Preemployment Evaluations: Dilemmas For The Family Physician

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Abstract: Preemployment evaluations present primary care physicians with numerous medical, ethical, and legal dilemmas. These examinations are especially problematic for community-based primary care providers unaccustomed to standards used by physicians in occupational settings. In response to a mailed questionnaire, 255 family physicians and general practitioners described their current methods of performing these examinations. Forty percent reported that employers routinely provide no information about the job for which the prospective employee is being evaluated. Respondents differed according to number and type of laboratory tests routinely included as part of a preemployment evaluation and in the proportion of prospective employees disqualified on the basis of the examination. Twenty-four percent reported no disqualifications, and 34 percent disqualified 5 percent or more. The percentage reporting medical and psychological information also varied. One-half routinely reported alcohol and drug abuse to employers, and of these, only one-half obtained a waiver for the release of such information. Five of every 6 physicians believed that it was more important to "tell the truth to the employer" than to "protect the interests of the employee." Our findings show that no consensus exists among the primary care physicians in our survey about the performance of preemployment evaluations. Because this can have serious consequences to workers, employers, and physicians, we propose guidelines for primary care physicians who perform preemployment evaluations. (J Am Board Fam Pract 1991; 4:95-101.)

While the majority of preemployment evaluations are performed by primary care physicians who have little or no training in occupational medicine, 1-3 certain issues involved in these evaluations are not being taught in current medical education 4,5 or in primary care residency training. 6,7 Recent discussions of occupational health issues in the literature have focused on toxic exposures and job-related illnesses rather than preemployment examinations. Determining fitness for work was ignored, for example, in a 17-page, two-part article reviewing current developments in occupational medicine. 8

Guidelines developed thus far are found almost exclusively in the occupational medicine literature, 9-12 are written by or for corporate physicians, 13,14 or are published outside the United States. 15-17 These authors do not describe current practices of U.S. family physicians, general internists, and general practitioners, nor do they

address many of the distinctive concerns of these disciplines.

Although the manner in which a preemployment evaluation should be conducted has not been addressed directly in the primary care literature, a few recent articles have suggested that there may be serious problems in the way that these physicians currently are performing preemployment examinations. Mayhew and Nordlund¹⁸ studied family physicians' attitudes about absenteeism certification and discovered important levels of physician anxiety caused by lack of objectivity, suspicion of dishonesty, and divided loyalty toward employer and patient-employee. Rosenstock and Hagopian¹⁹ and Holleman and Holleman²⁰ have argued that primary care physicians performing employment-related examinations often compromise principles of medical ethics, such as confidentiality, truth-telling, and beneficence, and must establish an investigative rather than a therapeutic relationship with their patients in order to fulfill their expected role as agent of the employer.

Recent increases in urine drug testing and HIV testing have highlighted the need to define ethical and professional responsibilities associated with

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preemployment examinations. Unfortunately, little is known about how primary care physicians actually perform preemployment (or other employment-related) evaluations, or whether consensus exists concerning appropriate standards. Identifying problems in performing and reporting these evaluations could facilitate the development of appropriate medical and ethical guidelines.

We hypothesized that a lack of training and published guidelines would result in a lack of uniformity in the performance of preemployment evaluations by primary care physicians and in their attention to confidentiality in the reporting of results. Focusing on an urban county in the Southwest, we developed a profile of procedures routinely included in preemployment examinations and how the results of these evaluations were reported to the employer.

Methods Study Population

The study population included 303 physicians from Texas who were members of the American Academy of Family Physicians (AAFP). When compared with all members of the AAFP, our respondents were similar in age (44 years), gender (19 percent women), proportion of residents (14 percent), and proportion of academic physicians (7 percent) (44 years, 19, 14, and 8 percent, respectively, for the national body). Our sample had a lower percentage of board-certified physicians (42 percent) than the national body (90 percent) (P < 0.0001).

Survey Instrument

A questionnaire was designed and mailed according to the guidelines suggested by Dillman.²¹ It included questions about the number and proportion of all patients seen for preemployment evaluations per month, information received from employers about the requirements and risks associated with the job, items routinely included in the preemployment evaluation, findings reported to employers, whether a waiver was secured before releasing findings, percentage of workers disqualified or restricted, and the physician's perceived obligation to employer and employee.

