

Ohio Education Association
Survey of School District Health and Life Insurance Plans, 2006

OEA Research and Information Systems
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Executive Summary

OEA distributed a health and life insurance survey instrument to the public school community to identify the health and life insurance plans that were available to staff in January 2006. Sixty-three percent of those surveyed responded. Given the pattern of responses, the results can be generalized to school districts throughout Ohio.

When treasurers were asked to identify the medical health insurance plan designs districts offered to their employees, they indicated that seventy-two percent of plans available were managed care plans: 61 percent were preferred provider organization plans (PPO), 7 percent were health maintenance organization plans (HMO), 2 percent were point of service (POS) plans, and 2 percent were high deductible health plans coupled with health savings accounts (HDHP/HSA). In loss financing terms, sixty percent of the districts surveyed indicated that they retained medical health insurance claim risks by self-insuring their medical health insurance plan; forty percent transferred the risk to a third party.

On a per employee per month (PEPM) basis, medical and pharmaceutical plan premiums for certified staff increased 6 percent from January 2005 to January 2006; the medical and pharmaceutical plan premiums available for classified staff increased 13 percent during the same time period. In January 2006, districts charged certified staff an average of \$25 per single and \$84 per family for those benefits, and charged classified staff \$26 per single and \$87 per family contract. Moreover, the out-of-pocket costs for these plans have increased from January 2005 to January 2006. The average managed care plan offered in January 2006 is associated with a 90 percent in-network and 80 percent non-network coinsurance differential, a \$200/single, \$400/family deductible non-network and an out-of-pocket maximum of \$1,200/single, \$2,400/family non-network.

In January 2006, three-tier retail prescription co-payments averaged \$10 for generics, \$15 for brand-name formulary drugs and \$30 for brand-name non-formulary drugs for 30-day supplies. For mail-order prescriptions, the average co-payments were \$10 for generics, \$30 for brand-name formulary drugs and \$40 brand-name non-formulary drugs for 90-day supplies. These costs represent substantial increases over January 2005 prescription drug copayment levels.

Dental plans were offered to 82 percent of school districts, costing \$39 per single and \$72 per family on average; employees typically paid no portion of the premium. Vision plans were offered to 56 percent of school district staff, costing \$9 per single and \$19 per family; employees typically paid no portion of the premium. The average value of the life insurance policies offered to employees was \$33,000.

Only 36 percent of districts reported the existence of a formal labor-management health insurance committee in place that is empowered by collective bargaining language to assist in the procurement of the employer's health insurance plans. Moreover, only 9 percent of the districts reported that their board of education had passed a procurement policy that requires competitive bids or proposals for the health insurance plans it provided to employees. Similarly, when asked if the board of education had passed a resolution requiring the full disclosure of all fees, commissions, bonuses and other gratuities from the insurance broker, consultant or independent agent, only 8 percent of districts were able to respond in the affirmative. Since 2003, the OEA has advocated through its legislative policy the necessity of competitive bidding and full disclosure in health insurance procurement.

Overview

The Ohio Education Association (OEA) Research and Information Services Division distributed a six-page school district health and life insurance survey to 814 school districts, joint vocational school districts, educational service centers and mental retardation and developmental disabilities (MRDD) facilities in late December 2005 asking for information on the health insurance plans in force in each institution on January 1, 2006. By February 24, 2006, 513 institutions had responded (Table 1).

Table 1: *Response Rate by Institution Type*

		Districts Surveyed	Responses by Region of Ohio				Total Responses	Response Rate
			Northeast	Northwest	Southeast	Southwest		
Type of	City	197	50	19	27	30	126	64%
Employer	Exempted Village	49	12	11	4	11	38	78%
	ESC	60	4	8	10	8	30	50%
	Local	375	74	70	52	50	246	66%
	JVSD	49	15	7	9	8	39	80%
	MRDD	84	10	11	7	6	34	40%
Total		814	165	126	109	113	513	63%

While the response rates from the school districts, joint vocational school districts and educational service centers were sufficient for the present purpose, the lack of response from the ESC and MRDD facilities did not allow for generalizability. The current report will thus reflect only the results of the school districts and joint vocational school districts (67 percent response rate across city, exempted village, local and joint vocational school districts).

