MILLIMAN REPORT

Potential Impacts on Commercial Costs and Premiums Related to the Elimination of Prior Authorization Requirements

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I. EXECUTIVE SUMMARY

Prior-authorization (PA) is a tool used by payers in the managed care industry to optimize the utilization of various high-dollar or potentially low-value services that are covered under a typical major medical policy. Services that are or could be over-utilized and misused, do not meet medical necessity criteria, are considered unsafe or have alternative treatments available, are likely candidates for PA.

Prior authorization can be an effective cost control tool for payers depending on the scope of services subject to PA, as well as the stringency of the application of the authorization rules. It can also help members avoid unnecessary risk and / or paying additional out-of-pocket cost sharing. However, PA can add to the administrative burden for healthcare providers and is often cited by providers as the main reason for delays in care or the patient not seeking the treatment at all, which can lead to increased long-term costs.[1]

Given that PA programs can affect member and provider satisfaction, premiums, and member cost sharing, as well as have impacts to clinical care, it is important that stakeholders understand the tradeoffs, including the potential increase in healthcare costs associated with placing limitations on or even eliminating the use of PA. Increased costs impact both insurance premiums and member cost sharing.

Blue Cross Blue Shield Association engaged Milliman to model the potential cost impacts that can result from generally[2] limiting or eliminating PA on the commercial (e.g., non-Medicare, non-Medicaid) markets in the US. For this paper, we only model the elimination of PA. The commercial market includes the employer group market, as well as the individual ACA market. Employers, who typically pay a large share of premiums under employer-sponsored health insurance programs, and some consumers in the individual market could see premium increases if the use of PA is either limited or eliminated. Likewise, patients, who typically pay cost sharing (deductibles, copays, etc.) under their health plan, could see increases in their out-of-pocket costs as they would be paying cost sharing on, for example, potentially medically unnecessary services or on services that could be done at a lower cost or more appropriate site of care.

To understand the potential range of cost impacts resulting from eliminating PA, we analyze 2019 claims experience (trended to 2023 cost levels) including the member cost sharing portion, for a nationwide sample of both individual consumers, as well as self-insured and fully-insured employer groups that purchased a typical major medical policy in 2019.[3] Using public information available on major payer PA programs, we construct and then apply to the claims data two hypothetical but representative lists of services that are subject to PA. We refer to these representative lists as “Broad Scope” and “Narrow Scope” scenarios, which vary by the number of services subject to PA.

We then apply a measure of program effectiveness, which is defined as the net percentage reduction in medical and prescription drug costs attributable to the PA program, to each of the scopes of services. As a proxy for program effectiveness, we use a range of service denial rates.[4] This range of PA denial rates for both medical procedures and prescription drugs is based on a review of public literature.

Our analysis estimates the range of financial impacts of eliminating PA programs across two representative PA program scopes of services and a range of program effectiveness rates.

As shown in Figure 1, our mid-range estimate of eliminating PA measures, for a program with a broad scope of services, results in an increase in premiums by $29.52 per member per month (PMPM), or a 4.8% increase in premiums. When modeling a narrow scope of services subject to PA, our mid-range estimate of eliminating PA measures, results in a $20.18 PMPM or 3.3% increase in premiums.

Likewise, as shown in Figure 2, member cost sharing amounts could increase as much as $2.28 PMPM, or 2.6%, when modeling a broad scope of services and $0.84 PMPM, or 1.0% when modeling a narrow scope of services.

Based on these PMPM estimates and total commercial enrollment estimates for 2023, we estimate that across the entire commercial market, premium increases could total between $43 and $63B annually.[5]

[1] https://www.ama-assn.org/system/files/2021-04/prior-authorization-survey.pdf
[2] While there are ongoing discussions and proposals regarding prior authorization requirements, we do not model any specific proposal or legislation.
[3] Typical is defined as coverage that includes medical and pharmacy services and generally includes the essential health benefits (EHBs) as defined by the ACA. More information on EHBs can be found here: https://www.cms.gov/CCIIO/Resources/Data-Resources/ehb
[4] Denial rates are a significant, but not the sole, driver of PA effectiveness. See considerations section in the main body of this report for more discussion related to factors influencing program effectiveness.
[5] Please see the Methodology section of the full report for sources and calculation methodology.

The full range of estimates based on higher or lower program effectiveness can be found in Figures 5 and 6 in the body of this report.[6]

In addition, readers should also consider the following:

- Administrative Costs – While premium costs increase if limitations are placed on prior authorizations, our research indicates that a payer's administrative costs would likely be lower, depending on the nature of the limitation. In the special cases where a prior authorization is eliminated, it may allow a reduction in the staffing hours previously used to support that authorization. Our analysis did not factor in these potential reductions in cost. Thus, the increases to premium and member costs shown above could be somewhat lower than shown.

- Net Savings – Often prior authorizations result in a diversion of care from one course of treatment to another rather than a wholesale denial of a course of treatment. While the PA-approved treatment, if different from the original course of treatment, may still incur costs, there is often a net savings relative to the original course of care. When such PA programs are removed, the additional costs include the loss of these net savings rather than the full cost of treatment denied under the PA program.

- Value-Based Care (VBC) – Many providers have more incentives to optimize care under VBC than they would under a strict fee-for-service environment. Thus, any limitations placed on prior authorizations could have even smaller effects on premiums and cost sharing than shown below particularly in delivery systems that are already efficient.

