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Cost of Medical Procedures

In our September 1975 issue, we covered the rise of the ambulatory surgery center as a means of keeping down costs for surgeries. We gave the cost for a tonsillectomy as between $250 and $300 including a two-day hospital stay, and the cost of an outpatient procedure at an ambulatory facility as $128. Adjusted for inflation to 2016 dollars, that’s between $1,121 and $1,345 for an inpatient tonsillectomy or $574 for an outpatient ambulatory procedure.

Costs have risen quite a bit since the 70s. According to healthcare procedure pricing website Healthcare Bluebook, the total fair price for an outpatient procedure at an ambulatory center would be $2,829 in the Washington, D.C. area. That’s $1,573 for the procedure itself, a $652 physician fee, and $604 for an anesthesiologist. That’s $2,255 more than the procedure cost in 1975 in today’s dollars, adjusted for inflation, which is 5 times the cost of what it once was in current dollars. Blue Cross Blue Shield of North Carolina estimates the average cost of a tonsillectomy at $5,442. That’s $4,097 more than the upper range for the 1975 cost, or a 4-fold cost increase.

Keeping Your Home Secure While You Travel

In a January 1970 feature on traveling safety and planning, we advised people to suspend deliveries of newspapers, milk, and laundry if they would be away for a long time, as well as keep a light or two on a timer. We warned that items piling up on the front door could alert a prospective burglar that a house is empty.

Though few people still get milk delivered to their door, this advice is still important. Today, burglars have a new way to find empty houses to target – social media. In April 2017, Allstate Insurance published a guide to consumers for smart social media strategies to avoid burglary. The guide states, “You may want to think twice before you hit ‘Share.’ Sure, it’s fun to share photos of your beachfront view (and make the folks back home a little jealous), but advertising your vacation on social media may be a recipe for theft and burglary.” Allstate advises travelers to check privacy settings on social media platforms, control how other users can “tag” you, limit social media connections, and finally, think twice before posting.

Renting The Essentials of Modern Life

In August 1968, we reflected on automobile rentals and the then fairly new practice of furniture rental in major cities. We also looked at a prediction by a financial columnist that, “in the not too distant future consumers might look forward to renting essential household equipment,” such as dishwashers, refrigerators, and televisions.

Today, of course, consumers can rent a wide variety of appliances. Rent-A-Center, perhaps the best-known appliance and furniture rental outlet began in 1973, just five years after we printed that prediction. The next few decades may see more transformation in the ownership of cars and other big-ticket items - there is speculation today that in the future, private automobile ownership may be phased out in preference for shared self-driving vehicles utilized by many people. (See this issue’s article on the topic.)
Electric Vehicles (EVs) continue to gain popularity. There are 14 EV models made by 12 manufacturers, which account for more than 400,000 vehicles on the road today in the U.S. alone. Monthly EV sales have demonstrated an upward trend since early 2014, according to EV-Volumes.com. Data from Statista shows that sales have increased in the U.S., China, and across Europe, reaching over 1.2 million vehicles and accounting for over a half a percent of the total automobile market share in seven OECD nations and China. The International Energy Agency cites government subsidies and decreasing battery costs as drivers for this rapid growth. Despite this, oil giants such as OPEC forecast relatively little EV penetration into the market over the next few decades. OPEC predicts that “fewer than one in sixteen” automobiles will be EVs by 2040 (less than 6.25%).

Sales growth of EVs is likely to increase more rapidly in the next few decades. The quality and performance of these vehicles are improving consistently, while initial and long-term costs are rapidly approaching equivalence with internal combustion engine (ICE) automobiles, particularly as government incentives reduce prices. In addition, rising Corporate Average Fuel Economy (CAFE) standards and emissions rules will continue to drive investment and innovation in the electric vehicle market. As these vehicles diversify, the market penetration will most likely expand into additional demographics. For example, previously, the only EVs on the market were small city cars and subcompacts. Now, there are electric luxury sedans and an SUV (in the form of Tesla’s Model S and X vehicles). As electric cars are offered in more diverse forms, their appeal will widen. Currently, many early adopters of these vehicles are young, concerned about the environment, and have above average incomes, according to a survey conducted by TrueCar.com. Appealing beyond this demographic is key to EV expansion. Once these vehicles escape the early adoption phase, sales could increase exponentially.

