Review and Evaluation of Required Coverage for Prosthetics

December 2008

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

EXECUTIVE SUMMARY ........................................................................................................ 1

BACKGROUND .................................................................................................................. 3

PROSTHETICS EFFICACY ............................................................................................... 3
  Use of Prosthetics ......................................................................................................... 3
  Cost of Prosthetics ..................................................................................................... 7

PROSTHETIC INSURANCE COVERAGE ........................................................................ 9
  Current Insurance Coverage of Prosthetics .............................................................. 9

PROSTHETIC MANDATED BENEFIT ............................................................................ 12
  Proposed Nebraska Coverage of Prosthetics ............................................................ 12
  Statutes and Proposals in Other States ...................................................................... 13
  Cost of Proposed Coverage in Nebraska ................................................................. 16

SUMMARY OF CONCLUSIONS .................................................................................. 18

BIBLIOGRAPHY ............................................................................................................ 20
EXECUTIVE SUMMARY

In 2008, the Nebraska Legislature considered Legislature Bill 969, a bill that required health carriers to cover prosthetic services. The proponents of LB 969 are intending to bring forward this legislative measure again in 2009 (hereinafter referred to as the “Nebraska Bill”).

An actuarial firm, NovaRest Consulting, with experience in investigations of benefit cost estimates and analysis was engaged by the Amputee Coalition of Nebraska to study this matter and to prepare a report addressing facets of the proposed legislation. NovaRest specializes in providing support to regulatory agencies. Services to state and federal insurance regulatory agencies include state insurance examinations, federal audits of Medicare bids, and projects to evaluate state insurance reform initiatives. Additionally, NovaRest has performed numerous financial evaluations of mandated benefits. Donna Novak, the founder of NovaRest, has performed actuarial mandated benefit reviews for the State of Maine from 2001 to the present including the analysis of eleven mandated benefit proposals. She has reviewed the impact of mandated benefits for the State of South Carolina, the State of Illinois, and for the Employer Alliance for Affordable Health Care in New York.

This report reviews the impact on insurance premiums from requiring insurance companies to cover prosthetic services similar to the mandate described in the Nebraska 2008 Legislative Bill 969. Due to the lack of Nebraska specific data, it uses actuarial estimates for similar legislation in other states and Nebraska specific assumptions to estimate the impact on insurance premiums in Nebraska.

Eleven states have passed legislation similar to the legislation being considered in Nebraska. Additionally, at least 27 other states are considering mandated prosthetic benefit legislation. This interest in mandating prosthetic insurance coverage is being driven by the financial hardship that amputees experience when their insurance limits the dollar amount of coverage or the frequency of prosthetic replacement.

A general tenet of insurance is to spread the risk of infrequent and random events amongst a covered population. Insurance coverage of prosthetics, as a fairly infrequent but significant cost event, follows this tenet.
The cost of prosthetics varies significantly and as technology improves, the cost is increasing. The cost of the typical prosthetic device ranges from $5,000 to $30,000. Due to wear and changes in the limb, prosthetic devices require replacement for an adult every three to five years and for a child every six to nine months.

The rate of amputation in the US is approximately 4.9 per 1,000 people and 52% of individuals with limb loss are under 65, while 5% are under 18. The loss of a limb is most frequently due to diabetes related circulation problems, but can also result from cancer, trauma, or birth defects. Not everyone with the loss of a limb is a good candidate for a prosthetic device. The decision on the appropriateness of a prosthetic device is based on the individual’s functional abilities and other factors.

The use of prosthetics allows individuals with the loss of a limb to perform many of the normal functions of daily living. A large percentage of individuals with limb loss (70% to 90%) are able to return to work and function in their home environment with the aid of a prosthetic device. Therefore, when we are looking at the cost of increased premiums, there is an offsetting macro-level benefit in the reduction of the costs associated with the unemployed.

