Economic Analysis of the ColoradoCare Proposal
Including addendum with 2019 projections

Prepared by Ivan J. Miller, Ph.D. for the Colorado Foundation for Universal Health Care
April 10, 2015 with Addendum added 8.3.15
Expense and Revenue Estimates

In April 2013, the Colorado Foundation for Universal Health Care (Foundation) published an economic analysis by Dr. Gerald Friedman that compared a Colorado universal health care plan to the health care system in operation at the time as well as to the scenario if the Affordable Care Act (ACA) were repealed. That report, “Three Possibilities for Colorado’s Future Health Care Financing and Delivery” (2013 Analysis), demonstrated that financing universal health care as a statewide Colorado Health Care Cooperative is feasible and has economic advantages.

The Colorado Health Care Cooperative proposal, renamed ColoradoCare, is expected to be introduced into the Colorado Legislature in 2015. While the plan’s basic structure is the same as in the 2013 proposal, many of the policy features have been refined. Since the 2013 Analysis was published, the Foundation has continued to research implementation and policy considerations, and has updated financial information concerning ColoradoCare. To incorporate the continuing research and refinements of the proposal, the following Economic Analysis of the ColoradoCare Proposal (ColoradoCare Analysis) has been prepared using the example year 2016.

Economic analysis of ColoradoCare, example year 2016

Report methodology
The ColoradoCare Analysis uses the same methodology as the 2013 Analysis. Based on further research on the line items and on updated financial information, this ColoradoCare Analysis makes adjustments to the 2013 estimates of expenses and revenues, and describes the projected impact on Coloradans.

Methodology
The total of Colorado Health Expenditures (CHE) (Consumption category) can be determined using the data from Centers for Medicare and Medicaid Services (CMS) reports of National Health Expenditures, Consumption category (NHE). The CHE represents all of the money spent on health care in Colorado, including money spent on parts of health care that are not usually covered by health insurance. To determine the expenses of ColoradoCare, both items not usually covered by insurance and savings from ColoradoCare are subtracted from the adjusted CHE, while anticipated increases in expenses are added. Contributions from continuing federal programs are also subtracted from the adjusted CHE to yield the ColoradoCare expenses for paying for all remaining universal health care. ColoradoCare’s expenses are compared with the anticipated revenues.

The 2016 example year is used because good expense and revenue estimates are available, and because the 2013 Analysis has data for 2016 for comparison. The savings estimates assume that savings would be limited in the first year (example year 2016) due to transition costs. Savings are anticipated to increase substantially over time as ColoradoCare is able to further reduce administrative expenses. If ColoradoCare has enough revenue in the first year, succeeding years should have sufficient revenue due to the increased savings as the program matures.

The parameters used to evaluate sufficient revenues to cover expenses are:

• Sufficient revenue to provide the right treatment at the right time to all beneficiaries.
• Provider compensation sufficient to maintain the full medical workforce needed to provide health care services.
• Colorado residents should not be charged more than necessary for high quality and universal health care.
## Table 1
### 2016 ColoradoCare Expense and Revenue Estimates

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Colorado Health Expenditures (Consumption category)</strong></td>
<td>$49,552</td>
</tr>
<tr>
<td><strong>Subtraction adjustments from CHE with ColoradoCare</strong></td>
<td></td>
</tr>
<tr>
<td>Administration in providers’ offices reduction</td>
<td>(1,851)</td>
</tr>
<tr>
<td>Administration in private insurance reduction</td>
<td>(3,849)</td>
</tr>
<tr>
<td>Drug, medical, and hospital pricing savings</td>
<td>(951)</td>
</tr>
<tr>
<td>Fraud reduction savings</td>
<td>(494)</td>
</tr>
<tr>
<td><strong>Total of expense reductions</strong></td>
<td>(7,145)</td>
</tr>
<tr>
<td>CHE outside of ColoradoCare responsibility</td>
<td>(3,320)</td>
</tr>
<tr>
<td>Dental care not covered at the beginning of ColoradoCare</td>
<td>($900)</td>
</tr>
<tr>
<td><strong>Total not typically covered expenditures</strong></td>
<td>(4,220)</td>
</tr>
<tr>
<td><strong>Total subtractions from CHE</strong></td>
<td>($11,365)</td>
</tr>
<tr>
<td><strong>Addition adjustments to CHE with ColoradoCare</strong></td>
<td></td>
</tr>
<tr>
<td>Coverage extension expense addition</td>
<td>1,211</td>
</tr>
<tr>
<td>Utilization increase expense addition</td>
<td>347</td>
</tr>
<tr>
<td>Increase in funds for health care services</td>
<td>1,558</td>
</tr>
<tr>
<td>ColoradoCare administration (not included elsewhere) expense addition</td>
<td>799</td>
</tr>
<tr>
<td>Medicaid premium refunds</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total CHE additions</strong></td>
<td>+ $2,657</td>
</tr>
<tr>
<td><strong>Funds needed to pay for universal health expenditures usually covered by health care insurance</strong></td>
<td>$40,844</td>
</tr>
<tr>
<td><em>(ColoradoCare and continuing federal programs combined)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Continuing funded federal programs</strong></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>(9,945)</td>
</tr>
<tr>
<td>Tricare</td>
<td>(352)</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>(762)</td>
</tr>
<tr>
<td><strong>Total continuing federal programs</strong></td>
<td>($11,059)</td>
</tr>
<tr>
<td><strong>Subtract continuing federal programs total from universal health expenditures usually covered by insurance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Funds needed for ColoradoCare expenses</strong></td>
<td>$29,785</td>
</tr>
<tr>
<td><strong>ColoradoCare Revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Medicaid waiver</td>
<td>8,567</td>
</tr>
<tr>
<td>ACA waiver</td>
<td>600</td>
</tr>
<tr>
<td>Out-of-pocket with ColoradoCare (96% actuarial value)</td>
<td>852</td>
</tr>
<tr>
<td>Revenue from premium taxes</td>
<td>20,565</td>
</tr>
<tr>
<td><strong>Total ColoradoCare revenue</strong></td>
<td>$30,584</td>
</tr>
<tr>
<td><strong>Surplus balance</strong></td>
<td>$799</td>
</tr>
</tbody>
</table>
Description and explanation of line items

Total Colorado Health Expenditures, (Consumption Category) $49,552 million
The 2013 Analysis estimated projected CHE at $49,001 million. Since 2013, the ACA has been through two years of implementation, and more recent economic estimates are available. CHE is calculated on NHE for 2012\(^2\) and adjusted for Colorado’s portion, population growth, and inflation\(^3\).

Subtraction adjustments from CHE with ColoradoCare implemented

Administration in providers’ offices reduction, $1,851 million
The savings estimate for providers’ decrease in administrative costs with ColoradoCare in the 2013 Analysis was $2,189 million. There is ample evidence that the billing and insurance-related costs of the current system can be reduced under ColoradoCare. Due to transition expenses in the first year, it would be difficult to capture all of the savings that come from administrative simplification, and the 2013 Analysis adjusted the savings downward to compensate for the transition.\(^4\) In addition, because there is no program similar to ColoradoCare that can verify the amount of savings that can be achieved by a universal health care system in a single state in the U.S., the ColoradoCare Analysis further lowers this estimate to $1,851 million as a conservative measure.

Administration in private insurance reduction, $3,849 million
This estimate was $3,337 in the 2013 Analysis, but appeared to combine private health insurance reduction with some of ColoradoCare administrative costs. In this update, reductions in private health insurance are treated separately from ColoradoCare administrative costs. The ACA has mandated that private health insurance must reduce administrative costs to 20% of premiums received. While some private insurers report administrative costs below 20%, the 2013 Analysis documents that administrative costs in private health insurance are often buried in health care expenditures due to flexibility in accounting rules. As a consequence, some private insurance companies have more than 20% of their expenditures that goes to administrative tasks. ColoradoCare would eliminate most of the private insurance administrative expenditures. Therefore, the 20% estimate is used here as an estimate of the private health insurance administrative costs. Dr. Friedman noted in the 2013 Analysis that, without ColoradoCare, private health insurance costs would be $19,246 million in 2016, and 20% is $3,849 million.

Drug, medical, and hospital pricing savings, $951 million
The savings estimated for this category in the 2013 Analysis was $1,151 million. This estimate was based on Medicaid and the VA’s success in lowering pharmaceutical prices, and the idea that ColoradoCare should be able to approach the lower cost of medications in European countries. Subsequent research has found that Medicaid and the VA’s savings were largely due to federal statutes that require pharmaceutical companies to give them “most favorable pricing.”\(^5\) The Colorado Department of Health Care Policy and Financing (HCPF) reports that it does not have much market leverage for Medicaid because it must provide all necessary medications. It obtains lower prices as a result of the federal statute\(^6\). Consequently, even with the use of pharmaceutical pricing tiers, ColoradoCare will not have the same ability to reduce pharmaceutical pricing as do European countries or the federal Medicaid and VA programs. The potential for market power to lower the cost of durable medical equipment (DME) is still great, as is noted in the 2013 Analysis. In addition, as to reduction in drug and DME costs, there is evidence that large hospitals have been charging higher prices based on market dominance in local communities rather than on added value\(^7,8,9\). ColoradoCare would have the market power to counter unwarranted hospital prices and this savings was not included in the 2013 Analysis. Considering that pharmaceutical savings would
be less than anticipated, offset by ColoradoCare’s ability to counter excessive market power, estimated savings from market power were lowered to $951 million.

*Fraud reduction savings, $494 million*

The 2013 Analysis estimated a savings of $705 million in fraud reduction because a single billing system can track expenditures more effectively than do the multi-payer billing systems. There is ample evidence of fraud in health care, but there are no comparable programs to ColoradoCare to document its potential for fraud reduction. Fraud reduction is mandated by the Amendment. As a conservative measure, this estimate was lowered 30% to $494 million.

*Total of expense reductions, $7,145 million*

This is the sum of the above expense reductions from the administrative simplification, market power, and fraud reduction that result from the implementation of a universal health care plan.

*CHE outside of ColoradoCare responsibility, $3,320 million*

CHE includes all expenses that are described as medical, but many of these expenses are for services that are not usually covered by insurance such as nursing home expenses paid out-of-pocket; private insurance payments for long-term care; non-durable medical equipment almost never covered by insurance; federal public health expenditures; and elective cosmetic surgery. These expenditures would not be the responsibility of ColoradoCare and are subtracted from ColoradoCare’s responsibility.

*Dental care not covered at the beginning of ColoradoCare, $900 million*

ColoradoCare is intended to cover some, but not all dental expenses from the first day. Covered benefits will likely include cleanings, prevention, services for children and some for the Medicaid-eligible, as well as some restorative work. The ColoradoCare Board would decide how these benefits could be expanded as savings accrue in the future. Because ColoradoCare would not cover the majority of restorative dental work, the cost of this work is not in the scope of ColoradoCare responsibility at the beginning of operation. The $900 million estimate represents 50% of the CHE amount spent in 2012 on dental care.

*Total not typically covered expenditures, $4,220 million*

This is the sum of the two line items above. Not all expenditures reported in CHE are expenditures that health insurance typically covers, and these should be considered costs outside of the usual meaning of universal health care.

2013 *Analysis categories not included in the ColoradoCare Analysis*

Neither the 2013 Analysis nor the ColoradoCare Analysis relies upon dynamic savings during the first years of implementation. Dynamic savings results from reducing unnecessary and inefficiently delivered services and from the results of improved prevention. Dynamic savings are anticipated as ColoradoCare matures and improves coordination and the efficient delivery of services.

The 2013 Analysis cited a decrease in government administration in the administration of Medicaid. The ColoradoCare analysis does not find any net change in the expense of administering Medicaid, but it transfers these expenses from the state government to ColoradoCare through the Medicaid waiver process.

*Total subtraction adjustments from CHE with ColoradoCare, $11,365 million*

This number is subtracted from the $49,552 million estimated CHE for 2016.
Addition adjustments to CHE with ColoradoCare implemented

Coverage extension expense addition, $1,211 million
The expansion of coverage to the 480,000 who remain uninsured in Colorado is expected to cost less than for an average population group this size. Because the ACA has extended coverage since 2013 and Medicaid was expanded in 2014, most people who know they have high-need conditions have had the opportunity to obtain ACA plans or to be covered by Medicaid. Meanwhile, the cost of treating others with high-need or expensive conditions—who may have previously received costly emergency treatment—is included in CHE. Therefore the previously uninsured to be added to ColoradoCare include a smaller proportion of people with expensive conditions than does the general population. The ColoradoCare Analysis adopts the estimate of $1,211 million from the 2013 Analysis for this additional adjustment to CHE.

Utilization increase expense addition, $347 million
This additional expense estimate was adopted from the 2013 Analysis. This is the cost of covering the pent-up demand. While many delay necessary treatment for financial reasons, causing great distress and worsening conditions, for the same reasons noted above under coverage extension, expensive conditions are often already covered. Consequently, the expenses of the pent-up demand can be covered with $347 million.

Increase in funds for health care services, $1,558 million
The sum of the two line items above represent expanded funding for health care services in a universal health care system.

ColoradoCare administration (not otherwise included), $799 million
Administrative expenses are calculated based on a 3.75% administrative expense estimate. The total ColoradoCare expenses are estimated here to be $29,785 million, which, at 3.75%, results in administrative expenses of $1,120 million. The Medicaid waiver funds ($8,567 million) include administrative costs for this portion of funding, which at 3.75% is $321 million. Because the Medicaid expense is offset by revenue in the ColoradoCare revenue category, the $321 million is subtracted from the $1,120 million administrative expense estimate to show an increase of $799 million in administrative expenses for ColoradoCare.

Medicaid premium refunds, $300 million,
Medicaid regulation does not allow recipients to be charged significant fees for services. However, the efficient collection of premiums through payroll results in employed Medicaid recipients paying 3.33% of payroll for a state Premium Tax. Due to the confidentiality requirements of both tax and health care laws, there is no way to prevent this collection. Depending on the details of a Medicaid waiver, employed Medicaid beneficiaries may need to apply for a refund. HCPF has estimated that the working Medicaid beneficiaries will earn approximately $1,000 million in 2016, which will result in a potential refund of $300 million.

2013 Analysis categories not included in the ColoradoCare Analysis
The 2013 Analysis included a separate Medicaid rate adjustment to bring Medicaid payment rates in line with other payments. This rate adjustment is not necessary in a universal health care system. Complex cost-shifting of the current system results in the overall low provider compensation in Medicaid being offset by higher provider compensation in private insurance. Universal health care would set one payment system that maintains provider compensation after expenses at the same
average level as the current system by averaging out the high and low payment rates. The transition to ColoradoCare is intended to maintain the current provider workforce and to be overall compensation-neutral for providers. Expense reductions and savings are to be derived from eliminating administrative complexity and inefficiency, including the wasteful cost-shifting process.

**Total addition adjustments to CHE with ColoradoCare, $2,657**
This number is added to the estimated CHE of $49,552 million in 2016.

**Funds needed to pay for universal health care expenditures usually covered by health care insurance, $40,844 million**
This number is calculated by combining the CHE estimate ($49,552 million) with the subtraction adjustments of $11,365 million and addition adjustments of $2,657 million. The result is the funding needed to pay for universal health care for the expenses usually covered by insurance if ColoradoCare begins operations in 2016. As an estimate of the funds needed for all of Colorado, it includes both ColoradoCare and the continuing funded federal programs.

