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Am J Hum Genet. 1992 Jan;50(1):84–91.

# The economics of clinical genetics services. IV. Financial impact of outpatient genetic services on an academic institution.

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PMCID: PMC1682524 PMID: 1729898

## Abstract

Those clinical genetic services that do not involve laboratory tests or procedures--i.e., the "cognitive" services such as diagnosis, management, and counseling--are labor-intensive, time-consuming, and not self-supporting. However, as a result of an evaluation at a genetics clinics, a patient will often receive other services at the same medical center. The full economic impact of the genetics clinic may be underappreciated. Therefore, at one medical center we examined (a) three settings that delivered genetics services and (b) two specialty clinics providing services to children with genetics conditions; and we calculated charges and payments for an unselected, consecutive group of outpatients. The results showed that cognitive genetics services accounted for a variable, but generally low, percentage of both the professional (generally physicians') and total charges accumulated by patients as a consequence of their visit to the genetics clinic. With laboratory and procedural charges included, patients seen in general genetics clinics (or their insurance plans) paid up to three times as much to the medical center and to its health professionals as to the genetics professional. These data confirm that clinical genetics services, while not generating enough income to cover their own costs, bring considerable revenue to the medical center. This fact alone should prove useful to the director of clinical genetics programs when they are negotiating finances with institutional administrators.

## Full text

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*Am. J. Hum. Genet. 50:84–91, 1992*

# The Economics of Clinical Genetics Services. IV. Financial Impact of Outpatient Genetic Services on an Academic Institution

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## Summary

**Those clinical genetic services that do not involve laboratory tests or procedures—i.e., the "cognitive" services such as diagnosis, management, and counseling—are labor-intensive, time-consuming, and not self-supporting. However, as a result of an evaluation at a genetics clinics, a patient will often receive other services at the same medical center. The full economic impact of the genetics clinic may be underappreciated. Therefore, at one medical center we examined (*a*) three settings that delivered genetics services and (*b*) two specialty clinics providing services to children with genetics conditions; and we calculated charges and payments for an unselected, consecutive group of outpatients. The results showed that cognitive genetics services accounted for a variable, but generally low, percentage of both the professional (generally physicians') and total charges accumulated by patients as a consequence of their visit to the genetics clinic. With laboratory and procedural charges included, patients seen in general genetics clinics (or their insurance plans) paid up to three times as much to the medical center and to its health professionals as to the genetics professional. These data confirm that clinical genetics services, while not generating enough income to cover their own costs, bring considerable revenue to the medical center. This fact alone should prove useful to the director of clinical genetics programs when they are negotiating finances with institutional administrators.**

## Introduction

The provision of genetic diagnostic, management, and counseling services is labor-intensive, time-consuming, and not self-supporting (Bernhardt et al. 1987; Pyeritz et al. 1987; Bernhardt and Pyeritz 1989). The last point has necessitated subsidization by sources other than revenue generated by genetic services, such as research grants, state appropriations, other governmental contracts, foundations, and institutional funds. Unfortunately, as both the need and demand for genetic services have grown, federal and foundation support for clinical genetics services has diminished (Holtzman 1983), and state legislatures and academic institutions have constantly sought ways to reduce expenses. As a result, service providers have had to rely increasingly on reimbursement from patients and third-party payers to support clinical services (Pyeritz et al. 1987). We have shown, however, that clinical settings offering a full range of genetic services, exclusive of laboratory tests, do not generate sufficient professional fee income to cover the costs involved with providing services (Bernhardt and Pyeritz 1989). This finding is consistent with those for other medical specialties that provide solely the so-called cognitive activities, in which evaluation and management services are compensated at two to three times less than the rate of procedural services (Becker et al. 1990).

In many medical centers, including academic ones, each of the clinical divisions and subdivisions is subjected to independent financial accounting. Some are virtually always in strong positive balance, with incoming exceeding costs attributable to generating that income. Characteristics of such units often include a preponderance of income from procedures and a relatively high percentage of services rendered to inpatients rather than to outpatients. Neither is likely to be typical of a clinical genetics division, in which virtu-

Received February 2, 1991; final revision received September 6, 1991.

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0002-9297/92/5001-0010$02.00



Selected References

These references are in PubMed. This may not be the complete list of references from this article.


1. Becker E. R., Dunn D., Braun P., Hsiao W. C. Refinement and expansion of the Harvard Resource-Based Relative Value Scale: the second phase. Am J Public Health. 1990 Jul;80(7):799–803. doi: 10.2105/ajph.80.7.799. [DOI] [PMC free article] [PubMed] [Google Scholar]
2. Bernhardt B. A. Population screening for the cystic fibrosis gene. N Engl J Med. 1991 Jan 3;324(1):61–62. doi: 10.1056/NEJM199101033240117. [DOI] [PubMed] [Google Scholar]
3. Bernhardt B. A., Pyeritz R. E. The economics of clinical genetics services. III. Cognitive genetics services are not self-supporting. Am J Hum Genet. 1989 Feb;44(2):288–293. [PMC free article] [PubMed] [Google Scholar]
4. Bernhardt B. A., Weiner J., Foster E. C., Tumpson J. E., Pyeritz R. E. The economics of clinical genetics services. II. A time analysis of a medical genetics clinic. Am J Hum Genet. 1987 Oct;41(4):559–565. [PMC free article] [PubMed] [Google Scholar]
5. Finley W. H., Finley S. C., Dyer R. L. Survey of medical genetics personnel. Am J Hum Genet. 1987 Apr;40(4):374–377. [PMC free article] [PubMed] [Google Scholar]
6. Holtzman N. A. The impact of the federal cutback on genetic services. Am J Med Genet. 1983 Jun;15(2):353–371. doi: 10.1002/ajmg.1320150225. [DOI] [PubMed] [Google Scholar]
7. Pyeritz R. E., Tumpson J. E., Bernhardt B. A. The economics of clinical genetics services. I. Preview. Am J Hum Genet. 1987 Oct;41(4):549–558. [PMC free article] [PubMed] [Google Scholar]
8. Walker A. P., Scott J. A., Biesecker B. B., Conover B., Blake W., Djurdjinovic L. Report of the 1989 Asilomar meeting on education in genetic counseling. Am J Hum Genet. 1990 Jun;46(6):1223–1230. [PMC free article] [PubMed] [Google Scholar]



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