Analysis of Senate Bill 1198
Health Care Coverage:
Durable Medical Equipment

A Report to the 2007–2008 California Legislature
April 3, 2008

CHBRP 08-02
The California Health Benefits Review Program (CHBRP) responds to requests from the State Legislature to provide independent analyses of the medical, financial, and public health impacts of proposed health insurance benefit mandates and proposed repeals of health insurance benefit mandates. In 2002, CHBRP was established to implement the provisions of Assembly Bill 1996 (California Health and Safety Code, Section 127660, et seq.) and was reauthorized by Senate Bill 1704 in 2006 (Chapter 684, Statutes of 2006). The statute defines a health insurance benefit mandate as a requirement that a health insurer or managed care health plan (1) permit covered individuals to obtain health care treatment or services from a particular type of health care provider; (2) offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition; or (3) offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service.

A small analytic staff in the University of California’s Office of the President supports a task force of faculty from several campuses of the University of California, as well as Loma Linda University, the University of Southern California, and Stanford University, to complete each analysis within a 60-day period, usually before the Legislature begins formal consideration of a mandate bill. A certified, independent actuary helps estimate the financial impacts, and a strict conflict-of-interest policy ensures that the analyses are undertaken without financial or other interests that could bias the results. A National Advisory Council, drawn from experts from outside the state of California and designed to provide balanced representation among groups with an interest in health insurance benefit mandates, reviews draft studies to ensure their quality before they are transmitted to the Legislature. Each report summarizes scientific evidence relevant to the proposed mandate, or proposed mandate repeal, but does not make recommendations, deferring policy decision making to the Legislature. The State funds this work through a small annual assessment on health plans and insurers in California. All CHBRP reports and information about current requests from the California Legislature are available at the CHBRP Web site, www.chbrp.org.
A Report to the 2007–2008 California State Legislature

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April 3, 2008

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Suggested Citation:
PREFACE

This report provides an analysis of the medical, financial, and public health impacts of Senate Bill 1198, a bill that requires health plans and insures to offer coverage for durable medical equipment at the same levels of coverage as other health care benefits. In response to a request from the California Senate Committee on Health on February 1, 2008, the California Health Benefits Review Program (CHBRP) undertook this analysis pursuant to the provisions of Senate Bill 1704 (Chapter 684, Statutes of 2006) as chaptered in Section 127600, et seq. of the California Health and Safety Code.

Edward Yelin, PhD, Janet Coffman, MPP, PhD, and Wade Aubry, MD, all of the University of California, San Francisco, prepared the medical effectiveness analysis section. Stephen L. Clancy, MLS, AHIP, of the University of California, Irvine, conducted the literature search. Patricia L. Sinnott, PT, PhD, MPH, of the VA, Palo Alto Health Care System and Robert Zone, MD, Former Medical Director, Durable Medical Equipment Regional Carrier, Centers for Medicare and Medicaid Services, Region D both provided technical assistance with the literature review and expert input on the analytic approach. Helen Halpin, ScM, PhD, and Nicole Bellows MPH, PhD, of the University of California, Berkeley, prepared the public health impact analysis and portions of the Introduction. Ying-Ying Meng, DrPH, and Gerald Kominski, PhD, of the University of California, Los Angeles, prepared the cost impact analysis. Robert Cosway, FSA, MAAA, of Milliman provided actuarial analysis. Susan Philip, MPP, of CHBRP staff prepared the background section and synthesized the individual sections into a single report. Cherie Wilkerson, BA, provided editing services. A subcommittee of CHBRP’s National Advisory Council (see final pages of this report) and a member of the CHBRP Faculty Task Force, Kathleen A. Johnson, PharmD, MPH, PhD, of the University of Southern California reviewed the analysis for its accuracy, completeness, clarity, and responsiveness to the Legislature’s request.

CHBRP gratefully acknowledges all of these contributions but assumes full responsibility for all of the report and its contents. Please direct any questions concerning this report to:

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Susan Philip, MPP
Director
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EXECUTIVE SUMMARY

California Health Benefits Review Program Analysis of Senate Bill 1198

Senate Bill (SB) 1198, as introduced by Senator Sheila Kuehl, would require health plans and insurers to offer coverage for durable medical equipment (DME) in the group market and do so at the same levels of coverage as other health care benefits. SB 1198 requires health plans and insurers to offer DME coverage to all group purchasers as opposed to requiring that they cover DME benefits. This means that plans and insurer may structure the DME benefit so that groups have the option to purchase the benefit.

DME items are usually external, reusable equipment that are used for the treatment of a medical condition or injury or to preserve the patient’s functioning. Examples include walkers, wheelchairs, home oxygen equipment, and hospital beds.

Many persons use DME in conjunction with medical care to improve their health, functioning, and quality of life. Persons may use DME on either a long-term or a temporary basis. Some persons use DME on a long-term basis to cope with or treat a physical disability or chronic illness. Others use DME temporarily while being treated for or recovering from an illness or injury, such as a strain, sprain, or a broken bone.

The California Health Benefits Review Program (CHBRP) undertook the analysis of SB 1198, in response to a request from the Senate Committee on Health on February 1, 2008, pursuant to the provisions of Senate Bill 1704 (Chapter 684, Statutes of 2006) as chaptered in Section 127600, et seq. of the California Health and Safety Code1.

Specific Provisions of SB 1198

• SB 1198 seeks to ensure that those members in the group market who have DME coverage, would have coverage at the same levels or “at parity” with other health care benefits.

  o Department of Managed Health Care (DMHC)-regulated plans would be required to ensure that “the amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to the basic health care services.” If the plan does not have annual or lifetime maximum benefit limits for basic health care services, then they may not apply limits to the DME benefit. DMHC-regulated plans are also required to ensure that “any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts applied to the basic health care services”

  o California Department of Insurance (CDI)-regulated policies are required to ensure that benefit limits do not exceed the “annual and lifetime benefit maximums applicable to all benefits in the policy.” In addition, these policies would be required to provide DME with

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1 California Health and Safety Code, Section 1345 and Section 1300.67 of the California Code of Regulations, Title 28
cost-sharing levels on par with those applied to the “most common amounts contained in the policy”.

Thus, any benefit limits specifically for DME would be required to be lifted and cost-sharing levels would be required to be on par with cost-sharing levels for other health care services.

• SB 1198 defines “durable medical equipment” as “equipment that is used for the treatment of a medical condition or injury or to preserve the patient’s functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.”

• SB 1198 would place these coverage and cost-sharing requirements only in the group market. Therefore, no individual DMHC- and CDI-regulated policies would need to make changes to their DME benefit.

• Many of the individuals with high utilization levels of DME relevant to SB 1198 include persons in the following categories: (1) persons with conditions related to physical disabilities, such as musculoskeletal disorders; (2) persons with sequelae from traumatic injuries such as spinal cord injuries and head trauma; (3) respiratory diseases and related conditions requiring the use of home oxygen equipment; and (4) persons with diagnoses related to complications of the digestive system requiring DME for nutrition.

• SB 1198 would not alter the plans’ and insurers’ ability to “conduct a utilization review to determine medical necessity prior to authorizing these services.” Medically necessary DME is usually considered to be equipment that treats an injury or preserves functioning. For example, equipment that would be solely used for the patient’s comfort or convenience (such as air conditioners) would not generally be considered medical necessary, but specialized wheelchair cushions to prevent pressure ulcers would be considered necessary.

• SB 1198 would require that coverage for DME occur when it is “prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license.” Physicians, podiatrists, and physical and occupational therapists are the providers who typically prescribe or order DME.

• SB 1198 requires that plans and insurers “communicate the availability” of the DME coverage after the contract or policy is amended to become compliant with its provisions.

Medical Effectiveness

• There are two major groups of persons who use DME:
  o Persons who use DME temporarily while being treated for an injury or illness or recovering from surgery.
  o Persons who use DME on a long-term basis due to a physical disability or chronic illness.
• For persons in both groups, use of DME can improve health, functioning, and quality of life.

• Few studies have examined the effect of having private health insurance coverage for DME on use of DME, and the findings of these studies are inconsistent.

• No studies of the impact of increasing annual or lifetime limits for DME coverage on use of DME were identified, nor were any studies of the effects of reducing deductibles, coinsurance, or copayments for DME found.

Utilization, Cost, and Coverage Impacts

• Total net annual expenditures are estimated to increase by $42,958,000 annually or 0.0542% mainly due to the administrative costs associated with the implementation of SB 1198, plus an assumed increase in DME utilization due to the reduction in the amounts enrollees must pay for DME through cost sharing.

• Prior to the mandate, all enrollees are estimated to have at least some coverage for DME. Post-mandate, enrollees would incur a reduction of $109,178,000 in copayments, due to required reductions in member cost sharing and removal of benefit maximums.

• The mandate is estimated to increase premiums by about $152,136,000. The distribution of the impact on premiums is as follows:
  o Premiums for private employers are estimated to increase by $119,630,000, or 0.254%.
  o Enrollee contributions toward premiums for group insurance are estimated to increase by $32,506,000, or 0.254%.
  o In terms of per member per month (PMPM) costs, the total premiums for large groups are expected to increase by $0.72 for DMHC-regulated plans and $0.36 for CDI-regulated plans. Employer premiums for small groups are expected to increase by $1.20 PMPM for DMHC-regulated plans and by $0.20 PMPM for CDI-regulated plans.

• Although SB 1198 would apply to the California Public Employees’ Retirement System (CalPERS), Medi-Cal Managed Care, and Healthy Families program, these programs would not be expected to face any expenditure or premium increases because they currently provide DME benefits at parity.

• CHBRP estimates that there would likely be no increase in the number of users. Instead, there would be a slight increase in the units of DME or utilization of more-expensive DME among existing DME users in response to reduced cost sharing and lifting of annual and lifetime expenditure limits. The increase in utilization and related expenses are minimal ($25.58 per DME user per year or 4.1%) because:
  o SB 1198 would continue to allow cost sharing such as deductibles and copayments as long as those are on par with other health care benefits.
Health plans and insurers still influence the choice of DME through their determination of medical necessity during the utilization review process.

- The number of enrollees who are covered for DME benefits is expected to remain the same after enactment of SB 1198.

- For the large-group market, plans and insurers would likely continue offering the DME benefits under a “base” (or standard) benefit package. Therefore, CHBRP estimates that all large-group members would continue to have DME coverage post-mandate.

- For the small-group market, it is likely that plans and insurers would offer the DME benefit under a rider. Because the cost of purchasing a DME rider would result in a premium increase of less than 1%, CHBRP estimates small employers would not be likely to forgo purchasing the rider. Therefore, CHBRP estimates that all small-group members would continue to have DME coverage post-mandate.

- CHBRP estimates that the costs for a given DME item (or per-unit cost) would not be affected by the mandate. At present, CHBRP estimates that, for a typical insured population, DME and services have a total PMPM cost of $2.56, including both the amounts paid by the plan, and member cost sharing. However, as discussed above, although the per-unit costs would not change for each DME item, the average cost per user would be expected to increase.

- Premiums are expected to increase by 0.206%. Increases in insurance premiums vary by market segment, ranging from approximately 0.057% to 0.354%. Increases as measured by PMPM payments are estimated to range from approximately $0.20 to $1.20. The greatest impact on premiums will be in the small-group DMHC-regulated market. These premium increases will be largely offset by reductions in out-of-pocket expenditures.

**Public Health Impacts**

- The health outcomes associated with the use of DME vary according to the type of DME that is being used. Some health outcomes include increased independence, mobility, and functionality, increased survival, and decreased morbidity.

- SB 1198 is not expected to increase the number of insured persons using DME. SB 1198, however, is expected to decrease out-of-pocket spending for approximately 11,000 enrollees using DME in excess of their annual benefit limit and therefore may result in reducing the financial hardship associated with their condition. Among the current users of DME, SB 1198 is also expected to result in an increased utilization. The health benefits associated with this increased utilization are unknown.

- Data on health expenditures indicate higher out-of-pocket DME costs among females. Therefore, it is possible that SB 1198 will benefit more females than males.

- SB 1198 is not expected to have an impact on racial disparities.