**Continuing funded federal programs**
Federal programs cannot be included in ColoradoCare except when a waiver application process is available as it is for the ACA and Medicaid. If Colorado adopts the ColoradoCare proposal, several federal health care programs will operate simultaneously. The most significant of these programs are listed below.

**Medicare, $9,945 million**
This estimate is updated by taking the 2012 Medicare enrollment in Colorado, multiplying it by the Medicare spending per beneficiary, increasing it for annual increase in Medicare expenditures through 2016, and adjusting for the fact that Colorado’s per-enrollee Medicare expenditures are 89% of the national average. The updated estimate is $9,945 million.

**Tricare, $352 million**
Colorado has 37,000 military personnel covered by TriCare. This funding would continue to reduce the amount of CHE that ColoradoCare is responsible for paying.

**Veteran’s Administration, $762 million**
The 2013 Analysis estimated continuing funding for the VA to be $762 million. There is no updated information to change this estimate. This funding would reduce the amount of CHE that ColoradoCare is responsible for paying.

**Total continuing federal programs, $11,059 million**
The total reduction in ColoradoCare’s responsibility for CHE from continuing federal programs is $11,059 million.

**Total ColoradoCare expenses, $29,785 million**
ColoradoCare expenses are determined by subtracting the total continuing federal programs funding ($11,059 million) from the Funds needed to pay for universal health care expenditures usually covered by health care insurance ($40,844 million), which yields the portion of CHE that it is the responsibility of ColoradoCare to finance—the ColoradoCare expense estimate ($29,785 million).

**ColoradoCare Revenue**
Medicaid waiver, $8,567 million
The 2013 Analysis estimated Medicaid plus ACA funding together. The ColoradoCare Analysis separates the continuing Medicaid funding from ACA waiver funding. Updated information from Colorado Legislative Council estimates that, in FY 2014-2015, state and federal funding for Medicaid and related health programs such as CHP+ was $7,525 million. CMS predicts a growth rate of 6.7% after the expansion in 2014-2015. The adjusted Medicaid estimate is $8,567 million.

ACA waiver, $600 million
Vermont has explored the complex calculation of ACA waivers with the U. S. Department of Health and Human Services. Vermont anticipated it would receive $106 million in subsidies in 2017. Colorado has a population 8.4 times the size of Vermont’s population, so a 2016 estimate for subsidies for Colorado at the Vermont rate would be $840 million. Considering that Vermont’s health care per capita costs are 30% higher than Colorado’s, and Vermont has a lower median family income, the subsidies per capita would likely be higher in Vermont. The Colorado subsidy is therefore estimated to be $600 million.

Out-of-pocket with ColoradoCare (96% actuarial value), $852 million
Out-of-pocket is calculated here as the cost sharing part of health coverage. Residents who are Medicaid-eligible will not participate in cost sharing, and the continuing federal programs are not affected by this cost sharing. After adjusting for the non-participation of these programs in cost sharing, cost sharing would pertain to $21,318 million of ColoradoCare’s health care spending. At a 96% actuarial value, the ColoradoCare cost sharing is $852 million.

In the 2013 Analysis, out-of-pocket (OOP) costs were calculated as “a residual total expenditures minus private health insurance and public spending.” As a result, the 2013 Analysis included OOP portions of CHE that are not usually covered by insurance, including nursing home OOP; private insurance payments for long-term care; non-durable medical equipment almost never covered by insurance; federal public health expenditures; and elective cosmetic surgery. In the ColoradoCare Analysis, these residual expenses are placed in the CHE outside of ColoradoCare responsibility category of subtraction adjustments from CHE.

An actuarial value of 96% is unusually high in the current system. While insurance plans often have an out-of-pocket maximum and limited cost sharing, most plans use deductibles that lower the actuarial value. ColoradoCare does not use deductibles because they often present a barrier to necessary health care. In addition, ColoradoCare and the ACA waivers do not allow copayments for designated primary care and prevention services, and ColoradoCare must waive copayments for financial need. Therefore, the only OOP expenses for covered services would be small copayments or cost-sharing payments that are needed to provide incentives for the efficient delivery of health care. As a result of these limited cost-sharing payments, ColoradoCare has an unusually high actuarial value.

Revenues generated by premium tax, $20,562 million
The non-partisan Colorado Legislative Services prepared the revenue estimates for the legislative resolution, introduced in 2015 by Rep. Joann Ginal and Sen. Irene Aguilar referring ColoradoCare to the ballot (Appendix A). With premium tax rates of 3.33% for employees, 6.67% for employers, and 10% for non-payroll income, the forecast revenue for 2016 would be $20,562 million.

2013 Analysis category not included in the ColoradoCare Analysis
The 2013 Analysis anticipated continuing revenue from $582 million of existing state and local funding reported in CHE. Some of this funding may be included in the HCPF funds that would be part of a Medicaid waiver. Although ColoradoCare would result in many savings that would benefit state and local government, these savings do not decrease the portion of CHE that would be ColoradoCare’s responsibility. Therefore, this item is removed from the Updated Report.

**Total ColoradoCare revenue, $30,584 million**

The sum of all revenues from waivers, OOP, and the Premium Tax is $30,584 million.

**Surplus Balance, $799 million**

Anticipated revenue exceeds anticipated expenses by $799 million. According to the ColoradoCare proposal, surplus funds may be used to improve benefits, increase reserves, decrease premiums or refund to members.

**Projections for 2019**

The Updated 2016 CHE projections are used to estimate the revenue needed for the sample year 2016. It is likely that the first year of operation for ColoradoCare will be 2019. Health spending is projected by the Centers for Medicare and Medicaid Services (CMS) to grow at an average annual rate of 6% after 2016, or 1.1% above the projected growth of Gross Domestic Product. Therefore, the revenue projections in the example year 2016 should be sufficient in 2019.

Health spending is projected by the Centers for Medicare and Medicaid Services (CMS) to grow at an average annual rate of 6% after 2016, or 1.1% above the projected growth of Gross Domestic Product (GDP). The Colorado economy is very strong, and has even been rated the fastest growing state economy. It is highly likely that Colorado will be able to exceed the national growth rate of GDP by 1.1%, and consequently, the premium tax may generate an even greater surplus in the first year of operation.
Discussion of the Impact of ColoradoCare on Coloradans

Transitioning to a statewide universal health care system would create considerable administrative, market-power, and fraud-reduction savings. Replacing the administration of a multi-payer with a universal health care system is projected to create $7,145 million total expense reductions through reduction in administration, market power, and fraud reduction. After compensating for $1,558 million for increased utilization and coverage expenses and the $799 million additional administrative expenses for ColoradoCare, there remains a projected expense reduction of $4,788. This decrease in the cost of health care in Colorado would have an overall positive impact on Coloradans.

Impact on employers

Reduction in overall employer health care expenses, $3,138 million
Because employers finance the largest portion of the cost of health care, they would benefit the most from the savings. Colorado Legislative Services estimates that universal health care would reduce employers’ contributions to employee health care by $2,523 million, not including the reduction in workers’ compensation expenses (Appendix A). The anticipated 59% reduction in workers’ compensation expenses is projected to decrease the employers’ statewide expenses another $615 million, resulting in the employer’s portion of the $4,788 million savings being an expense reduction of $3,138 million.

Elimination of expenses for administering employee health care plans
Removing employers’ responsibility for selecting health care insurance, educating employees about the health care insurance, and managing health care insurance would net additional employer savings. With universal health care, the employers’ role is the same as with payroll deductions for Medicaid and Social Security.

Increase in expenses for some employers
Even with this overall savings, some employers would see an increase in expenses. These primarily would be the small employers who have not provided health care coverage and employers who primarily hire part-time or minimum wage employees. These employers would benefit from a 59% reduction in workers’ compensation expenses, but would incur an expense of 6.67% of payroll. The impact would vary, depending on the workers’ compensation costs. In dangerous industries such as ranching or construction, the medical portion of workers’ compensation can be greater than 6.67%.

Impact on employees

Cost sharing
Due to the escalating costs of health care, employees are often asked to pay for an increasingly larger portion of employer-sponsored health plans, and these plans often require larger deductibles and co-payments. The payroll premium of 3.33% would be lower than the employee’s current share of premiums for many employees. The projected 96% actuarial value indicates that the out-of-pocket expenses for health care (4%) would be much smaller than the current system in which a 90% actuarial value is considered the top tier of the health care exchanges.
Some employees would receive a pay increase.
Some employers may decide to pass on to employees some of the savings that result from the employer’s decreased expenses. This could be the case when health insurance coverage was part of a negotiated wage and benefit package.

Comprehensive continuous health care coverage
ColoradoCare has health care coverage that have more benefits than plans offered on the health care exchanges. Because the health care would not be tied to an employer-sponsored plan, employees would no longer experience changes in policy or providers that result from the employer changing health care plans or employees changing jobs.

Employment choice
Universal coverage would allow employees more flexibility in job choice. Currently, some employers keep employees at part time to avoid health insurance expenses, and some employees remain at full time or stay in jobs they would prefer to leave in order to maintain health care coverage. Under ColoradoCare, health care would be separated from employment, allowing employees to make job choices based on job-related factors, not health care coverage factors.

Impact on Colorado residents
Reduction in overall health care expenses, $1,650 million
Colorado residents would benefit from the portion of the $4,788 million of savings that would not go to a reduction in employer expenses ($3,138 million). This portion is $1,650 million. Because the 1.2 million residents who benefit from Medicaid generally do not have health care expenses, these savings would be distributed among those who currently have health care expenses. The average savings would be $390/yr. These savings would be widely distributed among people who use health care. Because ColoradoCare eliminates deductibles, which are usually the first health care expenses of the year, the majority of Coloradans would benefit at least in some degree from these savings.

Residents would have consistent lifetime health care coverage instead of variable annual coverage
Currently, there are estimated to be 9.16% (approximately 480,000) people who are uninsured in Colorado at any one point. The estimate increases to 6.67% when considering the number of residents uninsured at any point during a one-year period. In addition, many do not seek health care because of unaffordable copayments. ColoradoCare eliminates the time periods when a resident might be without health care coverage or under-insured.

Elimination of medical debt
Currently 52% of debt sent to collections is medical debt. Over half of bankruptcy filers cite medical debt as a cause of their bankruptcy, and 75% had insurance at the onset of their illness. Increasingly, health care expenses are put on credit cards, which result in an additional expense of high interest rates, often for the people who can least afford it. Because ColoradoCare requires waiving copayments for financial need and has a very high actuarial value, substantial medical debt would no longer be a problem for Colorado residents.

Choice and continuity of care
Choice and continuity of care would be improved in most situations. In the current system, choice of provider is often limited by the provider’s participation in an insurer’s limited panel.
ColoradoCare allows beneficiaries to choose their primary care provider. Depending on ColoradoCare policies that have yet to be developed, selection of specialists may be limited if the primary care provider participates in a larger organization that has a defined network of specialists.

**Health care coverage for extended family and friends**
Currently, residents often need to help pay for the health care expenses of adult children or grandchildren, parents, and other relatives. The larger community often needs to raise money to help uninsured or under-insured friends and neighbors who have expensive conditions. As a universal health care plan, ColoradoCare would help alleviate this burden of financing the care of extended family and friends.

**Ombudsman office for consumers**
The proposal calls for an independent Ombudsman office for consumers, funded by ColoradoCare and under the supervision of the Commissioner of Insurance. This office would have the capacity to investigate and respond to inquiries and complaints and to make recommendations to the Board. ColoradoCare would be required to provide sufficient funding to allow the timely completion of all investigations. This office would have the potential to make ColoradoCare more responsive to the concerns of residents than is the current system, and consequently, could create better customer relations than the current system.

**Impact on government**

**Schools and universities**
Expenses for health care coverage and benefit management for faculty and staff would decrease.

**City and county governments**
City and county governments would experience savings in reduced premium costs as a result of their role as employers. Many local governments also sponsor health safety net programs that would no longer be necessary.

**State government**
The impact on state government is mixed, with some increased expenses and lost revenue as well as some savings. The Department of Revenue expenses would increase as a result of collecting premium taxes. Currently, health care expenses are tax deductible only for those whose itemized deductions are large, but ColoradoCare converts the payment of premiums to a tax, which is consequently a deductible expense. While this benefits the resident by lowering both state and federal income tax, the Colorado General Fund revenues would be decreased $218.7 million (Appendix A). General Fund revenues would also be decreased $196.7 million due to lost revenue from a tax on insurance plans (Appendix A).

The state government would see savings similar to those that city and county governments would experience. In its role as an employer, the state would benefit from the reduction in premium costs. Prisoner health care would no longer be a state expense. The Division of Insurance (DOI) would have a considerable reduction in workload. The DOI would have responsibility for operating Ombudsman Offices for beneficiaries and providers, but these offices would be funded by ColoradoCare.
Impact on providers

Overall provider compensation
The impact on providers is complex. The national competition to attract and retain providers will create powerful economic pressure on ColoradoCare to achieve its savings by cutting waste and keeping administrative costs low for the providers, while keeping compensation competitive and the work experience satisfying.

Payments consistent without cost shifting
The payment for services would be altered in several ways. In the current system, payers compensate providers at widely different rates. To maintain a practice or business in health care, providers need to have high payers to offset the low payers, a practice called cost shifting. The low payer that underpays shifts the cost of delivering health care to the high payers. Such a practice is expensive. ColoradoCare would level out payment rates for health care services, which would eliminate the need for cost shifting.

Reduction in provider administrative expense
Administrative work consumes one-sixth of U.S. physicians’ working hours, and the administrative work continues to grow. Between 1970 and 2010, the number of health care administrators in the U.S. increased 3,300%, while, in the same time period, the number of physicians increased only 200%. The current multi-payer system contributes to this problem because there are many payers, and each tends to add administrative burdens to protect their own budgets while no central entity is responsible for containing this escalating problem.

It is anticipated that ColoradoCare would reduce the administrative burden by decreasing the number of payers from many to one primary payer. It would also be incentivized to address the administrative burden on providers because any expense that increases CHE, including administrative expenses, increases ColoradoCare expenses. Due to this incentive, it is anticipated that ColoradoCare would develop an efficient payment system that would reduce administrative expenses and the amount of provider time devoted to administration.

Adjustments in provider compensation
Some hospitals and other providers wield great local market power, approaching monopolies, so that fees are much higher than they would be in a more competitive market. ColoradoCare could counter this excessive local market power and keep payments statewide within the competitive range, within the range needed to attract and retain providers and pay appropriately, according to actual costs.

Currently undercompensated areas include primary care and mental health services. Because a universal system is responsible for the health care workforce in the state, underfunded areas would likely receive increases in compensation.

Providers who are employers
As employers, providers save on health care costs for their employees as well as with streamlined administrative workload.

Independent Provider Ombudsman Office
ColoradoCare must provide funds to the Commissioner of Insurance for the operation of an ombudsman office for providers in addition to the ombudsperson for consumers. This ombudsman office could investigate and respond to inquiries and complaints and make recommendations to the
Board. The current system does not have this check and balance mechanism, and it has potential to improve provider relations.

**Work experience**
There is good evidence that the administrative complexity of the current system as well as the amount of time that providers devote to administrative work is harmful to provider morale. The reduction in administrative expense should be good for provider morale.

