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## Promoting Value-Based Healthcare Decisions: A Case Study of Shared Savings Programs in New Hampshire and Maine

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**Promoting Value-Based Healthcare Decisions:  
A Case Study of Shared Savings Programs in New Hampshire and Maine**

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### **Abstract**

State lawmakers nationwide are looking for solutions to the high healthcare prices faced by patients and employers. One of the emerging policies to combat rising costs is a shared savings program. These programs allow patients to compare prices and receive incentives for saving money on elective services. Maine and New Hampshire both passed legislation to enact shared savings programs implemented between 2019 and 2022. New Hampshire's program established for a large, self-insured employer outperformed programs in both states in the fully insured competitive market, saving patients 183 times more than participants in Maine's program during that timespan. Stakeholders and policy experts interviewed for this project highlighted several themes to explain the disparity in program outcomes. They identified aligning incentives across patients, employers, providers, and insurers as the most crucial program design element for policymakers to consider when implementing similar programs in the future.

*Keywords:* Healthcare, savings program, Maine, New Hampshire, patients, employers, providers, insurers, stakeholders, policy experts

**Table of Contents**

<b>Literature Review</b>	<b>6</b>
<i>Americans' Healthcare Shopping Behavior: Considering the Atmosphere</i>	<b>6</b>
<i>Transparency Programs: Effectiveness and Success</i>	<b>10</b>
<b>Description of Methodology</b>	<b>14</b>
<i>Descriptive Data</i>	<b>14</b>
<i>Qualitative Data</i>	<b>15</b>
<b>Empirical Results and Analysis</b>	<b>17</b>
<i>Descriptive Data Analysis</i>	<b>17</b>
<b>Program Design Elements</b>	<b>21</b>
<b>Policy Analysis</b>	<b>23</b>
<i>Policy Options</i>	<b>24</b>
<i>Scope</i>	<b>25</b>
<i>Criteria</i>	<b>25</b>
<b>Discussion on Implementation</b>	<b>26</b>
Misaligned Employer Incentives	<b>27</b>
Misaligned Insurer Incentives	<b>27</b>
<b>Weighing the Options</b>	<b>28</b>
<i>Policy Recommendation</i>	<b>29</b>
<b>Conclusion</b>	<b>32</b>
<b>Appendix A</b>	<b>40</b>
Communication for Interviews	<b>40</b>
Discussion Guide	<b>41</b>
<b>Appendix B: Descriptive Data Tables</b>	<b>44</b>

## **Promoting Value-Based Healthcare Decisions: A Case Study of Shared Savings Programs in New Hampshire and Maine**

Healthcare prices are high and are continuing to rise for both patients and employers. State legislators across the country are looking for solutions that will empower patients to take control of their healthcare choices (Burky, 2022; Diamond, 2022). Patient-centered reforms, such as shared savings, hope to make providers accountable and responsive to patient needs when it comes to non-emergency services. They also seek to encourage healthcare consumers to choose providers based on value. However, these solutions require transparent information about hospital charges, negotiated rates, and patient out-of-pocket costs.

On January 1, 2021, a federal rule went into effect that forced insurers to reveal the negotiated prices providers charge them for individual services for the first time (Kona & Corlette, 2022). Long regarded as a trade secret in healthcare and a major roadblock to transparency efforts, this requirement came with a regulation that forced hospitals to publish their prices online in a consumer-friendly fashion (Hospital Price Transparency, 2021). The Department of Health and Human Services (HHS), under the Trump Administration, released these rules with the goal of decreasing costs for elective and non-emergent services. The HHS proposal argued that giving consumers “better pricing information” would force hospitals to compete with other providers, leading to lower costs. (Centers for Medicaid and Medicare Services, 2019, p. 571).

Questions remain about the effect of this price transparency rule, particularly whether prospective patients will change their behavior to use the price-shopping tools provided by hospitals. These concerns are not new, and neither is the idea of enabling price shopping for elective procedures. States had price transparency and shopping programs for years prior to the

landmark regulation by HHS and the Center for Medicaid and Medicare Services (CMS). With negotiated prices and real pricing data from hospitals revealed, state policymakers interested in market-based initiatives to reduce costs may consider a state-sponsored transparency tool or program to increase shopping for care.

Among the leaders in this area are Maine and New Hampshire. Each took different strategies in implementing a shared savings program and had remarkably different results. Maine's program covered a portion of the individual and small group fully insured market as part of a legislative effort that mandated that insurance companies offer shared savings to their members. New Hampshire's initial approach was limited to the state employee health plan, which is self-insured. Every state is free to choose from a variety of third parties to implement transparency programs. Both New Hampshire and Maine use SmartShopper, a third-party program that specializes in shared savings, to implement their programs. Insurance companies can also partner with SmartShopper on their own. Some companies in New Hampshire have done this. Data from SmartShopper, which was acquired and is included in this analysis, revealed that New Hampshire's self-insured large employer significantly outperformed the SmartShopper programs in Maine and New Hampshire in financial savings metrics and general utilization.

To understand the disparity and provide policymakers with recommendations, we interviewed researchers, policy experts, and stakeholders in both states. Our analysis of these programs revealed a remarkable difference in outcomes. New Hampshire's program, established for a large, self-insured employer, outperformed programs in both states established in the fully insured competitive market. Members participating in New Hampshire's self-insured program

experienced 183 times as much savings as Maine's program and received over 169 times as many rewards.

We interviewed twelve experts who were either involved with the programs themselves or have enough experience on shared savings programs and the best way to implement them. They shared several challenges of shared savings programs, including misaligned incentives among stakeholders, a lack of symmetric information between providers and consumers, and a lack of hospital competition. These experts collectively expressed potential elements to include in a successful shared savings program. These ranged from simplicity and awareness of the interface to the quality of incentives and efforts to streamline the shopping process.

Policy recommendations are narrowed down to five program designs with criteria based on which option, or combination of options, would lead to the most value-based decisions for enrollees. Based on the data collected and interviews conducted, state policymakers should consider enacting a shared savings program combined with a High Deductible Health Plan (HDHP) for state employees. This option provides the most potential for aligned incentives across all stakeholders and sets the stage for a potential statewide expansion into the fully insured market.

## **Literature Review**

### ***Americans' Healthcare Shopping Behavior: Considering the Atmosphere***

To measure potential price shopping behavior for Americans within the healthcare system, it is important to determine existing access to prices available for consumers, as well as impediments to this access. For simplification, this is referred to as the atmosphere for healthcare shopping. Considering recent regulation requiring price transparency and other efforts over the last 5 years, consumers have been largely indifferent to healthcare shopping initiatives to this

point. The indifference is simply due to a lack of awareness among patients (Mehrotra & Dean, et. al, 2017). In addition to consumers being generally unaware of their ability to shop for lower-cost care, hospitals have only recently reached compliance with regulations (Bailey, 2017). With still limited data, it is difficult to create effective tools that meet consumer concerns.