The cost of the Nebraska Bill will be the marginal cost for insurers to provide the benefit over and above what they are currently covering. Therefore, the cost will vary by insurer and policy. Some insurance policies already provide more coverage for prosthetics than required by the Nebraska Bill and premiums for these policies will not increase. Other insurance policies provide minimal coverage for prosthetics and premiums for these policies will increase the most if the Nebraska Bill passes.

We estimated the average cost impact on premiums be 0.03% to 0.06% for commercial insurance policyholders in Nebraska. The impact on any particular individual’s premium could range from zero to as much as $0.41 per-member-per-month (“PMPM”) depending on the individual’s current prosthetic coverage and the insurer’s estimate of the use of the benefit for the individuals covered by the same policy form.

---
1 http://www.amputee-coalition.org/fact_sheets/limbloss_us.html
2 Commonwealth of Massachusetts Mandated Benefit Review; April 2005
The longer term impact on premiums may include other factors such as reduced mental health care costs and disability costs due to the successful impact of the prosthetic. It is expected that the use of prosthetics will result in individuals experiencing less depression and allow more individuals to return to work.

BACKGROUND

What Nebraska’s Proposed Legislation Requires
The Nebraska Bill requires health plans to provide health benefits coverage for expenses incurred in obtaining prosthetics. Under this bill, “Prosthetic” means artificial legs and arms and associated components. A deductible or copayment must be less than or equal to the annual Part B deductible that is imposed under Part B of the Medicare fee-for-service program. The deductible for 2009 will be $135. An annual or lifetime dollar maximum on coverage for prosthetics cannot be higher than an annual or lifetime dollar maximum that applies in the aggregate to all other terms and services covered.

The bill states that the coverage may be limited to the most appropriate prosthetic that is deemed medically necessary by the covered person’s treating physician, including repair or replacement of prosthetics if determined appropriate by the treating physician.

The bill will not impact large self-insured employer health insurance coverage to the extent that this state insurance law is preempted by ERISA.

PROSTHETICS EFFICACY

Use of Prosthetics
The loss of a limb is most frequently due to
- Dysvascular disease (7.5%);
- Diabetes related circulation problems (88%);
- Bone cancer (0.1%);
- Trauma (0.1%); or

---
• Birth defect (under 4.2%)\(^4\).

The current rise in diabetes will probably result in a similar rise in related amputations and the need for prosthetics. Centers for Disease Control and Prevention report that: “[F]rom 1980 to 2005, the crude incidence of diagnosed diabetes increased 124% from 3.3 per 1000 to 7.4 per 1000. Similarly, the age-adjusted incidence increased 114%, suggesting that the majority of the change was not due to the aging of the population.”\(^5\)

The rate of amputation in the US is approximately 4.9 per 1,000 people and 52% of individuals with limb loss are under 65, while 5% are under 18.\(^6\) A sample of 1,426 prosthetic users in Nebraska indicates that 2.4% are under 21 and 11% are over 65, indicating that in Nebraska, a larger percent of prosthetic users are non-seniors than nationally. However, a lower percent of prosthetic users are children.

The exact number of amputees or the number of individuals that would benefit from a prosthetic device living in Nebraska is unknown. The Amputee Coalition of Nebraska recently used national statistics to estimate that there are between 2,300 and 17,000 amputees in Nebraska. This range is fairly large because of the large variation in national estimates.

The Coalition received data from approximately half of the prosthetic providers in Nebraska and determined that there are between 1,100 and 1,200 patients being served by those providers. From this, we concluded that there may be approximately 2,400 prosthetic users in Nebraska. This would include individuals already covered by other insurance such as Medicare, Medicaid, or Workers Compensation.

