# Table of Contents

## Chapter 1 Introduction and Background
- Introduction ........................................................................................................... 1
- Summary ................................................................................................................. 1
- What A-2774 Requires ......................................................................................... 2

## Chapter 2 Financial and Social Impacts and Medical Efficacy
- The Current Insurance Market ........................................................................... 4
- The Current Situation ......................................................................................... 4
- Impact on Premiums of A-2774 ......................................................................... 5
- Impact on Purchase of Coverage ....................................................................... 6
- Impact on the Affordability and Utilization of Prosthetic and Orthotic Appliances ........................................................................................................ 7

## Chapter 3 Conclusion and Other Considerations for the Legislature
- Conclusion ............................................................................................................ 8
- Other Considerations for the Legislature .......................................................... 8

## Appendix
- A Report to the New Jersey Mandated Health Benefits Advisory Commission, March 2005, NovaRest
Chapter 1 | Introduction and Background

Mandated Health Benefits Advisory Commission Statement

Introduction

The Commission undertook the study with the understanding that it was charged by law with investigating many facets of the impact of Assembly Bill 2774 (A-2774).

With this in mind, and considering the limited time and expertise of the Commission and Department staff, an actuarial firm with experience in such investigations was engaged to study this matter and to prepare a report addressing some of those facets. The Commission drew upon the report of the actuarial firm in developing its recommendation, but does not specifically endorse any portion of that report. The NovaRest report to the Commission is attached.

The Commission understands that the Legislature specifically desires a discussion of the implications of this bill on the insurance market, including the impact on price and on the availability of necessary medical services.

Summary

The NovaRest analysis indicates that this bill, if enacted, would result in average premium increases of .025%. The Commission notes that this is a reasonable estimate of the cost increase made with the assumption that utilization and technological sophistication of the devices in question remains static.

A certain number of people, perhaps up to 250, could lose coverage as a result of the cost increase. Available estimates of the impact of price increases on the purchase of insurance coverage are based on a number of assumptions, and are consequently not precise.

We are unable to definitely quantify the extent to which the mandate would actually increase the availability of prosthetic and orthotic devices (P & O), reduce the financial burden on those who obtain such devices, or lead to improved results in other areas such as mental health and employability. However, it is possible to make a qualitative statement that the mandate would be beneficial in these areas.
Assembly Bill 2774 applies to the state regulated insurance market. The regulated insurance market includes individual and group contracts sold by hospital, medical, and health service corporations (e.g. Horizon Blue Cross Blue Shield), individual and group insurance policies sold by insurance companies, and contracts issued by health maintenance organizations (HMOs), including contracts and policies sold in the Individual Health Coverage (IHC) and Small Employer Health (SEH) markets and the small amount of State Health Benefits Plan (SHBP) coverage under insured contracts issued by HMOs for state employees and employees of local employers who opt to participate in the SHBP. Assembly Bill 2774 does not apply to the self-funded coverage provided by the SHBP.

The bill requires plans to which it applies to cover expenses incurred in obtaining a prosthetic or orthotic appliance from any licensed orthotist or prosthetist, or any certified pedorthist, as determined to be medically necessary by the covered person's physician.

The bill requires health plans to reimburse for these benefits at the same rate as reimbursement for prosthetic or orthotic appliances under the Federal Medicare reimbursement schedule.

The bill requires that the benefits shall be provided to the same extent as for any other medical condition covered under the policy.

The bill provides that “orthotic appliance” and “prosthetic appliance” have the meanings specified at N.J.S.A. 45:12B-3. That statute contains the following definitions:

“Orthotic appliance” means, solely for the purposes of this act, a brace or support but does not include fabric and elastic supports, corsets, arch supports, trusses, elastic hose, canes, crutches, cervical collars, dental appliances or other similar devices carried in stock and sold by drug stores, department stores, corset shops or surgical supply facilities.
“Prosthetic appliance” means, solely for the purposes of this act, any artificial device that is not surgically implanted and that is used to replace a missing limb, appendage or any other external human body part including devices such as artificial limbs, hands, fingers, feet and toes, but excluding dental appliances and largely cosmetic devices such as artificial breasts, eyelashes, wigs, or other devices which could not by their use have a significantly detrimental impact upon the muscular skeletal functions of the body.