- The impact of SB 1198 on the economic loss associated with DME-related diseases and conditions is unknown.
Table 1. Summary of Coverage, Utilization, and Cost Impacts of SB 1198

<table>
<thead>
<tr>
<th></th>
<th>Before Mandate</th>
<th>After Mandate</th>
<th>Increase/Decrease</th>
<th>Change After Mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coverage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of insured individuals with coverage for DME in base plan only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In SB 1198–compliant plans</td>
<td>18.2%</td>
<td>43.5%</td>
<td>25.3%</td>
<td>138.5%</td>
</tr>
<tr>
<td>In SB 1198–non-compliant plans</td>
<td>34.1%</td>
<td>0.0%</td>
<td>−34.1%</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>52.3%</td>
<td>43.5%</td>
<td>−8.8%</td>
<td>−16.8%</td>
</tr>
<tr>
<td>Percentage of insured individuals with coverage for DME in base plan/rider combinations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In SB 1198–compliant plans</td>
<td>21.9%</td>
<td>56.5%</td>
<td>34.6%</td>
<td>157.9%</td>
</tr>
<tr>
<td>In SB 1198–non-compliant plans</td>
<td>25.8%</td>
<td>0.0%</td>
<td>−25.8%</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>47.7%</td>
<td>56.5%</td>
<td>8.8%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Percentage of insured individuals with no coverage for DME</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of insured individual with coverage for DME</td>
<td>100.0%</td>
<td>100.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Number of insured individuals with coverage for DME in base plan only</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In SB 1198–compliant plans</td>
<td>3,074,379</td>
<td>7,333,883</td>
<td>4,259,504</td>
<td>138.5%</td>
</tr>
<tr>
<td>In SB 1198–non-compliant plans</td>
<td>5,743,485</td>
<td>—</td>
<td>−5,743,485</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>8,817,864</td>
<td>7,333,883</td>
<td>−1,483,980</td>
<td>−16.8%</td>
</tr>
<tr>
<td><strong>Number of insured individuals with coverage for DME in base plan/rider combinations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In SB 1198–compliant plans</td>
<td>3,694,322</td>
<td>9,528,117</td>
<td>5,833,794</td>
<td>157.9%</td>
</tr>
<tr>
<td>In SB 1198–non-compliant plans</td>
<td>4,349,814</td>
<td>—</td>
<td>−4,349,814</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>8,044,136</td>
<td>9,528,117</td>
<td>1,483,980</td>
<td>18.4%</td>
</tr>
<tr>
<td><strong>Number of insured individuals with no coverage for DME</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Number of insured individual with coverage for DME</strong></td>
<td>16,862,000</td>
<td>16,862,000</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Utilization and cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated DME users per 1,000 members per year</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Estimated average cost per DME user per year</td>
<td>$623.92</td>
<td>$649.51</td>
<td>$25.58</td>
<td>4.1%</td>
</tr>
</tbody>
</table>
### Table 1. Summary of Coverage, Utilization, and Cost Impacts of SB 1198 (cont.)

<table>
<thead>
<tr>
<th>DME Benefit Provisions</th>
<th>Before Mandate</th>
<th>After Mandate</th>
<th>Increase/Decrease</th>
<th>Change After Mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average DME coinsurance rate</td>
<td>14.9%</td>
<td>1.8%</td>
<td>−13.1%</td>
<td>−87.9%</td>
</tr>
<tr>
<td>Percentage of covered members subject to DME annual benefit limit</td>
<td>59.9%</td>
<td>0.0%</td>
<td>−59.9%</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Average DME annual benefit limit, for plans with limits</td>
<td>$3,984</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of members with costs in excess of DME annual benefit limit</td>
<td>0.1%</td>
<td>0.0%</td>
<td>−0.1%</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Percentage of DME Users with costs in excess of DME annual benefit limit</td>
<td>1.3%</td>
<td>0.0%</td>
<td>−1.3%</td>
<td>−100.0%</td>
</tr>
<tr>
<td>Number of DME users with costs in excess of DME annual benefit limit</td>
<td>11,060</td>
<td>—</td>
<td>−11,060</td>
<td>−100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium expenditures by private employers for group insurance</td>
<td>$47,088,966,000</td>
<td>$47,208,596,000</td>
<td>$119,630,000</td>
<td>0.2541%</td>
</tr>
<tr>
<td>Premium expenditures for individually purchased insurance</td>
<td>$6,158,288,000</td>
<td>$6,158,288,000</td>
<td>$0</td>
<td>0.0000%</td>
</tr>
<tr>
<td>Premium expenditures by individuals with group insurance, CalPERS, Healthy Families, AIM, or MRMIP</td>
<td>$12,819,308,000</td>
<td>$12,851,814,000</td>
<td>$32,506,000</td>
<td>0.2536%</td>
</tr>
<tr>
<td>CalPERS employer expenditures</td>
<td>$2,942,984,000</td>
<td>$2,942,984,000</td>
<td>$0</td>
<td>0.0000%</td>
</tr>
<tr>
<td>Medi-Cal state expenditures&lt;sup&gt;a&lt;/sup&gt;</td>
<td>$4,044,192,000</td>
<td>$4,044,192,000</td>
<td>$0</td>
<td>0.0000%</td>
</tr>
<tr>
<td>Healthy Families state expenditures</td>
<td>$644,074,000</td>
<td>$644,074,000</td>
<td>$0</td>
<td>0.0000%</td>
</tr>
<tr>
<td>Individual out-of-pocket expenditures (deductibles, copayments, etc.)</td>
<td>$5,602,060,000</td>
<td>$5,492,882,000</td>
<td>−$109,178,000</td>
<td>−1.9489%</td>
</tr>
<tr>
<td>Out-of-pocket expenditures for noncovered services</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0.0000%</td>
</tr>
<tr>
<td><strong>Total annual expenditures</strong></td>
<td>$79,299,872,000</td>
<td>$79,342,830,000</td>
<td>$42,958,000</td>
<td>0.0542%</td>
</tr>
</tbody>
</table>

*Source: California Health Benefits Review Program, 2008.*

*Notes:*
The population includes employees and dependents covered by employer-sponsored insurance (including CalPERS). All population figures include enrollees aged 0–64 years and enrollees 65 years or older covered by employment-sponsored insurance. Premium expenditures by individuals include employee contributions to employer-sponsored health insurance and member contributions to public health insurance.

<sup>a</sup>SB 1198–compliant plans mean plans that currently have no annual benefit limit and have cost-sharing levels averaging of 1.8% across Department of Managed Health Care (DMHC)-regulated and California Department of Insurance (CDI)-regulated plans.

<sup>b</sup>SB 1198–non-compliant plans means those plans that would currently have differential benefit limits and/or cost sharing for the DME benefit compared with other health care benefits.

<sup>c</sup>When DME are partially covered in the base plan, but augmented in a rider.

<sup>d</sup>Medi-Cal state expenditures for members under 65 years of age include expenditures for the Risk Medical Insurance Program (MRMIP) and Access for Infants and Mothers (AIM) program.

*Key: AIM=Access for Infants and Mothers; CalPERS=California Public Employees’ Retirement System; DME=durable medical equipment; MRMIP=Major Risk Medical Insurance Program.*
INTRODUCTION

Senate Bill (SB) 1198, as introduced by Senator Sheila Kuehl, would require health plans and insurers to offer coverage for durable medical equipment (DME) in the group market and do so at the same levels of coverage as for other health care benefits. The California Health Benefits Review Program (CHBRP) undertook the analysis of SB 1198 in response to a request from the Senate Committee on Health on February 1, 2008, pursuant to the provisions of Senate Bill 1704 (Chapter 684, Statutes of 2006) as chaptered in Section 127600, et seq. of the California Health and Safety Code.

Background on the Conditions for Which Durable Medical Equipment Are Used

Many persons use durable medical equipment (DME) in conjunction with medical care to improve their health, functioning, and quality of life. Use of DME can also help people return to work or school sooner than might otherwise be possible.

Persons who use DME can be divided into two major groups: those who need it on a long-term basis and those for whom its use is temporary. The first group consists of persons who use DME on a long-term basis to treat a chronic illness or cope with a physical disability or the physical consequences of treatment for a disease. Persons with physical disabilities, for example, those associated with musculoskeletal problems, use mobility aids, such as walkers and wheelchairs. They may also use adjustable hospital beds. Mobility aids are also used by persons with certain neurological disorders, such as cerebral palsy and multiple sclerosis. Persons with severe spinal cord or brain injuries who are bedbound often use bed pads, heel and elbow protectors, and other cushioned devices to prevent pressure ulcers. They may also use needles or catheters to obtain nutrients or fluids intravenously or use feeding tubes for enteral nutrition.

The types of DME used by persons with chronic illness vary across diseases and conditions. For example, persons with chronic obstructive pulmonary disease use oxygen and related respiratory equipment because their disease impairs their ability to breathe. Persons with diabetes use devices and supplies to monitor their blood sugar and the ketones in their urine to prevent complications. Some also use pumps, syringes, or pen-type devices to inject insulin and/or wear therapeutic shoes to prevent foot ulcers.

In addition, treatment for some diseases can result in a long-term need for DME. For example, persons who have had all or part of the small intestine, colon, rectum, or bladder removed to treat cancer, digestive disease, or nerve damage use pouches and/or catheters to collect and remove feces or urine from the body.

The second group of persons using DME is composed of those who use it on a temporary basis, for example persons who have had a strain, sprain, or a broken bone. They also use crutches, canes, and other mobility aids. Similarly, persons who have had surgery on joints, tendons, or ligaments may use mobility aids during recovery. Persons being treated for cancer may use infusion pumps to obtain pain medication and/or chemotherapy at home.
Background on SB 1198

Currently there are no requirements in California laws or regulations related to health insurance that specifically address the DME benefit in the privately insured markets. However, there are existing mandates that require health plans or insurers to cover equipment used for the treatment and management of specific conditions:

- Pediatric asthma management and treatment: Department of Managed Health Care (DMHC)-regulated plans are required to cover inhaler spacers, nebulizers, and peak flow meters (H&S Section 1367.06).²

- Diabetes benefits: DMHC- and California Department of Insurance (CDI)-regulated plans are required to cover equipment and supplies related to diabetes treatment and management. (H&S Section 1367.1 and Insurance Code Section 10123.7).

For the purposes of analysis, CHBRP assumes that because these items are required to be covered under existing law, SB 1198 would not directly impact coverage of these items.

In addition to these, there are mandates that require coverage for other items, supplies, and services that are not considered “durable medical equipment,” but may sometimes be combined with the DME benefit. These include:

- Orthotic and prosthetic (O&P) devices and services: DMHC- and CDI-regulated plans are required to offer coverage for O&P devices and do so at parity levels (H&S Section 1367.18 and Insurance Code, Section 10123.7)³

- Special footwear for persons suffering from foot disfigurement: DMHC- and CDI-regulated plans are required to cover specialized footwear for persons with disfigurements from conditions such as cerebral palsy, arthritis, and diabetes, and foot disfigurement caused by a developmental disability (H&S Section 1367.19 and Insurance Code Section 10123.141).

- Prosthetic device benefits for laryngectomy: Both DMHC- and CDI-regulated plans are required to cover this prosthetic device (H&S Section 1367.61 and Insurance Code 10123.82).

- Reconstructive surgery: Both DMHC- and CDI-regulated plans are required to cover medically necessary reconstructive surgery. Medically necessary prosthetic devices that are part of the reconstruction would be required to be covered (H&S Section 1367.63 and Insurance Code 10123.88).

These devices and supplies that are not considered DME are already mandated to be covered under current law, and would not be affected by SB 1198.

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² CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2185 (2004). Please see: http://www.chbrp.org/completed_analyses/index.php for the complete report.

³ CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2012. Please see: http://www.chbrp.org/completed_analyses/index.php for the complete report.
Individuals, who are under 65 years, are not covered by private insurance, and who qualify, may receive health care coverage, including DME, through one of the programs listed below. Generally, individuals must be considered “disabled” to be eligible for one of the programs listed below. Of those considered physically disabled, approximately 45% are in need of some form of DME, such as wheelchairs, to help them manage their basic needs at home and/or work (KFF, 2003).

- Medicare: Medicare covers persons with disability as defined under the Social Security Act. “Disability” under Social Security is based on ability to work. Individuals are considered disabled if (1) they cannot do the same work they were able to prior to becoming disabled, (2) they cannot adjust to other work because of their medical condition(s), and the disability to “expected to last for at least one year or to result in death.” “Ability to work” is defined as earnings in the previous year: in 2008, an individual could not earn more than an average of $940/month, otherwise s/he is not considered disabled. Medicare covers medically necessary DME and defines DME as equipment that “can withstand repeated use; is primarily and customarily used to serve a medical purpose; generally is not useful to an individual in the absence of an illness or injury; and is for use in the home.” The coinsurance rate for DME items under Medicare is 20% of the Medicare-approved cost of the item.

- Medi-Cal: In general, to qualify for Medi-Cal, a California resident must be in a household earning less than 200% of the federal poverty level. According to the Medi-Cal Provider Manual, “Medi-Cal covers DME when provided on the written prescription of licensed practitioners within the scope of their practice. The Medi-Cal definition of medical necessity limits health care services to those necessary to protect life, to prevent significant illness or significant disability, or to alleviate severe pain. Therefore, prescribed DME items may be covered as medically necessary only to preserve bodily functions essential to activities of daily living or to prevent significant physical disability.” Examples of items not covered by Medi-Cal include, air conditioners or air filters, modifications of automobiles, and household items. In general, Medi-Cal beneficiaries face no copayments or annual benefit limits for DME, but prior authorization and medical necessity certification are required for provider reimbursement. Note that Medi-Cal managed care plans would be subject to the requirements of SB 1198; however, they are considered currently compliant because Medi-Cal managed care members face little to no cost-sharing for DME benefits.

- Workers’ Compensation: California’s workers’ compensation system pays for medical bills that are incurred as a result of work-related injuries. Public and private employers are required to purchase workers’ compensation insurance or self-insure to pay these expenses. Statutes governing the workers’ compensation system allow payment for medical care that is “reasonably required to cure and relieve” the injured worker’s condition. This may include durable medical equipment to the extent physicians certify that such medical treatment is necessary for work-related injury. California’s worker’s compensation system uses Medicare’s fee schedule for DME reimbursement purposes (DIR, 2008).

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4 Section 1861(s)(6) subsection 414.202
5 California Labor Code Section 4600 (a)
• Federal protections for individuals with disability: Laws such as the Individuals with Disabilities Education Act of 1994, the Americans with Disability Act, and the Assistive Technology Act of 1998 places requirements and/or provides incentives for states to ensure that schools, public entities, and employers make adjustments to accommodate children and adults with disabilities. For example the Assistive Technology Act of 1998 defines assistive technology as “products, devices, or equipment, whether acquired commercially, modified, or customized, that are used to maintain, increase, or improve the functional capacities of individuals with disabilities.”