The content of this year’s survey focused upon medical and prescription benefits and district procurement practices. Accordingly, the survey content contained 22 questions with entries for information according to the following schedule: medical (71), prescription (48), dental (14), vision (14), life insurance (5), flexible spending accounts (4), funding (2), health insurance committees (1), health insurance procurement (13), and health insurance brokers/consultants (3). The survey instrument is available through a written request to the author.

Generalizations to Ohio school districts and joint vocational school districts not responding to this survey instrument could be accurate, given the calculation of an estimated variance and bound on the error of estimation term. Please see the section entitled “Sample Size” in the Appendix for details. Questions and comments can be directed to the author, Gregg Gascon, (614) 227-3019 or gascong@ohea.org, at the Ohio Education Association. The author would like to thank Laura Simonini and Krista Shaw for their data entry work on behalf of this project.

Medical Plans

Boards of education are permitted wide latitude under O.R.C. §§ 9.833, 9.90 and 3313.202 to offer a variety of insurance benefits to employees. Those that are most common to Ohio school districts are the subject of the present survey. The most expensive insurance plan for most districts is the medical plan, the subject of the first series of questions on the survey.

Districts were initially asked to identify the number and types of medical plans available to employees. The modal response was one while the range was five; that is, most school districts offered just one plan, though at least one district offered six medical health insurance plans.

Medical plan designs

Plan design accounts for a great deal of the control exercised by a plan over utilization. The standard continuum is reflected in the first five categories of plans in Table 2, with plan designs ordered from least to most controlling. The sixth category represents a relatively new plan design in the public school market, the high deductible health plan/health savings account (HDHP/HSA).

Table 2: *Medical Plan Design Distribution*

	Type of Employer				Total	Percent
	City	Exempted Village	Local	JVSD		
Medical Plan Base	13	3	34	5	55	9%
Type						
CMM	33	10	53	6	102	18%
PPO	102	31	193	31	357	61%
POS	5	2	5	2	14	2%
HMO	19	4	16	3	42	7%
HSA	5	1	5	1	12	2%
Total	177	51	306	48	582	

According to Table 2, the most common plan design available to school district employees by far is the preferred provider organization (PPO). Its ubiquity stands in stark contrast to the two least-offered plan designs, point of service (POS) and high deductible health plans coupled with a health savings accounts (HDHP/HSA), each of which represent 2 percent of the market. Crosstabulations of medical health insurance plan type by expenditure flow model category and by state region supported this pattern.

Enrollment

Eighty-nine percent of the medical health insurance plans reported by treasurers were accompanied by enrollment data. The vast majority (92 percent) of school districts maintain a two-tier rate system (i.e., single/family) rather than a four-tier rate system (i.e., single, single plus child, single plus spouse, family) for medical health insurance plan participation. Thus, actual enrollment per medical health insurance plan is 29 percent single, 1 percent single plus child, 2 percent single plus spouse, and 68 percent family. If the two-tier structure (i.e., single/family) is considered separately, actual enrollment is 29 percent single and 71 percent family. The median take-up rate (the number

enrolling in a plan divided by the number eligible to take the plan) among all medical health insurance plans offered to certified staff was 79 percent.

Joint purchasing arrangements

Sixty-two percent of the districts surveyed indicated that they participated in some type of joint purchasing arrangement (e.g., consortium or council of government) for health insurance. While these arrangements are subject to certain state laws (e.g., O.R.C. §§ 9.833, 167.03), their health insurance procurement standards and operations show wide variability in practice.

A crosstabulation of joint purchasing arrangement by employer type found that employer type made a clear difference: local school districts were much more likely to participate in such arrangements, while city school districts were less likely to participate ($\phi = .286, p < .05$). This finding is consistent with the observation that many smaller employers join cooperatives to increase their purchasing power.

Loss financing

Sixty percent of the districts surveyed indicated that they retained medical health insurance claim risks by self-insuring their medical health insurance plan; forty percent transferred the risk to a third party. This pattern is consistent with previous surveys.

