

AK LEGISLATURE FINANCE COMMITTEES FILES 2007-2008 3355

Unlike the Ninth Circuit case cited above, the Rhode Island case would not be binding precedent on a federal district court in Alaska. Neither the Ninth Circuit case nor the Rhode Island case would be binding on an Alaska state court, but a state court might regard such authorities as persuasive. The Rhode Island decision certainly demonstrates that the tonnage clause is not a dead letter, and in light of the Rhode Island decision, caution would certainly be in order in imposing any fee or tax exclusively on vessels, unless the proceeds were used to provide services to vessels.

Other Potential Constitutional Issues

A number of other constitutional provisions might be raised in an attack on a tax on passengers traveling on commercial passenger vessels.

If a tax can survive scrutiny under the second prong of the Complete Auto test and is at least minimally rational, it can probably survive a due process challenge as well. See Keane v. Local Boundary Commission, 893 P.2d 1239, 1248 (Alaska 1995) ("As long as services are available, the issue of usage by the taxpayer is irrelevant."); Katmailand, Inc. v. Lake and Peninsula Borough, 904 P.2d 397, 402 (Alaska 1995).

Equal protection is another potential issue. Alaska uses a sliding scale equal protection test, but the interests involved in taxation fall at the low end of the scale and are reviewed under "relaxed scrutiny." *Id.* at 401, n. 6. The federal equal protection clause requires only that the tax be "rationally related to a legitimate governmental interest." *Id.* at 401. As the Alaska Supreme Court observed, "[t]axes are rarely found to be without a rational basis." *Id.* at 400.

Other potential arguments might be based on the foreign commerce clause or the privileges and immunities clause of the federal constitution.

Conclusion

A head tax on cruise ship passengers might encounter challenges based on several provisions of the United States constitution, particularly the commerce clause and tonnage clauses.

LEGAL SERVICES

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MEMORANDUM

March 22, 2002

SUBJECT: Cruise Ship Head Tax; SB 290
TO: Senator John Cowdery
Attn: Don Smith
FROM: Kathryn L. Kurtz *KLK*
Legislative Counsel

An excise tax on passengers traveling on commercial passenger vessels might engender challenges based on the commerce and tonnage clauses of the Constitution of the United States.

Commerce Clause

When the framers wrote the federal constitution, they were very concerned about removing barriers to free trade between the states. This concern was addressed in the Commerce Clause in Article I, section 8 of the Constitution of the United States. The commerce clause expressly permits Congress to regulate commerce among the several states. It has also been interpreted to include a "negative command, known as the dormant Commerce Clause, prohibiting certain state taxation even where Congress has failed to legislate on the subject." Oklahoma Tax Commission v. Jefferson Lines, Inc., 514 U.S. 175, 179 (1995).

The Supreme Court has developed a four-part test for determining the validity of a tax under the federal commerce clause:

- (1) whether the activity taxed has a sufficient nexus with the taxing state;
- (2) whether the tax is fairly related to benefits provided by the state to the taxpayer;
- (3) whether the tax is fairly apportioned to local activities; and
- (4) whether it discriminates against interstate commerce.

Sjong v. State Department of Revenue, 622 P.2d 967, 973 (Alaska 1981), citing Complete Auto Transit, Inc., v. Brady, 430 U.S. 274, 279 (1977).¹

¹ Although this is an older case, the four-part test it describes is still good law. See for example Oklahoma Tax Commission v. Jefferson Lines, Inc., 514 U.S. 175, 183 (1995). Sometimes courts first analyze whether a law treats in-state and out-of-state interest

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The first prong of the Complete Auto deals with "nexus," or the quantity and quality of connections between the taxing state and the activity being taxed. The many interactions between cruise ships and coastal communities in Alaska would be found sufficient to satisfy the first prong of the Complete Auto test. Cruise ships and ferries provide overnight accommodations in part to enable passengers to enjoy the goods, services, and attractions available on shore in Alaskan communities. Cruise ships and ferries dock in Alaska ports, purchase goods and services from local vendors, and cruise ships sell on-shore tours and other services to disembarking passengers. Other state taxes involving vessels have easily met this prong of the Complete Auto test by virtue of less extensive contacts with shore. See Siong v. State, Department of Revenue, 622 P.2d 967, 970-971 (Alaska 1981); Hartley Marine v. Mierke, 474 S.E.2d 599, 608-609 (W. Va. 1996).

The second prong, requiring a fair relationship to benefits provided by the state to the taxpayer, is also easily met. This relationship need not be especially close. According to the United States Supreme Court,

If the event is taxable, the proceeds from the tax may ordinarily be used for purposes unrelated to the taxable event. ... The bus terminal may not catch fire during the sale, and no robbery may be foiled while the buyer is getting his ticket, but police and fire protection, along with the usual and usually forgotten advantages conferred by the State's maintenance of a civilized society, are justifications enough for the imposition of a tax.

Oklahoma Tax Commission v. Jefferson Lines, 514 U.S. at 199-200 (upholding an Oklahoma sales tax on the full price of bus tickets, including tickets for travel between states).² See also Hartley Marine v. Mierke, 474 S.E.2d at 610 ("There simply is no requirement that the tax imposed result in a direct and attributable benefit to a taxpayer.") Cruise ships and disembarking ferry and cruise ship passengers use many services provided by state and local government. For purposes of the commerce clause, it is not necessary that each vessel or passenger actually need or use each service in order to justify the tax.

The apportionment prong of the Complete Auto test is intended to ensure that "each State taxes only its fair share of an interstate transaction." *Id.* at 184, quoting Goldberg v. Sweet, 488 U.S. 252 (1989). Although there may be some question about how to

differently, and then move to the Complete Auto test. See Barber v. Hawaii, 42 F.3d 1185, 1194 (9th Cir. 1994); Hartley Marine Corporation v. Mierke, 474 S.E.2d 599, 607 (W.Va. 1996).

² Similarly, to satisfy the requirements of due process, the relationship does not have to be particularly close--"[a]s long as the services are available, the issue of usage by the taxpayers is irrelevant." Keane v. Local Boundary Commission, 893 P.2d 1239, 1248 (Alaska 1995).

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apportion nights spent in transit between Canada and Alaska, assuming there is an equivalent Canadian tax, there should be no apportionment problem if the tax is calculated based on nights spent on Alaska waters.

The final commerce clause test element is whether the tax discriminates against interstate commerce. This prong of the Complete Auto test, according to the Alaska Supreme Court, means that a state cannot impose a tax which discriminates against interstate commerce by providing a direct commercial advantage to local businesses relative to interstate business. Sjong v. Department of Revenue, 622 P.2d 967, 973 (Alaska 1981).

The Tonnage Clause

The tonnage clause is a relative of the commerce clause; it too is concerned with ensuring the free flow of commerce between states. It prohibits a state from laying "any Duty of Tonnage" without the consent of Congress. The term "tonnage" originally referred to the internal capacity of a vessel. Clyde Mallory Lines v. Alabama ex rel State Docks, 296 U.S. 261, 265 (1935). However, the clause has been interpreted more expansively to include "all taxes and duties regardless of their name or form, and even though not measured by the tonnage of the vessel, which operate to impose a charge for the privilege of entering, trading in, or lying in a port." *Id.* The clause prohibits "reliance on tonnage duties to raise general revenues, to regulate trade, or to charge for the privilege of entering, lying in, or trading in a port." New Orleans S.S. v. Plaquemines Port, Harbor and Terminal District, 874 F.2d 1018, 1023 (5th Cir. 1989).

The clause permits states to charge for services rendered to a vessel, such as pilotage, wharfage, use of locks on a navigable river, or policing of a harbor, Clyde Mallory Lines, 296 U.S. at 265, or for ensuring the availability of a service, such as fire fighting, even though not every vessel will actually need the service. Plaquemines, 874 F.2d at 1023.

The first question to ask in a tonnage clause analysis is whether the tax in question fits into the tonnage clause framework--whether it might reasonably be construed as a charge for the privilege of entering, trading in, or lying in a port.

West Virginia considered this issue in Hartley Marine Corporation v. Mierke, 474 S.E.2d 599 (W.Va. 1996). The statute challenged in that case taxed the use or consumption by "motor carriers"--including buses, trucks, and aircraft as well as barges and watercraft--of fuel purchased outside the state. *Id.* at 672. The court held:

Appellants urge this Court to view the use tax at issue as a charge for navigation of the rivers in violation of the Duty of Tonnage Clause. If this use tax were solely imposed for fuel consumption on the waters of this state, Appellants' arguments would be more convincing. The use tax at issue, however, is not a prohibited toll on the use of this state's navigable waterways, but an excise tax on the use of fuel which is imposed on all motor carriers operating within this state, including, buses, trucks, trains, and aircraft.

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Id. at 612. Because the tax did not fall exclusively on users of the state's waterways, the court did not see it as a tonnage tax.

The tax imposed in West Virginia affected vessels and buses and aircraft, as well as commercial passenger vessels. A tax dealing exclusively with commercial passenger vessels may be more vulnerable to a tonnage clause argument.

Hawaii imposes fees for anchoring and mooring in state harbors. In Barber v. Hawaii, 42 F.3d 1185 (9th Cir. 1994), the plaintiffs argued that mooring and anchorage fees collected by the state were a duty on tonnage that violated the federal tonnage clause. The plaintiffs conceded that under the Clyde Mallory case, a state was permitted to charge reasonable fees for services rendered. They apparently also conceded that provision of restroom facilities, parking, trash disposal and security services would be sufficient to satisfy the requirements of the Clyde Mallory case. The plaintiffs then tried to argue that because the services provided were open to the public and not provided specifically for those paying the fees, that the state was effectively not providing those services. The court rejected this argument finding that Hawaii in fact provided services in exchange for the mooring and anchorage fees, and that the fees were not a duty on tonnage. Barber v. Hawaii, 42 F.3d at 1196.

The plaintiffs in Barber v. Hawaii apparently did not argue the tonnage clause issue very well, and the court's discussion of the clause is cursory. However, the case upheld the fees in question. In contrast, a recent Rhode Island case held that a registration fee on all boats operated in Rhode Island waters for more than 90 days was an unconstitutional tonnage tax, because the revenues from the fee would not necessarily be used for services benefiting boaters. State v. Turnbaugh, 705 A.2d 530 (R.I. 1997).

The Rhode Island statute provided that the proceeds from the registration fee, subject to approval of the General Assembly, should be allocated to fund expenses of the department of environmental management, harbor maintenance, boating safety and other boating related programs. *Id.* at 532. The court wrote:

[I]t should be noted that any funds collected under the provisions of this chapter were required to be allocated, distributed, and used subject to the approval of the General Assembly. Thus this alleged restricted receipt account was entirely subject to being used as a general-revenue measure and not merely for the purpose of providing services to boats, boaters, and navigational improvements.

The court rejected the state's argument that the registration fee was merely a property tax, and instead concluded that it was "a classic form of tonnage tax specifically prohibited by the Constitution of the United States." *Id.* at 533.

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Unlike the Ninth Circuit case cited above, the Rhode Island case would not be binding precedent on a federal district court in Alaska. Neither the Ninth Circuit case nor the Rhode Island case would be binding on an Alaska state court, but a state court might regard such authorities as persuasive. The Rhode Island decision certainly demonstrates that the tonnage clause is not a dead letter, and in light of the Rhode Island decision, caution would certainly be in order in imposing any fee or tax on exclusively on vessels, unless the proceeds were used to provide services to vessels.

Other Potential Constitutional Issues

A number of other constitutional provisions might be raised in an attack on a tax on passengers traveling on commercial passenger vessels.

If a tax can survive scrutiny under the second prong of the Complete Auto test and is at least minimally rational, it can probably survive a due process challenge as well. See Keane v. Local Boundary Commission, 893 P.2d 1239, 1248 (Alaska 1995) ("As long as services are available, the issue of usage by the taxpayer is irrelevant."); Katmailand, Inc. v. Lake and Peninsula Borough, 904 P.2d 397, 402 (Alaska 1995).

Equal protection is another potential issue. Alaska uses a sliding scale equal protection test, but the interests involved in taxation fall at the low end of the scale and are reviewed under "relaxed scrutiny." *Id.* at 401, n. 6. The federal equal protection clause requires only that the tax be "rationally related to a legitimate governmental interest." *Id.* at 401. As the Alaska Supreme Court observed, "[t]axes are rarely found to be without a rational basis." *Id.* at 400.

Other potential arguments might be based on the foreign commerce clause or the privileges and immunities clause of the federal constitution.

Conclusion

A head tax on cruise ship passengers might encounter challenges based on several provisions of the United States constitution, particularly the commerce clause and tonnage clauses.

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HOUSE BILL NO. 207
IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-THIRD LEGISLATURE - FIRST SESSION

BY REPRESENTATIVE GATTO

Introduced: 3/24/03
Referred:

A BILL
FOR AN ACT ENTITLED

1 "An Act relating to taxes regarding certain commercial passenger vessels operating in
2 the state; and providing for an effective date."

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

4 * Section 1. AS 43 is amended by adding a new chapter to read:

5 Chapter 52. Excise Tax on Passengers Traveling Aboard
6 a Commercial Passenger Vessel.

7 Sec. 43.52.010. Levy of excise tax on passengers traveling aboard a
8 commercial passenger vessel. There is imposed an excise tax on passengers
9 traveling in the marine waters of the state aboard a commercial passenger vessel that
10 provides overnight accommodations.

11 Sec. 43.52.020. Rate of tax. The tax imposed by this chapter is levied at a
12 rate of \$100 a passenger a voyage.

13 Sec. 43.52.030. Liability for payment of tax. (a) A passenger traveling in
14 the marine waters of the state aboard a commercial passenger vessel that provides

1 United States, or a foreign government; or

2 (C) vessel licensed under AS 16.05.490 and used in charter
3 service for the recreational taking of fish and shellfish;

4 (2) "marine waters of the state" means the marine bays, sounds, rivers,
5 inlets, straits, passages, canals, Pacific Ocean, Gulf of Alaska, Bering Sea, and Arctic
6 Ocean within the territorial limits of the state, and all other bodies of marine water that
7 are wholly or partially within the state or are under the jurisdiction of the state;

8 (3) "passenger" means a person with whom a common carrier has
9 contracted for carriage from one place to another.

10 * Sec. 2. The uncodified law of the State of Alaska is amended by adding a new section to
11 read:

12 TRANSITION: REGULATIONS. Notwithstanding sec. 4 of this Act, the
13 Department of Revenue may proceed to adopt regulations to implement sec. 1 of this Act.
14 The regulations take effect under AS 44.62 (Administrative Procedure Act), but not before the
15 effective date of sec. 1 of this Act.

16 * Sec. 3. Section 2 of this Act takes effect immediately.

17 * Sec. 4. Section 1 of this Act takes effect January 1, 2004.

01/98/1595 00:04 907-463-5128

SHAUB & ASSOCIATES

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LEGAL SERVICES

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MEMORANDUM

May 5, 2000

SUBJECT: Cruise Ship Head Tax

TO: Representative Ramona Barnes

FROM: Pamela Finley 
Revisor of Statutes.

You have asked whether there are legal problems with adding a cruise ship head tax like that in CSSB 308(FIN) to HB 3002.

Single Subject

HB 3002 addresses public employee compensation and benefits. The only conceivable link between HB 3002 and a cruise ship head tax would be "public finance," but this may be too broad to be upheld. See *Harbor v. Dukmejian*, 742 P.2d 1290 (Calif. 1987). Of course, the Senate could decide to introduce and pass the "head tax" bill as separate legislation.

Constitutional Issues

The tax in CSSB 308(FIN) may be subject to constitutional challenges. In particular, I think it might engender challenges based on the commerce and tonnage clauses of the Constitution of the United States.

Commerce Clause

When the framers wrote the federal constitution, they were very concerned about removing barriers to free trade between the states. This concern was addressed in the Commerce Clause in Article I, section 8 of the Constitution of the United States. The commerce clause expressly permits Congress to regulate commerce among the several states. It has also been interpreted to include a "negative command, known as the dormant commerce Clause, prohibiting certain state taxation even where Congress has failed to legislate on the subject." *Oklahoma Tax Commission v. Jefferson Lines, Inc.*, 514 U.S. 175, 179. (1995).

The Supreme Court has developed a four-part test for determining the validity of a tax under the federal commerce clause:

- (1) whether the activity taxed has a sufficient nexus with the taxing state;
- (2) whether the tax is fairly related to benefits provided by the state to the taxpayer;
- (3) whether the tax is fairly apportioned to local activities; and
- (4) whether it discriminates against interstate commerce.

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Sjong v. State Department of Revenue, 622 P.2d 967, 973 (Alaska 1981), citing Complete Auto Transit, Inc., v. Brady, 430 U.S. 274, 279 (1977).¹⁷

The first prong of the Complete Auto deals with "nexus," or the quantity and quality of connections between the taxing state and the activity being taxed. The activity taxed by a bed tax would be either the provision of accommodations, or the privilege of renting or using accommodations, depending on how the tax was structured. In either case, the many interactions between cruise ships and coastal communities in Alaska would be sufficient to satisfy the first prong of the Complete Auto test. Cruise ships and ferries provide overnight accommodations in part to enable passengers to enjoy the goods, services, and attractions available on shore in Alaskan communities. Cruise ships and ferries dock in Alaska ports, purchase goods and services from local vendors, and cruise ships sell on-shore tours and other services to disembarking passengers. Other state taxes involving vessels have easily met this prong of the Complete Auto test by virtue of less extensive contacts with shore. See Sjong v. State Department of Revenue, 622 P.2d 967, 970-971 (Alaska 1981); Hartley Marine v. Mierke, 474 S.E.2d 599, 608-609 (W. Va. 1996).

The second prong, requiring a fair relationship to benefits provided by the state to the taxpayer, is also easily met. This relationship need not be especially close. According to the United States Supreme Court,

If the event is taxable, the proceeds from the tax may ordinarily be used for purposes unrelated to the taxable event. ... The bus terminal may not catch fire during the sale, and no robbery may be foiled while the buyer is getting his ticket, but police and fire protection, along with the usual and usually forgotten advantages conferred by the State's maintenance of a civilized society, are justifications enough for the imposition of a tax.