No other states currently have a mandate requiring insurers to provide coverage or offer coverage for DME (BCBSA, 2007). However, New Hampshire has a parity requirement for prosthetic devices—that coverage levels for prosthetic devices be at the same levels of coverage or at parity for DME.\(^6\)

**Medicare coverage for DME versus commercial coverage**

Medicare’s payments for DME are based on fee schedules that categorize items based on certain characteristics, for example, whether items are inexpensive and routinely used; whether they require frequent servicing; whether they are rental items; or if they are oxygen equipment. The fee schedules are further broken down by product groups; for example one product group may be portable oxygen equipment. Finally, payment rates are based on a formula that includes factors such as allowed charges adjusted by inflation and geographic variation (MedPAC, 2006). The Centers for Medicare and Medicaid Services (CMS) contracts with regional carriers (DMERCs, to replaced by DME Medicare Administrative Contractors—DME MAC) to process claims submitted to Medicare Part B to pays DME suppliers. The contractors are to adhere to coverage policies set forth by the federal CMS and develop regional coverage policies for specific DME items. The Medicare DME benefit has been subject to fraud and abuse by DME suppliers. For example, from 1999 to 2003, the General Accountability Office found that Medicare payments for power wheelchairs rose more than 400%. The rise in spending could be attributed to a range of reasons, including lack of clarity on coverage policy to fraud and abuse (GAO, 2004).

As mentioned, Medicare does not have an annual benefit limit, though beneficiaries are required to pay 20% of the cost of the DME item. Medicare’s experience with DME may suggest that removing annual benefit limits (and potentially lowering cost sharing) may lead to a substantial increase in utilization—and potential utilization for non-medically necessary items due to supplier-induced demand. It is unlikely, however, that SB 1198 would lead to such a dynamic for several reasons:

- The commercial population and the Medicare population are different. The commercial population is younger and healthier than Medicare. It is more likely that the Medicare population would use DME items more frequently and on a more chronic basis than the commercial population.
- Structure of DME payments and utilization management: Medicare’s payment to DME suppliers and the process for utilization management is different from that of the

\(^6\) New Hampshire Code Section 415:6-j
commercial payers. For example, health plans currently have the ability and have historically contracted with specific vendors and placed strict prior authorization and certificate of need requirements for reimbursement purposes. In addition, health plans currently use utilization management and medical necessity criteria to limit the potential costs of DME items being supplied.

Legislative Intent, Bill Provisions, and Key Assumptions for Analysis

According to the bill author’s staff, most health insurance includes coverage for DME but place limits on annual benefit, such as $2,000. In addition, health insurance plans may charge a lower cost-sharing level (e.g., charge a small copayment, such as $20) for services such as a doctor’s office visit, but a higher cost-sharing level (e.g., charge a coinsurance, such as 20%) for DME. The resulting out-of-pocket costs for DME items, such as a medically necessary electric wheelchair, could be exorbitant and potentially prohibitive. The intent of SB 1198 is to ensure that the DME benefit is structured in the same way that other health care benefits are structured: in general, with no annual benefit limits and reasonable cost-sharing levels.

DME coverage at parity with other benefits

SB 1198 seeks to ensure that those members in the group market that have DME coverage would have coverage at the same levels of coverage or “at parity” with other health care benefits.

- Annual benefit limits: DMHC-regulated plans would be required to ensure that “the amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to basic health care services required to be provided under Section 1367. If the contract does not include any annual or lifetime benefit maximums applicable to basic health care services, the amount of the benefit for DME and services shall not be subject to an annual or lifetime maximum benefit level.” Because plans do not typically place any annual or lifetime benefit maximums on basic health care services, any benefit limits for DME would be required to be lifted. CDI-regulated policies are required to ensure that benefit limits do not exceed the “annual and lifetime benefit maximums applicable to all benefits in the policy.” Any benefit limits specifically for DME would be required to be lifted. However, the DME benefit could count towards any annual and lifetime limit applied for all other benefits.

- Cost sharing: DMHC-regulated plans would be required to ensure that “any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts applied to the basic health care services required to be provided under Section 1367.” Plans and regulators would need to determine the meaning of the phrase “most common amounts applied to basic health care services” since basic health care services include services such as preventive screening, hospitalization, and home health care, each associated with its own copayment or coinsurance levels. CDI-regulated plans would be required to provide DME with cost-sharing levels on par with cost sharing applied to the “most common amounts contained in the policy”. Again, CDI-regulated insurers and regulators would need to determine what these most common amounts for benefits are for services typically covered in health insurance policies. For the purposes of CHBRP analysis, we project that the typical cost-sharing levels would be 1.8%, averaging across DMHC-
regulated and CDI-regulated plans post-mandate. The Utilization, Cost, and Coverage section discusses this estimate in further detail.

Requirement to “offer” versus “cover”
As mentioned, SB 1198 requires health plans and insurers to offer coverage to all group purchasers as opposed to requiring that they cover the benefit. This means that plans and insurer may structure the DME benefit so that groups have the option to purchase the benefit. It is possible that SB 1198 could have the unintended consequence of (1) plans offering the benefit as a rider and (2) groups, especially those in the small-group market, deciding not to purchase the DME benefits. As a result, fewer privately insured Californians may have a DME benefit. This report examines this potential dynamic, and the projected impacts are discussed in further detail in the Utilization, Cost, and Coverage section.

Populations directly impacted by SB 1198
SB 1198 would place requirements only on the group market. Therefore, no individual DMHC- and CDI-regulated policies would need to make changes to their DME benefits. SB 1198 would apply to California Public Employees’ Retirement System (CalPERS), Medi-Cal Managed Care, and Healthy Families since CalPERS, Department of Health Services (DHS), and Major Risk Medical Insurance Board (MRMIB), respectively, would act as the group purchasers for those beneficiaries. SB 1198 would not directly affect populations that are enrolled in health insurance products that are not subject to benefit mandates, such as those enrolled in self-insured plans, Medicare Advantage plans, or those who are uninsured.7

For populations in the privately insured group plans, those most likely to be affected by SB 1198 are persons with high DME costs for DME items that are not already currently mandated under California law. According to a Milliman analysis of DME utilization in the privately insured population in 2007, many of the individuals with high utilization levels of DME relevant to SB 1198 include persons in the following categories:

Persons with diagnoses related to physical disabilities. Many of the diagnoses associated with high utilization of DME are for diseases and conditions that typically lead to physical disability, including infantile cerebral palsy, muscular dystrophy and other myopathies, multiple sclerosis, spina bifida, brain disorders, and other paralytic syndromes. Although the range of severity of conditions is broad, both within and across diagnoses, many individuals with physical disabilities use DME items that are specifically detailed in SB 1198, such as wheelchairs, walkers, electric beds, shower and bath seats, and mechanical lifts.

Persons with sequelae from traumatic injuries such as spinal cord injuries and head trauma. Another group of persons with physical disabilities that may benefit from SB 1198 are those who have suffered traumatic injuries, such as spinal cord injuries and head trauma. Persons in this category often require the use of wheelchairs, transfer benches, and shower and bath seats.

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7 SB 1704, CHBRP’s authorizing legislation, defines a benefit mandate bill as “a proposed statute that requires a health care service plan or a health insurer, or both, to…offer or provide coverage of a particular type of health care treatment or service.” Thus, the portion of the population directly affected by a benefit mandate bill are those enrolled in a health insurance products offered by health care service plans or health insurers.
For the two categories listed above, determining the prevalence of the population with physical disabilities related to SB 1198 is difficult due to the varied causes of disabilities and different types of DME used by the population and existing health insurance mandates. While not a perfect measure of DME utilization, one question in the California Health Interview Survey in 2001 (CHIS, 2001) asked adults: “Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?” Of the privately insured respondents under age 65 years, 2.4% reported having a health problem that required the use of special equipment.

**Persons with respiratory diseases and related conditions needing home oxygen equipment.** Another important group of diagnoses for high DME users are those with respiratory diseases and conditions such as asthma, chronic airway obstruction, chronic obstructive pulmonary disease, and other lung diseases. Individuals with these conditions often use home oxygen equipment, which is specified in SB 1198. Persons with heart conditions are also users of home oxygen equipment.

**Persons with diagnoses related to complications of the digestive system.** A fourth group of high-volume DME users are those with diagnoses related to gastrointestinal problems, such as symptoms of poor nutrition, metabolism, and development, and intestinal malabsorption. Persons with these conditions sometimes rely on parenteral nutrition (IV nutrition) or feeding tubes due to an inability of the digestive system to supply sufficient nutrition to the body. DME items in this category include the parenteral nutrition and formulas administered via a feeding tube, as well as the supplies related to these forms of nutrition.

**Persons with other diagnoses.** In addition to the categories above, DME is used by persons with numerous other diagnoses. One important diagnosis is diabetes, although insurance companies are required to cover much of the DME used by persons with diabetes due to a previous mandate. Other relevant diagnoses for DME include arthritis, conditions related to skin and wound care, and urinary symptoms.

**Utilization Review**

SB 1198 would not alter plans and insurers ability to “conduct a utilization review to determine medical necessity prior to authorizing these services.” According to the bill author’s staff, the intent of SB 1198 is to ensure that patients receive medically necessary DME. Medically necessary DME is usually considered equipment that treats an injury or preserves functioning. For example, equipment that would be solely used for the patient’s comfort or convenience (such as air conditioners) would not generally be considered medically necessary, but specialized wheelchair cushions to prevent pressure ulcers would be considered necessary. SB 1198 is not intended to affect how coverage determinations would be made. For example, the bill is silent on renting versus purchasing DME; therefore, SB 1198 would not affect relevant coverage policies.

**Other provisions in SB 1198**

- SB 1198 would require that DME be covered when it is “prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license.”
Physicians, podiatrists, and physical and occupational therapists are the providers who typically prescribe or order DME.

- SB 1198 requires that plans and insurers “communicate the availability” of the DME coverage after the contract or policy is amended to become compliant in its provisions.
- SB 1198 defines “durable medical equipment” as “equipment that is used for the treatment of a medical condition or injury or to preserve the patient’s functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.” This definition is consistent with the definition of DME by most payers’, for example, Medicare.

**Analytic Approach**

This report provides an analysis of the medical, financial, and public health impacts of SB 1198.

- The Medical Effectiveness section focuses the literature review and analysis on the effect of private insurance coverage for DME, specifically: (1) the effects of having private insurance versus no insurance for DME; and (2) the effect of having more generous coverage for DME (e.g., larger annual or lifetime maximum, lower deductibles, lower copayments or coinsurance). Given that SB 1198 does not necessarily add new coverage for DME but instead alters the benefits structure so that coverage is at parity with other health care benefits, this approach is most relevant to assessing the potential effects of SB 1198’s provisions.8

- The Utilization Cost and Coverage section also presents the current coverage levels for DME benefits and the potential effects of raising the DME coverage levels to parity with other health care benefits.

- The Public Health Impact section presents the public health effects of raising DME coverage levels to parity with other health care benefits and the potential impacts on other societal effects such as productivity.

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8 This analytic approach is consistent with the approach CHBRP took for AB 2012, a bill enacted into law in 2006 that requires health plans to offer coverage for orthotics and prosthetics subject to the same annual and lifetime benefits limitations as basic health care services. CHBRP has also taken this approach to the analysis of three bills that would require parity in coverage for mental health and substance abuse services (SB 572, AB 423, and AB 1887).
MEDICAL EFFECTIVENESS

As discussed in the Introduction, many persons use durable medical equipment (DME) in conjunction with medical care to improve their health, functioning, and quality of life. Persons may use DME on either a long-term or a temporary basis. Some persons use DME on a long-term basis to cope with or treat a physical disability or chronic illness. Others use DME temporarily while being treated for or recovering from an illness or injury, such as a strain, sprain, or a broken bone.

Literature Review Methods

DME encompasses such a wide range of devices and products that a systematic review of the literature on the effectiveness of all of these devices and products was not feasible nor relevant to the intent of SB 1198. The California Health Benefits Review Program (CHBRP) examined data on DME claims filed with private health plans to determine whether persons with a small number of diseases and conditions accounted for a large proportion of DME claims. The only diagnosis that accounted for more than 10% of DME claims was “general symptoms.” Only three conditions—diabetes, sleep disorders, and chronic airway obstruction—each accounted for more than 5% of DME claims.

In light of these findings, and the fact that SB 1198 specifically addresses the benefit structure of DME, CHBRP focused the literature review for this bill on the impact of private insurance coverage for DME. The literature review examined articles and reports on the impact of having private insurance versus no insurance for DME, as well as the literature on the effect of having more generous coverage for DME (e.g., larger annual or lifetime maximum, lower deductibles, lower copayments or coinsurance).

Outcomes Assessed

Studies that examined the impact of health insurance coverage on use of DME or perceptions regarding access to DME were included in the literature review.

Study Findings

Findings from the studies included in this review are summarized below.

Only two studies examined the impact of private health insurance on use of DME or perceived access to DME among persons to whom SB 1198 would apply (i.e., persons whose primary form of health insurance is private health insurance).