The Diffusion of Innovation theory tracks how new technologies acquire market share through five distinct phases. According to the theory, the first 2.5 percent of owners of new technologies represent “innovators,” or those willing to take risks and who tend to have high financial liquidity. Following the innovators are “early adopters,” then comes the “early majority” followed by the “late majority” (with “laggards” accepting the technology later on). The most important aspect of this theory is that the growth of market share increases rapidly after the early adopters. EV market share could reach ten percent in the next few decades, should EV adoption follow the Diffusion of Innovation theory.

Numerous innovations have followed a similar trend of market penetration (see graphic to the left). However, EVs are a replacement for a similar product with a strong market presence, rather than a new product altogether. A better approximation for EV adoption would be residential LED lights, a replacement for incandescent bulbs that became commercially available in 2000. By 2012, there were 49 million LEDs installed in the U.S., and their market penetration is predicted to reach 36 percent in 2020 and 74 percent by 2030, according to the U.S. Department of Energy. This adoption rate is slower than that of radios or the Internet, though these can be considered entirely new technologies rather than replacement products. The example of LED light bulbs indicates even replacement technologies can achieve significant growth rates after reaching certain price and performance benchmarks.
Global EV sales increased 42 percent from the first quarter of 2015 to the first quarter of 2016 with 180,500 units sold, according to EV-Volumes. While this was less growth than year-to-year Q1 sales from 2014 to 2015, available EVs continue to improve on price and features. Electric vehicles once had a reputation as expensive, slow, uncomfortable city cars with an impractically low range. For example, the 1997-2003 Toyota RAV4 EV, one of the first EVs commercially available in the U.S., had a range of only 95 miles. It had an MSRP in 2002 of $42,000 (before tax incentives) or $56,434 adjusted for inflation. In contrast, the Chevrolet Bolt, a new electric hatchback, costs $37,500 and has a range of 238 miles. The upcoming Tesla Model 3 will retail for a similarly low price. An EV now costs $0.04 per mile, compared to $0.11 for an average gasoline powered car, according to the U.S. Department of Energy. AAA states that this comprises about 20 percent of motorists’ yearly automobile costs. Tesla vehicles also challenged EVs’ perceived style and image – now they are widely considered to be stylish, good looking, and luxurious.

Even at a comparatively small percentage of global market share, EVs could cause an immense, permanent decrease in oil prices. Reuters senior market analyst John Kemp ascribes the cause of the 2014 oil price crash to increased oil supply from shale sources and the two million barrel per day decrease in U.S. demand (among other factors). Given the current state of oversupply in the oil market, a decrease in demand due to widespread adoption of electric and alternative fuel cars could lead to a long-term glut in the global oil markets. In 2014, the average vehicle consumed 476 gallons per year (about 1.3 gallons per day), according to the U.S. Energy Information Administration. To reach a two million barrel per day decrease, EVs would need to replace 1.5 million gas-consuming vehicles. Assuming a constant 10 percent growth rate of sales beginning in 2017, EVs could displace enough demand for oil to severely impact the oil market as early as 2035. Following a Diffusion of Innovation schedule, this could even occur sooner than projected. In addition, ICE vehicles are becoming more and more fuel-efficient, further impacting demand.

However, there are many challenges for broader EV adoption. Because electric cars are a replacement for an existing product, they face competition, switching costs, and infrastructure issues that may slow their advance. One such challenge is that the benefits of EVs are less attractive to an individual who already owns a relatively new, reliable ICE car. That consumer will likely wait until they’re ready to buy their next car before considering purchasing an EV, which is a 5-10 year window. Furthermore, Americans are buying cars less often since the recession, according to automotive research firm Polk. This decreases the turnover rate, and means that sales for EVs may be less frequent. Moreover, when an EV competes with an ICE vehicle, the EV will have to offer comparable features at the same price point — although EVs have come down in price over the years, they are still relatively expensive. Tax incentives help reduce the MSRP, but are not available to all customers and are not guaranteed to last.

Battery recycling is another issue in EV ownership. 12-volt car batteries from ICE automobiles are the most recycled product in the world, according to Green Car Reports.

Batteries from electric vehicles can be recycled just as easily as lead-acid batteries, according to a report by San Jose State University. There are many uses for an old EV battery and they contain precious metals worth recovering. However, there is not yet a comprehensive system for recycling electric car batteries; this is likely due to low production numbers, the longevity of EV power systems (versus standard car batteries), as well as insufficient planning or industry players’ unwillingness to bear such costs without incentives or regulatory requirements.

