HUMANISTIC HEALTH MANAGEMENT PROGRAMS IN ANTHROPOCENE – A VECTOR-BORNE DISEASE CASE

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Introduction/background; Aim of the paper: Management of employee health is extremely important in the context of anthropogenic climate change. We examined the costs and benefits of implementing employee health management programs in the case of the vector-borne disease Lyme disease and its comorbidities (encephalitis, myelitis, and encephalomyelitis), taking sensitivity analysis into account. We have also examined the economic burden of these diseases and their comorbidities.
Materials and methods: In order to estimate the costs and benefits of implementing employee health management programs in the case of vector-borne diseases as well as the economic burden of these diseases, the following data were used: data from the National Health Fund (NFZ) with related etiological fraction calculus and sensitivity analysis; and datasets from the Social Insurance Institution and the Central Statistical Office, using the human capital method (which includes, among others, the number of sick days).
Results and conclusions: The total cost of Lyme disease and its complications, taking into account sensitivity analysis, amounts to EUR 16.2-16.3 million. The implementation of employee health management solutions would reduce the costs of Lyme disease's complications by at least EUR 2.5 million and decrease employer losses. The results of this study show that treatment costs for patients with complications are higher than those for patients with well-controlled diseases (without complications). Moreover, the conducted analysis indicates that the implementation of employee health management solutions similar to solutions implemented by the Polish National Forest Holding is associated with a reduction in the incidence and costs of serious complications.

Keywords: Humanistic Management, Vector-Borne Diseases, Employees' Health, Climate Crisis, Anthropocene.

1. Introduction

The current period of Earth's history, which has the proposed name Anthropocene (i.e., the time the readers and authors of this publication live in), is a time of significant and dangerous changes for all animals and has been compared by many authors to the five previous

great extinctions, "when the Earth lost more than three-quarters of its species in a geologically short interval" (Barnosky et al., 2011). In addition to the extinction of many species, anthropogenic climate changes have already had a proven effect on the prevalence pattern of organisms ranging from microorganisms (Cavicchioli et al., 2019), though insects (Wilson et al., 2007), to mammals, with examples such as "coyotes (*Canis latrans*) and crab-eating foxes (*Cerdocyon thous*) in the Americas, and golden jackals (*Canis aureus*) in Europe" (Somsen & Trouwborst, 2019). Both microorganisms and animals could gain new territory due to anthropogenic climate changes, by being introduced (in many cases unwillingly by humans) to previously non-occupied areas, or by moving in from neighboring areas where the species was already present. This also applies to vectors, which are defined as living organisms that transfer diseases between humans or from animals to humans. Vectors as a group include different insects, arachnids, and even snails, but the most important are mosquitoes, sandflies, and ticks.

Impacts of anthropogenic climate change on human health is in part caused by changes in areas of occurrence of vector-borne diseases (VBDs; Campbell-Lendrum, Manga, Bagayoko, & Sommerfeld, 2015; Schulte & Chun, 2009) as "anthropogenic climate change exacerbates the global spread of vector-borne pathogens and their diseases" (Cavicchioli et al., 2019, p. 579) through "vector abundance, longevity and biting rate, and pathogen replication rate in the vector" (Cavicchioli et al., 2019, p. 580). As such, "millions of people are predicted to be newly at risk due to climate change" (Cavicchioli et al., 2019, p. 580). This is confirmed by recent findings that show that temperature increases together with changes in humidity and rainfall levels can lead to the emergence of VBDs in new areas, for example zoonotic cutaneous leishmaniasis in Tunisia (Bellali, Hchaichi, Talmoudi, Harizi, & Chahed, 2018) and numerous others in various countries (Ogden, 2017). Furthermore, people in developed countries are not "immune" to re-emerging infectious diseases - this has been observed in the southern United States where hookworm is taking a toll on poorer populations (McKenna et al., 2017) – and newly described diseases such as Zika (Gulland, 2016). A special example here could be the "state of Florida [which] has not only experienced local transmission of Zika but also of the dengue and chikungunya viruses, which are transmitted via the common vector *Aedes specie*" (Dinh, Chowell, Mizumoto & Nishiura, 2016).