In a fully-insured health insurance plan, the administration, insurance and benefits are provided by the insurance company. Fully-insured plans in Ohio are generally subject to state law and Ohio Department of Insurance regulations. In a self-insured health insurance plan, the third party payer provides the administration, contracts with a reinsurance firm for insurance and works with the plan sponsor to determine benefits.

Self-insured plans are generally subject to the Employment Retirement Income Security Act of 1974 (ERISA), though non-Federal (state and local) government plans are not covered by the Act. Non-Federal governmental employers who self-insure benefits may also elect to exempt their plan from the Health Insurance Portability and Accountability Act (HIPAA) and its amendments, the Newborns' and Mothers' Health Protection Act of 1996, and the Women's Health and Cancer Rights Act of 1998.

Within loss financing category, several health insurance companies and third party administrators comprise the bulk of the Ohio school district market. In the self-insured market, the top four third party administrators named by respondents to the survey included Medical Mutual of Ohio (40 percent), Aultcare (10 percent), Anthem Blue Cross & Blue Shield (8 percent), and Core Source (7 percent). The top four health insurance companies identified by respondents who offered fully-insured medical health insurance plans were Anthem Blue Cross & Blue Shield (34 percent), Medical Mutual of Ohio (27 percent), United Healthcare of Ohio (23 percent) and Kaiser Permanente (5 percent). It should be noted that a number of treasurers did not identify their loss financing strategy (12 percent), while 6 percent did not submit a third party administrator or health insurance company name.

Medical health insurance premiums

Empirical analyses of employer health plan prices demonstrate that the most important factor accounting for health plan premium variability is treatment costs (Eichner, McClelland & Wise, 2000). When comparing health insurance premium data, it is essential to examine aggregate utilization and the plan’s patient, plan and provider management strategies in order for any comparison to be valid.

According to Santerre and Neun (2000), three general strategies can be utilized in a health plan to contain costs. First, patient management strategies can be used to contain costs at the point of service; common strategies include deductibles, co-payments and coinsurance. Second, plan management strategies that can be utilized include eligibility provisions, networks, gatekeepers and pre-authorization. Third, plans can provide provider management strategies such as utilization review, physician profiling, practice guidelines and formularies. The present survey did not collect aggregate utilization data, nor was it possible to collect data on plan and provider management strategies. However, the survey instrument did tap patient management strategies, and these variables will be offered later in this paper to illustrate the tremendous variability within plans offered to Ohio public school employees.

Table 3: *Certified Monthly Medical Plan Premiums by Prescription Drug Plan Inclusion*

		2006		2005	
Certified Premium, Plan Includes Rx Plan		Single Total Premium	Family Total Premium	Single Total Premium	Family Total Premium
No	N	103	102	99	99
	Median	\$317	\$793	\$297	\$746
Yes	N	468	468	450	451
	Median	\$370	\$944	\$351	\$892

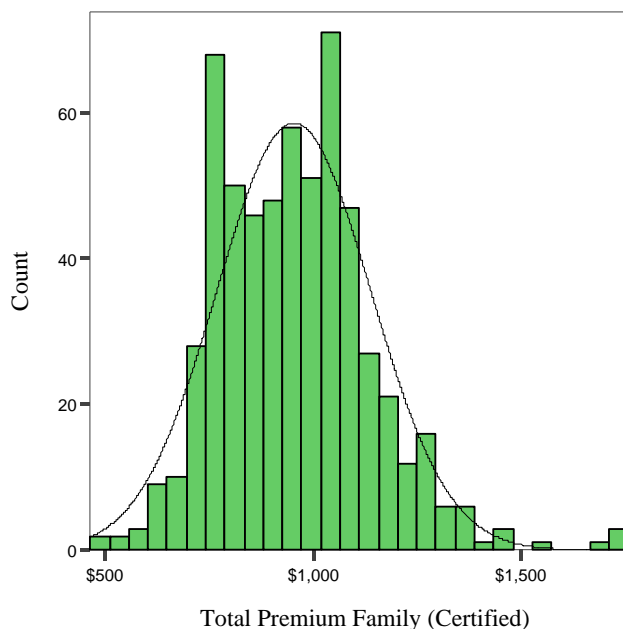
Thus, the monthly premiums of medical insurance plans without prescription drug coverage offered to certified staff under single and family contracts have increased an average of 5 percent and 6 percent, respectively, from January 2005 to January 2006, while the monthly premium for medical insurance plans with prescription drug coverage offered to certified staff under single and family contracts have increased an average of 7 percent and 6 percent, respectively, during the same time frame. A graphic examination of all medical insurance plans demonstrates the variability within the distribution of all medical health insurance plans (Figure 1).