The precise definitions are included in this report because “prosthetic” and “orthotic” are terms that could be widely or narrowly construed.
Chapter 2 | Financial and Social Impacts and Medical Efficacy

The Current Insurance Market

Approximately 2.4 million people (out of the New Jersey population of 8.5 million) will be affected by the provisions of this bill. They are the 2.4 million in the regulated insurance market (including 900,000 in the SEH market and 75,000 in the IHC market). The proposed mandate would have no direct effect on the people covered by self-funded plans, Medicare, Medicaid/Family Care, and the uninsured.

The Current Situation

There are currently no state or federal mandates requiring coverage of prosthetic or orthotic appliances. However, coverage of appliances is required in the SEH standard plans and the IHC standard plans. In the SEH market (but not the IHC market), a carrier may reduce or eliminate non-mandated standard benefits through a rider.

Some carriers offer coverage of prosthetic and orthotic appliances in the large group market. These appliances are covered in the self-funded SHBP, and may be covered in other self-funded plans.

The statement that such appliances are “covered” is not meant to imply that they are covered to the same extent indicated by A-2774. However, several carriers have indicated that their coverage automatically or optionally covers these appliances to the level required by A-2774.

Small employer and individual health plans are required to cover the initial fitting and purchase of pre-approved prosthetics. The health plan pays for replacements, if they are medically necessary and appropriate. This coverage is subject to pre-approval by the health plan, with a reduction of up to 50% in benefits if pre-approval is not obtained. This coverage is provided subject to deductibles and coinsurance, for insurance coverage, and (possibly) copays for an HMO product.
In the SEH market, riders currently can be added to limit coverage for P & O. One large carrier has a rider that imposes coinsurance of 50% and a $2,500 annual limit for Durable Medical Equipment (DME). Such a limit could apply to P & O as well.

New Jersey’s self-funded SHBP provides coverage for a specified list of prosthetic and orthotic appliances. This coverage is provided with 20% coinsurance after deductible in the traditional plan and 10% coinsurance (in network) and 30% coinsurance after deductible out of network for the NJ PLUS Point of Service (POS) plan. As in the case of the SEH and IHC standard plans, this would appear to substantially comply with the A-2774 mandate, except for who is responsible for the determination of medical necessity.

**Impact on Premiums of A-2774**

The actuarial consultant, NovaRest, evaluated the cost impact of the proposed mandate on health care premiums. They evaluated estimates provided by carriers at the request of the Department, information provided by the New Jersey Prosthetic and Orthotic Society, and experience in other states that have imposed similar mandates. NovaRest arrived at an overall short-term estimate of .025% of premium (or 25 cents per $1,000 of premium). As an upper limit, one carrier reported that the total cost of providing such benefits was about .08% of premium.

In evaluating this estimate, which may seem low, note that some coverage of such appliances is common, that the incidence of need for such appliances is infrequent and not normally a matter of subjective judgment and that the reimbursement for the appliances is tied to the Medicare schedule. NovaRest also assumed that carriers would be allowed to use managed care processes in determining medical necessity (which is contrary to the language of the bill), and assumed that “parity” would be interpreted as requiring that prosthetic and orthotic appliances receive the same benefit levels as other DME, which may be interpreted as a more limited parity than that required by the language of the bill.
The NovaRest report expresses a concern that improvements in prostheses may result in the development of highly sophisticated and expensive artificial limbs. Because of the potential for such developments, there is a concern that mandated coverage for these prostheses could have a larger effect on insurance premiums than the short-term estimate provided.

**Impact on Purchase of Coverage**

As a general consideration, increases in premium cause some policyholders to drop insurance coverage. These policyholders may become uninsured, or form self-funded plans. The extent to which an increase in premium causes a decrease in coverage cannot be precisely measured, and depends in part on the reason for the cost increase. In general, premium payers react differently to a price increase that reflects additional benefits than to a price increase that does not do so.

The term "elasticity" refers to the response of purchasers to a small price change that does not provide any additional value. Although the elasticity of demand for insurance is very difficult to measure, one study suggests that it is approximately -.2%. This means that for each 1% "valueless" increase in premium, .2% of customers will drop coverage.

