Review and Evaluation of Proposed Legislation Entitled: An Act Relative to Coverage for Cleft Palate and Cleft Lip House Bill 4557

Provided for
The Joint Committee on Health Care Financing

May 2009

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Executive Summary

This report was prepared by the Division of Health Care Finance and Policy (Division) pursuant to the provisions of M.G.L. c. 3 § 38C requiring the Division to review and evaluate the impact of a mandated benefit bill referred to the agency by a legislative committee. The Joint Committee on Health Care Financing referred House Bill 4557 "An Act Relative to Coverage for Cleft Palate and Cleft Lip," to the Division for review.

Please note that the term oral cleft and the phrase "cleft lip and/or cleft palate" are used interchangeably throughout this report.

Overview of Current Law and Proposed Mandate

House Bill 4557 (H. 4557) would mandate coverage for the expense of treatment of cleft palate and cleft lip for children under the age of 18. The proposed mandate would apply to the fully insured market, including Health Maintenance Organizations (HMOs), and Blue Cross Blue Shield plans, as well as the Group Insurance Commission (GIC).

The proposed law would mandate that all required health insurers cover a comprehensive array of services that are prescribed and medically necessary for the treatment of cleft lip and/or cleft palate for children under the age of 18. Health insurers typically cover all services today, with the exception of dental, orthodontic, and certain services associated with oral surgery. Children and adolescents do not go without services, however; they are believed to receive these services that are excluded from coverage.

Should H. 4557 be enacted, health insurers would pay for those services that are not currently covered by insurance but are covered by some combination of out-of-pocket costs, charitable organizations, and perhaps even dental insurance coverage. In 2009 dollars, the average lifetime treatment costs per individual for those services that are not presently covered by insurance runs about $18,500 or more.[1] If H. 4557 becomes law, these costs would be covered by the health insurer in the future.

Methodology

The Division prepared this review and evaluation of H. 4557 by conducting interviews with stakeholders, including legislative staff; meeting with and gathering information from the Cleft Lip and Palate team at Children's Hospital Boston; interviewing insurers in the Commonwealth and experts from around the country; reviewing the relevant literature relative to cleft palate and cleft lip; and conducting an actuarial analysis of the fiscal impact of H. 4557 (see appendix).

The review and evaluation of H. 4557 included the development of appropriate assumptions on claims costs, including assumptions about the cost and utilization of services, as well as coverage of services by insurers today among the targeted population. More specifically, the Division's analysis focused on the cost and use of dental, orthodontic, and certain procedures associated with

oral surgery that are generally excluded from coverage by health insurers, and are also considered integral to the treatment protocol at Children's Hospital Boston. For the purposes of this evaluation, the Division considered Children's Hospital Boston to be the "standard of care" for individuals with oral cleft since they treat over 90 percent of the total new cases in the Commonwealth each year.

Three different impact scenarios were developed—low, middle, and high—to present a range for the possible impact of the proposed mandate on costs. In addition, summary-level data from Massachusetts health plans was used to assess the reasonableness of estimates developed.

Results

In 2009, the projected increase in spending that would result from H. 4557 represents an increase in premiums from 0.00% to 0.01% or $602,000 to just over $1.5 million. The impact on per member per month (PMPM) premiums ranges from $.02 to $.04.

The five-year impact results are displayed in Exhibit 1. In 2009, three scenarios resulted in estimated increased total spending (including both claims spending and administrative expenses). These results were then trended forward five years using an annual trend rate of 2.6%, 3.6%, and 4.6%

Exhibit 1:
Estimated Cost Impact of H. 4557 on Fully Insured Health Care Premiums (2009-2013)

	2009	2010	2011	2012	2013	All 5 Years
Fully Insured Enrollment	2,868,000	2,868,000	2,868,000	2,868,000	2,868,000	
Low Scenario						
Annual Impact Claims (000s)	$542	$556	$570	$585	$600	$2,852
Annual Impact Administration (000s)	$60	$61	$63	$65	$67	$317
Annual Impact Total (000s)	$602	$617	$633	$650	$667	$3,169
Premium Impact (PMPM)	$0.02	$0.02	$0.02	$0.02	$0.02	
Middle Scenario						
Annual Impact Claims (000s)	$729	$755	$782	$811	$840	$3,917
Annual Impact Administration (000s)	$114	$118	$123	$126	$131	$611
Annual Impact Total (000s)	$843	$873	$905	$937	$971	$4,528
Premium Impact (PMPM)	$0.02	$0.03	$0.03	$0.03	$0.03	
High Scenario						
Annual Impact Claims (000s)	$1,226	$1,282	$1,341	$1,403	$1,467	$6,718
Annual Impact Administration (000s)	$295	$309	$323	$337	$353	$1,618
Annual Impact Total (000s)	$1,521	$1,591	$1,664	$1,740	$1,820	$8,336
Premium Impact (PMPM)	$0.04	$0.05	$0.05	$0.05	$0.05	

Introduction

H. 4557 requires health insurers to provide coverage for the treatment of cleft lip and cleft palate for children under the age of 18 who are covered under fully insured commercial plans, the GIC or the MassHealth program. The Division's review and evaluation of H. 4557 excludes the impact on the MassHealth program, however, consistent with the provisions of M.G.L. c. 3 § 38C.

Should H. 4557 be enacted, health insurers would be required to cover a comprehensive array of services and treatments as long as they are prescribed and certified by the treating physician or surgeon as medically necessary and consequent to the treatment of cleft lip or cleft palate.

The intent of the proposed mandate is to ensure coverage of a comprehensive list of services that are considered to be medically necessary for the child. In its review and evaluation of H. 4557, the Division focused on those services and treatments that are not typically covered by health insurers. Those services and treatments that are not often covered by health insurers today include certain dental, orthodontic, and services associated with oral surgery. In this report, the Division refers to these services as the "gap" in coverage for children and adolescents with oral cleft.

The Division was able to identify the gap in services and treatments with significant input from the Children's Hospital Cleft Lip and Cleft Palate Program team.[2] The gap captures the difference between what health insurers cover and what H. 4557 proposes to mandate. With the help of Children's Hospital Boston, the Division was able to build a model of the costs and utilization of dental, orthodontic, and certain services associated with oral surgery that are typically excluded by health insurance plans today.

This introductory section summarizes the scope of the current Massachusetts law and describes how private insurance coverage for cleft lip and cleft palate would change under the proposed mandate.

Summary of Current Coverage and Law

Current law does not mandate that health insurers provide coverage for the treatment and services of cleft lip and/or cleft palate for children under age 18. All six health insurers that the Division surveyed provide some level of coverage for oral cleft, yet coverage levels do vary across health insurers. Coverage among health insurers varies most relative to dental and orthodontic services and treatments.

Summary of Proposed Mandate

H. 4557 mandates coverage of all services for children under age 18 that are medically necessary and consequent to the treatment of cleft lip or cleft palate by the "treating" physician or surgeon. The language of the proposed mandate includes coverage for: benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and

adequate dental structures for orthodontic treatment or prosthetic management therapy; and speech therapy, audiology, and nutrition services.

This proposed mandate would apply to the fully insured population, including those commercially insured, those enrolled in Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs), Blue Cross Blue Shield plans, as well as those insured by the GIC including the self insured. The proposed mandate also applies to the MassHealth program, but that analysis is excluded from this review and evaluation of H. 4557 because it is not required per the provisions of M.G.L. c. 3 § 38C.

The Division predicated its analysis on the assumption that nearly all children and adolescents with oral cleft are receiving the services that they need today. It follows that the proposed mandate would not affect the treatment protocols of providers or the utilization of services by children and adolescents with oral cleft. The gap in services and treatments for children and adolescents are currently paid for through other means, including some combination of family out-of-pocket costs, charitable contributions, and perhaps even dental insurance. Should H. 4557 be enacted, health insurers would pay for the treatment and services that are presently covered by these other sources.