**Impact on Medicaid-eligible residents**

**Current Medicaid benefits would not be reduced**
Medicaid has a comprehensive benefit package, and beneficiaries have no significant copayment requirements. The necessary waiver approval will require that ColoradoCare maintains the Medicaid benefits as well as any of the special programs associated with Medicaid, and also must not charge beneficiaries significant copayments. Current Medicaid benefits will be the floor, and ColoradoCare could only improve upon the Medicaid benefits. Programs like the Medicaid Buy-In for working people with disabilities would continue as a benefit that is not available to all residents, and the improved dental benefits would increase the benefits available for Medicaid-eligible residents.

**Interaction with ColoradoCare**
As in the current system, due to the complexities of federal law, ColoradoCare would need to continue to identify Medicaid-eligible residents in order to document to CMS that ColoradoCare is serving enough residents to justify the Medicaid waiver, obtain the federally mandated pharmaceutical discounts for Medicaid patients, assure that Medicaid-eligible residents did not pay copayments, and refund any Premium tax that might have inadvertently been collected, because Medicaid beneficiaries may not be charged a significant premium.

**Improvement in access, continuity, and quality**
ColoradoCare would offer Medicaid beneficiaries improvement in access to care, continuity of care, and, in some areas, quality of care. Provider payments would no longer be lower for Medicaid-eligible patients. Therefore, Medicaid-eligible residents could see any provider, and, if they lost their eligibility, they could still continue with the same providers. The treatment of some conditions such as mental health issues would no longer be limited to restricted programs for each geographical area. Medicaid-eligible residents could seek out providers of their choosing.

**Impact on Medicare-eligible residents**

**Benefits for Medicare beneficiaries**
The impact on Medicare beneficiaries is complex and explained in more detail in Appendix B. Medicare is a federal program that cannot be altered by Colorado. The Medicare supplemental insurance plans are private health insurance, and ColoradoCare would provide supplemental benefits.

ColoradoCare would enhance Medicare in two ways.
- ColoradoCare would serve as supplemental insurance for Medicare.
- ColoradoCare would apply to be a Medicare Advantage Plan that Medicare beneficiaries could voluntarily join.
ColoradoCare would pay after Medicare, and would not cover expenses that are paid by Medicare Parts A, B, or D, or a Medicare Advantage Plan that is not operated by ColoradoCare.

Substantial Social Security and pension income is exempt from premiums. Social Security recipients and retirees have much of their income exempted from ColoradoCare premiums. The exempted income, based on federal and state tax law, is:

- Individuals have $9,000 and joint filers have $12,000 of Social Security income exempted.
- An additional $24,000 of remaining Social Security, pension, or annuity income per individual earner of that income is exempted.
- The maximum exempted Social Security, pension, and annuity income is:
  - $33,000 for an individual filer
  - $60,000 for joint filers if both have at least $30,000 of Social Security, pension, and annuity income.

Impact on residents with VA benefits, TriCare, Indian Health Service benefits, or other health care insurance coverage

ColoradoCare is a secondary payer. ColoradoCare is a secondary payer. Providers would be expected to bill other insurance before billing ColoradoCare, and residents who were eligible for health care through other systems such as the VA would be expected to use these other systems when they are available.

ColoradoCare would enhance the health care benefits for residents in continuing federal programs. Because ColoradoCare is mandated to provide both universal coverage and quality health care, it should seek arrangements or contracts for coordination with services such as the VA when the coordination would help assure improved health care. ColoradoCare’s comprehensive benefit package, which includes some dental coverage, would also likely enhance other health care insurance and the benefits available to VA beneficiaries.

Impact on non-payroll income earners

The Non-Payroll Premium Tax rate is 10% and has a maximum cap of $350,000/individual or $450,000/joint filer for both payroll and non-payroll income combined. The Premium Tax is a state tax and is deductible from income taxes, whereas health care is not deductible unless it exceeds 10% of income. Because state taxes calculated after federal deductions are considered, the premium tax would also be a deduction on state income taxes. Considering the reduction in income taxes, the impact of the 10% Premium for income tax payers is reduced to between 8.537% and 5.637% depending on tax bracket. This is a substantial reduction in taxes that the Colorado Legislative Services has calculated to be $218.7 million for state income taxes alone (Appendix A). A high-income earner in the federal 39.6% income tax category would pay an effective rate of 5.6%. Because premium liability is limited to $450,000 for joint filers, the after-income-tax impact would be $25,200. This is less expensive than the cost of some family health insurance plans. The ACA does not consider a family health insurance plan to be a Cadillac plan, upon which it imposes a 40% excise tax, until the cost exceeds $27,500.

Impact on Colorado jobs

ColoradoCare would cause a small, temporary increase in job churn

The transition to universal health care would create some churn in the job market. As less money would be spent on administration in health care, these funds would be freed up to be spent elsewhere in the Colorado economy, creating new jobs.
Without access to proprietary information, predicting the precise number of jobs that would be affected is not possible. Because the total savings are known, however, the number can be described within a broad range that demonstrates the general magnitude of the job churn.

Many of the jobs lost in the insurance industry would be out-of-state, and would therefore not affect the Colorado economy. In the 2013 analysis, Dr. Friedman determined that 60% of the insurance jobs are concentrated in states like Connecticut, Minnesota, New Jersey, and Ohio. Colorado has 40% of the insurance jobs that would be expected for its population size. Consequently, 40% of the $3,849 million ($1,540 million) of the savings from reduction in private insurance administration would affect Colorado jobs. The $1,851 million savings in provider office administration are presumed to be in Colorado.

To determine the range of the number of jobs lost with this reduction in administrative expenses, average clerical and customer service worker compensation is used for one end of the range and the mean Colorado wage was used for the other end of the range. To be conservative and assure that job churn was not underestimated, it is assumed that all savings result in jobs lost. Based on these average wages, between 6,404 and 10,040 residents would lose jobs in the first year, and they would need to seek one of the new jobs in Colorado.

While job churn is disruptive, it is an unavoidable part of the market economy in which demand changes and obsolete businesses yield to improved business models. A decision by the voters to move away from the inefficient multi-insurance model that does not achieve the goal of making health care affordable for all to the efficient universal health care system could be thought of as a financial decision to move from an obsolete business model to an improved model. Recent average trends since 2012 show Colorado with an annual rate of job loss of 480,000 and a rate of job gain of about 540,000. The high end of the estimate of job churn is 10,040 jobs or 2% of Colorado’s normal annual market churn. The impact on individuals affected is mitigated by the normal unemployment insurance safety net plus the continuous health insurance coverage, without COBRA charges, provided by universal health care.

**Net job gain over 21,267**

The primary impact on the Colorado employment and economic picture comes from the money currently spent out-of-state that would be available to Coloradans to spend locally, where it can have a substantial impact on the local economy. When money is put into the local economy, a significant amount is recirculated locally, and the reinvestment continues so that there is a “multiplier” of every dollar put into the local economy to create an even greater economic stimulus.

The savings that convert out-of-state spending to in-state spending, and consequently an economic stimulus, is substantial. Of the jobs lost in the insurance industry, 60% would be out-of-state. Of the $3,849 million saved by eliminating health insurance administration, $2,310 million would be money that went out of state previously and would be available to stimulate the Colorado economy. Assuming that 75% of the savings accrued from market power negotiating with pharmaceutical companies, durable medical equipment manufacturers, and national hospital chains, an additional $713 million of savings would become available to stimulate local economy. The stimulus of this $3,023 million additional funding to the Colorado economy would create 21,267 jobs. A comparison of this increase in jobs with the Bureau of Labor Statistics analysis of job growth shows...
that this gain in jobs is quite significant. In all of 2014, Colorado gained 62,300 jobs\textsuperscript{45}, and the unemployment rate dropped from 5.9\% to 4.2\%\textsuperscript{46}.

Impact on the insurance industry
The insurance industry would undergo a substantial loss of jobs and income in its health care and workers’ compensation sector. Other sectors of the industry should not be affected. The Colorado Legislature would probably need to address what should be done with the substantial reserves in Pinnacol because compensation for the loss of work and the loss of functionality portions of workers’ claims would not require such large reserves. The industry would retain its substantial reserves that it has built up over years of premium collection.

Conclusion
Universal health care through the ColoradoCare proposal is financially feasible and offers a substantial overall positive impact on Coloradans and the Colorado economy.
Endnotes


3 The 2013 National Health Expenditure (Consumption category) was divided by U.S. population to determine per capita expenditures of $8,712. This was adjusted for Colorado having per capita health expenditures that are 88% of national average according to Kaiser Family Foundation State Facts at http://kff.org/other/state-indicator/health-spending-per-capita/# resulting in a 2013 Colorado per capita expenditure of $7,666. The 2013 Colorado population was multiplied by the per capita expenditure to estimate CHE at $39,773 million. Adjusted for projected population growth to 5,447,410 in 2016, and 5.6% inflation in 2014, 6% inflation in 2015, and 6% inflation in 2016 according to CMS projections.


5 Public Law 102-585 permits the V.A. to obtain a vendor’s most favorable commercial pricing.

6 (2015) Memo from Colorado Health Care Policy and Financing

7 Miller Center (2014) A report by the State Health Care Cost Containment Commission: Cracking the code on health care costs. Miller Center at the University of Virginia, Charlottesville, VA.

8 Personal communication with Dr. Gerald Friedman, Dr. Friedman estimated that the savings for Colorado from trimming the large hospital overcharges would be in the hundreds of millions of dollars.


12 The ColoradoCare Analysis used Dr. Friedman’s 2013 Analysis estimate that ColoradoCare administrative costs would be 3.75% of operating budget. This estimated rate is supported by a Kaiser Family Foundation report that shows that the average state administrative cost for the slightly more complex Medicaid programs is 3.8% of budget. Schneider, A. & Wachino, V. (2000). Chapter IV, Medicaid Administration. Kaiser Family Foundation, Washington, DC. https://kaiserfamilyfoundation.files.wordpress.com/2013/05/mrabadministration.pdf.


16 Memo from Colorado Legislative Council, 2/18/15.


Ibid, p. 15. Written workers’ compensation premiums in Colorado in 2013 were $814 million and increasing at a rate of $76 million/year for the previous three years. Adjusted for rate of increase, in 2016 it is anticipated that Colorado’s workers’ compensation premiums would be $1,042 million. The medical share (59%) would be $615 million.


The savings come from administration in provider offices; insurance offices; fraud reduction; and market power to lower the cost of pharmaceuticals, medical equipment, and excessive fees; and the first four items in the Expense and Revenue table, and these need to be decreased by the total additional adjustments to CHE with ColoradoCare implemented. The sum of these four savings items is $7,145 million, and when decreased by additional expenses of coverage extension, increased utilization, and ColoradoCare increased administration costs, the first three items in addition adjustments to CHE with ColoradoCare implemented ($2,357 million), there remain $4,488 million of savings for Coloradans. The Colorado Legislative Council revenue estimate in Appendix A indicates that employers would receive $3,138 million of this savings, leaving $1,650 million to be distributed among Colorado residents.

Memo from Colorado Department of Health Care Policy and Finance indicates that current Medicaid and CHP+ enrollment is 1.213 million, and current population is 5.533 million according to Svaldie, A. (2014) Colorado ranks fourth among states for population growth (12/23/14).

Population is projected grow to 5,447,410 in 2016, subtracting the Medicaid eligible population (1.213 million) results in 4,234,410 a savings of $390 per resident.


Congressional Budget Office, (2003). How many people lack health insurance for how long? Washington, DC. This report indicates that across two survey methods, the number uninsured at one point during the year is 39% greater than the number uninsured at any one point during the year.


37 IRS Form 1040 (Schedule A) Instructions state that medical expenses need to exceed 10% of income (7.5% for those born before 195).
40 Bureau of Labor Statistics (2012). May 2012 State Occupational Employment and Wage Estimates Colorado http://www.bls.gov/oes/2012/may/oes_co.htm#00-0000. The 2012 Colorado average wage of occupations 43-4051 customer service, 43-4071 file clerks, and 43-4171 receptionist and information clerks is $30,703, and assuming 10% benefits, the employer’s average expense per employee is $33,773. The 2012 average wage for all occupations is $48,110 and assuming 10% benefits, the employer’s average expense per employee is $52,951. The in-state savings from reduced administrative expenses is divided by these employer’s average expense per employee to determine the range of possible job loss is between 6,404 and 10,040.
43 2013, p. 30 40% of insurance jobs are in Colorado
44 op. cit (2013). Dr. Friedman notes that using the IMPLAN program from the MIG group, and adjusting for inflation, every billion dollars of increased economic stimulus in the Colorado economy results in 7,035 jobs.
Economic Analysis of the ColoradoCare Proposal
Addendum with 2019 Projections

Prepared by Ivan J. Miller, Ph.D. for the Colorado Foundation for Universal Health Care
August 3, 2015
The Colorado Foundation for Universal Health Care published an Economic Analysis of the ColoradoCare Proposal in April 2015 with projections for the year 2016. This addendum provides additional projections for 2019 and compares Coloradans’ expenses under the current system with their expenses under ColoradoCare.

In the previous economic analyses of this proposal, Colorado Health Expenditures (CHE), a measure that is based on the Centers for Medicare and Medicaid Services (CMS) National Health Expenditures (NHE) data, was used to compare the forecast expenses for the current system and ColoradoCare. However, this measure is not an expression of what Coloradans experience as health care expenses—the health care premiums and out-of-pocket expenses they collectively pay each year. This addendum analysis converts CHE to Coloradans’ health care premiums and out-of-pocket expenses combined (Premiums + OOP), and compares the current system with ColoradoCare.

### Table 2

| 2019 Cost Projections for Coloradans: Current System Compared to ColoradoCare |
|---------------------------------|-----------------------------------|
| **Current system in 2019** | **ColoradoCare in 2019** |
| Premiums Coloradans would pay | $24.9 billion | $25.0 billion |
| Premiums Coloradans would pay | **-$0.3 billion refund to Medicaid eligible** |
| net $24.7 billion premium taxes | **+$0.3 billion premium taxes** |
| Out-of-pocket expenses Coloradans would pay | $1.1 billion for dental | $1.1 billion for dental* |
| Out-of-pocket expenses Coloradans would pay | $5.2 billion for medical | $0.9 billion for medical |
| $6.3 billion total out-of-pocket | **$2.0 billion total out-of-pocket** |

* This analysis finds that there would be $1.2 billion available in ColoradoCare’s budget to expand dental beyond the minimum dental coverage required by both the initiative language and ACA and Medicaid waivers. In the analysis, it is assumed that the ColoradoCare Board of Trustees will approve this allocation of money earmarked for dental coverage; however, the amount of dental benefit would need to be determined by the Trustees.

Under ColoradoCare, in 2019 Colorado residents and employers would pay $26.7 billion in premiums and out-of-pocket expenses for the services typically covered by comprehensive health and dental insurance — $4.5 billion less than the $31.2 billion cost with the current system.

**Positive impacts of ColoradoCare**

**Coverage:**
- All Coloradans would be covered compared to a projected 8% uninsured rate under the current system.
- The benefit package would be more comprehensive than the best Affordable Care Act plans.
- The economic analysis includes sufficient funding to pay for as much dental care as insurance currently pays, including coverage for children.
- Coverage would continue regardless of employment, marriage, age, or health condition.
- No one would be forced to change health care providers because an employer changed insurance plans.