- Sentinel Effects – This effect occurs when a prior authorization requirement is in place and requests for approval are lower simply because physicians know that certain requests will be denied, or the administrative hassle is too great. When a PA is removed, there may be a period when utilization of a particular service might stay at previous levels as providers have become accustomed to a lower level of utilization. After some time, utilization may begin to increase significantly as provider behavior responds to the lack of constraints.

As noted in the 2021 AMA prior authorization (PA) physician survey (see footnote 1), PA is often cited by providers as the main reason for delays in care or for the patient not seeking the treatment. In severe cases, delayed or foregone treatment could ultimately increase costs if a member does not seek care until the condition worsens.

Figure 1: Premium Impacts
Due to Removal of Prior Authorization
Medical and Pharmacy Expense PMPMs (2019 trended to 2023)

Total Premium Modeled (85% Loss Ratio)	$614.31
Total Benefit Expense Modeled	$522.17
Scenario 1: Broad Scope of PA Services	
Benefit Expense Subject to PA	$161.51
	PA Effectiveness 13%
Benefit Expense Increase	$25.09
Premium Increase (85% Loss Ratio)	$29.52
Recalculated Premium	$643.83
Premium Increase %	4.8%
Scenario 2: Narrow Scope of PA Services	
Benefit Expenses Subject to PA	$90.08
	PA Effectiveness 16%
Benefit Expense Increase	$17.15
Premium Increase (85% Loss Ratio)	$20.18
Recalculated Premium	$634.49
Premium Increase %	3.3%

[6]All results are applicable to the population modeled, which is broadly representative of a standard population with average age of 45 and covered by a typical large group major medical plan with an average AV of 85%. Results may differ for specific employers, individual purchasers, geographies or for younger or older populations.

Figure 2: Member Cost Sharing Impacts Due to Removal of Prior Authorization Medical and Pharmacy Cost PMPMs (2019 trended to 2023)	
Total Cost Sharing Modeled	$86.51
Scenario 1: Broad Scope of PA Services	
Cost Sharing Subject to PA	$17.95
	PA Effectiveness 11%
Cost Sharing Increase $	$2.28
Cost Sharing Increase %	2.6%
Scenario 2: Narrow Scope of PA Services	
Cost Sharing Subject to PA	$4.96
	PA Effectiveness 14%
Cost Sharing Increase $	$0.84
Cost Sharing Increase %	1.0%

Figures 1 & 2 Notes:

1. Effectiveness is a benefit expense (Figure 1) or member cost sharing (Figure 2) weighted average across medical and prescription drug based on studies from published articles and judgement regarding a reasonable range. See Appendix C for detail.

2. Results do not quantify impacts of eliminating PA on administrative costs or on the delay or diversion of care.

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II. BACKGROUND

Managed care payers use various processes known collectively as utilization management (UM) to optimize the utilization of various high-dollar or potentially low-value services that are covered under a typical major medical policy. UM usually encompasses prospective service review (i.e., prior to services being rendered), concurrent review (generally applicable to just inpatient hospital stays and occurring during the actual service period) and retrospective review (after claim is paid or service is rendered). Our analysis focuses on the front-end, prospective component of UM, namely prior authorization (PA). Services that are or could be over-utilized and misused, or services that do not meet medical necessity criteria, may raise safety concerns, or have alternative treatments available, are likely candidates for PA. Prior authorization requirements could involve an ordering provider simply notify the payer that the member will be receiving a service. In other cases, specific approval is required before a service is rendered or a drug is prescribed and there is a more involved administrative process of notification, documentation, and justification on the part of the ordering provider before a service is approved to be paid by the payer. Notification, documentation and approval or denial can be done telephonically or electronically through secure channels.

Prior authorization can be an effective cost control tool for payers depending on the services subject to PA, as well as the strictness of the application of the authorization rules. Controlling medical costs is an efficient way for payers to keep health insurance premium rates affordable for individuals and employers as medical and prescription drug costs are the largest portion of costs underlying a typical major medical insurance policy. By identifying unnecessary or ineffective services, prior authorization can reduce financial and medical risk for members and help them avoid additional out-of-pocket cost sharing on those services.

On the other hand, PA can add to the administrative burden for healthcare providers and is often cited by providers as the main reason for delays in care or for the patient not seeking the treatment.[7] In severe cases, delayed or foregone treatment could ultimately increase costs if a member does not seek care until the condition worsens. Provider groups, such as the American Medical Association have criticized PA and multiple states have passed or proposed legislation seeking to limit prior authorization practices of payers.[8]

Prior authorization programs affect both member and provider satisfaction, as well as clinical considerations. It is also important that stakeholders understand the potential cost impacts to eliminating the use of PA on both insurance premiums and member cost sharing.

Blue Cross Blue Shield Association engaged Milliman to model the cost impacts to employers (who generally pay a large portion of premium under employer sponsored plans) and consumers (individual purchasers or employees, who pay a portion of the premium, as well as deductibles, coinsurance, and copays) if PA is eliminated (e.g., if legislation limits payers' ability to implement or require prior authorization for services). This report is intended to inform stakeholders, which could include but is not limited to, employers, employees and other individual consumers, payers, and lawmakers, about the range of potential financial impacts of various changes to state or federal laws intended to limit the practice of prior authorization as a method of controlling costs. This report is technical in nature and readers with limited background in healthcare should consult a qualified professional when interpreting these results.