Not everyone with the loss of a limb is a good candidate for a prosthetic device. The decision on the appropriateness of a prosthetic device is based on the individual’s functional abilities and other factors, including

• Physical condition of the residual limb;
• Compounding health issues such as vascular or arthritic problems in the non-amputated appendages which may affect prosthetic wear;
• Demographic and lifestyle factors including employment and activity levels;

\(^4\) Health Care Utilization Project National Inpatient Sample (HCUP-NIS), 1996
\(^5\) http://www.cdc.gov/diabetes/statistics/incidence/fig2.htm
\(^6\) http://www.amputee-coalition.org/fact_sheets/limbloss_us.html
• Independent living status; and
• Timeframes for recovery and access to rehabilitative care.

At a recent Legislature Insurance Committee meeting, several Nebraska citizens with prosthetic needs testified in person or provided written testimony in support of the Nebraska Bill including:

• Steve Huggenberger, Chair of the Amputee Coalition of Nebraska, who has been an amputee from age seventeen due to an accident on his family’s farm;
• Sheryl Havermann whose 6 year old daughter lost her leg to cancer;
• Sandy Duckert, an amputee, mother of 3 children, who is employed as a nurse;
• Gigi Jensen whose 6 year old daughter also needs regular prosthetics, but is living under a $5,000 cap;
• Melissa McCabe, a young adult amputee who is trying to get started in life and manage her prosthetic bills at the same time, which was difficult with the prosthetic benefit cap on her insurance; and
• Steve Mountain, a former railroad employee, who was injured in an airplane accident and is trying to find a way to get back to work.

The use of prosthetics allows individuals with the loss of a limb to perform the normal functions of daily living. A large percentage of individuals with limb loss (70% to 90%) are able to return to work and function in their home environment. Because prosthetics allow an individual to perform activities for themselves and have more control over their lives, it helps people deal with the psychological trauma of limb loss.

In Virginia, the Joint Legislative Audit and Review Commission and Special Advisory Commission on Mandated Health Insurance Benefits reviewed the social and financial impact of mandated insurance benefits. In this report, the Virginia Commission stated that the potential of not having a prosthetic device could result in additional costs for the health insurer. While difficult to quantify the expected savings in Nebraska, we feel this potential

---

7 Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007
8 Commonwealth of Massachusetts Mandated Benefit Review; April 2005
avoidance of health care costs is important to consider. From the commission’s report:

“Mandating this coverage will not reduce the incidence of precursor events resulting in the need for a prosthetic. However, individuals enrolled in plans that do not offer prosthetics coverage or those with low annual caps or high co-payments, may be unable to afford to cover the entire expense of a prosthetic device. Without prosthetic care, many individuals will lead a more sedentary lifestyle which may lead to secondary complications depending on procedures used and the patient’s lifespan, including:

- Costs of medications for diabetes-related complications;

- Instances of heart attack due to peripheral vascular disease, for which surgical treatment and hospitalization can cost from $75,000 to $200,000;

- Development of knee or hip problems from being unable to walk correctly, for which surgery can cost from $80,000 to $150,000 or more; and

- Crutch overuse leading to wrist, elbow, and shoulder problems, which can cost between $7,500 and $25,000.

Medical experts in Virginia reported that increasing access to medically appropriate prosthetic devices for those that do not have adequate coverage reduces additional medical procedures associated with an increased sedentary lifestyle following an amputation.

It is apparent that a few situations from the above list, if avoided, will potentially offset some of the cost of providing additional prosthetic coverage.

---

9 Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007
A prosthetic that does not fit properly loses its functionality. If a prosthetic does not fit, it can cause pain and sores and often cannot be used until adjusted or repaired by a health care professional. This is particularly problematic shortly after limb loss when the remaining section of the limb is changing and with children, who are growing. Children outgrow their prosthetics just as they outgrow their clothes. The result is that prosthetics for children may have to be replaced as often as every six to nine months. For adults changes in the limb or normal wear of the prosthetic require replacement every three to five years.