For purposes of discussion, assume that the mandate causes a .025% increase in price. With approximately 2.4 million insured people affected by this mandate and the corresponding price change, the prediction would be that about 120 people would lose coverage.

This number could be high, because this cost increase is not "valueless" — additional coverage is provided as a result of the increase. On the other hand, the estimate of elasticity could be low. An elasticity of -.4, indicating a greater sensitivity to price, could lead to a higher estimate of 240 people losing coverage.
It is much more difficult to estimate the impact on the affordability and utilization of protheses and orthotics than to estimate the impact on premium. The primary impact will be on the approximately 2.4 million people with coverage from the regulated insurance market. Many in the affected population currently has some level of benefits for prosthetics and orthotics, and in some cases this coverage is at the level contemplated by A-2774. To the extent that the basis of reimbursement is higher than the Medicare fee schedule, the cost of the benefits may exceed those mandated by A-2774.

It is reasonable to assume that the use of prosthetic and orthotic devices will increase to the extent that insurance coverage makes affordable an appliance that would not otherwise be so. Furthermore, covered appliances will be more affordable (to the purchaser) who might otherwise have to use their own funds to purchase a needed appliance.

The NovaRest report notes that insurance coverage of a good or service tends to drive up the price of that service. It also notes that insurance coverage may result in use of more expensive appliances, more frequent replacement, and greater use of supporting services.
Chapter 3 | Conclusion and Other Considerations for the Legislature

Conclusion

As noted in the NovaRest report, approximately five in one thousand people suffer from loss of a limb and are potential users of prosthetic appliances. For those individuals who are part of the regulated insurance system, this mandate provides funding that reduces the need for funding through the resources of the insured person, charity or government programs.

It would be difficult to deny the benefits of P & O appliances when medically necessary. Therefore, the decision on whether to mandate P & O coverage must be made on the basis of whether such appliances should be covered by insurance, and to what extent.

The short term cost estimate is .025% of premium. The Legislature may want to consider the assumptions on which this estimate was based: i.e., static utilization and technological sophistication of the devices in question.

The Commission has a greater than usual concern about the potential long term cost projections of this mandate and was, therefore, unable to predict the economic impact.

Recommendations

The Commission does not make a recommendation for or against the passage of A-2774. However, the Commission offers the following recommendations for consideration by the Legislature.

Recommendation 1 — The Commission recommends that the medical necessity review process for prosthetics and orthotics remain the same as for any other medical condition.

Explanation: Language in A-2774 can be interpreted as not allowing carriers to use current processes for determining medical necessity, which is not desirable. Presently, carriers determine medical necessity of the requested service in consultation with treating providers and after a review of all the relevant supporting documentation. Further, the State has established an elaborate binding review of carrier medical necessity decisions and there has been no reason given for the
necessity of deviating from the established process in this instance. Further, increased cost estimates (.025% premium increase) were made assuming that the carrier retains its role in deciding medical necessity.

**Cost Estimate:** The .025% estimate assumes that medical necessity for prosthetics and orthotics will be determined in the same manner as for other conditions. If medical necessity is not determined as for any other condition, the cost will be higher.

**Recommendation 2** — The Commission recommends that the law clarify whether the requirement of “parity” in benefits with any other medical condition is met if prosthetics and orthotics are treated the same as any other Durable Medical Equipment (DME).

**Explanation:** In some cases, carriers are permitted to have, and do have, different benefits (coinsurance, deductibles, and dollar or other limits) for DME than for other medical services. It is not clear whether treating Prosthetics and Orthotics the same as DME complies with A-2774 as drafted. If it does not, then the bill does not give clear direction on how the Prosthetics and Orthotics benefit must be defined.

**Cost Estimate:** The cost estimate of .025% assumes that, while prosthetics and orthotics must be covered, the benefit levels can be determined the same as for any other DME. If coverage of prosthetics and orthotics is to be at parity with all services, then the cost impact would be higher.

**Recommendation 3** — The Commission recommends that the law not specify that reimbursement be based on the Medicare fee schedule.

**Explanation:** In the current environment, both carriers and providers use a system of reimbursement based largely on contracted rates (in-network) or reasonable and customary or billed rates (out of network). While not perfect, this system generally is preferable to both sides than a system of set fees. The Commission sees no reason to depart from usual industry practice.
**Cost Estimate:** The cost estimate of .025% assumes the use of the Medicare fee schedule. Reimbursement levels are generally higher than the Medicare fee schedule, so the estimated cost would rise.