Oklahoma Tax Commission v. Jefferson Lines, 514 U.S. at 199-200 (upholding an Oklahoma sales tax on the full price of bus tickets, including tickets for travel between states).¹⁸ See also Hartley Marine v. Mierke, 474 S.E.2d at 610 ("There simply is no requirement that the tax imposed result in a direct and attributable benefit to a taxpayer.")

¹⁷ Although this is an older case, the four-part test it describes is still good law. See for example Oklahoma Tax Commission v. Jefferson Lines, Inc., 514 U.S. 175, 183 (1995). Sometimes courts first analyze whether a law treats in-state and out-of-state interests differently, and then moves to the Complete Auto test. See Barber v. Hawaii, 42 F.3d 1185, 1194 (9th Cir. 1994); Hartley Marine Corporation v. Mierke, 474 S.E.2d 599, 607 (W. Va. 1996).

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Cruise ships and disembarking ferry and cruise ship passengers use many services provided by state and local government. For purposes of the commerce clause, it is not necessary that each vessel or passenger actually need or use each service in order to justify the tax.

The apportionment prong of the Complete Auto test is intended to ensure that "each State taxes only its fair share of an interstate transaction." *Id.* at 184, quoting Goldberg v. Sweet, 488 U.S. 252 (1989). Although there may be some question about how to apportion nights spent in transit between Canada and Alaska, assuming there is an equivalent Canadian bed tax, there should be no apportionment problem if the tax is calculated based on nights spent on Alaska waters.

The final commerce clause test element is whether the tax discriminates against interstate commerce. This prong of the Complete Auto test, according to the Alaska Supreme Court, means that a state cannot impose a tax which discriminates against interstate commerce by providing a direct commercial advantage to local businesses relative to interstate business. Sjong v. Department of Revenue, 622 P.2d 967, 973 (Alaska 1981). The coverage of the proposed tax (which does not affect non-commercial vessels, or vessels with fewer than 50 berths) is very similar to that of Juneau's cruise ship head tax ordinance. John Corso, the City Attorney for the City and Borough, has expressed concern that the cruise industry will challenge the city's ordinance based on this prong of the Complete Auto test. Memo from John R. Corso to the Mayor and Assembly, dated July 22, 1999. Mr. Corso opined that the Juneau head tax "would have a much better chance of surviving a discrimination claim" without those exemptions. *Id.*, page 4. That point is worth considering in regards to the proposed tax.

The Tonnage Clause

The tonnage clause is a relative of the commerce clause; it too is concerned with ensuring the free flow of commerce between states. It prohibits a state from laying "any Duty of Tonnage" without the consent of Congress. The term "tonnage" originally referred to the internal capacity of a vessel. Clyde Mallory Lines v. Alabama ex rel State Docks, 296 U.S. 261, 265 (1935). However, the clause has been interpreted more expansively to include "all taxes and duties regardless of their name or form, and even though not measured by the tonnage of the vessel, which operate to impose a charge for the privilege of entering, trading in, or lying in a port." *Id.* The clause prohibits "reliance on tonnage duties to raise general revenues, to regulate trade, or to charge for the privilege of entering, lying in, or trading in a port." New Orleans S.S. v. Plaquemines Port, Harbor and Terminal District, 874 F.2d 1018, 1023 (5th Cir. 1989).

The clause permits states to charge for services rendered to a vessel, such as pilotage, wharfage, use of locks on a navigable river, or policing of a harbor, Clyde Mallory Lines, 296 U.S. at 265, or for ensuring the availability of a service, such as fire fighting, even though not every vessel will actually need the service. Plaquemines, 874 F.2d at 1023.

Representative Ramona Barnes
May 5, 2000
Page 4

The first question to ask in a tonnage clause analysis is whether the tax in question fits into the tonnage clause framework—whether it might reasonably be construed as a charge for the privilege of entering, trading in, or lying in a port.

West Virginia recently considered this issue in Hartley Marine Corporation v. Mierke, 474 S.E.2d 599 (W. Va. 1996). The statute challenged in that case taxed the use or consumption by "motor carriers"—including buses, trucks, and aircraft as well as barges and watercraft—of fuel purchased outside the state. *Id.* at 672. The court held:

Appellants urge this Court to view the use tax at issue as a charge for navigation of the rivers in violation of the Duty of Tonnage Clause. If this use tax were solely imposed for fuel consumption on the waters of this state, Appellants' arguments would be more convincing. The use tax at issue, however, is not a prohibited toll on the use of this state's navigable waterways, but an excise tax on the use of fuel which is imposed on all motor carriers operating within this state, including, buses, trucks, trains, and aircraft.

Id. at 612. Because the tax did not fall exclusively on users of the state's waterway, the court did not see it as a tonnage tax.

The tax imposed in CSSB 308(FIN) is distinguishable from the tax in the West Virginia case, however, because it affects commercial passenger vessels exclusively (not vessels and buses and aircraft, like the West Virginia tax). That makes it more likely that a court will entertain a tonnage clause argument.

Hawaii imposes fees for anchoring and mooring in state harbors. In Barber v. Hawaii, 42 F.3d 1185 (9th Cir. 1994), the plaintiffs argued that mooring and anchorage fees collected by the state were a duty on tonnage that violated the federal tonnage clause. The plaintiffs conceded that under the Clyde Mallory case, a state was permitted to charge reasonable fees for services rendered. They apparently also conceded that provision of restroom facilities, parking, trash disposal and security services would be sufficient to satisfy the requirements of the Clyde Mallory case. The plaintiffs then tried to argue that because the services provided were open to the public and not provided specifically for those paying the fees, that the state was effectively not providing those services. The court rejected this argument finding that Hawaii in fact provided services in exchange for the mooring and anchorage fees, and that the fees were not a duty on tonnage. Barber v. Hawaii, 42 F.3d at 1196.

The plaintiffs in Barber v. Hawaii apparently did not argue the tonnage clause issue very well, and the court's discussion of the clause is cursory. However, the case upheld the fees in question. In contrast, a recent Rhode Island case held that a registration fee on all boats operated in Rhode Island waters for more than 90 days was an unconstitutional tonnage tax, because the revenues from the fee would not necessarily be used for services benefiting boaters. State v. Turnbaugh, 705 A.2d 530 (R.I. 1997).

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The court rejected the state's argument that the registration fee was merely a property tax, and instead concluded that it was "a classic form of tonnage tax specifically prohibited by the Constitution of the United States." *Id.* at 533.

Unlike the Ninth Circuit case cited above, the Rhode Island case would not be binding precedent on a federal district court in Alaska. Neither the Ninth Circuit case nor the Rhode Island case would be binding on an Alaska state court, but a state court might regard such authorities as persuasive. The Rhode Island decision certainly demonstrates that the tonnage clause is not a dead letter, and in light of the Rhode Island decision, caution would certainly be in order in imposing any fee or tax on exclusively on vessels, unless the proceeds were used to provide services to vessels. A bed tax that was imposed on beds on land as well as beds in ships would probably avoid tonnage clause problems.

Other Potential Constitutional Issues

There are a number of other constitutional provisions frequently used to challenge tax statutes which might be raised in an attack on the proposed tax.

If a tax can survive scrutiny under the second prong of the Complete Auto test and is at least minimally rational, it can probably survive a due process challenge as well. See Keane v. Local Boundary Commission, 893 P.2d 1239, 1248 (Alaska 1995) ("As long as services are available, the issue of usage by the taxpayer is irrelevant."); Katmailand, Inc. v. Lake and Peninsula Borough, 904 P.2d 397, 402 (Alaska 1995).

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Other potential arguments might be based on the foreign commerce clause or the privileges and immunities clause of the federal constitution.

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Conclusion

Putting a cruise ship head tax in HB 3002 would raise serious single subject questions. In addition, a tax like that in CSSB 308(FIN) might encounter challenges based on several provisions of the United States constitution, particularly the commerce clause and tonnage clauses.

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SB

170

SFIN

FILE

SENATE FINANCE COMMITTEE REPORT

DATE: 2/13/08

FURTHER:

DATE TURNED
IN TO OFFICE: 3/4/08

Finance Committee considered SENATE BILL NO. 170

SB 170 INSURANCE COVERAGE FOR WELL-BABY EXAMS

"An Act requiring that health care insurers provide insurance coverage for well-baby exams."

and recommends:

- be replaced with SCS or CS SB 170 (FIN)
- adopt previous SCS or CS _____ (_____)
- attached amendment(s)
- adopt _____ Letter of Intent
- further referral to _____ Committee

SENATE BILL:	
<input type="checkbox"/>	Same Title
<input type="checkbox"/>	New Title
<hr/>	
HOUSE BILL:	
<input type="checkbox"/>	Same Title
<input type="checkbox"/>	Technical Title Change
<input type="checkbox"/>	New Title w/ SCR # _____

NEW FISCAL NOTE(S):

PREVIOUS FISCAL NOTE(S):

Department	Date	Fiscal	Indet.	Zero	FN#

Department	Date	Fiscal	Indet.	Zero	FN#
CCRT	2/11			<input checked="" type="checkbox"/>	2

APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	PRINTED LAST NAME	DO PASS	DO NOT PASS	NO REC	AMEND
	Elton	✓			
	THOMAS	✓			
	OLSON	✓			
CO-CHAIR:		✓			
CO-CHAIR:	STEPHEN	✓			

FISCAL NOTE

STATE OF ALASKA
2008 LEGISLATIVE SESSION

Fiscal Note Number: 2
Bill Version: CSSB 170(L&C)
(S) Publish Date: 2/13/08

Identifier (file name): SB170-CED-INS-02-10-08 Dept. Affected: DCCED
Title: Insurance Coverage for Well-Baby Exams RDU: Insurance (116)
Sponsor: McGuire Component: Insurance Operations
Requester: Senato HESS Component Number: 354

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	Appropriation Required	Information						
		FY 2009	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
OPERATING EXPENDITURES								
Personal Services								
Travel								
Contractual								
Supplies								
Equipment								
Land & Structures								
Grants & Claims								
Miscellaneous								
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES								
-----------------------------	--	--	--	--	--	--	--	--

CHANGE IN REVENUES ()								
-------------------------------	--	--	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts								
1003 GF Match								
1004 GF								
1005 GF/Program Receipts								
1037 GF/Mental Health								
Other Interagency Receipts								
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2008) cost: _____

POSITIONS

Full-time								
Part-time								
Temporary								

ANALYSIS: (Attach a separate page if necessary)

This legislation would require health care insurers to provide insurance coverage for well-baby exams. It is not expected to impact the operations of the division.

Prepared by: Linda Hall, Director
Division: Insurance
Approved by: Emil R. Notti, Commissioner
Commerce, Community, and Economic Development

Phone 907 269.7900
Date/Time 2/11/08 9:37 AM
Date 2/11/2008

Adopted 3/4/08

25-LS0868\K
Bailey
2/26/08

CS FOR SENATE BILL NO. 170()
IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-FIFTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): SENATORS MCGUIRE, Davis

A BILL

FOR AN ACT ENTITLED

1 "An Act requiring that health care insurers offer insurance coverage for well-baby
2 exams."

3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

4 * Section 1. AS 21.42 is amended by adding a new section to read:

5 Sec. 21.42.351. Coverage for well-baby exams. (a) A health care insurer that
6 offers health care insurance that covers a dependent of a covered individual shall,
7 initially and at each renewal, offer coverage for the cost of well-baby exams. The
8 coverage required to be offered by this section is subject to standard policy provisions
9 applicable to other benefits, including deductible or copayment provisions.

10 (b) In this section,

- 11 (1) "health care insurer" has the meaning given in AS 21.54.500;
- 12 (2) "health care professional" means a health aide, physician, nurse,
13 and physician assistant, but does not include a practitioner of religious healing;
- 14 (3) "well-baby exam" means

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(A) a periodic physical examination by a qualified health care professional of a baby during the first 24 months of life in which information is collected on matters including normal development, growth rate, hearing, vision, language skills, motor development, diet, general care, preventative health care, immunizations, and infectious diseases; and

(B) consultation between the health care professional and a parent.

LEGISLATIVE RESEARCH REPORT

APRIL 10, 2007



REPORT NUMBER 07.113

INSURANCE COVERAGE FOR WELL-CHILD EXAMS

PREPARED FOR SENATOR LESIL MCGUIRE

BY CHUCK BURNHAM, LEGISLATIVE ANALYST

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You asked about health insurance coverage for "well-child" examinations. Specifically, you wanted the following information:

- The number of states that require insurance companies to provide coverage for well-child exams;
- Provisions of those requirements, including the number and frequency of exams required to be covered and the obligations, if any, that such laws place upon the insured;
- Research showing the health impacts of well-child examinations; and
- Potential impacts to Alaska of requiring coverage of well-child exams including benefits, negative consequences, and impacts on the uninsured.

SUMMARY

Since being incorporated into the U.S. health system in the 1930s, routine pediatric health supervision—commonly known as "well-child" care or well-child exams—has become a cornerstone of the nation's preventive healthcare.¹ At least twenty-one states require commercial insurance companies to cover some level of well-child care; however, among these states the health services and the number of exams that must be covered vary widely.

Despite the efforts of government agencies and others in recent years, high quality clinical research into the effectiveness of well-child exams is relatively scarce. This circumstance creates difficulties for healthcare providers, policy-makers, and parents when weighing the costs and benefits of providing or funding well-child care. Clearly, for certain population groups—in particular children of low-income families, who are most likely to suffer from chronic illness—certain aspects of well-child exams appear highly beneficial. Beyond immunizations, however, the battery of well-child services suggested in the schedules recommended by groups like the American Academy of Pediatrics (AAP), when delivered to healthy children, may incur costs unnecessarily and further strain an already burdened healthcare system.

Two things are true of nearly all state insurance mandates: they provide increased access to services and protection to consumers, and they raise premium costs. The question with regard to mandating well-child coverage in Alaska, then, is as follows: would the benefits gained by expanding preventive services outweigh potential increases in insurance premiums and the associated possible loss of coverage? Unfortunately, with the data available to us, we cannot conclusively answer this question. There exists wide consensus that certain preventive interventions improve health outcomes while remaining cost-effective—particularly when those services are targeted to population groups at increased risk for chronic illnesses. With the limited data available to us, however, it is not possible to determine the overall impact of mandating all well-child care services recommended by the AAP and others.

¹ In this report the terms "well-child" and "well baby" exams or care are used interchangeably. Significant variation exists in the composition of these exams among various jurisdictions and healthcare providers. In general, the visits include a mixture of health interventions delivered by a pediatrician or other healthcare provider according to a specified schedule throughout childhood. The interventions most commonly include behavioral counseling (sleep positioning, violence prevention, etc.), health screening (testing for iron deficiency, vision impairment, etc.), and delivery of prophylaxis (immunization, vitamin supplementation, etc.).

It is clear that mandating commercial insurance companies to cover well-child care would directly result in increased preventive care for only a portion of the state's children. About 47 percent of Alaskan children either receive public insurance benefits, which include access to robust well-child care, or are uninsured. The remaining 53 percent receive employer-based or some other form of private insurance. Although this is the type of insurance that a mandate would impact, a majority of such plans may already cover some aspects of well-child care (most often immunization and physical exams, at a minimum). With the data to which we have access, it is not possible to determine the number of children who would receive access to "new benefits" through a well-child mandate.²

Denali KidCare, Alaska's combination Medicaid and State Children's Health Insurance (SCHIP) program, provides access to comprehensive well-child benefits for low-income children as required by the federally mandated Early and Periodic Screening, Diagnosis, and Treatment program (EPSDT). The services in this program are generally more comprehensive than those provided by private insurers, yet research has shown that Medicaid's coverage of children is, on average, less expensive than private coverage. However, like many other states, Alaska struggles to enroll all of its eligible children. Particularly troublesome is that data from the U.S. Census Bureau show that the very young children (ages 0-6 years) of the lowest income families (under 100 percent of the federal poverty threshold) are also the least likely to be enrolled. Although the federal government is now requiring that states increase efforts to meet an 80 percent participation threshold, enrollment is not the sole issue. Of the Alaska children who are enrolled in Denali KidCare, only about half receive the well-child exams to which they are entitled. This lack of utilization is likely the result of a number of factors, including lack of access to healthcare providers and parents being unaware of available benefits. The combination of under-enrollment and low utilization of benefits means that there are thousands of Alaska children who currently qualify for well-child benefits, but do not receive those services.

Other states appear to have successfully increased delivery of well-child services by combining public insurance with private coverage of cost-effective services that have shown to improve health outcomes. Five of the seven states that currently exceed the federal goal of enrolling 80 percent of eligible children for EPSDT benefits have expanded both initial eligibility requirements for public insurance (at least 200 percent of federal poverty guidelines) and mandates for commercial well-child coverage.

Regardless of the strategies pursued, when considering mandating coverage of well-child care, Alaska-specific actuarial analyses of the cost-effectiveness of delivering individual preventive services to specific population groups may be the best means of determining which benefits would best serve the state's children.

² The number of children who would receive new benefits depends largely on two factors as follows: the services to which children currently have access, which we cannot determine largely due to confidentiality provisions of insurance carriers and state regulators, and the specific mandates that may be enacted in law.

PRIVATE INSURANCE COVERAGE OF WELL-CHILD EXAMS IN THE STATES

At least twenty-one states require private health insurance plans to include coverage of well-child exams based on the "Recommendations for Preventive Pediatric Healthcare," or "periodicity schedule," published by the American Academy of Pediatrics (AAP).³ Few of these states, however, require coverage of all of the procedures in the complete periodicity table. Indeed, states vary widely in the number and types of procedures covered, the years for which coverage is required, and whether the exams are exempt from deductible, co-pay, and coinsurance charges. For instance, New York requires very broad coverage of the AAP recommendations from birth to age twenty and exempts the costs for those exams from deductibles and coinsurance. By contrast, Montana requires coverage only through age three and allows companies to charge a co-pay and coinsurance for related exams and treatments.⁴

Other than deductibles, co-pays, and coinsurance, we located no requirements of or obligations placed upon the insured as a result of laws requiring coverage of well-child exams. Specifically, we found no requirement that insured parents make use of well-child benefits.