The improvement of prosthetic appliances has made a significant impact on amputee’s lives, similar to the favorable impact of replacement of hips, knees, and shoulders. According to an evaluation made by a legislative commission in Virginia:

“Safety and effectiveness studies are required by the U.S. Food and Drug Administration prior to issuing approval for prosthetic devices. Researchers have documented the positive effects prostheses can have on patients, including improved physical and psychological functioning of persons with amputations or congenital physical disabilities, by enabling them to perform activities of daily life. In addition, most individuals with prostheses return to some form of work and show a reduction in secondary conditions that can result from their disability.’’

**Cost of Prosthetics**
The cost of prosthetics varies significantly and as technology improves, the cost is increasing. An illustrative range used in 2007 by the Joint Legislative Audit and Review Commission (“JLARC”) of the Virginia General Assembly was:

- Below-knee prostheses $5,000-$7,000
- Above-knee prostheses $10,000-$30,000
- Below-elbow prostheses $3,000-$10,000
- Above-elbow prostheses $10,000-$30,000

---

10 Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007
These ranges do not include some advanced micro-processor prosthetics that can cost in excess of $50,000.

Of course, a double amputee would have double the cost for their prosthetics and for repair.

In the Virginia Commission Evaluation Report, average payments for the State Employee Plan were obtained. This data is displayed below\textsuperscript{11}.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Prosthetic Device & Total Number of Devices & Average Payment Through State Employee Health Plan \\
\hline
Transfemoral (Above-Knee) & 263 & $7,300 \\
Transradial (Below-Elbow) & 180 & $11,700\textsuperscript{1} \\
Transhumeral (Above-Elbow) & 87 & $31,600 \\
\hline
\textbf{Total} & 530 & \\
\hline
\end{tabular}
\caption{Prosthetic Device Usage and Average Payment Amounts for State Employees Since 2001}
\end{table}

\textsuperscript{1}Average cost for above-knee prosthesis includes costs of required below knee device and approximately $4,400 for knee prostheses.

Source: Virginia Department of Human Resources Management and Anthem, Inc.

As in most medical areas, prosthetic technology is ever expanding. Scientists from Brown University, MIT, and the Providence RI VA Medical Center are currently working on a prosthetic device that can merge man-made components with human tissue\textsuperscript{12}. Eventually this new technology and others will likely increase the cost of prosthetics even further as these devices move from the classification of experimental to approved medical care.

\textsuperscript{11} Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007

\textsuperscript{12} Metz, Rachel; Embracing the Artificial Limb, http://www.wired.com/news/medtech/0,1286,66633,00.html?w=wn_1techhead
PROSTHETIC INSURANCE COVERAGE

Current Insurance Coverage of Prosthetics

If a loss of limb is due to a work related injury it may be covered by Worker’s Compensation. In general, the employer/insurer is liable for all reasonable medical and hospital services, appliances, prescribed drugs, prosthetic devices, and other supplies that are necessary as the result of a work-related injury.\textsuperscript{13}

The Veterans Administration (VA) covers the expense for the loss of limb of veterans with qualifying service. Tricare covers active military and their families, as well as military retirees under age 65 and their families.

If the patient qualifies for Medicare due to age or disability, Medicare covers 80% of the scheduled reimbursement amounts for prosthetics after an annual Part B deductible is satisfied. Enrollment in Medicare Advantage plans or Medicare Supplement insurance may result in additional coverage.

Prosthetic insurance coverage under both group and individual commercial health insurance varies significantly. Many commercial plans cover prosthetics under a durable medical equipment ("DME") benefit, along with wheelchairs, walkers, and crutches. The DME benefit typically has low annual benefit limits. Other policies cover prosthetics separately, but still have inadequate annual dollar maximum payments and/or limit the timing between replacements. One example of limits on replacement timing would be coverage on one prosthetic device every five years, including children that are still growing.

If an individual is a double amputee, there is no increase in coverage, which will virtually leave one limb uncovered by commercial insurance.

In contrast to prosthetics coverage, replacement of hip, knee, and shoulder joints are routinely covered benefits by insurers. These are expensive services and the frequency of these procedures has been increasing. These procedures provide the same ultimate benefit to the patient as prosthetics do for patients needing limb replacements. An argument can be made that prosthetic replacements for legs and arms should be covered under the same benefit structure as joint replacements.