The graph visually reinforces earlier studies of the non-normal characteristics of the medical health insurance premium distribution among plans available to staff in Ohio public school districts. By reviewing the frequency of rates by interval width, the presence of two significant cost structures quickly become evident at the \$750 and \$1,050 bands. The health plans which contribute to each of the bands can be examined in the raw data file. While no discernable pattern among districts is found in the latter band, the former includes the health plans offered by the Stark County Council of Governments (COG). In other words, without the inclusion of health plan data from the Stark County COG in the present survey, the increase in medical and prescription drug plans in the Ohio public school district market would have been considerably higher. While it might be tempting to draw an association between joint purchasing arrangements and lower health plan prices, it is

interesting to note that the intervals reflecting the highest premiums in the distribution are mainly consortium plans. In fact, seven of the top ten costliest plans in this distribution are consortium plans.

Figure 1

Certified Employee Monthly Medical Plan Premiums, Rx Coverage Included, Family Contract



Given that 92 percent of districts arrange premiums in a two-tier structure (i.e., single/family), the medical health insurance premium costs for certified staff can be examined as a per employee per month (PEPM) cost. If districts which offer single plus child and single plus spouse rates are eliminated, the actual enrollment among the remaining districts surveyed is 29 percent single, 71 percent family. If we assume that this enrollment pattern was the same last year, we can calculate PEPM costs to identify how much medical and prescription drug health insurance has gone up from 2005 to 2006 in this population.

Using data from Table 3 as a baseline, we can take the product of the single rate (\$351) and actual single enrollment (29 percent), and add it to the product of the family rate (\$892) and actual family enrollment (71 percent) to get \$735 for 2005. For 2006, we can take the product of the single rate (\$370) and actual single enrollment (29 percent), and add it to the product of the family rate (\$944) and actual family enrollment (71 percent) to get \$778. Thus, from this perspective, the PEPM cost of medical and pharmaceutical health insurance plans available to certified staff in Ohio public school districts has increased 6 percent from January 2005 to January 2006. To put this number in context, the U.S. Department of Labor calculates that during the same time period, medical care costs increased 4.7 percent in the Midwest Region (CPI-U, U.S. City Average).

This series of analyses was repeated for medical health insurance plans available to classified staff in Ohio's public schools. According to Table 4, medical insurance plans without prescription drug coverage offered to classified staff under single and family contracts increased an average of 8 and 2

percent, respectively, from January 2005 to January 2006, while medical insurance plans with prescription drug coverage offered to classified staff under single and family contracts increased an average of 12 and 13 percent respectively. Assuming the same enrollment patterns as in the ranks of certified staff, we can take the product of the single rate (\$340) and actual single enrollment (29 percent), and add it to the product of the family rate (\$864) and actual family enrollment (71 percent) to get \$712 (2005). For 2006, we can take the product of the single rate (\$380) and actual single enrollment (29 percent), and add it to the product of the family rate (\$979) and actual family enrollment (71 percent) to get \$805. Thus, from this perspective, the PEPM cost of medical and pharmaceutical health insurance plans available to classified staff in Ohio public school districts has increased 13 percent from January 2005 to January 2006.