The lack of public infrastructure is perhaps the largest issue for recharging electric vehicles in the U.S. While the majority of EV owners charge at home, according to the Alternative Fuels Data Center, expansion to additional demographics will require that EV owners are able to recharge their vehicles while on long trips or even while running errands. Tesla paved the way by building “Supercharger” stations for its customers to use. However, these are not available to owners of other EV models, and the company recently announced that new customers would no longer have free, unlimited use of the charging network. EV owners do need to charge their vehicles at places other than their home, as many urban dwellers with cars do not have access to a home charging port. Other manufacturers could establish their own networks of proprietary chargers, third parties could develop and offer charging that provides energy to all models (e.g. upgraded gas stations), or municipalities could build charging infrastructure.

While meeting the disparate needs and desires of both current EV owners and potential customers is a daunting task; doing so will be necessary to achieve EV adoption beyond its current narrow demographic and geographic appeal. In the future, electric cars and other alternative fuel vehicles could have a serious impact on the number of ICE vehicles in the market and on the oil market in general.

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Will Medicaid Negotiate Lower Drug Prices for You?

Over the past decade, drug prices in the United States have grown well above the rate of inflation. This phenomenon has caused many consumers, including many seniors (who have been particularly affected by the high prices of medication) to doubt the integrity of the pharmaceutical industry. The senior community experiences higher rates of chronic conditions requiring them to take medication. According to research from AARP, 90 percent of prescription drugs doubled in price between 2005 and 2015. This community will consistently pay higher prices for drugs for years to come.

Climbing prices have caused a feeling of resentment towards pharmaceutical companies from the American public in general, as they may feel drug companies do not have their best interests in mind. According to a 2015 poll conducted by the Kaiser Family Foundation, 72 percent of Americans feel that drug costs are unreasonable, and 74 percent believe that pharmaceutical companies put profits before consumers. Some advocate that allowing Medicare to negotiate drug prices could help defray the impact of drug price increases. Several government programs can negotiate directly with pharmaceutical companies so that they may provide drugs at the lowest possible price to program beneficiaries. For example, the U.S. Department of Veterans Affairs (VA), can negotiate drug prices and receives mandatory rebates from companies. Medicaid drug prices are either discounted or set at the lowest amount negotiated.

A rule implemented in 2003 as part of the Medicare Modernization Act (MMA) currently prohibits Medicare from negotiating with pharmaceutical companies. In the uncertain healthcare environment of the United States today, some policymakers have proposed eliminating this rule, which would open the possibility of direct negotiations between pharmaceutical companies and the Medicare program. Those proposing the change hope to alleviate the cost of drug prices for seniors, which, according to an AARP Rx Price Watch Report, have climbed to an average of $5,800 per drug per year. However, supporters of keeping this rule in place believe that the change in drug prices paid by seniors will be marginal at best, or are concerned the change could stifle research and innovation in the pharmaceutical sector.

Supporters of the anti-negotiation provision cite several arguments. Some feel that the higher prices of drugs encourage innovation, particularly for drugs used by senior citizens. Another argument in favor of preserving the status quo points to the negotiation system in place at the U.S. Department of Veterans Affairs (VA). Critics of the VA’s approach assert that it prevents the VA from obtaining the newest and most effective treatments, in order to cut costs.

Advocates for a rule change disagree that prices are justified because of research and development. Sen. Amy Klobuchar (D-MN), one of the lawmakers who introduced the proposed rule change, said that “Because Medicare is barred from negotiating discounts, seniors face inflated prices for their medications, while the pharmaceutical industry gets a financial windfall.” Her statements follow a widely-held belief that drug price increases exceed the cost for research and development. According to Bureau of Labor Statistics data, between 2010 and 2016 the price of prescription drugs rose by 24 percent; however, the average inflation rate between 2010 and 2016 averaged 9.3 percent. The discrepancy between the two rates is typically attributed to the research and development costs behind introducing a drug, but many, including Sen. Klobuchar, believe that high drug prices go beyond these initial costs.

Those who argue for the repeal of this rule believe that it will significantly lower drug prices for seniors. Medicare could potentially use its massive size and scale to negotiate for lower prices for the more unique and specialized drugs that are typically utilized by seniors. Health Affairs researchers assert that lower drug prices will be a necessity in the future, because the aging Baby Boomers gaining Medicare eligibility will lead to skyrocketing costs for the program. Eliminating this rule could offset some of those additional costs. The Health Affairs research projects that by the end of 2017, National Health Expenditures (NHE) will reach nearly $4.3 trillion and NHE will account for 19.5 percent of GDP. Those who propose the repeal of this rule also believe that drug makers have sufficient incentive to go through the strenuous development and approval processes because Medicare is such a large buyer of medications.

