Published in final edited form as:

J Law Med Ethics. 2009 ; 37(0 1): 45–54. doi:10.1111/j.1748-720X.2009.00391.x.

Assessing Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control

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America's increasing obesity problem requires federal, state, and local lawyers, policymakers, and public health practitioners to consider legal strategies to encourage healthy eating and physical activity.¹ The complexity of the legal landscape as it affects obesity requires an analysis of coordination across multiple sectors and disciplines. Government jurisdictions can be viewed "vertically," including the local, state, tribal, and federal levels, or "horizontally" as agencies or branches of government at the same vertical level.² Inspired by the successful tobacco control movement, obesity prevention advocates seek comprehensive strategies to "normalize" healthy behaviors by creating environmental and legal changes that ensure healthy choices are the default or easy choices.³ With many competing demands on diminishing municipal budgets, strategic coordination both vertically and horizontally is essential to foster the environmental and social changes needed to reverse the obesity epidemic. No single agency at any level of government can be solely responsible for ensuring the protection and promotion of the public's health; multiple agencies that traditionally have little or no historic connection to a state or local health department must be allies in achieving desired results related to obesity.

Complex public health challenges, such as obesity, demand trans-disciplinary and multi-sectoral strategies, resource sharing, and political support. However, coordination between and within government agencies is hindered by several factors. First, statutes and ordinances typically grant agencies narrowly defined powers. Second, given such limited legal authority, government agencies traditionally focus their programs on specific subject areas (e.g., public safety and law enforcement vs. housing vs. transportation, etc.). The agencies' organizational culture and staffs become subject matter experts within these programmatic silos with few incentives for agencies to reach out to coordinate vertically or horizontally. One government agency (e.g., a public school) is isolated from the related work of another agency (e.g., a local parks department) that shares a common commitment to the same target audience. Further, neither agency is even aware of the commitment of a third (e.g., a health department) to increase opportunities for healthy eating and physical activity in a community. As a result, agencies may work in isolation with under-funded mandates, while opportunities to share facilities, fiscal resources, and personnel are lost. Ultimately, efficiency among many agency agendas is hindered.

Inefficiency in obesity prevention and control efforts that stems from a lack of coordination around law-based efforts can only aggravate the existing health disparities that already contribute to this issue. As it is, the economically and socially disadvantaged in our society, who live in communities with more fast food, fewer supermarkets, the lowest employment and highest crime rates, suffer a disproportionate burden of obesity-related diseases.⁴ Long and healthy lives are tied to where people live, to income, wealth, education, race/ethnicity, immigration status, and to the degree of inequality in society, as well as other physical and social determinants of health.⁵ If the income and other social disparities between African Americans and whites were eliminated, it is estimated that over 886,000 premature deaths in African American communities over the past decade would have been avoided.⁶

This paper assesses the current status of both horizontal and vertical coordination for law-based obesity prevention and control efforts. The discussion predominantly focuses on horizontal coordination via voluntary government approaches and public-private partnerships, yet it should be noted that other means – such as compelled coordination structures, formal rulemaking, and other sorts of regulatory apparatus – are sometimes necessary to affect change. We touch on just a handful of strategic coordination efforts across jurisdictions from the standpoint of four settings: local government, public schools, health care institutions, and workplaces to illustrate this overall theme. We highlight gaps in the coordination of law-based approaches to obesity, which the companion paper “Improving Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control” addresses in detail.

I. Community Settings: Horizontal Coordination among Government Agencies

Various local government agencies provide excellent examples of horizontal coordination and are emerging as the principle actors for adopting *creative* legal strategies to address the nutritional and physical activity factors associated with obesity. We focus in this section on the regulatory and fiscal powers of primarily local governments that help communities improve access to healthy foods and redesign their built environments to encourage greater levels of physical activity.

Recent regulatory activities led by local health agencies to support healthy eating include menu labeling requirements and trans fat bans. For example, the New York City menu labeling laws were first successfully challenged in court by the state restaurant association as too restrictive. The Federal District Court outlined in their opinion why federal law preempted the local statutes. Cooperating closely, the New York City Law Department and the Department of Health & Mental Hygiene drafted an amendment to the city health code that met the needs of the health department; this amendment implemented menu labeling in a manner that withstands legal challenge.