**Recommendation 4** — The Commission recommends that the State Health Benefits Plan be included in this bill to cover prosthetics and orthotics in the same manner as other carriers.

**Explanation:** The Commission felt that the State, as an employer and provider of health benefits to its employees, should not require employers to provide benefits different than the State provides to its employees.
A Report to the New Jersey Mandated Health Benefits Advisory Commission

Review and Evaluation of Assembly Bill A-2774
An Act concerning health care insurance coverage for prosthetic and orthotic appliances

March 2005

Prepared by:
Donna Novak, CFA, ASA, MAAA, MBA
NovaRest Consulting
# Table of Contents

Chapter 1  Introduction and Background  
**Introduction** ..............................................................................................................1  
**Summary** ..................................................................................................................1  
**What A-2774 Requires** .............................................................................................3  

Chapter 2  Financial and Social Impacts and Medical Efficacy  
**The Current Insurance Market** ...............................................................................4  
**The Current Situation** ..............................................................................................4  
**Impact on Premiums of A-2774** ..............................................................................6  
**Impact on Purchase of Coverage** ............................................................................7  
**Impact on the Affordability and Utilization of Orthotic and Prosthetic Appliances** .........................................................................................................................8  

Chapter 3  Conclusion  
**Conclusion** ...........................................................................................................10  

**Bibliography** ..........................................................................................................12
Chapter 1 Introduction and Background

Commission Statement

Introduction

The New Jersey Legislature has requested the New Jersey Mandated Health Benefits Advisory Commission to conduct a review of Assembly Bill 2774 (A-2774), a bill that requires all health carriers to cover orthotic and prosthetic (O&P) appliances; providing reimbursement therefore. The review was conducted using the requirements stipulated under the Mandated Health Benefits Advisory Commission Act, N.J.S.A. 17B:27D-1 et seq.

Considering the limited time and expertise of the Commission and Department staff, an actuarial firm, NovaRest Consulting, with experience in such investigations was engaged to study this matter and to prepare a report addressing all of those facets.

The Commission understands that the Legislature specifically desires a discussion of the implications of this bill on the insurance market, including impact on price and on the availability of necessary medical services.

Summary

Based on a macro financial analysis NovaRest estimates that there will be a short term impact on health premiums of less than 0.025% for the increased coverage of O&P appliances, assuming that reimbursements are based on Medicare cost schedules. If reimbursement were not limited to Medicare cost schedules, the impact on premiums would be more than with the proposed limitation of using Medicare cost schedules.

The effect of any mandated benefit on health insurance premiums depends on the amount of medical management that will be allowed and the interpretation of the benefit covered. NovaRest assumed that managed care plans will be able to define medical necessity and require the use of contracted providers. They also assumed that the definition of prosthetics was similar to that used in Massachusetts\(^1\) and Colorado\(^2\) of “an artificial device to replace in whole or in part an arm or leg”. A broader interpretation of what is covered under the mandate can result in higher costs. For example, if the definition of prosthetics in New Jersey were interpreted to include eyeglasses, wigs, hearing aids, or other devices used for purposes other than limb loss or injury, the impact of A-2774 would be significantly expanded.

\(^1\) Massachusetts House Bill No. 376
\(^2\) Colorado Statutes; Title 10 Article 16
We are unable to quantify the extent to which the mandate would actually increase the use of orthotics and prosthetics by covered individuals, or whether it would simply make the financial impact of those appliances more affordable. We are also unable to quantify the extent to which the mandate would lead to the substitution of more expensive (and presumably better) devices. Individuals with no or limited coverage may experience significant financial hardship if they require a prosthetic device for the activities of daily living or for work related activities. The prosthesis cost from $3,000 to $40,000 according to one report. Improved computerized prosthesis are being developed that can cost $70,000 or more. As technology improves the costs are increasing.

The longer-term impact on premiums may include other factors: some that decrease health care costs and some that increase health care costs. There may be reduced mental health care costs and disability costs due to the successful impact of the prosthesis. It is expected that improved use of prosthetics will result in individuals experiencing less depression and allow more individuals to return to work.