**Funding for increased health care:**
- ColoradoCare adds $1.5 billion to provide for health care to the previously uninsured.
- ColoradoCare adds $0.4 billion for the increased health care services used because health care would be affordable.
Sources of Savings:

- ColoradoCare reduces administrative expenses by $6.2 billion. These savings come from removing redundant insurance-industry administration and from decreasing bureaucracy and paperwork in providers’ offices.
- Prices for durable medical equipment and pharmaceuticals can be reduced by $1.2 billion using bulk purchasing market power.
- A unified billing system would reduce fraud by $0.6 billion.
- Over time — with a unified system supporting innovation, practical efficiencies, and integrated health delivery — savings are projected to increase.

For Colorado Residents:

- ColoradoCare would have no deductibles, no copays for most preventive and primary care, and would waive other copayments when they cause financial hardship.
- All Coloradans would have affordable health care. The current system is projected to leave more than 23% Coloradans underinsured in 2019.
- There would no longer be burdensome medical debt or bankruptcy caused by medical bills.
- Overall, Colorado residents and employers would pay $4.5 billion less for health care.
- The calendar year 2019 is projected to have a $1.5 billion surplus to offset future health care costs and/or be refunded to Premium Tax payers.
- Overall, Colorado residents would gain over $1.1 billion from income tax deductions.

For Colorado Employers:

- The aggregate reduction of expenditures for employee health is projected to be $3.8 billion.
- There would no longer be expenses related to administering employee health care.
- The medical portion of workers’ compensation (59%) would be covered by ColoradoCare.
- State, counties, cities, school districts and universities would benefit from significant savings for employee coverage.

For providers and health care professionals:

- Providers would receive prompt, adequate payment for every patient.
- The billing system would be simplified.
- ColoradoCare would be able to support practical innovation, responsiveness to community needs, and improved access for patients, especially in rural areas.

For Medicaid beneficiaries:

- All benefits would be maintained with a probable increase in dental benefits.
- There would continue to be no premiums for those under 138% of Federal Poverty Level.
- Beneficiaries would be able to see all providers and would no longer restricted to “providers who take Medicaid.”

Impact on Medicare beneficiaries:

- Medicare Parts A, B, and D, and Medicare Advantage would remain the same.
- ColoradoCare provides a comprehensive Medicare supplemental plan without deductibles.
- Anticipated adult dental, vision, and hearing services would be available to Medicare beneficiaries.
- Tax write-offs result in 85% of Medicare beneficiaries paying less in Premium Taxes than they would for the cost of the supplemental plan under the current system.

Impact on the Colorado economy:

- By redirecting $4.5 billion in out-of-state spending to in-state spending, Colorado would see a net gain of 32,000 jobs in 2019.
- Although most health care insurance administration jobs lost would be out-of-state, some jobs would be lost in Colorado, and job churn would increase for one year. The savings from ColoradoCare would stimulate the economy and create a greater number of new jobs. The typical rate of Colorado job change or churn is 480,000 per year. The churn would be mitigated by the unemployment insurance system and the continuous health care coverage that ColoradoCare would provide.
Introduction

The Economic Analysis of the ColoradoCare Proposal published on April 10, 2015 used the example year of 2016 for economic comparisons with the current health care system because it allowed close comparison with the current 2015 expenditures, and there was comparison data for the year 2016 in Dr. Gerald Friedman’s 2013 analysis, “Three Possibilities for Colorado’s Future Health Care Financing and Delivery1.” Since publication, there have been numerous requests for information about the projection for the year 2019, the first year that ColoradoCare could be operational.

The original analysis by Dr. Friedman was intended to show the feasibility of universal health care using a comparison of health care expenditures as categorized by economists for the Centers for Medicare and Medicaid Services (CMS) in the National Health Expenditures (NHE) report and the state version of this report, Colorado Health Expenditures (CHE). However, this measure is not an expression of what Coloradans experience as health care expenses, i.e. the health care premiums and out-of-pocket expenses that they collectively pay each year. This addendum analysis makes the adjustments to the CHE measure that are needed in order to reflect Coloradans’ health care premiums and out-of-pocket expenses combined (Premiums + OOP), and using this new measure, compares the current system with ColoradoCare.

The projections for ColoradoCare in 2019 are presented in Table 3, and they are followed by an explanation of how the projections in Table 2 and 3 were determined and how the 2016 expense and revenue projections were adjusted for the sample year 2019. Both the comparison with the current system and impact on stakeholders are presented in the Discussion of the Impact of ColoradoCare on Coloradans, 2019 example year.

### Table 3 2019 ColoradoCare Expense and Revenue Estimates
(Table 3 is reformatted from Table 1 in the 2015 analysis of the example year 2016. See Appendix D for an explanation of the reformatting.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current system, Colorado Health Expenditures (CHE) consumption category</strong></td>
<td>$60,682</td>
</tr>
<tr>
<td><strong>Subtraction adjustments from CHE under ColoradoCare</strong></td>
<td></td>
</tr>
<tr>
<td>Administration in providers’ offices reduction</td>
<td>(2,267)</td>
</tr>
<tr>
<td>Administration in private insurance reduction</td>
<td>(4,621)</td>
</tr>
<tr>
<td>ACA-related private insurance administrative and exchange expenses</td>
<td>(326)</td>
</tr>
<tr>
<td>Drug, medical, and hospital pricing savings</td>
<td>(1,165)</td>
</tr>
<tr>
<td>Fraud reduction savings</td>
<td>(605)</td>
</tr>
<tr>
<td><strong>Total expense reductions</strong></td>
<td>(8,984)</td>
</tr>
<tr>
<td>CHE not usually covered by regular health insurance</td>
<td>(4,066)</td>
</tr>
<tr>
<td><strong>Total subtractions from CHE</strong></td>
<td>($13,050)</td>
</tr>
<tr>
<td><strong>Addition adjustments to CHE under ColoradoCare</strong></td>
<td></td>
</tr>
<tr>
<td>Coverage extension expense addition</td>
<td>1,483</td>
</tr>
<tr>
<td>Utilization increase expense addition</td>
<td>425</td>
</tr>
<tr>
<td><strong>Total increase in funds for health care services</strong></td>
<td>1,908</td>
</tr>
<tr>
<td>ColoradoCare administration (not included elsewhere) expense addition</td>
<td>983</td>
</tr>
<tr>
<td><strong>Total CHE additions</strong></td>
<td>+ $2,891</td>
</tr>
<tr>
<td>(CHE minus subtractions and plus additions)</td>
<td></td>
</tr>
<tr>
<td>Funds needed for universal health expenditures, the part of CHE that is</td>
<td>$50,523</td>
</tr>
<tr>
<td>usually covered by comprehensive health and dental care insurance</td>
<td></td>
</tr>
<tr>
<td><strong>Continuing federally funded programs</strong></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>(12,492)</td>
</tr>
<tr>
<td>Tricare</td>
<td>(419)</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>(933)</td>
</tr>
<tr>
<td><strong>Total continuing federal programs</strong></td>
<td>($13,844)</td>
</tr>
<tr>
<td>(Subtract continuing federally funded programs from universal health</td>
<td></td>
</tr>
<tr>
<td>expenditures usually covered by comprehensive insurance)</td>
<td></td>
</tr>
<tr>
<td><strong>Funds needed for Coloradans’ health care expenses under ColoradoCare</strong></td>
<td>$36,679</td>
</tr>
<tr>
<td><strong>Waiver revenue combined with Premiums + OOP</strong></td>
<td></td>
</tr>
<tr>
<td>Medicaid waiver</td>
<td>10,821</td>
</tr>
<tr>
<td>ACA waiver</td>
<td>735</td>
</tr>
<tr>
<td>Federal waiver funding for ColoradoCare</td>
<td>11,556</td>
</tr>
<tr>
<td>Out-of-pocket medical under ColoradoCare (96% actuarial value)</td>
<td>942</td>
</tr>
<tr>
<td>Out-of-pocket for portion of dental assumed to not be covered</td>
<td>1,078</td>
</tr>
<tr>
<td>Revenue collected from premium taxes</td>
<td>25,000</td>
</tr>
<tr>
<td>Refund to Medicaid eligible residents (subtraction)</td>
<td>(332)</td>
</tr>
<tr>
<td><strong>Amount paid by Coloradans (Premiums + OOP)</strong></td>
<td>26,688</td>
</tr>
<tr>
<td><strong>Total of waiver revenue plus Premiums + OOP</strong></td>
<td>$38,244</td>
</tr>
<tr>
<td>(Subtract expenses from revenue)</td>
<td></td>
</tr>
<tr>
<td><strong>Surplus balance</strong></td>
<td>$1,565</td>
</tr>
</tbody>
</table>

Economic Analysis of the ColoradoCare Proposal, 4.10.15 Addendum with 2019 Projections, 8.3.15, v5.0
Description and explanation of line item adjustments in Table 2 and Table 3

Coverage and funding principles used to estimate ColoradoCare expenses:
Expense estimates in this analysis, as well as in the analysis that was used to determine the initiative’s Premium Tax rates, are based on the following two principles:

Expense estimates need to include comprehensive benefits, not the minimum benefits specified by laws and regulations.

As a universal health care proposal serving the members, ColoradoCare needs to consider all of the health care needs of Colorado. It has the responsibility to ensure both complete health benefit coverage as well as universal coverage. This is in contrast to the private/public multi-payer system in which each payer tightly defines not only the covered benefits, but who is included, and the insurer has no responsibility for complete or universal coverage.

The difference between the traditional approach and universal health care is most apparent in the approach to such essential components of health care as mental health, substance abuse, and dental health benefits. In the current system, insurance limitations on mental health and substance abuse treatment coverage have resulted in the shifting responsibility of many patients’ mental health care and substance abuse care to the underfunded public mental health and substance abuse treatment systems. In dental health, high copayments and coverage limits cause many people to forego necessary dental health care, and there is no system that addresses responsibility for the dental health of the population.

In contrast, a universal health care system is responsible for a reasoned examination of all health care needs and an effort to ensure that all of the health care deemed necessary is provided.

This principle results in a different approach to expense estimates than that applied to traditional insurance. Instead of estimating the cost of meeting the minimum standards (an exclusive method), a universal health care system needs to take into account expenses for expanded benefits that address the health care needs of the population (an inclusive method). The health care needs of the population are estimated by combining Colorado Health Expenditures (inclusive data) with the increased expenditures due to universal coverage, in addition to the increased utilization as barriers to treatment are removed. This is reflected in the proposal language that sets the floor for benefits (but with no ceiling limits on them), and it assigns the Trustees and the members, with their power as electors of the Trustees, the responsibility of evaluating how benefits can be expanded above the floor.

Revenues must be sufficient to be competitive with the payments and compensation available to providers in the other 49 states.

A realistic estimate of expenses must be based upon compensation for providers that is competitive with other states in order to maintain an adequate workforce to provide health care services. It is presumed that in the Colorado Health Expenditures, current compensation is adequate in the overall sense. There would be, however, a need to adjust how compensation is allocated among providers, in particular to address the generally insufficient funding for primary care, rural areas, and geographic areas with a high cost of living such as the resort communities. Expense estimates were made by projecting historical Colorado Health Expenditures out to the year 2019, adding in the cost of increased services due to universal coverage and increased utilization, and only reducing expense estimates when these reductions did not come from service delivery. This methodology yields an estimate for sufficient revenues to maintain the Colorado health care workforce and services at a high standard.
This funding needs to be distinguished from that of government health care programs, which are typically funded at bare-bones levels, often because the people receiving the services are not the people paying for them. Each government program serves a few, but all are paying. While ColoradoCare is a political subdivision of the state, it uses the cooperative business model. Everyone is paying according to income and everyone is receiving services. Cooperatives, such as rural electric cooperatives and credit unions, generally enjoy a good reputation for quality and customer service. The revenue estimates in this analysis do not require or adhere to any of the bare-bones expense policies typical in government-funded programs and are based on providing sufficient funds to ensure the current prevailing compensation to providers.

Description and explanation of Table 2 line items

*Premiums under the current system — $24.9 billion*

The combination of all health care expenses paid by private insurance plus the administrative and profit revenue retained by private insurance equals the amount Coloradans paid for insurance premiums. In example year 2012, the combination was 41.05% of NHE consumption category\(^2\). Assuming the same ratio, with the current system in 2019, 41.05% of the $60,682 million projected CHE would be $24,913 million, rounded to $24.9 billion.

*Premiums under ColoradoCare — $24.7 billion*

ColoradoCare is projected by Colorado Legislative Council economists to collect $25,000 million in Premium Taxes in 2019, and it is anticipated that the Medicaid waiver would require a refund of $332 million to working Medicaid beneficiaries because Medicaid beneficiaries may not be charged significant fees for health care services. Subtracting the refund from the Premium Taxes collected yields a net premium of $24,668 million, rounded to $24.7 billion.

*Dental out-of-pocket in both the current system and ColoradoCare — $1.1 billion*

It was assumed that dental out-of-pocket consumed the same portion of CHE in 2019 as it did in 2012. The ratio of dental out-of-pocket to NHE consumption expenditures in 2012 (.01776) was multiplied by the projected 2019 CHE of $60,682 million to yield a forecast of $1,078 million dental out-of-pocket in the current system, and the same amount of dental out-of-pocket was assumed to continue in ColoradoCare. This estimate is rounded to $1.1 billion.

*Medical out-of-pocket under the current system — $5.2 billion*

In the current system, if the $24.9 billion premiums calculated above are subtracted from the $31.2 billion Premiums + OOP, the $6.3 billion remainder is the out-of-pocket expense. Subtracting the $1.1 billion dental out-of-pocket from this figure yields a medical out-of-pocket expense of $5.2 billion.

*Current system Premiums + OOP — $31.2 billion*

The current system Premiums + OOP was determined by subtracting government funds which include the $13,844 million “Continuing federally funded programs,” the $10,821 million “Medicaid waiver” funds, and the $735 million “ACA waiver” funds (ACA subsidy money in the current system), and also subtracting the $4,066 million “CHE not usually covered by regular health insurance,” from the projected $60,682 million CHE to yield the remainder that is paid by Coloradans, $31,216 million. This is rounded to $31.2 billion.

*ColoradoCare out-of-pocket medical — $0.9 billion*

The ColoradoCare out-of-pocket is calculated by first determining the medical expenses that would be subject to medical out-of-pocket expenses, which are the “Funds needed for Coloradans’ health care expenses under ColoradoCare” minus the Medicaid-related programs and dental care. This
amount is calculated as follows: the $10,821 million “Medicaid waiver” funding, the anticipated $1,230 million earmarked for dental, and the projected $1,078 for dental out-of-pocket are subtracted from the $36,679 “Funds needed for Coloradans’ health care expenses under ColoradoCare” to yield an estimate that $23,550 million of Coloradans’ medical expenditures that would be subject to possible out-of-pocket expenses. A 96% actuarial value (96% actuarial value is equivalent to a 4% out-of-pocket) is applied to the $23,550 million, yielding a forecast of $942 million medical out-of-pocket, which is rounded to $0.9 billion.

**ColoradoCare funds earmarked for dental (in Table 2 footnote) — $1.2 billion**

It is assumed that dental insurance pays the same portion of CHE now as it did in 2012. The ratio of dental expenditures by insurance companies to NHE consumption expenditures from 2012 (.02027) was multiplied by the projected CHE of $60,682 million to yield a forecast of $1,230 million needed in order for ColoradoCare to continue paying Coloradan’s consolidated dental health care expenses the same amount that is now being paid by insurance. This funding earmarked for dental care would be an expansion of benefits beyond the minimum required by the initiative language and the Medicaid and ACA waivers, and the allocation of these funds would be at the discretion of the Board of Trustees acting on the desires of Coloradans. The $1,230 million is rounded to $1.2 billion.

