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Analysis of Assembly Bill 214, Health Care Coverage: Durable Medical Equipment

A Report to the 2009-2010 California Legislature
April 9, 2009

CHBRP 09-04

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 2009-2010 California State Legislature

Analysis of Assembly Bill 214, Health Care Coverage: Durable Medical Equipment

April 9, 2009

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PREFACE

This report provides an analysis of the medical, financial, and public health impacts of Assembly Bill 214, a bill that requires health plans and insurers 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 Assembly Committee on Health on February 6, 2009, 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, and Janet Coffman, MPP, PhD, of the University of California, San Francisco, prepared the medical effectiveness analysis. Stephen L. Clancy, MLS, AHIP, of the University of California, Irvine, conducted the literature search. Helen Halpin, ScM, PhD, and Sara McMenamin, MPH, PhD, of the University of California, Berkeley, prepared the public health impact analysis. Ying-Ying Meng, DrPH, of the University of California, Los Angeles, prepared the cost impact analysis. Robert Cosway, FSA, MAAA, provided actuarial analysis. Patricia L. Sinnott, PT, PhD, MPH, of the VA, Palo Alto Health Care System provided technical assistance with the literature review and expert input on the analytic approach. John Lewis, MPA, of CHBRP staff prepared the background section and synthesized the individual sections into a single report. Cherie Wilkerson 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 Southern California School of Pharmacy 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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Director

TABLE OF CONTENTS

LIST OF TABLES 4

EXECUTIVE SUMMARY 5

INTRODUCTION 12
- Background on the Conditions for Which Durable Medical Equipment Are Used 12
- Background on AB 214 13

MEDICAL EFFECTIVENESS 21
- Literature Review Methods 21
- Outcomes Assessed 21
- Study Findings 21

UTILIZATION, COST, AND COVERAGE IMPACTS 25
- Present Baseline Cost and Coverage 25
- Impacts of Mandated Coverage 30

PUBLIC HEALTH IMPACTS 38
- The Impact of the Proposed Mandate on the Health of the Community 38
- The Impact on the Health of the Community Where Gender and Racial Disparities Exist ... 39
- The Extent to Which the Proposed Service Reduces Premature Death and the Economic Loss Associated With Disease 40

APPENDICES 41
- Appendix A: Text of Bill Analyzed 41
- Appendix B: Literature Review Methods 44
- Appendix C: Description of Studies on the Impact of Health Insurance on Use of Durable Medical Equipment 50
- Appendix D: Cost Impact Analysis: Data Sources, Caveats, and Assumptions 55
- Appendix E: Information Submitted by Outside Parties 60

REFERENCES 61

LIST OF TABLES

Table 1. Summary of Coverage, Utilization, and Cost Impacts of AB 214 10

Table 2. Current Member Coverage of DME Benefits by Market Segment, California, 2009 ...27

Table 3. Distribution of Claims per User, 2006 28

Table 4. Average Coinsurance and Benefit Limits: Current and Post-mandate Levels...............31

Table 5. Baseline (Premandate) Per Member Per Month Premium and Expenditures by Market Segment, California, 2009 36

Table6. Impacts of the Mandate on Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2009...37

Table C-1. Characteristics of Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment 50

Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment 51

EXECUTIVE SUMMARY

California Health Benefits Review Program Analysis of Assembly Bill 214, Health Care Coverage: Durable Medical Equipment

Assembly Bill (AB) 214, as introduced by Assembly Member Wesley Chesbro, would require health plans and insurers to provide coverage for durable medical equipment (DME) and do so at the same levels of coverage as other health care benefits.

DME items are usually external, reusable equipment used for the treatment of a medical condition or injury or to preserve the patient's functioning. Examples include crutches, wheelchairs, home oxygen equipment, infusion pumps, and hospital beds, any of which may be needed for shorter or longer periods of time, depending on the individual's condition.

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. Many of the persons with relatively high DME costs 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.

The California Health Benefits Review Program (CHBRP) undertook the analysis of AB 214, in response to a request from the Assembly Committee on Health on February 6, 2009, 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[1].

Specific Provisions of AB 214

- AB 214 seeks to ensure that individuals with health insurance have DME coverage and have coverage at the same level or "at parity" with other health care benefits.
    - 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 the plans may not apply such 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"

[1] California Health and Safety Code, Section 1345 and Section 1300.67 of the California Code of Regulations, Title 28

- 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 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.

- AB 214 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."

- AB 214 would place these coverage and cost-sharing requirements on both the *group* and *individual* markets.

- AB 214 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 medically necessary, but specialized wheelchair cushions to prevent pressure ulcers would be considered necessary.

- AB 214 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.

- AB 214 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:
  - Persons who use DME temporarily while being treated for an injury or illness or recovering from surgery.
  - Persons who use DME on a long-term basis due to a physical disability or chronic illness.

- For persons in either group, 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 were found that specifically address the effects of increasing annual or lifetime limits for DME coverage on DME usage or the impact of reducing deductibles, coinsurance, or copayments for DME on such usage.

- 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

- Total net annual expenditures are estimated to increase by $72,991,000 annually, or 0.09%, mainly due to the administrative costs associated with the newly covered and newly enhanced DME benefits mandated by AB 214 (Table 1).

- Prior to the mandate, 99.73% of enrollees subject to the mandate have at least some coverage for DME. Postmandate, only an estimated 57,000 enrollees (0.27% of those with coverage subject to the mandate) would gain coverage for DME. The persons with no coverage are all enrolled in CDI-regulated, individual market policies, although 94% of enrollees in that market have some coverage for DME.

- Prior to the mandate, enrollees without coverage for DME incurred an estimated $1,085,000 in out-of-pocket expenses annually. Postmandate, that $1,085,000 in out-of-pocket expenses would be shifted to health plans and insurers. Other enrollees would also incur a reduction of $145,731,000 in out-of-pocket expenses due to required reductions in member cost sharing and removal of benefit maximums.

- The mandate is estimated to increase premiums by about $219.81 million. The distribution of the impact on premiums is as follows:
    - Total premiums for private employers are estimated to increase by $146,860,000, or 0.29%.
    - Enrollee contributions toward premiums for group insurance are estimated to increase by $38,033,000, or 0.28%.
    - Total premiums for those with individually purchased insurance are estimated to increase by $34,914,000, or 0.59%.
    - In terms of per member per month (PMPM) costs, employer premiums for large groups are expected to increase by $0.77 for DMHC-regulated plans and $0.40 for CDI-regulated policies. Employer premiums for small groups are expected to increase by $2.12 PMPM for DMHC-regulated plans and by $0.70 PMPM for CDI-regulated policies.
- Although AB 214 would apply to the DMHC-regulated plans offered by 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 be a $28.68 per DME user per year (4.03%) increase in DME utilization and related expenses. This utilization estimate is based on the following:
  - Prior to the mandate, 99.73% of enrollees with coverage subject to the mandate have at least some coverage for DME. The remainder, an estimated 57,000 enrollees (all with with coverage from CDI-regulated, individual market policies) would gain coverage for DME post mandate.
  - 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.
  - Health plans and insurers would continue to influence the choice of DME through their determination of medical necessity during the utilization review process.
- 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 $3.22, 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 0.28% across all coverage subjet to the mandate, which includes privately insured group market plans and policies, privately insured individual market plans and policies, and publicly funded plans. Increases in insurance premiums vary by market segment, ranging from 0% for market segments already compliant with the mandate, to approximately 0.091% to 0.668% for market segments that are not compliant with the mandate. Increases as measured by PMPM payments are estimated to range from approximately $0.40 to $2.12. The greatest impact on premiums will be in the small-group and individual DMHC-regulated markets. 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, functionality, survival, and decreased morbidity.

- AB 214 is expected to increase the scope of insurance coverage for DME for approximately 720,000 insured users of DME. A majority of these 720,000 DME users will financially benefit due to decreased copays associated with DME expenses. More than 3,100 DME users are expected to be newly covered for DME because previously DME was not included in their insurance coverage. An additional approximate 14,000 DME users are expected to financially benefit due to increasing the annual benefit limit. The increased coverage is expected to reduce the financial hardship associated with the health conditions requiring the use of DME, particularly for the approximately 3,100 DME users with new coverage and the 14,000 DME users who formerly would have exceeded the annual limits on DME coverage.