Another example of horizontal coordination includes the recent trend of health departments embracing Health Impact Assessments (HIA), which provide decision makers with information – arguably the evidence for the record – about how a policy, program, or project may affect the public’s health. HIAs are being used to influence access to and distribution of food, and recreational opportunities⁷ and to create mitigation measures for projects that are found to be potentially harmful to public health.

When health departments coordinate with other government agencies, their influence can expand well beyond the traditional public health approaches to address obesity prevention and control. Collaborative relationships between municipal health and urban planning departments have led to limitations on the number, location, and density of fast food restaurants. Likewise, health department collaboration with taxing agencies have led to the adoption of “junk food” and soda taxes; with recreation departments to the development of parks and bike paths; and with economic development departments with incentives to supermarkets to operate in underserved areas, expansion of mass transportation, and provision of lighting and playgrounds in housing developments.⁸

Such taxing, urban planning and zoning laws, and economic and community development strategies can further public health goals by changing the landscape of our cities and towns. The three land use planning approaches – comprehensive long-term plans, land development/zoning codes that regulate private activities, and capital improvement plans that dictate public investments – can advance obesity prevention as a priority in planning

efforts and infrastructure improvements. Table 1 describes the various ways that horizontal collaboration between government agencies can further public health agendas and lead to efficient service delivery.

II. School Settings: Vertical and Horizontal Coordination

Public schools, which offer safe places for physical activity and provide children complete meals through their food programs, are affected by laws and legal authorities at the federal, state, and local levels. In this section we consider how coordination vertically and horizontally affects the ability of schools to provide access to physical activity and healthy foods. While there are excellent examples of coordination, there remains a significant gap in potential service delivery.

(a) Access to Physical Activity

Of the many areas where vertical and horizontal coordination could increase opportunities for physical activity within school settings, two are discussed below: safe-routes-to-school programs and joint use partnerships.

SAFE-ROUTES-TO-SCHOOL (SRTS) PROGRAMS—SRTS programs are a multi-jurisdictional example of collaboration driven by legislation that begins at the federal level with the Department of Transportation, requires coordination at the state level, and results in funding at the local level. Table 2 outlines the key elements of local SRTS programs. The purposes of the programs are to enable and encourage children to walk and bicycle to school by making it a safe and appealing choice. The program requires horizontal coordination among government agencies to implement projects that improve safety, reduce traffic, improve air quality, and promote a healthy and active lifestyle from an early age. The program also goes beyond government agency coordination and embraces community leaders, parents, and schools. Across the nation, SRTS programs encourage and enable more children to walk and bike to school safely.⁹

As the SRTS programs are in their relative infancy and while local jurisdictions adopt laws and legal authorities to ensure safe walking and bicycling routes, the program can be in jeopardy of extinction before it reaches full potential. *Transportation Tomorrow* is a 2008 federal government report that includes recommendations for the future of federal transportation policy, programs, funding, and revenue generation¹⁰ that ignores Safe-Routes-to-School programs and more generally, walking and bicycling. The report neither recognized nor evaluated the surface transportation system's considerable impact on public health through the built environment's impact on obesity, physical inactivity, and injury.¹¹

JOINT USE PARTNERSHIPS—Joint use partnerships focus on horizontal coordination among agencies within the same or neighboring jurisdictions that reflect the willingness of school districts to open school grounds for after-hours recreational uses. They may involve the sharing of outdoor play areas, sports fields, gymnasiums, swimming pools, classrooms, computer rooms, and libraries. Forming the requisite partnerships between school districts, local government agencies, and community-based organizations is a complex, but surmountable, task. Despite serving the same or similar constituencies, these entities rarely have a history of working together. More commonly, school districts and other agencies have different funding sources and cycles, different institutional cultures, competing political agendas, and lack of state policy guidance.¹²

The partnerships, typically formalized through the creation of a joint use agreement, provide an opportunity for school districts and other government agencies (e.g., park and recreation departments) or nonprofit entities (e.g., youth sports programs) to increase a community's

access to recreational spaces and programs.¹³ The agreements are contracts that articulate the facilities to be shared and the conditions of the shared uses, specifically the financial responsibilities, maintenance and operation responsibilities, and legal obligations, such as liability insurance coverage. The ultimate success and ongoing sustainability of the joint use partnership hinges on the clarity, comprehensiveness, and political support of the formal joint use agreement.¹⁴ Because school districts often worry especially about their potential legal liability arising from opening up their school properties outside of school hours, careful attention to this feature of the agreement is critical.