RESEARCH ON WELL-CHILD EXAMS

Assessing the overall effectiveness of well-child exams is complicated by a number of factors. First, we were unable to locate high quality evidence-based studies of the impact of the exams as whole—that is, the specific combination of screening, preventive treatment, and counseling that are generally included in these exams. Indeed, with the notable exception of childhood immunizations, rigorous research designs such as randomized clinical trials have rarely been applied to individual components of the exams, much less for the well-child regimen as a whole. Second, even where a particular service can be shown to provide benefits, those benefits may not justify the costs for delivering that service to all children.

THE EVIDENCE BASE

The U.S. Department of Health and Human Service established the U.S. Preventive Services Task Force (USPSTF) in 1984 to give health care professionals advice about which forms of preventive care should be routinely offered to patients who exhibit no symptoms of illness.⁵ In order to be recommended by the USPSTF, a given service must first undergo rigorous, impartial

³ Those states are Arkansas, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Iowa, Maryland, Massachusetts, Minnesota, Missouri, Montana, New Mexico, New York, Ohio, Oklahoma, Rhode Island, Texas, Virginia, and Wisconsin. Additional states require coverage of individual procedures—metabolic testing and hearing screening, for example—but do not compel coverage of the comprehensive exams recommended by the AAP. We include a copy of the AAP periodicity table as Attachment A.

⁴ We include a table prepared by the AAP, which provides details on states' requirements for coverage of well-child exams, as Attachment B. Jody Ruskamp-Hatz, Senior Policy Specialist, National Conference of State Legislatures, (303) 856-1521, provided this table. According to Ms. Ruskamp-Hatz, most laws requiring coverage of well-child exams were enacted due to the advocacy of the AAP for the "Child Health Insurance Reform Plan" (CHIRP).

⁵ Extensive information about the USPSTF and its recommendations are available online at <http://www.ahrq.gov/clinic/cps3dix.htm#pediatric>.

assessments of the scientific evidence of its effectiveness. Since its inception, the Task Force has been widely viewed as the "gold standard" for definitely establishing the importance of including prevention in primary health care; however, due to the very high standards of evidence required, relatively few services have received the recommendation of USPSTF for delivery to asymptomatic children who are at average risk for illness. Table 1 compares the recommendations of the USPSTF to those of the "well-child" periodicity schedule of the AAP for a child of twelve months.ⁱⁱ

ⁱⁱ Clearly, both the AAP and the USPSTF promote the value of preventive medicine, and the variations among their recommendations may not reflect disagreements between the two groups, but rather result from the organizations' differing missions and methods. The USPSTF is widely recognized as having among the most stringent evidence-based standards in reviewing preventive health services prior to recommending those services be administered widely. By contrast, although the AAP supports its recommendations with some degree of clinical evidence, the organization uses an "expert consensus" method. In addition, the AAP may be more concerned with establishing a "continuum of care" for individual patients through frequent and comprehensive exams than with absolute clinical certainty of the value of a service to the entire population.

Table 1: Comparison of USPSTF and AAP Preventive Services Recommendations for a Child of Twelve Months

Service ¹	AAP		USPSTF	
	Patient Risk Factors ²			
	Average	Increased	Average	Increased
Anemia (iron deficiency) Screening	X		I	B
Developmental/Behavioral Assessment	X			
Hearing Screening	X		I ³	
Hereditary/Metabolic Screening	X		Currently being updated	
Hip Dysplasia Screening			I	
Immunization	X		X ⁴	
Injury Prevention	X			
Lead Screening		X	D	I
Nutrition Counseling ⁵	X			
Oral Fluoride Supplementation			B	
Physical Activity Counseling			I	
Skin Cancer Counseling			I	
Tuberculin Test		X		
Urinalysis	X			
Violence Prevention	X		I	
Vision Screening	X		B	

Legend: American Academy of Pediatrics (AAP): X - Recommended; U.S. Preventive Services Task Force (USPSTF) "grading" system: A - Strongly recommended, B - Recommended; C - No recommendation; D - Not recommended; I - Insufficient evidence to make determination.

Notes: The AAP and the USPSTF both promote the value of preventive medicine. Differences among their recommendations may not reflect disagreements between the two groups, but rather may result from the organizations' differing missions and methods. The USPSTF is widely recognized as having among the most stringent standards in reviewing preventive health services prior to recommending those services be administered widely. By contrast, the AAP may be more concerned with establishing a "continuum of care" for individual patients through frequent and comprehensive exams.

1) These are the services that one or both of the groups recommend for asymptomatic children at age 1 (twelve months). A blank space in the AAP columns indicates this service was not included in the group's schedule of preventive services. A blank in the USPSTF columns indicates that the task force has not issued an opinion on the service. Recommended services vary by age for both organizations.

2) Each organization publishes guidance regarding increased risk factors for children of various ages. For instance, the USPSTF considers status as a recent immigrant and low birth-weight and premature birth to be risk factors for anemia.

3) The USPSTF does, however, recommend hearing screening at birth.

4) Although it issues no immunization recommendations, the USPSTF endorses the joint recommendation of the AAP and the Centers for Disease Control, which is widely accepted as the official immunization schedule of the U.S.

5) The USPSTF recognizes the importance of nutrition and has reviewed data on the health risks of obesity in children; however, this is an example of a service for which there is insufficient evidence showing the positive and negative results of counseling. As a result, the organization has not issued a recommendation for nutritional counseling and has found insufficient evidence ("I") for obesity screening in children aged 6 and older.

Sources: American Academy of Pediatrics, Committee on Practice and Ambulatory Medicine, online at <http://www.aap.org/publications/pediatrics/content/pediatrics/115/3/645>; U.S. Preventive Services Task Force.

The differences between the recommendations of the USPSTF and the AAP are illustrative of the environment of confusing and often conflicting information in which healthcare providers, policymakers, and others are operating with regard to well-child exams. A group of researchers

who reviewed numerous studies in an attempt to assess the value and efficacy of well-child exams found that

taken together, the literature evaluating the effectiveness of well-child care is perhaps more remarkable for its limitations than for its findings.⁷

Those words were written in 1989. Despite the efforts of the USPSTF and others in the intervening years, it does not appear that the situation has improved significantly.

A 2004 study that reviewed the well-child recommendations of seven major North American health organizations found hundreds of discrete recommendations, and forty-two separate preventive interventions for children that were variously recommended by two or more of the organizations studied.⁸ Despite the dozens of recommended services, the researchers reported that they found "limited direct evidence" to support the recommendations. Although delivering preventive services, even in the absence of clinical data may appear benign, perhaps even wise, these researchers concluded otherwise, as follows:

Because a large number of interventions are routinely recommended and often mandated and because the implementation of any recommendation may cause harm (including the displacement of other beneficial activities), these recommendations should be based on the strongest possible evidence. When recommendations are made, supporting evidence should be clearly stated.⁹

Governments at all levels may have to take more active roles in developing the evidence base for well-child exams. In the meantime, however, scarce data, and the discrepancies in recommendations from well-respected organizations, require that healthcare providers, policy-makers, and parents make often difficult decisions in prioritizing limited healthcare resources.

WEIGHING COSTS AND BENEFITS

Critically discussing the costs of well-child exams in public arenas is often challenging because if a given service has a chance of improving the health of children it is difficult to deny that service, even where evidence of its efficacy is relatively weak. Nonetheless, in an age of rapidly increasing healthcare costs and intense competition for healthcare dollars, policy-makers and others may have little choice but to prioritize services according to their costs and benefits in relation to other services. This is particularly true in light of the fact that governmental well-child policies impact not only those who are covered by Medicaid and other public health programs, but also the insurance companies that are "mandated" to provide coverage of well-baby visits in nearly half of the states and, ultimately the consumer who may bear increased costs in a number of ways. Moyer and Butler emphasized this point in the following discussion:¹⁰

⁷ Judith L. Wagner, Roger C. Herdman, and David W. Alberts, "Well-Child Care: How Much is Enough?" *Health Affairs*, Vol. 8, No. 3; Fall 1989. We include a copy of this article as Attachment C.

⁸ Virginia A. Moyer, M.D., M.P.H., and Margaret Butler, B.A., "Gaps in the Evidence for Well-Child Care: A Challenge to Our Profession," *Pediatrics*, Vol. 114, No. 8; Dec. 2004. We include a copy of this article as Attachment D.

⁹ Moyer and Butler, p. 1511.

¹⁰ Moyer and Butler, pp. 1516-1517.

The costs and potential adverse effects of the recommended aspects of well-child care have not been evaluated adequately. Costs include not only the direct costs of physician and staff time, laboratory costs, and costs of agents used in prophylaxis but also costs to parents, such as time lost from work and costs of transportation.

As the authors say, these costs become increasingly burdensome if they cannot be justified by the benefits produced, particularly in light of the increased demands the exams place on the healthcare system:

When ineffective or less effective interventions displace more effective interventions, children are deprived of the more effective interventions. Although time per [healthcare] visit has increased, the average remains [approximately] 15 minutes . . . it would require 7 to 8 hours per working day for a primary care physician to provide the preventive services recommended by the USPSTF, making it unfeasible to provide even this limited list of preventive services within the current structure of practice.

MEASURES OF COSTS AND BENEFITS¹¹

There are a number of ways in which to weigh costs and benefits of health policy, the most comprehensive of which are quite complex, often requiring analysis by an actuary specializing in healthcare. Perhaps the most common of these methods are variations of "cost analysis," "cost-benefit analysis," and cost-effectiveness analysis," which are briefly defined as follows:

Cost analysis—calculates the net cost of a policy by subtracting the value of illnesses prevented by the policy from the cost of implementing that policy (the "cost of prevention"). When a policy has a negative cost—that is, the value of illness prevented is greater than the cost of prevention—the intervention is said to be a cost-saving policy.

Cost-benefit analysis—compares the cost of a policy to improvements in health as measured in dollars by subtracting the dollar value of health improvements from the cost of prevention.¹² Frequently, results of these analyses are expressed as a cost-benefit ratio with benefits on top and costs on the bottom (dollar value of health improvement / cost of prevention). A policy is generally viewed as worthwhile if the cost-benefit ratio is greater than one, which indicates the benefits are greater than the costs.

Cost-effectiveness analysis—allows comparison of health policies by dividing the value of the health improvement achieved by the policy by the net cost of that

¹¹ The following two sections are summarized from "What Policymakers Need to Know About Cost Effectiveness," *Partnership for Prevention*, 2001. Partnership for Prevention identifies itself as a membership organization of businesses, nonprofit organizations and government agencies advancing policies and practices to prevent disease and improve the health of all Americans. We include this document as Attachment E. Further information is available on the group's website at <http://prevent.org/content/view/full/520/>.

¹² This method of cost-benefit analysis is specific to healthcare. The dollar value of health improvements is a measure that includes a degree of subjectivity and, at times, controversy. In-depth discussion of such measures are outside the scope of this report. Additional information on measuring the economic burden of illness is included in Attachment E.

policy. This calculation creates a figure that can represent the value of a number of designated outcomes. For example, the analysis could be designed to compare the relative value of *deaths averted* for two screening procedures, the *per year* savings of those interventions, or the *per injection* value of several vaccines. Therefore, unlike cost analysis and cost-benefit analysis, cost-effectiveness analysis is designed to show which policies require fewer resources to achieve health benefits *compared to other interventions*, but does not necessarily indicate whether a policy produces net savings.

In general, it appears that cost-benefit analyses of well-child exam services, particularly those that are not supported by convincing clinical evidence, provide policymakers with the most useful information with which to make an "apples-to-apples" comparison of the relative value of interventions.

THE COST OF INSURANCE MANDATES

There exists fairly wide consensus that governmental mandates that commercial insurance policies include coverage of specific benefits raises the cost of insurance to consumers. There is no consensus, however, on the amount of increases such mandates generate. In 2003, the U.S. General Accounting Office (GAO) reviewed studies of the costs of state mandates. The GAO found wide variation in published estimates of increases in premiums attributable to mandates, from a 3.4 percent increase in premiums in Maryland, to a study in Virginia that claimed mandates accounted for nearly thirty percent of premiums. Some of this variation can be explained by the fact that the number and type of mandates varies among the states. In addition, some studies of mandates did not consider the fact that many state mandated benefits would be offered by insurance companies—either as an option or as a standard service—in the absence of mandates. In such cases, state mandate laws cannot be said to be responsible for the full portion of the premiums that are attributable to the service mandated. In studies that evaluated the marginal costs of mandates—those that likely would not be offered in the absence of a mandate—premium increases due to mandates were typically less than ten percent.¹³

Research specifically into increases in premiums due to mandating well-child exams appears to be relatively rare. One study by the Council for Affordable Health Insurance claims that well-child mandates represent one percent to three percent of premiums in the states that require such coverage. This study did not take into account whether such services would be provided absent a mandate; neither, however, does the study's definition of well-child care appear to include all of the services recommended by the AAP periodicity table.¹⁴ One of the primary concerns with mandates is that they may actually reduce coverage for certain consumers by raising premiums to the extent that individuals or employers are forced to reduce or eliminate coverage. Although premiums in the state would likely increase to some degree, in the absence of additional data we are unable to determine what impact a well-child exam mandate would likely have on the level of insurance coverage in Alaska.

¹³ The GAO report is available online at <http://www.gao.gov/new.items/d031133.pdf>

¹⁴ The Council for Affordable Health Insurance is a research and advocacy group made up of insurance carriers. Its report on mandates is available online at <http://www.cahi.org/index.asp>.

IMPACTS OF REQUIRING COVERAGE OF WELL-CHILD EXAMS IN ALASKA

In general, it appears that health insurance "mandates" are both beneficial and costly to consumers. Mandates are popular because they provide consumers greater access to services, particularly preventive services, which commercial insurers may not otherwise cover. This expanded coverage should lead to avoidance or earlier detection of health issues, which may produce long-term savings in health spending and increased quality of life. However, opponents of mandates point to studies showing that mandated benefits increase costs to consumers, forcing employers and individuals to reduce their level of coverage or even forego insurance altogether, resulting in fewer insured individuals.¹⁵ The question with regard to mandating well-child coverage in Alaska, then, is as follows: would the benefits gained by expanding preventive services outweigh potential increases in insurance premiums and the associated possible loss of coverage?

Unfortunately, with the data available to us, we cannot conclusively answer this question. To be clear, there exists wide consensus that certain preventive services improve health outcomes. Some of these services likely prove to be sound investments for healthcare dollars because they avert costly treatments for chronic illnesses. This is particularly true of services targeted to population groups who are at increased risks for certain illnesses. Nonetheless, with the exception of childhood immunization, we find no source to state with certainty that mandating commercial insurance coverage of the combination of services suggested by groups such as the AAP will provide benefits (improved health outcomes and long-term cost savings) that will outweigh increases in premiums and the potential loss of health coverage for some number of residents that may result. To address these questions fully, you may wish to consult an actuary specializing in healthcare policy.

CURRENT WELL-CHILD COVERAGE IN ALASKA

The extent of well-child exam coverage for Alaska children currently depends on several factors including healthcare coverage status, whether parents take advantage of the well-child benefits that are available to them, and family income level. Table 2 shows the status and type of healthcare coverage for Alaskans compared to the national average for children aged 0 to 18 years.

¹⁵ We include, as Attachment F, "Mandated Health Insurance Benefits: Tradeoffs Among Benefits Coverage, and Costs?" *California Health Policy Roundtable* (a Kaiser Family Foundation funded organization), July 2002.

Type of Coverage	Alaska		United States	
	Individuals	Percent	Individuals	Percent
Employer	96,160	49.3%	43,899,504	56.4%
Individual	7,210	3.7%	3,502,620	4.5%
Medicaid	60,210	30.8%	20,470,668	26.3%
Other Public	13,790	7.1%	1,089,704	1.4%
Uninsured	17,880	9.2%	8,873,304	11.4%
Total	195,240	100.0%	77,836,000	100.0%

Notes: Percent figures do not sum to 100 percent due to rounding. Alaska's proportion of children covered by "other public" insurance exceeds that of the U.S. population due in large part to children covered by the Indian Health Service
Source: Kaiser Family Foundation, from U.S. Census data; available online at <http://www.statehealthfacts.org>.

Our analysis of the data in Table 2 indicates that the pool of children who would be impacted by mandating well-baby coverage is somewhat limited. Well-child benefits are currently available to those covered by Medicaid and "other public" insurance, which includes the Indian Health Service, primarily under the federally mandated Early and Periodic Screening Diagnosis and Treatment program (EPSDT). (We discuss this program in greater detail below.) Mandating commercial coverage would provide no new benefits to the uninsured. Therefore, the remaining pool of approximately 103,000 children—those covered by employer-based or individual insurance—represents about 53 percent of all children aged 18 or younger. This is not to say, however, that 53 percent of Alaskan children would substantially benefit from mandated well-child coverage, because a number of the state's insurers already provide some level of well-child benefits. For instance, Premiera Blue Cross, which, according to the Department of Commerce Community and Economic Development, Division of Insurance, underwrites about 78 percent of the comprehensive health insurance policies in the state, includes immunizations and preventive office visits in its group plans.¹⁶ Such coverage is limited, however, and it is unclear exactly which well-child services are covered or how many exams are allowed annually.¹⁷ Nonetheless, it is clear that only a minority of Alaska children who currently receive no well-child benefits would begin receiving such benefits were they to be mandated by the state. However, the care of children who currently receive benefits may improve under such a mandate as a number of studies have shown that private preventive coverage is generally less than comprehensive, and are generally inferior to those required under Medicaid (EPSDT). We explore this issue further in our discussion of EPSDT below.

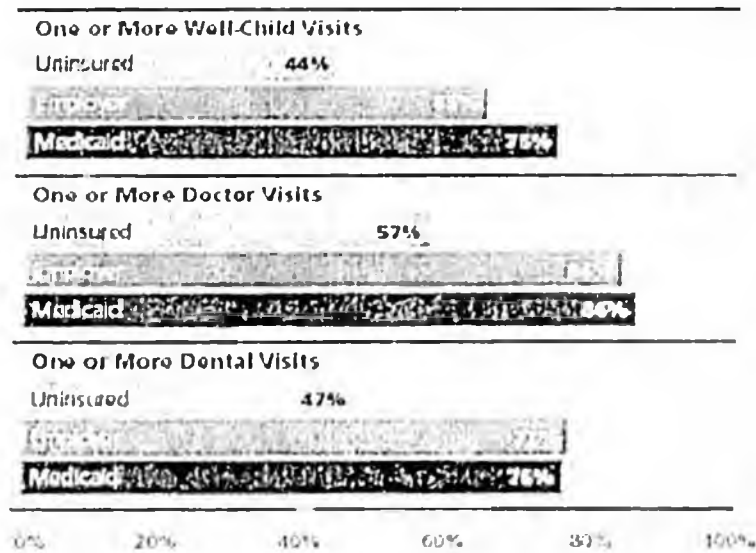
¹⁶ Except for group plans with over 200 members, for which such services are an optional benefit. Information on Premiera Blue Cross group plans is available online through <http://www.premiera.com>

¹⁷ Insurance companies operating in Alaska are not required to disclose details of policy agreements, except to regulators who are required to keep such information confidential. We, therefore, have no means of determining exactly how many Alaskans with private insurance are entitled to well-child benefits.