Table 4: *Classified Monthly Medical Plan Premiums by Prescription Drug Plan Inclusion*

		2006		2005	
Classified Premium, Plan Includes Rx Plan		Single Total Premium	Family Total Premium	Single Total Premium	Family Total Premium
No	N	103	101	53	52
	Median	\$319	\$798	\$295	\$783
Yes	N	475	498	288	291
	Median	\$380	\$979	\$340	\$864

Table 5 reports the amount of money required from certified staff to participate in the medical health insurance plan. Thus, Ohio public school employees under medical health insurance plans without pharmaceutical coverage have seen their single monthly premium contribution increase 76 percent, while those with a family contract have experienced a 14 percent increase from January 2005 to January 2006. For those with medical health insurance plans that include pharmaceutical coverage, monthly premium contributions have increased 25 percent per single contract and 11 percent per family contract during the same time period.

Table 5: *Certified Employee Monthly Premium Contribution in Medical Health Insurance Plans*

		2006		2005	
Certified Premium, Plan Includes Rx Plan		Single Total Premium	Family Total Premium	Single Total Premium	Family Total Premium
No	N	102	101	97	96
	Median	\$18	\$49	\$10	\$43
Yes	N	464	465	449	451
	Median	\$25	\$84	\$20	\$76

Table 6 reports the amount of money required from classified staff to participate in the medical health insurance plan. Thus, Ohio public school employees under medical health insurance plans without pharmaceutical coverage have seen their single monthly premium contribution increase 7 percent, while those with a family contract have experienced a 96 percent increase from January 2005 to January 2006. For those with medical health insurance plans that include pharmaceutical coverage, single monthly premium contributions have increased 53 percent per single contract and 10 percent per family contract during the same time period. The number of plans subjected to

analysis in 2005 and 2006 differ on the basis of a change of classification in the survey instrument used in 2006.

Table 6: *Classified Monthly Employee Premium Share in Medical Health Insurance Plans*

Classified Premium, Plan Includes Rx Plan		2006		2005	
		Single Total Premium	Family Total Premium	Single Total Premium	Family Total Premium
No	N	98	96	13	12
	Median	\$15	\$45	\$14	\$23
Yes	N	471	475	45	45
	Median	\$26	\$87	\$17	\$79

Patient management strategies

In the context of health insurance plan designs, patient management strategies are employed to reduce treatment costs by affecting patient decision-making via costs. Three commonly employed strategies include the coinsurance, deductible and out-of-pocket costs associated with a health care plan. Medical health insurance plans available to Ohio public sector employees contain all three types of patient management strategies. According to Table 7, the coinsurance portion of the medical health insurance plans available to Ohio public school employees has not changed appreciably from January 2005 to January 2006.

Table 7: *Coinsurance Levels by General Medical Health Insurance Plan Type*

Network in Plan		2006	2005
		Coinsurance (Plan)	Coinsurance (Plan)
No	N	112	103
	Median	80%	80%
Yes: in-network	N	432	426
	Median	90%	90%
Yes: non-network	N	440	411
	Median	80%	80%

Similarly, Table 8 indicates that the deductible structures of medical health insurance plans available to public school employees have not changed in the aggregate from January 2005 to January 2006. In medical plans without a network (e.g., base medical and major medical plans, comprehensive major medical plans), the median single deductible is \$100 while the median family deductible is \$200. In network plans, the median single/family in-network deductible is \$100/\$200, while the median single/family non-network deductible is \$200/\$400. Incidentally, the mode in each distribution is the same as the median.

Treasurers were further asked to classify the deductible provision in their medical health insurance policies as common (i.e., applies to services received both in and out of network) or separate (i.e., applies separately to services received in and out of network). In response, 27 percent indicated that

medical plan deductibles were common, 34 percent reported separate deductibles, and 38 percent didn't know.

Table 8: *Deductible Levels by General Medical Health Insurance Plan Type*

Network in Plan	2006		2005	
	Single	Family	Single	Family
No	\$100	\$200	\$100	\$300
Yes				
Network	\$100	\$200	\$100	\$200
Non-Network	\$200	\$400	\$200	\$400

The last patient management strategy question asked within the medical health insurance plan portion of the survey instrument concerned out-of-pocket maximum costs. Table 9 demonstrates the extent to which out-of-pocket costs have increased from January 2005 to January 2006 in this market.

