Applying Credit Card Innovations to Medical Billing

Executive Summary

The medical billing process lacks true customer service for patients. While phone lines are available for questions, patients often must assemble the pieces of the puzzle themselves: the EOB, the provider's bill and any other documentation provided. This level of customer service is not acceptable in many other industries, such as credit cards. The credit card industry has developed tools and processes to enable customers easily understand and pay their debts. This proposal seeks to apply the innovations of the credit card industry to the medical billing process.

By emulating a credit card company, insurers can better serve patients. In this proposal, the insurer takes on the role of the credit card company. Like a credit card company, which pays any vendor directly for their services, insurers reimburse providers in full. Then, the insurers provide a monthly statement of expenses that the patient needs to address. With this approach, the patient only needs to track and pay one entity, the insurer (instead of many different providers). The credit card setup is designed to ease customer concerns and enable easy payments. Why not apply this proven approach to the medical billing process?

A Transformed Patient Journey

Jane's Experience

Let's look at how a credit card-like medical billing process would impact a patient visit. In this scenario, Jane wants to visit her primary care doctor for an annual physical.

Prior to her visit, Jane contacts her insurer to get an estimate of the cost. She knows that there is an online tool to use, but she prefers to talking to people, so she calls. A customer service representative carefully explains that the average cost for an annual physical in her area (with her insurance) is $20. Jane feels pretty confident that this is a good price for visiting her doctor. She schedules an appointment with her doctor in two weeks.

As the day of her appointment nears, Jane gets nervous again. What exactly did the lady say on the phone? Was it $15 or $20? When did she have to pay it? Luckily, the insurance provider recorded the phone call and sent her a confirmation email. In the email, it states that her physical would cost $20, but that she doesn't have to pay at the office. She'll receive a statement with that cost on it. Jane breathes a sigh of relief. She can simply focus on getting through the discomfort of visiting the doctor, instead of worrying about the cost.

On the day of her appointment, Jane walks into the doctor's office. She checks in with the front desk, swiping her medical insurance card and providing id. After her appointment is complete, she checks out with the front desk. He prints off a receipt for her. The receipt shows exactly what procedures the doctor had ordered, such as blood tests and shots. Jane looks at it for a second. She doesn't remember getting a tetanus shot; Jane's arm doesn't even hurt. She asks the man at the desk about the tetanus shot on the receipt. He notes that she doesn't even have a band-aid on her arm, so he double-checks the tetanus shot order with the doctor. In 15 minutes, Jane's receipt is correct, with the tetanus shot

removed. She is happy to see that her receipt still states her estimated cost at $20.

At the end of the month, Jane receives a bill from her insurance company. The bill explains all the services that she received: the physical and blood test. She is happy to see that the tetanus shot has not been included in the list. The bill is for $20, matching both her receipt and her initial call to her insurer. Jane is happy that she completed her physical; for the price of just $20, she learned that she had high cholesterol. Now she is aware of the steps she can take to reduce her cholesterol and be healthier.

Jane's experience is drastically different from the current patient experience. Here are a few ways that her experience is different from the current procedure.

Task	Current	Jane
Get an estimate of the cost	• Call insurance provider • Check online cost estimators and compare for consistency • Confirm that the doctor is “in-network” and will be subject to in-network costs	• Call insurance provider
Prepare for the doctor	• Double-check the doctor is in-network and the cost of the physical • Double-check that the clinic accepts credit cards • Buy checks because the clinic does not accept AMEX	• Check email
At the appointment	• Pay $20 with a check	• Get receipt and make corrections • Confirm cost that she got previously
After the appointment	• Receive an EOB with a scary number on it • Panic • Get provider bill with another number on it • Worry about which one to pay	• Pay the $20 that she expected to her insurer when she receives her monthly statement.

Jane's experience was made possible by a customer service focus by the insurer. The insurer enabled her to have access to costs (her costs, not the provider's costs) throughout the entire process. This drastically improved her experience, addressing many of the patient concerns outlined in the provided report**.**

How is this process made possible?

The key technology development in this process is the cost-estimator. The insurer creates this cost estimator, so that the costs are aligned with the real insurance plan. Insurance companies have petabytes of data at their disposal. Making an algorithm to estimate costs based upon this data may be costly, but it should not be difficult. The cost-estimator is the same for the provider and the patient. Both can access it.