The language of the proposed mandate also ensures that dental or orthodontic treatment that is unrelated to the congenital condition of cleft lip and cleft palate is not covered. In addition, coverage offered under this mandate would be subject to the terms and conditions applicable to other benefits.

Background

In this section, the Division provides information on the prevalence of oral cleft in Massachusetts, the gap in insurance coverage today, and federal activity and legislative initiatives in other states.

Prevalence of Birth Defects

According to the Centers for Disease Control and Prevention (CDC), oral cleft, which includes cleft lip and/or cleft palate, is the most common birth defect in the United States and in Massachusetts. Birth defects, ranging in nature from severe to mild, are "congenital abnormalities of structure, function or metabolism present before birth."[3] In Massachusetts, 2,476 babies (live births) were born with a birth defect in the years 2002 and 2003. See Box 1 for a complete description.[4] The other two most common birth defects are Down Syndrome and atrioventricular septal defect (AVSD).

Box 1: Oral Cleft

Oral cleft is a congenital defect or birth defect, which includes cleft lip and/or cleft palate. Oral cleft is generally considered a "moderate" birth defect, like the majority of birth defects. Some babies born with oral cleft, however, may have multiple birth defects or syndromes and may be severe.

In 2002 and 2003, oral cleft was the most common birth defect in Massachusetts: 206 babies were born with oral cleft in those two years. The rate in Massachusetts is lower than the rate for the nation.

- The rate in Massachusetts was 12.80 per 10,000 births or 1 in every 780 babies.
- The national rate was 16.87 per 10,000 births or 1 in every 593 babies.

The prevalence of oral cleft varies significantly by ethnicity and by gender. Males have higher rates of oral cleft than females, and Asians have the highest rates of oral cleft. There are many factors that cause babies to be born with oral cleft, including genetic and environmental factors.

The definitions below are attributable to the published literature of the Cleft Lip and Palate Program at Children's Hospital Boston.

Cleft Lip: A cleft lip is an incomplete union of skin and muscle between the nose and lip. During the first 4 to 6 weeks of pregnancy, the lip is formed. The skin and muscle should normally grow in from both sides of the face to join with skin that grows down from the tip of the nose. But if the growth and union of these parts are not complete, the baby is born with cleft lip. There are several different types of cleft lip, involving the lip, nose and palate to varying degrees.

Cleft Palate: A cleft palate is when there is an opening in the roof of the mouth, involving the soft palate (muscular part) and the hard part (bony part). During the first 8 to 12 weeks of pregnancy, bone and muscle grow in from both sides of the upper jaw and join to form the palate (the roof of the mouth and the floor of the nose). If the fusion of these two shelves of bone and muscle is not complete, the baby is born with a cleft palate, an opening between the mouth and the nose. There are several different types of cleft palate, involving the soft and hard palate to varying degrees, (e.g. soft palate, bilateral complete cleft palate, unilateral complete cleft palate).

Cleft Lip and Cleft Palate Program at Children's Hospital Boston

The Division turned to the professional staff of the Cleft Lip and Palate Program at Children's Hospital Boston to assist in understanding the gap in coverage, as defined by the difference between what health insurers cover and what H. 4557 proposes to mandate.

The Division selected the Cleft Lip and Palate Program at Children's Hospital Boston as the model provider of service for the Division's review and evaluation of H. 4557, because it is the largest volume provider of treatment to children and adolescents with oral cleft in the state of Massachusetts. The Cleft Lip and Cleft Palate Program estimates that it treats 90 percent of new cases in Massachusetts each year, with the remainder of the new cases each year treated by other provider programs in the state (including the Shriners Hospital for Children, Springfield Cleft Lip and Cleft Palate Clinic, UMASS Memorial Craniofacial Center in Worcester, and the Massachusetts General Hospital).[5]

The Cleft Lip and Cleft Palate Program was established for the purpose of caring for children born with oral cleft and is comprised of a team of experts across several fields and disciplines, including pediatric dentistry, orthodontics, and oral surgery.[6] Pediatric dentists and orthodontists are key members of this team, along with the plastic surgeon. According to the Cleft Lip and Cleft Palate Program team, treating children and adolescents with cleft lip and/or cleft palate starts in infancy and includes all aspects of habilitation. Treatment generally ends for females around age 15 and for males by age 21. See Exhibit 2 for a summary of the protocol for treating children with oral cleft based upon the clinical approach followed by the program, which includes:

- A team approach, involving interdisciplinary care, that is optimal to ensuring that children receive comprehensive care;
- A sequential approach to managing and treating cleft lip and/or cleft palate;
- An integrated approach to surgical and dental procedures; and
- A commitment to completion of treatment that involves such procedures as "final skeletal (orthognathic) correction (jaw surgery)" and "restoration of missing or damaged teeth," which are typically denied by most health insurers today.

Exhibit 2: Treatment Protocol for Children with Cleft Lip and/or Cleft Palate

Age	Cleft Lip	Cleft Palate	Cleft Lip/Cleft Palate
6 weeks-3 months		Consider auditory brainstem response hearing evaluation	Dentofacial orthopedics
2-5 months	Repair cleft lip and nasal deformity		Repair cleft lip and nasal deformity
8-10 months		Hearing test and ear exam	Hearing test and ear exam
10 months		Repair cleft palate; Place ear tubes if necessary	Repair cleft palate; Place ear tubes if necessary
10-15 months		Speech/language evaluation	Speech/language evaluation
1-5 years		Hearing test every 6-12 months	Hearing test every 6-12 months
18-36 months	First dental evaluation	Dental evaluation	Dental evaluation
4-5 years	Consider revision of lip or nose	Consider pharyngeal flap for VPI, velopharyngeal insufficiency = persistent nasal speech	Consider revision of lip or nose; Consider pharyngeal flap for VPI, velopharyngeal insufficiency=persistent nasal speech
7-10 years			Phase I Orthodontics: Premaxillary expansion, removal of baby teeth. Alveolar bone graft to close gum cleft and/or premaxillary osteotomy to move
12-14 years	Consider revision of nasal tip		Consider revision of nasal tip. Phase II Orthodontics: Full orthodontic treatment to coordinate the bite and relieve crowding and rotations.
15-20 years	Final correction of external nose and septum		Final correction of external nose and septum. Phase III Orthodontics: Orthodontic treatment of orthognathic correction.

Source: Exhibit information taken from the brochure, "Information for Parents About Cleft Lip and Cleft Palate," 5th edition, 2005, Children's Hospital Cleft Lip and Palate Program team, page 24.

The Gap in Health Insurance Coverage

Should H. 4557 be enacted, treatment protocols and utilization levels for children and adolescents with cleft lip and/or cleft palate will probably not change. According to information provided by Children's Hospital Boston, it is believed that children and adolescents receive medically necessary services, even when they are not covered by health insurance plans. That is because families find other ways to pay for those services that are not covered by health insurance today, including: paying out of pocket, charitable organizations, and/or perhaps even dental insurance coverage. As a result, H. 4557 would probably not increase demand for care by children and adolescents or increase supply by providers, because children and adolescents already receive all services that are medically necessary.

The Division's review and evaluation of H. 4557 focused on the gap between what health insurance carriers cover today and what services are provided to children and adolescents with cleft lip and/or cleft palate. The Division determined the gap in health insurance coverage largely based on the information provided by the inter-disciplinary team at Children's Hospital Boston that identified dental, orthodontic and certain services associated with oral surgery as those services that are not typically covered by insurers today. Unfortunately, the Division could not determine from the information available how coverage decisions vary across insurers or who paid for services that were not paid by the health insurer.