- Among the current users of DME, AB 214 is expected to result in an increased utilization because increased annual limits and coinsurance are expected to lead to some persons receiving more DME, more expensive DME items, and more-frequent replacement of existing DME items. The health benefits associated with this increased utilization are unknown.

- Utilization data suggest that AB 214 will not have a substantial impact on gender disparities. AB 214 is not expected to have an impact on racial or ethnic disparities.

- The impact of AB 214 on the economic loss associated with DME-related diseases and conditions is unknown.

Table 1. Summary of Coverage, Utilization, and Cost Impacts of AB 214

	Before Mandate	After Mandate	Increase/ Decrease	Change After Mandate
Coverage				
Total population in plans subject to state regulation (a)	21,340,000	21,340,000	0	0.00%
Total population in plans subject to AB 214	21,340,000	21,340,000	0	0.00%
Percentage of insured individuals with coverage for DME				
In AB 214-compliant plans (b)	38.65%	100.00%	61.35%	158.74%
In non–AB 214-compliant plans (c)	61.08%	0.00%	-61.08%	-100.00%
Total with coverage	99.73%	100.00%	0.27%	0.27%
Percentage of insured individuals with no coverage for DME				
Total without coverage	0.27%	0.00%	-0.27%	-100.00%
Total	100.00%	100.00%	0.00%	0.00%
Number of insured individuals with coverage for DME				
In AB 214-compliant plans	8,248,000	21,340,000	13,092,000	158.74%
In non–AB 214-compliant plans	13,035,000	0	-13,035,000	-100.00%
Total with coverage	21,283,000	21,340,000	57,000	0.27%
Number of insured individuals with no coverage for DME				
Total without coverage	57,000	0	-57,000	-100.00%
Total	21,340,000	21,340,000	0	0.00%
Utilization and Cost				
Estimated DME users per 1,000 members per year	55	55	0	0.00%
Estimated average cost per DME user per year	$711.45	$740.13	$28.68	4.03%
DME Benefit Provisions				
Average DME coinsurance rate	6.46%	2.87%	-3.59%	-55.63%
% of covered members subject to DME annual benefit limit	45.40%	0.00%	-45.40%	-100.00%
Average annual benefit limit in non–AB214-compliant plans	$3,877	N/A		
% of members in non–AB 214-compliant plans with costs in excess of DME annual benefit limit	0.11%	0.00%	-0.11%	-100.00%
% of DME users in non–AB 214-compliant plans with costs in excess of DME annual benefit limit	1.94%	0.00%	-1.94%	-100.00%
Number of DME Users In non–AB 214-compliant plans with costs in excess of DME annual benefit limit	13,880	0	-13,880	-100.00%

Table 1. Summary of Coverage, Utilization, and Cost Impacts of AB 214 (Cont'd)

	Before Mandate	**After Mandate**	**Increase/ Decrease**	**Change After Mandate**
Expenditures				
Premium expenditures by private employers for group insurance	$50,546,207,000	$50,693,067,000	$146,860,000	0.29%
Premium expenditures for individually purchased insurance	$5,944,229,000	$5,979,143,000	$34,914,000	0.59%
Premium expenditures by individuals with group insurance, CalPERS, Healthy Families, AIM or MRMIP (d)	$13,475,994,000	$13,514,027,000	$38,033,000	0.28%
CalPERS employer expenditures (e)	$3,161,160,000	$3,161,160,000	$0	0.00%
Medi-Cal state expenditures	$4,112,865,000	$4,112,865,000	$0	0.00%
Healthy Families state expenditures	$643,247,000	$643,247,000	$0	0.00%
Individual out-of-pocket expenditures for covered benefits (deductibles, copayments, etc.)	$6,384,077,000	$6,238,346,000	-$145,731,000	-2.28%
Out-of-pocket expenditures for noncovered benefits	$1,085,000	$0	-$1,085,000	-100.00%
Total annual expenditures	$84,268,864,000	$84,341,855,000	$72,991,000	0.09%

Source: California Health Benefits Review Program, 2009.
Notes: (a) This population includes privately insured (group and individual) and publicly insured (e.g., CalPERS, Medi-Cal, Healthy Families, Access for Infants and Mothers [AIM], Major Risk Medical Insurance Program [MRMIP]) individuals enrolled in health insurance products regulated by DMHC or CDI. This population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment sponsored insurance.
(b) AB 214 compliant plans have *no* annual benefit limits and *no* different cost sharing for DME benefits than for other health care benefits.
(c) AB 214 noncompliant plans do have differential benefit limits and/or do have different cost sharing for DME benefits than for other health care benefits.
(d) Premium expenditures by individuals include employee contributions to employer-sponsored health insurance and member contributions to public insurance.
(e) Of the CalPERS employer expenditures, about 59% would be state expenditures for CalPERS members who are state employees, however CHBRP estimates no impact of the mandate on CalPERS employer expenditures.
Key: CalPERS = California Public Employees' Retirement System.

INTRODUCTION

Assembly Bill (AB) 214, as introduced by Assembly Member Wesley Chesbro, would require health plans and insurers to provide coverage for durable medical equipment (DME) 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 AB 214 in response to a request from the Assembly Committee on Health on February 6, 2009, 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.

DME items are usually external, reusable equipment used for the treatment of a medical condition or injury or to preserve the patient's functioning. Examples include crutches, wheelchairs, home oxygen equipment, infusion pumps, and hospital beds, any of which may be needed for shorter or longer periods of time, depending on the individual's condition.

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 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 abiltiy 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 may 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 AB 214

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 particular types of DME 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, AB 214 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 AB 214.

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[2] CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2185 (2004). Please see: www.chbrp.org/documents/asthma2185final.pdf for the complete report.
[3] CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2012 (2006). Please see: www.chbrp.org/documents/ab_2012final_amended.pdf for the complete report.

State and Federal Coverage for DME

Individuals not covered by private insurance 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 these programs. 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 is "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 (1) can withstand repeated use, (2) is primarily and customarily used to serve a medical purpose, (3) generally is not useful to an individual in the absence of an illness or injury, and (4) is for use in the home.[4] The coinsurance rate for DME items under Medicare is 20% of the Medicare-approved cost of the item.

- Medi-Cal: Although the income test varies by age, 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 AB 214; 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[5]. This may include DME 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."

Individuals who qualify may also receive health care services, including DME, through the Department of Veterans Affairs (VA). For eligible veterans of the armed forces, selected veteran's dependents, and survivors of veterans, the VA provides a health care safety net through its integrated health care system and may provide DME (DVA, 2009). The VA defines DME as equipment which (1) is medically necessary for the treatment of a covered illness or injury, (2) improves the function of a malformed, diseased, or injured body part, or delays further deterioration of a patient's physical condition, and (3) is appropriate for use in the home. The VA provides DME prescribed by the attending physician. The VA is required to bill private health insurance providers for medical care, supplies and prescriptions provided for care veterans receive for their non-service connected conditions. All veterans applying for VA medical care are required to provide information on their health insurance coverage, including coverage provided under policies of their spouses.

Individuals who qualify may also receive services, which may include some DME, through the California Department of Rehabilitation (CDOR). CDOR provides services to Californians with disabilities who want to work. Services include employment counseling, training and education, mobility and transportation aids, job search and placement assistance (CDOR, 2009). Service eligibility is based on an assessment of (1) physical or mental impairment, (2) the extent to which the impairment impedes employment, and (3) need and likelihood of benefiting from CDOR services to obtain, retain, or regain employment. When the department does not have funds to serve all eligible applicants, services are first provided to the people with the most significant disabilities. People in the "most significantly disabled" category are served, followed by those in the "significantly disabled" category and then by those in the "disabled category." Within each category, people are served according to date of application. Although some items classified as durable medical equipment may be provided, such services are only provided as deemed necessary for acquiring or retaining work.

