

MAINE STATE LEGISLATURE

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A Report to the Joint Standing Committee on Insurance and Financial Services of the 124th Maine Legislature

Review and Evaluation of LD 20
An Act to Require Insurance Companies
To Cover the Cost of Prosthetics

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I. Executive Summary

Maine currently requires that insurance carriers provide coverage for prosthetic devices to replace all or part of an arm or leg. However, as currently written, the statute specifically excludes prosthetic devices that contain microprocessor devices. LD 20, An Act to Require Insurance Companies to Cover the Cost of Prosthetics, as amended would require coverage for prosthetics employing microprocessors.

Currently most prosthetics employing microprocessor technology are used for knee prosthetics. Microprocessor prosthetics for other applications are being developed and are expected to be widely available for ankles, hands, elbows, etc. in the future.

Microprocessor knee prosthetics allow individuals to walk more naturally, with less effort, and more stability than with prior technology. This results in fewer injuries due to falls and improved benefit since the amputee does not tire as easily.

Coverage for microprocessor prosthetics is available through Workers Compensation insurance, Medicare, MaineCare, the Veterans Administration (VA), and Tricare for those who qualify.

To date, ten other states have adopted mandated prosthetic coverage, and none of these states exclude coverage for microprocessor prosthetics from their mandate.

Cigna and UnitedHealthcare currently cover microprocessors. Due to the currently limited utilization of microprocessors in prosthetic devices, Aetna believes that the cost implications are immaterial, and Aetna expects no increases to premiums, administrative expenses or indirect costs at this time. Mega Life estimates an impact of less than two-tenths of one percent, but anticipates that this number will likely increase with new technologies.

Anthem estimated the cost of this amendment based on the State of Maine Employee Health Plan (SOM), which currently covers prosthetic devices with microprocessors. For a 12-month experience period ending October 2009, the cost associated with the SOM plan for prosthetics with microprocessors was approximately \$0.11 per member per month (PMPM). During that period, there were only two SOM members incurring claims that listed “microprocessor” in the procedure description. Trending the \$0.11 PMPM to be effective in a 2010 rating period, Anthem estimates the cost to be approximately \$0.12 PMPM for group products.

In their response to the Department’s survey, Harvard Pilgrim estimated the cost to be under 0.1% of claims or approximately \$0.30 PMPM. Moreover, based on Harvard Pilgrim’s actual experience to date in Massachusetts and New Hampshire, use of these devices is low, so the impact on a PMPM basis is much less (approximately \$0.05 PMPM).

We estimate the initial premium increase for insured plans would be approximately \$0.15 PMPM or 0.05% of premium. Ultimately, this could increase to \$0.35 or 0.11% of premium.

For our cost estimates, we assumed that when the amendment is first implemented, microprocessor prosthetics will be primarily for knees, but over time microprocessor prosthetics will be available for ankles, wrists and elbows. We also assume that a microprocessor prosthetic costs \$32,000 more than a traditional prosthetic, that the prosthetic will be eligible for replacement every 5 years (consistent with Medicare rules) and that currently 28% of microprocessor prosthetics are covered by insurance.

II. Background

The Joint Standing Committee on Insurance and Financial Services of the 124th Maine Legislature directed the Bureau of Insurance (the Bureau) to review an amendment to LD 20, An Act to Require Insurance Companies to Cover the Cost of Prosthetics. The review was conducted as required by 24-A M.R.S.A. § 2752. This review was a collaborative effort of NovaRest, Inc. and the Bureau.

In 2004, Maine passed a mandated benefit requiring insurance carriers to cover prosthetic devices to replace all or part of an arm or leg.¹ The statute specifically excludes prosthetic devices that contain microprocessors. As amended, LD 20 removes this exemption from the existing mandated benefit.

Use of Prosthetics

Prosthetic devices are intended to restore function after limb loss. In 1999, the Food and Drug Administration (FDA) first licensed prosthetics employing microprocessors for use in the United States. Since then, technology advancements have greatly improved mobility and functional capability. Numerous new models with improved function have been introduced to the market. The use of prosthetics employing microprocessors for above-the-knee amputees provides enhanced comfort, mobility and safety compared to traditional prosthetic devices. These devices use microprocessor control for both the swing and stance phases of gait. By improving stance control, they may provide increased safety, stability, and function; for example, the sensors are designed to recognize a stumble and stiffen the knee, thus avoiding a fall. Other potential benefits of microprocessor controlled knee prostheses are improved ability to navigate stairs, slopes, uneven terrain, and reduction of energy expenditure and concentration required for ambulation.

The loss of a limb is most frequently due to:

- Diabetes related circulation problems (88%);
- Dysvascular disease (7.5%);
- Birth defect (under 4.2%);
- Bone cancer (0.1%); or
- Trauma (0.1%).²

The current rise in diabetes will probably result in a similar rise in related amputations and the need for prosthetics. The Centers for Disease Control and Prevention reports 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.”³

¹ 24-A M.R.S.A. § 4315

² Health Care Utilization Project National Inpatient Sample (HCUP-NIS), 1996

³ <http://www.cdc.gov/diabetes/statistics/incidence/fig2.htm>

The rate of amputation in the US is approximately 4.9 per 1,000 people and 49% of individuals with limb loss are under 65 years of age.⁴

Prosthetics employing microprocessors have been covered by Medicare since 2002. In addition to Maine, ten other states mandate insurance coverage for prosthetics. Maine is the only one of the 11 states that excludes prosthetics employing microprocessors.

⁴ http://www.amputee-coalition.org/fact_sheets/limbloss_us.html

III. Social Impact

A. Social Impact of Mandating the Benefit

1. *The extent to which the treatment or service is utilized by a significant portion of the population.*

This benefit would be used by a very small portion of the population. Currently, microprocessor prosthetics are most commonly used in above-knee amputation. They are generally used within the knee joint to allow for stable walking. However, there is growing research and development of microprocessor prosthetics for upper limb amputations, including elbow and hand. It is not expected that these uses will have a significant effect on the cost estimates at this time, but as new products are developed and introduced into the market place, they could have a more significant effect in the future.