The estimates assume that the lifetime costs for the gap in coverage, including dental, orthodontic and certain services associated with oral surgery, could total $18,500, or more, in 2009 dollars. Those lifetime costs for the gap in coverage represent services that are considered to be medically necessary by the Cleft Lip and Cleft Palate Program at Children's Hospital Boston.[7]

Survey of Health Insurers

Health Insurance Market

Health insurers in Massachusetts currently cover a wide range of services related to oral cleft for children under age 18. The Division asked six health insurers in Massachusetts and the GIC to respond to a set of survey questions focused on their current coverage for the treatment of cleft lip and/or cleft palate. All six health insurers in Massachusetts and the GIC responded to the Division's survey. The responses were then blinded prior to interpreting the results of the survey responses, as summarized below:

In general, the responses were difficult to interpret and categorize neatly because of the varying levels of coverage and the significant degree of interpretation involved in determining what might and might not be considered cosmetic in nature. The following statements are intended to clarify health insurance coverage overall:

- All six health insurers cover many of the services that are mandated by H. 4557;
- Two of the six insurers indicated that they would cover orthodontic services for the treatment of cleft lip and/or cleft palate; and
- Four of the six insurers indicated that they would not cover orthodontic services for the treatment of cleft lip and/or cleft palate.

The MassHealth Program

This report does not specifically address the impact of the proposed mandate on the MassHealth program, even though H. 4557 also applies to the MassHealth program. The Division did not ask the MassHealth program to respond to the same survey to which the six health insurance carriers responded.

Through the course of the Division's discussions with the team of the Cleft Lip and Cleft Palate Program at Children's Hospital Boston, however, the Division learned that the MassHealth program has the reputation among the provider community of being the "gold standard," when it comes to providing comprehensive coverage for both orthodontic treatment and oral surgery for individuals with oral cleft. The Division considered what made MassHealth the "gold standard" for individuals with cleft lip and/or cleft palate. Based on communication with staff from the Office of Medicaid, it would seem that MassHealth covers all services, including dental and orthodontic services for individuals with oral cleft.[8]

Federal Activity

The Children's Access to Reconstructive Evaluation and Surgery Act of 2009

In this 111th session of Congress, which began on January 3, 2009, the Children's Access to Reconstructive Evaluation and Surgery Act" (H.R. 1339, the CARES Act) was introduced in the House of Representatives by Representatives Carolyn McCarthy (D-NY), Patrick Tiberi (R-OH), and Bart Gordon (D-TN).[9] The American Society of Plastic Surgeons among other organizations supports this legislation. This same legislation has been introduced and has died in previous sessions of Congress.

H.R. 1339 would amend the Public Health Service Act, the Employee Retirement Income Security Act of 1974, and the Internal Revenue Code of 1986 to require that group and individual health insurance coverage and group health plans provide coverage for treatment of a minor child's congenital or developmental deformity or disorder due to trauma, infection, tumor, or disease. This would include the treatment of cleft lip and cleft palate.

The Reconstructive Surgery Act of 2007

Similar legislation relative to comprehensive coverage for reconstructive surgery was last filed in 2007 by Congressman Mike Ross (D-AK).[10] The Reconstructive Surgery Act of 2007, which is supported by the American Society of Plastic Surgeons and the Association of Independent

Craniofacial Advocates (AICA), would require that health insurers provide coverage for certain reconstructive surgery. The legislation has not been reintroduced in this 111th session of Congress.

More specifically, it would require insurers to provide coverage for reconstructive surgery, including medically necessary treatment for pre-operative and post-operative care deemed necessary by the treating physician or team of physicians. Reconstructive surgery could mean any medically necessary and appropriate surgery performed to correct or repair abnormal structures of the body caused by congenital defects, developmental abnormalities, trauma, infection, tumors, or disease. This would include cleft lip and cleft palate.

The Federal Employees Health Benefit Program (FEHBP)

The health insurance program for federal employees provides coverage for cleft lip and cleft palate, including orthodontic treatment after surgery for closure of a cleft palate or cleft lip, or for correction of prognathism or micrognathism, with limits on lifetime benefits per person, and for oral surgical procedures including surgical correction of cleft lip or cleft palate.[11]

State Activity

State Mandates

According to the Council for Affordable Health Insurance, at least 15 states have passed legislation to mandate coverage for the treatment and services for oral cleft:[12]

- Colorado, Florida, Idaho, Indiana, Louisiana, Maryland, Minnesota, Nebraska, North Carolina, Pennsylvania, South Carolina, Utah, Virginia, Washington, and Wisconsin have all enacted laws mandating coverage for oral cleft.
- Such mandates have increased the policies in each of these states by less than 1 percent.
- The laws have ranged in scope from focusing on mandating coverage for dental and orthodontic services to coverage for dental, orthodontic and oral surgery services.

California

The recent activity in the state of California indicates where most states are today: between bipartisan support for expanding coverage for oral clefts and significant financial pressures.

A comprehensive analysis performed by the California Health Benefits Review Program in 2008 of a proposed mandate to cover orthodontic services deemed necessary for medical reasons by a cleft palate or craniofacial team indicated that the cost of the mandate bill would be a few cents more per person per month.[13] Subsequently, the California General Assembly passed legislation mandating that health plans cover orthodontic treatment and services for individuals with oral cleft. This bill was passed with bipartisan support, but the mandate never became law because the Governor vetoed the legislation.[14]

Methodological Approach

Overview of Approach

The Division engaged three consultants for this project: the actuarial firm Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman), and independent consultants Ellen Breslin Davidson of EBD Consulting Services, LLC, and Tony Dreyfus. Oliver Wyman was hired to estimate the financial effect of the passage of H. 4557. Ellen Breslin Davidson was hired to review and evaluate the legislation, including working with Oliver Wyman to provide consultation on the methodology and assumptions for estimating the financial effects of H. 4557 with support from Tony Dreyfus to research the medical efficacy of treatment of oral clefts. The Commonwealth Enterprise Group (CEG) secured the contract with the Division under which Ellen Breslin Davidson and Tony Dreyfus worked.

The following steps were taken to prepare the review and evaluation of H. 4557:

1. Conducted Interviews with Stakeholders.

The Division conducted interviews with stakeholders in the Commonwealth to ensure that it was accurately interpreting the proposed change in law, to understand the perceptions about how the law would be interpreted, if enacted, and expectations about its likely impacts. Interviews were completed with legislative staff including Lisa Pellegrino from the office of Representative Ronald Mariano, and Peri O'Connor of Representative Louis Kafka's office.[15] Experts in the cleft lip and cleft palate community were consulted.[16]

2. Reviewed Literature.

A review of the literature was conducted to determine the context of the proposed mandate, including the federal and state landscape.

3. Prepared and Collected Survey Data from the Health Plans.

The Division asked that the health plans complete and submit their responses to a survey to determine the coverage policy and benefits of the plan relative to the proposed mandate.

4. Developed Baseline for Massachusetts.

The Division's actuarial firm developed a baseline of the costs for those services that are currently covered by health insurance carriers.

5. Applied Assumptions and Sensitivity Analysis to Methodology.

Model parameters were developed to estimate the total premium cost of the mandated benefits. Baseline premium costs were subtracted from the total premium costs to estimate the incremental impact of the mandate.

Approach for Determining Medical Efficacy

M.G.L., c. 3 § 38C (d) requires the Division to assess the medical efficacy of mandating the benefit, including the impact of the benefit to the quality of patient care and the health status of the population and the results of any research demonstrating the medical efficacy of the treatment or service compared to alternative treatments or services or not providing the treatment or services. To determine the medical efficacy of H. 4557, the Division conducted a literature search of the research in oral cleft.