No other states currently have a mandate requiring insurers to provide parity in coverage for DME (BCBSA, 2008). However, New Hampshire has a parity requirement that coverage levels for prosthetic devices be at the same level of coverage, or at parity, as other services.[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

[6] New Hampshire Code Section 415:6-j

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 be replaced by DME Medicare Administrative Contractors—DME MAC) to process claims submitted to Medicare Part B. 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 AB 214 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 beneficiaries. 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 commercial payers. For example, health plans have historically contracted with specific vendors for DME and placed strict prior authorization for DME 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 places 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 substantial and potentially impede the purchase of items such as this. The intent of AB 214 is to ensure that the DME benefit is structured in the same way as other health care benefits: in general, with no annual benefit limits and reasonable cost-sharing levels.

DME coverage at parity with other benefits

AB 214 seeks to ensure that those members in the group market that have DME coverage would have coverage at the same levels, 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 postmandate. The *Utilization, Cost, and Coverage Impacts* section discusses this estimate in further detail.

Populations directly affected by AB 214

AB 214 would place requirements on both the group and individual markets. AB 214 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) purchase coverage for some portion of their respective beneficiaries from carriers that would be required to comply with AB214. AB 214 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 or Medicare Advantage plans, or those who are uninsured.[7]

For populations with coverage that will be subject to AB 214, the persons most likely to be affected are persons with high costs for DME items that are not currently mandated under California law. According to a Milliman analysis of DME utilization in the privately insured

[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.

population in 2007, many of the persons with high DME costs relevant to AB 214 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, musculoskeletal conditions, and 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 AB 214, 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 AB 214 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.

For the two categories listed above, determining the prevalence of the population with physical disabilities related to AB 214 is difficult due to the varied causes of disabilities and different types of DME used by the population and existing health insurance mandates. Although 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 chronic airway obstruction, chronic obstructive pulmonary disease, and other lung diseases. Individuals with these conditions often use home oxygen equipment, which is specified in AB 214. 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 malabsorbtion. 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 are musculosketal diseases, including arthritis, conditions related to skin and wound care, urinary symptoms, and obesity.

Utilization Review

AB 214 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 AB 214 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. AB 214 is not intended to affect *how* coverage determinations would be made. For example, the bill is silent on renting versus purchasing DME; therefore, AB 214 would not affect relevant coverage policies.

Other provisions in AB 214

- AB 214 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.

- AB 214 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.

- AB 214 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 AB 214.

- 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 AB 214 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 AB 214's provisions.[8]

[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 benefit limitations as basic health care services. CHBRP has also taken this approach to the analysis of one bill that would requier parity in coverage for DME (SB 1198) and three bills that would require parity in coverage for mental health and substance abuse services (SB 572, AB 423, and AB 1887).

- The *Utilization, Cost, and Coverage Impacts* section 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 Impacts* 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.

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 systemmatic review of the literature on the effectiveness of all of these devices and products was not feasible nor relevant to the intent of AB 214. 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."[9] Only three conditions—diabetes, sleep disorders, and chronic airway obstruction—each accounted for more than 5% of DME claims

In light of these findings of the wide range of conditions and DME that would be subject to a complete review of the effectiveness of DME on medical outcomes, the 60-day limitation for completion of CHBRP reports, and the fact that AB 214 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 search encompassed 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). Literature retrieved for the analysis of AB 214 was combined with literature CHBRP retrieved for its analysis of SB 1198, a similar bill introduced in 2008.

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.

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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 nonelderly working adults, the majority of whom only need DME on a temporary basis while recovering from an injury or surgery or use inexpensive types of DME, such as spacers and peak flow meters for asthma.

Only three studies examined the impact of private health insurance on use of DME or perceived access to DME among persons whose primary form of health insurance is private health insurance.

Agree and colleagues (2004) analyzed responses of adults in the United States aged 50 years or older to a national survey. The authors examined the effect of having private health insurance as either a primary payer or a secondary payer[10] on use of types of DME that assist with mobility (e.g., canes, walkers, wheelchairs) among persons who had difficulty walking, transferring, or going outside. 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. The authors also compared persons who had private health insurance to persons who were enrolled in Medicaid or dually eligible for Medicaid and Medicare. They found no differences between the two groups in use of mobility aids alone or mobility aids plus informal caregiving. However, persons dually eligible for Medicaid and Medicare were more likely to use both mobility aids and formal caregiving, most likely because Medicaid provides more generous benefits for formal caregiving than private health plans. In all analyses, persons' underlying health needs were the factors most strongly associated with using mobility aids and/or obtaining assistance from caregivers.

Resnik and Allen (2006) analyzed data from the same survey as Agree and colleagues (2004) but studied a somewhat different group of respondents with mobility problems. Whereas Agree and colleagues (2004) examined responses from persons aged 50 years or older who had difficulty walking, transferring, or going outside, Resnik and Allen (2006) assessed responses from adults of all ages (18+) who had difficulty walking. They also categorized the types of health insurance that respondents had somewhat differently. Persons with private health insurance as either a primary payer or a secondary payer were compared to persons who were uninsured, enrolled in Medicaid, or enrolled in any other public health insurance program. The authors reported that persons who were uninsured were less likely to use any type of mobility aid than persons with private health insurance. They found no statistically significant difference in the likelihood of mobility aid use between persons with private insurance and persons enrolled in Medicaid and between persons with private insurance and those enrolled in other public programs. Consistent with Agree and colleagues' (2004) study, Resnik and Allen found that respondents' health needs were the factors most strongly associated with using mobility aids.

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,

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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.

supplies, or prescription drugs was lower than the percentages of persons who were intermittently insured or continuously uninsured (1%, 4%, and 6%, respectively).

These three studies are only somewhat generalizable to AB 214, because all three 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 nonelderly working adults for several reasons. 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, all three studies asked respondents only if they had health insurance and did not ask them specifically whether they had coverage for DME. The studies also did not assess 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 studies are summarized briefly but are not fully generalizable to AB 214, 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 access to DME for persons with special health care needs who were enrolled in two different types of Medicaid plans: (1) fee-for-service Medicaid plans, and (2) 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 nonelderly 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 on DME usage or the impact of reducing deductibles, coinsurance, or copayments for DME on such usage.
- 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

AB 214 would require all Department of Managed Health Care (DMHC)-regulated health plans and California Department of Insurance (CDI)-regulated insurance policies (both private and public programs) offered on a group or individual basis to *provide* coverage for durable medical equipment (DME) and services that is no less than the annual and lifetime benefit maximums applicable to basic health services under the contract.

This section will present first the current, or baseline, costs and coverage related to DME, and then detail the estimated utilization, cost, and coverage impacts of AB 214. For further details on the underlying data sources and methods, please see Appendix D at the end of this document.

Present Baseline Cost and Coverage

Current Coverage of Mandated Benefit

As discussed in the *Introduction*, AB 214 would require DMHC-regulated health 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 basic health care services. For CDI-regulated policies, AB 214 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, AB 214 would affect the 21,340,000 enrollees in both group and individual insurance plans or policies in California. The California Health Benefits Review Program (CHBRP) surveyed the seven largest health plans and insurers in California regarding their coverage and benefit levels for DME and services. Five health plans responded to the survey. Responses to this survey represent 73.4% of the CDI-regulated and 89.8% of DMHC-regulated market. Combined, responses to this survey represent 87.3% of the privately insured market. Using the responses of the five carriers, CHBRP determined that almost all enrollees have some coverage for DME (Table 2). 57,000 enrollees covered by CDI-regulated, individual market policies do not have any coverage for DME. These persons represent 0.27% of the population with coverage subject to the mandate and 6% of the population covered by policies from the CDI-regulated, individual market. Of the 21,340,000 enrollees in the group or individual markets with DME coverage, 61.08% of enrollees (13,035,000) have a plan or policy *not* currently in compliance with AB 214 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 AB 214. CalPERS DMHC-regulated plans cover 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 AB 214.