2. Macroeconomics and health

At the macroeconomic level, malaria can limit business activity by eliminating certain areas from cultivation, as well as by eliminating other human activity such as tourism or mining (Gallup, & Sachs, 2001; Sachs, & Malaney, 2002). It is worth stressing here that at the beginning of the 20th century, the spread of malaria also affected some countries in southern Europe (Gallup & Sachs, 2001). In addition, poor health conditions could prevent the transfer

of members of the workforce, especially women (Sachs & Malaney, 2002), from low- to high-productivity industries (Gill & Kharas, 2007), and therefore block the transition between phases of economic development (Ohno, 2009). However, long-existing economic and managerial paradigms ignore the biological aspects of the human condition; this leads to even Nobel laureates being criticized for focusing on the problems of deep biological determinants of economic growth, which, according to the neoliberal view, "are not...essential for analyzing changes in history over the last 2000-3000 years" (Balcerowicz, 2014). Still, many authors, including the Nobel prize winner in economics alluded to above, Douglass C. North, note that "malaria and tsetse flies harass human settlements" (North 2014, p. 292) and suggest that "micro-organisms absent in the native environment" may have an influence on human history and economics.

Many authors see the relationship between health and economic growth as complex and mutually influential, as low levels of economic development could have a negative influence on health, and poor levels of health could have a negative influence on economic development (Subramanian, Belli, & Kawachi, 2002). This two-way influence, however, may not be the case for malaria. In contrast to and independent from other factors (including other tropical diseases as well as history and geographic location), malaria is clearly negatively correlated to economic growth. Based on this finding, some authors believe that malaria is not a derivative of poverty but rather a derivative of biologic and environmental conditions (Gallup & Sachs, 2001; Sachs & Malaney, 2002). Other infectious diseases have not been shown to have an impact on today's economic growth in previous studies (Gallup & Sachs, 2001; Sachs & Malaney, 2002), but this may be explained by the high effect size of malaria. This seems to be confirmed by recent research using molecular techniques that suggests that both mosquitoes, which are vectors, and plasmodium, which is the cause of malaria, have deep evolutionary relationships with primates and humans (Bhumika, 2017; Guelbéogo et al., 2018; Robinson et al., 2018). This can be seen on the genetic level where mutation leading to cause sickle cell anemia, that could be lethal for homozygotes (carrying two mutated genes) is beneficial to heterozygotes (with only one mutated gene) in regions devastated by malaria (Sachs & Malaney, 2002). Other publications that focus on prehistory and history suggest that plague – transmitted by fleas from rats to humans – had multiple important effects, for example on Neolithic decline (Rascovan et al., 2019), urbanization in the Middle Ages (Voigtlander & Voth, 2013), the creation of a gap between Western Europe and the Islamic world (Findlay & Lundahl, 2017), and the development of modernity in countries including Poland (Pobłocki, 2017). Such a relationship between health and economic growth is an important topic in macroeconomics, as health is an integral part of human capital (Grossman, 1972, p. 225) and may be considered a consumption good (as it has a direct impact on the formation of the utility function), as well as an investment good (as it determines the amount of time available for market and nonmarket activities).

3. Employee health and managerial science

Health is also inseparably linked with productivity and the economic viability of individuals, populations, and nations. As described before, poor health has a negative impact on the productive capacity by escalating the cost burden on business, industry, and governments, and it is a performance driver. These complex and mutually influential relations can be summarized in two statements. First, employees do not leave their personal health and health risks at home; and second, employees cannot leave behind the impacts of their workplace exposures (including occupational exposure to diseases) when they return home. Despite this, the effects of infectious disease on business activity was mostly absent from managerial literature during the early years of the HIV-ADIS epidemic; there is clearly a research gap, especially in the light of the ongoing Covid-19 pandemic and the need for social distancing. Costs due to both health-related inabilities to work (absenteeism including both short-term disability and long-term disability) and health-related limited productivity levels while at work ("presenteeism") and the cost of establishing employee support programs was described as the "ADIS Tax" by Sydney Rosen and collogues in the seminal work *AIDS Is Your Business*, which clearly stated "If you've got global operations, you've got an HIV-infected workforce. Doing something about it will save lives – as well as money" (Rosen et al., 2003). This *doing something* could be understood as a call for employee health management programs (EHMPs) with the goal of health improvement combined with a better control of expenses, protection of human capital, support for human capital, and human capital enhancements.