The increased availability of orthotic and prosthetic services will be accompanied with an increase in professional services that support the use of these appliances.

Increased technology and the accompanying cost may have the largest long-term cost impact. As appliances are replaced with more technologically advanced models, the cost may increase significantly over time. Funding from the Veterans Administration is currently promoting technological improvements that would, according to one article, create artificial "biohybrid" limbs that merge man-made components with human tissue -- muscles, skeletal architecture and the neurological system --and work like fully functioning human appendages. These improvements will then be available to private consumers with similar needs to the extent that the Medicare cost schedule allows. It is impossible to predict at this time the ultimate cost of technologically superior devices or the extent to which Medicare will cover such devices. It is anticipated that physicians and patients will consider these devices medically necessary due to their improved impact on the patient's ability to perform activities of daily living.

---

5 Metz, Rachel, "Embracing the Artificial Limb", http://www.wired.com/news/medtech/0,1286,66633,00.html?tw=wn_1techhead
What A-2774 Requires

Scope

A-2774 requires health plans, including health, hospital and medical service corporations; commercial insurance companies offering individual and group health plans; health maintenance organizations; and health benefits plans issued pursuant to the New Jersey Individual Health Coverage (IHC) and Small Employer Health Benefits Programs (SEH) to provide health benefits coverage for expenses incurred in obtaining an orthotic or prosthetic appliance from any licensed orthotist or prosthetist, or any certified pedorthist, as determined medically necessary by the covered person’s physician. A-2774 does not apply to coverage provided to state and local employees through the State Health Benefits Plan.

The bill requires health plans, on and after the bill’s effective date, to reimburse for these benefits at the same rate as reimbursement for orthotic and prosthetic appliances under the federal Medicare reimbursement schedule. There is no requirement that reimbursement cannot contain the typical cost sharing for durable medical equipment (DME) benefits.

The bill provides that "orthotic appliance" and "prosthetic appliance" have the meanings specified at N.J.S.A. 45:12B-3. That statute contains the following definitions:

"Orthotic appliance" means, solely for the purposes of this act, a brace or support but does not include fabric and elastic supports, corsets, arch supports, trusses, elastic hose, canes, crutches, cervical collars, dental appliances or other similar devices carried in stock and sold by drug stores, department stores, corset shops or surgical supply facilities.

"Prosthetic appliance" means, solely for the purposes of this act, any artificial device that is not surgically implanted and that is used to replace a missing limb, appendage or any other external human body part including devices such as artificial limbs, hands, fingers, feet and toes, but excluding dental appliances and largely cosmetic devices such as artificial breasts, eyelashes, wigs, or other devices which could not by their use have a significantly detrimental impact upon the musculoskeletal functions of the body.

---

6 The term health plan is used in this report to refer to health insurers, BlueCross BlueShield, and HMOs.
Chapter 2 Financial and Social Impacts and Medical Efficacy

The Current Insurance Market

A-2774 will affect a small portion of the population. Based on national statistics of limb loss\(^7\) and prosthetic use, we estimate that approximately 0.21% of the under age 65 population use orthotics or prosthetics. Most of these individuals have some level of coverage and many have coverage similar to A-2774. In using this statistic to evaluate the impact of A-2774, keep in mind that not all of this population is covered by insured plans, some of this population already receives benefits at or above the level of A-2774, and there may be some people do not currently use orthotics and prosthetics for financial reasons.

The proposed mandate will only impact those New Jersey residents with fully insured group health insurance or individual health insurance. It will not impact those residents with coverage under the self-insured employers (including the SHBP); those covered by Medicare and those without insurance.

The Current Situation

Proponents report that "prosthetics have been re-classified as Durable Medical Equipment (DME) with annual caps from one to three thousand dollars which limit access to adequate care". Others have found new limits that only cover one prosthesis per lifetime or that their amputation has been classified as a "pre-existing condition" and the costs of replacement limbs are not covered. Some have found that even if their prosthesis is covered, their insurance limits adequate physical therapy to learn how to use the devices.\(^8\)

Small employers and individual health plans are required to cover the initial fitting and purchase of pre-approved prosthetics. The health plan pays for replacements, if they are medically necessary and appropriate. The health plan can reduce benefits by 50% with respect to charges for prosthetic devices which are not pre-approved by the health plan provided that benefits would otherwise be payable.