In 2007, there were an estimated 105,392 hospital discharges nationally where lower extremities were amputated.⁵ This results in an estimated rate of 3.5 lower extremity amputations per 10,000 people.⁶ Using the same database, the estimated number of hospital discharges where lower extremities were amputated in Maine was 432 per year.

Based on the national and Maine hospital discharge data, the age distribution for lower extremity amputation is as follows:

Age	Total number of discharges of Amputation Patients, Nationally	Maine Amputation discharges
1-17	375 (0.36%)	* ⁷
18-44	9,435 (8.95%)	39 (9.03%)
45-64	41,934 (39.78%)	158 (36.57%)
65-84	43,747 (41.51%)	183 (42.36%)
85+	9,861 (9.36%)	52 (12.04%)

Additional data contained in the national and Maine hospital discharge data shows the following information regarding payer of the service:

⁵ Agency for Healthcare Research and Quality, www.ahrq.gov

⁶ Calculations based on estimated 2007 populations estimates of the U.S. Census Bureau, www.census.gov

⁷ We interpret the asterisks to mean that although discharges were negligible in these categories, they are possible.

Payer	Total number of discharges of Amputation Patients, Nationally	Maine Amputation discharges
Medicare	65,784 (62.42%)	310 (71.76%)
Medicaid	11,251 (10.68%)	37 (8.56%)
Private Insurance	19,753 (18.74%)	68 (15.74%)
Uninsured	5,203 (4.94)	*
Other	3,222 (3.08%)	*
Missing	178 (0.17%)	*

Based on the above data, the total number of new amputations of lower extremities within the state of Maine that would be covered by private insurance would be in the range of 60 to 70 per year. This includes those covered by self-insured plans, which are not subject to Maine’s mandate.

Since the above numbers cover all amputations of lower extremities, statistical data is not available to accurately estimate the number of Maine patients who would be candidates for microprocessor prosthetics. Data indicates that between 19% and 40% of lower amputations are for above-knee amputations. Currently, microprocessor prosthetics are most suitable for above-knee amputations.

Not everyone with the loss of a limb, even in the case of above-knee amputation, is a good candidate for a microprocessor prosthetic or for any 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;
- Independent living status; and
- Timeframes for recovery and access to rehabilitative care.⁸

Based on the above, it can be estimated that this benefit would affect less than 35 new above-knee amputees per year in the State of Maine plus replacement prosthetics for current Maine amputees. Using our assumptions (see financial impact below), approximately 20 amputees initially and 50 amputees ultimately would benefit from this mandate every year.

2. *The extent to which the service or treatment is available to the population.*

Prosthetics employing microprocessors are readily available in the State of Maine. There are at least four major manufacturers of microprocessor knees available.

3. *The extent to which insurance coverage for this treatment is already available.*

⁸ Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007

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.

The Veterans Administration (VA) covers the expense for the loss of limb of veterans with qualifying service. Tricare covers active military members 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.

MaineCare reported that as of January 1, 2010, they are now covering microprocessors in knees that they previously would have denied. They currently do not cover microprocessors for other prosthetics due to the cost involved.

In Maine, carriers are required to cover non-microprocessor prosthetics to the same extent as Medicare to replace all or part of an arm or leg. Even though prosthetics are covered by insurance, some insurers do not cover microprocessor prosthetics, considering them as experimental devices and exclude them on that basis.⁹

Carriers reported the following information:

Aetna

Aetna currently provides microprocessor prosthetic coverage for lower extremities if approved for medical necessity based on its clinical policy guidelines. Aetna considers ankle-foot prostheses with microprocessor experimental, so are they are currently not covered.

Anthem

Anthem does not provide benefits for prosthetic devices to replace, in whole or in part, an arm or a leg that are designed exclusively for athletic purposes or that contain a microprocessor. They do cover prosthetics with a microprocessor under the State of Maine employee plan.

Cigna

Cigna currently covers all prosthetics as currently mandated and also provides for the coverage of prosthetics with microprocessors, after medical necessity review, if the benefit is not a specific benefit exclusion. For 2009 Cigna approved three such devices, and the cost to members was zero.

Harvard Pilgrim

Harvard Pilgrim only covers prosthetics to the extent of the current mandate and, therefore, does not cover microprocessor prosthetics.

Mega Life

⁹ Amputee Coalition of America, *Microprocessor Devices: The Facts*

For Mega Life policies, microprocessor controlled prosthetics are excluded, either in an amendatory endorsement or in the definition.

United Healthcare

United Healthcare currently covers microprocessor prosthetics.

4. If coverage is not generally available, the extent to which the lack of coverage results in a person being unable to obtain the necessary health care treatment.

Due to the high cost of microprocessor prosthetics, many patients may not be able to afford these devices without the help of insurance.

The average cost of an above-knee prosthetic is approximately \$20,000 - \$30,000. One Maine provider indicates that the current cost of a knee prosthetic with a microprocessor is approximately \$57,000.

5. If coverage is not generally available, the extent to which the lack of coverage involves unreasonable financial hardship.

As noted above, the costs of these devices can be very significant. As stated by the Amputee Coalition of America:¹⁰

When individuals discover that prosthetic care is not covered by their health insurer, or it is extremely limited, they resort to use of retirement funds or children's college savings to purchase the prosthesis they need.... Some individuals in this situation have even taken mortgages out on their homes to get the prosthesis they need.

6. The level of public demand and the level of demand from providers for this treatment or service.

It is estimated that this service is required approximately 78 times per year for new and replacement prosthetics in Maine for those under age 65 and that approximately 20 of these are covered by insurance that does not cover microprocessor prosthetics.

7. The level of public demand and the level of demand from the providers for individual or group coverage of this treatment.

A number of amputee advocacy groups strongly encourage LD 20. Groups include:

- Amputee Coalition of America
- Maine Coalition of Working Amputees
- Disability Rights Center

In addition, at least ten Maine residents have written to express their support for this bill.