Table 2. Current Member Coverage of DME Benefits by Market Segment, California, 2009

	DMHC-Regulated							CDI-Regulated		
				CalPERS	Medi-Cal		Healthy Families			
	Large Group	Small Group	Indi-vidual	HMO	Managed Care 65 and Over	Managed Care Under 65	Managed Care	Large Group	Small Group	Indi-vidual
Percentage of members with coverage for DME										
DME benefit complies with AB214	38%	0.14%	0.01%	100%	100%	100%	100%	2%	0.07%	0%
DME benefit does not comply with AB 214	62%	99.86%	99.99%	0%	0%	0%	0%	98%	99.93%	94%
Percentage of members without coverage for DME	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Number of members with coverage for DME										
DME benefit complies with AB 214	4,174,000	4,000	20	820,000	159,000	2,366,000	715,000	9,000	635	0
DME benefit does not comply with AB 214	6,926,000	2,840,000	965,980	0	0	0	0	391,000	931,365	980,700
Number of members without coverage for DME	0	0	0	0	0	0	0	0	0	57,000
Total	**11,100,000**	**2,844,000**	**966,000**	**820,000**	**159,000**	**2,366,000**	**715,000**	**400,000**	**932,000**	**1,038,000**

Source: California Health Benefits Review Program, 2009

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 policies on a group or individual basis 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 AB 214 is passed into law.

Based on Milliman's analysis of 2007 national claims data, CHBRP estimates that there are 55 users of DME items per year per 1,000 insured members. The estimated average annual cost per DME user is $711.45 (Table 1). The overall distribution of claims for DME is 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).

Table 3. Distribution of Claims per User, 2006

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

Source: California Health Benefits Review Program, 2009

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: 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. In general, 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. However, before the mandate, it is possible that some employees with disabilities or their family members with disabilities might have declined employer-based based coverage in favor of public programs (i.e., Medicare, Medi-Cal, Healthy Families, or the Veterans Administration), if their employer-based health insurance plans provided limited DME benefits. These individuals may switch to private insurance after the mandate. There are also nonprofit organizations and at least one state program (California Department of Rehabilitiation) that provide DME for insured and uninsured at no cost. CHBRP recognizes that there may be some shift in costs from these entities to carriers as a result of coverage. It was not possible for CHBRP to quantify these effects.

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 private self-insured plans. CalPERS PPO plans are administered by Anthem Blue Cross. The plans cover DME items. PERS Choice and PERS Select (both are self-insured PPO programs, and so are not subject to this mandate) have a 20% copayment for in-network providers and a $6,000 annual benefit limit. PERSCare includes a 10% copayment for in-network providers and requires 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.[11]

To further investigate public demand for benefits addressed by the bill, CHBRP utilized the bill specific coverage survey fielded after the analysis request was received. Surveyed plans and insurers offering plans or policies to self insured groups were asked whether the relevant benefits differed from those offered in the commercial markets. The responding carriers indicated that there were no substantive differences.

[11] Personal communication with the California Labor Federation and member organizations, January 2007.

Impacts of Mandated Coverage

How Would 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 new users or DME items used by an existing user. This effect would produce an estimated increase in the average cost per user of 4.03% or by about $28.68.

CHBRP estimates the shift to more-expensive, higher-technology equipment would be limited since AB 214 continues to allow "every plan...the right to conduct a utilization review to determine medical necessity prior to authorizing these services."

Postmandate coverage

AB 214 would affect the 21,340,000 enrollees in California with insurance coverage from the large group, small group, or individually purchased health insurance markets. AB 214 would affect DMHC-regulated plans and CDI-regulated policies. For this analysis, CHBRP assumes that all noncompliant health plans or policies would amend their base plans to bring them into compliance with AB 214. These amendments would reduce DME cost sharing to the plan's cost sharing for other medical benefits, and remove any DME-specific annual benefit limit. Based on CHBRP's survey of health plans and insurers, CHBRP estimated, for each type of individual and group plan or policy, the average pre-mandate coinsurance rate applying to DME the average pre-mandate coinsurance rate applying to other medical services (Table 4). Post-mandate, CHBRP assumed each type of plan or policy would be amended to drop the DME coinsurance rate to equal the average coinsurance rate for medical services current for that type of plan or policy. Similarly, based on the survey, CHBRP estimated, for each type of individual and group plan or policy, the percentage of members with an annual DME benefit limit, and the average amount of those limits. Post-mandate, CHBRP assumed each type of plan or policy would be amended to remove any DME benefit limits.

For the estimated enrollees in the CDI-regulated, individual market for (an estimated 57,000 persons, or 6% of that market) with no current DME coverage, CHBRP assumed the insurers would amend the policies to cover DME at the same coinsurance rate that applies to other medical services with no annual DME benefit limit.

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

		Baseline (Current)					
		Large Group		**Small Group**		**Individual**	
Plan Type	**Benefit Characteristic**	**DMHC-Regulated**	**CDI-Regulated**	**DMHC-Regulated**	**CDI-Regulated**	**DMHC-Regulated**	**CDI-Regulated**
DME Benefit complies with AB214	Coinsurance	0%	25%	0%	25%	0%	27%
	Benefit Maximum	None	None	None	None	None	None
DME Benefit does not comply with AB214	Coinsurance	21%	25%	33%	31%	22%	27%
	Benefit Maximum	$3,516	$3,884	$2,105	$2,891	$1,996	$1,901
		Post-mandate					
		Large Group		**Small Group**		**Individual**	
Plan Type	**Benefit Characteristic**	**DMHC-Regulated**	**CDI-Regulated**	**DMHC-Regulated**	**CDI-Regulated**	**DMHC-Regulated**	**CDI-Regulated**
DME Benefit complies with AB214	Coinsurance	0%	25%	0%	25%	0%	27%
	Benefit Maximum	None	None	None	None	None	None

Source: California Health Benefits Review Program, 2009
Key: CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

Changes in coverage as a result of premium increases

It is possible that AB 214 will have the unintended consequence of causing small-group employers or individuals to drop health care coverage altogether as a result of an increase in premiums. CHBRP estimates that it is unlikely to happen since the increase of premiums is relatively small, on the order of 0.00% or 0.6% of current premium levels in these markets.

How Would Utilization Change as a Result of the Mandate?

Since AB 214 expands coverage of DME benefits to parity levels for members with DME coverage, overall utilization rates (expenses) are expected to increase as a result of the mandate. Postmandate, $1,085,000 in out-of-pocket expenses incurred by enrollees without coverage would be shifted to health plans and insurers. In making this estimate, CHBRP assumed that the prices paid currently by enrollees without coverage are similar to the prices negotiated by health plans with DME providers. Other enrollees would also incur a reduction of $145,731,000 in out-of-pocket expenses due to required reductions in member cost sharing and removal of benefit maximums. As with other health benefits, CHBRP recognizes that a decrease in out-of-pocket expenditures 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 demand based on the experience of the Medicare program with DME (Federal Register, 2005). However, given that the target population is relatively young, plus health plans and insurers may take utilization control measures, and other mitigating factors discussed below, CHBRP model assumes a slight increase in DME utilization. The estimated increase in utilization and related expenses is about $28.68 per DME user per year, or 4.03%, in response to reduced cost sharing and lifting of annual and lifetime expenditure limits. This value was calculated based on Milliman Inc.'s analysis on the impact of cost sharing and benefit limits on DME utilization. Milliman's analysis does not identify how much of this increase would be due to an increase in the number of users versus an increase in the units of DME or utilization of more expensive DME among existing users. For this report, we have attributed all of the increase to an increase in the units of DME or utilization of more expensive DME among existing users. It is possible that expanded insurance coverage of DME may induce some individuals to use DME when they would otherwise forgo or delay their use. However, based on information from the content expert, who indicates that persons who need DME find ways to acquire it, and the currently broad coverage for DME (99.73% of individuals with coverage subject to the mandate have some DME benefits), CHBRP estimates the impact of the mandate on the number of users (as opposed to the rate of utilization, which is discussed below) will be negligible.

CHBRP's assumption of a slight increase in DME utilization is supported by the following evidence:

- **Most of the members have DME coverage already and the cost-sharing requirements will remain:** AB 214 would slightly increase the number of members who have coverage for DME benefits, as most of the members have DME coverage already, except 6% (57,000) of the members in the individual CDI market. Also, 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 would continue to influence the choice of DME through their determination of medical necessity during the utilization review process. As mentioned in the *Medical Effectiveness* section, there is some evidence from a small number of studies that utilization management reduces use of some types of DME. A 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 type of benefit because an enrollee may demand an item for the purpose of "convenience" that 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.