The four questions that help identify the atmosphere for consumer healthcare shopping include: Are American consumers aware of their ability to shop? What issues around price transparency have hindered consumers' ability to shop? What other factors do consumers cite as the issues? What does research indicate as the reason for their lack of shopping?

**Consumer Awareness.** A whole body of research focuses specifically on consumer awareness and their ability to shop for lower-cost healthcare services. One study by Mehrotra & Dean et al. (2017) surveyed 2,996 nonelderly U.S. adults who received medical care in the previous twelve months. They found that 75 percent of respondents did not know of a resource that would allow them to compare costs among providers. Meanwhile, it was estimated that in 2012, 70 percent of enrollees in a private insurance plan likely had access to some form of price transparency, meaning they could compare prices using an online database (Sinaiko & Rosenthal, 2016). After nearly a decade of new tools and strategies, this number is much higher and the interest of consumers in shopping for healthcare providers remains high in national surveys (Desai, Shambhu & Mehrotra, 2021). However, Desai, Hatfield, Hicks et al. (2017) found only 10 percent of employees used a price transparency website when their employer made it available. This shows that consumers have a strong stated preference toward healthcare shopping but their revealed preference is much lower.

Researchers have formed a consensus that utilization of all price transparency tools, either private or publicly supported, lies somewhere in the range of one to four percent



(Mehrotra, Brannen, & Sinaiko, 2014). Awareness is a significant barrier to the efficient use of price shopping tools. In an experiment by Desai, Shambhu, and Mehrotra in 2021, which focused on advertising the New Hampshire price transparency tool NHHealthCost, the researchers found their advertising campaign improved the website's rate of use by nearly seven-hundred percent. Despite this increase in awareness, the researchers concluded that awareness did not lead to consumers using lower-cost providers. This does not necessarily mean that consumers did not benefit from the use of the tool, as other factors beyond cost such as convenience should be considered, but it does show a resistance to change providers. Additionally, despite efforts from health insurers, states, and other third parties to create tools and increase consumer access to healthcare price information, the overall utilization of these resources continues to remain low (Buttorff, et al., 2021).

**Obstacles for Consumers.** Beyond the initial obstacle of consumer awareness of price shopping capabilities, there are still multiple barriers that hinder the ability of consumers to shop for lower-cost healthcare. All the potential obstacles vary depending on the consumer but it is best to quantify the barriers into prevalent categories among consumers. One potential barrier is that, without meaningful quality information, price transparency does not allow purchasers or consumers to assess overall value when choosing providers (Tu & Gorevitch, 2014). Although some states have ranking systems and review procedures to assess the quality of providers, this requires additional research and may not always be up-to-date. Relative to this barrier, there is also the tendency for consumers to be constrained by insurance networks or lack of provider availability (Desai, Shambhu & Mehrotra, 2021). A study in New York suggested that price transparency tools for consumer shopping may be of limited use as a strategy for cost

containment in concentrated provider markets, due to the inability of insurers to properly negotiate prices (Kim & Glied, 2021).

Perhaps the most prevalent obstacle is that prices are difficult to determine prior to receiving a service. This can result in a confusing set of charges after a consumer receives a service. Although certain advanced pricing tools, like the NH HealthCost, include local insurers and uninsured discount percentages, it is difficult to account for ancillary costs like facility and professional fees as well as out-of-network costs that are often billed separately (Buttorff, et al., 2021). Ultimately, the research shows that customized out-of-pocket cost estimates are critical for healthcare shoppers and individuals may not know the details of their benefit design to infer their out-of-pocket costs (Desai, Shambhu & Mehrotra, 2021). In lieu of accessible out-of-pocket costs, studies suggest that patients overwhelmingly follow the recommendations of their referring physicians, who are unlikely to be aware of the patient-specific cost implications of their referrals (Glied, 2021). These are just a few of the potential barriers to consumer shopping that can be identified objectively. Consumers also express concerns that are subjective to individual shoppers.

**Consumer Concerns.** A major concern for consumers explicitly detailed in the literature is an unwillingness to stray from a trusted provider in pursuit of a lower-cost option (Zhang et al. 2018). In one study among respondents who did not consider going to another physician the last time they received medical care, 77 percent reported that this was because they had gone to their provider in the past (Mehrotra & Dean, et al., 2017). Consumers consider more than just price when shopping for care. Therefore, price-shopping tool developers largely find sites that just list providers ranked by price — “single-use” websites — unsuccessful (Buttorff, et al., 2021). This is why those who utilize price shopping tools look for more specifically defined “shoppable

services” like MRIs, total knee replacements, and lab services, rather than regular office visits since these services do not require significant patient-provider relationships (Sinaiko & Rosenthal, 2016).

Despite previous relationships being important for consumers in price shopping, other concerns exist. Largely, they are the limitation of consumer time and resources. Due to the higher propensity for consumers to conduct a price search before undergoing imaging like MRIs and CT scans, the literature suggests that patients are not willing to visit a lower-cost provider unless the savings are substantial (Desai & Hatfield, et al., 2017). This appears to be a pattern among the insured. Most insurance benefits generously supplement lab tests and office visits, which were less likely to be searched. This becomes especially evident with high-cost elective procedures not traditionally covered by insurance, like LASIK. A nationwide survey revealed that three in five patients chose their LASIK surgeon through a referral from previous patients (Tu & May, 2007). Overall, consumers may not find the direct benefit of searching for lower-cost providers if they are already expected to have low out-of-pocket costs. This is why price shopping tools paired with financial incentives offer a potential increase in the utilization of these tools (Whaley, Brown, & Robinson, 2019).

### ***Transparency Programs: Effectiveness and Success***

While this review focuses on all types of price transparency programs, it is important to acknowledge that not all initiatives calculate prices or present them to patients in the same way. The challenge is that many tools report only the total price without offering an out-of-pocket cost estimate. These costs have been more difficult to determine because they require additional information, such as the patients’ spending and, most importantly, the negotiated rate between the provider and the insurance company (Mehrotra, Chernew, Sinaiko, 2018). Because most of

these studies were conducted before the price transparency rule went into effect, employer-sponsored health plans have been best positioned to offer actual out-of-pocket cost estimates to patients (Ginsburg, 2007). But providers are also able to provide that information. In some states like Ohio, as noted in Mehrotra, Chernew, and Sinaiko (2018), it is required that providers give patients the total price and out-of-pocket cost information. However, they do not offer a price comparison tool across providers.

There are three separate questions that will serve to determine the effectiveness of price transparency programs, all based on their stated goals: Do patients utilize transparency tools when they are offered? When patients use the tools offered, do those patients save money on their procedures? Does added transparency lead to overall lower prices for elective procedures?