Codified examples of joint use agreements exist. For example, in DeKalb County, Georgia, the county considers school playgrounds to be community parks allowing for after school use, maintenance to be performed by county park personnel, and liability questions to be shifted away from the school.

(b) Access to Healthy Foods

The recently passed federal Farm Bill legislation¹⁵ expands the federal *school lunch program*¹⁶ by increasing the number of elementary schools receiving free fresh fruits and vegetables when the majority of children are eligible for free or reduced price snacks and meals. *The program, which had operated in only 14 states with \$9 million in funding, will become a national program with \$40 million available in the 2008–09 school year; in 2012, the program would be funded at nearly eight times its current size – \$150 million each year with annual adjustments for inflation.*¹⁷

This bill, which is enacted at the federal level and administered by the United States Department of Agriculture (USDA), gives schools new opportunities to effectuate improved school nutrition policies articulated in their school wellness plans and opens new opportunities for horizontal public/private coordination – especially through Farm to School programs that currently operate in almost 2000 schools across the country. In the past, USDA guidance actively discouraged procuring foods from local vendors as a potential violation of the interstate commerce clause. Thankfully, in the recent reauthorization of the Farm Bill, this concern was dropped and now schools can buy and feature locally produced farm fresh foods such as fruits and vegetables, eggs, honey, meat, and beans on their menus; they can also incorporate nutrition-based curriculum and experiential learning opportunities through farm visits, gardening, and recycling programs. Farmers have access to a new market through schools and connect to their community through participation in educational programs designed around local food and sustainable agriculture.¹⁸ As schools work to eliminate foods of minimal nutritional value from their vending machines and other sales venues, the Farm to School programs can introduce healthy products into schools' food culture and practice.

III. Health Care Settings: Coordination to Affect Regulatory Changes

Access and use of the health care system by both children and adults is significantly associated with health insurance coverage.¹⁹ Over 50% of uninsured adults have no regular source of health care and regularly report delaying or going without care.²⁰ In 2006, more than 12% of children and over 20% of adults aged 18–64 were uninsured.²¹ More than one-fifth (22.6%) of the uninsured that year rated their health as fair to poor.

Being uninsured strongly links to low family income and unemployment,²² both of which are risk factors for obesity.²³ Despite improving economic conditions, during 2004–2006 the number of uninsured climbed by 3.4 million, including 1 million additional uninsured children. This rise followed a 6 million-person increase during the first four years of the decade.²⁴ During times of economic downturn, the ranks of the uninsured increase rapidly;

estimates show that each 1% increase in the unemployed translates into a 1.1 million rise in the uninsured.²⁵

The Medicaid program offers comprehensive coverage for low-income adults and children who are eligible. For children, Medicaid is supplemented by the State Children's Health Insurance Program (SCHIP). Medicaid's pediatric benefit for children, known as early and periodic screening diagnosis and treatment (EPSDT), offers comprehensive, regular health assessments including assessment of nutritional risk and weight.

Although the majority of obesity prevention and control strategies are implemented in non-health settings, the health care setting is important for obesity efforts, particularly those targeting children. Incorporating third-party reimbursement for interventions in the health care setting focused specifically on diet and physical activity can reinforce school and community programs with similar intentions.

Millions of dollars are spent each year on diets, diet plans, and weight loss strategies with no scientific basis, due in part to an uninformed population, a lack of oversight, and in part to insurance regulations that direct care outside of the health care system for lack of reimbursement. Health care providers are respected and listened to by parents and children because they are licensed and rely on scientifically supported treatments. Health providers serving overweight and obese patients can also identify additional and underlying health risks related to obesity, and promote a range of health and lifestyle interventions.²⁶ Because obesity tends to be a "family trait," reimbursing for interventions delivered through the health care system may place providers in the best position to influence entire families about obesity prevention and control.²⁷ For example, pediatric health care providers can influence adult health by advocating for family lifestyle changes and regular access to medical care for adults of all ages can be a critical step in prevention of weight gain, identification of risk, and interventions to treat obesity and its sequelae. Currently, the predominant policy for third-party reimbursement focuses much more heavily on treatment of the health consequences of obesity instead of preventing excess weight. In the case of overweight, few interventions allow reimbursement and require the patient to become obese and display related medical conditions to receive care. Despite the lack of adequate reimbursement, many physicians do devote time and effort to provide the nutritional counseling and support, general lifestyle and mental health screening, and counseling necessary to help people effect behavioral change.