¹⁰ Amputee Coalition of America, *Advocacy News: Federal Prosthetic Coverage Bill Released*, March 17, 2008

8. *The level of interest in and the extent to which collective bargaining organizations are negotiating privately for the inclusion of this coverage by group plans.*

No information is available.

9. *The likelihood of meeting a consumer need as evidenced by the experience in other states.*

There are no studies indicating the actual consumer experience in other states. Ten other states have mandated prosthetic benefits. None of these states exclude microprocessor prosthetics from the mandate. Virginia's mandate was effective January 1, 2010, and the Virginia Bureau of Insurance does not expect to have experience data to report until May 2011, as part of their annual report on the impact of mandated benefits.

10. *The relevant findings of the state health planning agency or the appropriate health system agency relating to the social impact of the mandated benefit.*

No information was provided by the state health planning agency.

11. *The alternatives to meeting the identified need.*

No alternatives to meeting the identified need were presented.

12. *Whether the benefit is a medical or a broader social need and whether it is inconsistent with the role of insurance and the concept of managed care.*

The benefit is a medical need due to a physical condition, and coverage required by LD 20 is not inconsistent with the role of insurance to provide medically necessary devices for a condition.

13. *The impact of any social stigma attached to the benefit upon the market.*

The loss of a limb and the disability resulting from it often causes amputees to feel social stigma because they are not able to do what a "normal" person can do. The use of prosthetics, especially microprocessor prosthetics, allows an amputee to resume more of the usual activities of daily living.

14. *The impact of this benefit upon the other benefits currently offered.*

Studies have shown that the use of microprocessor prosthetics has reduced other future health claims of users.¹¹ Because of the performance of these prosthetics, users report fewer falls while wearing microprocessor controlled prosthetic devices; therefore, the incidence of other injuries, such as broken hips requiring surgery is reduced.

¹¹ Hafner, BJ, Willingham, LL, Buell NC, Allyn KJ, Smith DG, *Evaluation of Function, Performance, and Preference as Transfemoral Amputee, Transition from Mechanical to Microprocessor Control of the Prosthetic Knee*, Archives of Physical Medicine and Rehabilitation, Volume 88, Issue 2, Pages 207-217 (February 2007)

In addition, the use of these devices results in users being more active since they allow for more mobility with less effort.

15. The impact of the benefit as it relates to employers shifting to self-insurance and the extent to which the benefit is currently being offered by employers with self-insured plans.

As premiums increase due to mandated benefits, some employers may choose to self-insure in order to have more control over the benefits that they provide to employees and the cost of health insurance premiums.

16. The impact of making the benefit applicable to the state employee health insurance program.

The State Employee Health Plan currently provides coverage for prosthetic devices with microprocessors; therefore, there would not be any cost implications for the plan.

IV. Financial Impact

B. Financial Impact of Mandating Benefits.

1. The extent to which the proposed insurance coverage would increase or decrease the cost of the service or treatment over the next five years.

Due to the level of current competition, it is expected that implementation of this coverage would not have any effect on the cost of microprocessor prosthetics over the next five years.

2. The extent to which the proposed coverage might increase the appropriate or inappropriate use of the treatment or service over the next five years.

The coverage of microprocessor prosthetics by insurance would increase the use of these devices. It could increase inappropriate use if prescribed for patients who normally would not be candidates for these devices. Health insurers could use managed care practices to control the misuse of the benefit.

The Amputee Coalition of America, states:

The provision of prostheses is done on a case by case basis using a proven set of criteria that takes into account the individual's potential for rehabilitation or achievement of a function level, as well as their age, vocation and any other health conditions.¹²

Hanger Prosthetics & Orthotics, a major provider of prosthetics in the United States with more than 600 locations nationwide provided a copy of a detailed Patient Assessment Validation Evaluation Test used to determine the suitability of an individual for prosthetics.

3. The extent to which the mandated treatment or service might serve as an alternative for more expensive or less expensive treatment or service.

The mandated coverage of microprocessor prosthetics would, in some cases, replace other less expensive traditional prosthetics.

4. The methods which will be instituted to manage the utilization and costs of the proposed mandate.

This amendment does not prohibit health plans from covering the services with the same medical management used for other services.

5. The extent to which insurance coverage may affect the number and types of providers over the next five years.

¹² Amputee Coalition of America, *LD20: Making the Case for Comprehensive Prosthetic Provision*

It is not anticipated that this mandate would have any effect on the number and types of providers over the next five years.

6. The extent to which the insurance coverage of the health care service or providers may be reasonably expected to increase or decrease the insurance premium or administrative expenses of policyholders.

The increase in premiums may vary over time, if this amendment is enacted. If this amendment becomes effective, there may be a backlog of individuals who currently cannot afford a microprocessor prosthetic and would want to replace their current prosthetic with a new microprocessor device. LD 20 as amended only requires replacement every five years, consistent with Medicare, but there may still be an increase in demand.

Over time, we anticipate microprocessor prosthetics for other uses. Microprocessor prosthetic ankles and hands are already being perfected, and prosthetic elbows may be available in the future. This will increase the cost of this mandate going forward, but we cannot estimate the extent with any precision. The cost of these newly developed prosthetics may also decrease over time if there is increased competition in the manufacturing of these devices.

We estimate a premium increase initially of \$0.15 per member per month (PMPM), with a potential increase of \$0.35 PMPM as other types of prosthetics are developed with microprocessors.

Our estimate is based on the following assumptions:

- 1) There are 4.9 amputees per 1,000¹³, 49% of whom are under age 65.
- 2) There are 13 new above-knee amputees in Maine every year.
- 3) 34% of amputations are above-knee amputations.¹⁴
- 4) 46% of above-knee amputees use prosthetics, and 60% of all amputees use prosthetics.¹⁵
- 5) 75% of above-knee prosthetics users would use microprocessor prosthetics, and eventually 50% of all prosthetic users would use microprocessor prosthetics.
- 6) The prosthetics used every year include the new prosthetics and 20% of the existing prosthetics as replacements (Medicare approves replacements every 5 years).
- 7) 32%¹⁶ of under age 65 amputees are covered by private insurance, excluding self-insurance, and 28%¹⁷ of insurance policies currently cover microprocessor prosthetics.
- 8) The cost of a microprocessor prosthetic is approximately \$32,000 more than a non-microprocessor prosthetic.