**Utilization.** There are several studies that have examined employer-sponsored health plans that include transparency tools and the extent of utilization among enrollees. Among them, Desai, Hatfield, Hicks, et. al (2017) found that, when California public employees and retirees were offered a new transparency price comparison tool, 12 percent of employees used the tool during the first 15 months. Additionally, Desai, Hatfield, Hicks, et al. (2017) revealed that 1 percent of enrollees who received advanced imaging (one of the services that can be shopped) price-shopped before receiving the service. In New York, researchers reported low use of a comparison-shopping tool relative to overall out-of-network use and the majority of those who did use the tool often searched for information on services they had already received (Kim & Glied, 2021). Patients in New Hampshire have a state-sponsored cost comparison tool but researchers found that only 1 percent of the state's residents utilized the tool over a 3 year period (Mehrotra, Brannen, and Sinaiko, 2014). Sinaiko and Rosenthal (2016) analyzed Aetna's Member Payment Estimator and found that between 1 and 4 percent of eligible enrollees used

the tool. Among them, the majority did not actually receive care for that service. Even in cases where the participants are paying a full cash price (self-pay), like in the case of LASIK surgery or dental crowns, patients still may not shop around for the service (Tu & May, 2007).

While it is evident that policymakers should be cautious in assuming that there is high demand for price shopping tools based on the available data, marketing plays a large role in determining utilization levels. For example, when price transparency tools in New York and New Hampshire were promoted with targeted advertising, utilization of the tool significantly increased (Kim & Glied, 2021; Desai, Shambhu, Mehrotra, 2021). Further research may be needed to determine whether low rates of utilization can be attributed, at least in part, to a lack of marketing and advertising (Sinaiko & Rosenthal, 2016).

Beyond just marketing a program, providing patients with additional incentives has a significant impact on participation. (Mehrotra, Chernew, Sinaiko, 2018; Whaley, Brown, Robinson, 2019). Whaley, Brown, and Robinson (2019) provided the first within-firm comparison to compare a transparency tool with and without financial incentives. This key study shows that the financial incentives in reference pricing, when combined with a price transparency tool, lead to a significant increase in shopping (Whaley, Brown, Robinson, 2019).

**Savings.** Even in cases where utilization increases, there is still an open question of whether or not participating patients are choosing lower-cost providers and saving money. Some research found that offering a price transparency tool to insured enrollees, even when participation was high, did not lead to the use of lower-cost providers (Desai, Shambhu, Mehrotra, 2021; Desai, Hatfield, Hicks, et al., 2017). But when patients who searched for prices are compared with those who did not search, one study showed that, in the case of a private price

transparency platform, the use of the tool was associated with lower total payments (Whaley, Schneider, Pinkard, et al., 2014).

When combined with an incentive structure such as reference pricing or a shared savings program, consumer behavior does shift in some cases. (Whaley, Sood, Chernew, et al., 2022; Robinson et al., 2015; Mehrotra, Chernew, Sinaiko, 2018; Whaley, Brown, Robinson, 2019). In the case of imaging services, the introduction of financial incentives led to a 6.5 percent decrease in MRI prices in the second year of the study. Overall, financial incentives were associated with a modest reduction in prices (Whaley, Sood, Chernew, et al., 2022). The utilization of lower-priced facilities in California for colonoscopy services increased by over 20 percent between 2009 and 2013 after the implementation of reference pricing (Robinson, Brown, Whaley et. al, 2015). A cash incentive shared savings transparency program in New Hampshire, after three years of marketing, found that members are 11 times more likely to shop for care when incentives are involved (Archambault & Horton, 2016). The program, with a 90 percent participation rate, saw overall savings of \$12 million and individual payouts of more than \$1 million (Archambault & Horton, 2016). Rather than reference-based pricing or shared savings, a tiered network benefit design led to medical savings (Sinaiko, Landrum, Chernew, 2017; Frank, et. al, 2015; Sinaiko, Alidina, Mehrotra, 2019).

But consumer behavior does not shift in all cases. Maine's cash incentive transparency program was evaluated by the Superintendent of Insurance in 2020. The evaluation revealed that 0.4 percent of eligible enrollees received incentives. Those that did saved a total of \$5,705 or \$69.57 per person (Maine Bureau of Insurance, 2020). The report indicates that it is possible enrollees were simply unaware of the program, highlighting previous research regarding the

effects of marketing on program effectiveness (Maine Bureau of Insurance, 2020; Kim & Glied, 2021; Desai, Shambhu, Mehrotra, 2021; Sinaiko & Rosenthal, 2016).

**Prices.** Even if patients are using transparency tools and saving money, there is the larger question of the impact on healthcare prices moving forward. Research on the wider effect transparency has on healthcare prices is divided. Economic theory would indicate that as market participants are able to look for the best deal, providers will seek to meet patients' demands for high-quality and low-cost services (Mehrotra, Chernew, Sinaiko, 2018). A Congressional Research Report on the empirical studies regarding the effects of price transparency found that greater transparency (posting prices in an accessible format) may lead to more efficient outcomes and lower prices (Austin & Gravelle, 2007). When price transparency is offered to the entire market, it can be effective at reducing prices and offer positive spillover effects to other consumers (Brown, 2019; Whaley, 2019). Other research points to the modest effects of previous transparency efforts, arguing that these types of programs will likely not move the needle enough to get continued attention (Glied, 2021).

## **Description of Methodology**

### ***Descriptive Data***

Data was acquired from SmartShopper representatives to compare outcomes over the past 4 years between programs for 3 separate entities: Fully insured members in Maine (individual and small-business market), fully insured members in New Hampshire (individual and small-business market), and self-insured members of a large employer in New Hampshire.

Based on the data provided, we compared the outcomes of each program based on 4 measures: awareness, shopping/utilization, savings, and cash rewards. Awareness refers to members who actively engaged with the program through utilization of the site and exploration

of healthcare options. They either called SmartShopper to inquire about the program or visited the SmartShopper website. Shopping or utilization is the percentage of members who engaged and then received a service through the program, although not all shoppers received incentive rewards. According to a SmartShopper representative, across all programs, 25 to 50 percent of those who shop via SmartShopper receive a reward. Savings per member was calculated by dividing the total dollar amount saved by the total number of members enrolled in the program then averaged over the past four years. Cash rewards were calculated by dividing the total dollar amount given out in rewards by the total number of members enrolled in the program then averaged over the past four years.

### *Qualitative Data*

For expert input, we compiled a list of 20 relevant experts over 3 categories: academic research, policy expert, and program stakeholders.