EHMPs are defined in managerial science by Wolfe, R.A., Ulrich, D.O, and Parker, D.F. as "long-term organizational activities intended to promote the adoption of personal behavior and organizational practices conducive to employees' physiological, mental, and emotional health." At the same time, EHMPs could be divided, as seen in Tables 1 and 2, into:

- primary prevention strategies and actions that focus on helping people stay healthy and productive,
- secondary prevention strategies that focus on identifying medical conditions earlier than they would be by typical clinical manifestation,
- and tertiary prevention strategies focused on evidence-based quality care management, return to work programs, disability management, and vocational rehabilitation,

Table 1.
Types of employee health management strategies

Strategy type	Employee health management strategies	
	Focus	**Examples**
PRIMARY PREVENTION	Helping people stay healthy and productive	Health promotion, health education, lifestyle management, safety engineering, job ergonomics and organizational design, nutrition, prenatal care, immunizations, and other wellness services
SECONDARY PREVENTION	Identification of medical conditions earlier than by typical clinical manifestations	Screening and early detection programs, health coaching, and proactive work disability prevention programs
TERTIARY PREVENTION	Evidence-based quality care management, return to work programs, disability management, and vocational rehabilitation	Providing earlier interventions, limiting the destructive and often disabling impact of serious medical conditions on the ability to function in daily life and at work; this can protect or restore productive lifestyles and reduce future costs

Adapted from: "Primary, secondary and tertiary prevention", https://www.iwh.on.ca/what-researchers-mean-by/primary-secondary-and-tertiary-prevention 15.09.2019 23:22.

Table 2.
Types of employee health management actions

	Employee health management actions	
	Goal	**Examples**
PRIMARY PREVENTION	Reducing the risk of injury or illness before the absence occurs (while the person is still healthy)	Modifying factors known to increase the risk of work disability by directly controlling a specific hazard or set of hazards, for example by increasing a worker's skills or modifying the work environment
SECONDARY PREVENTION	Occurs after illness or disability has occurred and aims at reducing long-term disability	Screening programs, biometric testing
TERTIARY PREVENTION	Occurs after illness or disability has occurred and aims at restoring productive lifestyles	Active absence or return-to-work management

Adapted from: "Primary, secondary and tertiary prevention", https://www.iwh.on.ca/what-researchers-mean-by/primary-secondary-and-tertiary-prevention 15.09.2019 23:22.

The workplace may be a key contributor to the health and wellbeing of individuals ("work and leisure should be a source of health for people" – World Health Organization, 1986) but also to the loss of health and wellbeing, as in the case of exposure to a VBD such as malaria (Gallup, & Sachs, 2001; Sachs, & Malaney, 2002). Workplace health initiatives that go beyond law requirements, as legal frameworks for employee protection exist in many countries, may be very important and uniquely positioned to leverage health and productivity. Still, such a strategy creates additional costs for companies that are higher than the costs for precautions that are required by law. This leads us to question whether the implementation of EHMPs in the case of VBDs is associated not only with improving workplace morale, but also reducing the incidence and costs of serious complications and costs for the company. Taking the second part of the above-cited Sydney Rosen quote into consideration together with the statement that "the most developed catalogue of human dignity elements developed by Nussbaum (1999) include, among others, 1) life, 2) bodily health, 3) bodily integrity"

(Pirson, 2013) and the *primum non nocere* principle, these questions should be addressed in a wider context. It is due to the nature of VBDs, which depend on exposition to vectors and transmission probability. This is also visible in Europe due to "high seroprevalence rates of antibodies to *Borrelia burgdorferi* in risk groups [e.g. forestry workers, authors' addition) … found in Europe, as much as 61.5% in northern Poland" (Haeberle, 2018). Such high prevalence led to the development of EHMPs in Poland within the Collective Work Agreement for State Employees of the National Forest Holding, which give employs the right to:

a) "vaccinations against tick-borne diseases, with a frequency resulting from medical requirements;
b) annual tests for antibodies to Lyme disease, according to medical indications;
c) group vaccinations against tick-borne meningitis at a frequency resulting from medical requirements and, in the case of Lyme disease threat, an annual check-up" (Ponadzakładowy Układ Zbiorowy, 2016).