At the heart of the debate lies the balance of reducing the cost of drugs for consumers, while also maintaining the innovation that will allow pharmaceutical companies to develop new and more effective treatments. The direction of U.S. policy in regard to this rule will be instrumental in determining the future of the prices Medicare patients pay for their medications.
Restricting Airbnb Won’t Solve D.C.’s Affordable Housing Problem

Kyle Burgess

Last month, D.C. Council member Kenyan McDuffie proposed legislation to regulate the homesharing platform Airbnb. This bill would broadly impact the rights of D.C. renters and homeowners to use their private property for supplemental income and would hurt consumers traveling to the city. The purported intent of such a bill is to protect the limited D.C. housing stock from commercial exploitation and keep rental prices down. However, there is no evidence that more regulation will accomplish these goals, particularly given that the District currently fails to enforce existing rules designed to curtail the same problems. Adding complexity to an already confusing system won’t solve D.C.’s housing challenges. Instead, it will harm the very renters it seeks to help.

The proposed bill would require Airbnb hosts to obtain a business license and would restrict rental activities to only the host’s permanent residence. It would also require hosts to be present for the entire period of the rental, potentially cutting off significant supplemental income for property owners who travel out of the city frequently, as is common among many D.C. residents. Additionally, the law would limit hosts to only 15 cumulative nights throughout the year of renting without being present – classifying more than 15 nights as a “vacation rental.” The law also imposes harsh fines on those who violate any provision of the regulations. For example, homeowners would be subject to fines of $1,000 for a first offense, $4,000 for a second violation, and $7,000 for any subsequent violation.

Most of Airbnb’s thousands of hosts utilize the platform in order to make extra income, which they use to help pay their mortgage, provide for their family, or save for emergencies. Airbnb representatives stated at a meeting of the U.S. Conference of Mayors that 13 percent of the hosts in the country’s ten largest cities – 16,000 people – used their rental income to avoid eviction or foreclosure.

For their part, company representatives have said that Airbnb has no problem with regulation and wants to work with the D.C. City council to craft reasonable regulations that provide a framework while allowing residents to rent out their properties. Airbnb also praised the recent rules in Arlington County, Virginia as “the first D.C. area municipality to pass an ordinance creating fair rules for middle class residents and families to continue sharing their homes.”

Council member McDuffie is right – the District has an affordable housing problem. However, Airbnb is not to blame. According to the D.C. Fiscal Policy Institute, the District had 60,000 low-cost units (apartments renting for less than $800 a month) in 2002; by 2013, that number shrank to 33,000.

As demolition and construction reshape the D.C. cityscape, affordable housing units have not been replaced one-for-one. Meanwhile, high-cost apartments (those renting at $1,400 per month or more) increased from 28,000 to 73,000 during the same period low-cost availability shrunk. According to the D.C. Fiscal Policy Institute, low-income households (those making $22,000 a year or less) saw rent increases of about $250 per month over the past ten years, while their incomes remained flat. Additionally, as subsidies for older affordable housing units expire and units are converted to condos or market-rate apartments, the District has made no plans to offset the potential loss of 13,000 low-income housing units that are set to expire by 2020. Instead, Council member McDuffie points the finger at Airbnb.

Clearly, the issues that drive D.C.’s affordable housing problem existed long before Airbnb came on the scene. The D.C. City Council, therefore, should not make Airbnb and its users scapegoats. By doing so, the city fails to address D.C.’s true affordable housing challenges and inhibits consumers’ ability to improve their financial well-being by standing in the way of legal home- and room-sharing. Instead, the District should pursue alternative solutions to D.C.’s high rents that don’t place the burden on those just trying to get by.
The State of “Right to Repair”

David J. Weissman

The “Right to Repair” refers to a consumer’s ability to diagnose and repair issues with a product they own. Right-to-repair extends to a personal ability to make repairs, as well as to have a third party do the work. Consumers may choose to contract out tasks to a third party instead of the product’s manufacturer or a party affiliated with or authorized specifically by the manufacturer (for example, a car dealership’s service department).