\textsuperscript{13} http://www.wcc.ne.gov/faq_employees.htm#4
In response to a recent survey by the Amputee Coalition of Nebraska, UnitedHealth Group in Nebraska reported that their benefits for prosthetic devices are limited to a single purchase of a type of device once every three years. The limit on reimbursement is $2,500 including repairs and replacement.

BlueCross BlueShield of Nebraska reported that its small group product, BluePride, is their only product that has a calendar year maximum of $5,000. Of the 17 members using the prosthetic benefit, only six had payments by BCBSNE in excess of $600.

Analysis of data provided by BlueCross BlueShield of Nebraska, with the important assumption that the member pays the difference between what BCBSNE pays and billed charges, results in the following:
This information clearly contains data for claims that were not for prosthetic devices, but rather were for supplies or repair of prosthetics. Only five or six claims appear to be for prosthetic devices. As can be observed from this table, BCBSNE paid $23,161 in prosthetic benefits for these policies while members were responsible for $53,503 – over twice the amount paid by BCBSNE. Four members were responsible for payments between $8,754 and $15,329.14

With health care premiums increasing every year, insurers are doing everything they can to be competitive and keep premiums down. If an

14 As noted, we are making an assumption that the member is paying the difference between BCBS’s payment and the billed charges.
insurer increased prosthetic coverage to satisfy a need in the market, their premiums may become less competitive. This would be particularly true if individuals that needed this benefit were free to choose their insurance carrier. If the benefit was mandated, all insurers would be required to provide similar coverage and the cost of the benefit would be more evenly spread among insurers rather than one insurer receiving a disproportionate share of individuals requiring prosthetic coverage.

**PROSTHETIC MANDATED BENEFIT**

*Proposed Nebraska Coverage of Prosthetics*

The Nebraska Bill requires individual or group sickness and accident insurance policies, including any hospital, medical, or surgical expense-incurred policies, as well as, self-funded employee benefit plans (to the extent not preempted by ERISA) to provide health benefits coverage for expenses incurred for prosthetics and in obtaining prosthetics. The coverage would be limited to the most appropriate prosthetic that is deemed medically necessary by the insured’s treating physician. The coverage would include repair or replacement of a prosthetic, if this is deemed appropriate by the insured’s treating physician.

The insurers can require that the prosthetics be furnished by a medical provider that has contracted with the insurer. However, the covered person shall have access to medically necessary clinical care, prosthetic services, and prosthetic components to the same extent that the policy provided for out-of-network services for other covered benefits as well.

This bill will allow a typical deductible or copayment for the prosthetic benefit. However, any cost sharing cannot exceed the annual deductible imposed under Part B of the Medicare fee-for-service program and the Medicare 20% Part B coinsurance.

The bill requires health plans, on and after the bill’s effective date, to reimburse for these benefits at no less than the reimbursement for prosthetic appliances under the federal Medicare reimbursement schedule. The proposed statute contains the following definitions:
“Prosthetic” means artificial legs and arms and associated components, including replacements if required because of a change in the patient’s physical condition.

Statutes and Proposals in Other States
Because of insurer restrictions on prosthetic benefits and a reported trend of insurer’s further decreasing coverage, state legislators in a number of states are introducing legislation to mandate coverage of this benefit. Key elements of typical legislation include:

1. Allowable deductibles and copays;
2. Restricting maximum coverage limits;
3. Reimbursement requirements;
4. Definition of prosthetic;
5. Coverage of repair; and
6. Restricting limitations on the frequency of replacement.