¹³ Centers for Disease Control and Prevention, "Improving the Lives of People with Limb Loss", <http://www.cdc.gov/programs/bd04.htm>

¹⁴ Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007

¹⁵ Joint Legislative Audit and Review Commission of the Virginia General Assembly; Evaluation of Senate Bill 931; September 2007

¹⁶ Agency for Healthcare Research and Quality, www.ahrq.gov

¹⁷ Based on carrier responses and carrier membership information

Insurers' estimates of premium increases are as follows:

Aetna

Aetna has a small block of individual plans in Maine and has not issued a rate increase in that block for several years. For group plans, Aetna believes that the cost implications are immaterial due to the limited number of their insureds using microprocessors in prosthetic devices. Therefore, Aetna expects no increases to premiums, administrative expenses or indirect costs at this time.

Anthem

Anthem estimated the cost of this amendment based on the State of Maine Employee Health Plan (SOM), which currently covers prosthetic devices with microprocessors. For a 12-month experience period ending October 2009, the cost associated with the SOM plan for prosthetics with microprocessors was approximately \$0.11 PMPM.¹⁸ During that period, there were only two SOM members incurring claims that listed "microprocessor" in the procedure description. Trending the \$0.11 PMPM to be effective in 2010 rating period, Anthem estimates the cost to be approximately \$0.12 PMPM for group products.

Cigna

Cigna reports that the financial and utilization implications that would drive pricing for all policies appears to be minimal as Cigna currently covers microprocessors, after medical necessity review is performed, in plans that do not exclude the benefit. The overall volume requested for this benefit is low.

Harvard Pilgrim

In their response to the Department's survey, Harvard Pilgrim said that an equivalent myoelectric or bionic device¹⁹ could cost up to three times a standard prosthetic device. However, they indicate that few members require a myoelectric or bionic prosthetic, so their actuaries have estimated the cost to be under 0.1% of claims or approximately \$0.30 PMPM. Moreover, based on Harvard Pilgrim's actual experience to date in Massachusetts and New Hampshire, use of these devices is low, so the impact on a PMPM basis is much less (approximately \$0.05 PMPM). In both Massachusetts and New Hampshire, the myoelectric or bionic devices are subject to the same standard for coverage as regular prostheses, i.e., the most appropriate model that adequately meets the member's needs in the performance of activities of daily living.

Mega Life

Mega Life estimates an impact of less than two-tenths of one percent, but anticipates that this number will likely increase with new technologies.

United Healthcare

United Healthcare currently covers microprocessor prosthetics and therefore there would be no increase in premium.

¹⁸ Per member per month

¹⁹ A myoelectric device uses electromyogram signals or potentials from voluntarily contracted muscles. A bionic device uses microcircuits. Both are types of microprocessor prosthetics.

7. The impact of indirect costs, which are costs other than premiums and administrative costs, on the question of the cost and benefits of coverage.

There would not be any additional cost effect beyond benefit and administrative costs.

8. The impact on the total cost of health care, including potential benefits and savings to insurers and employers because the proposed mandated treatment or service prevents disease or illness or leads to the early detection and treatment of disease or illness that is less costly than treatment or service for later stages of a disease or illness.

The total cost of health care would increase to the extent that non-microprocessor prosthetics are replaced with the more expensive microprocessor units. This cost will increase as microprocessor technology is applied to additional types of prosthetics. As previously noted, the price of some microprocessor prosthetics, however, may decrease over time with greater competition in manufacturing.

Microprocessor knee prosthetics reduce the chance of falling. This will result in fewer injuries from falls, including broken hips and other bones. No data is available to quantify the cost of the reduction in injuries due to falls.

9. The effects of mandating the benefit on the cost of health care, particularly the premium and administrative expenses and indirect costs, to employers and employees, including the financial impact on small employers, medium-sized employers and large employers.

Some insurers currently cover microprocessor prosthetics, and their premiums would be unaffected. Estimates from carriers that do not currently cover microprocessor prosthetics range from minimal to \$0.30 PMPM

We estimate that the average premium would increase approximately \$0.15 PMPM the first year that the amendment is implemented and as much as \$0.35 PMPM as microprocessor prosthetics for other applications become available.

10. The effect of the proposed mandates on cost-shifting between private and public payers of health care coverage and on the overall cost of the health care delivery system in this State.

To the extent that these services are currently covered by MaineCare and will be paid for by private insurance after the mandate is implemented, the cost will be shifted from the public payers to the private payers. MaineCare is not currently covering a significant number of microprocessor prosthetics that would be paid for by insurers due to this amendment.

V. Medical Efficacy

C. The Medical Efficacy of Mandating the Benefit.

1. The contribution of the benefit to the quality of patient care and the health status of the population, including any research demonstrating the medical efficacy of the treatment or service compared to the alternative of not providing the treatment or service.

A study published in the Archives of Physical Medicine and Rehabilitation compared the effect of active microprocessor control and passive mechanical control of the prosthetic knee on function and safety in 21 unilateral, transfemoral amputees. It concluded:

