MILLIMAN WHITE PAPER

A different approach to collect patient deductibles and coinsurance—can it increase provider revenues and improve patient/member satisfaction?

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Milliman

The process for paying a commercial medical insurance claim, from billing to collecting the patient's share, is complicated, expensive, and a source of both provider and patient abrasion. How can this situation be improved?

Patients have many transactions with their health plan and providers. The billing and collection process for patient out-of-pocket amounts owed can be confusing and frustrating for patients, and it can lead to patient's bills not being fully paid even though patients are financially obligated to pay their share of the providers' negotiated fees through their deductible and coinsurance up to their benefit plan's maximum out-of-pocket amount. This situation often leaves providers with less revenue than the contractual amounts they agreed upon with the health plan. These patient revenue shortfalls occur despite the significant effort and expense providers put into collections.

ECHO Health offers a payment management solution called Simplicity that attempts to streamline provider efforts to collect patient out-of-pocket amounts. ECHO engaged Milliman to research current healthcare payment and collections processes, and to evaluate the feasibility of the Simplicity program.

This whitepaper describes challenges that affect patients, providers, and health plans under the current medical billing paradigm, describes Milliman's review of the ECHO Health Simplicity program, and discusses how the Simplicity program differs from other industry approaches that address some of these challenges. It is important to note that Milliman does not endorse third party solutions. The data and information communicated in this paper are based on the materials researched by Milliman and our review of results from the assumptions and financial scenarios that we analyzed while evaluating the feasibility of the Simplicity program. Other programs or the readers' experience with the topics presented and discussed may vary. Readers should consider differences in assumptions and other variables from their actual experience as well as their potential impact on their own results, which may vary from the results presented in this paper.

A financial challenge for both provider and patient

Even the best health benefit coverage includes some amount of patient cost sharing through deductibles and copayments/ coinsurance. Collecting these amounts by providers from patients can be very time consuming and challenging, and often results in only partial collections. This situation has only grown in complexity and difficulty over time as a result of the increase in patient deductibles and coinsurance amounts over the last decade.[1,2] Providers often do not collect all of what is owed by patients, and as those amounts grow, the challenge of collecting them increases, lowering the realizable economic value of the contractual rates that providers negotiate with payers.

THE PROVIDER EXPERIENCE

Milliman estimates that the average uncollected patient responsibility, plus the expense to collect it, is around 9% of a provider's anticipated revenue from commercial health insurance and employer sponsored health plans ("payers") and their members. This means that an average provider will only receive 91% of their negotiated contractual fees with payers because they cannot collect the patient's portion of the total.

This revenue shortfall adds to the financial friction that already exists between providers and payers. To meet their financial

[1] The deductible and coinsurance are often referred to as the "patient responsibility" or the patient's "cost share". We will use these terms interchangeably throughout this paper.

[2] Per the Kaiser Family Foundation's Employer Health Benefits 2023 Annual Survey, the proportion of enrollment for covered workers in HDHPs (with savings options) grew from 20% to 29% from 2013 to 2023. During that same time, annual deductibles for families (with aggregate structures) increased for PPOs from $1,854 to $2,979 and HDHPs from $4,079 to $4,909, and the maximum-out-of-pocket for covered workers grew substantially during that time. (Claxton, Matthew, Winger, & Wager, 2023) The federal limits on maximum-out-of-pockets for families increased from $18,200 to $18,900 from 2023 to 2024, and limits for HDHPs increased from $15,000 to $16,100. (healthinsurance.org glossary for "out-of-pocket maximum")

objectives, providers often try to negotiate higher fees from commercial health insurers to offset the lower fees they receive from Medicare and Medicaid programs.[3] If deductible and coinsurance levels under commercial insurance continue to grow, and if provider collection rates do not improve, then providers will yield less revenue from commercial health plans. Because providers typically cannot negotiate higher fees for most Medicare and Medicaid patients, to offset this reduction in revenue, they may ask commercial payers for higher fee increases to make up the difference. This situation, in theory, would increase payer costs and put pressure on payers to increase premiums, which will, in turn, drive up employer group health plan sponsor's costs.

THE PATIENT BILLING EXPERIENCE

The consumer experience for a patient or health plan member in the current insurance claim payment and patient responsibility collections process is, to say the least, challenging. When a member needs care and becomes a patient, they become part of the financial transactional process between their healthcare providers and their provider of health benefits coverage (e.g., their employer, health insurer, Medicare, or Medicaid).

After a patient visits a doctor or goes to the hospital, they will receive bills from each healthcare provider, which may include bills from doctors and hospitals and other types of providers such as a reference laboratory, pharmacy, or diagnostic imaging center. Each of these providers submits a claim for payment to the payer. The payer processes each claim and generates two information summaries: an explanation of benefits (EOB) for the patient and an explanation of payment to the provider called the remittance advice (RA). The EOB, which goes to the member, explains what the payer is paying the provider for the claim and what the patient owes the provider for that claim (i.e., the "patient's responsibility). The RA, which goes to the provider, explains how the claim was adjudicated and how much was/will be paid for the claim and the patient's responsibility amount. These information summaries – the EOB and RA – are the formal documentation for the member and the provider of what the health plan paid and what amount is owed to the provider from the patient.

This should be relatively straightforward in what is otherwise a complicated administrative system, but often is still confusing for the member who may be juggling dozens of bills and EOBs at any given time, each confusingly showing varying amounts and using insurance jargon and poor explanations.

Clearly, this is not an ideal situation for a typical patient, and it is an even poorer experience for extremely ill patients who may be visiting many doctors, hospitals, and other provider types over an extended period of time.

A SUBOPTIMAL STATUS QUO

In addition to provider revenue shortfalls from uncollected patient amounts and patients dealing with administrative complexity, the current system adds expenses and takes a patient's personal time as well as the provider staff's time to sort out how much a patient should be paying and what the provider needs to collect. All of this can inhibit access to healthcare services and negatively affect the provider-patient relationship.