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9 This finding is in contrast to the Medicare program for which oxygen and related respiratory equipment alone accounted for 24% of DME expenditures in 2004 (USDHHS, 2004). The difference between the distribution of Medicare and private insurance claims for DME may reflect differences in the populations they serve. Medicare primarily serves persons age 65 years or older, many of whom have chronic illnesses and/or physical disabilities. In contrast, private health plans primarily cover children and non-elderly working adults, the majority of whom only need DME on a temporary basis while recovering from an injury or surgery or use inexpensive, reusable types of DME, such as spacers and peak flow meters for asthma.
Agree and colleagues (2004) presented findings from a national survey of adults aged 50 years or older who had functional limitations or chronic illness. The authors examined the effect of having private health insurance as either a primary payer or a secondary payer on use of types of DME that assist with mobility (e.g., canes, walkers, wheelchairs). They compared persons who had private health insurance to persons who had no health insurance or only had Medicare (i.e., had Medicare Part A, or Part A and Part B, but did not have Medigap coverage). The results were analyzed for use of mobility aids alone, mobility aids plus informal caregiving, and mobility aids plus formal caregiving. The authors found no statistically significant differences between the two groups in utilization of mobility aids alone or in combination with either type of caregiving. Persons’ underlying health needs were the factors most strongly associated with using mobility aids and/or obtaining assistance from caregivers.

Litaker and Cebul (2003) reported findings from a survey of adults in Ohio regarding the relationship between health insurance status and difficulties obtaining needed medical equipment, supplies, or prescription drugs. Respondents were divided into three groups based on health insurance status: persons who were continuously insured for 1 year, persons who were intermittently insured, and persons who were continuously uninsured for 1 year. The percentage of persons who were continuously insured who reported difficulty obtaining medical equipment, supplies, or prescription drugs was much lower than the percentages of persons who were intermittently insured or continuously uninsured (1%, 17%, and 20%, respectively).

Agree and colleagues’ study (2004) and Litaker and Cebul’s study (2003) are only somewhat generalizable to SB 1198, because both studies included persons age 65 years or older. The vast majority of persons in this age group receive primary health insurance coverage from Medicare. They may or may not choose to purchase supplemental private health insurance. Findings for persons enrolled in Medicare may not generalize to children and non-elderly working adults. Private insurers often impose annual or lifetime limits on coverage for DME, whereas Medicare does not. In addition, older adults are more likely than younger persons to have chronic illnesses or major physical disabilities that necessitate long-term use of DME, especially expensive devices. In contrast, many younger persons use DME only temporarily while recovering from an injury, surgery, or an acute illness.

In addition, both studies asked respondents only if they had health insurance, not what benefits were covered. They did not specifically assess whether a person’s health plan covered DME or whether cost sharing for DME was similar to or different from cost sharing for other health care services. Thus, these studies do not provide any information about the effects of differences in coverage levels or cost sharing for DME among privately insured persons on use of DME or difficulty obtaining DME.

Four articles on the use of DME by persons enrolled in Medicare or Medicaid were identified, as well as one article on use of DME by elderly persons and persons receiving social assistance enrolled in the public health insurance plan in British Columbia, Canada. The findings of these

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10 This study included some persons who were age 65 years or older for whom Medicare was their primary form of health insurance. Some of these persons had private, supplemental insurance (i.e., Medigap policies). Among subjects who were age 50 to 64 years, some subjects had private insurance as their primary form of health insurance. Others were enrolled in Medicare or Medicaid due to their disability or were uninsured.
studies are summarized briefly but are not fully generalizable to SB 1198, because the bill applies only to persons for whom private insurance is the primary payer.

One article assessed the impact of having private supplemental insurance (i.e., Medigap) on use of DME by persons enrolled in Medicare. Mathieson and colleagues (2002) found that Medicare enrollees who also had private supplemental insurance were more likely to use two or more mobility aids than enrollees who only had Medicare coverage.

Two articles compared Medicaid recipients with special health care needs who were enrolled in fee-for-service Medicaid and partially capitated case management programs in which a primary care provider coordinated services for enrollees. One study conducted in Ohio reported that implementation of the partially capitated case management program was associated with a reduction in claims and costs for DME for children and adults under age 65 years who had disabilities (Cebul et al., 2000). In contrast, a study conducted in Washington, DC, found that parents and other caregivers of children with special health care needs who were enrolled in a partially capitated case management program were less likely to report unmet need for DME than parents and other caregivers whose children were enrolled in fee-for-service Medicaid (Mitchell and Gaskin, 2004).

Two studies examined the impact of implementing a utilization management program on use of DME. One study examined the effect of prior authorization for several types of DME among Medicare recipients with private supplemental insurance. Implementation of utilization review was associated with reductions in DME claims and costs for seat lifts and for transcutaneous electrical nerve stimulators but did not affect claims or costs for power-operated wheelchairs or scooters (Wickizer, 1995). Another study examined the impact of prior authorization on use of nebulizers to administer respiratory medications to elderly persons and persons on social assistance enrolled in the public health insurance plan in British Columbia, Canada. The authors found that the prior authorization policy resulted in statistically significant reductions in the numbers of persons using nebulizers alone or in combination with inhalers and an increase in the number using inhalers only. The policy was not associated with changes in contacts with doctors, emergency department visits, or hospital admissions (Schneeweiss et al., 2004).

**Summary of Findings**

- Many persons use DME to improve health, functioning, quality of life, and productivity.
- Some persons use DME on a long-term basis to cope with physical disabilities and chronic conditions, whereas others use it temporarily in conjunction with medical or surgical treatment for injuries, musculoskeletal disorders, and cancer.
- Very few studies have been published on the impact of health insurance coverage for DME.
- The few studies available suggest that health needs are the primary factor associated with use of DME.
• No studies were found that specifically address the effects of increasing annual or lifetime limits for DME coverage or the impact of reducing deductibles, coinsurance, or copayments for DME.

• There is some evidence from a small number of studies that utilization management reduces use of some types of DME.
UTILIZATION, COST, AND COVERAGE IMPACTS

This section details the estimated impacts on utilization, cost, and coverage of SB 1198. A discussion of the current or baseline levels precedes presentation of the impact estimates.

Present Baseline Cost and Coverage

Current Coverage of Mandated Benefit

SB 1198 would require all plans and policies offered on a group basis by Department of Managed Health Care (DMHC)-regulated health plans and California Department of Insurance (CDI)-regulated insurance policies to offer coverage for durable medical equipment (DME) and services that are no less than other medical benefits under the contract. SB 1198 would not require plans and insurance carriers to cover DME benefits. The current practice of health plans and insurance carriers is to offer a DME benefit either: (1) as part of a “base” benefit package (a standard set of benefits); (2) as a written agreement or rider (an additional set of benefits available for purchase) that attaches to a policy to modify insurance coverage; or (3) as a combination of the two, that is, when DME are partially covered in the base plan, but augmented in a rider.

As discussed in the Introduction, SB 1198 would require DMHC-regulated plans to ensure that the amount of the benefit for DME and services be no less than the annual and lifetime benefit maximums applicable to basic health care services. Any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services can be no more than the most common amounts applied to the basic health care services. For CDI-regulated policies, SB 1198 would require the amount of the benefit for DME and services be no less than the annual and lifetime benefit maximums applicable to all benefits in the policy. Any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services can be no more than the most common amounts contained in the policy. Currently, SB 1198 would affect the 16,862,000 enrollees in group insurance plans or policies in California under age 65 years with DME coverage (Table 2).

The California Health Benefits Review Program (CHBRP) surveyed the seven largest health plans and insurers in California regarding their offered coverage and benefit levels for DME and services. CHBRP determined that enrollees could fall into one of four different categories for DME and service coverage:

- by a SB 1198–compliant base plan;
- by a SB 1198–non-compliant base plan;
- by a SB 1198–compliant base plan/rider (or rider only) plan;
- by a SB 1198–non-compliant base plan/rider (or rider only) plan.

Using the responses of the five carriers that replied to the survey, which represent 83.3% of the privately insured market, CHBRP determined that all enrollees have some coverage for DME (Table 2). Of the 16,862,000 enrollees in the group market with DME coverage, 59.9% (10,093,000 enrollees) have a plan that is not in compliance with SB 1198 because they face higher coinsurance for DME and services than for other medical benefits, or because they face
annual DME benefit limits, or both.

The California Public Employees’ Retirement System (CalPERS) is already in compliance with the provisions of SB 1198. CalPERS covers DME and services with no cost sharing and no annual benefit limits. Medi-Cal Managed Care and Healthy Families are considered group coverage since the Department of Health Services and Major Risk Medical Insurance Board (MRMIB) act as group purchasers for Medi-Cal and Healthy Family beneficiaries. Neither Medi-Cal nor Healthy Families has an annual benefit limit, and both cover DME at no charge. Therefore, these plans are already in compliance with SB 1198.

### Table 2. Current Member Coverage of DME Benefits by Market Segment, California, 2008

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<td><strong>Percentage of members having coverage for DME</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>SB 1198–compliant base plan</td>
<td>8.8%</td>
<td>2.3%</td>
<td>23.2%</td>
<td>63.6%</td>
<td>100.0%</td>
<td>18.2%</td>
</tr>
<tr>
<td>SB 1198–non-compliant base plan</td>
<td>33.5%</td>
<td>97.7%</td>
<td>37.4%</td>
<td>36.4%</td>
<td>0.0%</td>
<td>34.1%</td>
</tr>
<tr>
<td>SB 1198–compliant base plan/rider (or rider only) plan</td>
<td>30.5%</td>
<td>0.0%</td>
<td>3.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>21.9%</td>
</tr>
<tr>
<td>SB 1198–non-compliant base plan/rider (or rider only) plan</td>
<td>27.2%</td>
<td>0.0%</td>
<td>35.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>25.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Number of members having coverage for DME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB 1198–compliant base plan</td>
<td>1,033,463</td>
<td>7,708</td>
<td>755,557</td>
<td>462,651</td>
<td>815,000</td>
<td>3,074,379</td>
</tr>
<tr>
<td>SB 1198–non-compliant base plan</td>
<td>3,925,212</td>
<td>334,292</td>
<td>1,218,632</td>
<td>265,349</td>
<td>—</td>
<td>5,743,485</td>
</tr>
<tr>
<td>SB 1198–compliant base plan/rider (or rider only) plan</td>
<td>3,572,488</td>
<td>—</td>
<td>121,835</td>
<td>—</td>
<td>—</td>
<td>3,694,322</td>
</tr>
<tr>
<td>SB 1198–non-compliant base plan/rider (or rider only) plan</td>
<td>3,189,837</td>
<td>—</td>
<td>1,159,977</td>
<td>—</td>
<td>—</td>
<td>4,349,814</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,721,000</td>
<td>342,000</td>
<td>3,256,000</td>
<td>728,000</td>
<td>815,000</td>
<td>16,862,000</td>
</tr>
</tbody>
</table>

*Source: California Health Benefits Review Program, 2008*

*Note: Figures may exceed 100% due to rounding. The population includes employees and dependents covered by employer-sponsored insurance (including CalPERS).*

*Key: CalPERS=California Public Employees’ Retirement System; CDI=California Department of Insurance; DME=durable medical equipment; DMHC=Department of Managed Health Care.*

### Current Utilization Levels and Costs of the Mandated Benefit

As discussed in the Introduction, there are existing benefit mandates that require health plans or insurers to cover equipment and supplies used for the treatment and management of specific conditions. These items have been excluded in this analysis since those mandates would remain in law regardless of whether SB 1198 passed into law.

CHBRP estimates that there are 50 users of DME items per year per 1,000 members. The estimated average annual cost per DME user is $623.92 (Table 1). Overall, 53.40% of DME
users have annual claims less than $100, 40.27% of users have annual claims between $101 and $2,000, and only 6.33% have annual claims over $2,000, which is the current common annual benefit limit for DME (Table 3). The distributions of claims for DME are based on Milliman analysis of 2006 national claims data.

Table 3. Distribution of Claims per User, 2006

<table>
<thead>
<tr>
<th>Allowed Amount per User</th>
<th>No. of Patients</th>
<th>Allowed Amount</th>
<th>Distribution of Patients</th>
<th>Distribution of Allowed Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$100</td>
<td>290,598</td>
<td>8,434,414</td>
<td>53.40%</td>
<td>2.79%</td>
</tr>
<tr>
<td>$100–$200</td>
<td>53,201</td>
<td>7,592,010</td>
<td>9.78%</td>
<td>2.51%</td>
</tr>
<tr>
<td>$200–$300</td>
<td>30,038</td>
<td>7,362,985</td>
<td>5.52%</td>
<td>2.43%</td>
</tr>
<tr>
<td>$300–$400</td>
<td>21,050</td>
<td>7,301,411</td>
<td>3.87%</td>
<td>2.41%</td>
</tr>
<tr>
<td>$400–$500</td>
<td>16,295</td>
<td>7,291,354</td>
<td>2.99%</td>
<td>2.41%</td>
</tr>
<tr>
<td>$500–$600</td>
<td>13,363</td>
<td>7,321,159</td>
<td>2.46%</td>
<td>2.42%</td>
</tr>
<tr>
<td>$600–$700</td>
<td>10,971</td>
<td>7,118,556</td>
<td>2.02%</td>
<td>2.35%</td>
</tr>
<tr>
<td>$700–$800</td>
<td>10,647</td>
<td>7,996,881</td>
<td>1.96%</td>
<td>2.64%</td>
</tr>
<tr>
<td>$800–$900</td>
<td>8,744</td>
<td>7,415,862</td>
<td>1.61%</td>
<td>2.45%</td>
</tr>
<tr>
<td>$900–$1,000</td>
<td>7,816</td>
<td>7,405,246</td>
<td>1.44%</td>
<td>2.45%</td>
</tr>
<tr>
<td>$1,000–$2,000</td>
<td>47,023</td>
<td>66,315,190</td>
<td>8.64%</td>
<td>21.93%</td>
</tr>
<tr>
<td>$2,000–$3,000</td>
<td>16,046</td>
<td>39,167,619</td>
<td>2.95%</td>
<td>12.95%</td>
</tr>
<tr>
<td>$3,000–$4,000</td>
<td>7,582</td>
<td>25,846,668</td>
<td>1.39%</td>
<td>8.55%</td>
</tr>
<tr>
<td>$4,000–$5,000</td>
<td>3,387</td>
<td>15,046,477</td>
<td>0.62%</td>
<td>4.98%</td>
</tr>
<tr>
<td>$5,000–$6,000</td>
<td>2,003</td>
<td>10,941,785</td>
<td>0.37%</td>
<td>3.62%</td>
</tr>
<tr>
<td>$6,000–$7,000</td>
<td>1,262</td>
<td>8,160,609</td>
<td>0.23%</td>
<td>2.70%</td>
</tr>
<tr>
<td>$7,000–$8,000</td>
<td>821</td>
<td>6,128,603</td>
<td>0.15%</td>
<td>2.03%</td>
</tr>
<tr>
<td>$8,000–$9,000</td>
<td>601</td>
<td>5,092,665</td>
<td>0.11%</td>
<td>1.68%</td>
</tr>
<tr>
<td>$9,000–$10,000</td>
<td>423</td>
<td>4,000,771</td>
<td>0.08%</td>
<td>1.32%</td>
</tr>
<tr>
<td>$10,000–$15,000</td>
<td>1,206</td>
<td>14,591,614</td>
<td>0.22%</td>
<td>4.83%</td>
</tr>
<tr>
<td>$15,000–$20,000</td>
<td>467</td>
<td>8,036,708</td>
<td>0.09%</td>
<td>2.66%</td>
</tr>
<tr>
<td>$20,000–$25,000</td>
<td>256</td>
<td>5,731,489</td>
<td>0.05%</td>
<td>1.90%</td>
</tr>
<tr>
<td>&gt;$25,000</td>
<td>415</td>
<td>18,109,020</td>
<td>0.08%</td>
<td>5.99%</td>
</tr>
<tr>
<td>Total</td>
<td>544,215</td>
<td>$302,409,096</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: California Health Benefits Review Program, 2008