[7] https://www.ama-assn.org/system/files/2021-04/prior-authorization-survey.pdf
[8] https://www.ama-assn.org/practice-management/prior-authorization/what-prior-authorization

III. MEDICAL AND DRUG ALLOWED COST RESULTS

Based on a review of various payers' publicly available prior authorization requirements, we identify benefit categories that are typically subject to PA. These categories represent the services with the most Current Procedural Terminology (CPT) codes or Healthcare Common Procedure Coding (HCPC) codes that require some form of prior authorization. Based on the information on payer's PA programs, we construct two scenarios representing PA programs applicable to either a broad or narrow scope of services:

- **Broad Scope:** Represents about 26% of allowed medical claim costs as subject to PA (see Figure 3 for detail)
- **Narrow Scope:** Represents nearly 9% of allowed medical claim costs as subject to PA (see Figure 3 for detail)

For prescription drug costs, we review available data on PA requirements among policies issued under the Affordable Care act (ACA) in the small group market across several states. We identify specific drugs and therapeutic classes that were most commonly subject to PA and summarized costs by prescription drug type. We do not construct the broad and narrow levels of PA for drugs because there was little difference between payer practices in this category.

Next, we use claims experience for calendar year 2019 (trended to 2023 cost levels) from Milliman's proprietary database. These costs represent a composite, nationwide commercial (both employer and individual) benefit plan with an average actuarial value of ~85%[9] and nationwide demographic profile with an average age of 45. We map the broad and narrow scope code lists to the medical claims data and map the ACA PA list to the prescription drug claims. We summarize the results below in Figure 3.

Figure 3
Distribution of Allowed Medical Claims Subject to Prior Authorization
By PA Category
2019 Allowed Cost PMPM, trended to 2023

	(1)	(2)	(3)	(4)
	Broad Scope		Narrow Scope	
Prior Authorization Category	Allowed PMPM	Allowed %	Allowed PMPM	Allowed %
Inpatient and Outpatient Surgeries	$38.94	7.8%	$2.32	0.5%
High-Cost Drugs in the Medical Benefit	$37.08	7.4%	$30.13	6.0%
Radiological Services	$28.18	5.6%	$4.33	0.9%
Physical / Occupational / Speech Therapies	$10.46	2.1%	$0.51	0.1%
Ancillary / Additional Services	$5.71	1.1%	$4.21	0.8%
Cardiovascular Services	$5.15	1.0%	$1.02	0.2%
DME / Prosthetics / Medical Supplies	$4.41	0.9%	$1.17	0.2%
Pathology / Lab	$1.54	0.3%	$0.28	0.1%
Total Medical Cost Subject to PAs	**$131.47**	**26.3%**	**$43.96**	**8.8%**
Total Medical Cost Modeled		**$500.57**		

Figure 3 illustrates – for a composite, nationwide commercial policy – the portion of medical allowed costs subject to a broad or narrow PA program, by benefit category, expressed as both PMPM amounts and percentages of total allowed costs ($500.57). We sort PA categories by largest to smallest PMPM cost in column (1).

From Figure 3, note the following:

- Under our Broad Scope PA scenario, almost $132 PMPM, or 26%, of authorized medical costs are subject to PAs of various types, as compared to $44 PMPM, or 9%, for the Narrow Scope PA scenario[10]. While our modeling assumes the remaining 74% or 91% of costs, (for the Broad and Narrow scenarios, respectively), would be unaffected by the elimination of PA programs, we note that prior authorizations often result in a diversion of care from one setting or treatment plan to another. Furthermore, certain services that could be subject to PA are not submitted by providers for various reasons (e.g., providers may not submit procedures unlikely to receive PA approval). This is sometimes referred to as a "sentinel" effect.

[9] Actuarial value is the average percentage of patient costs paid by the plan.

[10] These percentages, while reasonable to convey the general magnitude of medical cost typically subject to PA, are understated as they represent the cost after the effect of the PA program.

- A significant portion of costs subject to the Broad and Narrow Scope PA programs (about 20% and 8% of allowed costs, respectively) are found in just the top three PA categories. This result implies that any limitations to PA applied to these categories would have a larger impact to premiums than the remaining categories. About 70% of the Narrow Scope PA program costs are attributable to a single PA category (High-Cost Drugs in the Medical Benefit).

A similar view of prescription drug costs is shown in Figure 4.

Figure 4
Distribution of Prescription Drugs Subject to Prior Authorization by Prescription Drug Type
2019 Allowed Cost PMPM, trended to 2023

Prescription Drug Type	Allowed PMPM	Allowed %	% PA in Drug Type
Generic	$0.38	0.3%	1.6%
Brand	$5.12	3.9%	12.0%
Specialty	$47.96	36.9%	78.7%
Preventive	$0.00	0.0%	0.0%
Total Prescription Drug Cost Subject to PA	**$53.47**	**41.2%**	**41.2%**
Total Prescription Drug Cost Modeled		**$129.81**	

For prescription drugs, about 41% of authorized allowed costs are subject to PA, and nearly 80% of those costs are associated with specialty drugs. Many of the PA drugs in the specialty category represent entire therapeutic classes, while many of those in the brand category are specific drugs.