**Description and explanation of Table 3 line items**

**Total Colorado Health Expenditures (Consumption category) — $60,682 million**

The 2016 estimate of $49,552 million was adjusted for 6% annual growth of NHE³ and for the growth rate of Colorado’s population being 2.822% greater than that of the national population⁴ upon which the NHE is based. This adjustment will be referred to as the “standard adjustment for increased NHE and population.” This adjustment results in a forecast of $60,682 million.

**Administration in providers’ offices reduction — $2,267 million**

A forecast of $2,267 million results from applying the standard adjustment for increased NHE and population to the 2016 forecast of $1,851 million.

**Administration in private insurance reduction — $4,621 million**

The growth of private insurance is projected to slow to 5.3%/year due to increased Medicaid and Medicare⁵ enrollment. Applying 5.3% and Colorado population’s growth rate (which is 2.822% greater than the national population growth rate) to the 2016 forecast of $3,849 million results in a forecast of $4,621 million.

**ACA-related private insurance administrative and exchange expenses — $326 million**

It’s been predicted that administrative costs will increase as a result of the ACA, and numerous anecdotes support this prediction. Himmelstein and Woolhandler have provided an estimate of the increased private insurance costs and costs of the exchanges based on Congressional Budget Office Reports and the NHE report⁶. The reduction in private insurance expenses in the 2016 ColoradoCare analysis did not take these expenses into consideration, and therefore, these expense reductions are included in the 2019 analysis separately. Colorado’s estimated share of the increased expenses resulting from ACA-related administration and exchange costs is $326 million. Consequently, the expense reduction resulting from removing the ACA-related administrative expenses is forecast to be $326 million in 2019.

**Drug, medical, and hospital pricing savings — $1,165 million**

A forecast of $1,165 million in 2019 results from applying the standard adjustment for increased NHE and population to the 2016 forecast of $951 million.
Fraud reduction savings — $605 million
A 2019 forecast of $605 million results from applying the standard adjustment for increased NHE and population to the 2016 forecast of $494 million.

CHE not usually covered by regular health insurance — $4,066 million
The standard adjustment for increased NHE and population was applied to the 2016 “CHE outside of ColoradoCare responsibility (now relabeled “CHE not usually covered by regular health insurance”) forecast of $3,320 million, resulting in a forecast of $4,066 million.

Coverage extension expense addition — $1,483 million
A 2019 forecast of $1,483 million results from applying the standard adjustment for increased NHE and population to the 2016 forecast of $1,211 million.

Utilization increase expense addition — $425 million
The standard adjustment for increased NHE and population was applied to the 2016 forecast of $347 million, resulting in a forecast of $425 million.

ColoradoCare administration (not included elsewhere) expense addition — $983 million
This figure represents expenses for administration of ColoradoCare calculated at a rate of 3.8% of total expenses, which is the amount generally required for the administration of a Medicaid program. It excludes the administrative expenses for the Medicaid waiver portion of funding, because these funds already include an allowance for administrative expense. It is calculated by first subtracting the $10,821 million “Medicaid waiver” from the $36,679 million “Funds needed for Coloradans’ health care expenses under ColoradoCare,” resulting in $25,858 million of expenses for which there is no administrative cost assigned. The administrative cost rate of 3.8% is applied to $25,858 million to yield a $983 million estimate for “ColoradoCare administration (not included elsewhere) expense.”

Medicare — $12,492 million
Medicare expenses are predicted to increase at a rate of 6.7% for the years between 2016 and 2019, and the Colorado population, according to the standard adjustment, is predicted to grow faster than the U.S. average upon which the Medicare prediction is based. Applying the predicted growth in Medicare expenses and the growth in Colorado’s population increases the 2016 estimate of $9,945 million to $12,492 million in 2019.

Tricare — $419 million
Tricare is not presumed to grow with the Colorado population growth. It is adjusted for the increase in NHE only, 6.0%/year. The 2016 forecast of $352 million is increased to $419 million.

Veterans Administration — $933 million
The standard adjustment for increased NHE and population was applied to the 2016 forecast of $762 million, resulting in a forecast of $933 million.

Medicaid waiver — $10,821 million
NHE forecasts Medicaid to grow at a 7.1%/year rate from 2016 to 2019, and the Colorado population is forecast to grow at a rate of 2.822% faster than the national population growth upon which the NHE forecast is based. Applying the NHE forecasted growth rate and the population growth rate to the 2016 projection ($8,567) results in a forecast of $10,821 million in 2019.
ACA waiver — $735 million
The standard adjustment for increased NHE and population was applied to the 2016 forecast of $600 million resulting in a forecast of $735 million.

ColoradoCare out-of-pocket medical — $942 million
The ColoradoCare out-of-pocket is calculated by first determining the medical expenses that would be subject to medical out-of-pocket expenses, which are the “Funds needed for Coloradans’ health care expenses under ColoradoCare” minus the Medicaid-related programs and dental care. This amount is calculated as follows: the $10,821 million “Medicaid waiver” funding, the anticipated $1,230 million earmarked for dental, and the projected $1,078 million for dental out-of-pocket are subtracted from the $36,679 million “Funds needed for Coloradans’ health care expenses under ColoradoCare” to yield an estimate that $23,550 million of Coloradans’ medical expenditures would be subject to possible out-of-pocket expenses. A 96% actuarial value (96% actuarial value is equivalent to a 4% out-of-pocket) is applied to the $23,550 million, yielding a forecast of $942 million in medical out-of-pocket expenses.

Out-of-pocket for portion of dental assumed to not be covered — $1,078 million
In the Addendum, the “Portion of dental care not covered at the beginning of ColoradoCare” was more accurately relabeled “Out-of-pocket for portion of dental assumed to not be covered.” This analysis earmarks $1,230 million for expanded dental services, the same amount that is projected to be paid by dental insurance in 2019 under the current system. This analysis also assumes that the 2012 ratio of out-of-pocket dental to NHE would be the same in 2019. According to the above assumptions, the ratio of dental out-of-pocket to NHE consumption expenditures from 2012 (.01776) was multiplied by the projected CHE of $60,682 million to yield a forecast of $1,078 million.

Revenue from Premium Taxes — $25,000 million
Colorado Legislative Council economists predict that the Premium Taxes would result in $25,000 million of revenue in 2019, and this prediction was used by the Secretary of State’s Title Board to determine the amount of Premium Tax placed in the initiative language.

Medicaid premium refunds — $332 million
The number of working Medicaid beneficiaries eligible for a refund of payroll premiums is assumed to rise by the predicted 1.7%/year rate of increase in population or 5.19% in three years, multiplied by an estimate for inflation continuing at the slow rate of $1.7%/year. The result is that the 2016 forecast of $300 million is increased to $332 million.
Discussion of the Impact of ColoradoCare on Coloradans: Example Year 2019

Comparison of the current system with ColoradoCare in 2019

Colorado’s health care expenditures for the current system would be reduced by $6,093. Transitioning to a statewide universal health care system would create considerable administrative, market-power, and fraud-reduction savings. Replacing the administration of a multi-payer with a universal health care system is projected to create $8,984 million in expense reductions through lower fees as a result of market power and a reduction in administration and fraud. After compensating for $1,908 million for increased utilization and coverage expenses and the $983 million administrative expenses for ColoradoCare, there would remain a projected expense reduction of $6,093 million.

Coloradans would pay $31,216 million under the current system, and would pay $26,688 million under ColoradoCare, resulting in a health care payments savings of $4,528 million. Although ColoradoCare reduces CHE by $6,093 million, this is, however not the amount Coloradans experience as health care payments. It is the total of all of the funds that Center for Medicare and Medicaid Services (CMS) defines as health care expenditures. The amount Coloradans experience as health care payments is the Premiums + OOP, defined here as the sum of premiums and out-of-pocket for health care services that are usually covered by comprehensive health and dental insurance.

Premiums + OOP can be determined for the current system by subtracting from CHE ($60,682 million) both the $4,066 million of CHE that is not usually covered by health care insurance (long-term care excluding the portion paid by Medicare and Medicaid, over-the-counter medical supplies, cosmetic surgery, etc.) and the $25,400 million of continuing funding paid by the federal government ($25,400 million is the total of $13,844 million “Continuing federally funded programs,” $10,821 million Medicaid funds, and $735 million ACA waiver funds which would be continued in the current system as subsidies). The continuing federal funding includes Medicaid funding, which is partially funded from the Colorado general fund, but is usually experienced by Coloradans as a state tax and not a health care expense. These subtractions from CHE yield a Premiums + OOP of $31,216 million under the current system.

Premiums + OOP for ColoradoCare is determined by adding the premiums paid by Coloradans and the anticipated out-of-pocket costs. Premiums paid are the projected $25,000 million estimated by Colorado Legislative Council economists minus the anticipated refund to Medicaid-eligible people who are working ($332 million). The out-of-pocket category is a combination of the projected out-of-pocket for dental ($1,078 million) and for medical ($942 million). Premiums + OOP with ColoradoCare is the sum of these components: $26,688 million.

The total for savings with ColoradoCare expressed as Premiums + OOP is $4,528 million ($31,216 million for the current system compared with $26,688 million under ColoradoCare — less than the $6,093 million savings when the CHE of the two systems is compared. The difference is a result of ColoradoCare’s planned $1,565 million surplus to assure the financial stability of ColoradoCare. Paying for this surplus is not included in CHE. This is an investment in future health care expenses through increased benefits and utilization, as a reserve to offset costs during a financial downturn, and/or a refund to Coloradans. Because this surplus will be collected from Coloradans in 2019, it
will be experienced as a payment for health care in 2019, and is consequently included in Premiums + OOP.

**Premiums under the current system would be $24,913 million compared to $24,668 million for ColoradoCare.**
The combination of all health care expenses paid by private insurance plus the administrative and profit revenue retained by private insurance equals the amount Coloradans paid for insurance premiums. In example year 2012, the combination was 41.05% of NHE consumption category. Assuming the same ratio with the current system continuing, 41.05% of CHE would be $24,913 million. This is compared to projected net Premium Tax revenue of $24,668 for ColoradoCare.

**Out-of-pocket expenses with the current system would be $6,303 million compared with $2,020 million for ColoradoCare**
The current system total out-of-pocket is determined by subtracting the $24,913 million premium estimate from the $31,216 million Premiums + OOP to yield $6,303 million out-of-pocket. Comparable expenses from ColoradoCare would come from combining the $1,078 million for dental out-of-pocket and $942 million for medical out-of-pocket for a total $2,020 million out of pocket with ColoradoCare.

**Current system has 8% uninsured and 23% underinsured, compared to universal coverage and no underinsurance with ColoradoCare.**
The current system has variable coverage including at least an 8% uninsured rate and an undetermined number of insurance policies that are not comprehensive covering the full range of health care services. The Commonwealth Fund found that 23% of insured people are underinsured with such high deductibles and out-of-pocket expenses compared to their incomes that 44% of these underinsured adults did not get needed health care due to expense, and 51% struggled to pay medical bills. In contrast, ColoradoCare has universal coverage, and because it has no deductibles and waives copayments for financial need, there is no underinsurance.

**Administrative expenses in the current system in 2019 would be $15,554 million — 37% of the system expenses. Colorado care would reduce administrative expenses by $6,275 million to $9,279 million — 25% of “Funds needed for Coloradans’ Health Care Expenses under ColoradoCare.”**
Administrative expenses in health care cover a wide variety of activities including scheduling, office management, enrollment of patients and providers, marketing, accounting, billing, authorization, and reporting requirements resulting from provider/payer contracts. The multi-payer system greatly increases the billing, payment, authorization, and reporting complexities, affecting all aspects of health care delivery and all health care personnel. Administrative expenses are not isolated to administrative personnel but also include time spent by providers on administration, which has been estimated to be one-sixth of their time. Because it is not possible to isolate the interwoven expenses related to multi-payer systems, to compare the administrative costs associated with the current system and ColoradoCare, it is helpful to measure the total administrative expenses, including the interwoven expenses of the multi-payer, public and private, systems as well as other administrative expenses.

In 1999, Woolhandler, Campbell, and Himmelstein estimated total administrative expenses in the U.S. to be at least 31% of NHE. They also found that the growth of the portion of the health care workforce classified as administrators from 1969 to 1999 was 0.3%/year. Subsequent reports from Woolhandler and Himmelstein indicate that the growth of administrative workforce as a portion of the total health care workforce continued to grow at the same rate or greater since 1999. Assuming that the portion of NHE that is for administrative expenses grows at the same 0.3%/year rate as the
growth of the administrator’s portion of the health care workforce, it is projected that in 2019 at least 37% of NHE would be consumed by administrative expenses. This continuing growth of the portion of the health care workforce that are administrators is supported by a Harvard Business review analysis that also found that between 1990 and 2012 there was a 75% growth in the health care work force, with all but 5% of that growth occurring in administrators, yielding job ratios of one doctor/six other health care professionals/ten administrators (1/6/10)\(^6\).

A comparison of the current system to ColoradoCare requires combining Premiums + OOP and Medicaid for both sides of the comparison in order to analyze equivalent systems. This combination of public and private systems (the multi-payer and multi-government payer system) reflects the makeup of the health care system that Woolhandler et. al. analyzed. The current system administrative expenses as defined by Woolhandler et. al. are 37% ($31,216 million Premiums + OOP + $10,821 million Medicaid), yielding that that $15,554 million of the expenditures in the current system are for administrative expenses. ColoradoCare would change the administrative expenses with a $4,621 million reduction in private insurance administration, a $2,267 million reduction in the administrative burden on providers, and a $326 million reduction in administrative expense by eliminating the ACA exchange and related expenses. Adding a $983 million increase for ColoradoCare’s administration expenses to these reductions results in a $6,231 million net reduction in administrative expense under ColoradoCare. Subtracting this $6,231 net reduction from the current system’s $15,554 million administrative expense results in a ColoradoCare administrative expense of $9,323 million — 25% of the $36,679 million “Funds needed for Coloradan’s health care expenses under ColoradoCare.”

This estimate may appear quite high, particularly since Medicare is often cited as spending under 2% on administrative expenses\(^7\). Indeed, ColoradoCare itself is anticipated to have the relatively low rate of 3.8% administrative expense for its internal operations. However these citations of low administrative rates come from isolating a single component of the system, and administrative expenses involve more than the costs of the payers. The low estimates also do not take into consideration routine administrative duties, payer and provider office administration, multi-payer system complexities beyond billing, and authorization and reporting requirements interwoven with provider activities.

These administrative expense numbers are estimates. The definition of what is administrative is somewhat fuzzy. For example, “Is scheduling patients administrative or patient care?” Furthermore, administrative expenses should not be understood as only a payment for administrative work. They also include the profits and executive salaries of the multi-payer insurance industry, which acts in a middleman role in the health care system. The point of measuring administrative expenses in this analysis, however, is for comparison and also to show that the system can afford to lose $6,231 million of administrative expenses because there would be plenty of administrative funds left. In fact, the removal of middlemen expenses can be a boon to the health care system as well as many other systems and businesses.