Some carriers currently cover these benefits at the level required by A-2774 and others cover them with some restrictions. WellChoice and Guardian report that they currently cover the benefits required by A-2774. Cigna offers a rider to its large group plans that covers the benefits required by A-2774.

---

\(^7\) NLLIC and the Limb Loss Research and Statistics Program (LLR&SP), "LIMB LOSS IN THE UNITED STATES", http://www.amputee-coalition.org/fact_sheets/limbloss_us.pdf

\(^8\) Rinko, Stephen, THE PROSTHETIC & ORTHOTIC SOCIETY OF NEW JERSEY, INC., Letter Dated January 30, 2005
Alternative Coverage or Financial Assistance

There are coverage alternatives for orthotics and prosthetics. There are also sources of financial assistance for the purchase of orthotics and prosthetics. The following lists are not all inclusive, but provide examples of alternative coverage or financial assistance.

O&P are covered by:
- Medicare;
- Medicaid;
- Veterans Administration;
- TRICARE; and
- Vocational Rehabilitation.

Financial assistance for O&P is available through:
- Barr Foundation;
- Dana Bowman’s Limb Bank Foundation;
- Limbs for Life Foundation;
- National Amputation Foundation;
- New Beginnings Prosthetic Ministries; and
- Service clubs such as the Lions, Rotary, Elks, or Shriners.

Similar Mandates in Other States

Three states have a mandate for the coverage of prosthetic devices: Colorado, Maryland, and New Hampshire. Maryland’s requirement only applies to nonprofit health service plans (BlueCross BlueShield).\(^9\) Massachusetts and Maine have legislation pending similar to A-2774.

Massachusetts’ proposal requires coverage for the “most appropriate medically necessary model that adequately meets the medical needs of the policyholder as determined by the treating physician”. Massachusetts, New Hampshire, and Colorado define prosthetic device as “an artificial device to replace in whole or in part an arm or leg.”\(^10\) Colorado requires coverage of replacement “unless necessitated by misuse or loss”.\(^11\)

---

\(^10\) Massachusetts House bill 376
\(^11\) Colorado Statutes Title 10, Article 16.
Impact on Premiums of A-2774

NovaRest’s estimate of the financial impact of A-2774 is predicated on two important assumptions:

1) The definition of prosthetic is assumed to be “an artificial device to support or replace in whole or in part an arm or leg” and is not interpreted more broadly than this definition; and

2) Managed care plans will have the ability to require authorization from the patient’s primary care physician.

Data that distinguishes orthotic or prosthetic appliances from other DME costs is limited. In general all of DME costs are approximately .5% of health costs. Thomas Valenti, the Vice-President of the New Jersey Prosthetic and Orthotic Society reports that the Prosthetic and Orthotic industry represents 1/3% of the health care industry. One insurer that currently covers benefits equivalent to A-2774, reports that their coverage, which is equivalent to that required by the bill, represents .08% of their New Jersey claims.

Some health plans in New Jersey currently cover the benefits required by this bill and reimburse at rates in excess of Medicare. For those insurers, the cost impact may be negative. When estimating the cost of this mandate, it was considered that some coverage for orthotics and prosthetics is currently provided. The marginal cost is the cost of providing additional appliances beyond what is covered under current policies. Based on the marginal cost of this mandate, the increase in premiums is expected to be less than 0.025%. A study of a similar benefit in Maine estimated the cost impact to be .03% of premium based on Maine’s current coverage of orthotics and prosthetics, which has more limitations than current New Jersey coverage. In testimony for the support of the Massachusetts proposed legislation, the cost was estimated to be $0.07 Per Member Per Month (PMPM). If we assume a total PMPM cost of about $200, this corresponds to approximately .035%.

In the long term there may be additional premium increases associated with coverage of orthotics and prosthetics. Current research on how to improve prosthetics may result in significantly more expensive appliances. The increase in replacement prosthetics may also increase the use of professional services that support the use of the prosthesis. In the long term these services may have a larger effect on premiums than currently anticipated based on current medical practices. It is not possible to anticipate the cost of the improved devices and the extent to which they will be reimbursed by Medicare at this time. Improved technology will increase the cost of health care without this mandate since prosthetics are currently reimbursed by most plans. The impact of this mandate

---

is limited to its impact on the utilization of covered prosthetic devices and related services.