Physicians were asked to describe their usual practice of performing preemployment examina-

tions by responding to our questions; they were not asked to consult their office records.

Statistics

Comparison of the proportional characteristics of the sample with the national membership of the AAFP was conducted using chi-square tests and SPSS software.

Results

Our response rate was 84 percent. Ninety-seven percent of the returned questionnaires were complete, and no more than three responses were missing for any one question. We found that preemployment examinations constituted an important facet of the practice of our respondents and a major investment by employers. Nearly half (45 percent) reported performing eight or more preemployment examinations per month, and nearly one-fourth (23 percent) reported doing 20 or more per month. Twenty-eight physicians (10 percent) indicated that they "seldom or never" performed preemployment examinations. Their responses were excluded from the remainder of the analysis, leaving 255 respondents whose answers were used to develop the profile.

Forty percent reported that employers routinely provided no information about the job for which the prospective employee was being investigated; 68 percent said that employers provided no information about the physical requirements of the job, and 92 percent reported that employers provided no information about the psychological and emotional stresses associated with the job.

Virtually all physicians reported histories and physical examinations as a routine part of their preemployment evaluations. These examinations required an average of 20.6 minutes to perform. In addition, many routinely performed such tests as urinalysis, CBC, urine drug screening, and spine radiographs (Table 1). Most (84 percent) reported urinalysis testing, but only 5 percent reported testing for human immunodeficiency virus. With regard to other tests, there was a low proportion of agreement.

Physicians varied in the number of prospective employees they disqualified. Sixty-two physicians (24 percent) reported that they had disqualified no prospective employees, but 86 physicians (34 percent) reported disqualifying 5 percent or more. Physicians also differed about restricting

prospective employees from doing certain aspects of their jobs. Fifty-eight physicians (23 percent) reported that they restrict no one, and the same number reported restricting 5 percent or more.

Table 2 indicates a low proportion of agreement concerning information reported to employers and waivers of confidentiality. The lone exception is the reporting of sexually transmitted diseases, particularly the acquired immunodeficiency syndrome. In other areas, there was considerable disagreement. Physicians were evenly split on reporting alcohol and drug abuse. Of those reporting information to employers, approximately half obtained the employee's written permission to release information.

When physicians were asked to give their opinion about loyalty to employer versus loyalty to patient (Table 3), the majority believed it was more important to "tell the truth to the employer" (84 percent) than to "protect the interests of the employee" (15 percent). ("Yes" answers to both choices were eliminated in the analysis.)

Discussion

Our findings show that our respondents differed substantially in preemployment examination practices.

Lack of Definitive Standards

Our data indicate that most preemployment examinations are performed by physicians who have little or no information about the patient's physical and psychological job requirements. This suggests that laboratory examinations often are not correlated with job demands, thus compromising the medical value of the preemployment examination while inflating costs because of unnecessary tests.

Unnecessary tests constitute a sizable expense to employers and also give them a false sense of security about the prognosticating powers of the examination. Employers who request that specific tests be done (e.g., testing for drugs and HIV, radiographs) should justify their inclusion in the preemployment evaluation when the indication is not apparent.

The high percentage of physicians (31 percent) performing routine spine radiographs despite their widely recognized ineffectiveness in predicting back problems,^{22,23} and the American Occupational Medical Association's recommendation

Table 1. Tests Routinely Included in Preemployment Evaluations.

	Frequency $(n = 255)$	Percent
Urinalysis	215	84
Complete blood count	106	42
Urine drug screening	96	38
Spine radiographs	79	31
Chest radiographs	67	26
Serologic test for HIV	12	5

that spine radiographs "should never be performed in a routine manner," 24 indicates that many primary care physicians do not apply occupational medicine standards to their own practice. The routine use of spine radiographs, urinalysis, and other tests as screening devices, despite their medical inappropriateness or cost-ineffectiveness, suggests that preemployment evaluations are being designed largely by employers rather than by physicians aware of current standards in occupational medicine.

The employer's failure to provide examining physicians with complete job descriptions lessens the physician's ability to provide a reliable, discriminating evaluation of fitness for work. Appropriate assessment requires focusing on the capabilities of the patient-employee relative to the requirements of a particular job. Without a complete understanding of job requirements, specific criteria for qualification for employment cannot be formulated.