The distributions above suggest significant portions of health care costs can be subject to PA programs. Limitations to PA programs will have varying effects on health care costs depending on whether they are applied to all services or targeted to specific service categories. For example, the removal of PA requirements for medical or prescription drug costs that are currently heavily managed under a PA program (such as surgeries or specialty drugs) will have a greater impact on overall costs than eliminating PA programs on lower cost categories of care (such as generic drugs).

In the next section, we break down the impacts of PA programs on total allowed costs by separating costs into paid benefit expenses and member cost sharing.

IV. RANGE OF IMPACTS TO PREMIUMS AND MEMBER COST SHARING

To measure the potential impact on premiums due to the removal of broadly or narrowly scoped PA programs, we estimate the paid benefit expense (i.e., the portion of allowed claims for which the payer is liable) for a composite, nationwide commercial comprehensive major medical policy with an average actuarial value of 85% and standard demographics (average age of 45). Our analysis is based on 2019 data from Milliman's proprietary databases, trended to 2023 cost levels.

Figure 5 below summarizes the portion of medical and pharmacy paid benefit expenses subject to PA under a representative Broad Scope PA program. The impact of eliminating a PA program will depend not only on the breadth of services subject to the program, but also on how strictly the program is administered for the given set of services. Accordingly, we provide three scenarios of effectiveness in columns (2) through (4) illustrating the additional benefit expense that could emerge if the PA program is suspended.

We define "effectiveness" as the net impact on claims costs of a series of downstream or related events that may accompany the primary impact of a service or prescription drug PA review. Overall effectiveness can vary from payer to payer, even, when the scope of services is similar, due the resources and rigor applied to the process internally. However, public research on PA programs is generally focused on denial rates, so we used denial rates reported in several research papers as a proxy to help set a reasonable estimate for program effectiveness. We recognize that several, related aspects of PA will influence ultimate costs. These aspects include decreased administrative costs related to PA for both provider and payer, sentinel effects, and substitute or alternate paths of care. We discuss these in more detail in the "Considerations" section below. Rather than attempting to consider each of these impacts explicitly, we broadly consider these effects by using ranges around our best estimates of program effectiveness.

We derive the mid-range estimates for medical PA and pharmacy PA effectiveness from a literature review of PA denial rates – please see Appendix C for detail on the studies used to arrive at these estimates. The ranges around the mid-range estimates for both medical and pharmacy are based on our judgement as to the potential variability across broadly and narrowly scoped programs. In general, we find that PA program rules related to medical procedures have ultimate (post-appeal) effectiveness lower than pharmacy programs (for example, mid-range denial rates of 10% for medical PA versus 20% for pharmacy).

Since PA is a common industry practice, the claims data utilized inherently contains the effects of these programs.[11] Therefore, in calculating the cost impacts of eliminating PA, we assume that PA is currently reducing costs covered by a stated percentage. Therefore, in Figure 5, we calculate values in columns (2) through (4) by first grossing up the portion of benefit expense subject to PA (in column (1)) by a factor of 1 less the effectiveness (i.e., for an effectiveness of 20%, divide column (1) by 1-.20 = .80) and then subtracting the original portion subject to PA in column (1). Thus, for a 20% effectiveness scenario, the additional cost associated with eliminating the PA program would make up 20% of total costs for that category (inclusive of the added services).

[11] The data also inherently contains the additional but unknown impact of suppression of submitted services due to the sentinel effect mentioned above. For additional discussion of sentinel effects and other key considerations and limitations of the data, see the "Considerations" section below.

Figure 5
Premium Impact Range of Eliminating PA
Applied to Broad Scope PA
(Dollar amounts stated on PMPM basis, trended to 2023)

		Paid Benefit	Additional Benefit Expense		
		(1)	(2)	(3)	(4)
		Portion Subject to PA	PA 20% Effectiveness	PA 10% Effectiveness	PA 5% Effectiveness
Medical	Inpatient and Outpatient Surgeries	$33.06	$8.26	$3.67	$1.74
	High-Cost Drugs in the Medical Benefit	$33.79	$8.45	$3.75	$1.78
	Radiological Services	$22.65	$5.66	$2.52	$1.19
	Physical / Occupational / Speech Therapy	$7.51	$1.88	$0.83	$0.40
	Ancillary / Additional Services	$4.10	$1.03	$0.46	$0.22
	Cardiovascular Services	$4.14	$1.04	$0.46	$0.22
	DME / Prosthetics / Medical Supplies	$3.70	$0.93	$0.41	$0.19
	Pathology / Lab	$1.13	$0.28	$0.13	$0.06
		Portion Subject to PA	**PA 30% Effectiveness**	**PA 20% Effectiveness**	**PA 10% Effectiveness**
Pharmacy	Generic	$0.32	$0.14	$0.08	$0.04
	Preferred Brand	$4.89	$2.10	$1.22	$0.54
	Specialty	$46.21	$19.81	$11.55	$5.13
	Preventive	$0.00	$0.00	$0.00	$0.00
(a)	Benefit Expense subject to PA	$161.51	$161.51	$161.51	$161.51
(b)	Additional Benefit Expense if PA Eliminated		$49.56	$25.09	$11.51
(c)	Benefit Expense not subject to PA	$360.66	$360.66	$360.66	$360.66
(d) = (a) +(b)+(c)	Total Benefit Expense	$522.17	$571.73	$547.25	$533.67
(e) = (d) / .85	Estimated Premium	$614.31	$672.62	$643.83	$627.85
	Premium Increase PA Removed ($)		$58.31	$29.52	$13.54
	Premium Increase PA Removed (%)		9.5%	4.8%	2.2%

Figure 5 illustrates potential increases to premium ranging from a high of $58.31 PMPM, or 9.5%, to $13.54 PMPM, or 2.2%. As noted, Figure 5 uses the Broad PA program definition. Appendix A shows the impacts if the Narrow PA program is modeled.