The Extent to Which Costs Resulting From Lack of Coverage Are Shifted to Other Payers, Including Both Public and Private Entities

Two types of cost transfers to private insurance programs could arise in general: first, people taking up employer-based insurance for DME coverage instead of public insurance; and second, people who use their employer-based insurance rather than rely on services in the nonprofit sector. No cost shifting is expected to occur from public programs (i.e., Medi-Cal and Healthy Families) to the privately insured market because the publicly insured are unlikely to have access to employment-based coverage to purchase private insurance for the DME benefit. There are nonprofits that provide DME for insured and uninsured at no cost. CHBRP recognizes that there may be some shift in costs from these charitable organizations to carriers as a result of coverage, but it was not possible to quantify this effect.
Public Demand for Coverage

As a way to determine whether public demand exists for the proposed mandate (based on criteria specified under SB 1704 [2007]), CHBRP is to report on the extent to which collective bargaining entities negotiate for, and the extent to which self-insured plans currently have, coverage for the benefits specified under the proposed mandate. Currently, the largest public self-insured plans are those preferred provider organization (PPO) plans offered by CalPERS. These plans provide coverage similar to that of the privately self-insured plans. CalPERS PPO plans are administered by Blue Cross of California. The plans cover DME items. PERS Choice and PERS Select have a 20% copayment for in-network providers and a $3,000 annual benefit limit. PERSCare includes a 10% copayment for in-network providers and require review and approval for DME items costing above $1,000. Members are also responsible for amounts over allowable charges when receiving services out of the network. Based on conversations with the largest collective bargaining agents in California, CHBRP concluded that unions currently do not include cost-sharing arrangements and out-of-pocket maximums for the DME benefit in their health insurance policy negotiations. In general, unions negotiate for broader contract provisions such as coverage for dependents, premiums, deductibles, and coinsurance levels.

Impacts of Mandated Coverage

How Will Changes in Coverage Related to the Mandate Affect the Benefit of the Newly Covered Service and the Per-Unit Cost?

Impact on per-unit cost

CHBRP estimates no effect on the price for specific DME items or the per-unit cost of DME. However, CHBRP estimates an increase in the average cost per user of DME benefits. This is because the decrease in the amount of coinsurance and removal of annual benefit limits would cause a limited shift to more-expensive, higher-technology equipment and possibly an increase in the number of DME items used by a given enrollee. This effect would produce an estimated increase in the average cost per user of 4.1% or by about $26

CHBRP estimates the shift to more-expensive, higher-technology equipment would be limited since SB 1198 continues to allow “every plan...the right to conduct a utilization review to determine medical necessity prior to authorizing these services.”

Post-mandate coverage

As discussed, coverage for DME services after the mandate could fall into the following categories:

- covered by a SB 1198–compliant base plan;
- covered by a SB 1198–compliant base plan/rider (or rider only) plan.

SB 1198 would affect the 16,862,000 enrollees in California under age 65 years with DME coverage in group insurance plans or group policies. For this analysis, CHBRP assumes that large-group employers with non-compliant base plans would expand their base plans to bring them into compliance with SB 1198, resulting in no change in the number of enrollees in the
large-group market having coverage for DME benefits. This assumption is based on the experience with the implementation of Assembly Bill (AB) 2012, a bill enacted into law effective July 1, 2007, requiring plans and insurers that covered orthotic and prosthetic (O&P) devices to do so at the same levels as other health care benefits. Based on CHBRP survey of health plans and insurers carriers responded to AB 2012 by expanding the base O&P benefit for large groups.

Because plans and insurers would likely wish to retain some flexibility in meeting the purchasing requirements of small-group employers, plans would likely offer the DME benefit through a rider (i.e., pull DME coverage out of the base plan and offer it instead as a compliant rider). Because the cost of purchasing a DME rider would result in a premium increase of less than 1%, CHBRP estimates small employers would not be likely to forgo purchasing the rider. Therefore, CHBRP estimates that all small-group members would continue to have DME coverage post-mandate.

Changes in coverage as a result of premium increases
When benefits are offered for purchase, groups have the option to purchase them. For the large-group market, plans and insurers would likely continue offering the DME benefits under a “base” (or standard) benefit package, thus the number of enrollees in the large-group market that have DME coverage is estimated to remain the same.

It is possible that SB 1198 will have the unintended consequence of causing small-group employers to drop coverage for DME because they would no longer have a low-cost option for covering DME and services. CHBRP estimates that dropping DME coverage from the total benefit package they purchase would result in a typical savings on the order of $2.50 per member per month (PMPM). Because these savings are less than 1% of total premiums in the small-group market, we assume that employers would not respond to such a small potential savings (Gabel et al., 2003).

How Will Utilization Change as a Result of the Mandate?

Although SB 1198 expands coverage of DME benefits to parity levels for members with DME coverage, overall utilization rates (expenses) are expected to increase slightly as a result of the mandate. As with other health benefits, CHBRP recognizes that a decrease in cost sharing may cause patients to use more items or demand more-expensive equipment regardless of their medical effectiveness. Additionally, CHBRP recognizes there may be DME supplier-induced demands based on the experience of Medicare program on DME (Fed Regist, 2005). However, given that health plans and insurers may take the utilization control measures, plus other mitigating factors discussed below, CHBRP model assumes no increase in the number of users but a slight increase in the units of DME or utilization of more-expensive DME among existing DME users. The estimated increase in utilization and related expenses are about $25.58 per DME user per year or 4.1% in response to reduced cost sharing and lifting of annual and lifetime expenditure limits. CHBRP’s assumption of a slight increase is supported by the following evidence:
- **No changes in either the number of newly covered members or the cost-sharing requirements are expected:** SB 1198 would not increase the number of members who have coverage for DME benefits, as the proposed law requires plans and insurers to offer coverage as opposed to mandating coverage. The potential change in benefit structure from one with an annual benefit limit to a benefit with no limit but a coinsurance rate (such as 20%) or deductible might maintain a disincentive for an enrollee to upgrade a DME device.

- **Utilization review process controls the type of DME members can obtain:**
  - Health plans and insurers still influence the choice of DME through their determination of medical necessity during the utilization review process. Previous study has shown that denials of coverage are particularly common for durable medical equipment (23% at one medical group and 15% at another medical group) (Kapur et al., 2003). From January 2001 to March 2008, there were 498 Independent Medical Review (IMR)-adjudicated cases that denied certain DME items; 171 of these cases were overturned in the favor of the members; and for the remaining cases, the plans’ original determination was upheld. DME is a benefit that comes under dispute more often than other types of benefits because an enrollee may demand an item for purposes that may be considered “convenience” but is not considered “medically necessary.” For example, wheelchairs were under dispute for 25 of the cases identified: 22 cases were upheld in the favor of the plan and 3 were overturned in the favor of the member. According to the DMHC, an IMR decision is found in the favor of the member in half of all cases for all benefits. For DME benefits, about one-third is found in the favor of the member.

  - Studies assessing the implementation of mental health parity have found little or no increase in utilization of services when the level of utilization management increased simultaneously with the implementation of parity. In one article on the Federal Employee Health Benefit Program (FEHBP), the authors found that parity did not increase the overall rate of use of mental health or substance abuse services and did not increase spending for these services, but did decrease out-of-pocket spending for beneficiaries (Goldman et al., 2006). The authors conclude, “When coupled with management of care, implementation of parity in insurance benefits for behavioral health care can improve insurance protection without increasing total costs.” A Health Affairs article from 2006 similarly concludes that when mental health parity is instituted in the context of managed care, there is minimal effect on total spending (Barry et al., 2006).

**To What Extent Does the Mandate Affect Administrative and Other Expenses?**

Health care plans include a component for administration and profit in their premiums. In estimating the impact of this mandate on premiums, actuarial analysis assumes that health plans will apply their existing administration and profit loads to the increase in health care costs produced by the mandate. Therefore, although there may be administrative costs associated with the mandate, administrative costs as a portion of premium would not change. For example, health plans and insurers may implement administrative changes as to how the DME benefit is
offered—moving it from the base plan to a rider. In addition, SB 1198 would require the plans and insurers notify members and applicants of their DME coverage changes. Health plans and insurers may also need to increase staff specialized in utilization management. These administrative changes were reflected in the standard administrative cost load associated with premiums.

Impact of the Mandate on Total Health Care Costs

CHBRP estimates that total net expenditures (including total premiums and out-of-pocket expenditures) for DME and services are estimated to increase by 0.054% as a result of SB 1198 (Table 6).

Costs or Savings for Each Category of Insurer Resulting From the Benefit Mandate

The impact is significantly higher for DMHC-regulated plans than for CDI-regulated plans, specifically, as shown in Table 5, SB 1198 is estimated to increase cost by:

- 0.062% for the large-group DMHC-regulated market;
- 0.018% for the large-group CDI-regulated market;
- 0.11% for the small-group DMHC-regulated market; and
- 0.014% for the small-group CDI-regulated market.

The reason that impacts are greater in the DMHC-regulated markets than for CDI-regulated markets is that to become compliant with SB 1198, most CDI-regulated plans would need to make minor reductions to their DME cost sharing, to match the cost sharing for other medical benefits. DMHC-regulated plans, conversely, will have to reduce DME cost sharing to essentially $0, since their cost sharing for other medical benefits is usually expressed as a copayment or a small dollar amount, such as $20 for an office visit. Table 4 shows the average estimated changes in annual benefit limits and cost-sharing levels that would likely occur as a result of the mandate.

### Table 4. Average Coinsurance and Average Benefit Limits: Current and Post-mandate Levels

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Benefit Characteristic</th>
<th>Baseline (Current)</th>
<th>Post-mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Large Group</td>
<td>Small Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DMHC- Regulated</td>
<td>CDI- Regulated</td>
</tr>
<tr>
<td>SB 1198–compliant base plans and/or riders</td>
<td>Coinsurance</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Benefit maximum</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>SB 1198–non-compliant base plans</td>
<td>Coinsurance</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Benefit maximum</td>
<td>$3,248</td>
<td>$3,488</td>
</tr>
<tr>
<td>SB 1198 Non-compliant riders</td>
<td>Coinsurance</td>
<td>30%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Benefit maximum</td>
<td>$3,500</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Source:** California Health Benefits Review Program, 2008

**Key:** CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

These percentage increases result in a $42,958,000 annual increase in total health care costs in California. For affected markets, premiums are expected to increase by 0.21%. The increases in premiums vary by market segment:
• $0.72 PMPM in the large-group DMHC-regulated market
• $0.36 in large-group CDI-regulated markets;
• $1.20 PMPM in the small-group DMHC-regulated market; and
• $0.20 PMPM in the small-group CDI regulated market.

Though SB 1198 is expected to increase the premiums paid by both employer and employee, it would cause a decrease in the cost of the covered benefits paid by the member (deductibles, copayments, etc.). The average portion of the premium paid by the employer would increase between $0.17 and $0.87, and the average portion of the premium paid by employees would increase between $0.04 and $0.33. However, the covered benefits paid by members (deductibles, copayments, etc.) would decrease between $0.14 and $0.81. Thus, total premiums would increase by $152,136,000, but covered benefits paid for by members out of pocket would decrease by $109,178,000.

CalPERS, Medi-Cal, and Healthy Families provide full coverage for DME, with no cost sharing and no annual limits, which is aligned with the mandated benefit offering required under SB 1198. Therefore, CalPERS, Medi-Cal, and Healthy Families are expected to face no impact if SB 1198 were to be enacted.

Impact on Long-Term Costs

Longer-term impacts on health care costs as a result of the mandate are unknown but likely to be minimal. However, other societal impacts, such as productivity gains may be possible and this is discussed in the Public Health Impacts section.