An additional coordination challenge surrounds BMI and obesity screening for schoolchildren. At present, the results of screening do not necessarily lead to interventions for overweight or obese children either because the information is not conveyed to the parent in an understandable manner, or the parents do not take action based on the information possibly due to lack of insurance. Some failure to report both inside and outside the school setting may relate to issues of student privacy and patient-provider²⁸ as well as employer-employee²⁹ confidentiality, which hamper development of shared information systems, thus possibly increasing the likelihood of follow-up.

IV. Workplace Settings: Government and Private Sector Coordination

The workplace is a primary channel for reaching working adults with health promotion programming,³⁰ and employers are increasingly turning to such programming to help contain costs, improve productivity, enhance satisfaction, create healthier workplace cultures, and improve their standing as socially responsible organizations.³¹ The last decade has seen a rapid expansion in the number of employers offering comprehensive workplace health promotion (WHP) programs that emphasize healthy eating, physical activity, and weight management and include social, environmental, and policy influences beyond

individual-level factors.³² Increased participation in these programs is hampered by absent or inadequate coordination, as the legal and public health implications of these various strategies remained largely unexplored. Table 3 displays various types of WHP strategies and critiques effectiveness and potential problems associated with each.

Although the Fair Labor Standards Act does not require employers to offer wellness benefits or employee assistance programs, federal law incentivizes such activities through the establishment of policies aimed at encouraging the use of the workplace to improve health. As a general matter, the Health Insurance Portability and Accountability Act of 1996 prohibits employers from denying eligibility for employee benefits based on a health factor, or from varying benefits, including variation in premiums and cost-sharing. An important exception, however, is the flexibility to vary premiums and cost-sharing for employees who satisfy the requirements of formal workplace wellness programs that meet federal standards³³ where participation can be linked to reduced premiums, cost-sharing, and other financial rewards.³⁴

Nonetheless, even when available, insurance coverage may be significantly limited due to high deductibles and coinsurance that hamper coverage for low- and moderate-income families. Employer-sponsored plans and private health insurance coverage may (particularly in the case of the small group and individual market) limit or exclude coverage for persons with underlying conditions, including obesity. These types of restrictions may be widespread.³⁵

Many approaches can circumvent obesogenic features in the workplace environment. Incentives can be used to promote active commuting, walking routes can be established both inside and outside of worksites, and breaks can be provided to allow employees to participate in physical activity.³⁶ Healthful foods can be offered in cafeterias and vending machine options and related pricing strategies can be designed to encourage the purchase of more healthful foods.³⁷ Employers might more frequently negotiate with health plans to reimburse participation in obesity intervention programs.

Health benefit coverage arrangements for comprehensive preventive health treatments blended with other types of employee assistance and benefit plan interventions that are permitted under federal and state employee benefit laws and that address health needs that are considered non-insurable, such as group nutrition counseling and exercise represent promising targets. Federal and state lawmakers could consider a combination of grant and tax incentives to encourage these “extracontractual” benefits that complement more traditional health insurance coverage.

In this vein, the Medicare Modernization Act (MMA) of 2003³⁸ contained provisions whose purpose was to stimulate the market for tax-favored Health Savings Accounts (HSAs) linked to high deductible health plans. Since passage of the MMA, growth of the HSA/high deductible plan market has been significant, with more than 6 million persons enrolled in HSA-style plans as of 2008.³⁹ To the extent that individuals can use their savings accounts to subsidize the purchase of health, exercise, and nutrition services that aid in the prevention of obesity, this may offer a means of financing certain health interventions otherwise considered uninsurable. At the same time, this additional financial aid may be offset by high and unaffordable deductibles for uncovered services, as well as high cost-sharing. With this caveat, it is important to note that the use of employer-funded HSAs might be used to encourage employers and employees to make health investments not typically covered through insurance, such as weight-related programs (e.g., fitness center fees, nutritional counseling).