From this list based on responses and availability, we conducted 12 semi-structured interviews corresponding to the designated expert category. From the expert commentary, we coded various themes which focused primarily on 2 sectors: challenges to program implementation and suggestions to improve elements of the program design. Our coding process included analysis by both authors. Interview transcripts were imported into separate documents and quotations were categorized by the corresponding theme. Important themes were coded based on frequency within interviews and imported to an Excel table that, after deduction and elimination of less frequent themes, were categorized into the two categories of challenges and design elements. These tables are shown below:



**Table 1. Program Challenges**

Type	Misaligned Incentives	Medical Loss Ratio	Hospital Competition	Asymmetric Information
Researcher #1	x		x	
Researcher #2	x			x
Researcher #3				x
Researcher #4				
Researcher #5			x	x
Policy Expert #1	x	x	x	
Policy Expert #2				
Policy Expert #3		x	x	
Program Stakeholder #1	x	x	x	
Program Stakeholder #2	x	x		
Program Stakeholder #3		x		
Program Stakeholder #4				

**Table 2. Program Design Elements**

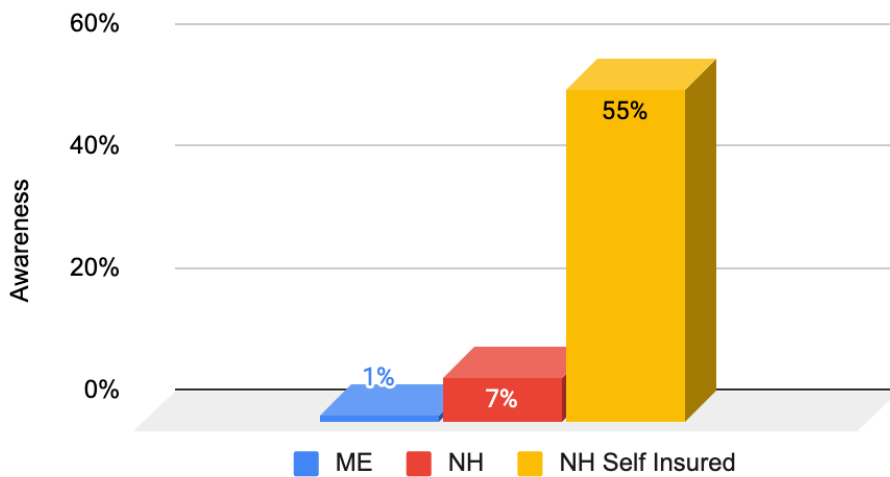
Type	Simplicity	Align Incentives	Incentive Quality	Education/Care Coordinator	Marketing/Awareness
Researcher #1	x	x	x		x
Researcher #2	x	x	x	x	x
Researcher #3		x			
Researcher #4			x		x
Researcher #5	x				
Policy Expert #1		x		x	
Policy Expert #2		x		x	
Policy Expert #3	x	x			x
Program Stakeholder #1	x	x			x
Program Stakeholder #2	x	x		x	
Program Stakeholder #3			x	x	x
Program Stakeholder #4	x	x	x	x	x

**Empirical Results and Analysis**

*Descriptive Data Analysis*

Figure 1 shows the percentage of enrolled members who participated in the program, either by requesting more information or visiting the cost comparison website. Over half of the enrolled members in New Hampshire’s self-insured market program interacted with SmartShopper in some capacity. This starkly contrasts the Maine and New Hampshire individual and small business market programs which had 1 and 7 percent awareness, respectively. See Appendix B for full data tables).

**Figure 1. Program Awareness\***

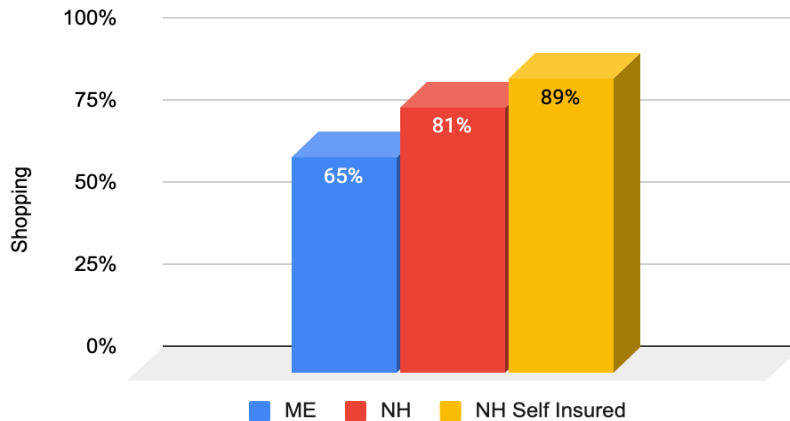


\*Awareness refers to members who actively engaged with the program through utilization of the site and exploration of healthcare options. They either called SmartShopper to inquire about the program or visited the SmartShopper website.

Both New Hampshire programs reported that over 80 percent of their members who were aware of the program shopped for a service. Meanwhile, 65 percent of aware enrollees in the Maine program shopped for a medical service. Figure 2 shows the percentage of members who utilized the shopping portion of the SmartShopper tool by receiving one of the medical services

offered. While the New Hampshire Large Employer still reported the highest level of utilization, the results for this measure are much less widely dispersed than the other 3 measures.

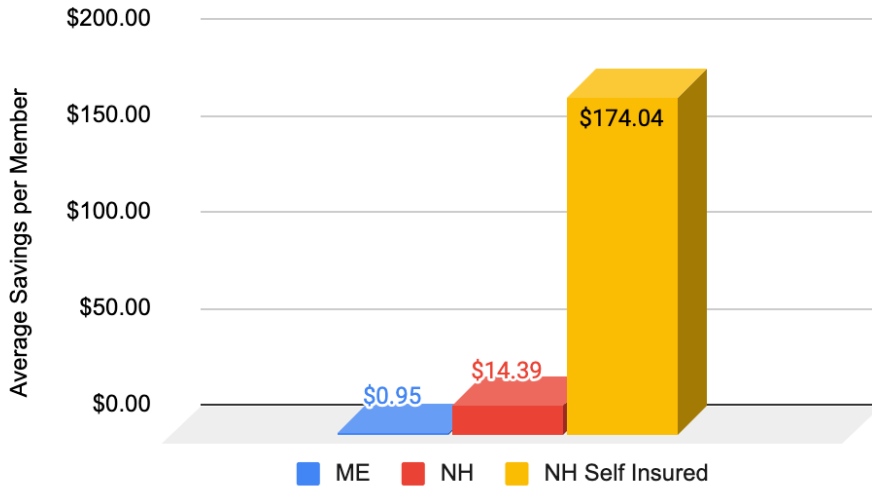
**Figure 2. Shopping\*\* Behavior Among Aware Members**



\*\*Shopping is the percentage of members who engaged and then received a service through the program. Not all shoppers received incentive rewards. According to a SmartShopper representative, 25-50% of those who shop via SmartShopper receive a reward.