This study examined the functional ability, performance, and satisfaction of transfemoral amputee subjects during the transition from an established, mechanical control prosthetic knee system into a microprocessor control Otto Bock C-Leg. This transition mirrors the common clinical practice of prescribing a microprocessor control knee after demonstration of proficient and successful use of a mechanical control knee unit. Although anecdotal evidence suggests that microprocessor control of the prosthetic knee may offer increased performance in functional tasks such as stair descent, ramp and hill descent, walking on uneven terrain, a reduction in cognitive demand while walking, and increased safety, empirical evidence for such benefits has been limited. The results shown in this investigation show a statistically significant improvement in subjects' ability to descend stairs; time required to descend a slope; sound-side step length while descending a hill; preference; satisfaction; self-reported frustration with falling; and self-reported frequency of stumbles, semi controlled falls, and uncontrolled falls while wearing the microprocessor control knee and population trends of 5% or more improvement in a number of other functional categories. The results of this investigation not only highlight measured differences between the microprocessor and mechanical control of a knee component but also offer several new techniques and associated outcome measures for assessing function in the transfemoral amputee population. Because it is in functional areas beyond level walking that the benefits of microprocessor control are most observed, the development and standardized use of tools to assess function in these domains is critical to our understanding of real-world amputee ability, performance, and preference. This research has shown that microprocessor control provides significant benefit over mechanical control of the prosthetic knee. It is hoped that this information encourages and promotes additional research in these and other potential benefits of microprocessor stance-phase control in lower-limb prosthetics.²⁰

²⁰ Hafner BJ, Willingham LL, Buell NC, Allyn KJ, Smith DG., Evaluation of Function, Performance, and Preference as Transfemoral Amputees Transition From Mechanical to Microprocessor Control of the Prosthetic Knee. Volume 88, Issue 2, Pages 207-217 (February 2007)

An additional study by Seymour et al showed positive results for improved function with the use of microprocessor-controlled prosthesis.²¹ The study conducted observations of participant's ability to traverse an obstacle course meant to replicate walking tasks that they would encounter in real-life. Participants were able to complete the obstacle course faster, with fewer steps, while wearing the C-leg. These results were retained when the participants carried a ten pound laundry basket while walking the course.

2. *If the legislation seeks to mandate coverage of an additional class of practitioners:*

This amendment does not mandate coverage of an additional class of practitioners.

a. The results of any professionally acceptable research demonstrating medical results achieved by the additional practitioners relative to those already covered.

Not applicable.

b. The methods of the appropriate professional organization that assure clinical proficiency.

Not applicable.

²¹ Seymour R, Engbrestson B, Kott K, *Comparison between the C-leg microprocessor-controlled prosthetic knee and non-microprocessor-controlled prosthetic knees; a preliminary study of energy expenditure, obstacle course performance, and quality of life survey*, Prosthet Orthot Int. 2007, 31(1):5161

VI. Balancing the Effects

D. The Effects of Balancing the Social, Economic, and Medical Efficacy Considerations.

1. The extent to which the need for coverage outweighs the cost of mandating the benefit for all policyholders.

It is estimated that 78 under age 65 amputees in Maine will require new or replacement above-knee prosthetics and would use a microprocessor prosthetic. Of these, 32% are covered by insurance, excluding self-insurance, but 28% of the insured already have microprocessor coverage, resulting in approximately 20 above-knee amputees potentially benefiting per year. As microprocessor prosthetics are available for other purposes, approximately 50 individuals per year will benefit.

The use of a microprocessor prosthetic enhances the usefulness of the prosthetic. For knees, the prosthetic allows for smoother walking and uses less effort allowing for walking longer distances. The use of a microprocessor knee prosthetic also results in fewer falls and injuries from falls, although the savings have not been quantified. Similar improved usefulness can be expected for other microprocessor prosthetics as they are developed.

2. The extent to which the problem of coverage can be resolved by mandating the availability of coverage as an option for policyholders.

Since this mandate would impact a very small percentage of the total population, it is likely that only those who would benefit from the services would purchase the coverage. This would result in an alternative coverage that would cost more than the cost of services when administrative charges were added to benefit costs. This cost would be reduced if the option was only available when the coverage was initially purchased, but then it would be less effective since many individuals may not believe that they will need the coverage and, therefore, would not purchase it.

3. The cumulative impact of mandating this benefit in combination with existing mandates on costs and availability of coverage.

The Bureau's estimates of the premium increases due to existing mandates are displayed in Appendix B. We anticipate that this bill would initially increase premiums by approximately \$0.15 PMPM and ultimately increase insured premiums²² by approximately \$0.35 PMPM. This represents 0.05% percent of premium initially and 0.11% ultimately.

²² This mandate would not apply to self-insured groups.

The following table contains the current estimate of the total cost of mandates in the state of Maine.

Cost of Mandated Benefits in Maine						
	Est. Maximum Cost as % of Premium					
	Prior to Amendment		Initial After Amendment		Ultimate After Amendment	
	Non-HMO	HMO	Non-HMO	HMO	Non-HMO	HMO
Total cost for groups larger than 20:	6.85%	7.32%	6.90%	7.37%	6.96%	7.43%
Total cost for groups of 20 or fewer:	3.75%	5.52%	3.80%	5.57%	3.86%	5.63%
Total cost for individual contracts:	3.74%	4.12%	3.79%	4.17%	3.85%	4.23%

VII. Appendices

Appendix A: Letter from the Committee on Insurance and
Financial Services with Proposed Legislation

SENATE

PETER B. BOWMAN, CHAIR
JUSTIN L. ALFOND
EARLE L. MCCORMICK

COLLEEN MCCARTHY REID, LEGISLATIVE ANALYST
JENNIFER RITCH-SMITH, COMMITTEE CLERK



HOUSE

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STATE OF MAINE

ONE HUNDRED AND TWENTY-FOURTH LEGISLATURE
COMMITTEE ON INSURANCE AND FINANCIAL SERVICES

January 14, 2010

Marti Hooper
Senior Insurance Analyst
Life and Health Division
Bureau of Insurance
34 State House Station
Augusta, Maine 04333

Dear Ms. Hooper:

Title 24-A Maine Revised Statutes Annotated, Section 2752 requires the Joint Standing Committee on Insurance and Financial Services to submit legislation proposing health insurance mandates to the Bureau of Insurance for review and evaluation if there is substantial support for the mandate among the committee after a public hearing on the proposed legislation. Pursuant to that statute, we request that the Bureau of Insurance prepare a review and evaluation of L.D. 20, An Act to Require Insurance Companies to Cover the Cost of Prosthetics, using the proposed Committee Amendment to LD 20 submitted by the bill's sponsor, Rep. Mark Bryant.