Finally, although extra-contractual health supports that complement insurance are important, *having* health insurance is key to assure that health consequences of obesity are identified and addressed as early as possible. Of particular importance is assuring comprehensive coverage for employees of lower socioeconomic standing, given their disproportionate burden of obesity,⁴⁰ associated comorbidities,⁴¹ and limited access to effective intervention options.⁴²

VI. Summary of Gaps Related to Coordination of Law-Based Efforts across Jurisdictions and Sectors

Overweight and obesity are issues that affect two-thirds of the U.S. adult population. We can see the overweight and obese in our schools, workplaces, and communities among children and adults alike. While obesity appears to disproportionately impact African Americans and Hispanics, it is seen in every sector of society. Coordination to address obesity requires effort implemented vertically and horizontally among government agencies, as well as between governments and regulatory commissions and private industry.

In the community, there are creative examples of government agencies working together to implement a coordinated approach to obesity prevention and control. HIAs, which augment environmental impact assessments in new development areas, inherently require coordination, and efforts to implement food bans and menu labeling are bridging health departments, local offices, and legislatures. While these activities represent progress, more cities and states must coordinate between agencies horizontally to succeed in adopting effective population-level obesity prevention and control strategies.

Progress is also clear in examples of successful vertical coordination between various levels of government. Improvements to the federal school lunch and breakfast programs, as well as SRTS programs, exemplify how laws and legal authorities created at the federal level result in progress at the local level. While these examples of coordination demonstrate improving programs, current legislation may be further refined to create access to healthier foods and develop more creative strategies for increasing physical activity for both children and adults.

Rates of overweight and obesity cannot be effectively controlled without partnership between government and the private sector. Worksite health promotion programs provide one example where incentives to business have created opportunities for working populations to increase activity. Similarly, the creation of Health Savings Accounts under the Medicare Modernization Act creates tax incentives that allow individuals to purchase health, exercise, and nutrition services that otherwise may not be available. Private industry reacts positive to incentives programs and these examples merely represent the tip of the iceberg of available opportunities to build partnerships between government and the private sector for obesity prevention and control.

Perhaps the biggest gap in obesity prevention and control efforts with respect to coordination issues is the need for improvements in the regulatory structure that oversees insurance and third-party reimbursement. While the lion's share of obesity prevention and control efforts take place outside of the health care system, overweight and obesity contribute substantially to morbidity and health care costs in the U.S. Third-party reimbursement for health care relating to overweight and obesity prevention based on sound scientific principles is a gap that must be addressed.

VII. Conclusion

Coordination of law based efforts across jurisdictions and sectors, particularly between government agencies and private-sector partners is a critical component to success in reversing current obesity trends. Each sector of society needs to buttress and reinforce opportunities to increase access to physical activity and healthy foods. By addressing obesogenic trends simultaneously across a spectrum of settings, we can reverse the current trends and commit to a healthy future.

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Table 1**Non-Health Agencies' Contributions to Obesity Prevention**

Planning Agency Activities
Enhanced physical activity:
<ul style="list-style-type: none"> • Create gathering places that promote social and community connection through mixed use developments and mixed housing types • Encourage transit oriented development to maximize the use of mass transit opportunities • Adopt form based zoning codes to facilitate more compact, mixed use developments • Ensure sidewalks and parks? are available, repaired, and well-lit • Install protected bike paths along major commute sheds and to/from schools • Implement traffic calming techniques along pedestrian and bicycle corridors
Increase access to healthy foods:
<ul style="list-style-type: none"> • Expand farmers markets in low income areas • Reform zoning codes to allow for more community gardens • Allow urban farming, the sale of produce and meat in corner stores, • Eliminate sidewalk obstruction bans preventing produce sales • Curtail liberal zoning for fast food restaurants
Economic Development Agencies
<ul style="list-style-type: none"> • Issue financial incentives (e.g., bonds, tax increment financing, etc.) to improve blighted neighborhoods • Establish policy preferences to encourage the development of projects that provide new grocery stores and compact, walkable transit villages to these distressed communities.
Park and Recreation Agencies
<ul style="list-style-type: none"> • Adopt capital improvement plans for equitable distribution of parks, recreational facilities, trails, and open spaces for physical activity throughout a community • Ensure foods sold in park areas are healthful and nutritious; prohibit foods of minimal nutritional value • Work with law enforcement agencies to maintain safety along these assets to enhance use
Law and Code Enforcement Agencies
<ul style="list-style-type: none"> • Work with park and recreation agencies to maintain safety in parks and opens spaces, as well as neighborhood streets and businesses • Work with housing and code enforcement agencies to enforce nuisance abatement powers to remove abandoned buildings and blight that may inhibit neighborhood physical activity • Include compliance with menu labeling requirements in restaurant inspections
Metropolitan Planning Agencies
<ul style="list-style-type: none"> • Manage federal and state transportation funding to allocate and prioritize regional transportation projects that encourage walking and cycling as viable modes of transportation • Facilitate collaboration among local governments to plan for regional transportation needs • Allocate a greater percentage of funds for projects that promote transit, walking, and cycling • Ensure transportation routes connect low-income communities with grocery stores and other food venues