There are three major product areas where right-to-repair issues are common. They are smartphones and other personal technological devices (including laptops, tablets, and gaming consoles), farm and industrial equipment such as tractors, and personal consumer vehicles. Consumers often want the ability to hire cheaper or more convenient third parties to repair their damaged screens or other common issues with their smartphones, rather than going through Apple or one if its affiliates. Similarly, farmers want to be able to work on their tractors, as they often live far from authorized service centers and may not have ample cash to pay for unexpected repairs. Many consumers want to be able to do simple work on their vehicles or have work done at their neighborhood auto shop, without paying high dealership costs and without risking losing warranty coverage.

Third-party repair shops often have a vested interest in these policies, as well. Some small auto repair shops, for example, have expressed concern over what will happen to their businesses if big carmakers successfully restrict shop manuals and diagnostic information to franchised dealerships. With cars relying more and more on embedded computers and proprietary software, this is a pressing concern for independent repair shops.

Laws Proposed

A number of recent legislative proposals would enshrine the right of consumers and third parties to repair products. One such law is Nebraska LB 67, the “Fair Repair Act.” This bill would require Apple or any other company selling “digital electronic equipment” in the state to make diagnostic and repair manuals and tools available to owners or independent repairers, and to sell parts to owners or independent repairers. This bill stalled in March, after the state legislature failed to take up the bill during the current session.

Nebraska is one of 12 states that has introduced similar legislation. Other states include Illinois, Wyoming, Massachusetts, Minnesota, and New York, though none of the bills put forward have yet passed. Apple’s policy towards third-party repairs has proved controversial in the past; customers who had screen repairs conducted by an independent shop saw their phones “bricked,” by a software update, known as Error 53. Apple eventually apologized for this and claimed that the error was the result of a “factory test and was not intended to affect customers.” Apple still kept Touch ID disabled for those phones, as the company determined that an authorized repairer accessing that feature posed a security risk.

John Deere tractors are another source of controversy. Farmers are not permitted to repair the newest generation of farming equipment that comes integrated with extensive software and computer systems. Attorneys for John Deere asserted, in a 2015 letter to the U.S. Copyright Office, that those who purchase its vehicles do not own them outright. According to this letter, John Deere owners have purchased an “implied license for the life of the vehicle to operate the vehicle, subject to any warranty limitations, disclaimers or other contractual limitations in the sales contract or documentation.”

Under the company’s existing policies, not only can owners not repair their farming equipment themselves, but independent shops cannot do the job either. This situation causes inconvenience for rural-dwelling farmers and costs them more money than it would otherwise.

Laws Passed

Personal vehicles are one area of right-to-repair policy that has seen significant progress. The state of Massachusetts passed H. 4362 in 2012, a bill titled “An Act protecting motor vehicle owners and small businesses in repairing motor vehicles.” It ensured that independent shops, and by proxy, motor vehicle owners would “have access to
information related to the proper and complete diagnosis, service and repair of motor vehicles." Later that year, voters in the state passed another version by ballot initiative, and in 2013 the state legislature reconciled the two measures.

In 2014, two carmakers’ trade associations reached an agreement with third-party garages and auto shops to establish a national standard in accordance with the Massachusetts law.

According to Automotive News, the two trade groups, the Alliance of Automobile Manufacturers and the Association of Global Automakers, agreed that their member companies would make all repair and diagnostic information available by the 2018 model year, as long as lobbying groups for independent repairers and aftermarket parts retailers would refrain from pursuing state-by-state legislation.

In a statement, Mike Stanton, president of the Association of Global Automakers, said, “A patchwork of 50 differing state bills, each with its own interpretations and compliance parameters, doesn’t make sense. This agreement provides the uniform clarity our industry needs.”

**Pro**

Right-to-repair is a very popular sentiment among consumers and the Massachusetts state ballot initiative to enshrine independent auto repair passed with 87 percent of the vote. Proponents cite the cost savings when people are allowed to either do repairs on equipment themselves or have a third party do those repairs. Another benefit lies in the longer useful life of devices (and the resulting reduction in waste) that happens when people can repair their own devices and equipment rather than simply discarding malfunctioning or broken items and buying anew. There are more general questions of ownership as well – many people have a philosophical problem with being told they can’t do as they please with an item they paid for and own, or even worse, being told they don’t “really” own that product.