Table 9: *Out-of-Pocket Maximum Levels by General Medical Health Insurance Plan Type*

Network in Plan	2006		2005	
	Single	Family	Single	Family
No	\$725	\$1,450	\$600	\$1,200
Yes				
Network	\$600	\$1,200	\$500	\$1,000
Non-Network	\$1,200	\$2,400	\$1,200	\$2,100

One way to demonstrate the impact of rising health insurance costs on employee compensation is through an employee risk corridor, a statistic which reflects the relative degree of risk experienced by an employee under a particular health plan. In this ratio, the numerator is the sum of the annual employee contribution towards the premium and the limit of the out-of-pocket maximum of the contract; the denominator is the relevant annual salary.

As an example, state figures from Tables 5 and 9 will be used with the 2004 – 2005 state average teachers' salary, \$49,333, obtained from the 2004-2005 average salary of all school personnel report from the Ohio Department of Education. According to Table 5, the state median certified employee contribution in 2006 for a medical plan with pharmaceutical coverage plan was \$25 per month for a single contract, and \$84 per family contract. According to Table 9, the out-of-pocket maximum cost for a network plan in 2006 was \$1,200/single and \$2,400/family out-of-network. Using this data, the following ratios (1, 2) can be calculated:

$$\begin{array}{rcl}
 \frac{\text{Single}}{((\$25 \times 12) + \$1,200)} & (1) & \frac{\text{Family}}{((\$84 \times 12) + \$2,400)} & (2) \\
 \frac{}{\$49,333} & & \frac{}{\$49,333} & \\
 = .03 & & = .07 &
 \end{array}$$

Thus, the average managed care single medical plan in the state holds three percent of the state average teachers' salary at risk for medical health insurance costs, while the average family plan holds seven percent. This figure does not take balance billing into account, the cost of which can be substantial, nor does it include prescription drug utilization, office visit and other co-payments. According to data recently compiled from a school-based population of 160,000 health plan participants, public school employees generate 13.1 scripts/member/year and 34.3 scripts/subscriber/year. According to the data in Tables 10 and 11, this could have a significant impact on the employee risk corridors calculated in (1) and (2) if these costs (whether at Tier 1, 2 or 3 or a combination therein) are added to the numerator.

Please note that those districts which bargain high deductible health plans coupled with a health savings account (HDHP/HSA) will need to adjust the out-of-pocket levels by the amount of the employer's contribution to the deductible; even so, the extent of the corridor is likely to be much higher than the corridors associated with the vast majority (98 percent) of medical health insurance plans available to Ohio public school employees. In 2006, the median annual employer contribution to each employee's deductible was \$750 per single and \$1,150 per family contract ($n = 12$).

While these costs represent a significant cost item to the average school teacher, the effect of health insurance costs are borne even heavier in the support staff ranks. As an example, consider a bus driver's health insurance costs. According to the 2004-2005 average salary of all school personnel report of the Ohio Department of Education, vehicle operators (buses) in Ohio school districts earned an average of \$17,507 in 2004-2005. According to Table 6, the state median classified employee contribution in 2006 for a medical plan with pharmaceutical coverage plan was \$26 per month for a single contract, and \$87 per family contract. According to Table 9, the out-of-pocket maximum cost for a network plan in 2006 was \$1,200/single and \$2,400/family out-of-network. Using this data, the following ratios (3, 4) can be calculated:

$\frac{\text{Single}}{((\$26 \times 12) + \$1,200)}$ $\frac{}{\$17,507}$ $= .09$	(3)	$\frac{\text{Family}}{((\$87 \times 12) + \$2,400)}$ $\frac{}{\$17,507}$ $= .20$	(4)
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Thus, the average managed care single medical plan in the state holds nine percent of the state average bus drivers' salary at risk for medical health insurance costs, while the average family plan holds 20 percent. Again, this figure does not take balance billing into account, the cost of which can be substantial, nor does it include prescription drug utilization, office visit and other co-payments.