Nevertheless, the question arises, how much administration is optimal? The Canadian system is often held up as a model for administrative efficiency. Woolhandler et. al. estimated that Canada had 16.7% administrative expenditures in 1999\(^8\). If the same methodology as used above (to predict that administrative expenses would consume 37% of the 2019 U.S. health care expenditures) is applied to the data that Woolhandler et. al. reported for Canada, it is projected that Canadian administrative expenditures would be 18.8% of Canadian health expenditures in 2019. ColoradoCare cannot reduce administration in the health care system to the Canadian level. Under ColoradoCare there would still be several federal programs and some out-of-state patients. Canada has the efficiency of being very close to a single-payer system. It may be that the 25%
administrative costs for ColoradoCare is as low a ratio as can be achieved by a single state establishing universal health care.

*ColoradoCare provides $1,908 million more health care services than the current system.*

The analysis increased ColoradoCare’s expenses by adding $1,483 million for coverage extension and $425 million increased utilization resulting in an increase of $1,908 million.

*ColoradoCare combines funding for medical and dental whereas the current system usually separates them*

The ColoradoCare list of benefits (Appendix E) and the ACA waiver would require including pediatric oral care services, and the Medicaid waiver would require some dental care for children and the elderly. These benefits are considered the floor, and the Trustees would be required to consider expanding these benefits to all adults if funds are available. This analysis finds that there would be $1.2 billion available for an adult dental health benefit, which is the equivalent of the projected amount that would be paid by dental insurance under the current system in 2019. In keeping with the principle that universal health care seeks comprehensive coverage, the expanded dental benefit is included in this analysis.

The actual benefit would need to be determined by the Board of Trustees. The benefit structure would likely differ from current dental plans, which rely heavily on large copayments and some deductibles. The deductibles would not be allowed in ColoradoCare, and the large copayments would need to be removed or waived in cases where they pose a financial hardship, and consequently a barrier to necessary health care.

**Impact on employers**

*Reduction in overall employer health care expenses, $3,842 million*

Because employers finance the largest portion of the cost of health care, they would benefit the most from the savings. The combination of the estimate prepared by Colorado Legislative Services of employer savings resulting from no longer being responsible for employee health care insurance and the anticipated 59% reduction in workers’ compensation expenses results in a forecast employers’ expense reduction of $3,138 million in 2016. Projecting to 2019, this estimate is increased by the standard adjustment for increased NHE and population and results in a forecast of $3,842 million in employer savings.

*Elimination of expenses for administering employee health care plans*

Removing employers’ responsibility for selecting health care insurance, educating employees about their health care insurance, and managing health care insurance would net additional employer savings. With universal health care, employers have no more administrative responsibility than they do with payroll deductions for Medicaid and Social Security.

*Increase in expenses for some employers*

Even with this overall savings, some employers would have an increase in expenses. These would primarily be the small employers who have not provided health care coverage and employers who primarily hire part-time or minimum wage employees. These employers would benefit from a 59% reduction in workers’ compensation expenses, but have an increased expense of 6.67% of payroll. The impact would vary depending on the workers’ compensation costs. In dangerous industries such as ranching or construction, the medical portion of workers’ compensation can be greater than 6.67%. Consequently, in spite of never having paid for employee health care, these industries may have a reduction in employee expenses.
**Impact on employees**

**Cost sharing**
Due to the escalating costs of health care, employees are often asked to pay for an increasingly larger portion of employer-sponsored health plans\(^\text{20}\), and these plans often have larger deductibles and copayments. The payroll premium of 3.33% would be lower than many employees’ current share of premium costs. There are no deductibles in the ColoradoCare proposal, which will be a savings for most employees. The projected 96% actuarial value indicates that the out-of-pocket expenses for health care (4%) would be much smaller than in the current system. (A 90% actuarial value is considered the top tier of the health care coverage on the exchanges.)

**Pay increase for some employees**
Some employers may decide to pass on to employees some of the savings that result from the employer’s decreased expenses. For example, this might be the case when health insurance coverage was part of a negotiated wage and benefit package.

**Comprehensive continuous health care coverage**
ColoradoCare includes more health care benefits than plans offered on the health care exchanges. Because health care would not be tied to an employer-sponsored plan, employees would no longer experience changes in policy or providers when an employer changes health care plans or an employee changes jobs.

**Employment choice**
Universal coverage would allow employees more flexibility in job choice. Currently, some employers keep employees part time to avoid health insurance expenses, and some employees stay in jobs they would prefer to leave in order to maintain health care coverage. With ColoradoCare, health care would be separated from employment, allowing employment decisions to be based on job-related factors, not health insurance needs.

**Impact on Colorado residents**

**Comprehensive benefits that can be expanded**
The benefit package in the initiative (and in the required ACA waiver and the required Medicaid waiver) is extensive and comprehensive (Appendix E). In addition, ColoradoCare was designed on the principle that while the initiative and waivers will set the floor for covered benefits, as funding becomes available, the Trustees are to consider expanded benefits. Universal health care in principle seeks to consider all health care expenditures. The analysis found that there was $1.2 billion available for expanded dental coverage beyond the limited coverage that would be covered under the initiative language and waivers; this coverage was included in this analysis as well as the one that was used to establish the amount needed for the Premium Tax rate. The initiative and both waivers ensure children’s vision and hearing benefits, and the Trustees acting upon the desires of Coloradans could expand these to adults as well. However, these specific benefits would need to be established by the Board of Trustees.

**Reduction in overall health care expenses for residents, $686 million plus over $1,127 million in income tax deductions**
Colorado residents would benefit from the portion of the $4,528 million of savings that would not go to a reduction in employer expenses ($3,842 million). This portion is $686 million\(^{21}\). In addition, because the ColoradoCare Premium Tax is a tax for a state program instead of the purchase of an individual health insurance policy, this expense is converted from a non-deductible health care expense in the current system to a deductible health care expense on both state and federal income
taxes. This would result in a more than $1,127 million decrease in income taxes (Appendix C). In addition, Coloradans would benefit from a $1,565 million surplus that could help offset future health care expenses, provide reserves that protect against an economic downturn, and/or become a refund.

Consistent lifetime health care coverage instead of variable annual coverage
Currently, there are estimated to be at least 8% (approximately 436,000) people who are uninsured in Colorado at any one point. The estimate increases to 667,000 when considering the number of residents uninsured at any point during a one-year period. Universal coverage would eliminate the uninsured status for Colorado residents.

Underinsurance no longer a concern
In addition, there are many who do not seek health care due to unaffordable copayments. ColoradoCare has no copayments for the entry point of primary care, and it waives copayments for financial hardship, thus eliminating the status of underinsured for Colorado residents.

Elimination of medical debt
Currently 52% of debt sent to collections is medical debt. Over half of bankruptcy filers cite medical debt as a cause of their bankruptcy, and 75% had insurance at the onset of their illness. Increasingly, health care expenses are put on credit cards, resulting in an additional expense of high interest rates, often for the people who can least afford it. Because ColoradoCare requires waiving copayments for financial need; because there are no deductibles; and because ColoradoCare has a very high actuarial value, substantial medical debt would no longer be a problem for Colorado residents.

Choice and continuity of care
Choice and continuity of care would be improved in most situations. In the current system, choice of provider is often limited by the provider’s participation in an insurer’s limited network. ColoradoCare allows everyone to choose their primary care provider. Depending on ColoradoCare policies that have yet to be developed, the selection of specialists may be limited if the primary care provider participates in a larger organization, such as an HMO, that has a defined network of specialists.

Health care coverage for extended family and friends
Currently, residents often need to help pay for the health care expenses of adult children or grandchildren, parents, and other relatives. The larger community often needs to raise money to help uninsured or underinsured friends and neighbors with expensive conditions. As a universal health care plan, ColoradoCare would help alleviate the financial burden of caring for the health needs of extended family and friends.

Ombudsman Office for Beneficiaries
The proposal calls for an independent Ombudsman Office for Beneficiaries, funded by ColoradoCare and under the supervision of the Commissioner of Insurance. This office would have the capacity to investigate and respond to inquiries and complaints and make recommendations to the Board of Trustees. ColoradoCare would be required to provide sufficient funding to allow the timely completion of all investigations. This office would have the potential to make ColoradoCare more responsive to the concerns of residents than the current system, and consequently, have better customer relations than the current system.

Impact on government
Schools and universities
Expenses for health care coverage and benefit management for faculty and staff would decrease.

City and county governments
City and county governments would experience savings in reduced premium costs due to their role as employers. Many local governments also sponsor health safety net programs that would no longer be necessary.

State government
The impact on state government would be mixed, with some increased expenses and lost revenue as well as some savings. The Department of Revenue expenses would increase as a result of expenses related to collecting Premium Taxes. Currently, health care expenses are tax deductible only for those whose medical itemized deductions are large, but ColoradoCare converts the payment of premiums to a tax, which is consequently an income tax deductible expense. While this benefits the resident by lowering both state and federal income tax, the Colorado General Fund revenues were forecast to be decreased $219 million in 2016 (Appendix A). General Fund revenues would also be decreased $197 million (in 2016 analysis due to lost revenue from a tax on insurance plans (Appendix A). In 2019, the decrease in the General Fund due to the Premium Tax being deducted is forecast to be $266 million, and the decrease in revenue from tax on insurance plans is forecast to be $218 million.

The state government would have savings similar to those that city and county governments would experience. Due to its role as an employer, the state would benefit from the reduction in premium costs. Prisoner health care would no longer be a state expense. The Division of Insurance (DOI) would have a considerable reduction in workload. The DOI would have responsibility for operating Ombudsman Offices for beneficiaries and providers, but this would not be a financial burden because ColoradoCare would be required to provide adequate funds for the operations of the Ombudsman Office.

Impact on providers

Overall provider compensation
The national competition to attract and retain providers will create powerful economic pressure on ColoradoCare to achieve its savings by cutting waste and keeping administrative costs low for the providers, while keeping compensation competitive and the work experience satisfying.

Payments consistent without cost shifting
The payment for services would be altered in several ways. In the current system, payers compensate providers at widely differing rates. To maintain a practice or business in health care, providers need to have high payers to offset the low payers, a practice called cost shifting. The low payer that underpays shifts the cost of delivering health care to the high payers. The complexities and inefficiencies of such a practice are administratively expensive, and create winners and losers depending on the mix of payers. ColoradoCare would level out payment rates for health care services, which would eliminate most the need for cost shifting.

However, while cost shifting would be greatly reduced, it would not be eliminated. Medicare payment rates would continue to be set by CMS according to federal law, and in some areas of health care, these rates have not been sufficient to attract an adequate workforce. If providers see Medicare patients, they may need to maintain a mix of ColoradoCare and Medicare in their practice.

Reduction in provider administrative expense
Administrative work consumes one-sixth of U.S. physicians’ working hours, and the administrative work continues to grow. Between 1970 and 2010, the number of health care administrators in the U.S. increased 3,300%, while in the same time period, the number of physicians only increased 200%. The current multi-payer system contributes to this problem because payers have a tendency to add administrative burdens to protect their own budgets while there is no central entity that is responsible for containing this escalating problem of an overall administratively heavy system.

It is anticipated that ColoradoCare would reduce the administrative burden by reducing the number of payers from many to one primary payer. It would also be incentivized to address the administrative burden on providers because any expense that would increase CHE, including administrative expenses, would increase ColoradoCare expenses. Due to this incentive, it is anticipated that ColoradoCare would develop an efficient payment system that would reduce administrative expenses and the amount of provider time devoted to administration.

**Adjustments in provider compensation**

Some hospitals and other providers have great local market power, approaching monopolies, so that fees are much higher than they would be in a more competitive market. ColoradoCare would be able to counter this excessive local market power and keep payments statewide within the range they would be in a competitive market, consequently, paying more appropriately according to actual costs.

Currently undercompensated areas include primary care and mental health services. Because a universal system is responsible for the health care workforce in the state, underfunded areas would likely receive increases in compensation.

**Providers who are employers**

As employers, providers save on health care costs for their employees as well as with streamlined administrative workload.

**Independent Provider Ombudsman Office**

ColoradoCare must provide funds to the Commissioner of Insurance for the operation of an independent Ombudsman Office for Providers in addition to an Ombudsman Office for Beneficiaries. This Ombudsman Office would have the ability to investigate and respond to inquiries and complaints and make recommendations to the Board. It has the potential to improve provider relations. The current system does not have this check and balance mechanism.

**Work experience**

It is commonly accepted among providers that the administrative complexity of the current system as well as the amount of time that providers devote to administrative work is harmful to provider morale. The reduction in administrative expense would be good for provider morale.

**Impact on Medicaid-eligible residents**

**Current Medicaid benefits would not be reduced**

Medicaid has a comprehensive benefit package, and beneficiaries have no significant copayment requirements. The necessary waiver approval would require that ColoradoCare maintain the Medicaid benefits as well as any of the special programs associated with Medicaid, and also would not charge beneficiaries significant copayments. Current Medicaid benefits will be the floor, and ColoradoCare could only improve upon the Medicaid benefits. Programs like the Medicaid Buy-In for working people with disabilities would continue as a benefit that would not be available to all...
residents, and the anticipated improved dental benefits would increase the dental benefits available for Medicaid-eligible residents.

**Interaction with ColoradoCare**

As in the current system, due to the complexities of federal law, ColoradoCare would need to continue to identify Medicaid-eligible residents in order to provide documentation to the federal government that ColoradoCare is serving enough residents to justify the Medicaid waiver, obtain the federally mandated pharmaceutical discounts for Medicaid patients, ensure that Medicaid-eligible residents did not pay copayments, and refund any Premium Tax that might have inadvertently been collected as a result of employment.

**Improvement in access, continuity, and quality**

ColoradoCare would offer Medicaid beneficiaries improvement in access to care, continuity of care, and in some areas, quality of care. Provider payments would no longer be lower for Medicaid-eligible patients, and thus, the limited availability of providers willing to accept a reduced fee would be eliminated. Therefore, Medicaid-eligible residents could see any provider, and if they lost their eligibility, they could still continue with the same providers. The treatment of some conditions such as mental health issues would no longer be limited to restricted programs for each geographical area. Medicaid-eligible residents could seek out providers of their choosing.

**Impact on Medicare-eligible residents**

_What is the health coverage for Medicare Beneficiaries?_

- Medicare regular Part A, Medicare Parts B and D, and Medicare Advantage would continue as they do now.
- ColoradoCare would provide supplemental or Medigap coverage to Medicare beneficiaries.
- ColoradoCare would provide benefits for services that are not covered by Medicare but covered by ColoradoCare (probably vision, dental, hearing, etc.)
- ColoradoCare would offer voluntary enrollment in a ColoradoCare Medicare Advantage Plan.

Because of significant tax exemptions and income tax deductions, Premium Taxes would end up costing 85% of Medicare beneficiaries less than this supplemental coverage would cost if the current system continued.

_What are the Premium Tax exemptions and deductions?_

All Social Security income and some pension income (including annuity, IRA, and other retirement income) are exempt up to a limit for the combined Social Security and pension income of $33,000 for an individual income tax filer and $60,000 for joint income tax filers. Because the ColoradoCare Premium Tax is deductible from income taxes, beneficiaries who have non-payroll income, in addition to the exempted Social Security and pension income, could lower their income taxes. The combination of these two tax advantages substantially reduces the impact of the Premium Tax on Medicare beneficiaries. (See Appendix B and C for a full explanation).