A copy of the proposed amendment is enclosed. Please prepare the evaluation using the guidelines set out in Title 24-A § 2752. Please submit the report to the committee on or before March 5th so the committee can take final action on LD 20 before the March 12th deadline for voting on all bills set by the presiding officers. If you have any questions, please do not hesitate to contact us or our legislative analyst, Colleen McCarthy Reid.

Sincerely,

Handwritten signature of Peter B. Bowman in black ink.

Peter B. Bowman
Senate Chair

Handwritten signature of Sharon Anglin Treat in black ink.

Sharon Anglin Treat
House Chair

cc: Members, Insurance and Financial Services Committee
Rep. Mark Bryant

PROPOSED COMMITTEE AMENDMENT ". TO L.D. 20, An Act to Require Insurance Companies to Cover the Cost of Prosthetics

Amend the bill by striking out everything after the enacting clause and before the summary and inserting in its place the following:

Sec. 1. 24-A MRSA § 4315 is amended to read:

§4315. Coverage of prosthetic devices

1. Definition. As used in this section, "prosthetic device" means an artificial device to replace, in whole or in part, an arm or a leg.

2. Required coverage. A carrier shall provide coverage for prosthetic devices in all health plans that, at a minimum, equals, except as provided in subsection 8, the coverage and payment for prosthetic devices provided under federal laws and regulations for the aged and disabled pursuant to 42 United States Code, Sections 1395k, 1395l and 1395m and 42 Code of Federal Regulations, Sections 414.202, 414.210, 414.228 and 410.100. Covered benefits must be provided for a prosthetic device determined by the enrollee's provider, in accordance with section 4301-A, subsection 10-A, to be the most appropriate model that adequately meets the medical needs of the enrollee.

3. Prior authorization. A carrier may require prior authorization for prosthetic devices in the same manner as prior authorization is required for any other covered benefit.

4. Repair or replacement. Coverage under this section must also be provided for repair or replacement of a prosthetic device if repair or replacement is determined appropriate by the enrollee's provider.

5. Coverage under managed care plan. If coverage under this section is provided through a managed care plan, a carrier may require that prosthetic services be rendered by a provider who contracts with the carrier and that a prosthetic device be provided by a vendor designated by the carrier.

6. Exclusions. Coverage is not required pursuant to this section for a prosthetic device ~~that contains a microprocessor or~~ that is designed exclusively for athletic purposes.

7. Application. The requirements of this section apply to all individual and group policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State. For purposes of this section, all contracts are deemed to be renewed no later than the next yearly anniversary of the contract date.

8. Health savings accounts. Benefits for prosthetic devices under health plans issued for use in connection with health savings accounts as authorized under Title XII of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 may be subject to the same deductibles and out-of-pocket limits that apply to overall benefits under the contract.

SPONSORED BY REP. BRYANT
FOR IFS COMMITTEE REVIEW
Hearing on Jan. 12, 2010

Sec. 2. Application. The requirements of this Act apply to all policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State on or after January 1, 2011. For purposes of this Act, all contracts are deemed to be renewed no later than the next yearly anniversary of the contract date.

Summary

This amendment replaces the bill. Under current law, health insurance carriers are required to provide coverage for prosthetic devices, but coverage is not required for those devices containing a microprocessor. The amendment removes the exclusion for prosthetic devices that include a microprocessor. The amendment applies to insurance policies issued or renewed on or after January 2, 2011.

Appendix B: Cumulative Impact of Mandates in Maine

Following are the estimated claim costs for the existing mandates:

- **Mental Health** (Enacted 1983) – The mandate applies only to group plans. It applies to all group HMO plans but does not apply to non-HMO employee group plans covering 20 or fewer employees. Mental health parity for listed conditions was effective 7/1/96 but does not apply to any employer with 20 or fewer employees, whether under HMO or other coverage. The list of conditions for which parity is required was expanded effective 10/1/03. Using annual experience reports from the carriers, the percentage of mental health claims paid has been tracked since 1984 and has historically been between 3% and 4% of total group health claims. The percentage was in the 3.27% to 3.47% range from 1998 to 2002 but then decreased, reaching 2.62% in 2007 and 2.60% in 2008. The percentage of claims is further broken out by HMO and other health plans, but the relationship is inconsistent from year to year. The continued decrease in mental health claims occurred despite the fact that an expansion of the list of conditions for which parity is required was fully implemented in 2005. We estimate a continuation of 2008 levels going forward. For HMO plans covering employers with 20 or fewer employees, we use half the value for larger groups to reflect the fact that parity does not apply. Although it is likely that some of these costs would be covered even in the absence of a mandate, we have no basis for estimating how much. We have included the entire amount, thereby overstating the impact of the mandate to some extent. However, this overstatement is at least partially offset by the fact that the data is an aggregate of all groups, while groups of 20 or fewer are exempt from the parity requirement in the case of HMO coverage and from the entire mandate in the case of non-HMO coverage.
- **Substance Abuse** (Enacted 1983) – The mandate applies only to groups of more than 20 and originally did not apply to HMOs. Effective 10/1/03, substance abuse was added to the list of mental health conditions for which parity is required. This applies to HMOs as well as other carriers. Using annual experience reports from the carriers, the percentage of claims paid has been tracked since 1984. Until 1991, it was in the range of 1% to 2% of total group health claims. This percentage showed a downward trend from 1989 to 2000 when it reached 0.31%. It then increased and leveled off at a range of 0.55% to 0.72% for 2002 through 2008 (low of 0.55% in 2008, high of 0.72% in 2006) despite implementation of the parity requirement. The long-term decrease was probably due to utilization review, which sharply reduced the incidence of inpatient care. Inpatient claims decreased from about 93% of the total in 1985 to 34% in 2008. The percentage of claims is further broken out by HMO and other health plans, but the relationship is inconsistent from year to year. We estimate substance abuse benefits will remain at the current levels going forward. Although it is likely that some of these costs would be covered even in the absence of a mandate, we have no basis for estimating how much. We have included the entire amount, thereby overstating the impact of the mandate to some extent. However, this overstatement is offset by the fact that the data is an aggregate of all groups, while the mandate applies only to groups larger than 20.
- **Chiropractic** (Enacted 1986) – Using annual experience reports from the carriers, the percentage of claims paid has been tracked since 1986 and has been approximately 1% of total health claims each year. However, the percentage increased from 0.84% in 1994 to a high of 1.51% in 2000. Since then, it has decreased to 1.13% in 2008. In the past, the level was lower for individual than for group, but individual has increased to about the same level as group. The level does vary between HMOs and other plans. For 2008, the percentages were 1.30% for HMO plans and 0.95% for other plans. We estimate the current levels going forward. Although it is likely that some of these costs would be covered even in the absence of a mandate, we have no basis for estimating how much. We have included the entire amount, thereby overstating the impact of the mandate to some extent.