Impact on Access and Health Service Availability

CHBRP expects that there will be minimal impacts on the access to and availability of DME and services as a result of SB 1198 because neither number of enrollees with coverage nor number of DME users is projected to increase. To the extent that cost sharing will be reduced and limits will be removed, access would be expected to increase for the small number of enrollees who seek equipment in excess of the annual benefit limit. Nonetheless, utilization review and medical management are expected to mediate the response of the health plans and insurers to this increase in demand. Some health plans and insurers that offer a non-compliant DME benefit in their base plan may shift the benefit to a compliant DME rider. As an unintended consequence, small employers may drop DME coverage altogether because they lack a “low-cost” DME option, consequently decreasing health service availability and access for some employees. CHBRP is unable to estimate these effects quantitatively.
Table 5. Baseline (Pre-mandate) Per Member Per Month Premium and Expenditures by Insurance Plan Type, California, 2008

<table>
<thead>
<tr>
<th>Population currently covered</th>
<th>Large Group</th>
<th>Small Group</th>
<th>Individual</th>
<th>CalPERS</th>
<th>Medi-Cal</th>
<th>Healthy Families</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DMHC-Regulated</td>
<td>CDI-Regulated</td>
<td>DMHC-Regulated</td>
<td>CDI-Regulated</td>
<td>DMHC-Regulated</td>
<td>CDI-Regulated</td>
</tr>
<tr>
<td>Population currently covered</td>
<td>11,721,000</td>
<td>342,000</td>
<td>3,256,000</td>
<td>728,000</td>
<td>1,299,000</td>
<td>812,000</td>
</tr>
<tr>
<td>Average portion of premium paid by employer</td>
<td>$238.92</td>
<td>$315.18</td>
<td>$245.82</td>
<td>$296.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Average portion of premium paid by employee</td>
<td>$54.60</td>
<td>$86.99</td>
<td>$93.75</td>
<td>$62.26</td>
<td>$294.46</td>
<td>$160.95</td>
</tr>
<tr>
<td>Total premium</td>
<td>$293.53</td>
<td>$402.17</td>
<td>$339.57</td>
<td>$358.26</td>
<td>$294.46</td>
<td>$160.95</td>
</tr>
<tr>
<td>Members expenses for covered benefits (deductibles, copays, etc.)</td>
<td>$15.78</td>
<td>$45.50</td>
<td>$24.95</td>
<td>$95.56</td>
<td>$50.61</td>
<td>$39.36</td>
</tr>
<tr>
<td>Member expenses for benefits not covered</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Total expenditures</td>
<td>$309.30</td>
<td>$447.67</td>
<td>$364.52</td>
<td>$453.82</td>
<td>$345.07</td>
<td>$200.31</td>
</tr>
</tbody>
</table>

Notes: The population includes individuals and dependents in California who have private insurance (group and individual) or public insurance (e.g., CalPERS, Medi-Cal, Healthy Families, Access for Infants and Mothers [AIM], Major Risk Medical Insurance Program [MRMIP]) under health plans or policies regulated by the Department of Managed Health Care (DMHC) or California Department of Insurance (CDI). All population figures include enrollees aged 0–64 years and enrollees 65 years or older covered by employment-based coverage.
Key: CalPERS=California Public Employees’ Retirement System; HMO=health maintenance organization and point of service plans.
### Table 6. Post-mandate Impacts on Per Member Per Month and Total Expenditures by Insurance Plan Type, California, 2008

<table>
<thead>
<tr>
<th></th>
<th>Large Group</th>
<th>Small Group</th>
<th>Individual</th>
<th>CalPERS</th>
<th>Medi-Cal Managed Care 65 yrs and Over</th>
<th>Managed Care Under 65yrs</th>
<th>Healthy Families</th>
<th>Total Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population currently covered</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMHC-Regulated</td>
<td>11,721,000</td>
<td>3,256,000</td>
<td>1,299,000</td>
<td>815,000</td>
<td>172,000</td>
<td>2,532,000</td>
<td>685,000</td>
<td>22,362,000</td>
</tr>
<tr>
<td>CDI-Regulated</td>
<td>342,000</td>
<td>728,000</td>
<td>812,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average portion of premium paid by employer</strong></td>
<td>$0.5895</td>
<td>$0.8723</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td></td>
<td>$119,630,000</td>
</tr>
<tr>
<td><strong>Average portion of premium paid by employee</strong></td>
<td>$0.0783</td>
<td>$0.3308</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td></td>
<td>$32,506,000</td>
</tr>
<tr>
<td><strong>Total premium</strong></td>
<td>$0.7242</td>
<td>$1.2030</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td></td>
<td>$152,136,000</td>
</tr>
<tr>
<td><strong>Member expenses for covered benefits (deductibles, copays, etc.)</strong></td>
<td>$0.5336</td>
<td>$0.8126</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td></td>
<td>$109,178,000</td>
</tr>
<tr>
<td><strong>Member expenses for benefits not covered</strong></td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td></td>
<td>$0.0000</td>
</tr>
<tr>
<td><strong>Total expenditures</strong></td>
<td>$0.1906</td>
<td>$0.3904</td>
<td>$0.0652</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td>$0.0000</td>
<td></td>
<td>$42,958,000</td>
</tr>
<tr>
<td><strong>Percentage impact of mandate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured premiums</td>
<td>0.2467%</td>
<td>0.3543%</td>
<td>0.0570%</td>
<td>0.0000%</td>
<td>0.0000%</td>
<td>0.0000%</td>
<td>0.0000%</td>
<td>0.2064%</td>
</tr>
<tr>
<td>Total expenditures</td>
<td>0.0616%</td>
<td>0.1071%</td>
<td>0.0144%</td>
<td>0.0000%</td>
<td>0.0000%</td>
<td>0.0000%</td>
<td>0.0000%</td>
<td>0.0542%</td>
</tr>
</tbody>
</table>

**Source:** California Health Benefits Review Program, 2008.

**Notes:** The population includes individuals and dependents in California who have private insurance (group and individual) or public insurance (e.g., CalPERS, Medi-Cal, Healthy Families, Access for Infants and Mothers [AIM], Major Risk Medical Insurance Program [MRMIP]) under health plans or policies regulated by the Department of Managed Health Care (DMHC) or California Department of Insurance (CDI). All population figures include enrollees aged 0–64 years and enrollees 65 years or older covered by employment-base coverage.

**Key:** CalPERS=California Public Employees’ Retirement System; HMO=health maintenance organization and point of service plans.
PUBLIC HEALTH IMPACTS

As described in the Introduction, the individuals most likely to be affected by SB 1198 are persons with high durable medical equipment (DME) costs for DME items that are not already currently mandated under California law. Many of the high-cost DME users are persons in the following categories: persons with diagnoses related to physical disabilities such as musculoskeletal disorders, persons with sequelae from traumatic injuries such as spinal cord injuries and head trauma, persons with respiratory diseases and related conditions needing home oxygen equipment, and persons with diagnoses related to complications of the digestive system.

The Impact of the Proposed Mandate on the Health of the Community

The health outcomes associated with the use of DME vary according to the type of DME that is being used. For persons with physical disabilities who use DME items such as wheelchairs, walkers, and shower and bath seats, the relevant health outcomes include increased independence, mobility, and functionality. The potential health outcomes related to using home oxygen equipment for some health conditions include improved survival, decreased breathlessness, and increased exercise endurance, (Bradley and O’Neill, 2005, Cranston et al., 2005; Crockett et al., 2001). Increased survival and decreased morbidity are associated with the use of parenteral nutrition (Perel et al., 2006).

As described in the Utilization, Cost, and Coverage section, SB 1198 is not expected to increase the number of insured persons using DME. SB 1198, however, is expected to decrease out-of-pocket spending for approximately 11,000 individuals using DME in excess of their annual benefit limit and therefore may result in reducing the financial hardship associated with their condition. Among the current users of DME, SB 1198 is also expected to result in an increased utilization, where decreased annual limits and coinsurance are expected to lead to some individuals receiving more DME, more-expensive DME items, and more-frequent replacement of existing DME items. The health benefits associated with this increased utilization is unknown.

The Impact on the Health of the Community Where Gender and Racial Disparities Exist

A literature review was conducted to determine whether gender or racial disparities associated with access and utilization of DME exist. Freedman et al (2004) examined socioeconomic disparities in the use of DME in the Medicare managed care population and did not find statistically significant differences between genders and races. Another study found that females over age 65 years were more likely to use mobility-related DME compared to men over 65 (Mathieson et al., 2002). SB 1198, however, applies specifically to the non-Medicare population. The 2001 California Health Interview Survey (CHIS) data and the 2004 Medical Expenditure Panel Survey (MEPS) data contain information on DME utilization by gender and race for the population specific to SB 1198.
Gender

According to the CHIS data, there were no statistically significant gender differences in privately insured Californian adults under 65 years reporting having a health problem that required special equipment (CHIS, 2001). An analysis of Milliman’s 2007 national claims database also did not find substantial gender differences in utilization and costs associated with DME, although males had a slightly higher proportion of costs for DME compared to females.

In contrast, the national MEPS data did identify gender differences in DME expenditures with 2.3% of females under 65 years having DME expenditures greater than $500 per year compared with only 1.5% of males (MEPS, 2004). Additionally, more than twice as many females reported paying $500 or more for DME out-of-pocket compared to males (1.3% of females, 0.6% of males). Based on the MEPS data, it is possible that SB 1198 will benefit more females than males since SB 1198 is expected to reduce out-of-pocket expenditures for some individuals with high DME costs.

Race

Among privately insured Californian adults under 65 years, whites and blacks reported higher rates of having a health problem that require special equipment compared to Hispanics and other racial or ethnic groups (CHIS, 2001). This finding was consistent with the MEPS data, which found fewer Hispanics with DME expenditures greater than $500 and fewer out-of-pocket expenses related to DME compared with non-Hispanics (MEPS, 2004). Comparing whites to non-whites, whites had more high-cost DME expenses and higher out-of-pocket costs (MEPS, 2004).

A literature search identified studies that found disparities in the receipt of DME, with minority veterans less likely to obtain DME compared to whites (Weaver et al., 1999) and minorities with traumatic spinal cord injuries less likely to have customized wheelchairs compared to whites (Hunt et al., 2004).

As stated previously, SB 1198 is not expected to result in an overall increase in the number of DME users but rather increase levels of utilization for current DME users and reduce out-of-pocket expenditures for some individuals. Since the MEPS data found that whites had higher out-of-pocket DME expenses compared with non-whites, SB 1198 is not expected to have an impact on racial disparities.

The Extent to Which the Proposed Service Reduces Premature Death and the Economic Loss Associated With Disease.

For some individuals, the provision of DME is a necessity for survival, particularly for those dependent on home oxygen equipment and parenteral nutrition. Although the administration of
home oxygen and parenteral nutrition is essential for the continued survival of some patients, it is not expected that SB 1198 will result in more people using these forms of DME and therefore is not expected to reduce premature death.

While the economic costs associated with the broad spectrum of diseases and conditions related to DME are unknown, researchers have estimated that many of the health conditions associated with DME utilization have substantial economic costs. For example, cerebral palsy was estimated to cost $921,000\textsuperscript{11} per person with the condition over their lifetime (CDC, 2004), and chronic obstructive pulmonary disease was estimated to cost the United States $38.8 billion annually\textsuperscript{12} (Foster et al., 2006). One study estimated that adults aged 18–64 years with disabilities (including both physical and cognitive disabilities) have substantially lower employment rates and earn less compared to non-disabled (Yelin et al., 2006).

No literature was identified that examined the impact of utilization of DME on increased productivity. Still, it is possible that by improving functionality, DME use could impact productivity costs. Since SB 1198 is not expected to result in an overall increase in the number of DME users and the benefit of increased DME utilization among existing DME users is unknown, the impact of SB 1198 on the economic loss associated with DME-related diseases and conditions is unknown.

\textsuperscript{11} Estimate made in 2003 dollars, and costs attributed to DME utilization were not specified
\textsuperscript{12} Estimate made in 2005 dollars, and costs attributed to DME utilization were not specified.
APPENDICES

Appendix A: Text of Bill Analyzed

BILL NUMBER: SB 1198  INTRODUCED
BILL TEXT

INTRODUCED BY  Senators Kuehl and Florez
(Principal coauthor: Assembly Member Beall)
(Coauthor: Senator Wiggins)
(Coauthors: Assembly Members Hancock and Hernandez)

FEBRUARY 13, 2008

An act to add Section 1367.27 to the Health and Safety Code, and to add Section 10123.24 to the Insurance Code, relating to health care coverage.

LEGISLATIVE COUNSEL’S DIGEST

SB 1198, as introduced, Kuehl. Health care coverage: durable medical equipment.
Existing law, the Knox-Keene Health Care Service Plan Act of 1975 (Knox-Keene Act), provides for the licensure and regulation of health care service plans by the Department of Managed Health Care and makes a willful violation of that act a crime. Existing law also provides for the regulation of health insurers by the Department of Insurance. Under existing law, health care service plans and health insurers are required to offer specified types of coverage as part of their group plan contracts or group policies.
This bill would require a health care service plan and a health insurer to offer coverage for durable medical equipment, as defined, as part of their group plan contracts or group policies.
Because the bill would specify additional requirements under the Knox-Keene Act, the willful violation of which would be a crime, it would impose a state-mandated local program.
The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.
This bill would provide that no reimbursement is required by this act for a specified reason.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1.  Section 1367.27 is added to the Health and Safety Code, to read:
1367.27.  (a) Every health care service plan, except a specialized health care service plan, that covers hospital, medical, or surgical expenses on a group basis that is issued, amended, received,
or delivered on or after January 1, 2009, shall offer coverage for durable medical equipment (DME) and services under the terms and conditions that may be agreed upon between the group subscriber and the plan. Every plan shall communicate the availability of that coverage to all group contractholders and to all prospective group contractholders with whom they are negotiating. Any coverage for DME shall provide for coverage when the equipment, including original and replacement equipment, is prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license. Every plan shall have the right to conduct a utilization review to determine medical necessity prior to authorizing these services.