**Impact on residents with VA benefits, TriCare, Indian Health Service benefits, or other health care insurance coverage**

*ColoradoCare is a secondary payer.*

ColoradoCare is a secondary payer. Providers would be expected to bill other insurance before billing ColoradoCare, and residents who were eligible for health care through other systems such as the VA would be expected to use these other systems when they were available.
ColoradoCare would enhance the health care benefits for residents in continuing federal programs
Because ColoradoCare is mandated to provide both universal coverage and access to care, it should seek arrangements or contracts for coordination with services such as the VA when the coordination would help ensure improved health care. When services from the VA or other federal programs are not located within a reasonable distance of a Colorado resident, ColoradoCare would be obligated to provide or arrange for services to these Coloradans. ColoradoCare’s comprehensive benefit package, which includes some dental, would also likely enhance the benefits available to VA beneficiaries and other continuing federal programs.

Impact on non-payroll income earners
The Non-Payroll Premium Tax rate is 10% and has a maximum cap of $350,000/individual or $450,000/joint filer for both payroll and non-payroll income combined. The Premium Tax is a state tax and is deductible from income taxes, whereas health care expenses are not deductible unless they exceed 10% of income (7.5% for people born before 1950)\(^\text{32}\). Because state taxes are based on federal deductions, the Premium Tax would also be a deduction on state income taxes. Considering the reduction in income taxes, the impact of the 10% Premium Tax for income tax payers is reduced to between 8.537% and 5.577% depending on tax bracket (Appendix C). This is a substantial reduction in taxes that the Colorado Legislative Services has calculated to be $219 million in 2016 (Appendix A), and is forecast to be $266 million in 2019 for state income taxes alone. A high-income earner in the federal 39.6% income tax category would pay an effective rate of 5.577%. Because premium liability is limited to $450,000 for joint filers, the after-income-tax impact would be $25,097. This is less expensive than the cost of some family health insurance plans. The ACA does not consider a family health insurance plan to be a Cadillac plan, upon which it imposes a 40% excise tax, until the cost exceeds $27,500\(^\text{33}\).

The exact amount of income tax savings for Coloradans is difficult to estimate because the savings increase with income, and there is no convenient way to estimate how many Coloradans would be in each tax bracket. However, even assuming that all Coloradans were in one of the lowest tax brackets, 15%, the reduced income taxes (federal and state combined) would be $1,127 million. This savings would certainly be larger because many incomes are in a higher tax bracket. This $1,127 million savings on income tax is in addition to the $4,528 million of savings reported in Premiums + OOP.

Impact on Colorado jobs

ColoradoCare would cause a temporary increase in job churn
The transition to universal health care would create some churn in the job market. As less would be spent on administration in health care, these dollars would be freed to be spent elsewhere in the Colorado economy, creating new jobs.

The major portion of the savings comes from eliminating private insurance administrative expense, which does not all result from job loss because it includes profits and some infrastructure. Many of the jobs lost in the insurance industry would be out of state, and would therefore not affect the Colorado economy. In the 2013 analysis, Dr. Friedman determined that 60% of the insurance jobs are concentrated in states like Connecticut, Minnesota, New Jersey, and Ohio. Colorado has only 40% of the insurance jobs that would be expected for its population size\(^\text{34}\).

Considering that much of the expense reduction comes from the elimination of unnecessary administrative jobs, there will be significant job churn in the first year. While job churn is disruptive, it is an unavoidable part of a vibrant market economy in which demand changes and obsolete businesses yield to improved business models. A decision by the voters to move away
from the inefficient multi-insurance model to the efficient universal health care system, which is more effective in achieving the goal of affordable health care for all, could be thought of as a financial decision to move from an obsolete business model to an improved model.

The anticipated job churn can be absorbed by the economy stimulated by ColoradoCare. Most of the people in the administrative and clerical positions that would be affected by the transition to ColoradoCare would be able to find new jobs in the stimulated economy. These administrative and clerical jobs normally have high turnover rates and require general skills that can be transferred to new positions. Recent trends since 2012 show Colorado with an annual rate of job loss of 480,000 and a rate of job gain of 540,000\textsuperscript{35}. Even if job churn from ColoradoCare were as high as 50,000, it would still be only about one-tenth of the annual job churn. The impact on individuals affected is mitigated by the normal unemployment insurance safety net plus the continuous health insurance coverage provided by universal health care without the costly COBRA expenses. Some of these new jobs would be rewarding jobs in the health care industry, and some of the jobs would be created by the $4.5 billion increase in discretionary funds that the savings would give Coloradans and Colorado businesses.

**Net job gain over 31,721**

The primary impact on the Colorado employment and economic picture comes from the money currently spent out-of-state that would be available to Coloradans to spend locally, where it can have a substantial impact on the local economy. Much of money spent in the local economy is also recirculated locally, and this reinvestment continues, creating a “multiplier” effect and even greater economic stimulus\textsuperscript{36}.

The savings that convert out-of-state spending to in-state spending, and consequently into economic stimulus, is substantial. Of the jobs lost in the insurance industry, 60% would be out-of-state\textsuperscript{37}. Consequently, of the $4.621 million saved by eliminating health insurance administration, $2,774 million would be money that went out of state previously and would be available to stimulate the Colorado economy. Because pharmaceutical companies, durable medical equipment manufacturers, and national hospital chains are primarily located out of state, it is assumed that 75% of the $1,165 million savings accrued from market power negotiations with these entities ($874 million) was sent out-of-state in the current system. Assuming conservatively that the income tax savings from federal taxes were all in the 15% tax bracket, there would be $861 million of tax money that is not sent to the federal government but would stay in the hands of Coloradans. This is a total conversion of $4,509 million from out-of-state spending to in-state spending. The stimulus of this $4,509 million additional funding to the Colorado economy would create 31,721 jobs\textsuperscript{38}. A comparison of this increase in jobs with the Bureau of Labor Statistics analysis of job growth shows that this gain in jobs would impact Colorado in a significant manner. In all of 2014 Colorado gained about twice as many jobs as this net gain, 62,300 jobs\textsuperscript{39}, and the unemployment rate dropped 1.7% from 5.9% to 4.2\textsuperscript{40}. An increase of 31,721 jobs resulted in a 0.87% decrease in unemployment rate in 2014.

**Impact on the health insurance industry**

The insurance industry would have a substantial loss of jobs and income in its health care and workers’ compensation sector. Other sectors of the industry should not be affected. The Colorado Legislature would probably need to address what should be done with the substantial reserves in Pinnacol (the Colorado quasi-governmental workers’ compensation insurance company, which is the largest workers’ compensation insurer in the state) because compensation for the loss of work and the loss of functionality portions of workers’ claims would not require the large reserves Pinnacol currently maintains. The health insurance industry would retain its substantial reserves that it has built up over years of premium collection.
Conclusion
Universal health care through the ColoradoCare proposal is financially feasible and would have a substantial overall positive impact on Coloradans and the Colorado economy.


State population growth 2.822% greater than national population growth between 2016 and 2019.

cwcb.state.co.us/public-information/publications/Documents/ReportsStudies/SWSIAppendices/Appendix%20A%20State%20of%20Colorado%20Population%20Projections%202000%20to%202030.pdf

U.S. Census Bureau, National population growth, NP2014-T1.xls file, Washington, DC.


https://kaiserfamilyfoundation.files.wordpress.com/2013/05/mrbadministration.pdf

cwcb.state.co.us/public-information/publications/Documents/ReportsStudies/SWSIAppendices/Appendix%20A%20State%20of%20Colorado%20Population%20Projections%202000%20to%202030.pdf


Hendee, C. (2014). Colorado ranks high for drop in uninsured after Affordable Care Act. Denver Business Journal, 7/9/14, cites several studies estimating Colorado’s uninsured rate to be in the range of 8.18% to 9.84%.


op. cit Friedman (2013)

op. cit Woolhandler et. al. (2003)


21 The savings come from administration in provider offices; insurance offices; fraud reduction; and market power to lower the cost of pharmaceuticals, medical equipment, and excessive fees; and the first four items in the Expense and Revenue table, and these need to be decreased by the total additional adjustments to CHE with ColoradoCare implemented. The sum of these four savings items is $7,145 million, and when decreased by additional expenses of coverage extension, increased utilization, and ColoradoCare increased administration costs, the first three items in addition adjustments to CHE with ColoradoCare implemented ($2,357 million), there remain $4,488 million of savings for Coloradans. The Colorado Legislative Council revenue estimate in Appendix A indicates that employers would receive $3,138 million of this savings, leaving $1,650 million to be distributed among Colorado residents.


23 Congressional Budget Office, (2003). How many people lack health insurance for how long? Washington, DC. This report indicates that across two survey methods, the number uninsured at one point during the year is 39% greater than the number uninsured at any one point during the year.


27 The loss due to deductions is assumed to be proportional to the increase from a 2016 forecast for $20,565 million from Premium Taxes to a 2019 forecast of $25,000 from Premium Taxes, which is an increase of 121.57% and yields a forecast for lost revenue due to tax deductions of $265.9 million.

28 The 2016 forecast of $196.7 million was increased for an estimated 1.7% annual inflation rate and the growth of Colorado’s population by 5.257% to yield a 2019 forecast of $217.8 million.


32 IRS Form 1040 (Schedule A) Instructions state that medical expenses need to exceed 10% of income (7.5% for those born before 195).


2013, p. 30 40% of insurance jobs are in Colorado

op. cit (2013). Dr. Friedman notes that using the IMPLAN program from the MIG group, and adjusting for inflation, every billion dollars of increased economic stimulus in the Colorado economy results in 7,035 jobs.


Appendix A
State Sen. Irene Aguilar, MD and Rep. JoAnn Ginal requested the research below from Colorado Legislative Council. Legislative Council is a nonpartisan legislative service agency that does not take a position on any legislation.

Estimated State Revenue Impact of Colorado Health Care Cooperative Pre-Tax Payroll Premium
Tax Year 2016 /a

<table>
<thead>
<tr>
<th>Shares of Payroll Premium on Wages: 65 Percent Employer, 35 Percent Employee</th>
<th>Payroll Premium Rate</th>
<th>9.0%</th>
<th>9.5%</th>
<th>10.0%</th>
<th>10.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Income Threshold</td>
<td>Payroll Tax Revenue</td>
<td>6,504.7</td>
<td>6,866.1</td>
<td>7,227.3</td>
<td>7,588.8</td>
</tr>
<tr>
<td></td>
<td>Change in Individual Income Taxes</td>
<td>(28.7)</td>
<td>(34.9)</td>
<td>(41.1)</td>
<td>(47.4)</td>
</tr>
<tr>
<td></td>
<td>Change in Insurance Premium Taxes</td>
<td>(98.1)</td>
<td>(98.1)</td>
<td>(98.1)</td>
<td>(98.1)</td>
</tr>
<tr>
<td></td>
<td>Net State Revenue Impact</td>
<td>$6,378.0</td>
<td>$6,733.1</td>
<td>$7,088.2</td>
<td>$7,443.4</td>
</tr>
<tr>
<td></td>
<td>Change in Business Costs /a</td>
<td>($2,994.6)</td>
<td>($2,873.0)</td>
<td>($2,751.4)</td>
<td>($2,629.8)</td>
</tr>
<tr>
<td>Single Filers; $350,000</td>
<td>Payroll Tax Revenue</td>
<td>12,003.9</td>
<td>12,670.8</td>
<td>13,337.7</td>
<td>14,004.6</td>
</tr>
<tr>
<td></td>
<td>Change in Individual Income Taxes</td>
<td>(152.4)</td>
<td>(165.0)</td>
<td>(177.5)</td>
<td>(190.1)</td>
</tr>
<tr>
<td></td>
<td>Change in Insurance Premium Taxes</td>
<td>(98.1)</td>
<td>(98.1)</td>
<td>(98.1)</td>
<td>(98.1)</td>
</tr>
<tr>
<td></td>
<td>Net State Revenue Impact</td>
<td>$11,753.5</td>
<td>$12,407.8</td>
<td>$13,062.1</td>
<td>$13,716.4</td>
</tr>
<tr>
<td></td>
<td>Change in Business Costs /a</td>
<td>($221.6)</td>
<td>$3.5</td>
<td>$228.6</td>
<td>$453.7</td>
</tr>
<tr>
<td>Joint Filers; $450,000</td>
<td>Payroll Tax Revenue</td>
<td>18,508.7</td>
<td>19,536.9</td>
<td>20,565.2</td>
<td>21,593.4</td>
</tr>
<tr>
<td></td>
<td>Change in Individual Income Taxes</td>
<td>(181.0)</td>
<td>(199.9)</td>
<td>(218.7)</td>
<td>(237.5)</td>
</tr>
<tr>
<td></td>
<td>Change in Insurance Premium Taxes</td>
<td>(196.1)</td>
<td>(196.1)</td>
<td>(196.1)</td>
<td>(196.1)</td>
</tr>
<tr>
<td></td>
<td>Net State Revenue Impact</td>
<td>$18,131.5</td>
<td>$19,140.9</td>
<td>$20,150.3</td>
<td>$21,159.8</td>
</tr>
<tr>
<td></td>
<td>Change in Business Costs /a</td>
<td>($3,216.2)</td>
<td>($2,869.5)</td>
<td>($2,522.7)</td>
<td>($2,176.0)</td>
</tr>
<tr>
<td>Total All Filers</td>
<td>Payroll Tax Revenue</td>
<td>35,013.3</td>
<td>38,237.8</td>
<td>41,138.8</td>
<td>44,030.8</td>
</tr>
<tr>
<td></td>
<td>Change in Individual Income Taxes</td>
<td>(323.1)</td>
<td>(359.3)</td>
<td>(395.5)</td>
<td>(431.7)</td>
</tr>
<tr>
<td></td>
<td>Change in Insurance Premium Taxes</td>
<td>(394.2)</td>
<td>(394.2)</td>
<td>(394.2)</td>
<td>(394.2)</td>
</tr>
<tr>
<td></td>
<td>Net State Revenue Impact</td>
<td>$31,875.9</td>
<td>$35,245.3</td>
<td>$38,845.1</td>
<td>$42,638.8</td>
</tr>
<tr>
<td></td>
<td>Change in Business Costs /a</td>
<td>($7,190.8)</td>
<td>($6,521.7)</td>
<td>($5,852.5)</td>
<td>($5,183.3)</td>
</tr>
</tbody>
</table>

/a This represents the net change in costs to businesses for the provision of medical care. This assumes that businesses will replace existing health care coverage with the proposed Health Care Cooperative. The taxable income of businesses would not change by the full amount shown because businesses could choose to alter their spending, investment, and employment decisions in multiple ways as a result of this change in their cost structure. The extent to which business taxable income would change is unknown. This analysis does not account for any secondary impacts associated with the imposition of a payroll premium.

Estimates subject to change based on the receipt of new information.