Research on Current Approaches

As with most things in the U.S. healthcare system, lasting improvements and solutions to administrative challenges require engagement and coordination with many stakeholders and an emphasis on long-term value for all parties.

Our research identified important considerations for approaches that are aimed at solving the challenges associated with collecting patient responsibility amounts. We looked at past and current industry solutions, including the ECHO Health Simplicity program, and evaluated how well the various solutions address the key considerations.

CURRENT ATTEMPTS TO ADDRESS THE ISSUE

Milliman's research and analysis focused on commercial payer perspectives, although the same process challenges can affect other health insurance coverages such as Medicare Advantage.

It is important to note that we did not identify any broad-based approaches that have comprehensively addressed the key challenges described above. Rather, based on our research, there are point solutions that respond to specific challenges as described below.

Provider in-house process

Providers rely on their own patient collection processes and often use collection agencies for outstanding patient receivables. Based on our research, we estimate that providers collect about 67% of their patients' receivables on average, although collection rates can vary substantially due to many factors.[4] Again, based

[3] For more information about this topic, see Commercial Reimbursement Benchmarking, June 2024, Marshall, Zhou, Anderson, and Mills, at https://www.milliman.com/en/insight/commercial-reimbursement-benchmarking-medicare-ffs-rates.

[4] The 67% patient receivables collection rate is within a range of estimated collection rate levels that we observed during our review of publicly available articles, surveys, and research reports, as well as confidential, proprietary surveys and research data (including interviews with provider managed care executives). A provider's actual average collection rates will vary due to a variety of factors, such as the size and age of their patient debts, the benefit coverage amounts of their patient population, when the provider is paid by the insurer during the patient's episode of care, and many other variables. For example, the Crowe RCA Benchmarking Analysis, "Hospital collection rates for self-pay accounts – The odds

on our research, we estimate that provider administrative expenses to collect these amounts are significant, and may average around 2.5% of a provider's fees.[5] Despite the expense and effort to collect, this results in bad debt write-offs when balances are not collected, and it hurts the provider-patient relationship.

On-site or pre-service collection

Some providers attempt to collect patient responsibility amounts at the time of service or pre-service (a customary practice with copays, which are known at the time of service). This is made possible through technologies that enable providers and payers to better coordinate before, or at the time of service, to estimate a patient's deductible and coinsurance. However, since the amounts can be high, many patients cannot pay the upfront payment and may forgo treatment because of this upfront cost.[6] Also, other patients want to wait until their insurer has processed the claim and determined their amount owed (via the EOB) before they pay the provider their patient responsibility.

Zero deductible and coinsurance benefit designs

Payers may offer plan designs that have no deductible or coinsurance (and copay only plans), which immediately solve the challenges associated with collecting the deductible and coinsurance because the full amount is collected from the insurer. However, such "first dollar coverage" plans can be much more expensive than plan designs with member out-of-pocket amounts, and thus make up only about 3% to 5% of commercial benefit plans.[7]

Laws and regulations

Prompt pay laws and transparency in coverage regulations may help to inform the patient about what is owed for a particular doctor visit soon after a service and/or before services occur. Also, the No Surprises Act and similar legislation can help patients lower their out-of-network amounts owed. These regulations can help patients plan ahead and budget for their share of the payment. The patient still needs to evaluate their budget by taking into consideration all their providers, and they still may not know all of what they owe or who it is owed to for a while after they receive services.

Laws have been enacted in some states to limit the impact medical debt has on patients' credit scores and laws like the Colorado Hospital Discounted Care Program places limitations on what hospitals can charge low-income patients and sets rules for how these patients' payment plans can be structured. These changes help patients with their credit scores and help a limited set of patients with better access to care at a more transparent cost. They do not appear to have a significant, positive impact on provider revenues.

The recently enacted Medicare Prescription Payment Plan (MPPP) puts in place a model where plan sponsors finance and collect deductible amounts from members using pharmacy products under Medicare Part D. While promising for beneficiaries and pharmacies, since this program is not yet in effect, its impact on administrative expenses and processes is unknown.

Integrated EOBs and patient portal technology

Integrated EOBs assist an individual by showing them all the services they received from different providers in a given period of time. This information helps members understand what they owe each of their providers. By better informing patients, these types of summary documents should benefit patients, providers, and payers. Our research did not analyze collection rate data for patients with and without integrated EOBs; however, organizations advertise improvements in their case studies presented on their websites.[8] Similarly, there are technology companies that advertise higher patient revenues for providers by improving patient knowledge and awareness through apps that connect them with their claims, billing and benefit information.[9] Use of integrated EOBs is not wide-scale yet, but their adoption appears to be limited due to market demand, rather than technological limitations. Although they do not help patients to fund the cost of their care, which remains an issue, integrated EOBs may help patients to pay their bills in full and on time. Also, patients may have a better experience since they will not have to keep track of all their EOBs.

Individually negotiated payment plans and other lenders

Sometimes patients negotiate payment plans with a particular hospital or doctor. Also, some patients can pay with a credit card or health savings account ("HSA"). Many seek other alternatives

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are against hospitals collecting patient balances greater than $7,500" (August 2022), reports that hospital self-pay after insurance collection rates for 2020 and 2021 were 76.0% and 54.8%, respectively. It also showed that collection rates are lower for higher patient debt amounts.

[5] The 2.5% collections administrative expense estimate is within a range of estimated collection expense levels that we calculated from assumptions selected after reviewing several publicly available articles and research reports about collection expense levels, patient debt collection agency fees, and proportions of patient debts by the size and age of the debt. A provider's actual collection expenses may vary from this estimate due to a variety of factors. For example, Valify's May 2015 article "How Much Are You Paying Your Collection Agency?" by Chris Heckler, shows ranges of collection agency fees by size and age of the patient debt. Also, the Advisory Board posted provider survey results about the full cost to collect insurance revenues as a percentage of net revenue ranging between 1.9% and 4.2% from 2011 to 2017 (see the Advisory Board's March 13, 2019 blog post titled "Cost to collect, denials, and patient collections: How does your organization stack up?").