- Adopt special standards for street design and width that can favor walking and biking as advocated by the National Complete Streets Coalition.

Table 2**Key Elements of Local Safe-Routes-to-School Programs¹⁰**

Health benefits of kids walking and bicycling to school	<ul style="list-style-type: none"> • Two recent studies have found that walking to school is associated with higher overall physical activity throughout the day.¹¹ There are many potential benefits of physical activity for youth including:¹² • Weight and blood pressure control • Bone, muscle, and joint health and maintenance • Reduction in the risk of diabetes • Improved psychological welfare • Better academic performance¹³
Key elements of safe walking and bicycling environments	<ul style="list-style-type: none"> • Neighborhood schools that are within walking and bicycling distance from homes • Sidewalks or bike-paths that connect homes with schools • Improved opportunities to cross streets (such as the presence of adult crossing guards, raised medians or traffic and pedestrian signals) • Slow vehicle speeds accomplished through roadway safety measures (traffic calming) and/or police enforcement where needed
Local collaboration needed for safe routes to schools programs	<ul style="list-style-type: none"> • Children - to provide them with basic safety education, such as how to cross streets, obey crossing guards and be visible to drivers. • Parents - to create awareness of the need for pedestrian and bicyclist safety education and opportunities to walk and bike and by practicing safety skills with their children. • Drivers - to alert all drivers to the presence of walkers and bicyclists and the need to slow down. • Law enforcement - to enhance pedestrian and bicyclist safety with school zone enforcement. • Local officials - to identify changes needed to improve walking and bicycling conditions around schools.

Table 3

Types of WHP Programs Offered Employees

WHP Strategies	Examples (1)	Effectiveness	Potential problems
Incentive strategies	Discounts, co-payment supplements, rewards for those meeting lifestyle goals	Clinically significant weight loss could be promoted by providing moderate financial incentives. ³⁷ Incentive strategies are best if positioned to drive greater participation in WHP programming and expanding the reach beyond only the healthy, motivated employees to those who might benefit more from intervention. ³⁸	Incentive programs are coming under increasing scrutiny. And strategies that institute differential premiums based on an employee's weight have come under fire from both the public health and regulatory communities that have criticized both their effectiveness and legality.
Interpersonal support strategies	On-site counseling, telephonic coaching, discounted commercial program access, reimbursement for comprehensive nutritional counseling	These strategies are extremely promising, given that the strongest evidence of weight loss efficacy is found for interpersonal support approaches. ³⁹	Many employers restrict these offerings to the highest risk employees, thereby diminishing the effectiveness of the strategy. A preferred approach would be to offer a range of interpersonal support strategies, varying in intensity (perhaps depending on baseline weight status) to an entire population.
Comprehensive strategies	Fitness challenges, prompts to increase physical activity, improving worksite-based food choices and calorie labeling, walking programs, wellness expos	Comprehensive strategies are the most promising interventions. ⁴⁰ Currently, <7% of U.S. workplaces offer comprehensive WHP programs that meet all five components. ⁴¹	Comprehensive programs can be cost effective, but they do not generally result in cost savings. ⁴² Further, the economic value associated with weight loss may differentially accrue to parties other than the employer (e.g. health plans, health systems, and individuals).