There are further considerations relating to the right of farmers to repair their equipment, such as with John Deere tractors. Farmers might live 50 miles away or more from the nearest authorized service center, and they don’t necessarily have the time or resources to get their equipment to a service center or to wait for a representative to come to them. In addition, farmers must be prepared to till their land and harvest their crop when it is ready – the consequences of waiting for an authorized repair might be too severe.

**Con**

The primary counter-argument used by manufacturers is that allowing owners to make repairs to a feature that involves software would run afoul of the Digital Millennium Copyright Act. This law effectively placed digital “locks” on software (such as copyright protections on movies) – meaning that someone who tries to circumvent digital protections to repair their equipment could technically do so, but would be breaking the law.

**Warranties**

In addition to the previously mentioned Massachusetts state legislation, there have historically been more protections for independent repair of automobiles. The 1975 Magnuson-Moss Warranty Act prevents a manufacturer from requiring consumers to have their vehicles serviced at authorized dealerships or to use Original Equipment Manufacturer (OEM) parts, and prevented them from voiding a customer’s warranty for using aftermarket parts. An OEM can only deny a warranty claim, for example, if they can prove that a poorly done repair or bad-quality aftermarket part caused the failure in question.
If you take a trip down Pennsylvania Avenue in Washington, D.C., the cars you see are probably very similar to the ones you might have seen five or ten years ago with some slight changes in style and design. Weaving in and out of traffic you will find the same red cabs that have been moving people around for years. Objectively, you might not be able to tell if it’s 2017 or 2010, but there is more to take in than what you may notice at first glance.

Nestled in the corner of the windows of the Toyota Camrys and the Chevy Malibus are stickers bearing the logos of popular local transportation apps, and once you spot them, you can’t help but notice that so many of the cars that drive down D.C. streets bear these same markings. They are the symbols of “ride-sharing”, the technological phenomenon that has swept through the country’s urban areas and promised to transform private transportation. The most popular apps, Uber and Lyft, allow you to hail nearby drivers who can whisk you away to your destination at a lower price than what you typically see from D.C. taxi cabs.

Ride-sharing is often easier, more convenient, and cheaper than driving your own car, which has the automobile industry on edge. Car manufacturers are dishing out billions of dollars to acquire startups at the forefront of this movement. Car ownership statistics indicate that young adults are buying fewer cars than they were in the past. Many people enjoy driving a newly-purchased car off the lot, but Millennials and younger Americans may not share those preferences. We may be moving toward a driving culture in which convenience and cost efficiency outweigh that new car smell.

Younger Americans are buying fewer cars than they have in the past, but uncovering the root causes of this trend requires a closer look. The Federal Reserve conducted a study of light vehicle sales over the past 20 years. Light vehicle sales include automobiles ranging in size from small cars to light trucks. These sales surpassed pre-recession levels in 2016 and are still trending upward. At the same time, younger age groups make up a decreased share of light vehicle buyers compared to pre-recession levels. (See Figure 1)

Based on this data, the Federal Reserve report notes, “While part of the rise in average age does reflect a decline since 2007 in the rate at which young buyers purchase new vehicles, the aging of the Baby Boomers, and a drop in the purchasing rate among 35 to 50 year olds appear to be the most important factors.” The Federal Reserve places significant emphasis on the changes in older demographics, but trends among younger buyers will be an important factor in the future, as well. In 20 years, when many Baby Boomers are no longer driving or purchasing new cars frequently, Millennials will drive new car sales. Yet, Millennials use personal car alternatives at a higher rate than every other age group. (See Figure 2)

Consumer sentiment and preference is also a factor. A 2015 PwC report on the sharing economy notes, “One-third of consumers we surveyed indicated that the automotive industry yields too much waste. Chief among them are Millennials, who notably don’t drive as much as previous generations did at comparable ages. They are less likely to get drivers licenses, and their view of cars is more perfunctory than emotional—they largely see cars as transportation, not as status symbols.” Additionally, a 2016 University of Michigan Department of Transportation study found that, for the age range of 16 to 44 year-olds the percentage of licensed drivers has declined from 91.8% in 1983 to 76.7% in 2014, potentially owing to increased urban populations and advancements of communication technology. Consumers are rapidly adopting ride-sharing, and it is important to recognize the benefits these services can provide.

There may also be other factors influencing young Americans’ changing attitudes toward personal transportation. For example, Millennials are choosing to live in urban areas over suburban areas. According to a 2015 Urban Land Institute Study, 46 percent of Millennials live in a medium-sized or large city, 23 percent live in a suburb, 20 percent in a small town, and 10 percent reside in rural areas. These city-dwellers have less need to own a car and they rely on alternative means of transportation.