- **Screening Mammography** (Enacted 1990) – Using annual experience reports from the carriers, the percentage of claims paid has been tracked since 1992. It increased from 0.11% of total claims in 1992 to 0.7% in 2002 and has remained at about this level since then. There was no significant difference between HMO plans and other plans for group coverage. Recently, the U.S. Preventive Services Task Force recommended that screening mammograms begin at a later age and be done less frequently. While it is possible this will lead to reduced utilization, the American Cancer Society, the American College of Obstetricians and Gynecologists, and many oncologists have not accepted these recommendations. We therefore estimate the past level of 0.7% in all categories going forward.
- **Dentists** (Enacted 1975) – This mandate requires coverage to the extent that the same services would be covered if performed by a physician. It does not apply to HMOs. A 1992 study done by Milliman and Robertson for the Mandated Benefits Advisory Commission estimated that these claims represent 0.5% of total health claims and that the actual impact on premiums is "slight." It is unlikely that this coverage would be excluded in the absence of a mandate. We include 0.1% as an estimate.
- **Breast Reconstruction** (Enacted 1998) – At the time this mandate was being considered in 1995, Blue Cross and Blue Shield of Maine estimated the cost at \$0.20 per month per individual. We do not have a more recent estimate. We include 0.02% in our estimate of the maximum cumulative impact of mandates.
- **Errors of Metabolism** (Enacted 1995) – At the time this mandate was being considered in 1995, Blue Cross estimated the cost at \$0.10 per month per individual. We do not have a more recent estimate. We include 0.01% in our estimate.
- **Diabetic Supplies** (Enacted 1996) – Our report on this mandate indicated that most of the 15 carriers surveyed in 1996 said there would be no cost or an insignificant cost because they already provide coverage. One carrier said it would cost \$.08 per month for an individual. Another said .5% of premium (\$.50 per member per month) and a third said 2%. We include 0.2% in our estimate.
- **Minimum Maternity Stay** (Enacted 1996) – Our report stated that Blue Cross did not believe there would be any cost for them. No other carriers stated that they required shorter stays than required by the bill. We therefore estimate no impact.
- **Pap Smear Tests** (Enacted 1996) – No cost estimate is available. HMOs would typically cover these anyway. For non-HMO plans, the relatively small cost of this test would not in itself satisfy the deductible, so there would be no cost unless other services were also received. We estimate a negligible impact of 0.01%.
- **Annual GYN Exam Without Referral** (managed care plans) (Enacted 1996) – This only affects HMO plans and similar plans. No cost estimate is available. To the extent the Primary Care Physician (PCP) would, in absence of this law, have performed the exam personally rather than referring to an OB/GYN, the cost may be somewhat higher. We include 0.1%.
- **Breast Cancer Length of Stay** (Enacted 1997) – Our report estimated a cost of 0.07% of premium.
- **Off-label Use Prescription Drugs** (Enacted 1998) – The HMOs claimed to already cover off-label drugs, in which case there would be no additional cost. However, providers testified that claims have been denied on this basis. Our 1998 report did not resolve this conflict but stated a "high-end cost estimate" of about \$1 per member per month (0.6% of premium) if it is assumed there is currently no coverage for off-label drugs. We include half this amount, or 0.3%.

- ***Prostate Cancer*** (Enacted 1998) – No increase in premiums should be expected for the HMOs that provide the screening benefits currently as part of their routine physical exam benefits. Our report estimated additional claims cost for non-HMO plans would approximate \$0.10 per member per month. With the inclusion of administrative expenses, we would expect a total cost of approximately \$0.11 per member per month, or about 0.07% of total premiums.
- ***Nurse Practitioners and Certified Nurse Midwives*** (Enacted 1999) – This law mandates coverage for nurse practitioners and certified nurse midwives and allows nurse practitioners to serve as primary care providers. This mandate is estimated to increase premium by 0.16%.
- ***Coverage of Contraceptives*** (Enacted 1999) – Health plans that cover prescription drugs are required to cover contraceptives. This mandate is estimated to increase premium by 0.8%.
- ***Registered Nurse First Assistants*** (Enacted 1999) – Health plans that cover surgical first assisting are mandated to cover registered nurse first assistants if an assisting physician would be covered. No material increase in premium is expected.
- ***Access to Clinical Trials*** (Enacted 2000) – Our report estimated a cost of 0.19% of premium.
- ***Access to Prescription Drugs*** (Enacted 2000) – This mandate only affects plans with closed formularies. Our report concluded that enrollment in such plans is minimal in Maine and therefore the mandate will have no material impact on premiums.
- ***Hospice Care*** (Enacted 2001) – No cost estimate was made for this mandate because the Legislature waived the requirement for a study. Since carriers generally cover hospice care already, we assume no additional cost.
- ***Access to Eye Care*** (Enacted 2001) – This mandate affects plans that use participating eye care professionals. Our report estimated a cost of 0.04% of premium.
- ***Dental Anesthesia*** (Enacted 2001) – This mandate requires coverage for general anesthesia and associated facility charges for dental procedures in a hospital for certain enrollees for whom general anesthesia is medically necessary. Our report estimated a cost of 0.05% of premium.
- ***Prosthetics*** (Enacted 2003) – This mandate requires coverage for prosthetic devices to replace an arm or leg. Our report estimated a cost of 0.03% of premium for groups over 20 and 0.08% for small employer groups and individuals.
- ***LCPCs*** (Enacted 2003) – This mandate requires coverage of licensed clinical professional counselors. Our report on mental health parity indicated no measurable cost impact for coverage of LCPCs.
- **Licensed Pastoral Counselors and Marriage & Family Therapists** (Enacted 2005) – This mandate requires coverage of **licensed pastoral counselors and marriage & family therapists**. Our report indicated no measurable cost impact for this coverage.
- ***Hearing Aids*** (Enacted 2007) – This mandate requires coverage for \$1,400 for each ear every 36 months for children age 18 and under. The mandate is phased-in by requiring coverage from birth to age 5 effective 1/08, age 6-13 effective 1/09 and age 14-18 effective 1/10. Our report estimated a cost of 0.1% of premium once fully implemented.