Prescription Drug Plans

Of all the other health insurance plan costs that typically arise in a school district's benefit program, the most important to employees may be those that arise under a prescription plan. The survey instrument featured questions about prescription drug co-payments. Such arrangements occur typically through co-payments (a dollar amount required) or co-insurance (a percent of the total price required). Commonly, prescription drugs are offered through a tiered arrangement by pharmaceutical benefit managers: generic drugs are available in tier one; formulary brand-name through tier two; non-formulary brand-name at tier three; and cosmetic/ lifestyle drugs or biologics at tier four. Information regarding tier 4 costs was excluded due to their rare incidence. Tables 10

and 11 reveal the retail and mail-order prescription drug plan co-payments or coinsurance requirements in Ohio school district prescription plans.

Most districts pay for such plans directly through their medical plan, though some (103) carve out the benefit through a pharmacy benefits manager (PBM). When districts carve out such plans, the median monthly single premium in 2006 was \$94, for family plans, \$211; the median monthly employee premium contribution is \$0 regardless of whether the contract is single or family.

Table 10: *Retail Pharmaceutical Plan Consumer Payment Requirements (30 day supply)*

	Frequency	Dollars	Percent
No Tiers	20%	\$5	20%
Two Tiers	30%		
	1	\$5	20%
	2	\$12	20%
Three Tiers	50%		
	1	\$10	20%
	2	\$15	20%
	3	\$30	40%

Table 10 demonstrates that half of the retail pharmaceutical plans available to Ohio public school district employees are three-tier plans. In such plans, the costs of drug utilization increases in the case of brand-name and brand-name non-formulary utilization.

Table 11: *Mail-Order Pharmaceutical Plan Consumer Payment Requirements (90 day supply)*

	Frequency	Dollars	Percent
No Tiers	23%	\$5	20%
Two Tiers	30%		
	1	\$8	10%
	2	\$15	15%
Three Tiers	48%		
	1	\$10	20%
	2	\$30	20%
	3	\$40	40%

Table 11 indicates that nearly half of the mail-order pharmaceutical plans available to Ohio public school district employees are three-tier plans. Interestingly, though the consumer receives 3X the amount of drugs under a mail-order pharmaceutical plan, the data reveals that the traditional rule of thumb in pharmaceutical costs (i.e., mail order drugs costing twice as much per tier) doesn't apply in the aggregate in these distributions.

Dental Plans

Dental insurance plans typically cover preventative, diagnostic, restorative, periodontic, prosthodontic and orthodontia services. Eighty-two percent of school district employers surveyed

offered a dental plan as part of either their medical or a stand-alone dental plan. Of those districts that were able to separate the dental premium from their other health benefits, the median price paid by the district was \$39 per single and \$72 per family contract, while the median employee contributions were \$0 for single and family contracts.

Coverage for child orthodontia was offered by 94 percent of dental plans, while adult orthodontia was covered by 71 percent of dental plans. The median maximum calendar year dental benefit per person was \$1,500, while the lifetime maximum benefit for orthodontia was \$1,000.

Vision Plans

Vision plans typically offer coverage primarily for eye examinations, frames, lenses and contact lenses. Standard limitations on coverage are based upon the timing of exams and the purchase of frames, lenses and contact lenses. Fifty-six percent of school employers surveyed offered a vision plan as part of either their medical plan or a stand-alone vision plan. Of those with separately reported premiums, the median premium paid by the district was \$9 per single and \$19 per family contract, while the median employee contributions were \$0 regardless of whether the contract was single or family.

Life Insurance

Most life insurance contracts available to employees in Ohio school districts are group term contracts, providing for the face value of the policy to be made payable to beneficiaries for the duration of employment. Group premiums are composite rated. Premiums are age-based, and employees may have the option to buy additional insurance for themselves and their dependents based upon age-rated premium tables. Additionally, employers may purchase policies with waiver of premium provisions, which allow the life insurance plan to cover employees if they become disabled, and conversion privileges, which allow an employee to convert the group term insurance to an individual permanent life insurance policy.

For certified employees, the median face value for life insurance policies was \$33,000; 22 percent of those indicating that they offered a life insurance policy made the face value dependent upon salary level. Eighty-nine percent of employers offering life insurance benefits allow employees to purchase additional coverage without an examination. The median life insurance rate per \$1,000 of coverage was \$0.14; the median accidental death and dismemberment (AD&D) rate was .02.