Approach for Determining the Fiscal Impact of the Mandate

Legal Requirements

M.G.L. c. 3 § 38C (d) requires the Division to assess nine different measures in estimating the fiscal impact of a mandated benefit:

1. Financial impact of mandating the benefit, including the extent to which the proposed insurance coverage would increase or decrease the cost of the treatment or the service over the next five years;
2. Extent to which the proposed coverage might increase the appropriate or inappropriate use of the treatment or service over the next five years;
3. Extent to which the mandated treatment or services might serve as an alternative to a more expensive or less expensive treatment or service;
4. Extent to which the insurance coverage may affect the number or types of providers of the mandated treatment or service over the next five years;
5. Effects of mandating the benefit on the cost of health care, particularly the premium, administrative expenses and indirect costs of large employers, small employers and non-group purchasers;
6. Potential benefits and savings to large employers, small employers, employees and non-group purchasers;
7. Effect of the proposed mandate on cost shifting between private and public payers of health care coverage;
8. Cost to health care consumers of not mandating the benefit in terms of out-of-pocket costs for treatment or delayed treatment; and
9. Effect on the overall cost of the health care delivery system in the Commonwealth.

Estimation Process

The following steps were followed to estimate the fiscal impact of this mandate:

- Estimate the size of the affected insured population;
- Estimate the baseline claims costs for the affected benefits;
- Estimate the utilization and cost if the mandate is passed; and
- Estimate the impact of administrative expenses of the relevant insurers.

Following these steps, estimates were made for a five-year timeframe (2009-2013) for a range of "low case" to "high case" scenarios. Differences between scenarios were driven by two factors:

1. Prevalence of children with cleft lip and/or cleft palate.

The number of children with oral cleft was estimated using data from the health plans for the low and middle scenarios. A high estimate was made based on the national rate of oral cleft. Data on the actual number of children and adolescents with oral cleft by insurance coverage was not available.

2. Average lifetime treatment costs for services that are not typically covered today.

The average lifetime treatment costs for services that are not typically covered today was estimated using the information provided by the Cleft Lip and Palate Program team at Children's Hospital Boston. These lifetime costs were estimated to be $18,500 in 2009 dollars for the middle scenario, and varied this assumption across scenarios to develop a low and high estimate.

For more detailed information on the methodological approach used to calculate the impact of H. 4557 (including the approach to calculating administrative costs), refer to the appendix to this report.

Summary of Findings

Medical Efficacy

The treatment of cleft lip and cleft palate has become the focus of teamwork among doctors, dentists and other specialists. For many years, clinical literature has recognized the orthodontist as a key member of the treatment team.[17]

The orthodontic treatment that is preparatory to surgical repair of cleft lip and cleft palate appears to be an integral part of the overall treatment. Two parts of this orthodontic work are particularly important.

- The first is the reshaping the child's upper jaw to prepare for the implantation of a bone graft that closes the cleft in the upper jaw.
- The second is the substantial repositioning of teeth in preparation for surgery to align the adolescent's jaws.

The overall surgical treatment of cleft lip and cleft palate appears to be highly effective in the repair of these congenital conditions, with relatively modest costs for large benefits in oral function and facial appearance.

The bone graft into the alveolar or gum line area of the upper jaw is one of the key steps in the multi-stage treatment of clefts. The orthodontic work prepares the upper jaw to receive the bone graft, largely through expanding the curved arch of the forward part of the upper jaw. The alveolar bone graft has long been recognized as playing an important role in closing the cleft and reducing the need for use of prosthetics.[18] The alveolar bone graft is performed when the child is 7 to 10 years old.[19] When the patient is fully grown, a second important stage of the treatment includes orthodontic and surgical work to align the jaws so that the teeth meet for chewing.

These treatments are part of an evolving science with substantial literature on new techniques and improved results. The strategies for orthodontic treatment continue to evolve.[20] Improvements in orthodontic and surgical techniques are leading to shorter treatments and improved outcomes and less prosthetic intervention.[21] The orthodontic preparation for the alveolar bone graft and the jaw surgery appear widely accepted as a necessary part of the overall treatment. Debate among clinicians instead has focused on the usefulness of orthodontic treatment of infants, where reshaping of the upper jawbone has been thought to improve later outcomes. Debate about efficacy of this infant orthodontic work is longstanding.[22] Paradoxically, insurers have most often been hesitant to pay for orthodontic work in the later stages of care, where the clinical consensus is strong, and least hesitant to pay for work done with infants, where clinical debate has not settled whether orthodontic reshaping is useful.[23]

The orthodontic component of repair of cleft lip and cleft palate is perhaps not well-suited to the model of evidence-based medicine. The surgical treatment of clefts as a whole is unlikely to face study through controlled comparison of treatment and non-treatment groups, because non-treatment is unethical, and is today found only in regions of the world poor enough to lack access

to appropriate surgical care. And clinicians judge that the orthodontic preparation for the alveolar bone graft and the jaw repositioning is essential to the treatment as a whole. For ethical and practical reasons some medical care is not readily amenable to controlled experimentation. In such cases, the Division finds it reasonable to rely on expert clinical opinion and judge the treatment medically effective.

The resistance by insurers to paying for dental care stems from the separation for the general population of medical and dental insurance. Medical insurers unfamiliar with the treatment of cleft lip and cleft palate may understandably wonder why they should pay for the dental component of treatment for cleft lip and cleft palate. The Division's examination of the issue suggests that the orthodontic and surgical treatment of cleft lip and cleft palate is an interlocked single enterprise, and that the dental component is necessary for the successful completion of the overall treatment.

Financial Impact of Mandate

1. *The Division is required to assess the extent to which the proposed coverage would increase or decrease the cost of the treatment or the service over the next five years.*

   The Division estimated the fiscal impact of the bill (see Appendix I) relative to the effect this mandate bill would have on treatment for cleft lip and/or cleft palate.

   - Estimated impacts of H. 4557 on Massachusetts health care premiums for fully insured products were calculated assuming that the 2009 premium for a fully insured member is $4,800.
   - Low, middle, and high scenarios assumed a prevalence rate of 0.13 percent for the low and middle scenarios and 0.17 percent for the high scenario.
   - The combination of these assumptions as well as administrative expense assumptions produced estimates of the total cost of the mandated benefits.
   - Baseline premium levels were subtracted from the estimated total premium cost, producing estimated impacts on the premium of $.02, $.02, and $.04 Per Member Per Month (PMPM) in 2009, to determine the cost increase due to the proposed mandate.
   - The PMPMs are multiplied by the fully insured population projection for the corresponding year to arrive at estimated annual impact dollar.

   The five-year impact results are displayed in Exhibit 3. In 2009, these scenarios result in estimated increased total spending of $602,000, $843,000, and approximately $1.5 million, respectively. The Division is required to assess the extent to which the proposed coverage might increase the appropriate or inappropriate use of the treatment or service over the next five years. The Division does not anticipate a change in the appropriate or inappropriate use of the treatment or service over the next five years, based on the understanding that treatment protocols are followed today regardless of insurance coverage. The Division may be able to anticipate less delay in receiving appropriate treatments today, due to the presence of insurance coverage in the future.

Exhibit 3:
Estimated Cost Impact of H. 4557 on Fully Insured Health Care Premiums (2009-2013)

	2009	2010	2011	2012	2013	All 5 Years
Fully Insured Enrollment	2,868,000	2,868,000	2,868,000	2,868,000	2,868,000	
Low Scenario						
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Annual Impact Claims (000s)	$729	$755	$782	$811	$840	$3,917
Annual Impact Administration (000s)	$114	$118	$123	$126	$131	$611
Annual Impact Total (000s)	$843	$873	$905	$937	$971	$4,528
Premium Impact (PMPM)	$0.02	$0.03	$0.03	$0.03	$0.03	
High Scenario						
Annual Impact Claims (000s)	$1,226	$1,282	$1,341	$1,403	$1,467	$6,718
Annual Impact Administration (000s)	$295	$309	$323	$337	$353	$1,618
Annual Impact Total (000s)	$1,521	$1,591	$1,664	$1,740	$1,820	$8,336
Premium Impact (PMPM)	$0.04	$0.05	$0.05	$0.05	$0.05	

2. *The Division is required to assess the extent to which the mandated treatment or services might serve as an alternative to a more expensive or less expensive treatment or service.*

   Based on the understanding that children and adolescents receive medically necessary services today, the Division does not anticipate that the mandated services will serve as an alternative to a more expensive or less expensive treatment or service.