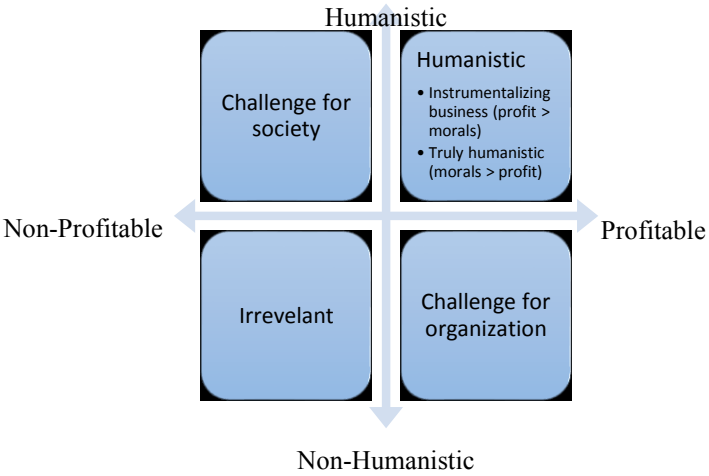
Such EHMPs in the case of VBDs are not only theoretical but also practical phenomena; they are examples of humanistic management understood as the "philosophy of management that emphasizes the interests of the employee in the manager-employee partnership" and treating employees as important stakeholders (Ferris, 2013). Therefore, EHMPs clearly lie within the managerial sphere (Wolfe, et al., 1987), as they integrate both "financial profitability as well as humanistic objectives" (Spitzeck, 2011) on the company level where "profitability is a necessary but not sufficient condition for humanistic management" (Spitzeck, 2011).

Still, such a program should be subject to ethical review in similar ways as all other medical interventions, especially those with unknown benefits. We can learn from the history of the development of new medical interventions, where good intentions can lead to harm to program participants (Brodniewicz et al., 2015). The Integrated Model of Humanistic Management (Spitzeck, 2011), as shown in Table 3, may be a valid tool for assessing employee health management programs with a VBD focus. Due to nature of VBDs, such a model should take the following points into consideration: the probability of infections; the casual relation between occupation and infection; and the severity of diseases.

4. The limitation of analysis

It should be underlined that the research analysis has some crucial limitations, including use concepts and methodology typical in macroeconomics on organization level. Therefore, they should be taken into consideration. The first is connected with the profile of Lyme disease. It is a multi-system and highly variable disease.

Table 3.
Integrated Model of Humanistic Management



Adapted from: Spitzeck, H. (2011). An Integrated Model of Humanistic Management. Journal of Business Ethics, 99(1), 51–62. https://doi.org/10.1007/s10551-011-0748-6.

Any organ system can be affected and healthcare providers may report health service data connected with the comorbidity to the National Health Fund (NFZ) as a result.

The second limitation is connected with the requirements for the billing codes in the documentation of healthcare providers and payers (NFZ) in Poland. Healthcare providers are not obliged to report full ICD10 codes (of more than three characters), which means that the incidence of a VBD and its complications (e.g. encephalitis) are understated.

The third limitation, as described in Sections 2 and 3, is the interdependence between health- and organization-related issues; this has not been sufficiently explored, in our opinion, within managerial science. This can be observed when looking at the effects of the Covid-19 pandemic.

In view of the above-mentioned limitations of the research analysis, this study included a sensitivity analysis.

5. Methods

Design

Loss of productivity during cures of infectious diseases could be associated with absenteeism, sickness levels, and decreased working times, and later with managerial time, social costs, and the need to replace employees in the last phase of a disease (Rosen et al., 2003). Taking into account that it is not possible to analyze all existing VBDs, the authors chose as a model Lyme disease, which is the most widespread VBD in Europe and Poland, especially among forestry workers (Haeberle, 2018). Furthermore, EHMPs with a VBD focus are already in place. Lyme disease is characterized by high rates of neurological abnormalities.

Encephalitis, myelitis, and encephalomyelitis affect 5% to 30% of patients; therefore, some non-communicable diseases are comorbidities of this communicable disease and impose a large economic burden on the national healthcare system and the economy.

This study is a prevalence-based top-down cost of illness study, which analyzes direct and indirect costs of Lyme disease and its complications. Prevalence is defined as all patients suffering from Lyme disease and its complications living on December 31, 2018. The research was based on data acquired from the NFZ, the Social Insurance Company (ZUS), and Poland's Central Statistical Office (GUS).

We examined the costs of a VBD (i.e., Lyme disease) together with its comorbidities (encephalitis, myelitis, and encephalomyelitis), taking sensitivity analysis into account. Analysis was performed on the country level (Poland) to avoid possible bias, which could arise from different forms of reporting infections and a disease's economic burden, as these factors are reported differently between countries. Still, it is estimated that one million people are affected by Lyme disease in Europe. The WHO estimates that annually there are 300,000 cases in the United States and 85,000 cases in Europe, and that there were 8000 cases in the UK and 22,000 cases in Poland in 2018. As per the International Association for Medical Assistance for Travelers, "the risk of Lyme disease is present in Poland. [The] risk is elevated in the Warmia and Mazury Lake regions, Western Pomerania, the Bialowieza National Forest, and the Carpathian Mountain Forest. Katowice province has the highest percentage of infected ticks." But such a statement "may be biased by over-reporting and over-diagnosis" (Czupryna at al,. 2016). However, according to Paradowska-Stankiewicz and Chrześcijańska, "In 2017, 1.48% more Lyme disease cases were registered in comparison to the previous year. A slight increase and lack of a clear trend in individual voivodeships may indicate a very high level of sensitivity." This is a similar situation to the well established case of coral reef bleaching, where "the disease mechanisms are not absolutely clear for all the different syndromes" (Cavicchioli et al., 2019, p. 580).