Impact on Purchase of Coverage

As a general consideration, increases in premium will cause some policyholders to drop insurance coverage. These policyholders may become uninsured, or form self-funded plans. The extent to which an increase in premium causes a decrease in coverage has not been precisely measured, and depends in part on the reason for the cost increase. In general, premium payers react differently to a price increase that reflects additional benefits than to a price increase that does not do so.

The term "elasticity" refers to the response of purchasers to a small price change that does not provide any additional value. Although the elasticity of demand for insurance is very difficult to measure, one study suggests that it is approximately -0.2%. This means that for each 1% "valueless" increase in premium, 0.2% of customers will drop coverage. With approximately 2.4 million insured, the prediction is thus that less than 125 people would lose coverage.

Since 1997 and before, articles have been written cautioning that mandated benefits will increase insurance premiums and thus the number of uninsured. Because of the potential impact on the uninsured many states now require studies of the impact of benefit mandates on the market and specifically on premium rates. Potential increase in premiums from A-2774 would be less than 0.025%. This premium increase by itself would not seem likely to move health insurance purchasers to discontinue coverage, but it would be combined with the already double digit increases in premiums that many believe are becoming unaffordable. PriceWaterhouseCoopers estimated that between 2001 and 2002, 15% of the increase in health insurance premiums was due to government mandates and regulation. The impact of every additional increase including A-2774 is an important consideration.

The implication of cost shifting the cost of mandated benefits to employee is that the cost increase is leveraged when it is shifted to the employee. If the employee pays 50% of the premium prior to the increase and is expected to pay all of the 0.025% increase, the employee’s contribution is increased by 0.05%. Added to other cost shifting the increases in employee contributions may be causing

employees to decline the coverage offered to them. The employees most likely to drop coverage are the healthy and the low income.

**Impact on the Affordability and Utilization of Orthotic and Prosthetic Appliances**

Generally, it is believed that when a provider’s services become reimbursable, their cost tends to rise. For A-2774, cost is managed by only requiring reimbursement equal to the Medicare reimbursement schedule. Since the Medicare O&P fee schedule was implemented in 1989, Federal reimbursement levels for orthotics and prosthetics have increased only 25 percent while the Consumer Price Index (CPI) has increased by more than 48 percent.\(^{17}\) As technology produces more sophisticated appliances, the demand for the most technologically advanced alternative will increase costs.

As with any product there are alternative orthotic and prosthetic solutions. A typical prosthetic can run from $3,000 to $40,000 and must be replaced every few years. Computerized versions of prosthetics can run over $50,000.\(^ {18}\) A-2774 would give the physician the responsibility for determining the medically necessary alternative. The physician may prescribe the more expensive alternative even though it is not medically necessary for activities of daily living or for job activities. The coverage of replacement prosthetics required under A-2774 may result in the replacement of current functional prosthetics with more expensive state-of-the-art models.

Utilization can only be managed to the extent that the individual’s physician uses his judgment as to medical necessity. For a prosthetic to be the most effective it must be comfortable and easy to use. It is reported that all amputees will have problems with their prostheses and some amputees would never be satisfied.\(^ {19}\) It is the physician's responsibility to weigh the benefit of replacing prosthetics that the patient is not satisfied with versus the cost of supplying replacement prosthesis.

Since medical necessity is left to the interpretation of the physician, will patients be willing to settle for appliances that allow them to perform the activities of daily living rather than demand the state of the art appliances? Typically when insurance covers a product, physicians and patients will choose the best and most expensive alternative. Specialized prosthetics for sport purposes may be considered medically necessary by some physicians leading to multiple

---

\(^{17}\) American Orthotic and Prosthetic Organization, "CONGRESS SHOULD MAINTAIN THE MEDICARE ORTHOTIC & PROSTHETIC FEE SCHEDULE UPDATE", http://www.aopanet.org/hot_op_issues/documents/section_2/2_3/Medicare_OP_Fee_Schedule.doc


prosthetics for multiple uses for each patient. It will be left to the physician and patient to determine the level of sophistication and specialization needed.