[6] According to Kaiser Family Foundations issue brief, American's Challenges with Health Care Costs (L. Lopes, A. Montero, M. Presiado, L. Hamel, March 2024), "One in four adults say that in the past 12 months they have skipped or postponed getting health care they needed because of the cost."

[7] This range is approximate and based on data observed in the Kaiser Family Foundation Employer Health Benefits Annual Surveys from 2019 to 2022.

[8] Cedar-Novant case study from June 2022, "Novant Health adds $30+ million in net profit in 12 months with Cedar Pay".

[9] For example, Rectangle Health markets the Bridge™ Payments platform on their website: https://www.rectanglehealth.com/platform/bridge-payments-and-financing/.

like family and friends, banks, and other types of lenders.[10] There are organizations that attempt to solve the provider liquidity and patient financing issues by augmenting existing payment processes and working with one patient and provider at a time. None of these approaches are designed to fit a patient's on-going medical cost needs nor do they provide liquidity for a patient across all their providers. Also, many, like medical credit cards, charge very high interest rates, which can exacerbate patient medical debt issues.[11]

Charities and other approaches to access public funds

Charity organizations assist patients who need payment assistance. There are also health benefit technology companies that help patients to qualify and enroll in Medicaid to help them fund their bills. Providers sometimes do this on behalf of their patients too. All these types of programs are helpful to individuals but they are applied one patient or provider at a time. Not everyone qualifies for assistance and these are not applied on a wide-scale.

Organizations offering a multi-faceted approach

Beyond this, there are a few organizations that offer solutions using multiple approaches to address key problems. These vendors coordinate with payers to pay providers the combined payer and patient amounts, produce integrated EOBs for the patient, and arrange a payment plan to collect the amounts owed by the patient. They advertise that their solutions will improve providers' satisfaction with payers by increasing the amount of patient deductibles and coinsurance that in-network providers receive as well as improve the patient/member's experience. Our research for these vendors indicates they have been limited by geography or require using the vendor's limited provider network. It appears that none are used on a wide scale yet. If these approaches can expand to a broad set of providers, geographies, and/or payers, then they may become meaningful solutions to the financial and patient experience challenges.

THE ROLES OF PAYERS AS THE CENTRAL "HUB" OF HEALTHCARE TRANSACTIONS

Payers are key facilitators for their members and providers, as they are positioned as the "hub" for provider claim submission and member health benefit transactions. Payers administer their members' benefits with employers, negotiate provider networks and fees, pay providers, produce EOBs for their members and RAs for providers, provide customer service, and facilitate (or provide) other services like care coordination, disease management, wellness, and HSAs. As such, they are well positioned to participate in solutions that improve the billing and payment process.

Overview of the provider payment process

A contract between a payer and a healthcare provider defines the terms of payment for the health services provided. A payer's contracted providers are the payer's "in-network" or "participating" providers. The payer-provider contracts define the payer-provider business relationship, their operational and administrative responsibilities, and the rules and calculations to determine the amount to be paid for the service and the division of financial responsibility between the patient/member and the plan.

Specifically, payer-provider contracts define the total payment a provider is supposed to receive for their services from all sources. The payer and the provider agree in the contract what the total fee is and/or the approach to calculate it. Common names for these total fees are provider rates, fee schedules, contracted amounts, allowed amounts, or allowed charges. For brevity, we call them "fees".

Similarly, the insurance contract between a payer and a member (i.e., patient) defines services that are covered, deductibles, coinsurance amounts, and the maximum out of pocket amounts ("MOP") for a given year. The payer uses it to determine the payer's share and the patient's share of any given claim.[12]

The fee received by a provider consists of the portion paid by the payer and the portion the patient is supposed to pay. The provider contract is agnostic to the actual deductibles and coinsurance the patient is supposed to pay. From a payer-provider contractual perspective, the provider is supposed to receive all of the fee that they negotiated with the payer, but in reality, that does not always happen since some patients do not pay their portion.

Since the payer is the primary entity with visibility into the provider's fee and member's plan design, the payer is the best source of truth for the patient's responsibility for any given claim. The patient amount owed is shown in the EOB and the RA.

The way a health insurance claim is paid to providers in today's environment is complicated for all involved but payment processes for the payer's portion have been refined over the years and are fairly automated and routine.[13]

[10] According to Kaiser Family Foundations issue brief, American's Challenges with Health Care Costs (L. Lopes, A. Montero, M. Presiado, L. Hamel, March 2024), "About four in ten adults (41%) report having debt due to medical or dental bills including debts owed to credit cards, collections agencies, family and friends, banks, and other lenders to pay for their health care costs…"

[11] Consumer Financial Protection Bureau, Medical Credit Cards and Financing Plans, May 2023

[12] Copayments are another type of cost share which are collected at the time of service, and they are small; therefore, for purposes of this paper, we are mostly ignoring copayments.

[13] Our research did not focus on what providers yield from payer payments. For purposes of this paper, we assume providers receive 100% of what the payer owes.

Processes for paying the patient's portion are inefficient relative to the payer payment processes, and improvements have been mostly focused on ways for providers to collect amounts directly from patients as they are the ones who owe the funds.

A SINGLE VISIT, 12 TRANSACTIONS

A patient's doctor visit for common cold symptoms that includes a lab test and a follow up phone call involves at least ten transactions

- 2 insurance claims (doctor's and lab's)
- 2 EOBs (one for each claim) for the patient
- 2 RAs (one for each claim) for the doctor and lab
- 2 payer claim payments to the doctor and lab
- 2 bills (doctor's and lab's) are sent to the patient
- 2 patient amounts paid to the doctor and lab

12 administration steps for a routine visit

For example, a patient's doctor visit for common cold symptoms that includes a doctor visit, a lab test, and a follow up phone call to recommend bed rest will involve at minimum 12 transactions:

- Two insurance claims (the doctor's claim and the lab's claim)
- Two bills (the doctor's bill and the lab's bill) are sent to the **patient**
- Two payer claim payments (the payer separately pays the doctor and the lab)
- Two EOBs (one for each claim) are sent to the **patient** and two RAs are sent to the doctor and to the lab
- The **patient** makes two payments for the amounts they owe, one to the doctor and one to the lab.