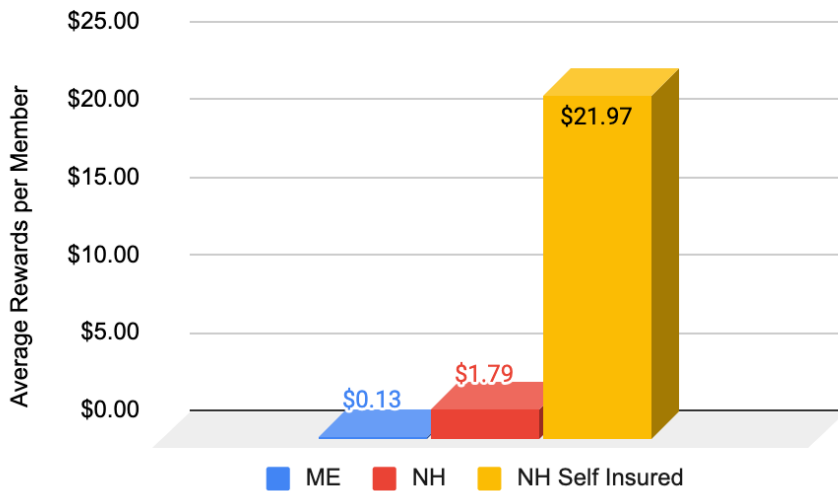
Figures 3 and 4 display the remarkable disparity in financial outcomes between the 3 programs studied. The New Hampshire large employer experienced 12 times as much savings as the fully insured New Hampshire program and produced 183 times as much savings as the Maine fully insured program. The results are similar when it comes to the total cash rewards given out per member. New Hampshire’s self-insured employer gave out 12 times more cash rewards than the New Hampshire fully insured program and 169 times more cash rewards than the Maine fully insured program.

**Figure 3. Average Savings per Member\*\*\***



\*\*\*Includes those who did not shop for care.

**Figure 4. Average Rewards per Member**



\*\*\*Includes those who did not shop for care.

**Data Analysis**

**Program Challenges.** Questions for the academic researchers, policy experts, and program stakeholders explored the inefficiencies and outside inhibitors that existing price

shopping programs encounter. Asymmetric information and the related inability of patients to access the often-complex information about healthcare prices make any shared savings program difficult to navigate. 3 researchers have measured a wide range of programs and noted in their findings that patients often encounter accessibility issues. These arise either from the unavailability of healthcare price information or the inability to translate the complex billing procedures.

Levels of trust greatly contribute to the implementation of shared savings programs. At least one member of each class of interviewees expressed that they heavily rely on referrals from their trusted primary care physician when considering where to obtain an elective procedure. Therefore, it was evident that any shared savings program would require testing this area of trust. If this disclosure was not possible voluntarily then it may have to be compulsory. A little under half of the targeted interviewees affirmed that requiring providers to disclose price shopping tools could be useful for patients. Meanwhile, others expressed reservations that it may just be another form that gets lost in the mix of paperwork. Still others argued it is the insurer's responsibility and not the providers to disclose this information.

The insurer's responsibility was addressed across all interview types. Program stakeholders and policy experts in the field drew particular attention to misaligned incentives and the medical loss ratio (MLR). The MLR is a federal requirement that forces insurance companies to report the percentage of revenue spent on medical services and it imposes penalties in the form of customer rebates if an insurer spends less than 80 or 85 percent of premium revenue on medical care. The intention being that insurers are only keeping 15 to 20 percent in profit gains. Insurers get around this rule by increasing the size of the pie and raising premiums to spend more on medical care. Some experts argue that with MLR there is no incentive to lower medical costs

if increasing those costs helps to have a larger bucket for your administrative costs. Program stakeholders in Maine specifically found this to be a significant barrier to entry for its price-shopping tool. One policy stakeholder responsible for sponsoring the bill expressed the intense pushback and lobbying by insurance companies who were afraid they would lose profit if patients were saving.

The same stakeholder, along with several policy experts, also noted that a major challenge for both the Maine and New Hampshire programs is the limited competition within each state's healthcare system. The term shopping implies that there are multiple options that a patient can explore to find the best price and most convenient care for their elective procedure. However, as interviewees noted, because most of Maine and New Hampshire are rural areas with limited diversity in their healthcare providers and with the existence of hospital conglomerates, shared savings programs are limited in their capacity to offer savings to patients. Program stakeholders from both state's programs addressed the importance of stakeholder buy-in when implementing these programs. As one NH program stakeholder noted, the New Hampshire self-insured employer was able to align incentives for the employer, insurer, unions, and providers.

### ***Program Design Elements***

Regarding beneficial design elements, the questions that were posed to all 3 categories of experts were intended to identify the ideal factors for ensuring program success. Each interviewee was asked to draw from their research, expertise, or program experience to identify the characteristics of a shared savings program that lead to success. The key design element that was expressed in nearly all interviews was the need for program simplicity that would allow all types of patients to easily access and use the platform. Like with any market-based tool, consumers, or potential patients shopping for care, must be able to understand what amount they

are paying and what additional benefits they receive for using the program. Experts in every category used terms and phrases like ‘frictionless’, ‘clear-cut’, and ‘simple as humanly possible’ to describe the necessary design for any shared savings program.

In relation to simplicity, other interviewees touched on the importance of educating the patient to ensure that they not only know how to effectively use the tool but also why certain design elements will save them money. Some program stakeholders suggested the expansion of patient education teams by third-party partners to ensure that patients have a resource to help them through the process from start to finish. One New Hampshire program representative noted that this is part of their successful program design and that the education coordinator considers not just cost for the patient, but also convenience and patient accessibility to find the highest value care. Policy experts and program stakeholders alike asserted that these programs can be difficult to navigate, even for experienced healthcare professionals. Having an education coordinator who could help with this navigation is essential to any successful program.

Two other program design elements that stood out among interviews were the importance of aligning incentives for all stakeholders involved in the program and ensuring high quality incentives. Researchers examined how stakeholders that have competing interests serve as immediate barriers to the successful implementation of a program. In the Maine study specifically, program stakeholders were met with this harsh reality of misaligned incentives. To simplify this design element, researchers in the field discussed how essential it is to have clarity in the goals for the program. These goals include how much will be saved, who is providing incentives, and who is being served.

Along with getting all stakeholders involved and in agreement on incentives, interviewees also discussed how these incentives must be of high quality to show any effect for

patients. One program stakeholder, who had experience with both the Maine and New Hampshire programs, expressed that transparency alone is not capable of affecting real change and saving money for consumers. There must be a quality incentive to encourage consumers to shop.

The final common design element mentioned by interviewees was the value added by properly marketing the shared savings program. It is one thing to have a tool that is easily accessible with large incentives and buy-in from stakeholders. But if patients are not frequently made aware of the tool, then it remains relatively ineffective. This was an opinion shared by most respondents. For more detailed and selective quotes about challenges and design elements, please refer to the Interviewee Quotation Tables in Appendix A.