(b) The amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to the basic health care services required to be provided under Section 1367. If the contract does not include any annual or lifetime benefit maximums applicable to basic health care services, the amount of the benefit for DME and services shall not be subject to an annual or lifetime maximum benefit level. Any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts applied to the basic health care services required to be provided under Section 1367.

(c) "Durable medical equipment" consists of equipment that is used for the treatment of a medical condition or injury or to preserve the patient's functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.

SEC. 2. Section 10123.24 is added to the Insurance Code, to read:

10123.24. (a) On and after January 1, 2009, every insurer issuing group health insurance shall offer coverage for durable medical equipment (DME) and services under the terms and conditions that may be agreed upon between the group policyholder and the insurer. Every insurer shall communicate the availability of that coverage to all group policyholders and to all prospective group policyholders with whom they are negotiating. Any coverage for DME shall provide for coverage when the equipment, including original and replacement equipment, is prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license. Every insurer shall have the right to conduct a utilization review to determine medical necessity prior to authorizing these services.

(b) The amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to all benefits in the policy. Any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts contained in the policy.

(c) "Durable medical equipment" consists of equipment that is used for the treatment of a medical condition or injury or to preserve the patient's functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.

(d) This section shall not apply to Medicare supplement, short-term limited duration health insurance, vision-only, dental-only, or CHAMPUS supplement insurance, or to hospital indemnity, hospital-only, accident-only, or specified disease insurance that does not pay benefits on a fixed benefit, cash payment only basis.
SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.
Appendix B: Literature Review Methods

Appendix B describes methods used in the medical effectiveness literature review for SB 1198, a bill that would require health plans that offer coverage for durable medical equipment (DME) to provide coverage that is at parity with coverage for medical services.

DME encompasses such a wide range of devices and products that a systematic review of the literature on the effectiveness of all of these devices and products was not feasible nor relevant to the intent of SB 1198. In addition, the California Health Benefits Review Program (CHBRP) examined data on DME claims filed with private health plans and found that no diagnoses other than “general symptoms” accounted for more than 10% of DME claims. In light of these findings, and the fact that SB 1198 specifically addresses the benefit structure of DME, CHBRP focused the literature review for this bill on the impact of private insurance coverage for DME. The literature review examined articles and reports on the impact of having private insurance versus no insurance for DME, as well as the literature on the effect of having more generous coverage for DME (e.g., larger annual or lifetime maximum, lower deductibles, lower copayments or coinsurance).

For all topics, the literature search was limited to articles published in English. The search encompassed all pertinent studies published from 1995 to present. PubMed, the Cumulative Index of Nursing and Allied Health Literature, the Web of Science, the Cochrane Register of Controlled Clinical Trials, EconLit, and the Social Science Citation Index were searched. The Agency for Healthcare Quality and Research’s Web site was also searched.

The literature search yielded a total of 331 abstracts regarding DME. At least two reviewers screened the title and abstract of each citation returned by the literature search to determine eligibility for inclusion. The reviewers obtained the full text of articles that appeared to be eligible for inclusion in the review and reapplied the initial eligibility criteria. Seven studies met the inclusion criteria and were included in the medical effectiveness review.

In making a “call” for each outcome measure, the team and the content expert consider the number of studies as well the strength of the evidence. To grade the evidence for each outcome measured, the team uses a grading system that has the following categories:

- Research design
- Statistical significance
- Direction of effect
- Size of effect
- Generalizability of findings

The grading system also contains an overall conclusion that encompasses findings in these five domains. The conclusion is a statement that captures the strength and consistency of the evidence of an intervention’s effect on an outcome. The following terms are used to characterize the body of evidence regarding an outcome.
• Clear and convincing evidence
• Preponderance of evidence
• Ambiguous/conflicting evidence
• Insufficient evidence

The conclusion states that there is “clear and convincing” evidence that an intervention has a favorable effect on an outcome, if most of the studies included in a review are well-implemented, randomized controlled trials (RCTs) and report statistically significant and clinically meaningful findings that favor the intervention.

The conclusion characterizes the evidence as “preponderance of evidence” that an intervention has a favorable effect if most but not all five criteria are met. For example, for some interventions, the only evidence available is from nonrandomized studies or from small RCTs with weak research designs. If most such studies that assess an outcome have statistically and clinically significant findings that are in a favorable direction and enroll populations similar to those covered by a mandate, the evidence would be classified as a “preponderance of evidence favoring the intervention.” In some cases, the preponderance of evidence may indicate that an intervention has no effect or has an unfavorable effect.

The evidence is presented as “ambiguous/conflicting if their findings vary widely with regard to the direction, statistical significance, and clinical significance/size of the effect.

The category “insufficient evidence” of an intervention’s effect is used where there is little if any evidence of an intervention’s effect.

The search terms used to locate studies relevant to the SB 1198 were as follows:

**Free Text Terms (i.e., keywords)—All Databases**

- Annual maximum benefit*
- Coinsurance
- Copay*
- Copayment*
- Cost sharing
- Crutch*
- Dme
- Durable medical equipment
- Equipment
- Expenditures
- Expenditures invested
- Expenditures per quality adjusted life year gained
- Expenditures saved
- Health and functioning outcomes
- Health insurance
- Incubator*
- Infusion pump*
Insur*
Insurance
Insurance deductible
Interruption pneumatic compression device*
Level of coverage
Lifetime maximum benefit*
Medical equipment
Medical insurance
Medical supplies
Medicare
Nebulizer*
Needles
Outcome
Outcome assessment*
Oxygenator*
Parity
Prostheses*
Reimbursement*
Self-help device*
Trusses
Utilization
Vaporizer*
Ventilator*
Wheelchair*

* Indicates truncation of a term

Medical Subject Heading (MeSH) – PubMed, CINAHL, Cochrane Library

"Equipment and Supplies/utilization"[MeSH]

“Equipment and Supplies/economics”[MeSH]

Equipment and Supplies (include all terms below plus more specific terms associated with them)

Amplifiers
Atmosphere Exposure Chambers
Bandages
Bioreactors
Catheters, Indwelling
Contraceptive Devices
Culture Media
Dental Equipment
Diagnostic Equipment
Disposable Equipment
Durable Medical Equipment
Electric Power Supplies
Electrodes
Emergency Medical Tags
Equipment and Supplies, Hospital
Feminine Hygiene Products
Gamma Cameras
Gas Scavengers
Gastric Balloon
Gravity Suits
Incubators
Infant Equipment
Infusion Pumps
Intermittent Pneumatic Compression Devices
Lasers
Lenses
Medicine Chests
Microbubbles
Micropore Filters
Microspheres
Nanospheres
Nebulizers and Vaporizers
Needles
Oxygenators
Phantoms, Imaging
Prostheses and Implants
Protective Devices
Reagent Kits, Diagnostic
Self-Help Devices
Sensory Aids
Surgical Equipment
Surgically-Created Structures
Syringes
Thermometers
Tomography Scanners, X-Ray Computed
Tourniquets
Transducers
Transplants
Ventilators, Mechanical
X-Ray Film
X-Ray Intensifying Screens

Outcome and Process Assessment (Health Care)
Outcome Assessment (Health Care)
Process Assessment (Health Care)
Insurance, Health, Reimbursement
Reimbursement Mechanisms

Insurance, Health
Health Benefit Plans, Employee
Health Insurance Portability and Accountability Act
Insurance, Accident
Insurance, Dental
Insurance, Health, Reimbursement
Insurance, Hospitalization
Insurance, Long-Term Care
Insurance, Major Medical
Insurance, Medigap
Insurance, Nursing Services
Insurance, Pharmaceutical Services
Insurance, Physician Services
Insurance, Psychiatric
Insurance, Surgical
Managed Care Programs
Managed Competition
Medical Savings Accounts
Medicare
National Health Insurance, United States
Prepaid Health Plans
Single-Payer System

Insurance
Cost Sharing
Insurance Benefits
Insurance Carriers
Insurance Claim Reporting
Insurance Claim Review
Insurance Coverage
Insurance, Disability
Insurance, Health
Insurance, Liability
Insurance, Life
Insurance Pools
Insurance Selection Bias
Social Security

Costs and Cost Analysis
Cost Sharing
Appendix C: Description of Studies on the Impact of Health Insurance on Use of Durable Medical Equipment

Appendix C describes the studies on the effects of health insurance on use of durable medical equipment that were analyzed by the medical effectiveness team. For each study, Table C1- presents the citation and information about the type of study, relationship(s) assessed, population studied, and location at which a study was conducted. Table C-2 summarizes findings from these studies.

Table C-1. Characteristics of Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment

<table>
<thead>
<tr>
<th>Citation</th>
<th>Type of Trial</th>
<th>Relationship Assessed</th>
<th>Population Studied</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree et al., 2004</td>
<td>Level III—Cross-sectional survey</td>
<td>Impact of private insurance (either primary carrier or Medicare supplemental carrier) on use of durable medical equipment alone or in combination with informal or formal personal care services</td>
<td>Adults age 50 yrs. or older who have difficulty walking, transferring (e.g., from lying in bed to standing), or going outside</td>
<td>United States—national sample</td>
</tr>
<tr>
<td>Litaker and Cebul, 2003</td>
<td>Level III—Cross-sectional survey</td>
<td>Impact of being continuously insured on difficulty obtaining medical equipment/supplies or prescription medications</td>
<td>Adults aged 18 to 98 yrs</td>
<td>Ohio</td>
</tr>
</tbody>
</table>

13 Level I = Well-implemented RCTs and cluster RCTs, Level II = RCTs and cluster RCTs with major weaknesses, Level III = Nonrandomized studies that include an intervention group and one or more comparison group, time series analyses, and cross-sectional surveys, Level IV = Case series and case reports, Level V = Clinical/practice guidelines based on consensus or opinion.

14 This study included some persons who were age 65 years or older for whom Medicare was their primary form of health insurance. Some of these persons had private, supplemental insurance (i.e., Medigap policies). Among subjects who were age 50 to 64 years, some subjects had private insurance as their primary form of health insurance. Others were enrolled in Medicare or Medicaid due to their disability or were uninsured.
Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment

Private Insurance (Primary or Supplemental) vs. No Insurance or Only Medicare

<table>
<thead>
<tr>
<th>Citation</th>
<th>Outcome</th>
<th>Research Design</th>
<th>Statistical Significance</th>
<th>Direction of Effect</th>
<th>Size of Effect</th>
<th>Generalizability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree et al., 2004</td>
<td>Use of durable medical equipment for mobility</td>
<td></td>
<td>a. Not statistically significant</td>
<td>a. No difference</td>
<td>a. No difference</td>
<td>• This study is only somewhat generalizable to the population that would be affected by SB 1198 because it included persons age 65 yrs or older, a group to whom SB 1198 would not apply.</td>
</tr>
<tr>
<td></td>
<td>a. Alone</td>
<td>Level III—Cross- sectional survey</td>
<td>b. Not statistically significant</td>
<td>b. No difference</td>
<td>b. No difference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. With informal care</td>
<td></td>
<td>c. Not statistically significant</td>
<td>c. No difference</td>
<td>c. No difference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. With formal care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Continuously Insured vs. Intermittently Insured vs. Uninsured

<table>
<thead>
<tr>
<th>Citation</th>
<th>Outcome</th>
<th>Research Design</th>
<th>Statistical Significance</th>
<th>Direction of Effect</th>
<th>Size of Effect</th>
<th>Generalizability</th>
</tr>
</thead>
</table>
| Litaker and Cebul, 2003 | Difficulty obtaining medical equipment/supplies or prescription medications | Level III—Cross-sectional survey | • No formal test of statistical significance performed | • % persons reporting difficulty was lower for insured persons than for intermittently insured or uninsured persons | • Continuously insured=1%  
• Intermittently insured=17%  
• Uninsured=20%   | • This study is only somewhat generalizable to the population that would be affected by SB 1198 because it included persons age 65 yrs or older. In addition, the findings are not fully generalizable because the authors asked respondents about both DME and prescription medication, whereas SB 1198 applies only to DME. |

Key: DME=durable medical equipment.
Appendix D: Cost Impact Analysis: Data Sources, Caveats, and Assumptions

This appendix describes data sources, as well as general and mandate-specific caveats and assumptions used in conducting the cost impact analysis. For additional information on the cost model and underlying methodology, please refer to the California Health Benefits Review Program (CHBRP) Web site, http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php.

The cost analysis in this report was prepared by the Cost Team which consists of CHBRP task force members and staff, specifically from the University of California, Los Angeles, and Milliman Inc. (Milliman). Milliman is an actuarial firm, and it provides data and analyses per the provisions of CHBRP authorizing legislation.

Data Sources

In preparing cost estimates, the Cost Team relies on a variety of data sources as described below.