- **Infant Formulas** (Enacted 2008) – This mandate requires coverage for amino acid-based elemental infant formulas for children 2 years of age and under, regardless of delivery method. Our report estimated a cost of 0.1% of premium.
- **Colorectal Cancer Screening** (Enacted 2008) – This mandate requires coverage for colorectal cancer screening for persons fifty years of age or older, or less than 50 years of age and at high risk for colorectal cancer according to the most recently published colorectal cancer screening guidelines of a national cancer society. No carriers stated they denied coverage, therefore our report estimated no impact on premium.
- **Independent Dental Hygienist** (Enacted 2009) – This mandate requires individual dental insurance or health insurance that includes coverage for dental services to provide coverage for dental services performed by an independent practice dental hygienist. This mandate is effective 1/2010. This mandate applies only to policies with dental coverage; therefore, there is no estimated impact on medical plan premiums.

These costs are summarized in the following table:

COST OF EXISTING MANDATED HEALTH INSURANCE BENEFITS

Year Enacted	Benefit	Type of Contract Affected	Est. Maximum Cost as % of Premium	
			Non-HMO	HMO
1975	Maternity benefits provided to married women must also be provided to unmarried women.	All Contracts	0 ¹	0 ¹
1975	Must include benefits for dentists' services to the extent that the same services would be covered if performed by a physician.	All Contracts except HMOs	0.10%	--
1975	Family Coverage must cover any children born while coverage is in force from the moment of birth, including treatment of congenital defects.	All Contracts except HMOs	0 ¹	--
1983	Benefits must be included for treatment of alcoholism and drug dependency.	Groups of more than 20	0.55%	0.55%
1975 1983 1995 2003	Benefits must be included for Mental Health Services, including psychologists and social workers.	Groups of more than 20	2.60%	2.60%
		Groups of 20 or fewer	--	1.30%
1986 1994 1995 1997	Benefits must be included for the services of chiropractors to the extent that the same services would be covered by a physician. Benefits must be included for therapeutic, adjustive and manipulative services. HMOs must allow limited self referred for chiropractic benefits.	Group	0.95%	1.30%
		Individual	0.95%	1.30%
1990 1997	Benefits must be made available for screening mammography.	Group	0.70%	0.70%
		Individual	0.70%	0.70%
1995	Must provide coverage for reconstruction of both breasts to produce symmetrical appearance according to patient and physician wishes.	All Contracts	0.02%	0.02%
1995	Must provide coverage for metabolic formula and up to \$3,000 per year for prescribed modified low-protein food products.	All Contracts	0.01%	0.01%

Year Enacted	Benefit	Type of Contract Affected	Est. Maximum Cost as % of Premium	
			Non-HMO	HMO
1996	Benefits must be provided for maternity (length of stay) and newborn care, in accordance with "Guidelines for Prenatal Care."	All Contracts	0	0
1996	Benefits must be provided for medically necessary equipment and supplies used to treat diabetes and approved self-management and education training.	All Contracts	0.20%	0.20%
1996	Benefits must be provided for screening Pap tests .	Group, HMOs	0.01%	0
1996	Benefits must be provided for annual gynecological exam without prior approval of primary care physician.	Group managed care	--	0.10%
1997	Benefits provided for breast cancer treatment for a medically appropriate period of time determined by the physician in consultation with the patient.	All Contracts	0.07%	0.07%
1998	Coverage required for off-label use of prescription drugs for treatment of cancer, HIV, or AIDS.	All Contracts	0.30%	0.30%
1998	Coverage required for prostrate cancer screening .	All Contracts	0.07%	0
1999	Coverage of nurse practitioners and nurse midwives and allows nurse practitioners to serve as primary care providers.	All Managed Care Contracts	--	0.16%
1999	Prescription drug must include contraceptives .	All Contracts	0.80%	0.80%
1999	Coverage for registered nurse first assistants .	All Contracts	0	0
2000	Access to clinical trials .	All Contracts	0.19%	0.19%
2000	Access to prescription drugs .	All Managed Care Contracts	0	0
2001	Coverage of hospice care services for terminally ill.	All Contracts	0	0
2001	Access to eye care .	Plans with participating eye care professionals	0	0.04%
2001	Coverage of anesthesia and facility charges for certain dental procedures.	All Contracts	0.05%	0.05%
2003	Coverage for prosthetic devices to replace an arm or leg	Groups >20	0.03%	0.03%
		All other	0.08%	0.08%
2003	Coverage of licensed clinical professional counselors	All Contracts	0	0
2005	Coverage of licensed pastoral counselors and marriage & family therapists	All Contracts	0	0
2007	Coverage of hearing aids for children	All Contracts	0.1%	0.1%
2008	Coverage for amino acid-based elemental infant formulas	All Contracts	0.1%	0.1%
2008	Coverage for colorectal cancer screening	All Contracts	0	0
2009	Coverage for independent dental hygienist	All Contracts	0	0
	Total cost for groups larger than 20:		6.85%	7.32%
	Total cost for groups of 20 or fewer:		3.75%	5.52%
	Total cost for individual contracts:		3.74%	4.12%