The actual impact of removing a PA program will vary considerably among payers. Each payer's definition of services covered by their PA program will be unique, as will be the effectiveness of their specific program. Even within a payer, it is possible that their definition of PA services and the stringency of their protocols may vary for each service category, line of business, or even employer group. Our scenarios show a range of possible impacts, but do not represent all possible combinations. Reviewing the results from Figure 5 and Appendix A (Figure 8) yields premium increases ranging from 9.5% down to 1.5%.

Figure 6 shows the same analysis for the Broad Scope program applied to the member cost sharing component of allowed costs.

Figure 6
Member Cost Sharing Impact Range of Eliminating PA
Applied to Broad Scope PA
(Dollar amounts stated on PMPM basis, trended to 2023)

		Cost Sharing	Additional Cost Sharing		
		(1)	(2)	(3)	(4)
		Portion Subject to PA	PA 20% Effectiveness	PA 10% Effectiveness	PA 5% Effectiveness
Medical	Inpatient and Outpatient Surgeries	$4.52	$1.13	$0.50	$0.24
	High-Cost Drugs in the Medical Benefit	$1.05	$0.26	$0.12	$0.06
	Radiological Services	$4.63	$1.16	$0.51	$0.24
	Physical / Occupational / Speech Therapy	$2.56	$0.64	$0.28	$0.13
	Ancillary / Additional Services	$1.50	$0.38	$0.17	$0.08
	Cardiovascular Services	$0.78	$0.20	$0.09	$0.04
	DME / Prosthetics / Medical Supplies	$0.47	$0.12	$0.05	$0.02
	Pathology / Lab	$0.38	$0.10	$0.04	$0.02
		Portion Subject to PA	**PA 30% Effectiveness**	**PA 20% Effectiveness**	**PA 10% Effectiveness**
Pharmacy	Generic	$0.06	$0.02	$0.01	$0.01
	Preferred Brand	$0.24	$0.10	$0.06	$0.03
	Specialty	$1.76	$0.75	$0.44	$0.20
	Preventive	$0.00	$0.00	$0.00	$0.00
(a)	Cost Sharing subject to PA	$17.95	$17.95	$17.95	$17.95
(b)	Additional Cost Sharing if PA Removed		$4.86	$2.28	$1.07
(c)	Cost Sharing not subject to PA	$68.56	$68.56	$68.56	$68.56
(d) = (a) +(b)+(c)	Total Cost Sharing	$86.51	$91.37	$88.79	$87.58
	Increase in Cost Sharing if PA Removed ($)		$4.86	$2.28	$1.07
	Increase in Cost Sharing if PA Removed (%)		5.6%	2.6%	1.2%

Note: We use the simplifying assumption that the impact of eliminating PA is proportional for paid claims and patient cost-sharing. We recognize that due to non-linear plan design dynamics (e.g., member cost sharing falls to $0 above the maximum out of pocket limit), paid claims and cost sharing will not exhibit the same trend if PA elimination increases utilization. We expect the difference in trend to be immaterial for this analysis and does not change overall conclusions.

Member cost sharing impacts reflect the lower proportion of costs paid by members, typically due to out-of-pocket maximums in the benefit plans. Appendix B (Figure 9) contains results for the Narrow Scope program. Combining with Figure 6, the full range of member cost sharing impacts range from 5.6% increase to 0.4% increase.

To further illustrate how PA affects member cost sharing, we develop Figure 7 (combining information from Figures 3 and 4 with Figure 6) to summarize the relationship between:

a. The allowed costs subject to PA as a percentage of total medical allowed costs (columns (1) and (4)).
b. The member cost sharing subject to PA as a percentage of total cost sharing (columns (2) and (5)).

The ratio of these measures gives the relative cost sharing of services subject to PA by category (columns (3) and (6)).

Figure 7
Allowed and Cost Sharing Claims Subject to Prior Authorization as a Percent of Total Allowed Claims
(Ordered by Broad Scope allowed cost as percentage of total allowed)

	Broad Scope			Narrow Scope		
	(1)	(2)	(3)	(4)	(5)	(6)
Prior Authorization Category	**Allowed**	**Cost Sharing**	**CS / Allowed**	**Allowed**	**Cost Sharing**	**CS / Allowed**
Inpatient and Outpatient Surgeries	7.8%	0.9%	11.6%	0.5%	0.0%	9.3%
High-Cost Drugs in the Medical Benefit	7.4%	0.2%	2.8%	6.0%	0.2%	3.2%
Radiological Services	5.6%	0.9%	16.4%	0.9%	0.0%	1.4%
Physical / Occupational / Speech Therapies	2.1%	0.5%	24.5%	0.1%	0.0%	26.6%
Ancillary / Additional Services	1.1%	0.3%	26.3%	0.8%	0.2%	29.3%
Cardiovascular Services	1.0%	0.2%	15.2%	0.2%	0.0%	3.0%
DME/Prosthetics / Medical Supplies	0.9%	0.1%	10.7%	0.2%	0.0%	20.4%
Pathology / Lab	0.3%	0.1%	24.8%	0.1%	0.0%	12.9%
Total Medical Subject to PAs	**26.3%**	**3.2%**	**12.1%**	**8.8%**	**0.6%**	**6.6%**
Total Prescription Drug Subject to PAs	**41.2%**	**1.6%**	**3.8%**	**41.2%**	**1.6%**	**3.8%**

Note: Our literature review suggests a similar scope of payer pharmacy PA programs. Therefore, we use a single scope for pharmacy claims.