To What Extent Would the Mandate Affect Administrative and Other Expenses?

Health care plans and policies include a component for administration and profit in their premiums. In estimating the impact of this mandate on premiums, CHBRP assumed that health plans and policies 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 were assumed to not change. For example, health plans and policies may implement administrative changes as to how the DME benefit is offered—moving it from a rider to the base plan. In addition, AB 214 would require the plans and policies to notify members and applicants of their DME coverage changes. Health plans and policies may also need to increase staff specialized in utilization management. These administrative changes were assumed to be 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 $72,991,000, or 0.09%, as a result of AB 214 (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 6, AB 214 is estimated to increase cost by:

- 0.062% for the large-group DMHC-regulated plans;

- 0.019% for the large-group CDI-regulated policies;

- 0.20% for the small-group DMHC-regulated plans;
- 0.048% for the small-group CDI-regulated policies;
- 0.24% for the individual DMHC-regulated plans; and
- 0.20% for the individual CDI-regulated policies.

The reason that impacts are greater in the DMHC-regulated plans than for CDI-regulated policies is that to become compliant with AB 214, most CDI-regulated policies 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.

These percentage increases result in an $72,991,000 annual increase in total health care costs in California. Across all markets, including those that are unaffected by AB 214 because they already cover DME at parity, premiums are expected to increase by 0.28%. The increases in premiums vary by market segment:

- $0.77 PMPM in the large-group DMHC-regulated plans
- $0.40 PMPM in large-group CDI-regulated policies;
- $2.12 PMPM in the small-group DMHC-regulated plans;
- $0.70 PMPM in the small-group CDI regulated policies;
- $2.09 PMPM in the individual DMHC-regulated plans; and
- $0.85 PMPM in the individual CDI-regulated policies.

Though AB 214 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.). Total premiums for private employers are estimated to increase by $146,860,000, or 0.29%. Enrollee contributions toward premiums for group insurance are estimated to increase by $38,033,000, or 0.28%. Total premiums for those with individually purchased insurance are estimated to increase by $34,914,000, or 0.59%. The average portion of the premium paid by the employer would increase between $0.31 and $1.66 PMPM, and the average portion of the premium paid by employees would increase between $0.09 and $2.09 PMPM. However, the covered benefits paid by members (deductibles, copayments, etc.) would decrease between $0.31 and $1.43 PMPM. Thus, total premiums would increase by $219,807,000, but covered benefits paid for by members out of pocket would decrease by $145,731,000 for members with cost sharing, plus another $1,085,000 for members without coverage prior to the mandate.

DMHC-regulated plans offered by 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 AB 214. Therefore, CalPERS, Medi-Cal, and Healthy Families are expected to face no impact if AB 214 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 are 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 AB 214. 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 policies to this increase in demand. As an unintended consequence, small employers or individuals may drop health care coverage altogether because of the increase in premiums. CHBRP estimates that it is unlikely to happen since the increase of premiums is small, on the order of $0..00 to $2.15 PMPM. CHBRP is unable to estimate these effects quantitatively.

Table 5. Baseline (Premandate) Per Member Per Month Premium and Expenditures by Market Segment, California, 2009

	DMHC-Regulated							CDI-Regulated			Total Amount
				CalPERS (b) HMO	Medi-Cal (c)		Healthy Families Managed Care				
	Large Group	Small Group	Indi-vidual		Managed Care 65 and Over	Managed Care Under 65		Large Group	Small Group	Indi-vidual	
Total population in plans subject to state regulation (a)	11,100,000	2,844,000	966,000	820,000	159,000	2,366,000	715,000	400,000	932,000	1,038,000	21,340,000
Total population in plans subject to AB 214	11,100,000	2,844,000	966,000	820,000	159,000	2,366,000	715,000	400,000	932,000	1,038,000	21,340,000
Average portion of premium paid by employer	$279.83	$246.48	$0.00	$321.26	$239.00	$128.09	$74.97	$341.25	$288.13	$0.00	$58,443,353,000
Average portion of premium paid by employee	$69.94	$71.52	$330.89	$56.69	$0.00	$0.71	$10.22	$97.61	$54.11	$169.28	$19,440,350,000
Total premium	$349.77	$318.00	$330.89	$377.95	$239.00	$128.80	$85.19	$438.86	$342.24	$169.28	$77,883,703,000
Member expenses for covered benefits (deductibles, copays, etc.)	$18.90	$24.61	$54.10	$19.49	$0.00	$0.59	$2.32	$53.72	$124.95	$41.39	$6,384,077,000
Member expenses for benefits not covered	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.09	$1,085,000
Total expenditures	$368.67	$342.62	$385.00	$397.44	$239.00	$129.39	$87.51	$492.58	$467.19	$210.75	$84,268,865,000

Source: California Health Benefits Review Program, 2009.
Notes: (a) The population includes privately insured (group and individual) and publicly insured (e.g., CalPERS, Medi-cal, Healthy Families, AIM, MRMIP) individuals enrolled in health insurance products regulated by DMHC or CDI. This population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment sponsored insurance.
(b) Of these CalPERS members, about 59% or 483,800 are state employees.
(c) Medi-Cal state expenditures for members under 65 years of age include expenditures for the Major Risk Medical Insurance Program (MRMIP) and the Access for Infants and Mothers (AIM) program. Medi-Cal state expenditures for members over 65 years of age include those with Medicare coverage.

Table 6. Impacts of the Mandate on Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2009

	DMHC-Regulated							CDI-Regulated			Total Amount
				CalPERS (b) HMO	Medi-Cal (c)		Healthy Families Managed Care				
	Large Group	Small Group	Indi-vidual		Managed Care 65 and Over	Managed Care Under 65		Large Group	Small Group	Indi-vidual	
Total population in plans subject to state regulation (a)	11,100,000	2,844,000	966,000	820,000	159,000	2,366,000	715,000	400,000	932,000	1,038,000	21,340,000
Total population in plans subject to AB 214	11,100,000	2,844,000	966,000	820,000	159,000	2,366,000	715,000	400,000	932,000	1,038,000	21,340,000
Average portion of premium paid by employer	$0.6163	$1.6575	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.3106	$0.5998	$0.0000	$146,860,000
Average portion of premium paid by employee	$0.1540	$0.4666	$2.0948	$0.0000	$0.0000	$0.0000	$0.0000	$0.0889	$0.1043	$0.8535	$72,947,000
Total premium	$0.7703	$2.1241	$2.0948	$0.0000	$0.0000	$0.0000	$0.0000	$0.3995	$0.7041	$0.8535	$219,807,000
Member expenses for covered benefits (deductibles, copays, etc)	-$0.5437	-$1.4264	-$1.1747	$0.0000	$0.0000	$0.0000	$0.0000	-$0.3083	-$0.4783	-$0.3353	-$145,731,000
Member expenses for benefits not covered	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	-$0.0871	-$1,085,000
Total expenditures	$0.2266	$0.6977	$0.9201	$0.0000	$0.0000	$0.0000	$0.0000	$0.0912	$0.2258	$0.4310	$72,991,000
Percentage Impact of Mandate											
Insured premiums	0.2202%	0.6679%	0.6331%	0.0000%	0.0000%	0.0000%	0.0000%	0.0910%	0.2057%	0.5042%	0.2822%
Total expenditures	0.0615%	0.2036%	0.2390%	0.0000%	0.0000%	0.0000%	0.0000%	0.0185%	0.0483%	0.2045%	0.0866%

Source: California Health Benefits Review Program, 2009.

Notes: (a) The population includes privately insured (group and individual) and publicly insured (e.g., CalPERS, Medi-cal, Healthy Families, AIM, MRMIP) individuals enrolled in health insurance products regulated by DMHC or CDI. This population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment sponsored insurance.

(b) Of these CalPERS members, about 59% or 483,800 are state employees.

(c) Medi-Cal state expenditures for members under 65 years of age include expenditures for the Major Risk Medical Insurance Program (MRMIP) and the Access for Infants and Mothers (AIM) program. Medi-Cal state expenditures for members over 65 years of age include those with Medicare coverage.