3. *The Division is required to assess the extent to which the insurance coverage may affect the number or types of providers of the mandated treatment or service over the next five years.*

   Insurance coverage is not likely to affect the number or types of providers of the mandated treatment or service over the next five years, assuming that utilization will not change and individuals will continue to seek services from providers in a similar manner as they do today.

4. *The Division is required to assess the effects of mandating the benefit on the cost of health care, particularly the premium, administrative expenses and indirect costs of large employers, small employers and non-group purchasers.*

   H. 4557 will lead to an increase in health plan administrative costs. Exhibit 3 above includes administrative cost estimates.

5. *The Division is required to assess the potential benefits and savings to large and small employers, employees, and non-group purchasers.*

   It is unlikely that this mandate would produce any savings. In addition, this mandate would not affect the many large employers who are self-insured unless they choose to adopt this standard.

6. *The Division is required to assess the effect of the proposed mandate on cost shifting between private and public payers of health care coverage.*

   The proposed mandate applies to commercial insurance carriers, Health Maintenance Organizations (HMOs), and Blue Cross Blue Shield plans, MassHealth and the GIC. The fiscal impact on MassHealth has been excluded from consideration in this report, because it is not subject to the provisions of M.G.L. c. 3 § 38C (d). H. 4557 will almost certainly lead to a cost shifting between private payers. For instance, the Division can anticipate a shift away from families, charitable organizations, and dental coverage to health insurers.

7. *The Division is required to assess the cost to health care consumers of not mandating the benefit in terms of out-of-pocket costs for treatment or delayed treatment.*

   It is reasonable to suggest that consumers would lower their out-of-pocket costs should H. 4557 be enacted. Data are unavailable, however, to determine exactly how much is being paid today by families, charitable organizations and/or dental insurance. Data are unavailable to determine how treatment is delayed today because of the gap in health insurance coverage.

8. *The Division is required to assess the effects on the overall cost of the health care delivery system in the Commonwealth.*

   Should H. 4557 be enacted, the overall cost of the health care delivery system in the Commonwealth will not change. The Division does, however, anticipate a shift in costs from families, charitable organizations, and perhaps even dental insurance to health insurers. And to the extent that health insurers reimburse for services at different rates, the overall cost of the health care delivery system could be different than it is today, but that cannot be quantified with the data available.

Endnotes

[1] Oliver Wyman Actuarial Consulting, Inc.; see Appendix I of this report.

[2] Dr. John Mulliken and members of his team and colleagues, including Dr. Richard Bruun, Ms. Dorothy MacDonald, Dr. Bonnie Padwa, Dr Stephen Shusterman, Ms. Diane Pinto and Ms. Nina Kay Anderson.

[3] Centers for Disease Control and Prevention (CDC), Improved National Prevalence Estimates for 18 Selected Major Birth Defects, United States.

[4] National Institute of Health, National Institute of Dental and Craniofacial Research, Prevalence of Cleft Lip and Cleft Palate

[5] Children's Hospital Boston, Cleft Lip and Palate Team. Meeting and interview with Team, December 1, 2008.

[6] Putting a Smile on Your Child's Face, Dental Care for Your Child with Cleft Lip and Palate. Foundation for Faces for Children.

[7] Children's Hospital Boston, Cleft Lip and Palate Team. Information from Team.

[8] Office of Medicaid, MassHealth staff, 2009.

[9] www.govtrack.us/congress/bill.xpd?bill=h111-1339

[10] Cleft Advocate, www.cleftadvocate.com

[11] Office of Personnel Management (OPM), Policy Division.

[12] Council for Affordable Health Insurance, www.cahi.org/index.asp

[13] California Health Benefits Review Program (CHBRP). (2008). Analysis of Senate Bill 1634 Health Care Coverage: Cleft Palates, Report to California State Legislature.

[14] California Association of Health Plans, Fact Sheet, The High Cost of Benefit Mandates, May 19, 2008, www.calhealthplans.org

[15] Meeting with legislative staff, Division of Health Care Finance and Policy and its consultants.

[16] Cleft lip and cleft palate community, including March of Dimes, www.marchofdimes; American Cleft-Palate Craniofacial Association, North Carolina; Cleft Palate Foundation, Cleft Surgery, 2001 Edition, 2008 Reprint.

[17] Figueroa AA, Polley JW, Cohen M.1993 Orthodontic management of the cleft lip and palate patient. Clin Plast Surg. Oct; 20(4):733-53; and Kuijpers-Jagtman AM. 2006. The orthodontist, an essential partner in CLP treatment. B-ENT.; 2 Suppl 4:57-62. A PubMed search for articles cleft palate and orthodontic care produced 873 articles, including 50 review articles. Articles from journals in Italy, Turkey, Brazil and Singapore, not referenced here, supported the important role of the orthodontist or the importance of bone grafting

[18] Moore D, McCord JF. 2004. Prosthetic dentistry and the unilateral cleft lip and palate patient. The last 30 years. A review of the prosthodontic literature in respect of treatment options.Eur J Prosthodont Restor Dent. Jun;12(2):70-4.; Semb G, Ramstad T. 1999. The influence of alveolar bone grafting on the orthodontic and prosthodontic treatment of patients with cleft lip and palate. Dent Update. Mar;26(2):60-4.; Cohen M, Polley JW, Figueroa AA. 1993 Secondary (intermediate) alveolar bone grafting. Clin Plast Surg. Oct;20(4):691-705.

[19] Children's Hospital Boston. 2005. Information for Parents About Cleft Lip and Palate, Appendix.

[20] Evans CA.2004. Orthodontic treatment for patients with clefts. Clin Plast Surg. Apr;31(2):271-90.

[21] Reisberg DJ. 2000. Dental and prosthodontic care for patients with cleft or craniofacial conditions. Cleft Palate Craniofac J. Nov; 37(6):534-7.

[22] Winters JC, Hurwitz DJ. 1995 Presurgical orthopedics in the surgical management of unilateral cleft lip and palate. Plast Reconstr Surg. Apr;95(4):755-64; Masarei AG, Wade A, Mars M, Sommerlad BC, Sell D. 2007 A randomized control trial investigating the effect of presurgical orthopedics on feeding in infants with cleft lip and/or palate. Cleft Palate Craniofac J. Mar;44(2):182-93. Bongaarts CA, van't Hof MA, Prahl-Andersen B, Dirks IV, Kuijpers-Jagtman AM. 2006. Infant orthopedics has no effect on maxillary arch dimensions in the deciduous dentition of children with complete unilateral cleft lip and palate (Dutchcleft). Cleft Palate Craniofac J. Nov;43(6):665-72.

[23] Interview, Feb. 6, 2009 with R Hathaway, Medical Director, Craniofacial Center, Peyton Manning Children's Hospital, Indiana.

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Appendix: Actuarial Review of Massachusetts House Bill 4557, An Act Relative to Coverage for Cleft Palate and Cleft Lip

February 26, 2009

Actuarial Review of Massachusetts House Bill 4557, An Act Relative to the Treatment of Cleft Palate and Cleft Lip

Massachusetts Division of Health Care Finance and Policy

OLIVER WYMAN

Dianna K. Welch, FSA, MAAA

MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

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Introduction and Executive Summary

Introduction

Pursuant to M.G.L. Chapter 3, Section 38c, when reporting favorably on a mandated benefit bill, joint committees of the general court and the house and senate committees on ways and means are required to include a review and evaluation of the bill conducted by the Massachusetts Division of Health Care Finance and Policy (Division).