"UPTAKE" OF WELL-CHILD BENEFITS

Research has demonstrated that even when well-child benefits are available, many parents do not take advantage of them, nor do parents typically adhere to recommended exam schedules as their children age. This is a cause for particular concern with regard to low-income families, whose children are more likely to be in poor health, are more likely to have special healthcare needs, and are at greater risk for long-term disability than children in families with higher incomes. In short, these are precisely the children who could benefit most from well-child exams.¹⁰ Figure 1 illustrates the "uptake" of healthcare services by low-income children in 2002.

Figure 1: The Use of Healthcare Services by Insurance Status for Low-Income Children in the U.S., 2002

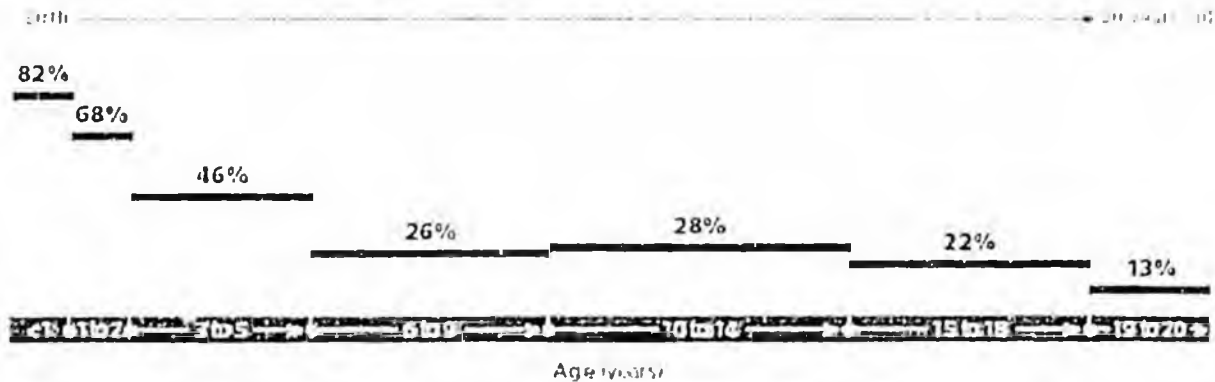


Source: Christine Provost Peters, "EPSDT: Medicaid's Critical But Controversial Benefits Program for Children," Health Policy Forum Issue Brief No. 819, November 20, 2006.

¹⁰ Christine Provost Peters, "EPSDT: Medicaid's Critical But Controversial Benefits Program for Children," Health Policy Forum Issue Brief, George Washington University, No. 819, November 20, 2006. We include a copy of this document as Attachment G.

Figure 2 shows that even within the coverage group most likely to receive well-child care—those on Medicaid—uptake of available services diminishes rapidly as children age.¹⁹

Figure 2: Percentage of Children Receiving Medicaid-Funded Well-Child Screening by Age Group in the U.S., 2003



Source: Christine Provost Peters, "EPSDT: Medicaid's Critical But Controversial Benefits Program for Children," Health Policy Forum Issue Brief No. 819; November 20, 2006

The above figures suggest that a significant portion of Alaskan children who would benefit most from mandated coverage of well-child care—that is, children from low-income families who are covered by commercial insurance that does not already provide such coverage—would not receive that care or would receive it only for a few years.

INCOME AS A FACTOR IN COVERAGE

Household income is perhaps the single most predictive factor of health insurance coverage and, therefore, for receipt of well-child exams. Because low-income children are less likely to be insured, they are also, as Figure 1 illustrates, less likely to receive well-child care. Table 3 provides further evidence that the uneven distribution of insurance coverage across income levels is such that the children who need preventive care most may not be receiving it.²⁰

¹⁹ These figures are from Provost Peters.

²⁰ Population data are from 2005. Certain poverty data are from 2004. Because population and poverty data may be from different years, and due to the impact of sampling error and other statistical complexities, these data should be seen as estimates only. For the same reasons, and because we used data from different sources, the count of "uninsured," and certain other figures in this table may not precisely match other information in this report. We believe, however, that the proportions of children in certain age groups and of the uninsured are reliable estimates.

Table 3: Insurance Status by Age and Income Level in Alaska, 2004-2005²¹

Ages	Insurance Status	Number of Children	Number of Children in Specified Family Income Groups (Expressed as a Percentage of Federal Poverty Threshold) ¹							
			Below 100%	% of Un-Insured	100% to 150%	% of Un-Insured	150% to 200%	% of Un-Insured	200% and above	% of Un-Insured
0 to 18 Years	Total	194,207	23,033		25,050		21,868		124,256	
	Insured	174,587	16,071		22,604		18,831		117,081	
	Uninsured	19,620	6,963	35.5%	2,446	12.5%	3,037	15.5%	7,175	36.6%
0 to 6 Years	Total	69,816	8,966		8,895		9,692		42,264	
	Insured	62,988	5,529		8,055		8,836		40,568	
	Uninsured	6,828	3,437	50.3%	839	12.3%	856	12.5%	1,696	24.8%
7 to 12 Years	Total	63,461	8,463		6,405		7,317		41,276	
	Insured	57,683	6,882		5,636		6,650		38,514	
	Uninsured	5,779	1,581	27.4%	769	13.3%	667	11.5%	2,762	47.8%
13 to 18 Years	Total	60,929	5,604		9,750		4,859		40,716	
	Insured	53,916	3,660		8,912		3,344		38,000	
	Uninsured	7,013	1,945	27.7%	838	11.9%	1,515	21.6%	2,716	38.7%

Notes and Sources: 1) The "Federal Poverty Threshold" is a complex statistical measure used by the U.S. Census Bureau to report population, economic, and demographic data. This measure differs somewhat from the Federal Poverty Guidelines, which is an administrative calculation used to establish eligibility for need-based programs. This table should be viewed as estimates of Alaskan children at certain general income levels rather than an indication of who may qualify for specific income-based assistance programs. Additional information on the differences between poverty guidelines and thresholds is available online at <http://aspe.hhs.gov/poverty/faq.shtml#differences>.

The figures in this table are from the U.S. Census Bureau, "Current Population Survey" of 2005. Certain poverty data are from 2004. Because population and poverty data may be from different years, and due to the impact of sampling error and other statistical complexities, these data should be seen as estimates only. For the same reasons, and because we used data from different sources, some figures in this table may not precisely match other information in this report. The public database for "Current Population Survey" information from several years is available online at http://www.census.gov/hhos/www/cps/cps_table_creator.html.

There are a number of striking aspects of the data in Table 3. First, over one-third of all children with family incomes below 100 percent of federal poverty threshold are uninsured. This compares to an overall uninsured rate for children in Alaska of about 9.2 percent (see Table 2). Even more alarming, about half of all children from birth to age 6 living in poverty do not have insurance. The research we reviewed indicates that this is the precise group for which society

²¹ This table used the "Federal Poverty Threshold," which is a statistical measure used by the U.S. Census Bureau to report population, economic, and demographic data. This calculation differs somewhat from the Federal Poverty Guidelines, which are administrative measures used to establish eligibility for need-based programs. This table should be viewed as estimates of Alaskan children at certain general income levels rather than an indication of who may qualify for specific income-based assistance programs. Additional information on the differences between poverty guidelines and thresholds is available online at <http://aspe.hhs.gov/poverty/faq.shtml#differences>.

will likely face the greatest expense for corrective healthcare.²² Perhaps the most remarkable aspect of these data is the fact that a significant portion of all uninsured children in Alaska may qualify for well-child benefits under current public assistance eligibility criteria.

MEDICAID EPSDT COVERAGE²³

As you know, the primary public insurance program for children in Alaska is Denali KidCare (DKC).²⁴ Because DKC is funded in part by Medicaid, federal provisions require implementation of the Early and Periodic Screening, Diagnosis, and Treatment program (EPSDT). This program requires comprehensive well-child services for Medicaid eligible children, which must include the following:

- ◆ Screening Services;
- ◆ Comprehensive health and developmental history;
- ◆ Comprehensive unclothed physical exams;
- ◆ Appropriate immunizations;
- ◆ Laboratory tests;
- ◆ Lead toxicity screening;
- ◆ Health education;
- ◆ Vision, hearing and dental services; and
- ◆ Other necessary diagnoses, treatments, and other measures as prescribed by law to correct or ameliorate defects and physical and mental illnesses and conditions discovered by the screening services.

Overall EPSDT benefits must meet "reasonable standards of medical practice" as suggested by recognized medical organizations in child health care.²⁵ In Alaska, these services are recommended at the following ages:

- ◆ Birth, 2, 4, 6, 9, 12, 15, 18 and 24 months;
- ◆ Aged 3, 4, 5, and 6 years;
- ◆ At least every other year after age 6.²⁶

²² See, for example, Eileen Salinsky, "Clinical Preventive Services: When is the Juice Worth the Squeeze?," *National Health Policy Forum Issue Brief*, George Washington University, No. 305, August 24, 2005. We include a copy of this document as Attachment H.

²³ A comprehensive review of Medicaid and EPSDT coverage is outside the scope of this report. We provide this information only as an indicator of the current status of well-child care in the state and of the potential to expand this care under public insurance in lieu of, or in combination with, requiring coverage of well-child exams by commercial insurers.

²⁴ Denali KidCare is the name given to the state's public insurance program that is funded in part by Medicaid and the State Children's Health Insurance Program (SCHIP). Further information on Denali KidCare is available online at <http://www.hhs.state.ak.us/dhcs/DenaliKidCare/default.htm>.

²⁵ Further information on EPSDT requirements is available from the Centers for Medicare and Medicaid Services online at <http://www.cms.hhs.gov/MedicaidEarlyPeriodicScrvt/>.

²⁶ "Alaska Medicaid Recipient Services," Alaska Department of Health and Social Services, Division of Health Care Services, p. 15, available online at <http://www.hhs.state.ak.us/dhcs/DF/MedicaidRecipientHandbook1.pdf>.

A number of studies have found that the comprehensive requirements of EPSDT generally provide greater well-child benefits than those of commercial insurance policies, which tend to restrict or deny certain services.²⁷ In Alaska, however, those who are eligible are not fully utilizing this benefit. According to the fiscal year 2005 "Annual EPSDT Participation Report," only 50.75 percent of "total eligibles who should receive at least one initial or periodic screen" actually received that service.²⁸ Although the federal government is now requiring states to implement programs to increase participation rates, those efforts have not yet been widely successful. Just seven states have met the federal participation goal of 80 percent. Each of those states has initial income eligibility guidelines of at least 200 percent of the federal poverty guideline (\$4,167 per month for a family of four in Alaska in 2006).²⁹ The barriers to participation are manifold, but include low provider participation rates due to inadequate reimbursement for services, lack of parental awareness of the benefits available, and the overall scarcity of healthcare services in many parts of Alaska.

In general, it appears that the number of children who would be impacted by increased efforts to raise participation rates among those currently eligible for EPSDT services may exceed the increases that are possible strictly from mandating commercial coverage of well-child exams. According to data from the U.S. Census Bureau, expanding Denali KidCare income guidelines to 200 percent of federal poverty guidelines would likely increase by several thousand the number of uninsured children who are eligible for services.³⁰ However, increased education about available benefits and expanding eligibility do little to address the shortage of healthcare providers in certain areas of the state. Although we located no Alaska-specific research in this regard, the healthcare system in many parts of the state likely could not sustain substantial increases in comprehensive EPSDT services. In addition, expanding publicly funded services will clearly increase a Medicaid budget that is already seen by many as being too costly and growing at too fast a rate. It is worth noting, however, that the national average annual per capita spending on children in Medicaid is, at \$1,315, about one-third that of other enrollees at \$4,011. Also, historic costs per child are less, on average, for Medicaid than for private insurance.³¹

As you know, Chapter 34 SLA 2003 reduced the household income limits for uninsured children and pregnant women from 200 percent of the federal poverty guidelines for Alaska to 175 percent of the guidelines, and converted that percentage into dollar amounts. As a result of this change, fewer children and pregnant women were eligible for Denali KidCare. The federal poverty guidelines typically increase over time, so the income limits, which are fixed at 175 percent of the 2003 guidelines, are only about 160 percent of the 2006 guidelines and 155 percent of the 2007 guidelines. If the federal poverty guidelines continue to increase, Alaska's income guidelines for Denali KidCare will continue to fall as a percentage of the federal poverty guidelines, thereby excluding additional residents from coverage.

²⁷ See, for example, pp. 4-5 of Provost Peters.

²⁸ This report is available online at http://www.cms.hhs.gov/MedicaidEarlyPeriodicScm-03_StateAgencyResponsibilities.asp

²⁹ These states are Georgia, Iowa, Minnesota, Nevada, New York, and Vermont. For further information, see Provost Peters, p. 24. Federal poverty guidelines for Alaska are as of April 1, 2006.

³⁰ As you know, companion bills currently before the Legislature, SB 87 and HB 140, seek to expand Denali KidCare eligibility guidelines.

³¹ Provost Peters, p. 17.

CONCLUSION

The policy question of whether to mandate commercial insurance coverage of well-child visits in Alaska is a highly complex one. A comprehensive review of the question would include an actuarial analysis of the cost-effectiveness of requiring such coverage. Such a review may also include considering ways to expand public health coverage and use of well-child exams for both the currently eligible population and those below a certain level of income not currently receiving such benefits. Other states that have mandated benefits require an exam schedule that is based on, but is more limited than, that suggested by the American Association of Pediatrics. Some mix of these strategies may provide the preventive care Alaskan children need—particularly those in low-income families—while avoiding driving healthcare policy premiums and the Medicaid budget to unacceptably high levels.

I hope you find this information to be useful. Please do not hesitate to contact us if you have questions or need additional information.

LIST OF ATTACHMENTS

Attachment A

"Recommendations for Preventive Pediatric Healthcare," *American Academy of Pediatrics (AAP)*

Attachment B

American Academy of Pediatrics, "CHIRP-Child Health Insurance Reform Plan," a table of state laws mandating well-child exams, provided by Jody Ruskamp-Hatz, Senior Policy Specialist, *National Conference of State Legislatures*

Attachment C

Judith L. Wagner, Roger C. Herdman, and David W. Alberts, "Well-Child Care: How Much is Enough?" *Health Affairs*, Vol. 8, No. 3, Fall 1989

Attachment D

Virginia A. Moyer, M.D., M.P.H., and Margaret Butler, B.A., "Gaps in the Evidence for Well-Child Care: A Challenge to Our Profession," *Pediatrics*, Vol. 114, No. 8; Dec. 2004

Attachment E

"What Policymakers Need to Know About Cost Effectiveness," *Partnership for Prevention*, 2001

Attachment F

"Mandated Health Insurance Benefits: Tradeoffs Among Benefits Coverage, and Costs?" *California Health Policy Roundtable* (a Kaiser Family Foundation funded organization), July 2002

Attachment G

Christine Provost Peters, "EPSDT: Medicaid's Critical But Controversial Benefits Program for Children," *Health Policy Forum Issue Brief*, George Washington University, No. 819, November 20, 2006

Attachment H

Eileen Sainsky, "Clinical Preventive Services: When is the Juice Worth the Squeeze?," *National Health Policy Forum Issue Brief*, George Washington University, No. 806; August 24, 2005

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Investing in Maternal and Child Health: An Employer's Toolkit.

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Part 1, Page 3

Over the past 15 years, "evidence of effectiveness" has emerged as a key factor in health benefit investment decisions. Employers interested in "smart purchasing" have developed benefit plans that support and incentivize evidence-based or evidence-informed services.

Part 2, Page 11

Increasing healthcare costs and stagnating quality have led many employers to shift their focus from budget-based allocation decisions to value-based purchasing strategies. Value-based purchasing brings together information on the quality of healthcare, including health outcomes and health status, with data on the dollar outlays going towards health.

Because preventive services can prevent or reduce the need for treatment they provide a cost-offset. Employers who invest their healthcare dollars in screening, counseling, and preventive medications may be able to avoid spending healthcare dollars on treatment. In some cases, where the cost of screening is *less* than the cost of treatment, employers may be able to save healthcare dollars by investing in preventive services

Part 2, Page 18-19, 24-25

In an actuarial analysis, the National Business Group found that Well Child Services, Immunizations, and General Preventative Services were all either cost-effective or cost-saving.

Part 2, Page 33-36, 45-46

Well Child Services, Immunizations, and General Preventative Services are all included in the Recommended Minimum Plan Benefits.

Investing in Maternal and Child Health

National
Business
Group
on Health



An Employer's Toolkit

- 1** Maternal and Child Health: A Business Imperative – How employers benefit from healthy families
- 2** The Maternal and Child Health Plan Benefit Model – Evidence-informed, comprehensive, and sustainable employer-sponsored healthcare benefits for children, adolescents, and pregnant women
- 3** Balanced Scorecard & Analysis Tools – Linking maternal and child health outcomes to organizational performance
- 4** Healthy Pregnancy and Healthy Children: Opportunities and Challenges for Employers
- 5** Communication and Engagement: Incentivizing Prevention and Health Promotion
- 6** Health Education Materials for Beneficiaries
- 7** Resources for Employers



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1 Maternal and Child Health: A Business Imperative

- Maternal and child healthcare costs.
- The business case for investing in maternal and child health.
- Dependent coverage challenges.
- Strategies employers can use to improve the health of women and children.