PUBLIC HEALTH IMPACTS

As described in the *Introduction*, the population most likely to be affected by AB 214 are persons with high 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).

AB 214 is expected to increase the scope of insurance coverage for DME for approximately 720,000 insured users of DME. A majority of these 720,000 DME users will financially benefit due to decreased copays associated with DME expenses. More than 3,100 DME users are expected to be newly covered for DME where previously DME was not included in their insurance coverage. An additional approximate 14,000 DME users are expected to financially benefit due to increasing the annual benefit limit. The increased coverage is expected to reduce the financial hardship associated with the health conditions requiring the use of DME, particularly for the approximately 3,100 DME users with new coverage and the 14,000 DME users who formerly would have exceeded the annual limits on DME coverage.

Among the current users of DME, it is possible that AB 214 may result in an increased utilization of DME because decreased annual limits and coinsurance could result in 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 are unknown. It is possible that some individuals may benefit from some of the amenities of more expensive DME items, such as increased maneuverability of ultra-lightweight wheelchairs, although this could not be verified in the review of the literature on coverage summarized in the *Medical Effectiveness* section. Overall, since AB 214 does not prevent insurers from managing their DME benefit through utilization review and applying medical necessity criteria, the benefits of these amenities may not accrue to everyone for whom the maximum dollar benefit limit is lifted.

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

A literature review was conducted to determine whether there are gender, racial, or ethnic disparities associated with access and utilization of DME. 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). Another study of individuals aged 65 and over found that minorities use mobility devices in accordance with their underlying need (Cornman and Freedman, 2008). AB 214, however, applies primarily to the non-Medicare population.

The 2001 California Health Interview Survey (CHIS) data and the 2006 Medical Expenditure Panel Survey (MEPS) data contain information on DME utilization by gender and race for the population specific to AB 214.

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 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. The national MEPS data also found similar rates for males and females with high DME expenditures, where 2.5% of females under 65 years had DME expenditures greater than $500 per year compared with 2.1% of males (MEPS, 2009). Additionally, slightly more females reported paying $500 or more for DME out-of-pocket compared to males (1.4% of females, 1.1% of males). Based on the CHIS and MEPS data, AB 214 is not expected to have a substantial impact on gender disparities.

Race

Among privately insured Californian adults under 65 years, whites and African-Americans 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, 2006). Comparing whites to non-whites, whites had slightly higher out-of-pocket DME costs (1.3% over $500 compared to 1.2% over $500) (MEPS, 2009). According to the MEPS data, between 2004 and 2006, the DME expenditure differences between whites and non-whites appear to be diminishing (MEPS, 2009).

A literature search identified studies that found disparities in the receipt of DME, with minority veterans less likely to obtain DME compared to non-Latino whites, minorities with traumatic spinal cord injuries less likely to have customized wheelchairs compared to non-Latino whites, and minorities less likely to use high-tech assistive technology devices compared to non-Latino whites (Hunt et al., 2004; Kaye et al., 2008; Weaver et al., 1999).

Since the MEPS data do not indicate that racial minorities within the insured population have greater out-of-pocket DME costs, AB 214 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. However, it is not expected that AB 214 will result in more people using these forms of DME and therefore is not expected to reduce premature death.

Although 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 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 (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 nondisabled (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 the economic benefit of increased DME utilization is unknown, the impact of AB 214 on the economic loss associated with DME-related diseases and conditions is unknown.

APPENDICES

Appendix A: Text of Bill Analyzed

BILL NUMBER: AB 214 INTRODUCED
BILL TEXT

INTRODUCED BY Assembly Member Chesbro

FEBRUARY 3, 2009

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

AB 214, as introduced, Chesbro. 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 provide coverage for durable medical equipment, as defined, as part of their plan contracts or health insurance policies.

Because this 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.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: yes.

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 or individual basis that is issued, amended,

received, or delivered on or after January 1, 2010, shall provide coverage for durable medical equipment (DME) and services under the terms and conditions that may be agreed upon between the subscriber and the plan. Every plan shall communicate the availability of that coverage to all group or individual contract holders and to all prospective group or individual contract holders with whom they are negotiating. Coverage for DME shall provide for coverage when the equipment, including original and replacement devices, 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, 2010, every insurer issuing group or individual health insurance shall provide coverage for durable medical equipment (DME) and services under the terms and conditions that may be agreed upon between the policyholder and the insurer. Every insurer shall communicate the availability of that coverage to all group or individual policyholders and to all prospective group or individual policyholders with whom they are negotiating. Coverage for DME shall provide for coverage when the equipment, including original and replacement devices, 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 AB 214, a bill that would require health plans to provide coverage for durable medical equipment (DME) 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 AB 214. 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 AB 214 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 search encompassed 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 1999 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 Business Source Complete were searched. Web sites maintained by the following organizations were also searched: the Agency for Healthcare Research and Quality, the American Academy of Actuaries, America's Health Insurance Plans, the California Health Care Foundation, the Center for Studying Health System Change, the Commonwealth Fund, the Congressional Budget Office, the Employee Benefits Research Institute, the Institute for Clinical Systems Improvement, the International Network of Agencies for Health Technology Assessment, the Kaiser Family Foundation, the National Association of Health Underwriters, the National Bureau of Economic Research, the National Guideline Clearinghouse, the National Health Service Centre for Reviews and Dissemination, the National Institute for Health and Clinical Excellence, the National Institutes of Health, the New America Foundation, RAND, the Robert Wood Johnson Foundation, the Scottish Intercollegiate Guideline Network, the Society of Actuaries, the Urban Institute, and the World Health Organization. The results of this literature search were combined with literature retrieved for CHBRP's analysis of SB 1198, a similar bill that was introduced in 2008.

The literature search yielded a total of 313 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. One study met the inclusion criteria and was incorporated into the medical effectiveness review along with seven articles included in the medical effectiveness review for SB 1198.

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 AB 214 were as follows:

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

(Note: The PubMed format is below. MeSH terms were entered in the appropriate format for each database. See Search Strategy document for formats.)

Beds
Catheters, Indwelling
Communication Aids for Disabled
Durable Medical Equipment
Durable Medical Equipment/economics
Durable Medical Equipment/statistics and numerical data
Durable Medical Equipment/supply and distribution
Durable Medical Equipment/utilization
Equipment and Supplies
Equipment and Supplies/economics
Equipment and Supplies/statistics and numerical data
Equipment and Supplies/supply and distribution
Equipment and Supplies/utilization
Equipment and Supplies/utilization
Incubators
Infusion Pumps
Infusion Pumps, Implantable
Insulin Infusion Systems
Intermittent Pneumatic Compression Devices
Intermittent Positive-Pressure Breathing
Nebulizers and Vaporizers
Needles
Orthopedic Equipment
Oxygen Inhalation Therapy/instrumentation
Oxygenators
Oxygenators, Membrane
Parenteral Nutrition
Physical Therapy Modalities/instrumentation
Self-Help Devices
Transcutaneous Electric Nerve Stimulation
Transducers
Trusses
Ventilators, Mechanical
Wheelchairs

Arthritis/rehabilitation
Asthma/rehabilitation
Brain Injuries/rehabilitation
Cerebral Palsy/rehabilitation
Chronic Disease/rehabilitation
Diabetes Insipidus/rehabilitation

Diabetes Mellitus/rehabilitation
Fractures, Bone/rehabilitation
Gastrointestinal Diseases/rehabilitation
Heart Failure/rehabilitation
Multiple Sclerosis/rehabilitation
Muscular Dystrophies/rehabilitation
Neoplasms/rehabilitation
Obesity, Morbid/rehabilitation
Pulmonary Disease, Chronic Obstructive/rehabilitation
Sleep Disorders/rehabilitation
Spinal Cord Injuries/rehabilitation
Stroke/rehabilitation

Costs and Cost Analysis
Health Care Costs
Health Care Costs/statistics & numerical data
Insurance Claim Review
Insurance Coverage
Insurance, Health
Insurance, Health, Reimbursement