The Division has contracted with Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) to perform an actuarial review of House Bill 4557, An Act Relative to the Treatment of Cleft Palate and Cleft Lip. Our analysis includes only the impact on the fully-insured, commercial market and the Group Insurance Commission (GIC). This market includes fully-insured plans offered by commercial insurers, Health Maintenance Organizations (HMOs), and Blue Cross and Blue Shield Plans as well as the GIC. It does not include Medicare Supplement or Medicare Advantage plans, Division of Medical Assistance, Commonwealth Care plans, or individual products offered prior to July 1, 2007. While the mandate bill also applies to the Division of Medical Assistance, our analysis is only intended to reflect the impact on the fully-insured commercial market and the GIC, consistent with the requirements of M.G.L. Chapter 3, Section 38c.

We have prepared this report for the sole use of the Division for the purpose described above, and we do not authorize parties other than the Division to use the information contained herein. Any party other than the Division who chooses to use or rely on the information presented in this report does so without our authorization. This report is not intended to be a legal interpretation of the bill as written.

Executive Summary

House Bill 4557, An Act Relative to the Treatment of Cleft Palate and Cleft Lip would require insurers to provide coverage for treatment of cleft palate and cleft lip to covered children under the age of 18. The coverage would be required to include benefits for a wide range of treatments including medical, dental, surgical, and orthodontic treatments. The full text of the bill is in Appendix A.

We estimated the financial impact of the mandate on total and marginal costs. The total cost estimate reflects the full cost of the covered benefits mandated by the bill based on our assumptions of cost and utilization levels that would exist under a mandate. However, carriers are already providing many of the services that would be mandated. For those services there is no additional cost associated with the mandate relative to what they are paying currently. The marginal cost estimate reflects only the costs that are expected to be realized in addition to the costs of currently covered benefits for the affected population. Our estimates of the cost impacts of the mandated benefit on the fully-insured commercial market and the GIC for the five-year projection period from 2009 through 2013 are included in the tables below. Exhibit 1 shows the impacts on a per member per month (PMPM) basis, while Exhibit 2 shows the dollar impacts.

We estimate the total impact on premiums of the mandated benefits for the period from 2009 through 2013 to be approximately $24,778,000 to $35,317,000. On a marginal basis, we estimate that the mandate would increase premiums by $3,169,000 to $8,336,000 for the period from 2009 through 2013. The total premium cost estimates represent an increase in premium of 0.03% to 0.05%. The marginal cost estimates represent an increase in premium of 0.00% to 0.01%.

Exhibit 1

PMPM Claims and Premium due to House Bill 4557 Mandated Benefits

Total Cost						
		2009	2010	2011	2012	2013
Claims	Low	$0.12	$0.13	$0.13	$0.13	$0.14
	Middle	$0.13	$0.14	$0.14	$0.15	$0.15
	High	$0.15	$0.16	$0.17	$0.17	$0.18
Premium	Low	$0.14	$0.14	$0.14	$0.15	$0.15
	Middle	$0.15	$0.16	$0.16	$0.17	$0.18
	High	$0.19	$0.20	$0.20	$0.21	$0.22
Marginal Cost						
		2009	2010	2011	2012	2013
Claims	Low	$0.02	$0.02	$0.02	$0.02	$0.02
	Middle	$0.02	$0.02	$0.02	$0.02	$0.02
	High	$0.04	$0.04	$0.04	$0.04	$0.04
Premium	Low	$0.02	$0.02	$0.02	$0.02	$0.02
	Middle	$0.02	$0.03	$0.03	$0.03	$0.03
	High	$0.04	$0.05	$0.05	$0.05	$0.05

Exhibit 2

Claims and Premium due to House Bill 4557 Mandated Benefits

Estimate of Commercially Insured Population + GIC		2,868,000	2,868,000	2,868,000	2,868,000	2,868,000	
Total Cost (in $000's)		2009	2010	2011	2012	2013	2009 - 2013
Claims	Low	$4,234	$4,344	$4,457	$4,573	$4,692	$22,301
	Middle	$4,532	$4,695	$4,864	$5,039	$5,220	$24,350
	High	$5,193	$5,432	$5,682	$5,943	$6,216	$28,465
Premium	Low	$4,705	$4,827	$4,952	$5,081	$5,213	$24,778
	Middle	$5,239	$5,428	$5,623	$5,825	$6,035	$28,150
	High	$6,443	$6,739	$7,049	$7,373	$7,713	$35,317
Marginal Cost (in $000's)		2009	2010	2011	2012	2013	2009 - 2013
Claims	Low	$542	$556	$570	$585	$600	$2,852
	Middle	$729	$755	$782	$811	$840	$3,917
	High	$1,226	$1,282	$1,341	$1,403	$1,467	$6,718
Premium	Low	$602	$617	$633	$650	$667	$3,169
	Middle	$843	$873	$905	$937	$971	$4,528
	High	$1,521	$1,591	$1,664	$1,740	$1,820	$8,336

2

Analysis

Benefits

The benefit that this bill is intended to mandate is treatment for a wide range of services related to cleft palate and cleft lip for children under age 18. Many of these services are already covered by insurance carriers in Massachusetts. However, there are varying levels of coverage in the market, particularly as it relates to dental, orthodontic, and oral surgery benefits. Some carriers do not cover dental and orthodontic services under their medical plans even if the services are medically necessary for the treatment of cleft palate or cleft lip. Some do not cover certain expenses related to oral surgery if the need for the service is considered cosmetic in nature. This bill is intended to require coverage for all services related to the treatment of cleft palate and cleft lip that are certified by the physician as being medically necessary.

Process

The first step we took in estimating the impact of this bill was to understand the legislative intent of the bill. We had a conference call with Lisa Pellegrino, Health Policy Analyst, Office of State Representative Ron Mariano, Chairman, Joint Committee on Financial Services; Peri O'Connor, Administrative Aide to Representative Louis Kafka; as well as policy analysts and consultants for the Division. Through this call and subsequent communications, we were able to gain an understanding of the intent of the bill. The legislative intent is to require coverage of medically necessary dental and orthodontic procedures that are related to the treatment of cleft palate or cleft lip. Most carriers currently exclude these services from their covered benefits because their policies either exclude dental services entirely or cover only preventive dental care, even if the services are considered medically necessary. Our analysis estimates the impact of the intent of this bill and does not include a legal interpretation of the language of the bill.

Next we estimated the financial impact of the bill. This involved estimating the size of the affected population, the targeted population that will utilize the service, the cost of

treatment, and the administrative cost associated with the service. Additional detail explaining our analysis for each of these steps is provided in the sections that follow.

Affected Population

The population whose premiums will be affected by this mandate is the commercially insured population and the GIC. To estimate the size of this population we reviewed the 2007 financial statements of companies filing Health Annual Statements with commercial membership in Massachusetts. However, there are companies that insure commercial members in Massachusetts that do not file Health Annual Statements. We included an estimate of members for companies not filing Health Annual Statements in our total membership estimate. Next we made an adjustment for the increase in coverage that has occurred since 2007 as a result of the health care reform law that was passed by Massachusetts in 2006[1]. In December 2008, the Division issued a press release indicating that the percentage of Massachusetts residents who remain uninsured is 2.6%[2], down from previous estimates of 5-7% in 2007[3,4]. Using these estimates of the reduction in the percentage of residents that are uninsured, we estimated the increased number of insured residents. To estimate the number of fully-insured commercial members, we then subtracted the increased enrollment in subsidized insurance through Commonwealth Care from the total insured residents. Commonwealth Care enrollment was 162,726 as of December 2008[5]. Ultimately, we arrived at an estimated commercial insurance population of 2,574,000 as of the end of 2008. We estimated the size of the GIC to be 294,000[6]. Therefore, the estimated size of the affected population is 2,868,000.