### **Policy Analysis**

Healthcare price transparency is on the rise and so are transparency-based programs. But the power behind price transparency will always lie with the patients who can use that information to make value-based decisions about their care and potentially save money on their plannable services in the process.

There are several lessons to be learned from the incentive-based programs in Maine and New Hampshire, all of which will be incorporated in a thorough policy analysis and recommendation between relevant policy options. The policies considered within this project are limited to incentive-based designs, which include both positive incentives (carrots) and negative incentives (sticks). While the carrot-and-stick options are not all mutually exclusive, in evaluating the options based on the criteria, they will each be evaluated on their individual merits.



Within each of the 5 policy options to consider, there are numerous and varied implementation strategies and program design components that could drastically change the effect of the program. Our initial review of the policy options will depend on quality implementation and aligned incentives so that all stakeholders are invested in the success of the program. Implementation strategies and the more granular aspects of program design will be considered in the policy recommendation.

### *Policy Options*

Each of the following policies and programs could be either mandated to private insurance companies within state legislatures or applied to the state health plans for state employees. Some of these options work better in fully insured competitive markets, while others work better for self-insured employers.

1. **Status Quo:** For states without any of the following programs or health plan designs, this policy option would mean no action taken to apply any of the following incentive-based policies.
2. **Shared savings:** A program in which patients are offered a cost comparison tool by their insurer that allows them to shop for certain procedures and services. When they save money on a medical service, they take home a portion of the savings.
3. **High-Deductible Health Plan (HDHP):** A health plan that carries lower premiums but requires members to pay more in out-of-pocket costs before insurance covers medical expenses.
4. **Reference-based Pricing (RBP):** In contrast to traditional coverage wherein providers negotiate with employers to determine prices, under RBP, employers set a price they

will pay for certain medical services based on RBP software or other methods for benchmarking prices against relevant providers and locations.

5. **Tiered Provider Networks:** A health plan feature that places providers into tiers based on cost and quality of care, allowing consumers to make value-based decisions to determine the provider for a particular medical service.

### *Scope*

The policy options in this section are limited by the actor, which in this case is state governments. There may be additional federal, local, or private-sector solutions that fall under the umbrella of incentive-based programs that are not included here.

### *Criteria*

The criteria with which we will evaluate each incentive-based policy option is based on which options, or combination of options, leads to the most price shopping for elective procedures. The goal of incentive-based policies within this context is to encourage members to make value-based decisions when it comes to healthcare services they can plan for such as imaging, lab work, and surgeries. The higher the utilization of a price shopping tool, the more value-based decisions are being made, even if not all patients have chosen the most cost-effective option. There are 4 primary criteria that will help determine which approaches state policymakers should consider:

- 1) **Political feasibility** is a necessary component of the evaluation because recommending a policy that is not politically palatable would lead to unproductive and wasteful legislative efforts and potentially alienate health reformers who would seek to institute other benefit design changes down the road.
- 2) **Patient savings** is a criterion that will determine which benefit design

provides healthcare consumers with the highest savings, both in terms of dollar amounts and quantity of procedures available for price shopping. This criterion also takes into account the quality of the incentive offered to patients within each program design.

3) **Accessibility** is a criterion that will judge a policy option based on the ease of access and participation of the patient. Incentive-based policies should offer patients extensive education and make it as frictionless as possible for patients to save on their nonelective procedures.

4) **Aligned incentives to save for all stakeholders** is critical to program success, and occurs when all parties involved (patient, employer, provider, insurer, and third party) have the highest possible incentive to contain costs and promote value-based decisions for nonelective medical care. When incentives are aligned, there is a level of clarity in goals that allows for sustained and frictionless implementation.

### **Discussion on Implementation**

To determine the policy approach states should consider, a discussion on the affected population is also necessary. In the case of state governments, policymakers can enact these options for two different groups: 1) The individual and small group insurance markets across the state and 2) State employee health plans (self-insured).

Although enacting these policies across an entire state, as the Maine program did, would likely affect more patients than limiting the change to a state employee health plan, it would also be much more difficult to achieve politically. In recognizing the political challenge of a major reform to the fully insured market statewide, states can choose to enact changes to the state employee health plan as a first step towards the larger goal of statewide implementation across markets.

In addition to the political issues, 9 of the 12 experts highlighted the inherent difference in the incentive structure between self-insured employers and those in the competitive market. In considering why New Hampshire's cash incentive program had significantly higher utilization for the large employer when compared to programs for the fully insured market in both New Hampshire and Maine, most program stakeholders interviewed pointed to misaligned incentives for the employers and insurance companies.

### ***Misaligned Employer Incentives***

Because a self-insured employer is directly liable for the cost of all covered medical services, the employer directly benefits from any cost savings by a patient. But in the case of a fully insured health plan, the employer sits within a larger risk pool and pays insurance companies a predetermined premium per employee, regardless of how much each employee pays out-of-pocket for the services they receive (Sachdev, White, & Bai, 2019). This dynamic gives self-insured employers a much higher incentive to get their enrollees to utilize a shopping tool because the employer incurs all costs and benefits from any cost containment by their patients. While employers who pool the risk by offering fully insured health plans certainly want their enrollees to be satisfied, they have less of an incentive to educate their employees on or encourage them to utilize a price-shopping tool.

### ***Misaligned Insurer Incentives***

Policy experts and program stakeholders, explaining why they believe the programs in fully insured markets reported such low utilization, pointed to a requirement under the Affordable Care Act (ACA) called the Medical Loss Ratio (MLR). This ACA requirement applies to small group and individual health plans. It forces insurance companies to report the percentage of revenue spent on medical services and imposes penalties in the form of customer

rebates if an insurer spends less than 80 or 85 percent of premium revenue on medical care. The intention behind the requirement was to make sure that insurance companies are not spending an unnecessary amount of their revenue on administration or salaries. If they do, the consumers benefit through rebates.

Some allege that insurance companies are gaming the system to avoid paying out rebates to customers, which is an unfortunate unintended consequence of the ACA’s minimum MLR (Hansard, 2022). When it comes to offering patients opportunities to contain costs through cash incentives programs, program stakeholders in Maine reported that insurance companies were opposed to the legislation. Following its passage, they did little to promote the price shopping tool to their policyholders.

Due to the above issues of political feasibility and misaligned incentives, the evaluation of policy alternatives will be based in the context of a state employee health plan rather than a statewide requirement on fully insured health plans.