Health Status Indicators
Healthcare Disparities
Social Class
Socioeconomic Factors

Evaluation Studies as Topic
Outcome Assessment (Health Care)
Utilization Review

Free text terms—All Databases

Arch support
Arch supports
Braces
Canes
Crutches
Decubitus care
Diabetic shoes
DME
Dressings
Durable medical equipment
Enteral pump
Enteral pumps
Glucometer
Hospital bed

Hospital beds
Incontinence appliances
Incontinence supplies
Infusion supplies
Insulin infusion
Intermittent positive pressure machines
Ipcd
Ippb
Knee orthosis
Monitoring equipment
Nebulizers
Neuromuscular electrical nerve stimulators
New onset DME
Orthopedic device
Orthopedic devices
Orthopedic inserts
Orthopedic shoes
Orthoses
Orthosis
Parenteral nutrition
Parenteral pump
Parenteral pumps
Patient lift
Patient lifts
Rib belt
Rollabout chair
Rollabout chairs
Shoe lift
Shoe lifts
Trapeze
Trusses
Vaporizers
Walker
Wheelchairs

Annual maximum benefit
Coinsurance
Copayment
Deductible
Expenditures invested
Expenditures per quality adjusted life year gained
Expenditures saved
Health insurance
Health insurance reimbursement
Health spending schema
Insurance

Insurance claim review
Insurance coverage
Level of coverage
Lifetime maximum benefit
Reimbursement

Comparative effectiveness
Cost effective
Cost effectiveness
Effectiveness

Utilization

Disparities
Disparity
Parity

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 C-1 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. These tables include studies that were reviewed for the report CHBRP issued on SB 1198, a similar bill introduced in 2008, and one new study, indicated in bold in the tables below, which has been added for the medical effectiveness review for AB 214.

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

Citation	Type of Trial[12]	Relationship Assessed	Population Studied	Location
Agree et al., 2004	Level III—Cross-sectional survey	Impact of private insurance (either primary carrier or Medicare supplemental carrier)[13] on use of durable medical equipment alone or in combination with informal or formal personal care services	5,792 adults age 50 yrs or older who have difficulty walking, transferring (e.g., from lying in bed to standing), or going outside	United States—national sample
Litaker and Cebul, 2003	Level III—Cross-sectional survey	Impact of being continuously insured on difficulty obtaining medical equipment/supplies or prescription medications	15,613 adults aged 18 to 98 yrs	Ohio

[12] 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.

[13] 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-1. Characteristics of Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment (cont'd.)

Citation	Type of Trial[14]	Relationship Assessed	Population Studied	Location
Resnik and Allen, 2006	**Level III—Cross-sectional survey**	**Impact of being privately insured on use of any assistive device to improve mobility (i.e., cane, crutches, walker, wheelchair, electric wheelchair, motorized scooter)**	**7,148 adults who had difficulty walking**	**United States—national sample**

Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment

Continuously Insured versus Intermittently Insured versus Uninsured

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
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=4% • Uninsured=6%	• This study is only somewhat generalizable to the population that would be affected by AB 214 because it included persons age 65 yrs or older, a group to whom AB 214 would not apply. In addition, the findings are not fully generalizable because the authors asked respondents about both DME and prescription medication, whereas AB 214 applies only to DME.

Key: DME=durable medical equipment.

[14] 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.

Private Insurance (Primary or Supplemental) versus No Insurance or Only Medicare

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Agree et al., 2004	Use of durable medical equipment for mobility a. Alone b. With informal care c. With formal care	Level III—Cross-sectional survey	a. Not statistically significant b. Not statistically significant c. Not statistically significant	a. No difference b. No difference c. No difference	a. No difference b. No difference c. No difference	• This study is only somewhat generalizable to the population that would be affected by AB 214 because it included persons age 65 yrs or older, a group to whom AB 214 would not apply.

Private Insurance (Primary or Supplemental) versus Medicaid Only or Dual Medicare-Medicaid Coverage

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Agree et al., 2004	Use of durable medical equipment for mobility a. Alone b. With informal care c. With formal care	Level III—Cross-sectional survey	a. Not statistically significant b. Not statistically significant c. Statistically significant	a. No difference b. No difference c. Persons on Medicaid or Dually-Eligible for Medicare and Medicaid were more likely to use	a. No difference b. No difference c. OR=2.42 ($p<0.01$)	• This study is only somewhat generalizable to the population that would be affected by AB 214 because it included persons age 65 yrs or older, a group to whom AB 214 would not apply.

Key: OR=odds ratio.

Private Insurance (Primary or Supplemental) versus No Insurance

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Resnik and Allen, 2006	**Use of any assistive device to improve mobility (i.e., cane, crutches, walker, wheelchair, electric wheelchair, motorized scooter)**	**Level III—Cross-sectional survey**	• **Statistically significant**	• **Persons who did not have insurance were less likely to use mobility devices**	• **OR=0.59 (0.42-0.84)**	• **This study is only somewhat generalizable to the population that would be affected by AB 214 because it included persons age 65 yrs or older, a group to whom AB 214 would not apply.**

Key: OR=odds ratio.

Private Insurance (Primary or Supplemental) versus Medicaid

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Resnik and Allen, 2006	**Use of any assistive device to improve mobility**	**Level III—Cross-sectional survey**	• **Not statistically significant**	• **No difference**	• **OR=1.00 (0.84-1.10)**	• **This study is only somewhat generalizable to the population that would be affected by AB 214 because it included persons age 65 yrs or older, a group to whom AB 214 would not apply.**

Key: OR=odds ratio.

Private Insurance (Primary or Supplemental) versus Any Public Insurance Other than Medicaid

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Resnik and Allen, 2006	**Use of any assistive device to improve mobility**	**Level III—Cross-sectional survey**	• **Not statistically significant**	• **No difference**	• **OR=1.10 (0.84-1.20)**	• **This study is only somewhat generalizable to the population that would be affected by AB 214 because it included persons age 65 yrs or older, a group to whom AB 214 would not apply.**

Key: OR=odds ratio.

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 CHBRP Web site at www.chbrp.org/costimpact.html.

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 that provides data and analyses per the provisions of CHBRP's 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 (2007) California Health Interview Survey (CHIS), which is used 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 approximately 53,000 households. More information on CHIS is available at www.chis.ucla.edu/

2. The latest (2008) California Employer Health Benefits Survey is used 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] and Point of Service Plans [POS]),
   - premiums for policies regulated by the California Department of Insurance (CDI) (primarily preferred provider organizations [PPOs] and fee-for-service plans [FFS]), and
   - premiums for high deductible health plans (HDHPs) for the California population covered under employment-based health insurance.

   This annual survey is currently 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. 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 healthcare 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 (2008 Group Health Insurance Survey) contains data from seven major California health plans regarding their 2007 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 87.3% of the privately-insured market: 89.8% of privately insured enrollees in full-service health plans regulated by DMHC and 73.4% of lives privately insured health insurance products regulated by CDI. Public 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—comprise 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.

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 that summarize the current scope of benefits. CHBRP assesses enrollment information online at http://www.dhcs.ca.gov/dataandstats/statistics/Pages/BeneficiaryDataFiles.aspx.

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 Managed 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-MRMIP 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 products subject to state-mandated health insurance benefits.
- Cost impacts are only for the first year after enactment of the proposed mandate
- 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: www.chbrp.org/documents/longterm_impacts08.pdf.

- Several 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% 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., ({[−0.088/80] × 100} = −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-percent 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: www.chbrp.org/documents/uninsured_020707.pdf.

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 postmandate 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).
- 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).

[15] CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2012. Please see: www.chbrp.org/documents/ab_2012final_amended.pdf for the complete report.

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 parties chose to submit information.

No information was submitted directly by interested parties for this analysis.

For information on the processes for submitting information to CHBRP for review and consideration please visit: http://www.chbrp.org/requests.html.

REFERENCES

Agree EM, Freedman VA, Sengupta M. Factors influencing the use of mobility technology in community-based long-term care. *Journal of Aging and Health*. 2004;16:267-307.