Next we estimated the affected population as of 2009-2013 in order to perform our five-year projections. The U.S. Census Bureau has projected Massachusetts population to grow by 10.4% from 2000 to 2030[7]. This represents an average annual growth rate of 0.3%. However, the population age 65 or greater is projected to grow at an annual rate of 1.8%. This corresponds to essentially no growth in the under 65 age group. Because the

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[1] Massachusetts General Laws

http://www.mass.gov/legis/laws/seslaw06/sl060058.htm

[2] Division of Health Care Finance and Policy.

http://www.mass.gov/?pageID=eohhs2pressrelease&L=4&L0=Home&L1=Government&L2=Departments+and+Divisions&L3=Division+of+Health+Care+Finance+%26+Policy&sid=Eeohhs2&b=pressrelease&f=081218_health_insurance&csid=Eeohhs2

[3] U.S. Census Bureau.

http://pubdb3.census.gov/macro/032008/health/h06_000.htm

[4] Kaiser Daily Health Policy Report.

http://www.kaisernetwork.org/daily_reports/health2008dr.cfm?DR_ID=52498

[5] Commonwealth Connector, Connector Summary Report from Connector Board Meeting January 15, 2009.

[6] Commonwealth of Massachusetts Group Insurance Commission

http://www.mass.gov/gic/ Accessed January 27, 2009.

[7] U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.

affected population is predominantly under age 65, we are projecting no change in the affected population over the five-year projection period.

Targeted Population

The targeted population that would utilize the benefits mandated by House Bill 4557 is children with cleft palate or cleft lip. For this study we obtained permission from six of the carriers that participated in the study that the Massachusetts Division of Insurance conducted, Trends in Health Claims for Fully-Insured, Health Maintenance Organizations in Massachusetts, 2002-2006[8] (Trend Study) to use the data provided for that study to support this mandated benefit study. The list of the six participating carriers is in Appendix B. We reviewed these carriers' claims data from 2006 to determine the percentage of covered children that had any claims with a primary or secondary diagnosis of Cleft Palate, Cleft Lip, or Cleft Palate and Cleft Lip. We found that approximately 0.13% of covered children had claims with these diagnoses.

We also did a search for published prevalence data as a reasonableness check on the prevalence that we were seeing within the Massachusetts data. According to the Massachusetts Birth Defects Monitoring Program, approximately 0.13% of births in 2002 -2003 had cleft palate or cleft lip[9]. This is significantly lower than the national rate of 0.17% of births.

We used the prevalence from the carrier data of 0.13% as the basis for our low and middle estimates. For our high estimate we used the nationwide prevalence rate of 0.17%.

Cost of Treatment

The next step of our analysis was to estimate the cost of treating cleft palate or cleft lip. We sent a survey to the six carriers shown in Appendix B to understand their existing levels of coverage for the mandated benefits. All of the surveyed carriers currently provide coverage for medical procedures including surgery and other services to treat cleft palate and cleft lip. We reviewed the claims data of the carriers to estimate the costs of medical claims that are already being covered by all carriers. We observed an average medical claims PMPM of $0.09.

Next we trended the claims cost from 2006 to 2009. We trended the claims using an annual cost per service trend of 3.6% for our middle estimate. This trend is our estimate of the average five-year cost per service trend for all medical services from the Trend Study. We do not believe that prevalence of cleft palate or cleft lip has increased since 2006. In addition, we are not aware that treatment protocols have changed that would

[8] Oliver Wyman, Report to the Health Care Access Bureau of the Massachusetts Division of Insurance, Trends in Health Claims for Fully-Insured, Health Maintenance Organizations in Massachusetts, 2002-2006

[9] Massachusetts Birth Defect Monitoring Program, Massachusetts Birth Defects 2002-2003, January 2008.

http://www.mass.gov/Eeohhs2/docs/dph/birth_defects/surveill_report_02_03.pdf

lead to any change in utilization for those with cleft palate or cleft lip. Therefore, we used only a cost per service trend, and not a total PMPM trend which includes the impact of cost per service and utilization changes. We trended the claims using annual cost per service trends of 2.6% and 4.6% for our low and high estimates, respectively. Applying these trends resulted in estimated medical claims PMPMs of $0.10 to $0.11 as of 2009.

As noted above, all of the carriers that we surveyed already provide coverage for medical surgeries and other medical services related to cleft palate and cleft lip. We are assuming that there will be no change in these medical-related services that are being provided as a result of the increased coverage for dental and orthodontic benefits. The treatment protocols for cleft palate and cleft lip require these dental and orthodontic services to prepare the patient for additional medical procedures. Therefore, if dental and orthodontic services are not being performed due to a lack of coverage, then theoretically there could be medical procedures that are not being performed as a result. However, it is believed that families are finding ways to pay for the dental and orthodontic procedures that are not currently covered. This could be done by paying out of pocket, receiving some coverage from dental insurance plans (though these plans often have an annual maximum that would limit coverage), or through charitable organizations. Because it is believed that the vast majority of patients are not foregoing the dental and orthodontic care, we do not believe there will be any material impact on the existing medical coverage. The mandate represents a shift in cost of dental and orthodontic services from consumers, dental insurers, and charitable organizations to the medical insurance carriers. There is no data available to suggest what portion of the cost is coming from each of these sources today.

Next we estimated the cost of the dental and orthodontic services that are often not covered by carriers. For this part of the analysis we worked closely with a team of experts from Children's Hospital Boston. From our discussions with the team we were able to gain an understanding of the dental and orthodontic treatments that are included in their treatment protocol that are not typically covered by insurance carriers. There are also oral surgery costs that are frequently excluded from coverage. While the oral surgeries themselves are typically covered, certain procedures associated with the oral surgeries may not be. Children's Hospital also provided us with information on the percentage of patients that receive the various treatments and ranges of billed charges that would be applicable to those services at Children's Hospital. From this information and other industry data, we estimated the average cost that would be allowed by insurance carriers for services not typically covered today if the mandate were passed. We estimated that the lifetime treatment cost for these services is approximately $18,500 in 2009 dollars. For our low, middle, and high estimates we assumed that the range would be within 20% of this estimate. The range incorporates variability that could be caused by using providers other than Children's Hospital, and by varying levels of member cost sharing. Because Children's Hospital treats a large volume of patients in Massachusetts, we have used our estimate that is based largely on their information as our middle estimate.

Administrative Expense and Profit

Increases in benefits also result in increases in administrative expenses and contributions to surplus or profit. In 2008, Oliver Wyman performed an expense study for the Division of Insurance[10] (Expense Study). This was a five-year study that analyzed expense ratios and loss ratios of the Commonwealth's HMOs and Blue Cross and Blue Shield Plans. The study found that the average loss ratio in Massachusetts for 2002 through 2007 was 86.5%, meaning 13.5% of premium is available for retention items, including administrative expense and contribution to surplus. We used this 13.5% retention ratio to estimate the amount that would be included for retention in premium increases for the mandated benefits. The low and high ends of the ranges were based on the lowest and highest five-year average retention percentages of the health plans included in the analysis.

Marginal Costs

Using the carrier data and assumptions for those carriers that were not surveyed, we have estimated the baseline costs in the affected population based on current coverage levels, utilization levels, and cost per service. The difference between the total expected cost under the mandate and the baseline costs produce our marginal cost estimates.

Results

The following Exhibit shows the results of our analysis.

