸ Ibid.
- ³⁹ AGEM de Boer, T Taskila, et al, "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.
- ⁴⁰ SJ Tamminga, AGEM de Boer, et al., "Return-to-work Interventions Integrated into Cancer Care: A Systematic Review," *Occup Environ Med*. 2010; 67: 639-648.
- ⁴¹ See, e.g., SK Lutgendorf, K De Geest, et al., "Social Influences on Clinical Outcomes of Patients with Ovarian Cancer," *Clin Oncol*. 2012; 30(23): 2885-2890 (ovarian cancer); CH Kroenke, C Queensberry, et al., "Social Networks, Social Support, and Burden in Relationships, and Mortality after Breast Cancer Diagnosis in the Life After Breast Cancer Epidemiology (LACE) Study," *Breast Cancer Res Treat*. 2013; 137(1): 261-271.
- ⁴² Cancer and Careers, "2012 Harris Interactive Survey Key Findings," (2012). Available online at <http://www.cancerandcareers.org/en/2012-survey/2012-survey-key-findings>, accessed September 4, 2014.
- ⁴³ Ibid.
- ⁴⁴ JL Heskett, TO Jones, et al., "Putting the Service-Profit Chain to Work," *Harvard Bus Rev*. July – Aug. 2008.
- ⁴⁵ TY Park & JD Shaw, "Turnover Rates and Organizational Performance: A Meta-Analysis," *J Appl Psychol*. 2013; 98(2): 268-309.
- ⁴⁶ JL Heskett, TO Jones, et al., "Putting the Service-Profit Chain to Work," *Harvard Bus Rev*. July – Aug. 2008.
- ⁴⁷ U.S. Department of Labor, Bureau of Labor Statistics, "May 2013 National Occupational Employment and Wage Estimates: United States." Available online at http://www.bls.gov/oes/current/oes_nat.htm#00-0000, accessed September 4, 2014.
- ⁴⁸ H Boushey and SJ Glynn, "There Are Significant Business Costs to Replacing Employees," Center for American Progress, Nov. 16, 2012. Available online at <http://www.americanprogress.org/wp-content/uploads/2012/11/CostofTurnover.pdf>, accessed September 4, 2014.
- ⁴⁹ H Boushey and SJ Glynn, "There Are Significant Business Costs to Replacing Employees," Center for American Progress, Nov. 16, 2012. Available online at <http://www.americanprogress.org/wp-content/uploads/2012/11/CostofTurnover.pdf>, accessed September 4, 2014.
- ⁵⁰ TI Solovieva, DL Dowler, and RT Walls, "Employer Benefits from Making Workplace Accommodations," *Disabil Health J*. 2011; 4(1): 39-45.

⁵¹ Ibid.

⁵² SJ Tamminga, A GEM de Boer, et al., "Enhancing Return-to-Work in Cancer Patients, Development of an Intervention and Design of a Randomised Control Trial," *BMC Cancer*. 2010; 10: 345-353.

⁵³ See, SJ Tamminga, AGEM de Boer, et al., "Enhancing Return-to-Work in Cancer Patients, Development of an Intervention and Design of a Randomised Control Trial," *BMC Cancer*. 2010; 10: 345-53; JF Steinder, C Nowels, and DS Main, "Returning to Work after Cancer: Quantitative Studies and Prototypical Narratives," *Psychooncology*. 2010; 19(2): 115-124.

⁵⁴ J Pryce, F Munir, and C Haslam, "Cancer Survivorship and Work: Symptoms, Supervisor Response, Co-Worker Disclosure and Work Adjustment," *J Occup Rehabil*. 2007; 17:83-92.

⁵⁵ Z Amir and J Brocky, "Cancer Survivorship and Employment: Epidemiology," *Occup Med*. 2009; 59: 373-377.

⁵⁶ J Pryce, F Munir, and C Haslam, "Cancer Survivorship and Work: Symptoms, Supervisor Response, Co-Worker Disclosure and Work Adjustment," *J Occup Rehabil*. 2007; 17:83-92.

⁵⁷ Ibid.

⁵⁸ Z Amir and J Brocky, "Cancer Survivorship and Employment: Epidemiology," *Occup Med*. 2009; 59: 373-377.

⁵⁹ J Pryce, F Munir, and C Haslam, "Cancer Survivorship and Work: Symptoms, Supervisor Response, Co-Worker Disclosure and Work Adjustment," *J Occup Rehabil*. 2007; 17:83-92.

⁶⁰ AGEM de Boer, T Taskila, et al, "Interventions to Enhance Return-to-Work for Cancer Patients (Review), The Cochrane Collaboration, 2011.

⁶¹ SJ Tamminga, A GEM de Boer, et al., "Enhancing Return-to-Work in Cancer Patients, Development of an Intervention and Design of a Randomised Control Trial," *BMC Cancer*. 2010; 10: 345-353.

⁶² K Murphy, M Markle, et al., "Addressing the Employment-Related Needs of Cancer Survivors," *Work*. 2013; 423-432.

⁶³ Resources for understanding state disability laws can be found online at the Disability Legal Rights Center, <http://disabilityrightslegalcenter.org/state-specific-materials>, accessed September 4, 2014.

⁶⁴ US Department of Labor, "Families and Employers in a Changing Economy," (1995). Available online at <http://www.dol.gov/whd/fmla/1995Report/summary.htm>, accessed September 4, 2014.

⁶⁵ US Equal Employment Opportunity Commission, "Questions & Answers about Cancer in the Workplace and the Americans with Disabilities Act (ADA)," (2005). Available online at <http://www.eeoc.gov/laws/types/cancer.cfm>, accessed September 4, 2014.

⁶⁶ US Equal Employment Opportunity Commission, "Americans with Disabilities Act: Questions and Answers." Available online at <http://www.ada.gov/employt.htm>, accessed September 4, 2014.

⁶⁷ B Loy, "JAN's Accommodation Compliance Series," (2013).

⁶⁸ Ibid.

⁶⁹ International Foundation of Employee Benefit Plans, "Survey Shows Nearly All Employers Make an Effort to Accommodate Seriously Ill Employees," Oct. 24, 2005. Available online at <http://benefitslink.com/pr/detail.php?id=39296#.U9nTiYBdWDA>, accessed September 4, 2014. See, also, B Lee-Frye, "Breast Cancer and Work: Knowing Your Rights, Telling Colleagues, Taking Accommodations," *LifeWire*, updated June 26, 2010. Available online at <http://breastcancer.about.com/lw/Health-Medicine/Womens-Health/Breast-Cancer-and-Work.htm>, accessed September 4, 2014.

⁷⁰ US Department of Labor, "Family and Medical Leave Act: Overview". Available online at <http://www.dol.gov/whd/fmla/>, accessed September 4, 2014.

⁷¹ Ibid.

⁷² See Society for Human Resource Management, "Disability Benefits: General: Which states require employers to have a short-term disability plan?" Available online at <http://www.shrm.org/templatestools/hrqa/pages/stateswithstd.aspx>, accessed September 4, 2014.

⁷³ SJ Tamminga, A GEM de Boer, et al., "Enhancing Return-to-Work in Cancer Patients, Development of an Intervention and Design of a Randomised Control Trial," *BMC Cancer* 2010; 10: 345-353.