**Weighing the Options**

**Table 3. Policy Alternatives for a State Employee Health Plan**

	<b>Political Feasibility</b>	<b>Patient Savings</b>	<b>Accessibility</b>	<b>Aligned Incentives</b>
<b>Status Quo</b>	Moderate to High. This is the current policy, but with healthcare costs rising, pressure is mounting on policymakers to contain costs.	Low. Patients are offered few opportunities to make value or cost-based decisions for their non-elective medical procedures.	Low. Patients are giving little information or guidance on how to save money on plannable medical services.	Low. Currently, stakeholders do not have strong enough incentive to contain costs or promote value-based healthcare decisions.

<p><b>Shared Savings Program</b></p>	<p>Moderate. Programs exist in both majority GOP and majority Democrat states.</p>	<p>High. Patients are given the opportunity to compare costs and receive additional savings if they choose a lower cost provider.</p>	<p>Moderate to High. Success of these types of programs depends on extensive education and a frictionless setup that allows patients to shop and receive incentives quickly and easily.</p>	<p>High. Self-insured employers benefit when their employees save on their care and the state benefits by more value-based decisions on care by patients, helping drive costs down.</p>
<p><b>High Deductible Health Plans (HDHPs)</b></p>	<p>Moderate to Low. HDHPs can be controversial, increasing costs for those who use more medical services.</p>	<p>Moderate. When combined with shared savings or HSA, HDHPs can increase savings for all patients and encourage value-based decisions. However, higher utilization of medical services could lead to higher out-of-pocket costs.</p>	<p>Moderate. While HDHPs can sometimes act as barriers to care for those without financial means, in combination with a shared savings program, patients are offered more education and care coordination.</p>	<p>Moderate to High. Because HDHPs shift more out-of-pocket costs to the employee, both employers and the insurance companies can benefit from the setup.</p>
<p><b>Reference-Based Pricing (RBP)</b></p>	<p>Moderate to Low. RBP will likely be unfamiliar to state legislators and there are few examples of other states that use RBP for the state health plan, as it has not achieved wide popularity.</p>	<p>Moderate to High. Largely depends on the prices employers set and the quality of the third-party administrator, but the high potential for savings for patients due to prices being set allows for a value-based choice of provider.</p>	<p>High. Employers negotiate the prices, and patients are not asked to bear the burden of the work to shop or compare costs in the same way as other price transparency-based plan designs.</p>	<p>Moderate to High. Employers and employees are aligned in their goal to contain costs. Providers may accept a reasonable negotiated fee for a service but are not required to.</p>
<p><b>Tiered Networks</b></p>	<p>Low. This is an uncommon plan design and may face significant implementation challenges due to the political dynamics.</p>	<p>Moderate to High. Patients are given the option to choose providers that offer the highest value but do not receive additional incentives based on their choices.</p>	<p>Moderate. Patients are still required to compare tiers, and if not provided with clear guidance, tiered networks could be a barrier.</p>	<p>High. Providers have a strong incentive to offer higher-value services to attract patients and move up in the tiers. Employers benefit when patients choose higher-value care.</p>

***Policy Recommendation***

Based on the data provided, feedback from experts, and stakeholders in Maine and New Hampshire, as well as a thorough review of the alternatives — state policymakers should

consider enacting a shared savings program for their state employee health plan. In addition, a shared savings program would be most effective in a High Deductible Health Plan (HDHP) because it creates the highest potential for cost savings through a combination of lower premiums and extra savings on out-of-pocket costs. While RBP offers patients high accessibility and savings, there are limited case studies of RBP and shared savings programs together, making that hybrid less politically feasible. This policy recommendation follows the general model of New Hampshire's SmartShopper program for state employees which has a shared savings program and a High Deductible Health Plan but also provides necessary implementation strategies and design choices which can help increase utilization and overall savings for any state health plan. Within this recommendation, there are several design changes and implementation strategies that policymakers must consider for a shared savings program in an HDHP to meet the criteria necessary for success.

### ***Design Changes and Implementation Strategies to Mitigate Challenges***

**Simplicity.** Among the challenges that the Maine and New Hampshire programs faced, most interviewees cited the importance of a frictionless user experience for the patient. The easier the process is made for the patient, the more likely the patient is to use the service. Among the design changes, some experts cited the need for a mobile app with a simple user interface that has their information and insurance coverage already included in any price shopping search.

**Marketing and Awareness.** In addition to a simple user experience, patients also need to be told about the program to take advantage of it. Several interviewees cited the importance of marketing the program and making sure that patients are aware of the savings potential and cash incentives offered. Incentives must be aligned across stakeholders to support that effort. When all stakeholders benefit from the patient saving money, employers and insurers are more likely to

promote the program to their employees and members. Because research shows that trust is a critical part of a healthcare consumer changing their behavior, it is critical that every trusted entity (employer, insurer, third party, or union representative) is promoting the program to the member (Zhang et al. 2018). Particularly among self-insured employers with unions, as is the case in New Hampshire, there is an extra layer of trust that can convince patients of the merits of an incentive-based program.

Another critical layer of trust is the relationships patients have with their primary care provider. Some policy experts have suggested, as part of a shared savings program, including a disclosure requirement. Providers would be required to disclose the right the patient has to compare prices and shop for care if that patient is enrolled in a shared savings program. Any sort of provider disclosure requirement would have to take advantage of the relationship patients have with their provider without adding to the bureaucracy providers already have to weed through to care for patients.

**Education and Coordinating Care.** It is critical that enrollees in a shared savings program have extensive education about how to best utilize plan features to save money. Additionally, for states who also choose to introduce a High Deductible Health Plan (HDHP), patients will likely initially express concern about higher out-of-pocket costs. Education about how a patient can utilize an HDHP and shared savings to save in the long run is critical to ensure the program works as intended. Both the program stakeholders and policy experts mentioned adding on a care coordinator that can walk patients through the plan features and potentially even price shop on their behalf. This would be a new addition to programs of this type and could make a difference in patient utilization.



**Quality and Quantity of Incentives.** Several interviewees cited the importance of how high the incentives are and in what form they are offered. Incentives in the form of gift cards or any other proxy for actual cash should be avoided. While checks are preferable to gift cards, direct deposit would be the most effective form of cash incentive. Additionally, program stakeholders in Maine highlighted that saving on some procedures provided a maximum cash incentive of \$10, which is unlikely to motivate a potential consumer. Incentives should be high enough and cover enough procedures to make it worth a patient's time and effort.

### **Conclusion**

Through an analysis of the literature around shared savings programs as well as a targeted approach in analyzing two major case studies of Maine and New Hampshire programs, we were able to identify preliminary existing challenges in the design and implementation of these programs. Further analysis of the literature has demonstrated that the continuous lack of awareness of healthcare shopping tools among consumers, paired with several obstacles in newly developed fields, limits price shopping for consumers significantly. Because most price shopping tools are only able to give ballpark estimates of what consumers will ultimately end up paying, there is a reliability issue that diminishes utilization among consumers.