If the patient does not make timely payments, both providers will repeat the billing process multiple times.

Patient experiences vary depending on the quantity and types of health services they utilize during the course of care. The office visit example above has 12 financial transactions with 6 directly involving the patient. In more severe situations, such as a broken leg or a cancer diagnosis, the volume of transactions is compounded due to the number and complexity of bills from doctors, hospitals, therapists, laboratories, pharmacies, and other healthcare providers.

Impacts on the patient: A confusing and complicated experience

As presented above, the process for the patient to pay their providers is often ambiguous and complicated. A patient must coordinate with the different providers' office staffs to figure out what to pay them. A patient receives numerous EOBs and bills from their payer and providers with no single source of truth for what the patient owes in total. These documents come at various times and they are not in sequence with when the health services were provided. Payers calculate the patient responsibility for each claim based on when the payer processes the claim, not when each service occurred.

All this can be hard for a patient to sort out. It creates stress during what is often a difficult time, and confusion about who or what to pay can delay a patient's payments. If a payment is delayed, then collection agencies may be involved, which is even more complicated for the patient. Overpayments may never be returned to the patient or are subject to escheatment processes where they often end up as unclaimed property for the patient/member to chase.

In addition to confusion over the right amount to pay, some patients cannot pay all their providers in the short term. It is possible that many of these individuals could pay their providers over a longer period if there was a way to consolidate and finance what they owe in total to all their providers. If a patient understands what they owe and has an easy-to-understand payment plan to meet the consolidated obligation over a period of time, then their experience may be more manageable and simplified. It is reasonable to think that by making it easier for patients to pay, they will be more apt to pay their providers and thus provider collections will increase. Many healthcare providers offer payment plans and other services to help patients pay their bills, but accessing these programs can be time consuming and thus these programs are hard to scale.

Impacts on the provider: Quantifying the impact

To better understand the scope of this issue, Milliman researched provider revenue collection rates and modeled the impact of patient responsibility collection yields on provider contractual fee yields. As mentioned, we estimated that providers have been yielding around 91% of the total contractual amount that payers and patients (combined) are supposed to pay for services covered by their health plans.

Key factors that affect this net yield include:

- The patient responsibility collection rate
- The amounts to collect
- The administrative expense for collection.

Additionally, providers lose the time value of money for the time it takes to collect from patients, and providers' resources used for collections could otherwise be used for other activities.

As mentioned earlier, Milliman estimated that the average provider receives about 67% (or two-thirds) of the patient responsibility and writes off the remaining one-third as patient bad debt. The fees received can vary substantially by patient

income, type of service or provider, benefit plan design, and by the size of the claim or patient cost sharing amount. For example, collection rates decrease as the amounts to collect increase.[14]

Milliman calculated the collection rate's impact on net yields across scenarios with different provider types and service types for small group and large group commercial populations using Milliman's Consolidated Health Sources research database ("CHSD") as the claims dataset. We observed that patient responsibility relative to fees varies by type of provider and type of service as well as by benefit plan design—all of which affect the amount to be collected from the patient.

The actuarial value ("AV") of a health benefit is the ratio of payer payments to fees. An AV describes the relative richness of a health benefit plan. Higher AVs mean the payer's share is higher and the patient's responsibility is lower. Conversely, for lower AVs, providers must collect more out-of-pocket amounts from patients.

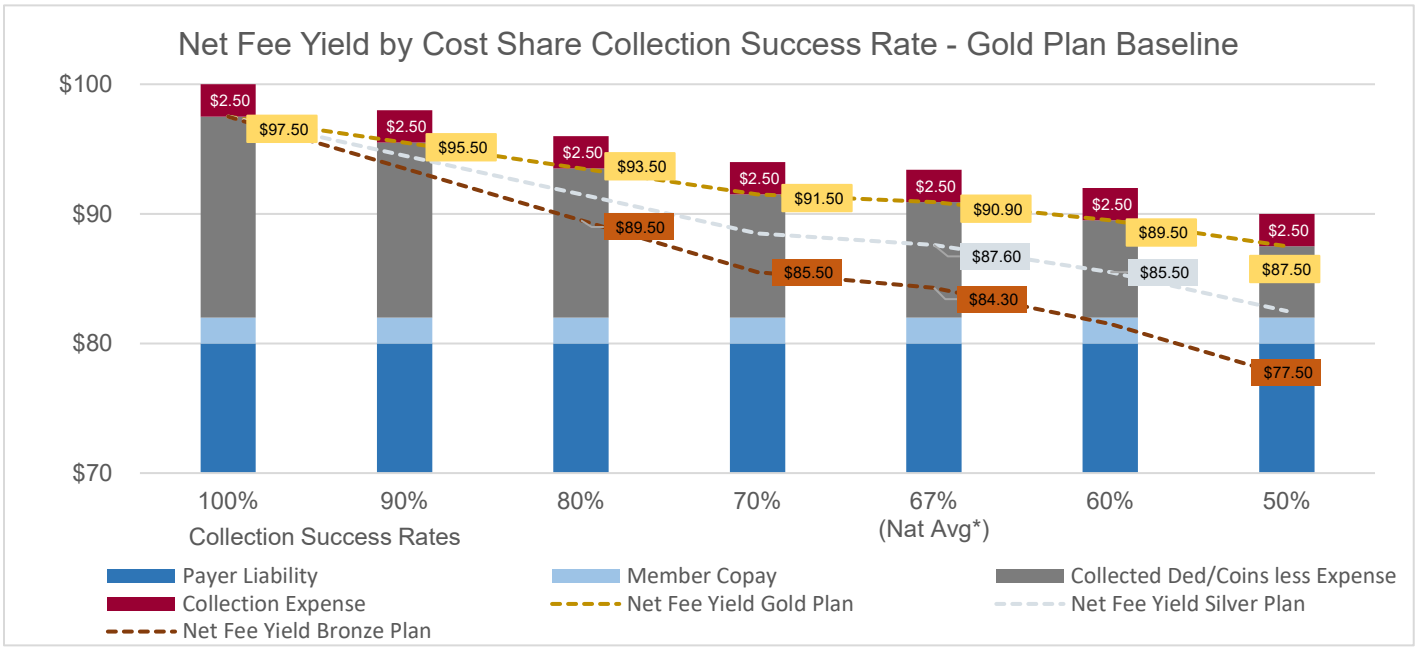
Using the CHSD, we calculated that the average AV for in-network benefits is about 80%.[15] Therefore, patient responsibility is about 20% of provider fees. If the provider collects two-thirds (67%) of the patient responsibility, then they receive 13.4% out of the 20%. By adding the other 80% of the fee from the payer's payment, we see that the provider receives 93.4% of their fee.[16]