Flexible Spending Accounts

Flexible spending accounts (Section 125 plans) provide a vehicle for funding health care and dependent care expenses in the context of an employer's cafeteria plan. A number of expenses can be paid for through such accounts. In the context of health care expenses, this may include dental services, hospital services, insurance premiums, prescription drugs, dental services, travel expenses to receive medical care, and vision care, to name a few. They can also be used to set aside pre-tax funds to pay for health insurance premiums.

Of those responding to the survey, 52 percent offered employees a flexible spending account. Of those that offered such a plan, 82 percent offered both medical-dental accounts and child-dependent

care accounts. Six percent of employers who offered an FSA contributed to employees' accounts (the median amount was \$400/year).

Labor-management health insurance committees

District treasurers were also asked about the existence of labor-management health insurance committees operating in their districts. Specifically, treasurers were asked if there was a formal labor-management health insurance committee in place that is empowered by collective bargaining language to assist in the procurement of the employer's health insurance plans. Thirty-six percent of those surveyed responded affirmatively.

Health insurance plan procurement

The last series of questions dealt with procurement issues. Procurement is the process through which an entity acquires goods and services to use in support of its mission. In this context, three main questions were asked: one concerning competitive bidding and two questions concerning brokers. The former question is germane in this setting due to the fact that Ohio law does not require competitive bidding of health insurance plans in the school district market. It is difficult to understand why this is so, as health insurance markets built on competition provide lower prices to consumers. In any case, treasurers were asked to indicate if the board of education had passed a procurement policy that requires competitive bids or proposals for the health insurance plans it provided to employees. Nine percent of the districts surveyed responded affirmatively to either method.

Two main questions were asked concerning broker compensation and contracting. When reporting these statistics, it is important to note that many treasurers responding to the survey did not list a broker or consultant when they were part of a joint purchasing arrangement. In many cases, the districts in question were part of consortia that employ consultants that provide services to all districts in the consortia and are employed in a direct contract with the sponsors of the joint purchasing arrangement. With that in mind, 201 districts reported using a broker, consultant or independent agent to purchase health insurance on behalf of the board of education. Of these, 28 percent reported that the individual was paid a percentage of the premium, 41 percent were paid a direct fee, and 30 percent didn't know how they were paid.

When asked if the board of education had passed a resolution requiring the full disclosure of all fees, commissions, bonuses and other gratuities from the insurance broker, consultant or independent agent, only 8 percent of districts were able to respond in the affirmative.

Appendix

Sample Size

Surveys attempt to make certain assertions about population characteristics based upon samples generated within them. The sample size needed to estimate p with a bound on error B utilized was estimated using the following equation:

$$n = \frac{Npq}{(N-1)D + pq}$$

where $q = 1 - p$ and $D = \frac{B^2}{4}$

The bound (B) utilized was .05, while p was replaced with the most conservative estimate, .5. Accordingly, solving for n generated an estimated sample size of 251, while the sample size of the survey was 477, so the estimates herein could be considered as representative of the school district and joint vocational school district population as a whole. Estimates of adequate sample sizes for ESC data (52) and MRDD data (70) indicated that the response rates (Table 1) of these institutions were insufficient.

Measures of Central Tendency and Probability Distributions

Most health insurance studies include data on premium averages. Employing such a measure of central tendency expressly implies that premiums are normally distributed- a unimodal, symmetric shape with 95 percent of all observations falling within two standard deviations of the mean of the distribution. It is well established that many economic variables possess non-normal distribution traits such as outliers, pronounced skewness and gaps or clusters (Moore & McCabe, 1999). Cost is clearly an economic variable, and would be likely to demonstrate one or more anomalies indicative of non-normal distributions. Using the mean as a measure of central tendency in such distributions puts the center of the distribution farther out in the long tail than the median, which signifies the midpoint of the distribution such that half the individual observations fall below and above its position. The median was used as a measure of central tendency as appropriate.

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