Maternal and Child Health: A Business Imperative

Investing in Maternal and Child Health: A Business Imperative

EXECUTIVE SUMMARY

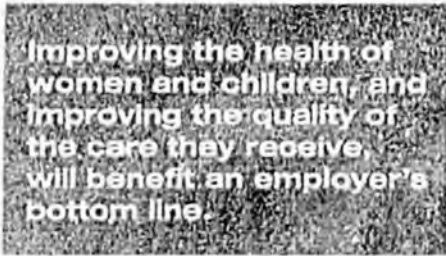
The Business Case for Investing in Maternal and Child Health

Ever-increasing healthcare costs are forcing companies to explore alternative benefit designs and health promotion strategies for employees and their dependents. To reduce costs, employers are asking beneficiaries to manage their healthcare expenses and take on a consumer role in healthcare decision-making. Employers are also focusing on particular sub-groups of their overall beneficiary population to identify opportunities to improve health status and reduce cost. One important, yet commonly overlooked sub-group, is child and adolescent dependents and pregnant women.

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Investing in Maternal and Child Health: A Business Imperative

Maternal and child health is important to business. Maternal and child healthcare services (e.g., labor and delivery, childhood immunizations) account for \$1 out of every \$5 large employers spend on healthcare.¹ Furthermore, a substantial proportion of employee's lost work time can be attributed to children's health problems. And pregnancy is a leading cause of short- and long-term disability and turnover for most companies.²



Improving the health of women and children, and improving the quality of the care they receive, will benefit an employer's bottom line.

Improving the health of children, adolescents, and childbearing-age women benefits employers in at least four ways:

1. **Lower healthcare costs.** Healthy women and children use fewer costly healthcare services (such as hospitalization) and thus have lower total healthcare costs.
2. **Increased productivity.** Parents of healthy children miss fewer workdays than those with ill children. As such, they are less likely to take family medical leave, personal sick leave, or paid time off due to a child's health problem. They may also be more productive at work because they do not suffer stress related to caregiving.
3. **Improved retention/reduced turnover.** Women who have healthy pregnancies (pregnancies without complications) are able to work longer during their pregnancy and return to work sooner after delivery as compared to women who suffer complications. Similarly, parents with healthy children and adolescents are less likely to leave the workforce or cutback their work hours compared to the parents of children with chronic illnesses or severe disabilities.
4. **A healthier future workforce.** The children and adolescents of today are the workforce of tomorrow. Many chronic diseases, for example obesity and mental illness, put children at risk for a lifetime of health problems. Employers benefit (from lower healthcare costs and improved productivity) when the people in the community or region where they recruit are healthy.

Investing in Maternal and Child Health includes information, resources, and tools employers can use to improve the health of their beneficiaries. This toolkit includes:

- Recommendations on evidence-informed, comprehensive health benefits to support child, adolescent, and pregnancy health (Part 2).
- Cost-impact assessments of the recommended benefit changes (Part 2).
- Data on the cost of maternal and child healthcare services (Parts 2 and 4)
- The business case for investing in child and adolescent health, healthy pregnancies, and primary care services for all beneficiaries (Part 4).
- Tools employer can use to develop a maternal and child health strategy, communicate the value of their maternal and child health benefits, and link maternal and child health outcomes to organizational performance (Parts 3 and 7).
- Strategies employers can use to effectively communicate with beneficiaries, and tailor existing health programs and policies to the unique needs of children, adolescents, and pregnant women (Part 5).
- Health education information specifically developed for beneficiaries (Part 6).

Improving Maternal and Child Health

Maternal and child health refers to the health and health care of:

- Preconception women (women of childbearing-age prior to conception);
- Pregnant women;
- Postpartum women (women who were pregnant in the previous year);
- Children (birth to 12 years) and adolescents (aged 13 to 21 years), including those with special health care needs.

Benefit Design Opportunities

Benefit managers, charged with selecting and implementing health benefits, struggle with complex and sometimes contentious resource allocation decisions. Each year, benefits department staff must decide which healthcare services to cover in their plan(s) and at what level. Typically, these decisions are a function of cost, employee and/or union negotiations, and tradition.

Over the past 15 years, "evidence of effectiveness" has emerged as a key factor in health benefit investment decisions. Employers interested in "smart purchasing" have developed benefit plans that support and incentivize **evidence-based** or **evidence-informed** services. Many evidence-based benefit guidelines have been developed for adult care; far fewer are available to inform the design of **maternal and child health benefits**. Increasing healthcare costs, stagnating quality, and pressure from globalization have also led employers to shift their focus from budget-based allocation decisions to **value-based purchasing** strategies. Employers are beginning to see health benefits as an investment, not merely a cost.

The provision of evidence-informed, high-value maternal and child health benefits, and innovative, **family-friendly work/life benefits** may help employers improve the health of children, adolescents, and pregnant women, and the productivity of employees.

For additional information on evidence-informed benefits, refer to Part 2.

The Maternal and Child Health Plan Benefit Model

The Maternal and Child Health Plan Benefit Model (Plan Benefit Model) is the core component of this toolkit. The Plan Benefit Model is an evidence-informed, standardized, equitable, and comprehensive health benefits package created specifically for children, adolescents, and pregnant women. It emphasizes prevention and early detection, aims to reduce employee cost barriers to essential care services, and strives to balance employee affordability with employer sustainability.

The Plan Benefit Model is the National Business Group on Health's (Business Group's) recommendation on minimum health, pharmacy, vision, and dental benefits. It includes guidance on cost-sharing arrangements and other information pertinent to plan design and administration.

Concepts of evidence and value have helped balance health benefit decisions in recent years. However, the cost impact of benefit modification remains a critical factor in employers' resource allocation decisions. Furthermore, the potential cost-offsets of investing in prevention and early

Investing in Maternal and Child Health: A Business Imperative

detection are frequently overlooked. To address these issues, the Business Group sponsored an actuarial meta-analysis of the Plan Benefit Model. This analysis estimated the cost impact of the Plan Benefit Model recommendations on typical large-employer PPO and HMO plan types. The analysis, presented in Part 2, provides cost-impact assessments for (a) the entire Plan Benefit Model, (b) each service category (e.g., preventive services), and (c) each recommended benefit (e.g., immunizations). Employers can use this information to estimate the cost implications of adopting the Plan Benefit Model recommendations for their own covered population.

Variation in Benefits

While virtually all large employers provide health benefits, there is wide variation in the structure of benefits and coverage levels. While tailoring can be used to meet diverse needs, variation can also lead to fragmentation, beneficiary confusion, and administrative costs. The extreme cost, quality, and access variation seen in the marketplace today suggests that employers are not maximizing their investment in health benefits. Employers may be able to improve their return on investment in health benefits by improving the alignment between health benefits, organizational strategy, and internal operations. Part 3 includes tools to help employers evaluate the relationships between maternal and child health outcomes and organizational performance, implement and track Plan Benefit Model recommendations, and design and evaluate other maternal and child-focused health and work/life benefits.

Beneficiary Engagement Opportunities

Experience has shown employers that providing comprehensive health benefits is not sufficient to ensure good health for any population: engagement, appropriate utilization, and quality are necessary factors as well. In order for beneficiaries to become engaged in health promotion and healthcare decision-making, they need education on the importance of these activities, resources and tools, appropriate incentives, and employer support.

The idea behind **engagement** is simple. Beneficiaries will make better healthcare decisions if they are equipped with:

1. The knowledge necessary to understand their personal (or their child's) health needs and unique health risks; and
2. The information required to make effective healthcare decisions, for example information on cost and quality.

Many employers have successfully developed strategies to engage employees; few have effectively engaged dependent beneficiaries. Parts 4, 5, and 6 present strategies employers can use to engage dependent beneficiaries in health promotion and healthcare decision-making.

Overlooked Benefits: Child, Adolescent, and Maternity Care

Employer-sponsored medical benefit plans were originally developed to protect employees from the catastrophic costs of unplanned illness and injury. Over time, these "health insurance" plans evolved into "health coverage" programs as they began to provide access to basic healthcare services, preventive

services, and ancillary services such as medical equipment, dental care, and vision care.³ Today, most large employers offer a robust benefits package that typically includes:

- Healthcare coverage (general medical; prescription drugs; specialty services such as behavioral health, dental, and vision care; and disease management services).
- Disability benefits.
- Employee assistance services.
- Wellness programs.

These programs are designed to provide health or health-related services that address specific employee and employer needs.

Employer-sponsored health coverage programs, past and present, have focused mainly on the needs of working-age adults. Benefit plans were structured to provide care to adults, and the unique health care needs of children were largely ignored. Consider the following examples regarding care for children and pregnant women:

- Children generally receive care in different settings than adults; they are more likely to need provider office visits, home health services, and school-based care, and less likely to need prescription drugs or hospitalization.
- The type and intensity of required care differs as well. For example, comprehensive well-child care, (essential preventive care), requires 26 provider office visits and at least 37 immunizations during the first 21 years of life.^{4,5} These critical healthcare services are a long-term investment: they set the stage for a lifetime of good health.
- Children with special health care needs (approximately 12.8% of children under the age of 18) require intensive and/or specialized care. These children suffer from complex problems that are often best addressed by a **healthcare team** that can integrate necessary health, education, and social services.
- Research shows that preconception health affects pregnancy health and the health of infants and children. Therefore, child health requires a long-term perspective and an investment in women's health and well-being.

Typical employer-sponsored plans do not adequately account for these differences in either plan design or cost-sharing strategies.

Due to cost differences, a lack of visibility, and other issues, maternal and child health has been given less attention than health care for adults. Children, adolescents, and pregnant and postpartum women are a unique and important segment of an employer's beneficiary population. As a group they:

- Require specific health interventions and healthcare services that are different in scope, intensity, duration, or setting from that of the general population.
- Have a different disease and condition profile.
- Often rely on others to access health coverage and services.

Opportunities exist to improve existing benefits by tailoring them to better meet the unique needs of women and children.

Employer-Sponsored Health Coverage Pertinent to Maternal and Child Health

Dependent Coverage

Typically, employer-sponsored plans are open to qualifying employees under the age of 65, their dependents (children, and spouses or domestic partners), and occasionally retirees. Virtually all large employers provide maternity benefits (i.e., coverage for prenatal care, labor and delivery, and postpartum care). Dependent coverage for children varies by age, school status, and other factors. Most large employers provide child dependent coverage from birth, through adolescence, and into young adulthood. In fact, 43% of Business Group member survey respondents provide healthcare coverage to dependent children through age 25, as long as the child remains a full-time student.⁶

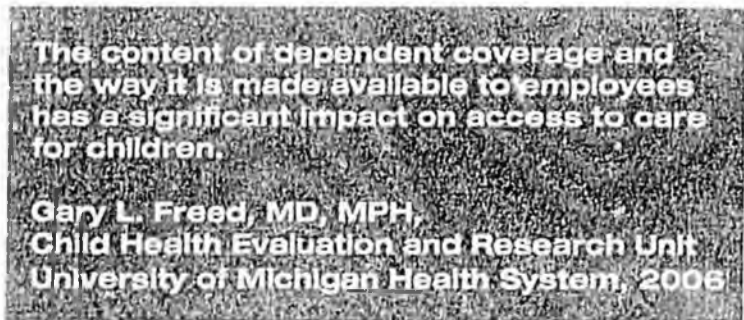
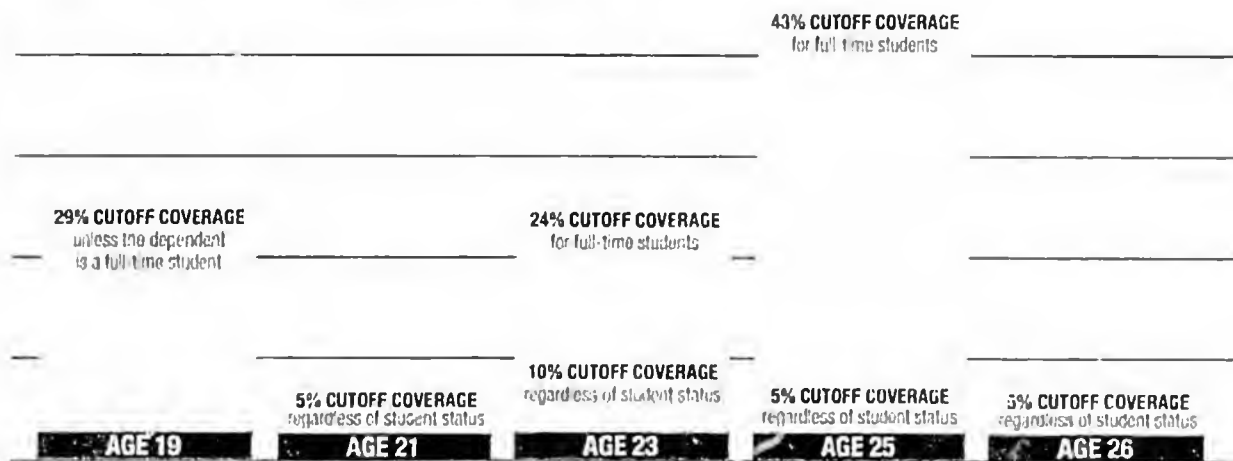


Figure 1A: Child Dependent Age Cutoffs for Large Employers



Source: National Business Group on Health, *Maternal and Child Health Benefits Survey* (Washington, DC: National Business Group on Health, January 2005)

Demographics

Pregnant Women

In 2006, there were 55.9 million women of childbearing-age (women aged 18 to 44 years) in the United States. Approximately 6 million (11%) of these women became pregnant and 4 million had live births.⁷ In 1999, 65.9% of pregnant women had private health insurance, namely employer-sponsored health coverage.⁸ Certain sub-groups of pregnant women, for example non-Hispanic white women and women with incomes 301% or more above the Federal poverty line, were even more likely to be privately-insured (74.8% and 92.1% respectively).⁸

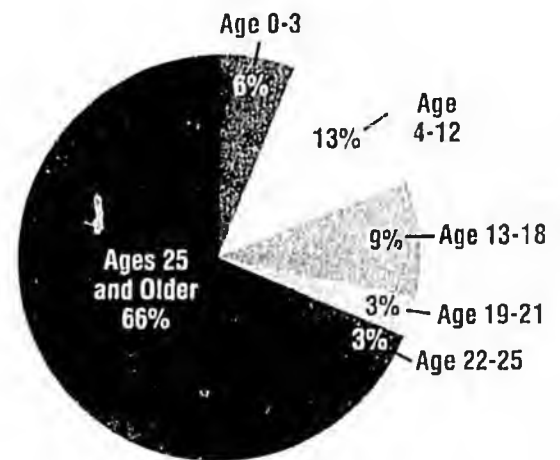
Children and Adolescents

In 2006, there were 73.7 million children in the United States between the ages of 0 and 17 years, accounting for 25% of the total population.⁷ In 2005, 57.8% of these children had employer-sponsored health coverage.⁹ According to Business Group surveys, child and adolescent dependents (through age 25) generally comprise about one-third of a large employer's total beneficiary population.⁶

Children with Special Health Care Needs

Approximately 12.8% of children under the age of 18 in the United States have a special health care need (a chronic and severe health problem that requires more intensive or specialized care than children normally require).¹⁰ Children with special health care needs are only slightly less likely than their peers to have employer-sponsored healthcare coverage. Children with special health care needs are an important part of an employer's beneficiary population because they:

- Experience complex, chronic, and severe health problems, which can be difficult to manage.
- Use more healthcare services than other children and thus have higher overall healthcare expenditures.
- Experience more sick days than other children and require additional office visits and hospitalizations, which results in lost productivity and absenteeism for their parents.



Researchers estimate that 8.6% of employees provide care to a child with a special health care need.¹¹

Pregnancy-Related Healthcare Costs: An Overview

During 2003, 90% of females had at least one healthcare expenditure. Pregnancy is a major cause of health expenditures among women of childbearing-age.¹²

The total cost of a pregnancy includes physician/provider services for prenatal care and labor and delivery; hospital or birth-center fees for labor and delivery; laboratory and diagnostic testing costs; medication; and postpartum care. The total cost of a pregnancy is difficult to estimate due to different provider payment methods (e.g., capitation); extensive regional differences; and variance in the procedures, medications, and screening services women and their newborns receive. According to a recent study of women with employer-sponsored health coverage who delivered a baby in 2004, prenatal care and maternity-related hospital payments combined averaged \$7,737 for a vaginal delivery and \$10,958 for a cesarean delivery (these figures include patient out-of-pocket costs).¹³

Pregnancy and childbirth account for nearly 26% of all hospitalizations in the United States.¹³

In 2000, the average hospital charge for labor and delivery was \$6,200 (this figure does not include charges for the newborn's care). Other types of obstetric hospital stays included antepartum care (average charge \$6,900), care related to pregnancy loss (average charge \$8,200), and postpartum care (average charge \$8,900).¹² Another study using 1996 data included infant costs in their analysis and found that labor and delivery costs averaged \$12,770 among women in employer-sponsored plans.¹⁴ The cost of delivery for a full-term healthy infant averaged \$8,593, and the cost of delivery for a full-term infant with complications averaged \$13,713.¹⁴

Prematurity is one of the most expensive complications of pregnancy. The cost of delivery for a preterm infant averaged \$21,052 in 1996, and the cost of delivery for an extremely preterm infant averaged \$63,256.¹⁴ In 2003, the care of premature or low-birthweight babies accounted for nearly half of the \$36.7 billion dollars spent on hospital care for infants.¹⁵ Nearly half of all charges related to prematurity fall in the laps of employers and other private insurers. In fact, each year employers spend approximately \$9 billion dollars on claims related to prematurity.¹⁶

Healthcare Costs for Children and Adolescents: An Overview

In 2000, national healthcare expenditures for children and adolescents totaled \$67 billion. Among children who used any type of healthcare service in 2000, the average medical expense was \$1,115.¹⁷ As is common in adult populations, a relatively small proportion of children are responsible for the bulk of total medical expenditures. For example, while the average per-child healthcare expenditure was \$1,115 in 2000, the median expense was only \$316.¹⁷

By definition, children with special health care needs use more healthcare services than their peers. For example, children with special needs have twice as many outpatient care visits as other children.¹⁷ The increased service use results in additional healthcare costs. Among children with a special health care need, the average medical expense was \$2,498 in 2000, more than double the average for all children.