As of September 30, 2008, eleven states have passed legislation similar to the Nebraska Bill and two others are expected to pass their legislation shortly including:\(^{15}\):

---

\(^{15}\) Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007 and NovaRest research
<table>
<thead>
<tr>
<th>State</th>
<th>Year Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>2001</td>
</tr>
<tr>
<td>Maine</td>
<td>2003</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>2004</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>2006</td>
</tr>
<tr>
<td>California</td>
<td>2006</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>2006</td>
</tr>
<tr>
<td>Oregon</td>
<td>2007</td>
</tr>
<tr>
<td>New Jersey</td>
<td>2008</td>
</tr>
<tr>
<td>Indiana</td>
<td>2008</td>
</tr>
<tr>
<td>Louisiana</td>
<td>2008</td>
</tr>
<tr>
<td>Maryland</td>
<td>Pending</td>
</tr>
<tr>
<td>Vermont</td>
<td>2008</td>
</tr>
<tr>
<td>Virginia</td>
<td>Pending</td>
</tr>
</tbody>
</table>

1 Maryland and Virginia mandates are awaiting the analysis of state cost impact studies.

Although there is a lot of similarity between state mandates, provisions vary somewhat. The following table summarizes the current state prosthetic mandates.
<table>
<thead>
<tr>
<th>State</th>
<th>Allowable deductibles and coinsurance</th>
<th>Reimbursement limits</th>
<th>Definition of prosthetic</th>
<th>Coverage of repair or replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>Medicare ($100, 20%)</td>
<td>Medicare</td>
<td>Limbs, hands, fingers, feet, and toes</td>
<td>Not explicitly</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Medicare ($100, 20%)</td>
<td>Medicare</td>
<td>Whole or part of an arm or leg</td>
<td>Yes</td>
</tr>
<tr>
<td>California</td>
<td>No more than the most common amounts applied to the basic health care services.</td>
<td>Medicare</td>
<td>Whole or part of an arm or leg</td>
<td>Unless required due to misuse or loss</td>
</tr>
<tr>
<td>Colorado</td>
<td>Medicare ($100, 20%)</td>
<td>Medicare</td>
<td>Whole or part of an arm or leg</td>
<td>Not explicitly</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Medicare ($100, 20%)</td>
<td>Medicare</td>
<td>Whole or part of an arm or leg</td>
<td>Not explicitly</td>
</tr>
<tr>
<td>Maine</td>
<td>Medicare ($100, 20%)</td>
<td>Medicare</td>
<td>Limb, appendage, or external body part including hand or foot</td>
<td>Yes, unless required due to misuse or loss</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Medicare ($100, 20%)</td>
<td>Medicare</td>
<td>An artificial medical device that is not surgically implanted and that is used to replace a missing limb.</td>
<td>Yes</td>
</tr>
<tr>
<td>Louisiana</td>
<td>Shall not be greater than the co-payments that apply to other benefits under the plan.</td>
<td>Medicare</td>
<td>Means an artificial limb device to replace, in whole or in part, an arm or a leg</td>
<td>Yes</td>
</tr>
<tr>
<td>Vermont</td>
<td>May not be subject to provisions that are more restrictive than those that apply generally to other non-primary care items and service under the health plan.</td>
<td>Medicare</td>
<td>leg or arm</td>
<td>Yes</td>
</tr>
<tr>
<td>Indiana</td>
<td>Must be comparable to other coverage generally under the state employee health benefit plan.</td>
<td>Medicare</td>
<td>An artificial limb device or appliance designed to replace in whole or in part an arm or a leg</td>
<td>If medically necessary to restore or maintain the ability to complete activities of daily living or essential job-related activities.</td>
</tr>
<tr>
<td>Oregon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In addition to these states, many other states are considering changes to required prosthetic coverage, according to an evaluation made by the Virginia General Assembly in 2007:

“Additionally, the national advocacy organization indicates that 27 states (including Virginia) are considering legislation based on the model bill, and draft language for a Congressional bill is being developed.”