Figure 7 illustrates how the elimination of PA programs can affect premiums and member cost sharing differently. For example, High-Cost Drugs in the medical benefit represents a significant portion of the benefit expense typically subject to PA. Yet the member cost sharing as a percentage of allowed costs on this benefit category is much lower than average allowed costs shown in columns (3) and (6) (roughly 3% on average for High-Cost Drugs in the medical benefit compared to Total Medical averages for Broad and Narrow scoped programs of about 12% and 7%, respectively). This relationship implies that removing PA requirements on this category would produce a greater percentage impact on premiums than on member cost sharing. Conversely, where member cost sharing as a percentage of allowed costs is above average (for example 24.5% and 26.6% of allowed costs shown in columns (3) and (6) for Physical / Operational / Speech Therapies), this relationship implies that removing PA requirements on this category would produce a greater percentage impact on member cost sharing than on premiums.

V. CONSIDERATIONS

The information presented above estimates costs associated with prior authorizations based on variations in the scope of services subject to PA and the stringency of the PA program requirements. However, the illustrations above reflect simplified examples. Calculating precise impacts to changes in PA programs can be challenging for various reasons that we consider below.

KEY CONSIDERATIONS

Net Savings

Prior authorization often results in substituting one set of services for another. Examples of this include physical therapy in lieu of back surgery, a lower cost imaging in place of higher cost imaging, or the use of a lower cost, therapeutically similar prescription drug first before going to a more expensive one (otherwise known as step therapy). Thus, a limitation or elimination of a particular PA rule may not result in an increase in claims for the full cost of that service, to the extent a lower cost service might otherwise have been utilized. It is outside the scope of this analysis to account directly for all of the various situations where a PA rule achieves a net savings as opposed to a full savings. Because our modeling uses denial rates (which do not account for the net savings effect), impacts shown in our analysis could be overstated. However, please see further discussion below for other offsetting effects to this possible overstatement.

Payer and Provider Administrative Costs

PA programs have administrative costs associated with them that could be reduced if a smaller scope of services is considered under the program. Therefore, any increase in claim costs associated with eliminating PA programs is likely offset with at least some administrative expense savings. In certain cases, multiple departments may be involved in doing some form of PA or have some related cost to it (e.g., medical personnel versus IT staff). Likewise, provider costs for administering their side of the PA process would decrease, either improving financial performance for providers or serving to reduce physician compensation / fee schedules. If the latter were the case, there would be an additional net savings. Our analysis does not account for either payer or provider administrative costs associated with PA, therefore impacts on premiums in this analysis could be overstated.

Sentinel Effects

A sentinel effect occurs when the requirement to request a prior authorization prevents the provider from submitting the request. For example, the sentinel effect may happen when the provider expects the request will not meet the payer's criteria and thus the provider perceives the submission as wasted effort. When a PA is removed, there may be a period when utilization of a particular service might stay at previous levels as providers have become accustomed to a lower level of utilization. After some time, utilization may begin to increase significantly as providers begin to submit more claims that they previously would not have, knowing that they no longer will be denied. Our estimates do not account for sentinel effects, and therefore could be understated, all else equal. We note that any understatement of the impact of PA elimination in our analysis due to sentinel effects is at least partly offset by both the administrative costs and the net savings dynamics discussed above. Due to the complexity of these relationships, modeling them quantitatively is outside the scope of this current analysis.

OTHER CONSIDERATIONS

Purpose of Prior Authorizations

In our experience with payer clients, we note multiple purposes for the use of PA. Most noted the need for medical necessity review, mitigating the overuse or misuse of services, intervening with alternate treatment paths that are either more effective or equally effective but lower cost, and ensuring safety controls. Depending on the reason for the implementation of a PA rule and the nature of the limitation on the use of PA, the impact to premiums could vary. For example, if a blanket prohibition on PA was required on J-coded drugs, the impact would be substantial, as these drugs are very expensive on a per case basis. On the other hand, limitations on PA related to physical therapy may be far less impactful, not simply because it is cheaper per service, but also because the nature of PA as it relates to physical therapy is typically only regarding number of services or length of treatment, not a wholesale denial.

Value-Based Care Impacts

Impacts on the limitation of PA might be lower now than they might have otherwise been prior to the advent of value-based care and providers being at risk for utilization. Incentives provided under risk-based contracts might reduce the incentive to over-utilize services. However, this is heavily dependent, at a minimum, on the nature of the risk-based contract and the incentives (or disincentives) involved. In some cases, the narrower PA lists we observed for some payers may be linked to situations where they have risk-based contracts with providers shifting the responsibility for utilization management onto the provider.