Exhibit 3

Development of Total Cost and Marginal Cost Estimates of House Bill 4557

Total Cost Estimates		Low	Middle	High
Claims PMPM provided 2006 for medical services	(A)	$0.09	$0.09	$0.09
Claims trend	(B)	2.6%	3.6%	4.6%
Estimated medical claims PMPM provided 2009	(C) = A*(1+B)^3	$0.10	$0.10	$0.11
Prevalence <18	(D)	0.13%	0.13%	0.17%
% of mems <18	(E)	25.7%	25.7%	25.7%
Lifetime cost of dental/orthodontic/oral surgery services often not covered	(F)	$14,800	$18,500	$22,200
Average annual cost of dental/orthodontic/oral surgery services	(G) = F/18	$822	$1,028	$1,233
Dental/orthodontic/oral surgery 2009 claims PMPM	(H) = E*D*G/12	$0.02	$0.03	$0.04
2009 Claims cost PMPM	**(I) = C+H**	**$0.12**	**$0.13**	**$0.15**
Admin & contribution to surplus ratio	(J)	10.0%	13.5%	19.4%
Premium PMPM (with Admin)	**(K) = I/(1-J)**	**$0.14**	**$0.15**	**$0.19**
Baseline Costs				
Baseline Claims Cost PMPM	**(L)**	**$0.11**	**$0.11**	**$0.12**
Baseline Premium PMPM	**(M)**	**$0.12**	**$0.13**	**$0.14**
Marginal Cost Estimates				
Marginal Claims Cost PMPM	**(N) = I-L**	**$0.02**	**$0.02**	**$0.04**
Marginal Premium Increase PMPM	**(O) = K-M**	**$0.02**	**$0.02**	**$0.04**

[10] Oliver Wyman, Analysis of Administrative Expenses for Health Insurance Companies in Massachusetts, September 2008.

The total premium cost estimates represent an increase in premium of 0.03% to 0.05% based on an average annual premium per member of roughly $4,800[11]. The marginal cost estimates represent an increase in premium of 0.00% to 0.01%.

[11] Average commercial group premium per member is from 2007 financial statements of companies filing health statements, trended to 2009 at an annual rate of 7%.

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Five-Year Projection

The following two exhibits show the results of our five-year projection. Exhibit 4 shows the impact of the mandate on a PMPM basis. Premiums associated with the covered mandated benefits are estimated to range from $0.14 PMPM to $0.19 PMPM in 2009. On a marginal basis we would expect premiums and claims to increase by $0.02 to $0.04 PMPM in 2009. Exhibit 5 shows the total impact on the fully-insured commercial market and the GIC.

Exhibit 4

PMPM Claims and Premium due to House Bill 4557 Mandated Benefits

Total Cost						
		2009	2010	2011	2012	2013
Claims	Low	$0.12	$0.13	$0.13	$0.13	$0.14
	Middle	$0.13	$0.14	$0.14	$0.15	$0.15
	High	$0.15	$0.16	$0.17	$0.17	$0.18
Premium	Low	$0.14	$0.14	$0.14	$0.15	$0.15
	Middle	$0.15	$0.16	$0.16	$0.17	$0.18
	High	$0.19	$0.20	$0.20	$0.21	$0.22
Marginal Cost						
		2009	2010	2011	2012	2013
Claims	Low	$0.02	$0.02	$0.02	$0.02	$0.02
	Middle	$0.02	$0.02	$0.02	$0.02	$0.02
	High	$0.04	$0.04	$0.04	$0.04	$0.04
Premium	Low	$0.02	$0.02	$0.02	$0.02	$0.02
	Middle	$0.02	$0.03	$0.03	$0.03	$0.03
	High	$0.04	$0.05	$0.05	$0.05	$0.05

Exhibit 5

Claims and Premium due to House Bill 4557 Mandated Benefits

Estimate of Commercially Insured Population + GIC		2,868,000	2,868,000	2,868,000	2,868,000	2,868,000	
Total Cost (in $000's)		2009	2010	2011	2012	2013	2009 - 2013
Claims	Low	$4,234	$4,344	$4,457	$4,573	$4,692	$22,301
	Middle	$4,532	$4,695	$4,864	$5,039	$5,220	$24,350
	High	$5,193	$5,432	$5,682	$5,943	$6,216	$28,465
Premium	Low	$4,705	$4,827	$4,952	$5,081	$5,213	$24,778
	Middle	$5,239	$5,428	$5,623	$5,825	$6,035	$28,150
	High	$6,443	$6,739	$7,049	$7,373	$7,713	$35,317
Marginal Cost (in $000's)		2009	2010	2011	2012	2013	2009 - 2013
Claims	Low	$542	$556	$570	$585	$600	$2,852
	Middle	$729	$755	$782	$811	$840	$3,917
	High	$1,226	$1,282	$1,341	$1,403	$1,467	$6,718
Premium	Low	$602	$617	$633	$650	$667	$3,169
	Middle	$843	$873	$905	$937	$971	$4,528
	High	$1,521	$1,591	$1,664	$1,740	$1,820	$8,336

We trended claims and premiums forward at the cost per service trends shown in Exhibit 3. By using the same trend for claims and premium, we are assuming that the loss ratio remains constant. Over the five-year period covered by the Expense Study, the Massachusetts Total loss ratio fluctuated from year to year, but remained within 0.6% of the five-year average.

We estimate the total impact on premiums of the mandated benefits for the period from 2009 through 2013 to be approximately $24,778,000 to $35,317,000. On a marginal basis, we estimate that the mandate would increase premiums by $3,169,000 to $8,336,000 for the period from 2009 through 2013.

Appendix A

HOUSE..... No. 4557

The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES, February 27, 2008.

The committee on Financial Services, to whom was referred the petition (accompanied by bill, House, No. 4283) of Louis L. Kafka that health insurance policies be required to provide coverage for the treatment of children with cleft lips and palates, reports recommending that the accompanying bill (House, No. 4557) ought to pass.

For the committee,

RONALD MARIANO.

The Commonwealth of Massachusetts

In the Year Two Thousand and Eight.

AN ACT RELATIVE TO THE TREATMENT OF CLEFT PALATE AND CLEFT LIP.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Chapter 32A of the General Laws, as appearing in the 2006 Official Edition, is hereby amended by adding the following section:—

Section 17J. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 2. Chapter 118E is hereby amended by adding the following section:
Section 61. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 3. Section 108 of Chapter 175 is hereby amended by adding the following section:—

Section K. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to

insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 4. Section 110 of Chapter 175 is hereby amended by adding the following section:—
Section N. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 5. Chapter 176A of the General Laws is hereby amended by adding the following section:—

Section 8CC. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 6. Chapter 176B of the General Laws is hereby amended by adding the following section:—
Section 4CC. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are

prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 7. Chapter 176G of the General Laws is hereby amended by adding the following section:—

Section 4U. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

SECTION 8. Chapter 176I of the General Laws is hereby amended by adding the following section:—

Section 12. Notwithstanding any general or special law or rule or regulation to the contrary, a health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include benefits for medical, dental, oral and facial surgery, surgical management and follow-up care by oral and plastic surgeons, orthodontic treatment and management, preventative and restorative dentistry to insure good health and adequate dental structures for orthodontic treatment or prosthetic management therapy, speech therapy, audiology, and nutrition services, only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to the treatment of the cleft lip or palate. The coverage required by this section is subject to the terms and conditions applicable to other benefits. Payment for dental or orthodontic treatment not related to the management of the congenital condition of cleft lip and cleft palate shall not be covered under this provision.

Appendix B

List of Carriers That Provided Permission to Use Massachusetts Division of Insurance Trend Study Data and Provided Survey Responses

Blue Cross and Blue Shield of Massachusetts, Inc. and Blue Cross and Blue Shield of Massachusetts HMO Blue, Inc.

Fallon Community Health Plan

Health New England, Inc.

Harvard Pilgrim Health Care, Inc.

Neighborhood Health Plan

Tufts Associated Health Maintenance Organization, Inc.

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