As mentioned earlier, we estimated the average administrative and third-party expenses for providers to collect patient cost shares are around 2.5% of the fee. Subtracting the 2.5% collection expense from the 93.4% fee yield results in a 90.9% net fee yield for the provider.

Figure 1 (below) shows our results for the impact that different collection rates have on provider net fee yields relative to a contractual fee of $100 using the national average 80% AV health benefit and the collection rate of 67%.

Using this $100 claim example with the nationwide average actuarial values for payer payments, and proportional amounts for member copays, deductibles, and coinsurance, we separate the provider's $100 fee into the amounts owed by payers and patients, calculate the fee yield for varying patient cost share collection rates (100% to 50%), and then deduct the average collection expense to calculate the provider's net fee yield.

FIGURE 1: MEMBER COST SHARE COLLECTION RATE IMPACT ON PROVIDER CONTRACTUAL FEE YIELDS



[14] According to Crowe, self-pay, after insurance hospital collection rates dropped from 76.0% to 54.8% from 2020 to 2021. In 2021, when a patient's after insurance balance with a hospital was $5,000 or greater, the hospital's collection rate was 32%, and it dropped to 17% for balances greater than $7,500. (Crowe RCA Benchmarking Analysis, Hospital collection rates for self-pay accounts – The odds are against hospitals collecting patient balances greater than $7,500, August 2022)

[15] Milliman analyzed 2019 nationwide group commercial claims from the Milliman Consolidated Health Cost Guidelines Sources Database (CHSD) to estimate that the actuarial value of health plan benefits across all plan types was 83.3%, leaving 16.7% to be paid by the health plans' members. After adjusting for coverages without patient obligations (i.e., 100% actuarial value plans), the actuarial value reduces to 80.3%, leaving 19.7% to be paid by the members. These amounts are rounded for presentation purposes.

[16] The estimates assume providers collect 100% of payers' payments and member copayments. Results are based on the average impact of deductibles, coinsurance, and MOPs, using the 2019 CHSD national average commercial payer liability (i.e., actuarial value) adjusted to exclude plans with zero deductibles and zero coinsurance.

A few key observations from Figure 1 are:

- The gold dashed line tracks the change in net fee yields for varying collection rates at an 80% AV health benefit.
  - Payer Liability, Member Copay, Collected Ded/Coins less Expense levels are calculated using the 80% AV.
  - Similarly, the silver and bronze dashed lines are net fee yields for 70% AV and 60% AV, respectively.
  - The 80%, 70% and 60% AVs are intended to represent the lower end of the AV for the ACA's "Gold", "Silver", and "Bronze" benefit plan levels, respectively.
- At a 67% average collection success rate, the net fee yields relative to the $100 fee by type of plan are:
  - Gold - $90.90 or 9.1% lower
  - Silver - $87.60 or 12.4% lower
  - Bronze - $84.30 or 15.7% lower
  - Note that the lower AVs have lower net fee yields.
  - This demonstrates that lower AVs may result in less revenue to providers.
- At a 100% collection rate, the provider will receive the $100 contractual fee for Gold, Silver, and Bronze, but $2.50 is spent to collect it. So, the net fee is $97.50—2.5% lower.
- Amounts between 67% and 100% can be used to gauge fee yield improvements for higher collection rates. For example, if collection success rates increased from 67% to 80%:
  - The Gold plan net fee yield would increase by $2.60 to $93.50, a 2.9% improvement to commercial revenue.
  - The Bronze plan would increase by $5.20 to $89.50, a 6.2% improvement to commercial revenue.
  - Comparing Gold to Bronze increases, there is more upside opportunity for Bronze (the lower AV plan).
- If collection rates decrease as the amounts to collect increase, then Bronze plans will have lower collection rates than Gold plans.
  - With a 50% collection rate, Bronze yields a net fee of $77.50 or 22.5% below the provider fee.
  - At the 80% collection rate scenario for Bronze, the provider's revenue increases by $12—15.5% more.
  - Even if the Bronze collection success rates only improve to 70%, the net fee yield is $85.50—a 10.3% increase.

A key result, as exemplified for the Gold plan, is that the 2.9% increase to commercial revenue from a 67% to 80% shift in the collection success rate is a substantial upside revenue opportunity for providers. There is another 2.5% of administrative expense savings opportunity if the provider is removed from the collections process, which means there could be up to a 5.4% combined increase in commercial net income for the provider.

With this type of financial incentive for providers, they may consider alternative approaches, especially if the patient experience can simultaneously be made better.

Earlier, we discussed various approaches we reviewed in our research and we concluded that the organizations pursuing the broadest solutions may offer viable alternatives to the status quo.

Characteristics of a broad solution

Taking what we learned from that review and analysis, our industry experience, and our reviews of other similar programs' marketing materials, we identified important stakeholder considerations and several key aspects required in a solution for it to be successful.