VI. METHODOLOGY

We researched prior authorization code lists for over a dozen nationwide or regional insurers and several Blue Cross and / or Blue Shield plans. We selected six of those based on the robustness of the available code sets. We compiled the list of HCPCs and CPTs for each payers' PA program from available public documents. We did not attempt to apply any special limitations related to the application of particular codes detailed in the documents, nor did we attempt to replicate the adjudication of the payers' PA programs.

We compiled code counts by prior authorization category (DME, Surgery etc.) to ascertain the types of care that had the most limitations applied to them. We used the volume of codes by category to build each of the "Broad Scope" and "Narrow Scope." More specifically, for the Broad Scope grouping we selected code sets from two to four of the payers with the most codes in each category, with the selection of payers varying by category. The final list of codes in the Broad grouping for each category represented the union of the code sets of all the payers selected. The Narrow group was made up of any payer code sets not selected for the Broad category.

For prescription drugs, we used the formulary information published by CMS for payers participating on the federal exchanges. We summarized the number of payers that applied PA to each prescription drug and determined the percentage of payers that apply PA in each case. We selected the prescription drugs where about 90% of the payers apply PA and then evaluated the distribution of PA application within that drug's therapeutic class. If the entire class was generally subject to PA, we defined the PA criteria at the class level. If primarily specific drugs within a therapeutic class were subject to PA, we limited the PA description to that subset of drugs.

We then applied the selected code sets for each grouping to a proprietary Milliman database that consists of over 100 million commercial lives. We summarized experience from a nationwide sample of commercial lives covered by a typical major medical policy in 2019, and we trended the claim amounts to 2023 cost levels using trend guidance from the 2022 Milliman *Health Cost Guidelines*™. We included a small but material sample of individual market experience, and we excluded Medicare eligible members from this analysis.

For US annual dollar estimates of costs, we combined the PMPM cost estimates with data retrieved from Kaiser Family Foundation on enrollment in commercial health plans for 2021. As proxy for increases in enrollment in this segment, we use the estimated population growth for two years to arrive at a 2023 estimate.

Sources:

1. Commercial Enrollment: https://www.kff.org/other/state-indicator/total-population/?dataView=1&currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

2. Population Growth: https://worldpopulationreview.com/countries/united-states-population

VII. CAVEATS

The report is intended to help quantify the potential range of impacts to health insurance premiums of eliminating insurance payer prior authorization programs. Other uses may be inappropriate. The results in this report represent estimates and actual results for any given payer could vary significantly. The estimates are intended to provide a framework in which to discuss potential impacts of proposed legislation or regulation of PA practices. It is not intended to provide pricing impacts.

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We relied on certain public information taken from payer websites and CMS, and on claims data from Milliman's Consolidated HCG Sources Database. This information was taken as given and we accepted it without audit. To the extent the data and information relied upon is not accurate, or is not complete, the values and conclusions provided in this report may likewise be inaccurate or incomplete.

Models used in the preparation of our analysis were applied consistently with their intended use. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP). The models, including all input, calculations, and output may not be appropriate for any other purpose. Where we relied on models developed by others, we have made a reasonable effort to understand the intended purpose, general operation, dependencies, and sensitivities of those models. We relied on input, review, and validation by other experts in the development of our models.

The results of this report are technical in nature and are dependent upon specific assumptions and methods. No party should rely on these results without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals.

Fritz Busch and Stacey Muller are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The terms of Milliman's work order with BCBSA #18939 apply to this report and its use.

APPENDIX A

Appendix A
Figure 8
Premium Impact Range of Eliminating PA
Applied to Narrow Scope PA
(Dollar amounts stated on PMPM basis, trended to 2023)

			Additional Benefit Expense		
		(1)	(2)	(3)	(4)
		Portion Subject to PA	PA 20% Effectiveness	PA 10% Effectiveness	5% Effectiveness
Medical	Inpatient and Outpatient Surgeries	$2.02	$0.51	$0.22	$0.11
	High-Cost Drugs in the Medical Benefit	$27.23	$6.81	$3.03	$1.43
	Radiological Services	$0.89	$0.22	$0.10	$0.05
	Physical / Occupational / Speech Therapy	$2.90	$0.72	$0.32	$0.15
	Ancillary / Additional Services	$0.24	$0.06	$0.03	$0.01
	Cardiovascular Services	$4.08	$1.02	$0.45	$0.21
	DME / Prosthetics / Medical Supplies	$0.36	$0.09	$0.04	$0.02
	Pathology / Lab	$0.93	$0.23	$0.10	$0.05
		Portion Subject to PA	PA 30% Effectiveness	PA 20% Effectiveness	10% Effectiveness
Pharmacy	Generic	$0.32	$0.14	$0.08	$0.04
	Preferred Brand	$4.89	$2.10	$1.22	$0.54
	Specialty	$46.21	$19.81	$11.55	$5.13
	Preventive	$0.00	$0.00	$0.00	$0.00
(a)	Benefit Expense subject to PA	$90.08	$90.08	$90.08	$90.08
(b)	Additional Benefit Expense if PA Eliminated		$31.70	$17.15	$7.75
(c)	Benefit Expense not subject to PA	$432.09	$432.09	$432.09	$432.09
(d) = (a) +(b)+(c)	Total Benefit Expense	$522.17	$553.87	$539.32	$529.91
(e) = (d) / .85	Estimated Premium	$614.31	$651.61	$634.49	$623.43
	Premium Increase PA Removed ($)		$37.30	$20.18	$9.12
	Premium Increase PA Removed (%)		6.1%	3.3%	1.5%