Assumptions and Data Sources
Payroll income sources subject to payroll tax: Wages, salaries, and tips.
Non-payroll income sources subject to payroll tax: Dividends, interest, and rents; capital gains; business and farm proprietors’ income; taxable social security benefits, pensions, and annuities; and other income.
Income sources exempt from payroll tax: Alimony; tax-exempt social security benefits, pensions, and annuities; unemployment compensation.
These estimates do not incorporate individual income tax changes resulting from a change in the amount deducted from federal taxable income for out-of-pocket medical care expenses.
Capital gains, business and farm income, social security, pensions, annuities, and other income: Colorado Department of Revenue, Statistics of Income.
Distribution of income by source: Colorado Department of Revenue, Statistics of Income.
Estimates for income and households in tax year 2016 created using expectations for growth in the components of Colorado personal income, population, and capital gains contained in the March 2015 LCS forecast.
Distribution of coverage among employer-based plans, direct purchased plans, military plans, Medicaid, Medicare, and the uninsured: Colorado Department of Regulatory Agencies, 2013.
Appendix B
Explanation of the ColoradoCare Proposal’s Relationship to Medicare Beneficiaries

How would ColoradoCare affect Medicare beneficiaries and their health care coverage?
- Medicare regular Part A, Medicare Parts B and D, and Medicare Advantage would continue as they do now.
- ColoradoCare would provide supplemental or Medigap coverage to Medicare beneficiaries.
- ColoradoCare would provide benefits for services that are not covered by Medicare but covered by ColoradoCare (probably vision, hearing, dental, etc.)
- ColoradoCare would offer voluntary enrollment in a ColoradoCare Medicare Advantage Plan.

Because of significant tax exemptions and income tax deductions, Premium Taxes would end up costing 85% of Medicare beneficiaries less than this supplemental coverage would cost if the current system continued.

What are the tax exemptions?
There are three tax exemptions or deductions that impact Medicare beneficiaries.
- The definition of non-payroll income in the proposal uses the Social Security taxable benefits as defined on line 20 of the IRS 1040 form. The taxable Social Security amount excludes $9,000 for individual filers and $12,000 for joint filers.
- ColoradoCare’s definition of non-payroll income excludes Social Security and pension incomes as defined by Section 39-22-104(f)(4), Colorado Revised Statues, and explained by the Colorado Department of Revenue publication FYI 25. This exemption of pension or annuity income has a $20,000 maximum per person for people between 55 and 65 years old, and a $24,000 maximum for people over 65 years old, and it applies to the combination of Social Security, pension, retirement plan, and IRA income. It combines with the federal partial exemption of Social Security income as follows:
  - An individual filer could have $9,000 of Social Security income exempted on the federal 1040 form plus as much as $24,000 additional Social Security, pension, retirement plan, and IRA income exempted resulting in a total exemption of $33,000.
  - Joint filers could have $12,000 of Social Security income exempted on the federal 1040 form plus up to $24,000 for each person’s additional Social Security, pension, retirement plan, and IRA income exempted resulting in a total exemption of $60,000.
- The income that is not exempted or does not come from wages is considered non-payroll income. Premium Taxes for non-payroll income are 10% of gross income, but this is partially offset by the Premium Tax becoming a deduction from both federal and state taxes. After adjustment for savings on income tax, the non-payroll Premium Tax results in the following impacts on the taxpayers:

<table>
<thead>
<tr>
<th>Individual filer taxable income</th>
<th>Joint filer taxable income</th>
<th>Federal income tax rate</th>
<th>Your Premium Tax impact rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to $9,076</td>
<td>up to $18,150</td>
<td>10%</td>
<td>8.537%</td>
</tr>
<tr>
<td>over $9,076</td>
<td>over $18,150</td>
<td>15%</td>
<td>8.037%</td>
</tr>
<tr>
<td>over $36,900</td>
<td>over $73,800</td>
<td>25%</td>
<td>7.037%</td>
</tr>
<tr>
<td>over $89,350</td>
<td>over $148,850</td>
<td>28%</td>
<td>6.737%</td>
</tr>
<tr>
<td>over $186,350</td>
<td>over $226,850</td>
<td>33%</td>
<td>6.237%</td>
</tr>
<tr>
<td>over $405,100</td>
<td>over $405,100</td>
<td>35%</td>
<td>6.037%</td>
</tr>
<tr>
<td>over $406,750</td>
<td>over $457,600</td>
<td>39.6%</td>
<td>5.577%</td>
</tr>
</tbody>
</table>

What would be the cost of the Medicare supplemental plan be in the current system in 2019?
Medicare supplemental insurance is a commercial insurance product regulated by the states. A variety of plans may be offered, and the cost varies according to plan, the medical needs of enrollees, and the state where the plan is offered. AARP, Inc. plans for Colorado were used to estimate the cost of a Medicare Supplemental Plan that did not have deductibles. In 2019, the value of one of these Medicare Supplemental Plans is estimated to be $2,023.00.

**How do the Premium Taxes on Medicare beneficiaries compare to the cost of the supplemental?**

The amount of Premium Tax paid depends on the source of income, with a higher rate on non-payroll income than payroll income. Even if people over 65 had only non-payroll income in addition to their Social Security and pension income, they would pay less in premiums than the projected cost of the supplemental if their income were below $62,000 for individual filers and $117,000 for joint filers. However, at least 21% of people over 65 are employed, and among the high-income earners, 41% of their income comes from employment. Because the Premium Tax is lower for wage income, seniors who have a portion of their income that comes from wages could have an even higher income before they would be paying more in Premium Tax than the cost of the supplemental plan. In fact, in some cases, seniors could still pay less in Premium Tax than the cost of the supplemental if their income were as much as $106,000 for single filers and $198,000 for joint filers. Overall, it is estimated that for 85% of Medicare beneficiaries, Premium Taxes would be less than the cost of the supplemental.

**Are there other benefits that Medicare beneficiaries would obtain with ColoradoCare?**

ColoradoCare was designed on the principle that while the initiative and waivers will set the floor for covered benefits, as funding becomes available the Trustees are to consider expanded benefits. Universal health care in principle seeks to consider all health care expenditures. The analysis found that there was $1.2 billion available for expanded dental coverage beyond the limited dental coverage that would be provided through the Medicaid waiver; this coverage was included in this

---

analysis as well as the one that was used to establish the amount needed for the Premium Tax rate. Both the initiative and two waivers require vision and hearing benefits for children, and the Trustees acting upon the desires of Coloradans could expand these to adults as well. However, the specific benefits would need to be established by the Board of Trustees.

**Social Security is not mentioned in the proposal, so how is it excluded from the Premium Tax?**
As explained above in tax exemptions, Social Security income is excluded in two processes that are part of the proposal’s definition of non-payroll income. The Premium Tax is based on line 20 of the federal IRS 1040 form, which excludes $9,000 of Social Security income for individual and $12,000 for a couple. In addition, non-payroll income does not include any pension or annuity income that is not subject to Colorado income taxes pursuant to section 39-22-104(f)(4). This section of the law refers to provisions on Line 7 and 8 of the Colorado 104 Income Tax Form, and it exempts up to $24,000 per person of Social Security income that is not already excluded on the federal 1040 form. The combination of these two exclusions results in Social Security income being excluded³.

Tax law is generally complex and requires detailed definitions. Therefore, the ColoradoCare proposal did not attempt to create complex tax exemptions, but instead relied on existing federal and state defined exemptions, which are unfortunately complex. By relying on federal and state tax statues, it is possible for the exemptions to be increased or adjusted for changing circumstances in the future by either the federal or state government.

**Why would anyone want a Medicare Advantage Plan if ColoradoCare provides a supplemental?**
Some of the interface with Medicare cannot be precisely predicted, but will need to be negotiated. There is a potential for ColoradoCare to obtain additional federal funds and offer Medicare beneficiaries additional services, including a desirable pharmaceutical benefit, if it could become a Medicare Advantage program, and therefore, the possibility of becoming a Medicare Advantage program is included in the proposal.

**What happens to people who have been dual eligible, on both Medicare and Medicaid?**
The Medicaid waiver would include covering the current benefits for the dual eligible Medicare and Medicaid beneficiaries.

**Are there reasons that Medicare beneficiaries would want to support ColoradoCare if costs them more?**
Many Medicare beneficiaries have children and grandchildren living in Colorado whose health care coverage in the current system may be insecure. Sometimes, the grandparents financially contribute to their family’s health care costs. Providing all Coloradans with lifetime, comprehensive health care would seem to be worth the small increase in payments for ColoradoCare premiums. Many retirees would support ColoradoCare even when they might pay more because it would ensure that their relatives and neighbors would have access to good health care. It is a way to improve society for future generations and clean up the current health care system quagmire. Retirees often support education even when their children are grown because it makes for a better community and society: The same values and reasoning apply to universal health care.

---

³ The maximum Social Security benefit for someone retiring at full retirement age is $2,642/month or $31,704/year. This is less than the individual filer exclusion. Although it is possible that both people who are joint filers would have the maximum, resulting in a few thousand dollars of Social Security taxation, it is highly unlikely that joint filers would both have the maximum. Therefore it is reasonable to state that Social Security income is excluded from the Premium Tax. The maximum benefit available may be found at the Social Security Administration website [https://www.colorado.gov/pacific/sites/default/files/Income25.pdf](https://www.colorado.gov/pacific/sites/default/files/Income25.pdf).
Appendix C

Explanation of non-payroll Premium Tax impact

The Non-Payroll Premium Tax rate is 10% and has a maximum cap of $350,000/individual or $450,000/joint filer for both payroll and non-payroll income combined. The Premium Tax is a state tax and is deductible from income taxes, whereas health care expenses are not deductible unless they exceed 10% of income (7.5% for people born before 1950). Because state taxes are calculated based on federal deductions, the Premium Tax would be a deduction on state income taxes as well. Considering the reduction in income taxes, the impact of the 10% Premium Tax for income tax payers is reduced to between 8.537% and 5.577% depending on tax bracket. A high-income earner in the federal 39.6% income tax category would pay an effective rate of 5.577%. Because premium liability is limited to $450,000 for joint filers, the after-income-tax impact would be $25,200. This is less expensive than the cost of some family health insurance plans. The ACA does not consider a family health insurance plan to be a Cadillac plan, upon which it imposes a 40% excise tax, unless the cost exceeds $27,500, $2,300 more than ColoradoCare would cost a wealthy joint filer after considering the tax write-off.

This deduction is a substantial reduction in income taxes that the Colorado Legislative Services has projected to be $218.7 million in 2016 (Appendix A), and is forecast in this analysis to be $265.9 million in 2019 for state income taxes alone. The exact amount of income tax savings for Coloradans is difficult to estimate because the savings increase with income, and there is no convenient way to estimate how many Coloradans would be in each tax bracket. However, even assuming that all Coloradans were in one of the lowest tax brackets, 15%, the reduced income taxes (federal and state combined) would be $1,127 million. This savings would certainly be larger because many incomes are in a higher tax bracket. This $1,127 million savings on income tax would be in addition to the savings report for Premiums + OOP.

<table>
<thead>
<tr>
<th>Individual filer taxable income</th>
<th>Joint filer taxable income</th>
<th>Federal income tax rate</th>
<th>Your Premium Tax impact rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to $9,076</td>
<td>up to $18,150</td>
<td>10%</td>
<td>8.537%</td>
</tr>
<tr>
<td>over $9,076</td>
<td>over $18,150</td>
<td>15%</td>
<td>8.037%</td>
</tr>
<tr>
<td>over $36,900</td>
<td>over $73,800</td>
<td>25%</td>
<td>7.037%</td>
</tr>
<tr>
<td>over $89,350</td>
<td>over $148,850</td>
<td>28%</td>
<td>6.737%</td>
</tr>
<tr>
<td>over $186,350</td>
<td>over $226,850</td>
<td>33%</td>
<td>6.237%</td>
</tr>
<tr>
<td>over $405,100</td>
<td>over $405,100</td>
<td>35%</td>
<td>6.037%</td>
</tr>
<tr>
<td>over $406,750</td>
<td>over $457,600</td>
<td>39.6%</td>
<td>5.577%</td>
</tr>
</tbody>
</table>

---

4 IRS Form 1040 (Schedule A) Instructions state that medical expenses need to exceed 10% of income (7.5% for those born before 1950).

Appendix D
Explanation of how Table 3 was formatted differently than Table 1
Table 3 updates the projections for example year 2016 that are displayed in Table 1. The following line items were changed in Table 3, example year 2019, to clarify the comparison of ColoradoCare with the current system.

- The line item “Dental care not covered at the beginning of ColoradoCare” was moved from “Subtraction adjustments from CHE under ColoradoCare” to “Waiver revenue plus Coloradan’s Health Care Payments” and more properly labeled “Out-of-pocket for the portion of dental assumed to not be covered” because it is payment that Coloradans would contribute to services that are anticipated to be covered under ColoradoCare, and therefore, part of the overall funding for ColoradoCare’s health coverage.

- Under “Subtraction adjustments from CHE under ColoradoCare,” the line item “ACA-related private insurance administration and exchange expenses” was added to reflect the administrative savings because ColoradoCare would eliminate the ACA’s added administrative burden.

- The line item “CHE outside of ColoradoCare responsibility” was more accurately labeled “CHE not usually covered by regular health insurance.”

- By moving the line item “Dental care not covered at the beginning of ColoradoCare” there was no longer a need for the subtotal line item “Total not typically covered expenditures,” and therefore, it was removed.

- The line “Funds needed to pay for universal health expenditures usually covered by health care insurance” was changed to “Funds needed for universal health expenditures, the part of CHE that is usually covered by comprehensive health and dental care insurance” in order to show the relationship to CHE and reflect that ColoradoCare combines medical and dental health care.

- The line “Funds needed for Coloradans’ health care expenses” was changed to “Funds needed for Coloradans’ health care expenses under ColoradoCare.

- The line item “Out-of-pocket with ColoradoCare (96% actuarial value)” was relabeled to the more accurate label, “Out-of-pocket medical under ColoradoCare (96% actuarial value).”

- The line item “Medicaid premium refunds” was moved from “Subtraction adjustments from CHE with ColoradoCare” to “Waiver revenue plus Coloradan’s Health Care Payments” as “Refund to Medicaid eligible residents (subtraction)” because it is more properly thought of as a revenue decrease and consequently, a decrease in Coloradans’ expenditures on ColoradoCare. It was more accurately relabeled “Refund to Medicaid eligible residents, (subtraction).”

- Descriptions of the addition and subtraction processes employed in the table were italicized and placed in parentheses.
Appendix E

ColoradoCare Benefits

- Outpatient services for both primary and specialty care
- Emergency and urgent care services
- Hospitalization
- Maternity and newborn care
- Mental health and substance use disorder services, including behavioral health treatment
- Prescription drugs and durable medical equipment
- Rehabilitative services and services that help patients acquire, maintain, or improve skills necessary for daily functioning and the devices needed for these services
- Laboratory services
- Wellness, including integrative and some alternative medicine
- Chronic disease management
- Pediatric services, including vision and hearing care
- Dental care for children and low-income people over 60
- Palliative and end-of-life care
- Local health care services when temporarily in another state (residents, ColoradoCare beneficiaries, include students and others who continue to list Colorado as primary residence and pay taxes here themselves or as a dependent)
- No annual dollar cap on services
- No deductibles
- No copayments for most preventive and primary care;
- Services regardless of whether illness or injury occurs at work, in an accident, or otherwise
- When Medicaid eligible, and in some other circumstances determined by the Board of Trustees:
  - Home health services
  - Children with autism
  - Telemedicine
  - Adult vision
  - Adult dental
  - All other programs connected with Medicaid funding by federal or state statues would be continued as conditions of the Medicaid waiver.

The minimum benefits listed above are set by the initiative and the waivers that ColoradoCare is required to obtain from the Affordable Care Act and Medicaid. The Board of Trustees, acting on the wishes of members, is empowered to increase benefits as it determines funds are available.