Blue Cross and Blue Shield Association (BCBSA). *State Mandated Benefits and Providers.* State Legislative Health Care and Insurance Issues. 2008 Survey of Plans. Office of Policy. 2008

Bradley JM, O'Neill B. Short-term ambulatory oxygen for chronic obstructive pulmonary disease. *Cochrane Database of Systematic Reviews.* 2005;(4):CD004356. DOI:10.1002/14651858.CD004356.pub3.

California Department of Industrial Relations (DIR), Division of Workers' Compensation. Order of the Administrative Director of the Division of Workers' Compensation official Medical Fee Schedule Durable Medical Equipment, Prosthetic, Orthotics, Supplies effective for services rendered on or after January 1, 2008. February 26, 2008. Available at: www.cms.hhs.gov/DMEPOSFeeSched/LSDMEPOSFEE/list.asp?filterType=none&filterByDID=-99&sortByDID=3&sortOrder=descending&intNumPerPage=10. Accessed March 27, 2009.

California Department of Rehabilitation. Frequently Asked Questions, 2009. Available at: www.rehab.cahwnet.gov/public/faq.htm. Accessed March 27, 2009.

California Health Interview Survey (CHIS). Los Angeles, CA: UCLA Center for Health Policy Research; 2001.

Cebul RD, Solti I, Gordon NH, Singer ME, Payne SM, Gharrity KA. Managed care for the Medicaid disabled: Effect on utilization and costs. *Journal of Urban Health*. 2000;77:603-624.

Centers for Disease Control and Prevention (CDC). Economic costs associated with mental retardation, cerebral palsy, hearing loss, and vision impairment—United States, 2003. *MMWR Morbidity and Mortality Weekly Report.* 2004;50:57-59.

Chernew M, Cutler M, Keenan SP. Competition, markets, and insurance: Increasing health insurance costs and the decline in insurance coverage. Health Services Research. 2005; 40:1021-1039.

Cornman JC, Freedman VA. Racial and ethnic disparities in mobility device use in late life. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences.* 2008;63:S34-S41.

Cranston JM, Crockett AJ, Moss JR, Alpers JH. Domiciliary oxygen for chronic obstructive pulmonary disease. *Cochrane Database of Systematic Reviews.* 2005;(4):CD001744. DOI:10.1002/14651858.CD001744.pub2.

Crockett AJ, Cranston JM, Antic N. Domiciliary oxygen for interstitial lung disease. *Cochrane Database of Systematic Reviews.* 2001;(3):CD002883. DOI:10.1002/14651858.CD002883.

Federal Register. Medicare program: Durable medical equipment regional carrier service areas and related matters. Final rule. *Federal Register.* 2005;70:9232-9239.

Foster TS, Miller JD, Marton JP, Caloyeras JP, Russell MW, Menzin J. Assessment of th economic burden of COPD in the U.S.: A review and synthesis of the literature. *COPD*. 2006; 3:211- 218.

Freedman VA, Rogowski J, Wickstrom SL, Adams J, Marainen J, Escarce JJ. Socioeconomic disparities in the use of home health services in a Medicare managed care population. *Health Services Research*. 2004;39:1277-1298.

Glied S, Jack K. *Macroeconomic Conditions, Health Care Costs, and the Distribution of Health Insurance.* Cambridge, MA: National Bureau of Economic Research; 2003. Working paper (W10029). Available at www.nber.org/papers/W10029. Accessed February 7, 2007.

Hadley J, The effects of recent employment changes and premium increases on adults' insurance coverage. *Medical Care Research and Review.* 2006:63:447-476.

Henry J. Kaiser Family Foundation (KFF). Understanding the Health-Care Needs and Experiences of People With Disabilities: Findings from a 2003 Survey. 2003. Available at: www.kff.org/medicare/upload/Understanding-the-Health-Care-Needs-and-Experiences-of-People-with-Disabilities-Findings-from-a-2003-Survey.pdf. Accessed March 5, 2008.

Hunt PC, Boninger ML, Cooper RA, Zafonte RD, Fitzgerald SG. Schmeler MR. Demographic and socioeconomic factors associated with disparity in wheelchair customizability among people with traumatic spinal cord injury. *Archives of Physical Medicine and Rehabilitation.* 2004;85:1859-1864.

Kapur K, Gresenz CR, Studdert DM. Managing care: Utilization review in action at two capitated medical groups. *Health Affairs (Millwood).* 2003;Suppl Web Exclusives:W3-275-82. Available at: http://content.healthaffairs.org/cgi/reprint/hlthaff.w3.275v1. Accessed March 27, 2009.

Kaye HS, Yeager P, Reed M. Disparities in usage of assistive technology among people with disabilities. *Asst Technol.* 2008;20:194-203.

Litaker D, Cebul RD. Managed care penetration, insurance status, and access to health care. *Medical Care*. 2003;41:1086-1095.

Mathieson KM, Kronenfeld JJ, Keith VM. Maintaining functional independence in elderly adults: The roles of health status and financial resources in predicting home modifications and use of mobility equipment. *Gerontologist.* 2002;42:24-31.

Medical Expenditures Panel Survey (MEPS). *Justification for Budget Estimates for Appropriations Committees, Fiscal Year 2004*. Rockville, MD: Agency for Health Care Research and Quality; February 2003. Available at: www.ahrq.gov/About/cj2004/meps04.htm. Accessed March 23, 2008.

Medical Expenditures Panel Survey (MEPS). Agency for Health Care Research and Quality; 2006. Analysis conducted for the California Health Benefits Review Program by Miriam Cisternas, February 2009.

Medicare Payment Advisory Commission (MedPAC). *Durable Medical Equipment: Payment Basics.* September, 2006. Available at: www.medpac.gov/publications/other_reports/Sept06_MedPAC_Payment_Basics_DME.pdf. Accessed on March 19, 2008.

Mitchell JM, Gaskin DJ. Do children receiving Supplemental Security Income who are enrolled in Medicaid fare better under a fee-for-service or comprehensive capitation model? *Pediatrics*. 2004;114:196-204.

Perel P, Yanagawa T, Bunn F, Roberts I, Wentz R, Pierro A. Nutritional support for head-injured patients. *Cochrane Database of Systematic Reviews*. 2006;(4):CD001530. DOI:10.1002/14651858.CD001530.pub2.

Resnik L, Allen S. Racial and ethnic differences in use of assistive devices for mobility. *Journal of Aging and Health*. 2006;18:106-124.

Schneeweiss S, Maclure M, Carleton B, Glynn RJ, Avorn J. Clinical and economic consequences of a reimbursement restriction of nebulised respiratory therapy in adults: Direct comparison of randomised and observational evaluations. *British Medical Journal*. 2004;328:560-563.

U.S. Department of Health and Human Services (USDHHS), Office of the Inspector General. Lowering rates and adopting alternative methods could save Medicare millions for home oxygen equipment. September 13, 2004. Available at: www.oig.hhs.gov/publications/docs/press/2004/091304release.pdf. Accessed March 8, 2008.

U.S. Department of Veterans Affairs (DVA). VA Health Care. 2008. Eligibility and Enrollment. Available at: www.va.gov/healtheligibility/costs/. Accessed March 27, 2009.

U.S. Department of Veterans Affairs (DVA). *Health Care Benefits for Children of Vietnam Veterans: Durable Medical Equipment.* Available at: www.va.gov/hac/forbeneficiaries/spina/policymanual/spina/Chapter2/3c2s5.htm. Accessed March 27, 2009.

U.S. General Accounting Office (GAO). *Medicare: CMS's Program Safeguards Did Not Deter Growth in Spending for Power Wheelchairs*. November 17, 2004. Available at: www.gao.gov/new.items/d0543.pdf. Accessed March 19, 2008.

Weaver FM, Giobbie-Hurder AG, Hughes SL, Smith G, Kubal JD, Ulasevich A. Home medical equipment receipt in a home care appropriate population. *Journal of Aging and Health.* 1999;11:494-516.

Wickizer TM. Controlling outpatient medical equipment costs through utilization management. *Medical Care*. 1995;33:383-391.

Yelin E, Cisternas M, Trupin L. The economic impact of disability in the United States, 1997. *Journal of Disability Policy Studies*. 2006;17:137-147.

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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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