APPENDIX B

Appendix B
Figure 9
Member Cost Sharing Impact Range of Eliminating PA Applied to Narrow Scope PA
(Dollar amounts stated on PMPM basis, trended to 2023)

			Additional Cost Sharing		
		(1)	(2)	(3)	(4)
		Portion Subject to PA	PA 20% Effective	PA 10% Effective	PA 5% Effective
Medical	Inpatient and Outpatient Surgeries	$0.21	$0.05	$0.02	$0.01
	High Cost Drugs in the Medical Benefit	$0.95	$0.24	$0.11	$0.05
	Radiological Services	$0.06	$0.02	$0.01	$0.00
	Physical / Occupational / Speech Therapy	$0.13	$0.03	$0.01	$0.01
	Ancillary / Additional Services	$1.24	$0.31	$0.14	$0.07
	Cardiovascular Services	$0.03	$0.01	$0.00	$0.00
	DME / Prosthetics / Medical Supplies	$0.24	$0.06	$0.03	$0.01
	Pathology / Lab	$0.04	$0.01	$0.00	$0.00
			PA 30% Effective	PA 20% Effective	10% Effective
Pharmacy	Generic	$0.06	$0.02	$0.01	$0.01
	Preferred Brand	$0.24	$0.10	$0.06	$0.03
	Specialty	$1.76	$0.75	$0.44	$0.20
	Preventive	$0.00	$0.00	$0.00	$0.00
(a)	Cost Sharing subject to PA	$4.96	$4.96	$4.96	$4.96
(b)	Additional Cost Sharing if PA Eliminated		$1.61	$0.84	$0.38
(c)	Cost Sharing not subject to PA	$81.55	$81.55	$81.55	$81.55
(d) = (a) +(b)+(c)	Total Cost Sharing	$86.51	$88.12	$87.35	$86.89
	Increase in Cost Sharing if PA Removed ($)		$1.61	$0.84	$0.38
	Increase in Cost Sharing if PA Removed (%)		1.9%	1.0%	0.4%

APPENDIX C

Appendix C
Figure 1
Blue Cross Blue Shield Association
Studies Used for Estimating Pharmacy PA Program Denial Rates

Study:	Link:	Denial Rate Estimate:
PCSK9 Inhibitors	https://jamanetwork.com/journals/jamacardiology/article-abstract/2654960	0.5280
Type 2 Diabetes Medications	https://pubmed.ncbi.nlm.nih.gov/23697475/	0.4309
Impact of Pharmacy Intervention	https://pubmed.ncbi.nlm.nih.gov/31103568/	0.3610
Computerized PA	https://pubmed.ncbi.nlm.nih.gov/23475736/	0.2700
Complex Dermatologic Conditions	https://pubmed.ncbi.nlm.nih.gov/32622138/	0.2600
Impact of Pharmacy Intervention	https://pubmed.ncbi.nlm.nih.gov/31103568/	0.1940
Proton Radiation Therapy	https://pubmed.ncbi.nlm.nih.gov/30557675/	0.1287
PA for Specialty Medications in Urban areas	https://pubmed.ncbi.nlm.nih.gov/27440624/	0.1230
Pharmacy Technician-based PA	https://pubmed.ncbi.nlm.nih.gov/33771445/	0.1140
Computerized PA	https://pubmed.ncbi.nlm.nih.gov/23475736/	0.0700
Infusable Medications	https://pubmed.ncbi.nlm.nih.gov/31507077/	0.0400
Breast Oncology	https://pubmed.ncbi.nlm.nih.gov/28245148/	0.0250
Dalfampridine PA Program	https://pubmed.ncbi.nlm.nih.gov/23383704/	0.0170
Pediatric Hematology / Oncology Medications	https://pubmed.ncbi.nlm.nih.gov/28436209/	0.0150
Child Antipsychotics	https://pubmed.ncbi.nlm.nih.gov/32599007/	0.0000
Average		**0.1718**

Appendix C
Figure 2
Blue Cross Blue Shield Association
Studies Used for Estimating Medical PA Program Denial Rates

Study:	Link:	Denial Rate Estimate:
Large-Volume Proton Therapy Center	https://pubmed.ncbi.nlm.nih.gov/32639929/	0.2600
Gynecologic Oncology	https://pubmed.ncbi.nlm.nih.gov/36244827/	0.2100
Genetic Testing	https://pubmed.ncbi.nlm.nih.gov/34939253/	0.2100
Urology	https://pubmed.ncbi.nlm.nih.gov/35961563/	0.1180
Cytoreductive surgery	https://pubmed.ncbi.nlm.nih.gov/36112250/	0.0975
Elective Superficial Venous Procedures	https://pubmed.ncbi.nlm.nih.gov/31859243/	0.0610
Elective Surgeries	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9013228/	0.0468
Utilization Services for Low Back Pain	https://pubmed.ncbi.nlm.nih.gov/26641851/	0.0319
Neurosurgery	https://thejns.org/view/journals/j-neurosurg/127/2/article-p332.xml	0.0200
Pediatric Tonsil Surgery	https://pubmed.ncbi.nlm.nih.gov/33170763/	0.0150
Government and Private Policies on Medical Necessity (1)	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9465897/	0.0140
Government and Private Policies on Medical Necessity (2)	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9465897/	0.0068
Average		**0.091**

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