Material Design

There are three materials proposed in this process: the cost estimator output, the receipt and the final bill. Rather than take a whole new design approach, each material emulates a familiar standard. The cost estimator design emulates a salary calculator. The receipt looks like the one that you would receive from a grocery store. The final bill is similar to a credit card statement (see pdf). These radical new design will look familiar to most people, despite being new to the medical world.

Patient Benefits of the Credit Card Approach

The report outlined seven major concerns that patients identified. The experience described above addresses each of these concerns, to a certain extent.

Patients Don't Know What They Don't Know

The primary way to enlighten patients about the cost of services is the insurer-provided cost estimator. There is already a need for this estimator, as evidenced by the **companies** working to develop online models. Patients can input the services that they believe that they need and a cost is outputted. This basic idea reveals the costs to patients. However, it can be iterated and expanded.

Insurance companies have a huge database of services and costs. It would be easy to develop an algorithm that suggests what other procedures may be necessary. For example, if a patient wanted a physical, the algorithm can see that 40% of people that receive physicals also pay for an additional shot. This additional information (which can be constantly improved by the insurer's data) allows patients insight into both the costs of the services and what additional services may be required.

Volume of Communication

Although this process increases the volume of communication, each document is consistent. In Jane's experience, she got more paperwork. She received 3 communications: an initial quote, a receipt and a bill. This is one more than the current EOB and bill. However, Jane got all three of her communications from the same source, the insurer. More importantly, because all the communications were from the insurer, they were all consistent. Each stated the same information and cost. This process slightly increases the volume of communication, but the patient has requested and expects all the communications.

Understandability

The credit card-like process enhances understandability by emulating a process that most patients

already understand. In a typical purchase, a customer can find out prices online, go to a store to purchase the item, pay with a credit card, and be billed later. The transformed medical billing process follows this procedure. The cost can be found online. The cost online is the same as cost of the service shown on the receipt. If they decide to get more services (like buying more items at the store), the cost is still reflected on the receipt. The bill that comes at the end of the month detailing the services provided is modeled on a credit card bill. This process is more understandable because it builds on a process that most people intuitively understand.

Terminology

This process provides a terminology translator when it is needed. Patients can get definitions of services at the online cost estimator. More importantly, patients can understand what services they received due to the receipt. The receipt will spell out everything that was completed. Rather than fill the receipt with definitions, the translator is the provider's front desk. This person knows the doctor and how they describe services. The patient can use them to parse and understand the terminology. This part of the process can be iterated as well. For example, the patient could describe what happened to the front desk and this desk could align the description with doctor's services. This would eventually build a database of how the individual patient describes services. These individualized descriptions could eventually be used in place of the doctor's jargon.

Timing

In this process, the patient knows when to expect the monthly statement. The statement will be sent by the insurer at a consistent interval, so no one has to worry about when the bill will arrive.

Financial Planning

The cost-estimator and the monthly statements both allow patients to plan for their expenses. This can also be iterated and expanded. For example, like a water bill, the costs over the last few months can be shown as a bar graph. There are many opportunities to expand the financial tools provided because the insurer has all the information required.

Trust

Patient can trust consistency and transparency. In this process, patients receive multiple documents from the same entity, the insurer, and these documents show the same cost. Additionally, patients have the power to double-check (on the receipt) the services that the provider sends to the insurer. In the scenario, Jane noticed that there was a mistake and was able to fix it on the spot (before it was sent to the insurer). This process will build trust over time.

Other Benefits

While this proposal is focused on the patient experience, the provider experience is also improved. Like the patient, the provider now only has one interface, the insurer. The provider does not have to maintain an extensive billing department to track down patient non-payments. Doctors are always paid for their work by the insurer. This allows them to spend more time focused on patient outcomes, instead of

patient non-payments. This is a boon to patients in the long run.

Conclusion

By emulating the credit card process, the medical billing system can better serve patients (and doctors). Patients are able to receive the information that they need. Payments are easy to understand. Both doctors and patients interact directly with the insurer only, simplifying the lines of communication. In the long term, enabling doctors to focus on patient care and insurers to focus on patient billing can result in better patient outcomes.