Cost of Proposed Coverage in Nebraska
The cost of this bill will be the marginal cost for insurers to provide the benefit over and above what they are currently covering. Therefore, the cost will vary by insurer. Some insurance policies already provide more coverage of prosthetics than required by the Nebraska Bill and premiums for these policies will not increase. Other insurance policies provide minimal coverage for prosthetics and premiums for these policies will increase the most if the Nebraska Bill passes.

For example, the cost of the prosthetic benefit to BCBSNE for its small group product was approximately $0.08 per-member-per-month (“PMPM”) based on their survey answers\(^{17}\). The cost under the Nebraska Bill, using the BCBSNE provider paid amounts as the reimbursable amount would be approximately $0.20 PMPM, or a $0.12 PMPM cost increase at current provider rates. Note that the actual increase could be more or less depending on differences in Medicare reimbursements, as well as potential increased utilization. Any increase in utilization would result from more frequent replacement of ineffective prosthetics rather than from an increase in individuals needing or using prosthetic devices.

The Maine Bureau of Insurance does periodic estimates of its prior mandated benefit legislation. The estimate for Maine’s mandated prosthetic benefit, which is identical to the Nebraska Bill, was a maximum of 0.03% of premium for larger employer groups and 0.08% for employer groups under

\(^{16}\) Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007

\(^{17}\) Note, the small number of BCBSNE members using the prosthetic benefit is not a large enough sample for an accurate estimate of the cost of a larger population, but we think that the order of magnitude can be implied by the survey answers.
20 and individual coverage. The higher cost for individuals and small groups is due to the limited prosthetic benefits in these policies prior to the Maine mandate.

We did not receive sufficient information from insurers in Nebraska to be able to estimate the average premium increase based on current benefits. Some insurers claimed that the information requested was proprietary and would not provide it. Premium rates will increase based on insurer estimates of increased claims cost and the administrative cost of administering the new prosthetic benefit. Estimated premium increases resulting from similar legislation in other states range from or 0.01% to 0.16% of the premium.

The following table shows the estimates made in other states of the impact on premiums for mandated prosthetic benefits.

<table>
<thead>
<tr>
<th>State</th>
<th>Dollar PMPM</th>
<th>Percent of Premium</th>
<th>Year of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>$0.10 PMPM to $0.26 PMPM or average of $0.16 PMPM</td>
<td>Average of 0.054%</td>
<td>2006</td>
</tr>
<tr>
<td>Maine</td>
<td>$0.08 - $0.21 PMPM</td>
<td>0.03% - 0.08%</td>
<td>2002</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>$0.42 PMPM</td>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>New Jersey</td>
<td></td>
<td>0.025% to 0.08%</td>
<td>2005</td>
</tr>
<tr>
<td>Virginia</td>
<td>$0.02 to $0.08 PMPM</td>
<td></td>
<td>2007</td>
</tr>
</tbody>
</table>

NovaRest has reviewed the assumptions made in the estimates above and the reports detailing the state mandates and current insurance coverage in each state. The insurance carriers in Nebraska did not provide information that could be used to estimate the premium increase so we based our estimates on the information provided and analysis done in other states. We started with the estimate done in Maine since Maine has similar demographics to those in Nebraska. We modified the assumptions used in the Maine estimate for

---

current conditions and some differences in Nebraska. We then reviewed the estimates done in other states to verify that our estimates were reasonable based on actuarial estimates done in other states for similar mandates.

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.

Based on our analysis, our understanding of the situation in Nebraska, and the current average cost of a prosthetic, we estimate that the average premium increase would be in the range of 0.03% to 0.06%. Considering the average premium in Nebraska,\textsuperscript{19} this would result in an average increase in group premium for individual coverage of $0.17 PMPM and for family coverage of $0.48 PMPM. The impact on any particular individual’s premium would depend on the current prosthetic coverage and the insurer’s estimate of the use of the benefit for the individuals covered by the policy form. Many policies will not have any increase in premiums while policies with minimal prosthetic coverage will have the largest premium increases. Individuals that require prosthetics will not choose the policies with minimal coverage if they have a choice, therefore these policies will have less prosthetic patients than the average in the Nebraska population. Since some individuals do not have a choice in their health insurance coverage, there will be some prosthetic users that are covered by the low benefit policies. The policies with minimal coverage could increase group premiums for individual coverage from $0.26 to $0.41 PMPM\textsuperscript{20}, which of course is higher than the projected average premium increase since it represents the range of maximum increases.