It should be noted that when employers ask for specific tests, interests other than fitness for work may be influencing the request, such as establishing a baseline for possible later claims of work-re-

Table 2. Medical Findings Generally Reported by Physician to Employer.

Type of Information	Percent Giving Information* (n = 254)	Percent Giving Information Who Obtained Waivers
Major diseases	78	44
Minor diseases	38	52
AIDS	14	63
Other sexually trans- mitted diseases	19	52
Alcohol or drug abuse	51	57
Prior workers' com- pensation history	32	55

 $^{^*\}chi^2 = 71.27$; df 5; P < 0.05.

 $[\]dagger \chi^2 = 3.696$; df 5; P > 0.05.

Table 3. Physicians' Loyalties to Employer and Patient.

When someone presents for preemployment examination, the physician's primary obligation is to:	Frequency (n = 240)	Percent
Tell the truth to the employer	203	84
Protect the interests of the potential employee	37	15

lated disability, decreasing medical insurance exposure, or providing a benefit to the employee by screening for conditions that would not preclude employment but might benefit by early treatment. While lumbar films may not be helpful in predicting who is at higher risk for back injury, they substantiate that a pre-existing radiologic abnormality is not work related.

Impact upon Physicians, Patients, and Employers

The impact of the lack of definitive standards upon the medical profession itself must be considered. The lack of explicit criteria forces physicians to use implicit criteria, increasing the possibility of arbitrary judgments and the risk of accusations of bias. Unless physicians have explicit job requirements on which to base decisions to approve or disapprove the potential employee, they may be perceived as disqualifying the patient based on physical or mental impairment alone, a practice not allowable by law.²⁵

When explicit criteria are lacking, the physician can be placed in the awkward position of deciding between loyalty to the employer, who pays the bill, and fidelity to the patient, who needs an advocate and a caregiver and who, traditionally, has been the physician's sole concern. In so doing, the physician must choose between two fundamental principles of medical ethics that often come into conflict: beneficence and truthfulness. Such decisions force the physician to compromise many of the values traditionally recognized by the medical profession, such as confidentiality and patient autonomy.

It is also important to consider the impact of the lack of explicit criteria upon patients. Preemployment examinations pose, for many patients, a conflict between self-interest and honesty, forcing them to decide whether to withhold potentially damaging elements of their medical histories that might, justly or unjustly, affect job eligibility. This is particularly difficult for the

many persons for whom unemployment may result in hunger and homelessness.

When different standards are used for disqualifications and restriction, it suggests that some workers' opportunities to get jobs may be influenced not by a medical problem, but by the choice of which physician, using his or her own set of implicit standards, performs the examination. Conversely, a physician using standards that are inappropriately lax may approve a patient for employment for whom the job poses too great a risk. The outcome may be preventable injury to the employee and lost productivity and increased workers' compensation claims for the employer.

Confidentiality in the Physician-Patient Relationship

From an ethical perspective, the most disconcerting finding to us was the physicians' preference for protecting employers' interests over those of the employee and the loss of confidentiality of the physician-patient relationship. When forced to choose, the majority of those surveyed preferred "telling the truth to the employer" over "protecting the interests of the potential employee." A high percentage indicated that they routinely reported medical and psychological information to employers, and many did so without obtaining waivers of confidentiality from patient-employees. Such a pattern of favoritism toward employers is particularly important because many in occupational medicine and elsewhere would question the right of the employer to obtain much of the information commonly reported.

Does the investigative nature of the preemployment examination harm the therapeutic relationship between physician and patient? If the patient's primary care physician performs the preemployment evaluation, the physician could feel obliged to reveal to the employer information previously acquired in the context of a confidential, therapeutic relationship. When economic and medical considerations conflict, physicianpatient trust can be undermined. In subsequent visits, the patient could be less likely to disclose symptoms and history. Thus, the quality of the physician-patient relationship could be compromised, diminishing the therapeutic value of future interactions.

The use of implicit versus explicit criteria means that the physician must take more responsibility for any damaging decisions rendered. The physician is forced to switch roles, e.g., from confidant to judge, therapist to investigator, and patient advocate to employer's protector. Patients may have difficulty perceiving the physician in these divergent roles and maintaining a wholesome therapeutic relationship with the physician.