STAKEHOLDER CONSIDERATIONS FOR A SOLUTION

Patient experience

Patients' experiences could be improved by a solution that can organize and summarize the various services and disparate patient cost shares owed into a single source and that has a means to communicate with providers about payments on behalf of the patient. The solution could make the patient cost share payments on behalf of the patient and improve affordability by facilitating a way for the patient to gradually pay their consolidated cost shares over time, without the involvement of collections agencies.

Provider experience

Providers commit significant resources and incur great expense to collect contractual fees from their patients, and the collections process can strain the patient-provider relationship. Therefore, a viable solution should increase provider net income and keep providers mostly away from collecting deductibles and coinsurance directly from their patients. This type of approach may free up provider resources to focus more on patients and improve the overall patient experience. If patients are more content, it may help to increase patient retention.[17]

Payer experience

Payers are deeply involved with the member and provider payment process. They are the original source for what amounts are owed to providers and how much patients owe, but they are currently not involved with making sure patients' amounts are actually paid. A solution involving payers may have advantages over others due to their administrative capabilities and their relationships with members, employers, and providers. A payer

[17] According to Accenture, "79% of people say ease of navigation factors are the reason for leaving their providers." Detailed reasons for leaving included difficulty of doing business with or having bad experiences with front desk or administrative staff. (Accenture, Healthcare Experience: The difference between loyalty and leaving. Loren McCaghy and Sarah Sinha, 2022.)

could benefit from a solution that reduces the number of transactions between members and providers as it may improve the member experience and have an impact on member well-being. Theoretically, this may positively affect payer relationships with employers and providers.

SEVEN KEY ASPECTS OF A COMPREHENSIVE SOLUTION

Providers, Patients and Payers all share a fundamental problem in the current health care payment model. We identified the following key aspects as critical for the success of the solution:

1. Consolidated financial statement

Improve the patient experience with a single source of truth for what the patient owes across all covered services as one consolidated financial statement.

2. Pay the patient responsibility to the provider

Increase provider net yields by paying the patient responsibility to the provider when the claim is paid and recouping the amount from the patient afterwards.

3. Financing options

Reduce friction, increase convenience, and create affordability by introducing liquidity into the health payment system to make financing options available to patients when they need it. Instead of a patient negotiating payment plans with several different providers, a patient can finance the total consolidated amount through a single entity to simplify the payment plan approach.

4. Reduce administrative complexity

Improve transactional integrity and timing, and reduce or eliminate administrative complexity and expense, by virtually eliminating the need for disparate transactions between payers, providers, and patients. Eliminating the need for providers to collect amounts directly from patients avoids the need for individual patient EOBs, bills, and collections calls/notices.

5. Simple to implement

Make the solution simple and intuitive to implement within the current administrative framework for claims payment without changes to operational procedures nor requiring payer-provider contract renegotiations to accomplish it. Payers should not need to change their claims adjudication and payment systems or processes, and providers should not need to change their patient accounting processes.

6. Scalability

The solution must be scalable to cover most or all in-network providers for a payer and standardize the process so many payers can participate in the solution without the providers experiencing substantial variation from payer to payer.

7. Long-term economic viability

Create long term economic viability such that the net costs for implementing the solution are substantially less than the increase in the net fee yield for providers and without increasing existing payer or patient liabilities.

Milliman's analysis of Simplicity

Milliman reviewed Simplicity's approach which is designed to make it easier for patients to understand their share of their providers' fees, while combining the payer payment and the patient amount owed into a single payment to the provider at the same time. It includes a way for patients to consolidate their financial responsibilities across all providers so they can pay it over time. The solution is designed to work within the current administrative framework and cost structure of the commercial health care and insurance system. The Simplicity process operates between the payer, patient, and the providers to:

- Receive a payer's EOBs and RAs during the claims payment process and summarizes them into a consolidated monthly financial statement for each member to inform the member about what they owe all their providers and what they owe in total each month.
- Pay each provider their total agreed upon fee for the payer's and patient's portions of the fee at the time each claim is paid.
- Receive member payments for the amounts paid to providers on the member's behalf and coordinate the administration of member payment plans.
- Coordinate the administration and compliance activities required for financing the overall program.
- Manage compliance with other regulations applicable to the program.

Simplicity's goal is to address the seven key aspects that we described above.

Milliman reviewed Simplicity's process and we interviewed Simplicity's leadership team. We compared Simplicity's process steps and objectives to the key aspects we described above for a comprehensive solution. If executed according to how the program was described, Simplicity's program would address the first five key aspects of a comprehensive solution.

We also developed a financial model to study the conditions required for Simplicity to achieve scalability and long-term economic viability (key aspects six and seven).

FINANCIAL MODEL

Our analysis involved building a theoretical model to measure stakeholder cashflows with and without Simplicity's impact. It calculates six years of theoretical cash flows to simulate and

measure the financial results for each stakeholder. The model simulates results for different types of providers and services, using assumption inputs for collection rates, administrative expenses, AVs and health benefit designs, fee levels, cost of capital, credit reserve levels and costs, and many insured population characteristics, including membership persistency and growth.

The model uses commercial claims and enrollment from CHSD and Milliman's research informed the key assumptions. Simplicity provided Milliman with Simplicity's administrative expense assumptions and requirements for credit reserves related to funding the patient responsibility payments to providers.

Using the model, we studied whether reasonable scenarios were feasible, and we stress tested results to identify successful conditions and points of failure for the proposed solution.

- We measured financial impacts for each stakeholder—including Simplicity and different types of entities that could finance the patient responsibility.
- Successful scenarios had at least break-even results for payers and economic gains for providers, but they require financial and operational commitments from both.[18]

Milliman's analysis demonstrated that Simplicity could increase providers' net fee yields and work in aggregate for a large commercial block of business with an average mix of benefit plan AVs when stakeholders agree to work with each other to implement the required process. As expected, the program works best in scenarios when collection rates improve enough to create positive financial returns for the stakeholders.

