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The case for exploring the usage of employee wellness programs for pediatric asthma control

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Abstract

The multiple socioecological determinants of asthma mandate that pediatricians develop a treatment strategy beyond the practice-based setting. To expand to a more impactful community-based role, pediatricians must look to form partnerships with groups that are capable of promoting social and environmental change. Traditionally, these groups have included schools, governmental agencies, and child care establishments. One group that is not actively being availed of are employers who have shown success in improving adult-based outcomes through wellness programs. Employers are stakeholders in pediatric asthma care through its impact on reduced worker productivity and higher health insurance premiums. An employer's focus on pediatric asthma will be a collective win for the employer and employee. The article herein describes the rationale for the focus of employers on pediatric asthma care and potential incorporation within employer-based wellness strategies.

Keywords

Adherence; corporate wellness; education; employer; tobacco smoke

The complex socio-medical and environmental contributors to pediatric asthma mandate the need for solutions outside of the traditional patient-provider relationships. One venue not well studied is the usage of employee wellness services to promote childhood asthma endpoints. Employee wellness programs generally are perceived as any employment-based intervention, policy, or activity whose primary objective is to improve health outcomes of adult employees (1). However, wellness programs can be used more broadly than simply as an employment-centered activity, but instead can be designed as an employer-sponsored benefit to promote health-related behaviors (e.g., primary prevention or health promotion) and disease management (e.g., secondary prevention) of the employee and their dependents (2). A few notable businesses have explored the usage of wellness services to address rising healthcare costs associated with their employees' dependent children. IBM had conducted a short-term observational study of a workplace-generated program to enhance parental role-modeling to improve pediatric dietary and activity practices of both adults and their children (3). Despite the economic and employee recruitment appeal that such a family-oriented

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health program may have for businesses, these sorts of initiatives are unfortunately rare in the corporate arena. This scarcity is even more disconcerting when pediatricians are actively trying to partner with community-based stakeholders to promote positive socioecological changes in caregiver behaviors—an issue that ranks among the chief determinants of control of chronic diseases like childhood asthma (4). Unfortunately, pediatricians focusing on asthma have traditionally directed their advocacy efforts using traditional community partners (e.g., schools, government agencies, and child care). With workplace wellness programs valued as a multibillion dollar industry, pediatric asthma clinicians should begin to campaign for these business-based programs to incorporate caregiver-targeted education and behavior change to target asthma outcomes (5).

Corporate leadership may not pay a close attention to children's health since it represents an overall lower cost to health plans. It is understandable that employers and subsequently wellness companies focus on the high total costs of employee chronic disease and their adult dependents. But employers would be wise to focus on the commonalities between asthmatic children and their diseased adult counterparts. A retrospective analysis of data from 2001 to 2007 among 650,000 employees throughout the United States indicated that workers with dependents diagnosed with asthma have \$862 more in dependent healthcare expenses as compared to children without asthma (6). Children with poorly controlled, severe asthma cost approximately \$5000 more per patient per year compared to children with well-controlled asthma (7). These additional pediatric costs approximate that of working adults with persistent asthma in a United Kingdom-based study (8). Moreover, a case study of employees at a large US university reported that having a child with asthma, not the far more prevalent adult-based asthma, was among the 3 most pressing health issues they faced (9).

Beyond the often discussed direct costs of asthma to the healthcare system, is the more personally relevant cost to lower wage employees who may have to forego wages when time off from work is required to attend to acute healthcare visits or provide home care for their ill child. Equally significant are employees underperforming at work due to the stress of taking care of a child with asthma. Stress could manifest with anxiety or depression among caregivers of children with asthma—both of which have been linked with poor adherence to preventive asthma care and worsened symptom severity (10,11). A review of 2002–2007 US Medical Expenditure Panel Survey (MEPS) data have estimated 0.92 days lost from school each year per child, which in turn influences caregiver demands and subsequent employee productivity (12). Lost productivity may be further compounded in women since they are far more likely to serve as the primary caregiver and have a higher likelihood of being absent from work due to childcare responsibilities (13,14).

So where should we begin to expand pediatric asthma services in workplace wellness programs beyond the traditional patient–provider model. One promising strategy could include the development of external partnerships with academic centers or other specialized pediatric vendors who are already positioned to provide asthma care services. Working with established partners with local and national credibility could be seen as a significant benefit for an employee looking to minimize any additional personal investment of time and resources required for pediatric asthma management queries. Second opinions could be sought through the usage of existing telemedicine consultation services by either the

employee or their child's healthcare provider. Moreover, several leading US academic medical centers currently provide well-established healthcare strategy packages for employers, which in turn could be further leveraged to provide an enhanced level of clinical expertise focused on pediatric asthma management strategies (15,16).

Another area that would be of particular interest for wellness companies are environmental contributors to asthma exacerbations. The focus on children and their caregivers who smoke is of significant concern in lower wage families (17). Among these lower-income households, youth are likely to be exposed to caregiver-derived, in-home smoke exposures that result in more frequent asthma exacerbations. Moreover, within these environments where smoking behaviors are more frequently observed, there is also a higher likelihood for intergenerational transmission of smoking to their adolescent children (18). In other words, the next generation of employees may suffer the same health and economic consequences as their smoking parents before them had faced.

Several companies offer tobacco smoking cessation programs of which some include direct or indirect links that provide education into the effects of tobacco on dependents' health. Some of these programs also include the use of incentives as a means for behavioral modification. Few researchers have analyzed the utility of incentives in modifying smoking behaviors contingent upon employee reported behavior change or reduced nicotine biomarkers. To the best of the authors knowledge, no workplace-based incentive program targeting smoking cessation provides rewards based on pediatric outcomes. Future employer-centric smoking interventions may benefit from the introduction of pediatric biometric data. With acknowledgment of ethical-related concerns of using and storing pediatric data, one must at least consider the added benefit of using a caregivers' altruistic attitude toward their children to promote public health. Moreover, the inclusion of children's outcomes in wellness activities allows the employer to view children as the next generation of employees. Given that employers do not want to inherit a future workforce of smokers and the subsequent higher health claims associated with secondhand smoke exposure, the focus on children's health may ultimately be an ideal long-term strategy.

Corporate leadership may better understand the value of adding such a pediatric component if evaluated by more than return-on-investment markers (e.g., productivity gains and healthcare cost savings). Rather the focus should be return-on-value measurements derived from a healthier employee's family that increases a business's competitive advantage (e.g., increased employee engagement, reduced turnover, and higher satisfaction and retention). The investment in children's health is ultimately an investment in human capital. In a competitive labor market, an employer's focus on pediatric asthma will be a collective win for the employer and employee, as well as for the healthcare community looking to jointly address the clinical and socioecological determinants that contribute to asthma.

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