Although children with special health care needs make up less than 15% of the population, they account for 41% of all child health expenditures.¹⁷

Healthcare Services Used	Children with Special Health Care Needs	All Children
Outpatient office visit	83.3%	67.4%
Emergency department visit	16.3%	11.1%
Inpatient hospital stay	6.0%	2.4%
Dental visit	50.3%	41.2%
Prescription medication	78.7%	45.8%

Source: Chevalley FM. *Utilization and Expenditures for Children with Special Health Care Needs*. Research Findings No. 24. Rockville, MD: Agency for Healthcare Research and Quality; 2006.

Special needs status is only one demographic variable that affects healthcare use and healthcare costs. For example, children living in the Northeast and the Midwest are more likely to use healthcare services and have higher healthcare expenses than children in other areas of the country. White children are more likely to incur medical expenses than either Hispanic or black children.¹⁷ Age is also an important factor: very young children (0 to 5 years) are more likely to have healthcare expenditures than older children (6 to 11 years) or adolescents (12 to 17 years).¹⁷

For additional information on healthcare costs for children and adolescents, refer to Part 4

More than 4 million hospitalizations per year could be prevented by improving primary care, increasing access to quality treatment, and encouraging Americans to live a healthier lifestyle.

In 2004, spending on pediatric conditions included¹⁸:

- Short-term diabetes complications (\$61 million)
- Asthma (\$326 million)
- Gastroenteritis (\$241 million)
- Urinary tract infections (\$109 million)

While hospital admission rates for some of these conditions have remained stable or declined, treatment costs for others have risen dramatically. For example, between 1997 and 2004¹⁸:

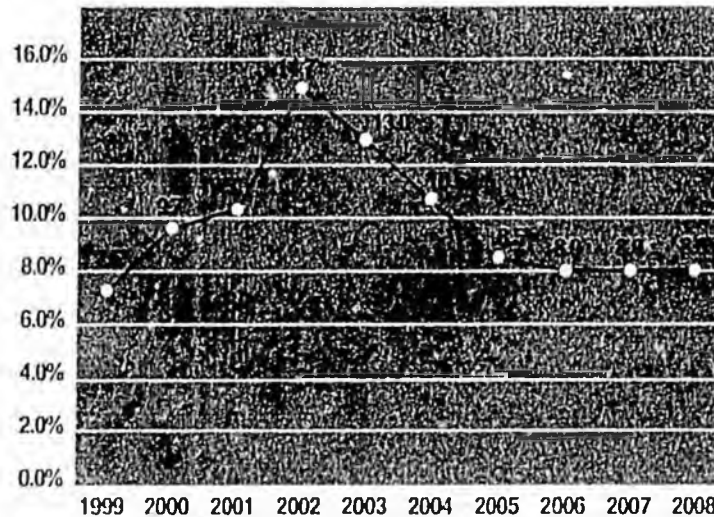
- Diabetes complications costs rose more than 50%, from \$40 to \$61 million.
- Pediatric gastroenteritis costs rose 10%, from \$219 to \$241 million.
- Urinary tract infection costs rose 27%, from \$86 to \$109 million.

Employer-Sponsored Healthcare Coverage Costs

The cost of employer-sponsored health plans increased dramatically through the late 1980s and 1990s. Healthcare cost increases peaked in 2002, when the cost trend reached 14.7%.¹⁹ Since 2002, costs have stabilized; yet large employers still face steep annual increases.¹⁹

In 2005, large employers, on average, paid \$6,658 per employee enrolled in an HMO plan and \$6,518 per employee enrolled in a PPO plan (refer to Figure 1C) (note this is a summary of individual and family coverage and does not include costs for some specialty behavioral health services, or dental or vision care).¹⁹ In 2007, the total average cost of coverage was approximately \$4,360 for an individual and \$12,110 for a family (these figures include employer *and* employee premium costs).²⁰

Figure 1B: Large-Employer Healthcare Cost Increases, 1990-2008



Source: National Business Group on Health, Watson Wyatt Worldwide. *2007 Dashboard for Success: How Best Performers Do It*. 12th Annual Survey Report. Washington, DC: Watson Wyatt Worldwide; 2007.

Figure 1C: Large-Employer Healthcare Costs by Plan Type, 2005

Plan Type	Employer Contribution		Employee Contribution		Total Premium	
	Single	Family	Single	Family	Single	Family
HMO	\$642	\$2,598	\$3,472	\$8,741	\$4,114	\$11,339
PPO	\$709	\$2,628	\$3,618	\$9,124	\$4,326	\$11,752
All Plan Types	\$689	\$2,658	\$3,550	\$8,917	\$4,239	\$11,575

Note: "Large employer" was defined as any employer with more than 200 employees.

Source: Henry J. Kaiser Family Foundation, Health Research & Education Trust. *Employer Health Benefits 2006 Annual Survey*. Menlo Park, CA: Henry J. Kaiser Family Foundation, Health Research & Education Trust; 2006.

For years employers have used employee cost-sharing to contain healthcare costs. In fact, growth in healthcare premiums has consistently outpaced both inflation and growth in workers' earnings for the past 20 years.²¹ Between 2000 and 2005, the cost of buying coverage for an employee (i.e., the employee's share of the premium) increased 61% (\$273) for single coverage and 60% (\$971) for family coverage.²²

Family out-of-pocket costs for medical care are also on the rise. In 2003, 18.2% of families covered by employer-sponsored health benefits spent 10% or more of their

The growth in healthcare costs has become a central women's health issue. A sizable share of women are falling through the cracks, either because they don't have insurance or even with insurance can't afford to pay for medical care or prescription drugs.

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Kaiser Family Foundation

annual income on medical expenses (premiums and copayment/coinsurance), compared to 14.2% in 1996.²¹ This represents a 28% increase over 8 years.

While employee cost-sharing is an effective cost-containment strategy, many experts believe that employers have maximized the financial benefit of cost-sharing.²³ High cost-sharing, specifically high premiums, can price some families out of the market. Similarly, high deductibles, copayment/coinsurance requirements, and out-of-pocket maximum amounts may force families to delay or forgo care. One of the primary purposes of the Plan Benefit Model is to balance employer sustainability and employee affordability. The Plan Benefit Model aims to ensure beneficiary access to essential care services by removing beneficiary cost barriers wherever possible, all without increasing employer costs.

Employer-Sponsored Maternal and Child Health Benefit Costs¹

To provide data on the cost of maternal and child healthcare services for a typical large employer in the United States, PricewaterhouseCoopers (PwC) developed a cost projection model. This model included data from PwC's proprietary health insurance cost model and the Medstat database.

The Medstat database used in this analysis included information on the experience of 3 million members covered by large-employer healthcare benefit plans during 2004. This data set represents a typical distribution of enrollment by plan type (HMO, PPO, POS, and indemnity plans) and average cost-sharing provisions (deductible, coinsurance, and copayment). The data was normalized to reflect the typical level of costs for a hypothetical population of 120,000 beneficiaries (refer to Figures 1D, 1E, and 1F).

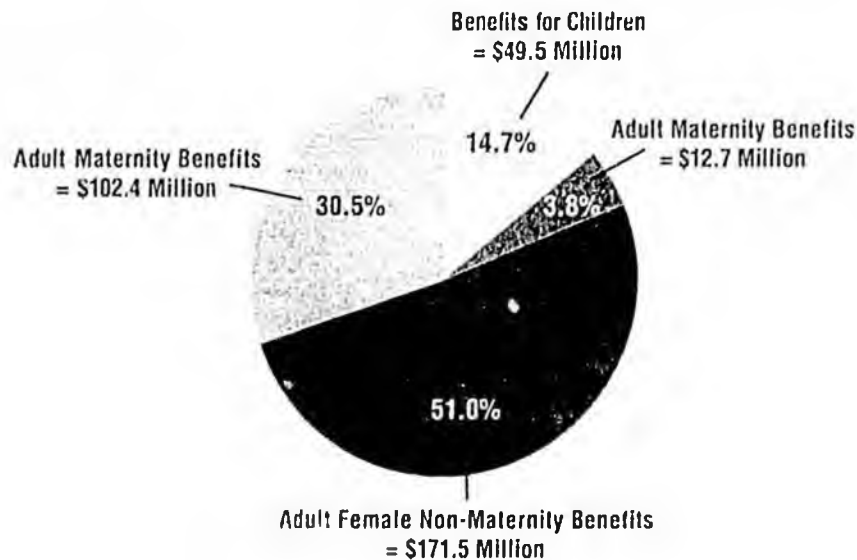
Children and adolescents comprised 33% of the beneficiary population included in the Medstat data and were responsible for 14.7% of total costs (\$49.5 million) (refer to Figure 1D). Children and adolescents' use of healthcare services, and the associated costs, were highest in the

first year of life (including birth) and during late adolescence. Healthcare services for children and adolescents were responsible for 16% of inpatient costs, 12% of outpatient costs, 18% of professional services/office visit costs, 10% of prescription drug costs, and 24% of ancillary service costs.

Females comprised 54.6% of the adult beneficiary population and were responsible for 64.3% of adult-related costs. Maternity benefits, including prenatal and postpartum care services, were responsible for 3.8% (\$12.7 million) of total plan costs.

Average Annual Cost of Benefits For Covered Children and Adolescents	
Newborns (0-1 year)	\$4,629
Children (1-12 years)	\$872
Adolescents (13-18 years)	\$1,125
<hr/>	
All Children (0-18 years)	\$1,258

Figure 1D: Health Plan Benefits for Large Employers, Average Benefits for a Plan with 120,000 Beneficiaries, 2004



Notes: The plan enrollment for this data includes active employees, retirees under 65, and COBRA participants. Dental benefits are not included. Benefits for retirees 65 and over are not included.

Source: PricewaterhouseCoopers LLP. *Actuarial Analysis of the National Business Group on Health's Maternal and Child Health Plan Benefit Model*. Atlanta, GA: PricewaterhouseCoopers LLP, August 2007.

Figure 1E: Beneficiary Healthcare Costs for Children and Adolescents, by Age, 2004

Age Group (Years)	Average Number of Beneficiaries	Inpatient Hospital Services	Outpatient Hospital Services	Professional Services	Prescription Drugs	Ancillary Services
00-00	1,664	\$2,708	\$242	\$1,537	\$67	\$74
01-04	5,199	\$177	\$235	\$569	\$107	\$58
05-09	7,613	\$99	\$154	\$309	\$135	\$61
10-14	9,450	\$126	\$156	\$307	\$183	\$71
15-19	10,099	\$249	\$279	\$412	\$249	\$94
20-25	5,342	\$367	\$357	\$493	\$383	\$110
Total	39,367	\$301	\$228	\$446	\$203	\$79

Figure 1F: Total Plan Costs, by Age, 2004

Age Group	Average Number of Beneficiaries	Inpatient Hospital Services	Outpatient Hospital Services	Professional Services	Prescription Drugs	Ancillary Services	Total
Children	39,367	\$11,860,067	\$8,992,537	\$17,572,525	\$7,979,406	\$3,101,806	\$49,506,342
Adults	80,633	\$62,093,331	\$64,069,727	\$81,467,397	\$68,911,505	\$10,021,403	\$286,563,363
All Beneficiaries	120,000	\$73,953,399	\$73,062,264	\$99,039,922	\$76,890,911	\$13,123,210	\$336,069,705
Distribution of Benefits		22.0%	21.7%	29.5%	22.9%	3.9%	100%
Children's % of Total	33%	16%	12%	18%	10%	24%	15%

The 2004 data shown above was one of the primary sources used to project the average health plan costs for 2007. The updated 2007 plan costs were used to estimate the impact of the Plan Benefit Model's recommended changes in plan design. For more information on the cost impact of recommend plan design changes, refer to Part 2.

Health-Related Costs for Employers

In addition to health plan expenditures, employers pay for specialty services such as dental, vision, and mental health care; disease management services; short- and long-term disability; and costs associated with absenteeism, lost productivity, and turnover.

Workplace Burden

A substantial proportion of employee's **lost work time** can be attributed to child health problems. Research shows that child illness and injury result in absenteeism, tardiness, leaving work early, and significant work interruptions.²⁴ Working parents with young children in childcare typically miss 9 days of work annually due to child illness; the parents of elementary-school-aged children miss up to 13 days of work annually due to child illness.²⁵ These missed work days result in **lost productivity** costs for employers. In fact, employee absences due to childcare breakdowns cost businesses in the United States approximately \$3 billion dollars every year.²⁵

Approximately 26% of the time, employees who call in sick are actually staying home to care for an ill family member, usually a child.²⁶

The parents of children with special health care needs are particularly vulnerable to lost work time. When asked about their experience during the previous year, parents of special needs children report an average of 20 missed school/childcare days, 12 provider office or emergency department visits, and 1.7 hospitalizations.²⁷ One study found that the mothers of children with a developmental delay or disability (e.g., cerebral palsy, autism) lose around 5 hours of work each week, totaling 250 hours per year. This translated into lost productivity costs of \$3,000 to \$5,000 a year (assuming an hourly employee cost of \$12 to \$20, including fringe benefits).²⁸

The **workplace burden** of childhood illness is highest among the parents of young children, due to the increased rate of illness among young children and their inability to care for themselves.²⁴ Illness, injury, and disability among adolescents also result in lost productivity for parents and subsequent costs for employers. Adolescent injuries are the most expensive injuries of any age group and require a significant amount of care. The parents of these adolescents often lose work time in order to care for their child in the hospital and during the rehabilitation process. Unique issues of adolescence such as serious mental illness, substance abuse, and unintended pregnancy can cause significant parental stress.

Both child and adolescent health problems can result in **work cutback** or, in extreme cases, an **early exit from the workforce**. Research shows that work/life benefits can support families struggling with acute or chronic illness or injuries.¹¹ These benefits can reduce turnover and improve productivity.^{25,26}

Family-Friendly Benefits

Employer sensitivity to family issues is strongly associated with increased job satisfaction and loyalty. A 2000 America @ Work survey found that several **family-friendly benefits** were independently related to organizational commitment. Employees who had access to (a) flexible work schedules, (b) preventive medical care, and/or (c) childcare for sick children, even when they did not personally use these benefits, showed a stronger commitment to their organization and a significantly lower intention to quit than employees without access to these benefits.³⁰

Family-friendly benefits are also a means of recruiting employees and promoting productivity (refer to Figure 1G). In a recent study, researchers evaluated the impact of four types of family-friendly benefits: prenatal programs, worksite lactation programs, sick childcare, and flexible working arrangements. All four benefit types were found to increase employer attractiveness. Furthermore, flexible working arrangements were found to improve productivity, and prenatal programs and lactation programs were found to reduce overall healthcare costs.³¹

The impact of children's special healthcare needs on families is substantial: 20.9% of parents report that their child's special health care need caused them financial difficulties and 28.9% reduced their hours or quit their job because of their child's needs.²⁹

There is considerable evidence that child health affects parents' work lives. Poor child health can present substantial challenges to parents' effort to manage their work and caregiving roles. Child health, however, is more than just a personal concern for parents. Owing to healthcare costs, lost time, and other employment implications, child health is also a relevant consideration for business organizations.

**Debra Major, Carolyn Allard
Journal of Occupational Health Psychology, 2004**

Figure 1G: Family-Friendly Benefits Offered by Large Employers, 2005

Type	Family-Friendly Benefit	Percentage of Large Employers who Offer Benefit
Flexible Work Schedule	Flextime	56%
	Bring child to work in an emergency	18%
Leave Programs	Paid family leave	39%
	Family leave above and beyond that required by Federal FMLA	28%
	Parental leave above and beyond that required by Federal FMLA	18%
Childcare Benefits	On-site childcare center	13%
	Emergency childcare (center open to sick children)	12%
	Company-supported childcare center	11%
Other	Lactation program/designated area	28%

Source: Burke ME. 2005 *Benchis Survey Report*. Alexandria, VA: Society for Human Resource Management; 2005.

Summary

Employers have a unique opportunity to improve the health of women and children through health benefit design, beneficiary education and engagement, and health promotion programs. This toolkit provides employers with the information and tools they need to design and implement evidence-informed, comprehensive health benefits; effectively communicate benefit offerings to beneficiaries; educate beneficiaries on the importance of health promotion and disease prevention; and link these activities to organizational success.

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2 The Maternal and Child Health Plan Benefit Model: Evidence-Informed Coverage



Health plan benefit design recommendations to improve the health of children, adolescents, and pregnant women.

- Plan implementation guidance – plan administration information, cost-sharing provisions, and key definitions.
- The Maternal and Child Health Plan Benefit Model –recommendations on minimum health, pharmacy, vision, and dental benefits; and abbreviated cost-impact assessments.
- An actuarial analysis illustrating the financial impact of the Maternal and Child Health Plan Benefit Model on both PPO and HMO plan designs. Employers can use this information to estimate the impact of the Maternal and Child Health Plan Benefit Model recommendations on their covered population.
- A cost-offset addendum that provides economic data to support the cost-effectiveness of prevention and early detection.

2

Maternal and Child Health Plan Benefit Model: Evidence-Informed Coverage

Plan Implementation Guidance Document

This document provides a description of the Maternal and Child Health Plan Benefit Model and guidance for its implementation. It also includes an actuarial analysis illustrating the financial impact of the Maternal and Child Health Plan Benefit Model on both HMO and PPO plan designs. Employers can use this information to estimate the cost implications of adopting the recommended benefits in their own covered population.

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Introduction

The Maternal and Child Health Plan Benefit Model (Plan Benefit Model) proposes a set of evidence-informed, comprehensive, standardized, integrated, and sustainable employer-sponsored health benefits for children and adolescents (ages 0 to 21 years), as well as preconception, pregnant, and postpartum women.

The model includes recommendations on *minimum* health, pharmacy, vision, and dental benefits; cost-sharing arrangements; and other information pertinent to plan design and administration. The Plan Benefit Model is not meant to be a gold-standard; rather, it is the National Business Group on Health's (Business Group's) baseline recommendation on which benefits *all* large employers should cover in *all* of their health plans.

The Plan Benefit Model was designed to:

1. Encourage evidence-informed benefit design.
2. Emphasize prevention and early detection.
3. Reduce employee cost barriers to essential care services.
4. Improve standardization.
5. Balance employee affordability and employer sustainability.

Plan Benefit Model Design

The Business Group used a multi-step process to identify, structure, and estimate the financial impact of the health benefits recommended in the Plan Benefit Model.