Limitations of the Study

Because our goal was to define the preemployment examination practices of a representative sample of family physicians, one possible weakness of our study is that our sample population was restricted to a single geographic region with a large concentration of petrochemical companies. We do not believe that this unduly influenced our sample, however, because the major oil companies provide their own occupational medicine services.

A second concern is that the questions asked of physicians were not specific enough to determine whether individual tests were requested depending on job specifications, on directions of the employer, or "routinely." The limited number of employers who provided any information on the physical or psychological requirements of the job make us believe that few physicians chose laboratory tests on the basis of specific screening criteria. The extent to which testing reflects the employers' or the physicians' initiative is not clear; it can be argued, however, that physicians are responsible for judging the legitimacy of such tests.

The differential between the percentage of board-certified physicians in our sample and those in the national body raises the question of whether our study underestimates the average American family physician's familiarity with current standards of preemployment evaluations.

A final criticism of this study is its reliance on the self-reporting of data.

Recommendations

The lack of explicit criteria and uniform standards for performing preemployment examinations may adversely affect workers, employers, and physicians. To ameliorate these problems, we suggest the following guidelines:

1. What the employer should tell the physician. Employers should provide a job title; description; list of physical, mental, and emotional requirements; and particular risks and exposures. Because these may be subtle and complex, employers should consult with the physician in identifying these requirements, stresses, and risks. In certain instances, this assessment will necessitate that the physician visit the job site.

The employer and the physician should agree prospectively upon explicit criteria for each job qualification. Job-specific requirements, such as "must be able to lift 30 pounds" or "must have 20/20 visual acuity in both eyes without corrective lenses" will help alleviate arbitrary and unjust decisions.

What the physician should tell the employee. The physician should inform the patient-employee at the outset about the investigative nature of the visit and of the different sort of physicianpatient relationship that will be appropriate for this encounter. Otherwise, patients who do not know the rules may be unfairly disadvantaged. The patient-employee may then decide whether to withhold certain information from the physician.²⁶

Physicians may wish to protect the trust necessary for therapeutic relationships with their patients by suggesting that they see another physician for employment-related investigatory encounters.

Physicians should counsel and educate employees about the dangers associated with particular jobs. In most cases, anticipatory guidance, including emphasis on prevention, will decrease an employee's risk and the employer's costs. Physicians should also report any abnormal findings to their patients and make recommendations for treatment or referral; even in the investigative relationship, there is some therapeutic responsibility.

3. What constitutes appropriate testing. The key to a cost-effective use of medical technology is to choose tests on the basis of two factors: the requirements of the job and the medical and occupational history of the prospective employee. Guidelines for job-appropriate tests are available in the occupational medicine literature.27-31

Appropriate testing is important not only for job screening but also for early detection of treatable diseases. Tests chosen for this screening function, a distinct benefit to employees, should meet the criteria for an appropriate screening test.³² When testing is provided solely as a benefit to employees and not as screening for fitness to work, this should be clearly communicated to the employee, and compliance with the testing should be optional.

4. What the physician should tell the employer. We recommend that physicians keep all medical records in their offices as base-line data and report to the employer only the patient-employee's qualifications and any restrictions that might be necessary. Should a need for this information arise as part of a workers' compensation claim, for instance, it can be provided with the employee's consent. There will, of course, be exceptions, such as an insulin-dependent diabetic subject to hypoglycemic episodes, who would be safer if coworkers were aware of the condition.

In exceptional cases such as this, the patient must choose between getting that particular job and maintaining medical confidentiality and should be allowed to make an informed decision. Should the patient choose the former, medical information can be transferred to the employer once the patient has agreed, verbally and in writing, to a waiver of confidentiality. Even in this situation, however, only the pertinent medical information should be released.

If implemented, these guidelines could alleviate many of the problems for employees, employers, and physicians that are inherent in current methods of assessing fitness for employment.