Younger people are marrying and having children later than their predecessors, which both delays their moving out of large cities and diminishes their need for a car. 2014 Gallup data found that 27 percent of Millennials were married. According to historical data cited by Gallup, 36 percent of Gen X, 48 percent of Baby Boomers and 65 percent of the Silent Generation were married.
when they were the same age as Millennials are now. In addition, recent college graduates are hampered by an unprecedented amount of student loan debt. According to Gallup in 2016, 35 percent of Millennials hold student loan debt (as opposed to 25 percent of Gen X, 6 percent of Baby Boomers, and 3 percent of the Silent Generation).

Millennials’ gravitation towards urban areas, postponement of having children, and substantial student debt are all factors that may prevent this generation from buying cars at rates as high as their predecessors.

As explained above, ride-sharing apps, including Uber, Lyft, and many smaller competitors, are online mobile platforms that connect nearby drivers with people looking for a ride. Powered by the GPS function of a smartphone, users request a ride and receive an immediate fare estimate. The app stores user payment information and users traveling in a group can choose to split the ride fare among themselves. Additionally, users can opt to share their ride with unknown passengers traveling along a similar route in order to cut costs.

Car rental platforms, including Zipcar, Maven, and car2go, allow subscribers to rent cars on-demand, typically on a short-term basis. The apps enable users to locate nearby rentable cars, at which point the user can reserve a time slot for that car. Hourly fares typically range from $8 to $18 depending on the car. These technologies are readily available to those who want to participate in the “sharing economy,” and car manufacturers are beginning to get more heavily involved in this space. For example, car2go is a subsidiary of Daimler (Mercedes-Benz’s parent company) and Maven is owned by General Motors.

Competition in the auto industry is heating up for a stake in the ride-sharing and self-driving car worlds. In 2016, General Motors invested $500 million in ride-sharing app Lyft and acquired the assets of former Lyft competitor Sidecar, and in 2017 the company announced a partnership with Lyft to deploy thousands of self-driving Chevy Volts used strictly for ride-sharing purposes. GM’s Maven program offers rental periods ranging from one hour to one month. Maven now competes with Zipcar and car2go for this short-term car rental market. Volkswagen, Europe’s largest carmaker, invested $300 million in ride-sharing firm Gett, which has a large European market share. Ford has also made a number of recent acquisitions including that of Argo AI, a self-driving technology firm that it purchased for $1 billion, and Chariot, a San Francisco based ride-sharing company. French carmakers Citroën and Peugeot, which have been absent from the U.S. market since 1974 and 1991 respectively, will return to the U.S. in a ride-sharing and car-sharing capacity before a planned eventual return to the mainstream market.

Large tech firms are also getting involved. Google’s “Waze” navigation app has conducted a limited release of its carpooling service that allows drivers to pick up people traveling in the same direction. What has prompted this recent flood of investment in the ride-sharing industry? One reason might be the rise of urban populations. Another might be the availability of highly advanced GPS technology that facilitates ride-sharing systems. Or simply, people may not be as interested in owning cars as they once were.

While the timeline is uncertain, it appears that we may be moving toward a culture that values convenience over car ownership. Ride-sharing is prolific in major cities and is gaining traction all over the nation. If you want to see what it’s all about, you can join the trend with the click of a button. For some, this might be a relief, but for others it may encroach on a desire for autonomy on the road. To be sure, these changes will be felt first and foremost in densely populated cities. Rural areas and the more far-flung suburbs will be unlikely to abandon their personal vehicles any time soon. However things play out, these technologies have ignited a spark in the tack of auto industry.
Something’s **Fishy in the Seafood World**

David J. Weissman

The delicious fish dish you order at a restaurant or beautiful filet you take home from the grocery store may not be what you think it is. Many seafood retailers market fish deceptively. They pass off lesser-known species of fish as different, more popular (and sometimes more expensive) species, or they market farmed fish as wild-caught.

A report by conservation group Oceana found that on average, retailers market 28 percent of fish as a different species, and a high proportion of substitute species potentially pose health risks.

According to the Oceana report, Asian catfish, also known as pangasius, was the most heavily substituted fish. The report found that vendors substituted this fish for perch, grouper, sole, plaice, halibut, catfish, cod, flounder, bass, rock cod, hake, pollock, snakehead, panga, rawas, red snapper, gurnard, and anglerfish.