Development

The Business Group established the Maternal and Family Health Benefits Advisory Board (Benefits Advisory Board) to develop and vet the Plan Benefit Model, and to provide guidance on the overall project. The Benefits Advisory Board consisted of 14 Business Group member medical directors, benefit managers, and health promotion program staff; healthcare consultants; and delegates from the American Academy of Family Physicians (AAFP), the American Academy of Pediatrics (AAP), and the National Association of Pediatric Nurse Practitioners (NAPNAP). The Benefits Advisory Board met between February 2006 and May 2007 to design and revise the Plan Benefit Model.

Content and Data Sources

The benefits recommended in the Plan Benefit Model were adapted from clinical guidelines and recommendations developed by 28 professional organizations, healthcare groups, and Federal health agencies (refer to Figure 2A). In order to promote consistency and standardization, well-child care benefits were modeled on the American Academy of Pediatrics' *Bright Futures Guidelines* (2007, 3rd edition), which functions as the standard of preventive care in pediatric practices across the country.

When clinical guidelines and recommendations were not available, industry standard definitions and benefit coverage limits were applied. The Federal Employees Health Benefit Plan (FEHBP) was used

as the industry standard default. FEHBP is the largest group medical plan in the United States and is reviewed annually for adequacy.

In situations where clinical guidelines or recommendations conflicted, the Benefits Advisory Board reviewed the original documents and developed their own "expert opinion" statement.

Figure 2A: Organizations Cited in the Plan Benefit Model
Advisory Committee on Immunization Practices (ACIP)
Agency for Healthcare Research and Quality (AHRQ)
American Academy of Family Physicians (AAFP)
American Academy of Ophthalmology (AAO)
American Academy of Pediatric Dentistry (AAPD)
American Academy of Pediatrics (AAP)
American Association for Pediatric Ophthalmology and Strabismus (AAPOS)
American Association of Certified Orthoptists (AACO)
American College of Obstetricians and Gynecologists (ACOG)
American Dental Association (ADA)
American Dietetic Association (ADA)
American Medical Association (AMA)
American Psychological Association (APA)
American Speech-Language-Hearing Association (ASHA)
Bright Futures Guidelines
California Healthcare Foundation (CHCF)
Center for Medicare and Medicaid Services (CMS)
Centers for Disease Control and Prevention (CDC)
Eye Med
Federal Employee Health Benefit Plan (FEHBP)
Hospice Foundation of America (HFA)
Kaiser Family Foundation (KFF)
National Academy of Neuropsychology (NAN)
National Hospice and Palliative Care Organization
U.S. Armed Services Health Care Services (TriCare)
U.S. Breastfeeding Committee (USBC)
U.S. Department of Health and Human Services, Bureau of Health Professions (HRSA-BHP)
U.S. Preventive Services Task Force (USPSTF)

Review

The Plan Benefit Model was reviewed by the Benefits Advisory Board. In addition, an ad-hoc committee of 20 individuals and organizations reviewed the model and submitted comments and corrections. These external reviewers provided additional expertise and guidance. Reviewers included primary care providers; academic researchers; maternal and child health policy experts; patient and family advocates; and ancillary service providers, including dentists, dieticians, vision providers, and others. A full list of external reviewers is provided in the acknowledgements section on page iii.

Evidence-Informed Coverage

The Plan Benefit Model was informed by medical evidence. Some recommended interventions (e.g., STI screening) are evidence-based. Other recommended interventions do not meet the stringent criteria for being evidence-based, but nonetheless represent the best available information for health improvement. These interventions are based on what is called “recommended guidance.”

Generally, the term “evidence-based” refers to medical interventions (e.g., tests, procedures, medications) that have been evaluated and determined to be effective. This means the intervention has a measurable impact on health outcomes: it prevents disease, reduces mortality, or improves a person’s functionality.

Evidence-based interventions have a strong base of research to support their efficacy, safety, and cost-effectiveness.

An intervention is considered “**evidence-based**” when^{1, 2}:

- Peer-reviewed, documented evidence shows that the intervention is medically effective in reducing morbidity or mortality;
- Reported medical benefits of the intervention outweigh its risks;
- The estimated cost of the intervention is reasonable when compared to its expected benefit; and
- The recommended action is practical and feasible.

Recommended guidance is based on the best available information about a condition, disease, or health service, but lacks the scientific research support in order to be considered evidence-based. Expert opinion, expert panel judgments, and consensus opinion are all forms of recommended guidance.

Evidence-based benefit design is an approach for developing health benefits. Evidence-based plans promote health care with demonstrated effectiveness by providing more generous coverage for services supported by strong evidence, and less generous coverage for services that are unproven or evidence indicates may be ineffective or unsafe.³ The Business Group and many individual employers believe that this approach promotes quality and standardization, and helps reduce costs by eliminating waste.³

Evidence-based benefit design is a useful approach for many areas of clinical care. However, it is not feasible in all areas. For many interventions commonly performed in the course of child and adolescent care, there are few, if any, properly constructed studies that link the intervention with intended health outcomes. The absence of evidence does not demonstrate a lack of usefulness, however; it mostly reflects a lack of documented study.⁴ Many organizations and institutions are working to fill these existing gaps in information.⁵

Until scientific research can be conducted, employers must find other ways to evaluate the usefulness and appropriateness of child health interventions. Recommended guidance (e.g., an expert opinion from a leading professional organization) is one important source of information in the benefit design process.

Evidence-based recommendations in pediatrics are limited due to⁵:

- *Unique ethical issues regarding the withholding of treatment from vulnerable populations.* It would be unthinkable for a clinician to withhold a long-standing treatment from a child in order to test its utility; yet, that is what a true randomized controlled trial (RCT) would require.
- *Lower levels of research investment.* Children's health problems (compared to adult issues) are less likely to be studied, and, when studied, the research is not as well funded.
- *Challenges of research in children.* Children are more difficult to study than adults. For example, because children's bodies change rapidly through the natural process of growth and development, the effect of a given intervention (e.g., counseling to promote weight loss in obese children) can be difficult to measure.
- *Demographic challenges.* Children aged 1 to 5 years in the United States are the most diverse in terms of race and ethnicity of any age cohort.
- *Social determinants of health* (e.g., poverty, education, social support) impact children to a far greater extent than adults.

The Plan Benefit Model is based primarily on recommended guidance. For the purpose of transparency, each proposed benefit carries an "evidence rating."

Evidence Rating	Level
Evidence-Based Research	1
Recommended Guidance <ul style="list-style-type: none">• Expert Opinion• Expert Panel• Expert Consensus	2
Federally Vetted	3
Industry Standard	4

Plan Benefit Model Guidance

Covered Population

The Plan Benefit Model is designed to address the *minimum* health care needs of a target population:

1. Preconception, pregnant, and postpartum women.
2. Children (0 to 12 years of age) and adolescents (13 to 21 years of age), including those with special health care needs.

The Plan Benefit Model does not include recommendations on benefits for adult men (with the exception of vasectomy) or for adult women outside of the scope of maternity care.

The adolescent age limit (21 years) is consistent with commonly accepted definitions for differentiating between adolescence and adulthood.^{4,9} Plan provisions for preconception, pregnant, and postpartum women apply to adolescents who require reproductive health services. Benefit coverage for labor and delivery, which includes services for newborns, can be applied to the mother and/or retrospectively to the newborn child once an application for the child's health coverage has been completed. It is recommended that the application for enrolling the newborn child be completed and submitted to the employer's health plan within 30 days of birth.

Referenced Health Plans

The Plan Benefit Model was designed to support two common managed care plan designs: **preferred provider organizations (PPOs)** and **health maintenance organizations (HMOs)**. These two plan designs were chosen because they are extremely common. As such, utilization and claims data could be used for actuarial modeling purposes. The Plan Benefit model can be applied to other plan designs, such as consumer-directed health plans (CDHPs); however, restructuring would be required.

Covered Services

Covered services described in the Plan Benefit Model are designed to support a range of healthcare services along a prevention – illness – chronic disease continuum. The covered services are organized into five descriptive categories:

- **Preventive Services** are designed to detect the existence of, or risk for, diseases, conditions, and problems. These services include comprehensive health assessments; age-appropriate screening, counseling, preventive medication, and preventive treatment; parent and child education; and anticipatory guidance. The recommended preventive services address the physical, mental, vision, and oral health care needs of the target population.
- **Physician/Practitioner Services** support the delivery of care by individual health professionals who may or may not be affiliated with a group practice or hospital.
- **Emergency Care, Hospitalization, and Other Facility-Based Care** address acute health care needs. These services may be necessary to treat illness, address injury, or support pregnancy.
- **Therapeutic Services / Ancillary Services** include an array of specialty services that may be performed in a practitioner's office, the beneficiary's home, or in a healthcare facility.
- **Laboratory, Diagnostic, Assessment, and Testing Services** are used to determine the presence, severity, or cause of an illness, or for diagnosing a specific illness, injury, or disability.

Plan Benefit Model Key Concepts

Cost-Sharing

Employee/employer cost-sharing is an employer strategy designed to lessen the financial liability of a health plan. While employee cost-sharing is an effective cost-containment strategy, many experts believe that employers have maximized the financial benefit of cost-sharing.⁷ High cost-sharing, specifically high premiums, can price some families out of the market. Similarly, high deductibles and copayment/coinsurance requirements may force families to delay or forgo care.

Research has shown that as the cost of healthcare increases for beneficiaries, utilization of unnecessary *and* essential care decreases. When beneficiaries forgo preventive care or delay seeking care for an acute problem, there is a real risk that the problem will become exacerbated over time. In the end, the beneficiary is likely to require more intensive and expensive care than would have been required had he or she sought care when symptoms first emerged.

The Plan Benefit Model supports access to essential care services by removing beneficiary cost barriers wherever possible. The Plan Benefit Model aims to balance employee affordability and employer sustainability.

Growth in healthcare premiums has consistently outpaced both inflation and growth in workers' earnings for the past 20 years.⁸ Between 2000 and 2005, the cost of buying coverage for an employee (i.e., the employee's share of the premium) increased 61% (\$273) for single coverage and 60% (\$971) for family coverage.⁹ Family out-of-pocket costs for medical care are also on the rise. In 2003, 18.2% of families with employer-sponsored health coverage spent 10% or more of their annual income on medical expenses (premiums and copayment/coinsurance), compared to 14.2% in 1996. This represents a 28% increase over 8 years.⁸

Typical cost-sharing methods include: premiums, deductibles, copayment or coinsurance, annual out-of-pocket maximums, and/or lifetime maximums. The Plan Benefit Model includes the following cost-sharing recommendations. These cost-sharing provisions were included in the actuarial analysis, with the exception of recommended premium and out-of-pocket amounts.

- **Preventive Services.** The Plan Benefit Model recommends zero cost-sharing for preventive services to avoid real or perceived financial barriers, and to increase utilization.
- **Premium.** If employers require employees to contribute toward the cost of health benefits, the Plan Benefit Model recommends an amount between 15% and 25% of the total plan cost.¹⁰ In 2007, the average cost of coverage was approximately \$4,360 for individual coverage and \$12,110 for family coverage (these figures include employer *and* employee premium costs).¹¹ Twenty percent (20%) cost-sharing was applied to these numbers in order to calculate the following recommended premiums:
 - Individual (1): \$870
 - Individual plus one dependent (2): \$1,740
 - Family (3+): \$2,420

If a higher premium amount is required, the Plan Benefit Model recommends lowering the maximum out-of-pocket limit by a similar percentage. The Plan Benefit Model also recommends using scaled premiums that are consistent with an employer's salary banding methodology.

- **Deductible.** The Plan Benefit Model recommends *against* using deductibles because they can be cost barriers to essential services. If a deductible must be used, one amount should be collectively applied to all covered services described in the Plan Benefit Model.
- **Out-of-Pocket (OOP) Maximum.** OOP maximums protect beneficiaries from mounting cost-sharing requirements (premium costs and copayment/coinsurance). If an employer includes a cost-sharing provision, the Plan Benefit Model recommends the following annual total OOP schedule*:
 - Individual (1): \$2,370 total (\$1,500 maximum copayment/coinsurance, plus \$870 premium).
 - Individual plus one dependent (2): \$5,420 total (\$3,000 maximum copayment/coinsurance, plus \$1,740 premium).
 - Family (3+): \$5,420 total (\$3,000 maximum copayment/coinsurance, plus \$2,420 premium).

*Note that these recommended OOP maximums *include* dental and vision out-of-pocket expenses; they do not include out-of-pocket pharmaceutical costs.
- **Copayment.** The Plan Benefit Model recommends a copayment schedule for the HMO model. Copayments are a disincentive to the overuse of certain healthcare services; they also scale out-of-pocket spending with service use (i.e., beneficiaries who use more healthcare services are required to pay more in out-of-pocket costs than those who use fewer services). This schedule excludes preventive care, and is scaled to correspond with the cost and utilization frequency of the service category. Plan participants are protected from excessive copayment costs through the OOP maximum noted above.

- **Coinsurance.** The Plan Benefit Model recommends a coinsurance schedule for the PPO model. Coinsurance is a disincentive to the overuse of certain healthcare services; it also scales out-of-pocket spending with service use. This schedule excludes preventive services, and is scaled to correspond with the cost and utilization frequency of the service category. Plan participants are protected from excessive coinsurance costs through the OOP maximum noted above.
- **Annual/lifetime caps** are excluded from the Plan Benefit Model for reasons of equity.

The Plan Benefit Model's OOP maximum includes premium costs, which is atypical in the marketplace today. Premium costs were included in the OOP maximum so that employees will be able to assess their maximum financial liability for health coverage under an employer-sponsored group medical plan.

Communication

Employer-sponsored health plans subject to the Employee Retirement Income Security Act (ERISA) of 1974 are required to provide plan participants with specific information about the benefits to which they are entitled, including covered benefits, plan rules, financial information, and documents about plan operation and management. The Plan Benefit Model attempts to support the regulatory provisions contained in 29 CFR - CHAPTER XXV - PART 2520 regarding the publication of health plan provisions in a summary plan description (SPD). Employers are encouraged to develop their own plan administration rules regarding the following items, which are not referenced in the Plan Benefit Model:

For additional information on effectively communicating benefit changes to beneficiaries, please refer to In Part 5.

- o COBRA eligibility and administration procedures.
- o Claims administration procedures.
- o Eligibility requirements.
- o Provider network administration rules.
- o Details regarding plan sponsorship, governance, and termination provisions.

Plan Structure

- The Plan Benefit Model recommends that **group care** be reimbursed as a covered service. Group care allows for multiple plan participants to be seen at the same time by an individual provider or healthcare team. Group care is a cost-effective means of care that can improve quality and timeliness in specific situations. Group care is most relevant for education-based services such as nutrition counseling or anticipatory guidance. Employers are encouraged to develop administrative procedures and set reimbursement levels with their plan administrator(s).
- The Plan Benefit Model also recommends that care delivered by a "healthcare team" be reimbursed as a covered service. A **healthcare team** is a group of healthcare professionals who work together to recommend diagnoses or treatments. Currently, claims for services delivered by two or more providers on the same day for the same diagnosis are frequently denied. The denial of such claims inhibits efficient referrals (e.g., the immediate referral from

- a primary care provider to a mental health specialist) and coordinated care.
- A **network**, for the purpose of a PPO or an HMO, is typically a geographic area designated by the employer or the health plan. Providers and provider services are classified as being “in-network” or “out-of-network.” The Plan Benefit Model provisions recommended here only cover in-network providers and provider services. Employers should apply their own out-of-network provisions, as appropriate.
- **Plan coordination.** The Plan Benefit Model strongly encourages employers to coordinate the delivery of care when using multiple plan administrators (e.g., vision, dental, behavioral health). Beneficiaries are often confused by multiple plan administration rules and cost-sharing requirements, and employers sometimes duplicate payment for like services (e.g., EAP and mental health treatment services).
- **Flex benefits.** The Plan Benefit Model recommends that employers “flex” benefits for children and women with complex case management needs. All children with special health care needs and all women with high-risk pregnancies should qualify for case management. A definition of case management is provided in the next section. Employers should work with their health plan administrators to determine the exact nature of flex benefits. Some examples include:
 - Extending a single benefit for multiple providers (e.g., home health visits).
 - Providing additional benefits for high-risk populations (e.g., increasing preventive dental care visits from the recommended two visits per year to three visits per year for certain children).
 - Reducing or eliminating copayment or coinsurance amounts on essential services or products.

Key Definitions that Govern Plan Provisions

Most employer-sponsored health plans use a set of definitions to explain and govern plan provisions, and mediate appeals from plan participants and providers when claims are denied. The key definitions that guide the Plan Benefit Model are listed below. Each definition was created or adapted to meet the specific health care needs of children, adolescents, and pregnant women.

Medical Necessity

Medically necessary care is:

- Prescribed by a physician or other qualified healthcare provider.^A
- Required to prevent, diagnose, or treat an illness, injury, or disease or its symptoms; help maintain, improve, or restore the individual’s health or functional capacity; prevent deterioration of the individual’s condition; or remedy developmental delays or disabilities.
- Generally agreed to be of clinical value.
- Clinically consistent with the patient’s diagnosis and/or symptoms.
- Appropriate in terms of type, scope, frequency, duration, intensity, and delivered in a setting that is appropriate to the needs of the patient.^{B, C}

^A The fact that services are provided, prescribed, or approved by a physician or other qualified healthcare provider does not in and of itself mean that the service is medically necessary.

^B Care should not be primarily for the convenience of the patient, physician, or another healthcare provider (e.g., elective cesarean delivery).

^C Care should be rendered in the least intensive setting appropriate for the delivery of the service, procedure, or equipment.

Children With Special Health Care Needs

Children with special health care needs are those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that usually required by children of the same age.¹² Children who are victims of abuse or trauma and children in foster care also qualify as "children with special needs" due to their demonstrated risk for physical, emotional, and behavioral problems.

Case Management

Case Management refers to the arrangement, coordination, and monitoring of healthcare services to meet the needs of a particular patient and his/her family. Case management is conducted by a case manager or other qualified healthcare provider who - in collaboration with the patient and the patient's healthcare team - develops, monitors, and revises a plan that outlines the patient's immediate and ongoing health care needs. Case management may also include the coordination or delivery of the following services:

- Arrangement for community services.
- Arrangement for physician ordered services.
- Benefit administration.
- Benefit education/optimization and provider/facility selection.
- Collaboration with care providers within or outside of the healthcare team (e.g., social services, school counselors).
- Crisis intervention.
- Family consultation.
- Patient education.
- Patient advocacy.