Private Health Insurance

1. The latest (2005) California Health Interview Survey (CHIS), which is utilized to estimate insurance coverage for California’s population and distribution by payer (i.e., employment-based, privately purchased, or publicly financed). The biannual CHIS is the largest state health survey conducted in the United States, collecting information from over 40,000 households. More information on CHIS is available at www.chis.ucla.edu/

2. The latest (2007) California Employer Health Benefits Survey is utilized to estimate:
   - size of firm,
   - percentage of firms that are purchased/underwritten (versus self-insured),
   - premiums for plans regulated by the Department of Managed Health Care (DMHC) (primarily health maintenance organizations [HMOs]),
   - premiums for policies regulated by the California Department of Insurance (CDI) (primarily preferred provider organizations [PPOs]), and
   - premiums for high deductible health plans (HDHP) for the California population covered under employment-based health insurance.

   This annual survey is released by the California Health Care Foundation/National Opinion Research Center (CHCF/NORC) and is similar to the national employer survey released annually by the Kaiser Family Foundation and the Health Research and Educational Trust. Information on the CHCF/NORC data is available at: www.chcf.org/topics/healthinsurance/index.cfm?itemID=133543.

3. Milliman data sources are relied on to estimate the premium impact of mandates. Milliman’s projections derive from the Milliman Health Cost Guidelines (HCGs). The HCGs are a health care pricing tool used by many of the major health plans in the United
States. See [www.milliman.com/expertise/healthcare/products-tools/milliman-care-guidelines/index.php](http://www.milliman.com/expertise/healthcare/products-tools/milliman-care-guidelines/index.php). Most of the data sources underlying the HCGs are claims databases from commercial health insurance plans. The data are supplied by health insurance companies, Blues plans, HMOs, self-funded employers, and private data vendors. The data are mostly from loosely managed health care plans, generally those characterized as preferred provider plans or PPOs. The HCGs currently include claims drawn from plans covering 4.6 million members. In addition to the Milliman HCGs, CHBRP’s utilization and cost estimates draw on other data, including the following:

- The MEDSTAT MarketScan Database, which includes demographic information and claim detail data for approximately 13 million members of self-insured and insured group health plans.
- An annual survey of HMO and PPO pricing and claim experience, the most recent survey (2006 Group Health Insurance Survey) contains data from seven major California health plans regarding their 2005 experience.
- Ingenix MDR Charge Payment System, which includes information about professional fees paid for healthcare services, based upon approximately 800 million claims from commercial insurance companies, HMOs, and self-insured health plans.

These data are reviewed for applicability by an extended group of experts within Milliman but are not audited externally.

4. An annual survey by CHBRP of the seven largest providers of health insurance in California (Aetna, Blue Cross of California, Blue Shield of California, CIGNA, Health Net, Kaiser Foundation Health Plan, and PacifiCare) to obtain estimates of baseline enrollment by purchaser (i.e., large and small group and individual), type of plan (i.e., DMHC or CDI-regulated), cost-sharing arrangements with enrollees, and average premiums. Enrollment in these seven firms represents 94.6% of privately insured enrollees in full-service health plans regulated by DMHC and 85.4% of those privately insured by comprehensive health insurance products regulated by CDI.

**Public Health Insurance**

5. Premiums and enrollment in DMHC- and CDI-regulated plans by self-insured status and firm size are obtained annually from CalPERS for active state and local government public employees and their family members who receive their benefits through CalPERS. Enrollment information is provided for fully funded, Knox-Keene licensed health care service plans covering non-Medicare beneficiaries—which is about 75% of CalPERS total enrollment. CalPERS self-funded plans—approximately 25% of enrollment—are not subject to state mandates. In addition, CHBRP obtains information on current scope of benefits from health plans’ evidence of coverage (EOCs) publicly available at [www.calpers.ca.gov](http://www.calpers.ca.gov).

6. Enrollment in Medi-Cal Managed Care (Knox-Keene licensed plans regulated by DMHC) is estimated based on CHIS and data maintained by the Department of Health Care Services (DHCS). DHCS supplies CHBRP with the statewide average premiums negotiated for the Two-Plan Model, as well as generic contracts which summarize the
current scope of benefits. CHBRP assesses enrollment information online at www.dhs.ca.gov/admin/ffdmb/mcss/RequestedData/Beneficiary%20files.htm.

7. Enrollment data for other public programs—Healthy Families, Access for Infants and Mothers (AIM), and the Major Risk Medical Insurance Program (MRMIP)—are estimated based on CHIS and data maintained by the Major Risk Medical Insurance Board (MRMIB). The basic minimum scope of benefits offered by participating plans under these programs must comply with all requirements of the Knox-Keene Act, and thus these plans are affected by changes in coverage for Knox-Keene licensed plans. CHBRP does not include enrollment in the Post-MRMIB Guaranteed-Issue Coverage Products as these individuals are already included in the enrollment for individual health insurance products offered by private carriers. Enrollment figures for AIM and MRMIP are included with enrollment for Medi-Cal in presentation of premium impacts. Enrollment information is obtained online at www.mrmib.ca.gov/. Average statewide premium information is provided to CHBRP by MRMIB staff.

General Caveats and Assumptions

The projected cost estimates are estimates of the costs that would result if a certain set of assumptions were exactly realized. Actual costs will differ from these estimates for a wide variety of reasons, including:

- Prevalence of mandated benefits before and after the mandate may be different from CHBRP assumptions.
- Utilization of mandated services before and after the mandate may be different from CHBRP assumptions.
- Random fluctuations in the utilization and cost of health care services may occur.

Additional assumptions that underlie the cost estimates presented in this report are:

- Cost impacts are shown only for people with insurance and only for the first year after enactment of the proposed mandate.
- The projections do not include people covered under self-insured employer plans because those plans are not subject to state-mandated minimum benefit requirements.
- Employers and employees will share proportionately (on a percentage basis) in premium rate increases resulting from the mandate. In other words, the distribution of premium paid by the subscriber (or employee) and the employer will be unaffected by the mandate.
- For state-sponsored programs for the uninsured, the state share will continue to be equal to the absolute dollar amount of funds dedicated to the program.
- When cost savings are estimated, they reflect savings realized for 1 year. Potential long-term cost savings or impacts are estimated if existing data and literature
sources are available and provide adequate detail for estimating long-term impacts. For more information on CHBRP’s criteria for estimating long-term impacts please see: 
http://www.chbrp.org/completed_analyses/index.php

• Several recent studies have examined the effect of private insurance premium increases on the number of uninsured. (Chernew et al., 2005; Glied and Jack, 2003; Hadley, 2006). Chernew et al. estimate that a 10-percent increase in private premiums results in a 0.74 to 0.92 percentage point decrease in the number of insured, while Hadley (2006) and Glied and Jack (2003) estimate that a 10% increase in private premiums produces a 0.88 and 0.84 percentage point decrease in the number of insured, respectively. The price elasticity of demand for insurance can be calculated from these studies in the following way. First, take the average percentage point decrease in the number of insured reported in these studies in response to a 1% increase in premiums (about –0.088), divided by the average percentage of insured individuals (about 80%), multiplied by 100%, i.e., \( \frac{[-0.088/80] \times 100}{1} = -0.11 \). This elasticity converts the percentage point decrease in the number of insured into a percentage decrease in the number of insured for every 1% increase in premiums. Because each of these studies reported results for the large-group, small-group, and individual insurance markets combined, CHBRP employs the simplifying assumption that the elasticity is the same across different types of markets. For more information on CHBRP’s criteria for estimating impacts on the uninsured please see: 
http://www.chbrp.org/completed_analyses/index.php

There are other variables that may affect costs, but which CHBRP did not consider in the cost projections presented in this report. Such variables include, but are not limited to:

• Population shifts by type of health insurance coverage: If a mandate increases health insurance costs, then some employer groups and individuals may elect to drop their coverage. Employers may also switch to self-funding to avoid having to comply with the mandate.

• Changes in benefit plans: To help offset the premium increase resulting from a mandate, health plan members may elect to increase their overall plan deductibles or copayments. Such changes would have a direct impact on the distribution of costs between the health plan and the insured person, and may also result in utilization reductions (i.e., high levels of patient cost sharing result in lower utilization of health care services). CHBRP did not include the effects of such potential benefit changes in its analysis.

• Adverse selection: Theoretically, individuals or employer groups who had previously foregone insurance may now elect to enroll in an insurance plan post-mandate because they perceive that it is to their economic benefit to do so.

• Health plans may react to the mandate by tightening their medical management of the mandated benefit. This would tend to dampen the CHBRP cost estimates. The dampening would be more pronounced on the plan types that previously had the least effective medical management (i.e., PPO plans).
Variation in existing utilization and costs, and in the impact of the mandate, by geographic area and delivery system models: Even within the plan types CHBRP modeled (HMO—including HMO and point of service [POS] plans—and non-HMO—including PPO and fee for service [FFS] policies), there are likely variations in utilization and costs by these plan types. Utilization also differs within California due to differences in the health status of the local commercial population, provider practice patterns, and the level of managed care available in each community. The average cost per service would also vary due to different underlying cost levels experienced by providers throughout California and the market dynamic in negotiations between health plans and providers. Both the baseline costs prior to the mandate and the estimated cost impact of the mandate could vary within the state due to geographic and delivery system differences. For purposes of this analysis, however, CHBRP has estimated the impact on a statewide level.

Bill Analysis-Specific Caveats and Assumptions

DME Items already covered in existing law
Currently there are existing mandates that require health plans or insurers to cover equipment used for the treatment and management of specific conditions. These are already mandated to be covered under current law, and existing law would not be affected by the passage of SB 1198. We have excluded these items in our current utilization and impact analyses. CHBRP specifically excluded these items because inclusion would have overstated the potential impacts of SB 1198. The specifics of exclusions are as follows:

- Pediatric asthma management and treatment: DMHC regulated plans are required to cover inhaler and spacers (H&S Section 1367.06).
- Diabetes benefits: DMHC- and CDI-regulated plans are required to cover equipment and supplies related to diabetes treatment and management. (H&S Section 1367.1 and Insurance Code Section 10123.7).

In addition to these, there are mandates that require coverage for other items, supplies and services that are not considered “durable medical equipment,” but may sometimes be combined with the DME benefit. These include:

- Orthotic and prosthetic (O&P) devices and services: DMHC- and CDI-regulated plans are required to offer coverage for O&P devices and do so at parity levels (H&S Section 1367.18 and Insurance Code, Section 10123.7).15
- Special footwear for persons suffering from foot disfigurement: DMHC- and CDI-regulated plans are required to cover specialized footwear for persons with disfigurements from conditions such as cerebral palsy, arthritis, diabetes, and foot disfigurement caused by a developmental disability (H&S Section 1367.19 and Insurance Code Section 10123.141).

15 CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2012. Please see: http://www.chbrp.org/completed_analyses/index.php for the complete report.
• Prosthetic device benefits for laryngectomy: Both DMHC- and CDI-regulated plans are required to cover this prosthetic device (H&S Section 1367.61 and Insurance Code 10123.82)

• Reconstructive surgery: Both DMHC- and CDI-regulated plans are required to cover medically necessary reconstructive surgery. Medically necessary prosthetic devices that are part of the reconstruction would be required to be covered (H&S Section 1367.63 and Insurance Code 10123.88).

Assumption regarding the small-group market

As discussed, CHBRP assumes that the in the small-group market, carriers will be likely to offer the benefit in the rider in order to provide small groups the option of not purchasing the benefit, if they wish. There is a possibility, however, that a carrier may decide to offer the DME in the base plan in order to minimize the potential for adverse selection (i.e., only those small groups that would need the DME benefit would buy it). In that case, the small group would have no option but to purchase the DME benefit as part of the health insurance coverage.

As discussed, all small groups are assumed to purchase the DME rider post-mandate. It is possible that some small groups may choose not to purchase the rider because they are particularly more price sensitive than the average; however, because the cost of purchasing the DME rider is less than 1% of the total cost of the benefit package, this dynamic would be unlikely.
Appendix E: Information Submitted by Outside Parties

In accordance with CHBRP policy to analyze information submitted by outside parties during the first two weeks of the CHBRP review, the following party chose to submit information.

Fact Sheet, SB XXXX (Kuehl) Durable Medical Equipment: Health Insurance Coverage, Submitted February 7, 2008

For information on the processes for submitting information to CHBRP for review and consideration, please visit: http://www.chbrp.org/recent_requests/index.php.
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California Health Benefits Review Program Committees and Staff

A group of faculty and staff undertakes most of the analysis that informs reports by the California Health Benefits Review Program (CHBRP). The CHBRP Faculty Task Force comprises rotating representatives from six University of California (UC) campuses and three private universities in California. In addition to these representatives, there are other ongoing contributors to CHBRP from UC. This larger group provides advice to the CHBRP staff on the overall administration of the program and conducts much of the analysis. The CHBRP staff coordinates the efforts of the Faculty Task Force, works with Task Force members in preparing parts of the analysis, and coordinates all external communications, including those with the California Legislature. The level of involvement of members of the CHBRP Faculty Task Force and staff varies on each report, with individual participants more closely involved in the preparation of some reports and less involved in others.

As required by the CHBRP authorizing legislation, UC contracts with a certified actuary, Milliman Inc. (Milliman), to assist in assessing the financial impact of each benefit mandate bill. Milliman also helped with the initial development of CHBRP methods for assessing that impact.

The National Advisory Council provides expert reviews of draft analyses and offers general guidance on the program to CHBRP staff and the Faculty Task Force. CHBRP is grateful for the valuable assistance and thoughtful critiques provided by the members of the National Advisory Council. However, the Council does not necessarily approve or disapprove of or endorse this report. CHBRP assumes full responsibility for the report and the accuracy of its contents.

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