**SUMMARY OF CONCLUSIONS**

*Nebraska Amputees and Costs*

Eleven states have passed legislation similar to the Nebraska Bill to mandate insurance coverage of prosthetic devices and many others are in the process of reviewing similar legislative proposals.

\textsuperscript{19} Kaiser Family State Health Facts for 2006 trended to 2009; http://www.statehealthfacts.org/profileind.jsp?id=270&cat=5&rgn=29

\textsuperscript{20} This is based on the average cost of prosthetic, average replacement time, and estimated prosthetic users with these policies.
The interest in mandating this benefit is driven by the financial hardship facing individuals that require prosthetic 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 estimated cost of a prosthetic device varies significantly based on the type of prosthetic included in the range. A typical device can cost from $3,000 to $30,000. Improved micro-processor prosthetics are being developed that can cost $50,000 or more.

Although the prosthetic use in Nebraska has not been fully determined, the population benefiting from the Nebraska Bill would be relatively small. From an extrapolation of national statistics, Nebraska would have approximately 8,000 amputees. Since not all of these individuals are good candidates for the use of prosthetic devices, the affected population would be expected to be less than 8,000.

For commercial insurance policyholders in Nebraska, we estimated the average cost impact on premiums be 0.03% to 0.06%. The impact on any particular individual’s premium could range from zero to as much as $0.41 PMPM depending on the individual’s current prosthetic coverage.

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

On a more macro-level, the cost of insurance coverage of prosthetics is offset by the increased productivity of the individual. Some individuals that may otherwise not be able to find employment and would therefore need state assistance, can, with the use of a prosthetic devise, become a valuable participant in the work force and family life.

---


BIBLIOGRAPHY


BlueCross BlueShield Association, "State Legislative Health Care and Insurance Issues"; http://bcbshealthissues.com/proactive/newsroom/release.vtml?id=29189

Bunce, Victoria, "The Problem with Mandates",


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

Commonwealth of Massachusetts Mandated Benefit Review; April 2005

Department of Health Policy & Planning Report, Colorado, “Prosthetic and Orthotic Adult Benefit-Colorado”

Gavora, Carrie, "How Health Insurance Mandates Misdiagnose the Disease", http://www.heritage.org/Research/HealthCare/BG1108.cfm

Health Care Utilization Project National Inpatient Sample (HCUP-NIS), 1996
http://www.amputee-coalition.org/fact_sheets/limbloss_us.html


Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007

Kaiser Foundation, "MANDATED HEALTH INSURANCE BENEFITS”:


Maine Artificial Limb & Orthotics, www.mainearificiallimb.com


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

Mishra, Raja, "Amputation rate for US troops twice that of past wars", The Boston Globe,

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"


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"


TRADEOFFS AMONG BENEFITS, COVERAGE, AND COSTS?", http://chpps.berkeley.edu/publications/Issue_Brief_7_02.pdf

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](http://www.UtahArm.com)


WASHBURN, LINDY, "A clamor over health care costs", Business News, [http://www.northjersey.com/page.php?qstr=eXJpcnk3ZjezN2Y3dnFlZUVFeXkyOSZmZ2JlbDdmN3ZxZWVFRXl5NjY0NTM5NCZ5cmlyeTdmNzE3Zjd2cWVlRUV5eTI=](http://www.northjersey.com/page.php?qstr=eXJpcnk3ZjezN2Y3dnFlZUVFeXkyOSZmZ2JlbDdmN3ZxZWVFRXl5NjY0NTM5NCZ5cmlyeTdmNzE3Zjd2cWVlRUV5eTI=)