The Plan Benefit Model recommends that all children with special health care needs and all women with high-risk pregnancies have access to case management services.

Experimental Treatment Modalities

A drug, device, or procedure will be considered "experimental" if any of the following criteria apply:

- There is insufficient outcome data to substantiate the treatment's safety.
- No reliable evidence demonstrates that the treatment is effective in clinical diagnosis, evaluation, or management of the patient's illness, injury, disease, or its symptoms, or; evaluation of reliable evidence indicates that additional research is necessary before the treatment can be classified as equally or more effective than conventional therapies.
- The treatment is not of proven benefit or not generally recognized by the medical community as effective or appropriate for the patient's specific diagnosis.
- The treatment has not been granted required FDA approval for marketing.^A
- The treatment is only provided or performed in special settings for research purposes.

^A This criterion does not exclude 'off label' use.

Plan Integration

Employers are strongly encouraged to systematically coordinate their health plan design and administration activities with other benefit and human resource programs. The Business Group believes this type of integrated approach will lead to decreased healthcare costs. Examples of integration opportunities include:

- Team with workforce scheduling staff to develop alternatives for pregnant and postpartum women and parents of children with special healthcare needs (e.g., compressed workweeks, telecommuting, flex-time, alternative start and end times, and partial workloads).
- Collaborate with disability plan administrators regarding return-to-work strategies for postpartum women.
- Coordinate plan benefit administration activities with employee assistance program (EAP) managers regarding the availability and use of mental health prevention and treatment benefits.
- Include information on the value of preventive services in work/life manager and employee training sessions.
- Include well-child care and prenatal care resources in health promotion materials.
- Incorporate maternal and child health needs into existing worksite-based health promotion programs and policies (e.g., healthy cafeteria, on-site immunizations, campus-wide smoking ban).

Actuarial Analysis

Purpose

Benefit managers charged with administering employer-sponsored health benefits are often forced to make difficult resource allocation decisions. Typically, an employer's benefits budget determines the selection and continuation of health benefits. However, increasing healthcare costs and stagnating quality have led many employers to shift their focus from budget-based allocation decisions to value-based purchasing strategies. **Value-based purchasing** brings together information on the quality of healthcare, including health outcomes and health status, with data on the dollar outlay going towards health.¹³ It aligns financial incentives for beneficiaries and providers to encourage the use of high-value care while discouraging the use of low-value or unproven services.¹⁴ Employers have also begun to evaluate the medical evidence for benefits, as described in the previous section.

Concepts of evidence and value have helped balance health benefit decisions in recent years. However, the cost impact of benefit modification remains a critical factor in employers' resource allocation decisions. To help employers understand the cost of adopting the Plan Benefit Model recommendations, the Business Group sponsored an actuarial meta-analysis of the model. This analysis estimated the cost impact of the model's recommendations on typical large-employer health

Because preventive services can prevent or reduce the need for treatment they provide a cost-offset. Employers who invest their healthcare dollars in screening, counseling, and preventive medications may be able to avoid spending healthcare dollars on treatment. In some cases, where the cost of screening is less than the cost of treatment, employers may be able to save healthcare dollars by investing in preventive services. For more information on cost-offsets, refer to page 77.

plans (HMO and PPO plan types). The analysis provides cost-impact assessments of the following:

- The Plan Benefit Model (in whole);
- Each service category (e.g., preventive services); and
- Each recommended line-item benefit (e.g., immunizations).

The meta-analysis was conducted by PricewaterhouseCoopers, LLP (PwC) in conjunction with the Business Group.

Process

In order to estimate the cost impact of the Plan Benefit Model, PwC:

1. Identified International Classification of Diseases Version 9 (ICD-9) diagnoses codes supported by the Plan Benefit Model.^A
2. Used these codes and the Plan Benefit Model recommendations to construct a benchmark model, called the PricewaterhouseCoopers' HMO/PPO Benchmark Model (HMO/PPO Benchmark Model) (Figure 2B).
3. Priced the ICD-9 codes and developed utilization and cost estimates for the HMO/PPO Benchmark Model using PwC proprietary health insurance cost models, Medstat data, and data from other private and public-sector sources (e.g., peer-reviewed journal articles, meta-analyses).
4. Used key attributes of the HMO/PPO Benchmark Model to illustrate the employer and employee costs of a standard HMO and PPO. These plan costs were then applied to the Plan Benefit Model in order to calculate the estimated cost increase or decrease of applying the Plan Benefit Model recommendations to a typical large-employer health plan.

The HMO/PPO Benchmark Model is an actuarial model that PwC created in order to develop cost-impact estimates for the Maternal and Child Health Plan Benefit Model (Plan Benefit Model).

HMO/PPO Benchmark Model

The HMO/PPO Benchmark Model (Figure 2B) provides estimates of the average cost of typical large-employer health plan (HMO and PPO plan types). The costs are modeled for 2007 and represent typical utilization rates and service costs for large-employer health plans covering a commercial population of active employees and dependents.^B The estimates are based on dollar amounts paid to healthcare providers who deliver medical, mental health, dental, and vision services covered under typical employer-sponsored health plans; they do not include administrative costs charged by the health plan administrator.

The HMO/PPO Benchmark Model was based on the following sources:

- PwC proprietary health insurance cost models;
- Large-employer claims experience from the Medstat database of 3 million members for services incurred in 2004; and
- Published healthcare cost reports.

Figure 2B: PricewaterhouseCoopers' HMO/PPO Benchmark Model

	Average Allowed Costs	Amount Paid by Employees	Amount Paid by Employers
HMO plan costs			
Average per member per month (PMPM)	\$322.07	\$29.98	\$292.10
Average per employee per year (PEPY)	\$8,116	\$755	\$7,361
PPO plan costs			
Average per member per month (PMPM)	\$390.31	\$86.52	\$303.79
Average per employee per year (PEPY)	\$9,836	\$2,180	\$7,656

Note: The benchmark model may include covered services that are not applicable to an individual employer's population.

HMO/PPO Benchmark Model Terminology

The following items describe terminology used in the HMO/PPO Benchmark Model:

- **Average Allowed Charges PMPM** represents billed charges (less provider discounts) and is equivalent to the total plan costs paid by the employer and the employees.
- **Amount Paid by Employees.** The estimated cost of services paid by employees depends on the cost-sharing provisions of their health plan. In order to facilitate comparisons to a known plan design, the following cost-sharing provisions were used in the HMO/PPO Benchmark Model:
 - o **HMO Medical Cost-Sharing.** HMO cost-sharing for medical services includes \$10 copayment for primary care office visits, \$25 copayment for specialist office visits, \$100 copayment for emergency department visits and inpatient hospital admissions, \$50 copayment for outpatient surgery, and 20% coinsurance for durable medical equipment (DME).
 - o **PPO Medical Cost-Sharing.** PPO cost-sharing for medical services includes a \$250 deductible, 20% coinsurance, and a \$2,500 out-of-pocket (OOP) maximum. The deductible and OOP maximum are on a per member basis. The family deductible is \$500, and the family OOP maximum is \$5,000. Note that this plan design does not have a fixed dollar copayment for office visits, which is fairly common in today's marketplace. However, many employers are shifting toward coinsurance as the predominant method of cost-sharing.
 - o **Prescription Drugs.** For both HMO and PPO plans, cost-sharing includes \$10 copayment for retail generic drugs and \$25 copayment for retail brand prescriptions. Required copayment for mail-order prescriptions with a 90-day supply are \$20 for generic prescriptions and \$50 for brand prescriptions. Prescription drugs are not subject to an OOP maximum in the HMO/PPO Benchmark Model.

- o **Dental.** For both PPO and HMO plans, cost-sharing includes a \$50 deductible. There is no coinsurance for preventive services, 20% coinsurance for restorative services, and 50% coinsurance for orthodontic services. The maximum annual dental benefit paid by the employer is \$2,500 per member, with a \$5,000 family maximum.
- o **Vision.** For both PPO and HMO plans, vision exams require a \$25 copayment and the maximum annual benefit for eye-wear is \$200 per member.
- **Benefits Paid by Employer.** The amount paid by the employer is the difference between the *total allowed amount* and the *amount paid by employees*.

Maternal and Child Health Plan Benefit Model Actuarial Analysis

The Plan Benefit Model actuarial analysis begins on page 18. The data are organized into a HMO cost estimate (Figure 2E) and a PPO cost estimate (Figure 2F). The analysis documents provide estimates of the incremental cost to an employer of adopting each line-item benefit recommended in the Plan Benefit Model. The cost increases are expressed on a per member per month (PMPM) basis and as a percent increase to the HMO/PPO Benchmark Model described in Figure 2B.

Estimated Cost Impact of the Plan Benefit Model

If an employer *did not offer any* of the recommended benefits and choose to adopt the Plan Benefit Model in full, the recommended HMO plan would cost \$322.07 PMPM or \$8,116 per member per year (PMPY) and the PPO plan would cost \$390.31 PMPM or \$9,836 PMPY (refer to Figures 2E and 2F).

If an employer's current health plans were identical to the HMO/PPO Benchmark Model and the employer were to adopt all of the Plan Benefit Model recommendations, the employer's health plan costs would increase 10% and 6.2%, respectively (refer to column H in Figures 2E and 2F for line-item benefit cost estimates, and Figures 2C and 2D for high-level summaries). However, because most large employers provide coverage for at least some of the benefits recommended in the Plan Benefit Model (e.g., prenatal care), the total cost increase is likely to be less than noted. Analysis of the variance between an employer's current health plans, the HMO/PPO Benchmark Model, and the Plan Benefit Model is required for an exact cost-impact assessment.

Figure 2C: Estimated Impact of Plan Benefit Model Recommendations on a Typical Large-Employer HMO Plan Design

	Employer Impact of Plan Benefit Model (PMPM)	Total Employer-Adjusted Cost of Plan Benefit Model (PMPM)	Percent Employer Change from Current Cost Estimate (% of total)*
Impact Benefit Additions and Modifications	\$13.34	4.6%	6.2%
Impact From Cost-Shifting to Employer/From Employee	\$4.44	1.6%	N/A
Total	\$17.79	6.2%	6.2%

Figure 2D: Estimated Impact of Plan Benefit Model Recommendations on a Typical Large-Employer PPO Plan Design

	Employer Impact of Plan Benefit Model (PMPM)	Total Employer-Adjusted Cost of Plan Benefit Model (PMPM)	Percent Employer Change from Current Cost Estimate (% of total)*
Impact Benefit Additions and Modifications	\$20.81	6.5%	9.9%
Impact From Cost-Shifting to Employer/From Employee	\$9.50	3.1%	N/A
Total	\$30.31	10.0%	10.0%

How to Use the Actuarial Analysis Information

Employers can use the actuarial cost estimates listed in Figures 2C-2F to estimate the cost implications of adopting the recommended benefits for their covered population.

It is important to note that the financial data presented in the actuarial analysis documents *cannot* be used to predict the *exact* cost of implementing Plan Benefit Model recommendations for any particular employer. The cost increase estimates were based on the degree to which the HMO/PPO Benchmark Model benefits were *lower* than the benefits recommended in the Plan Benefit Model.

If a given employer's current health benefit costs are lower or higher than those listed in the HMO/PPO Benchmark Model, or if the employer's current health plan costs do not match the HMO/PPO Benchmark Model costs, then the actuarial analysis cost estimates will not be exact. Therefore, it is important that employers compare their current health benefits to those recommended in the Plan Benefit Model and analyze the variance. A side-by-side comparison tool is provided in Part 3 for this purpose.

Explanation of Terms Used in the Actuarial Analysis Documents

Current Cost Estimate (PMPM)

- **Total costs (PMPM)**, similar to the **Allowed Charges**, represent 100% of the estimated costs that will be paid by the employer and employee. Total costs are expressed on a per member per month (PMPM) basis.
- **Paid by Members (PMPM)** represents the estimated amount or percent of the total costs that are paid by employees and dependents. These costs typically reflect the specific cost-sharing amounts that are included in each covered benefit or service. Employees and dependents are collectively referred to as "members" and costs are expressed on a per member per month (PMPM) basis.
- **Paid by Employer (PMPM)** represents the estimated amount or percent of the total costs that are paid by the employer and are expressed on a per member per month (PMPM) basis.

Revised Benefit Cost Estimate

- **Employer Impact of Plan Benefit Model (PMPM)** represents the estimated change in the employer costs that are created by applying the Plan Benefit Model recommendations to the total costs. These costs typically reflect recommended changes that were made to the cost-sharing strategy or benefit coverage levels.
- **Total Employer-Adjusted Cost of Plan Benefit Model (PMPM)** represents the employer's share of the combined total estimated cost for the Plan Benefit Model.
- **Member Impact of Plan Benefit Model (PMPM)** represents the member's financial portion of the costs associated with each service recommended in the Plan Benefit Model. The change in value from the HMO/PPO Benchmark Model is typically a function of the change in the recommended cost-sharing levels in the Plan Benefit Model.
- **Percent Change from Current Cost Estimate (% of Total)** represents the percentage change to the employer's share of the combined total estimated cost for the Plan Benefit Model.
- **Rationale for Change** summarizes the changes the Plan Benefit Model makes to the HMO and PPO Plan Design Benchmark Model along with the estimated cost or percentage change to the employer's share of the overall benefit plan costs.
- **Coinsurance or Copayment Amount** summarizes the value of the member's cost-sharing responsibility for a specific service category.
- **Coinsurance or Copayment Frequency** summarizes the frequency that a member will be required to pay the coinsurance or copayment amount.

Summary Points

- The Maternal and Child Health Plan Benefit Model (Plan Benefit Model) proposes a set of evidence-informed, comprehensive, standardized, integrated, and sustainable employer-sponsored health benefits for children and adolescents (ages 0 to 21 years), as well as preconception, pregnant, and postpartum women. It includes recommendations on minimum health, pharmacy, vision, and dental benefits; cost-sharing arrangements; and other information pertinent to plan design and administration.
- The Plan Benefit Model supports access to essential care services by removing beneficiary cost barriers wherever possible.
- To help employers understand the cost of adopting the Plan Benefit Model recommendations, the Business Group sponsored an actuarial meta-analysis of the model. This analysis estimated the cost impact of the model's recommendations on typical large-employer health plans (HMO and PPO plan types). If an employer *did not offer any* of the recommended benefits and were to adopt the Plan Benefit Model in full, the recommended HMO plan would cost \$322.07 PMPM or \$8,116 per member per year (PMPY) and the PPO plan would cost \$390.31 PMPM or \$9,836 PMPY. If an employer's current health plans were identical to the HMO/PPO Benchmark Model and the employer were to adopt all of the Plan Benefit Model recommendations, the employer's health plan costs would increase 10% and 6.2%, respectively.

Footnotes

- ^A ICD-9 (2007) diagnosis codes that corresponded to the recommended services were included (ICD-9 diagnosis codes were excluded for general categories of services [e.g., office visits, ED visits]).
- ^B The HMO/PPO Benchmark Model did not include the cost of case management services for children with special health care needs or other populations with complex medical needs. An estimate of the cost of adding flex benefits (as described in the Plan Benefit Model) would need to consider the degree to which these services are already provided in an employer's general case management benefit.

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Figure 2E: Pricing Analysis of the Maternal and Child Health Plan Benefit Model (HMO Plan Design)

HMO Benchmark Model Costs and Changes to Meet Minimum Plan Benefit Model Recommendations

HMO Estimate (2007 Year Dollars)	Current Cost Estimate (PMPM) Average 2007 HMO Cost Per Member Per Month ¹			Revised Benefit Cost Estimate				
	Plan Benefit Model Recommendations	Total Costs (PMPM)	Paid by Members (PMPM)	Paid by Employer (PMPM)	Employer Impact of Plan Benefit Model (PMPM)	Total Employer- Adjusted Cost of Plan Benefit Model (PMPM)	Member Impact of Plan Benefit Model (PMPM)	Percent Employer Change from Current Cost Estimate (% of total)*
I. Preventive Services								
a. Well-Child Services	\$2.24	\$0.37	\$1.87	\$0.37	\$2.24	\$(0.37)	0.1%	
b. Immunizations	\$2.21	\$-	\$2.21	\$-	\$2.21	\$-	0.0%	
c. Preventive Dental Services	\$6.86	\$-	\$6.86	\$-	\$6.86	\$-	0.0%	
d. Early Intervention Services for Mental Health/Substance Abuse	\$-	\$-	\$-	\$4.83	\$4.83	\$-	1.7%	
e. Preventive Vision Services	\$-	\$-	\$-	\$0.32	\$0.32	\$-	0.1%	
f. Preventive Audiology Screening Services	\$-	\$-	\$-	\$0.32	\$0.32	\$-	0.1%	
g. Unintended Pregnancy Prevention Services	\$3.07	\$-	\$3.07	\$-	\$3.07	\$-	0.0%	
h. Preventive Preconception Care	\$-	\$-	\$-	\$-	\$-	\$-	0.0%	
i. Preventive Prenatal Care	\$-	\$-	\$-	\$1.61	\$1.61	\$-	0.6%	
j. Preventive Postpartum Care	\$-	\$-	\$-	\$0.32	\$0.32	\$-	0.1%	
k. Preventive Services (General)	\$-	\$-	\$-	\$3.22	\$3.22	\$-	1.1%	
Category Sub-Total:				\$10.99		\$(0.37)	3.8%	
II. Recommended Levels of Care for Physician/Practitioner Services								
a. Services Delivered by a Primary Care Provider	\$23.72	\$1.85	\$21.88	\$-	\$21.88	\$-	0.0%	
b. Services Delivered by a Mental Health/Substance Abuse Provider	\$4.59	\$0.82	\$3.94	\$0.74	\$4.69	\$-	0.3%	
c. Services Delivered by a Specialty Provider or Surgeon	\$64.21	\$2.53	\$61.67	\$-	\$61.67	\$-	0.0%	
d. E-Visits and Telephonic Visits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Category Sub-Total:				\$0.74		\$0.00	0.3%	