From commentary derived from targeted researchers, policy experts, and program stakeholders we concluded that misaligned incentives, the medical loss ratio among insurers, lack of competition among providers, and asymmetric information for patients are primary challenges related to shared savings programs. Meanwhile, we identified simplicity, incentive quality, education, awareness, and stakeholder alignment as key characteristics of successful programs. Drawing from these challenges and design elements, we conclude that a shared

savings program and HDHP implemented within the context of a state employee health plan provides the highest potential for increasing value-based decisions by members.

Due to the scope of this analysis and time restrictions, the analysis is limited in depth and could benefit from further research. The approach in further research could use a less-targeted network of experts and program stakeholders across multiple programs, rather than limiting to two-state designs. Additionally, with more access to program data, researchers could conduct a quantitative analysis identifying program strengths and weaknesses in a statistical rather than surveyed manner. A larger policy discussion or empirical research about the implementation strategies for transparency-based programs applying to the statewide fully insured market would be beneficial.

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## **Appendix A**

### **Communication for Interviews**

#### ***Email to Policy Experts and Researchers***

Hello XX,

My name is INSERT NAME, and I am currently in my final semester at Pepperdine's School of Public Policy earning my MPP. For my capstone project, a colleague and I are comparing Maine and New Hampshire's shared incentive programs with the goal of providing recommendations to state policymakers on the ideal way to design an incentive-based program and implement it.

We are hoping to interview some experts who have written about price transparency or shared-incentive programs and may provide insight that we can use for our analysis. Your research has been instrumental in our review of the literature and policy context of this issue, and we would be grateful if you could lend your voice to this project. Would you have some time this week or next for a quick 15-30 minute phone or Zoom interview?

I appreciate your time and consideration and I look forward to hearing from you.

#### ***Email to Program Stakeholder***

Hello XX,

My name is INSERT NAME, and I am currently in my final semester at Pepperdine's School of Public Policy earning my MPP. For my capstone project, a colleague and I are comparing Maine and New Hampshire's shared incentive programs with the goal of providing recommendations to state policymakers on the ideal way to design an incentive-based program and implement it.



We are hoping to interview some experts who are closely associated with the programs and may provide insight that we can use for our analysis. Your name has come up several times and we would be grateful if you could lend your voice to this project. Would you have some time this week or next for a quick 15-30 minute phone or Zoom interview?

I appreciate your time and consideration and I look forward to hearing from you.

### **Discussion Guide**

#### ***Questions for General Research Interviewees:***

1. General: What do you find to be the missing link between price transparency and patients using that information to shop and potentially save on their elective procedures and services?
2. Research shows that trust is a primary consideration when seeking to change consumer behavior in healthcare shopping. Do you think requiring primary care providers to disclose the shopping program would increase utilization?
3. In your research, have you found reference-based pricing to be comparable to incentive-based programs? Can they work together? Is one approach more or less successful, in your opinion?

#### ***Specific to academic researchers:***

1. In your research, what kind of price shopping programs have you found to be the most effective in increasing participation and financial savings?
2. Can you list the most important characteristics of a successful healthcare price shopping program, in your opinion?

#### ***Specific to policy experts:***

1. What kind of program design is most successful in getting patients to participate and save money?
2. What are the most important characteristics of a successful healthcare price-shopping program?

The second category serves to inform the case study of comparing the Maine and New Hampshire programs. The goals of the comparative analysis questions will be to narrow down the impact of each program beyond just the numbers we have access to and draw out some possible pitfalls or successes in the design and implementation of each program.

***Questions for Comparative Analysis Interviewees:***

1. General: What do you find to be the missing link between price transparency and patients using that information to shop and save on their elective procedures and services?

***Specific to program stakeholders from both states:***

1. General: What do you find to be the missing link between price transparency and patients using that information to shop and save on their elective procedures and services?
2. Do you think that incentive-based structures allow for more program participation?
3. **NH Specific:** (Share top-line results from NH program) Did you find the SmartShopper program to be successful? Why or why not?
4. **Maine Specific:** (Share top-line results from Maine program) Did you find the Maine shopping program to be successful? Why or why not?
5. In your opinion, can this data be considered trustworthy? Are there any indicators that would suggest otherwise?
6. (Different based on interviewee expertise) In your experience, what did NH/Maine do well in implementing and designing the program? What did they do poorly?

*Specific to lawmakers:*

1. Do you think that all stakeholders were supportive of these programs?
2. What kind of impact, positively or negatively, did specific stakeholders have on program success?

## Appendix B: Descriptive Data Tables

SmartShopper Aggregated Data - 2019-2022					
New Hampshire Fully-Insured Population	4-year average	2022	2021	2020	2019
Members	71250	78000	75000	66000	66000
Awareness*	7%	6%	6%	8%	8%
Shopping**	81%	85%	83%	82%	72%
Savings	\$1,020,000	\$1,080,000	\$950,000	\$1,200,000	\$850,000
Average savings per member	\$14.39	\$13.85	\$12.67	\$18.18	\$12.88
Rewards	\$126,000	\$108,000	\$122,000	\$125,000	\$149,000
Average rewards per member	\$1.79	\$1.38	\$1.63	\$1.89	\$2.26
Maine Fully-Insured Population	4-year average	2022	2021	2020	2019
Members	14475	15500	15900	14100	12400
Awareness*	1%	1%	1%	1%	1%
Shopping**	65%	71%	69%	61%	60%
Savings	\$14,400	\$33,500	\$14,800	\$3,600	\$5,700
Average savings per member	\$0.95	\$2.16	\$0.93	\$0.26	\$0.46
Rewards	\$1,850	\$2,600	\$2,500	\$900	\$1,400
Average rewards per member	\$0.13	\$0.17	\$0.16	\$0.06	\$0.11
NH Self-Insured Employer	4-year average	2022	2021	2020	2019
Members	25750	25000	26000	26000	26000
Awareness*	55%	55%	55%	56%	52%
Shopping**	89%	95%	96%	96%	70%
Savings	\$4,475,000	\$5,000,000	\$3,800,000	\$4,100,000	\$5,000,000
Average savings per member	\$174.04	\$200.00	\$146.15	\$157.69	\$192.31
Rewards	\$565,750	\$555,000	\$528,000	\$506,000	\$674,000
Average rewards per member	\$21.97	\$22.20	\$20.31	\$19.46	\$25.92

*\*Awareness refers to members who engaged with the program. They either called SmartShopper to inquire about the program or visited the SmartShopper website.*

*\*\*Shopping is the percentage of members who engaged and then received a service through the program. Not all shoppers received incentive rewards for receiving a service. According to a SmartShopper representative, 25-50% of those who shop via SmartShopper receive a reward.*

*Aggregated data provided by SmartShopper. Averages calculated by authors. Averaged data points were calculated by taking the aggregate savings and rewards for each program and then dividing that by the number of participants in the respective program.*