SIMPLICITY'S SOLUTION

Comparing Simplicity to the key aspects above, we found that Simplicity's approach starts with the first three features from above. They market that they have an easily accessible summary of all obligations owed by the patient for all the services they received. They also have a financial instrument to fund immediate payment to providers for the patient cost share amounts owed. This financing solution will increase provider cash flow and net fee yields. This should also eliminate the providers' administrative burden of billing and collections because Simplicity arranges and administrates payment plans for a patient's total obligation.

Easily accessible information summary

The first aspect, an information summary (for the single source of truth), can be solved with data and technology by collecting and summarizing the payer EOBs into a single statement that consolidates a patient's in-network claims and cost share obligations into one amount. This consolidated statement has at least two benefits:

- The consolidated financial statement by itself is an improvement over the current process and would greatly reduce administrative work for both patients and providers.
- The statement makes it easy for patients to see who they owe and what they owe for all their covered health services.

The statement is just one step in an improved approach. Without additional features, providers will still be waiting on patients to pay them or they still may not be paid by patients who cannot pay the full amount.

Adding liquidity into the payment process

The next two aspects, creating a financial instrument to add liquidity to pay the patient amounts and establish patient payment plans, will fund the patient cost shares, and make most providers' patient collection activities unnecessary. This would increase provider net yields and reduce or eliminate their collection expenses.

Clarity for the patient

With these three new approaches working in tandem, the actual amounts owed by patients will be the same. However, the total of all of the various cost sharing obligations and to whom they owe that total amount will be clearer. Patients work with the single financial entity that is funding the cost sharing amounts in order to make a single set of payments, rather than the patient figuring out how to pay multiple providers.

Increased net yields for the provider

The organized information and liquidity remove much of the administrative and financial friction that stalls patient payments to providers, which will increase net yields and improve the patient's experience.

Below, in Table 1 and Table 2, we show examples of the number of payment steps for payers, providers, and patients for a typical knee surgery in the current payment process and in the proposed improved approach.[19]

A comparison of Table 1 to Table 2 shows that there are 43 fewer total steps to pay the providers—total steps reduce from 90 to 47 (or 48% less).

- For the patient, the 15 EOBs and 15 provider bills are replaced with 1 financial statement.

[18] Actual models are more complex than described in this summary of our analysis here. For more information about the model and our analysis please contact the authors of this report.

[19] This is a simplified example. The actual number of steps may vary by type of service or provider due to case-specific circumstances (e.g., pharmacy EOBs may be in real-time or fewer or greater services may occur). This ignores other steps like communications with payer's customer service, provider office's staff or collection agencies for items like benefit inquiries or past due billing follow ups.

- The patient owes one amount to the entity who provides the financing, instead of 15 amounts across 7 different providers.
- The providers currently interact with 75 of the steps; these interactions would reduce to 30 (or 60% less) when the billing and patient collection steps are eliminated.

Although we cannot determine exactly how every provider will adjust their administrative processes when they do not have to collect amounts directly from patients, it is reasonable to think that provider collection expenses may be much lower.

TABLE 1 – KNEE SURGERY EPISODE OF CARE – CURRENT PROCESS

Visits in episode of care	Steps in the billing process: Provider sends claim to payer	Payer sends patient EOB	Payer sends RA to provider	Payer pays claims to provider	Provider bills patient	Patient pays provider	No. steps in billing process per provider
Primary care 1 visit							6
Orthopedist 3 visits	x3	x3	x3	x3	x3	x3	18
Diag. Radiology 1 visit							6
Hospital 1 visit							6
Anesthetist 1 visit							6
Pharmacy 2 visits	x2	x2	x2	x2	x2	x2	12
Therapist 6 visits	x6	x6	x6	x6	x6	x6	36
Total steps in billing process for episode of care:							90

TABLE 2 – KNEE SURGERY EPISODE OF CARE – NEW PROCESS

Visits in episode of care	Steps in the billing process: Provider sends claim to payer	Payer sends EOB/RA with payment to Simplicity	Simplicity pays provider in full	Simplicity sends patient the consolidated amount owed	Patient pays Simplicity the consolidated amount owed	No. steps in billing process per provider
Primary care 1 visit						3
Orthopedist 3 visits	x3	x3	x3			9
Diag. Radiology 1 visit						3
Hospital 1 visit						3
Anesthetist 1 visit						3
Pharmacy 2 visits	x2	x2	x2			6
Therapist 6 visits	x6	x6	x6			18
Simplicity billing system						2
Total steps in billing process for episode of care:						47

OPERATIONAL CONSIDERATIONS

With these three key aspects of the solution in place, and with the resulting higher provider net yields, the remaining steps are achievable, if the stakeholders work together to accomplish them operationally. Payers and providers would need to participate in this approach to enable this type of change within the current operational process. The new process flow could work like this:

1. The patient sees the network providers.
2. The providers submit their insurance claims to the payer through their existing process.
3. The payer processes the claims and identifies plan liabilities and patient cost share responsibility as part of the normal adjudication process and then submits the information with the payer's payment to its vendor (e.g., Simplicity).
4. The patient cost share portion of the fee is funded by a financial entity that coordinates with the vendor and the vendor pays the total fees to the providers, less any adjustments required for participation in the program.
5. The provider is made whole, in turn, eliminating the need to bill or collect the patient responsibility.
6. The patient receives one consolidated bill from the vendor for all medical services and remits a single payment through the vendor's process to pay the financial entity what is owed.

Providers will need to accept this new payment method for receiving patient cost shares (step 5) in order to reduce (or eliminate) their billing and collections activity. This will, in turn, reduce their administrative expenses, improve their cash flow and ultimately increases their net fee yields.

Payers, or vendors supporting them, will need the operational infrastructure, security, service support, and compliance expertise for these types of transactions. The service support must be excellent and there should be a deep understanding of the insurance payment administrative process and revenue cycle (e.g., they must be able to account for adjustments, duplicates, refunds, etc.).