Direct costs

The direct costs assessed in the research in the case of Lyme disease include medical care (e.g., outpatient consultations, hospitalization) without drug reimbursement. They are calculated from the payer's perspective on the basis of data acquired from NFZ. Due to the marginal share of co-payments in the public healthcare system, the costs calculated from the payer perspective are a good estimate of social cost. Due to the lack of data, intangible costs and costs of informal care have been omitted.

In the case of complications, the calculation of direct costs was also carried out on the basis of data acquired from NFZ. These costs do not include costs of primary healthcare (PHC) or drug reimbursement. Data were extracted from the NFZ in two stages. First, patients with primary and comorbid Lyme diagnosis were selected. Then, episodes containing primary or Lyme-related comorbidity were identified for these patients. The direct costs of complications

were calculated using etiological fractions (EF) to estimate the share of comorbidity costs attributable to Lyme disease. Determining the impact of Lyme disease's complications on the healthcare system and the economy was thus based on the attributable risk methodology (Walter, 1976, pp. 829-831). In our analysis the attributable risk methodology estimates the risks of having a particular medical condition (i.e. encephalitis, myelitis, and encephalomyelitis) by Lyme disease status, then combines these risks with estimates of the proportion of the population with Lyme disease to calculate an etiological fraction (EF).

The EF is calculated based on the following:

$$EF = \frac{P(R-1)}{P(R-1)+1},$$

where:

P stands for the Prevalence Rate of Lyme disease among patients treated in Poland and R stands for the Relative Risk of suffering from encephalitis, myelitis, and encephalomyelitis among people with Lyme disease (Hogan et al., 2003, pp. 917-925).

We used panel data of patients within inpatient and outpatient care as a sample (data was received from the NFZ to calculate Relative Risk and Prevalence Rate values).

Indirect costs

The indirect costs assessed in the research include the costs of productivity losses due to premature death, work absences, or the inability to work. The indirect costs were estimated using data from the ZUS and GUS. The human capital method was used to estimate the indirect costs.

The human capital approach uses the present value of expected future earnings, often adjusted for nonmarket productivity, to estimate the potential loss to society if an individual becomes disabled or dies. In the human capital approach, morbidity costs are calculated as the value of lost productive time due to acute illness and short- and long-term disabilities (Pike, Grosse, p. 4). Future market production is typically projected based on labor force participation and employment rates, life table survival probabilities, and hourly gross earnings, generally categorized by age and sex or by age alone. Productivity costs associated with premature death are calculated as the loss of productivity estimated as the present value of future economic production over the expected remaining lifetime for someone of a given age and sex.

The costs of lost productivity due to sickness absence were calculated using ZUS data (i.e., the number of days taken off for sickness caused by diseases) and the average daily gross wage in the economy.

The costs of lost productivity related to work incapacity were calculated on the basis of the ZUS data concerning the volume of transferred social security benefits, along with GUS data on the average gross salary in the economy. These data were corrected using employment rates in the workforce.

Lost productivity caused by premature death was also included in the analysis. A calculation of these costs was carried out on the basis of data acquired from the GUS. This data included the number of deaths due to Lyme disease and its comorbidities (encephalitis, myelitis, and encephalomyelitis) divided by age, sex, and Poland's average gross monthly wages.

Indirect costs of complications were calculated using EF, as in the case of direct costs.

Sensitivity analysis

In our study, we applied point estimates of EF for Lyme disease complications. Variables used to calculate EF are subject to uncertainty; therefore, we provided limits of direct and indirect costs resulting from adjusting Relative Risk values. It should be underlined that, according to the NFZ data, encephalitis, myelitis, and encephalomyelitis affect only 2% of patients with Lyme disease. However, according to Polish physicians (experts), encephalitis, myelitis, and encephalomyelitis affect 5% to 30% of patients. Therefore, the Relative Risk value of 20% has additionally been applied (R+20%).