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References

- 1. National Institute of Occupational Safety and Health. National occupational hazard survey. Vol. 3. Cincinnati, OH: Division of Surveillance, Hazard Evaluations, and Field Studies, 1977. (NIOSH publication no. 78-114.)
- 2. Welter ES. The role of the primary care physician in occupational medicine: principles, practical observations, and recommendations. In: Zenz C, ed. Occupational medicine: principles and practical applications. 2nd ed. Chicago: Yearbook Medical Publishers, 1988:62-73.
- 3. *Idem*. The private physician and the worker. Am Fam Physician 1981; 23:105.
- Levy BS. The teaching of occupational health in American medical schools. J Med Educ 1980; 55: 18-22.
- Idem. The teaching of occupational health in the United States medical schools: five-year follow-up of an initial survey. Am J Public Health 1985; 75: 79-80.
- Cordes DH, Rest KM, Hake JC. Occupational health: a core discipline of family medicine? J Fam Pract 1982; 15:1193-4.
- Cullen MR, Rosenstock L. The challenge of teaching occupational and environmental medicine in internal medicine residencies. Arch Intern Med 1988; 148:2401-4.
- Cullen MR, Cherniack MG, Rosenstock L. Occupational medicine. N Engl J Med 1990; 322:594-601, 675-83.
- 9. Howe HF. Organization and operation of an occupational health program. J Occup Med 1975; 17: 360-400.
- 10. Goldman RH. General occupational health history and examination. J Occup Med 1986; 28:967-74.
- 11. Himmelstein JS. Worker fitness and risk evaluations in context. State Art Rev Occup Med 1988; 3: 169-78.
- 12. Stoney P. Fit for work? Occup Health 1989; 41: 104-8.
- 13. Shaw R. The pre-placement examination. Conn Med 1982; 46:497-9.
- 14. Rothbart PL. Liability of corporate physicians in conducting preemployment and annual physical examinations. J Leg Med 1985; 6:477-87.
- Kelman GR. Occupational health: the preemployment medical examination. Lancet 1985; 2:1231-3.
- 16. Floyd M, Espir ML. Assessment of medical fitness for employment: the case for a code of practice. Lancet 1986; 2:207-8.
- 17. Cowell JW. Guidelines for fitness-to-work examinations. Can Med Assoc J 1986; 135:985-8.
- 18. Mayhew HE, Nordlund DJ. Absenteeism certification: the physician's role. J Fam Pract 1988; 26: 651-3.
- 19. Rosenstock L, Hagopian A. Ethical dilemmas in providing health care to workers. Ann Intern Med 1987; 107:575-80.

- 20. Holleman WL, Holleman MC. School and work release evaluations. JAMA 1988; 260:3629-34.
- 21. Dillman DA. Mail and telephone surveys: the total design method. New York: John Wiley & Sons,
- 22. Gibson ES. The value of preplacement screening radiography of the low back. State Art Rev Occup Med 1988; 3:91-107.
- 23. Himmelstein JS, Andersson GBJ. Low back pain: risk evaluation and preplacement screening. State Art Rev Occup Med 1988; 3:255-69.
- 24. Snook SH. Approaches to preplacement testing and selection of workers. Ergonomics 1987; 30:241-7.
- The Rehabilitation Act of 1973. (P.L. 93-112. Sept. 26, 1973.)
- 26. British Medical Association. The handbook of medical ethics. London: British Medical Association, 1984.
- 27. Waldron HA. Pre-placement screening. In: Waldron HA, ed. Occupational health practice. 3rd ed. Boston: Butterworths, 1989:23-8.

- 28. Levy BS, Halperin WE. Screening for occupational disease. In: Levy BS, Wegman DH, eds. Occupational health: recognizing and preventing work-related disease. 2nd ed. Boston: Little, Brown and Company, 1988:75-86.
- Bond MB, Messite J. Preplacement medical evaluation and recommendations. In: Zenz C. ed. Occupational medicine: principles and practical applications. 2nd ed. Chicago: Year Book Medical Publishers, 1988:904-8.
- 30. McCunney RJ, Welter ES. Occupational medical services. In: McCunney RJ, ed. Handbook of occupational medicine. Boston: Little, Brown and Company, 1988:3-35.
- 31. Rothstein MA. Medical screening of workers. Washington, D.C.: Bureau of National Affairs,
- 32. Frame PS, Carlson SJ. A critical review of periodic health screening using specific screening criteria. I Fam Pract 1975; 1:29-36, 2:123-9, 189-94.