OTHER FINANCIAL CONSIDERATIONS

When the operational aspects of this process are solved, the funding for the administrative and financial operations expenses, and for the patient cost share payments to providers must still be figured out. Milliman's model and data for measuring the impact on stakeholders for this program can be an essential part of an analysis for stakeholders to identify the specific financial terms and parameters for their arrangement.

As described earlier, the financial model for evaluating the feasibility of Simplicity allowed us to run many scenarios to test the financial impacts to the stakeholders from changing the mix of participating provider types and health services covered, membership growth and persistency levels, provider fee levels,

and plan designs/benefit levels (varying the mix across Bronze, Silver, and Gold plans). Changes to these variables affected the net benefits paid and the patient responsibilities as well as capital and reserves required to fund the overall program. We tested the financial impact and the level of collection rate success required using baseline administrative expense and cost of capital assumptions provided by Simplicity.

Below, we describe the assumptions and financial results for one example scenario that we modeled with before and after Simplicity results. It shows financial improvements for the providers and payer, as well as for the financial entity that provides the required capital and takes the credit risk for collections.

Example Scenario and Financial Model Results

1. Population: a large group with 100,000 members for a theoretical commercial employer group payer based on Milliman's CHSD large group commercial benchmark data's nationwide average population.
2. Premium, utilization, and claims: Milliman's 2019 nationwide average CHSD large group benchmark data trended to 2024 for base line average premium, utilization, and incurred claims, adjusted to represent 100,000 members.
    a. Year 1 premiums are $543 million or $452.50 PMPM.
    b. Year 1 without Simplicity allowed claims (i.e., 100% of provider fees) are $604 million or $503 PMPM.
3. In-network benefit design: a Silver PPO plan with a 76.45% AV, based on an individual deductible of $2,500, 20% coinsurance, and a maximum out-of-pocket of $6,000.
4. Simplicity-specific assumptions: we applied Simplicity's proprietary baseline administrative expense, cost of capital, and credit reserve calculation assumptions.
5. Key calculation assumptions include:
    a. Providers represent a broad network of PPO hospitals, other facility types, and professional providers, excluding retail/mail order pharmacy.
    b. Historical average collection rates across all in-network providers average 64%.
    c. Provider collection expenses average 3.5% of the provider fees for this type of plan design.
    d. The baseline trend to premiums and allowed claims from year 1 to year 5 is 7% per year.
    e. The discount rate for calculating the net present value of cash flows is 4.75%.
    f. The population stays the same for all 5 years of coverage in both the "without Simplicity" and the "with Simplicity" financial calculations.
    g. Model the cash flows for 5 years of coverage without Simplicity and with Simplicity with final payments made at the end of year 6 to account for claims runout.
6. The success criteria are that the present value of net income differences for "without Simplicity" and "with Simplicity" are positive for the payer and the providers, and the present value of the net income for the financing entity is positive.
7. Key results and assumption parameters in the model are summarized below:
    a. The net present value for the 5-year increase in net income (revenues less expenses) in millions and as a PMPM:
        i. Payer = +$7.4 M or $1.23 PMPM
        ii. Providers = $24.8 M or $4.14 PMPM
        iii. Finance entity = $ 0.9 M or $0.14 PMPM
    b. To achieve the model success criteria, key model parameters are:
        i. For these results, a "with Simplicity" collection rate of 82.25% is required. This means at least a 29.6% improvement to the "without Simplicity" collection rate is required.
        ii. Providers' collection expenses reduce from 3.5% to 0.2%, and providers accept 96.5% of the contractual fees from Simplicity. For this scenario, this reduces capital requirements and payer amounts to help fund liquidity for the program.
8. Other approaches for the financial model can include shared risk across the payers, providers, and financial entities to spread revenues to mitigate downside risk or enhance revenues for improved collection rate performance. Additionally, the model supports payer premium decreases as a way to pass collection rate performance improvements to their members.

Conclusions

A true solution must approach the problem in a holistic way with an eye toward long-term value. Although the financial process and risks may seem complex, it is worth pursuing. The status quo is a poor approach from a consumer perspective, and it seems to exacerbate the underlying cost pressures inherent in the health care system. With today's technology and industry "know how", operationalizing a solution like we have described is plausible if providers and payers can commit to it and are willing to share their knowledge and expertise with other experts who understand how to implement the financing aspects of the solution.

CAVEATS AND LIMITATIONS

ECHO Health commissioned Milliman to write this whitepaper to discuss the current industry challenges stemming from how patient deductibles and coinsurances are billed for, paid, and

collected, and to contrast alternative approaches for this process. The findings and conclusions reflect the opinion of the authors; Milliman does not endorse any product or organization. If this report is reproduced, it should be reproduced in its entirety as sections taken out of context can be misleading. Milliman does not intend to benefit any third-party recipient of its work product.

The observations and ideas presented in this paper reflect a point-in-time analysis based on the current information collected and reviewed during our research. Other content may have been updated or created since we completed our research.

The data presented in this paper is intended to illustrate how other approaches to the claims payment and patient billing process can potentially be used to improve the patient experience and provider net fee yields, and it is not to be relied upon outside of this illustrative context. The data and examples presented are only a subset of the potential scenarios and outcomes for collection rate levels and their impact on provider net fees. As such, the results of these limited comparisons should not be interpreted as indicators of any broad solution that will be successful for all situations described or not described.

The estimates included in this paper are not predictions of the future; they are estimates based on the assumptions and data analyzed at a point in time.

Throughout this analysis, Milliman relied on data and other information provided by publicly available data sources and our client's proprietary surveys. Milliman has not audited or verified this data and other information but has reviewed it for reasonableness. If the underlying data or assumptions are inaccurate or incomplete, the results may also be inaccurate or incomplete.

Models used in the preparation of our analysis were applied consistent 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).

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Adam R. Singleton, FSA, MAAA and Chris S. Tilley, FSA, MAAA are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this paper.

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