Beyond the cost of the O&P, additional physician and technical services needed to support the effective use of replacement prosthetics will increase the cost of the total treatment. Since there are no cost restrictions on these services, economic theory indicates that as the demand for these services increases, the cost per service may also increase.
Chapter 3  Conclusion

Conclusion

The population benefiting from A-2774 would be relatively small. The 1996 National Health Interview Survey indicates that nearly 12 million people in the United States have an extremity absence, or limb loss (excluding tips of fingers or toes only). The prevalence rate averages 4.9 per 1,000 persons or 0.49% with an extremity loss.\(^{20}\)

Even though the affected population is small, the coverage of O&P is important to allow the individual to return to normal social and work activities. In addition to replacing functional loss due to the loss or injury to a limb, they provide cosmetic, sensory, and expressive functions.\(^{21}\) This includes allowing the individual to get needed exercise to stay healthy. Also returning to normal activities lessens depression and other psychological problems.

Efficacy is reduced when patients do not use prosthetics due to pain or difficulty of use. Many hours of rehabilitation and therapy are needed to maximize the usefulness and acceptance of the prosthesis. Patients often find appliances heavy and awkward to use. Some report that activities take 5 times as long to perform with the prosthetic.\(^{22}\) Pressure on soft tissue can cause pain resulting in discarded prosthetics. It is therefore important that appliances fit properly and are well maintained.

It is reported that veterans are currently experiencing an increased number of amputees due to life saving equipment that does not protect limbs. The US Department of Veterans Affairs believes that prosthetic limbs are so important to the care of veteran amputees that they are funding scientists at Brown University and the Massachusetts Institute of Technology for research to design artificial "biohybrid" limbs that merge man-made components with human tissue -and work like fully functioning human appendages.\(^{23}\)\(^{24}\)

\(^{20}\) Centers for Disease Control and Prevention, "Improving the Lives of People with Limb Loss", http://www.cdc.gov/programs/bd04.htm
\(^{24}\) Metz, Rachel, "Embracing the Artificial Limb", http://www.wired.com/news/medtech/0,1286,66633,00.html?tw=wn_1techhead
The cost impact on premiums is relatively small at less than 0.025%. Even this small amount can add to the already burdensome health premiums for individuals, small employers, and employees.


BlueCross BlueShield Association, "State Legislative Health Care and Insurance Issues"


Centers for Disease Control and Prevention, "Improving the Lives of People with Limb Loss", http://www.cdc.gov/programs/bd04.htm


Commerce and Industry Association of New Jersey, "2004 Legislative and Regulatory Agenda", http://www.cianj.org/gov/docs/LegAgenda04Final.pdf

Division of Health Care Finance and Policy Commonwealth of Massachusetts, September 2004, "Review and Evaluating of Proposed Legislation to Mandate Coverage for Scalp Hair Prostheses"

Gavora, Carrie, "How Health Insurance Mandates Misdiagnose the Disease", HTTP://WWW.HERITAGE.ORG/RESEARCH/HEALTHCARE/BG1108.CFM
Illinois Division of Insurance, "Mandated Benefits, Offers, and Coverages - Illinois Division of Insurance",
http://www.ins.state.il.us/healthInsurance/Mandated_benefits.htm


Maine Artificial Limb & Orthotics, www.maineartificiallimb.com


Metz, Rachel, "Embracing the Artificial Limb", http://www.wired.com/news/medtech/0,1286,66633,00.html?tw=wn_1techhead


National Association of Insurance Commissioners, "NAIC's Compendium of State Laws on Insurance Topics"


National Center for Policy Analysis, "Five Myths about the Uninsured in America ", http://www.ncpa.org/ba/ba339/ba339.html


Pennsylvania Health Care Cost Containment Council, "Executive Summary Diabetes Benefits in House Bill 656"


South Carolina Department of Insurance, September 30, 2004, "Final Report to the Secretary United States Department of Health and Human Services"

State of Wisconsin, "Fact Sheet on Mandated Benefits in Health Insurance Policies"


University of Washington Center for Technology & Disability Studies, "Health-Related Sources of Adaptive Technology Funding", http://uwctds:washington.edu


Utah Arm website, www.UtahArm.com