Costs and benefits of implementing employee health management solutions

We examined the costs and benefits of implementing employee health management solutions in the case of VBDs and their comorbidities (i.e., Lyme disease and encephalitis, myelitis, and encephalomyelitis) taking into account sensitivity analysis. As described in Section 3, EHMP can be divided into primary, secondary, and tertiary strategies. Taking available data into account, we focused on primary and secondary strategies. It should be underlined that secondary strategies are mainly based on screening programs. In Poland, the most widely used screening test is the ELISA test. It is a highly sensitive but non-specific test and may lead to false results. Therefore, employers should co-finance the use of more specific tests used by their employees, e.g. the PCR test (cost: EUR 37-46) and the LTT test (cost: EUR 116-197).

In order to estimate the costs and benefits of implementing employee health management solutions in the case of Lyme disease, the following data were used:

- data from the NFZ with related etiological fraction calculus and sensitivity analysis,
- datasets from the Social Insurance Institution and GUS using the human capital method (which includes, among others, the number of sick days).

6. Results

Costs of Lyme disease and its complications – EF standard and sensitivity analysis

The total cost of Lyme disease and its complications, taking into account sensitivity analysis, amounted to EUR 16.2-16.3 million in 2018 (Table 4).

Table 4.
The values of costs related to Lyme disease and its complications in Poland in 2018 (in millions of euros)

	DIRECT – total	INDIRECT – total	TOTAL
	Total	Total	Total
Model value	6920	9331	**16251**
Sensitivity value	6964	9380	**16344**

Source: Authors' elaboration based on ZUS, NFZ, and GUS data.

The results of this study show that there is a prevalence of indirect costs in the structure of total costs of Lyme disease and its complications.

It should be underlined that the implementation of employee health management solutions will enable earlier interventions and, as a result, limit the destructive and often disabling impact of serious medical conditions on the ability of a person to function in daily life and at work. It should be noted that the number of sickness-related absence days due to Lyme disease amounted to 145,000 in the year 2018. The implementation of employee health management solutions would reduce employers' expenditures and the costs associated with Lyme disease complications by at least EUR 2.5 million.

7. Discussion

As mentioned before, due to its nature, assessment of EHMPs with a VBD focus must take into consideration not only profitability but also the probability of infections, the causal relation between occupation and infection, and the severity of the disease. Considering all these points, National Forest Holding employee health management should be considered profitable as well as truly humanistic; as a link between seroprevalence and the occupation is limited but existing.

In managerial literature, employee health management was discussed during the early years of the HIV epidemic (Rosen et al., 2003) but was not widespread due to the short-term interests of corporations. National Forest Holding employee health management is an example of a socially and humanistically responsible agreement between employees and an employer (and not in an industry where you might expect to find such an agreement), which gives hope and could serve as a blueprint for similar actions in other organizations with climate change-

related VBD risks. Still, there is a need to obtain more data to prepare a full, valid, and longitudinal model to compare data from different timepoints of the Anthropogenic era.

8. Conclusions

This is the first attempt in evaluating the costs and benefits of implementing employee health management solutions in the case of VBDs and their comorbidities. The study shows that a significant share of the total costs (57%) of Lyme disease and its comorbidities is constituted by indirect costs. The results of this study show that the implementation of employee health management solutions similar to those implemented at the Polish National Forest Holding will decrease employer expenditures and losses, as well as reduce the costs of Lyme disease complications by at least EUR 2.5 million. The societal and long-term perspective is crucial in the process of implementing employee health management solutions.

Still, outside such a program, companies should take into consideration the following opinions from experts and physicians (Legal Alert for Supervisors, February 1, 2013) on how to deal with people suffering from Lyme disease:

- If any workers are experiencing joint pain, heart problems, or central nervous system issues, it is possible that they are suffering from Lyme disease. Most sufferers claim that they never knew they were bitten in the first place, so the disease may go untreated for a long time. People with Lyme disease can be left with a host of symptoms that sometimes last a lifetime.
- It is necessary to manage fatigue. Tiredness is the hallmark symptom of the condition. Allow Lyme disease sufferers to have flexible work schedules and, if possible, consider allowing rest breaks and providing ergonomic equipment.
- It is necessary to be aware of pain. People with Lyme disease may have chronic pain. Talk to affected staffers to see if they would benefit from changing to less physically demanding jobs. Consider whether workers' pain medications could affect their ability to work in safety-sensitive positions.
- It is necessary to cut down on stress as stress can exacerbate symptoms. Set reasonable deadlines and assist sufferers in prioritizing tasks.

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