**Slippery Marketing Practices Bait Consumers**

Seafood is different than other commonly eaten meats, such as chicken, pork, or beef. There are many more species of fish than there are choices of other meats. Additionally, most consumer interaction with fish comes from eating it already prepared at restaurants, buying fresh or frozen filets, or heating prepared fish products like frozen, breaded fish sticks.

According to the National Oceanic and Atmospheric Administration (NOAA) Fisheries of the United States report for 2015, Americans consumed 15.5 pounds per capita of seafood in 2015. This low American seafood intake is in contrast to the 104.8 pounds per capita of red meat and 106 pounds per capita of all poultry products consumed in 2015, according to the National Chicken Council.

There is a lack of data on how many consumers eat whole fish, but based on the overall small consumption figures of fish, it may be reasonable to assume that very few people are familiar with what fish species look like whole – and fewer still would be able to identify a species based on sight alone.

What all of this means is that unscrupulous vendors or restaurant managers wishing to pass off cheap fish as expensive fish can easily manipulate consumers. The most popular, best-known seafood species are also the most expensive – salmon, lobster, swordfish, and tuna (not the canned variety) can net $20 per pound – especially wild-caught varieties or those sold far from the coast. This situation presents a profit incentive for those suppliers wishing to deceive.

There are also health consequences for substituted seafood. Consumers concerned about mercury intake may wish to avoid certain species of fish. According to Oceana, some of the conditions that can result from mislabeled seafood include poisoning by histamine, scombrototoxin, ciguatera, or tetrodoxin. Histamine or scombrototoxin can lead to hives, low blood pressure, nausea, or trouble breathing, among other symptoms, ciguatera, can cause neurological damage, and tetrodoxin, the poison found in the “puffer fish” or fugu, can cause paralysis or death.

Gempylotoxin is another common adverse health outcome from certain fish. Escolar and oilfish can contain this toxin, and the U.S. Food and Drug Administration (FDA) advises against the consumption or sale of this fish because it can cause significant gastric distress. Oceana reports that there have been more than 50 cases of escolar sold as “white tuna” in the U.S.

There are sustainability issues with some fish that consumers may wish to avoid, as well, including certain at-risk species of wild-caught fish that are overfished or farmed fish raised in adverse, untenable, or unclean conditions. Regarding the latter, some aquaculture farms use more fish feed (in terms inputs, such as smaller fish or fish oil extracted from smaller whole fish) than they produce in final fish product. This is the exception, rather than the rule, but difficult to determine from a label or menu.

**Deceptive Marketing: Hook, Line, and Sinker**

One reason for all this is the fact that 91 percent of the seafood consumed in the U.S. is imported, according to the NOAA.
Fish caught or farmed in other countries are not subject to the same regulations as seafood that comes from U.S. fisheries, so it may not be as safe.

In a statement to CNN, Dan Solis, the FDA's Director of Import Operations in Los Angeles, said the following about imported food products: “The way it is manufactured, they don’t have the same laws and regulatory systems that we do in the U.S. Inherently, yeah, imported food manufactured overseas is probably riskier.”

According to the office of Sen. Thad Cochran (R-MS), samples of pangasius and tilapia imported from Vietnam and China have been found to contain elements of formaldehyde. In addition, Sen. Cochran’s office stated that the FDA inspects only two percent of imported seafood – and tests even less than that for contaminants in a laboratory.

As mentioned previously, there is a monetary incentive to market mislabeled seafood. Vendors and restaurants doing this know they will profit, and that there is a low possibility that the authorities will catch or prosecute them.

Another reason stems from consumers themselves. Many people have a preference for the best-known species of fish and aren’t interested in lesser-known or visually unappealing fish, or species with unusual names. Many people’s distaste for whole fish and predilection for prepared products where the specific fish is easily disguised (such as frozen fish sticks or fish sandwiches) further compounds this situation.

Fishing for a Solution

Consumer education is one of the best ways to address this problem. Consumers should only buy seafood from sources they trust and should educate themselves on the visual differences between different species of fish. An app called “FishVerify” can help consumers with this; users can snap a photo of the fish in question and the app will inform them of the species. Recreational anglers were the intended audience of this app, but consumers can use it at the fish market as well. A number of state government agencies also maintain fish identification guides that are useful for determining fish species based on color, gill and fin location, and other attributes. In addition to utilizing fish identification apps and guides, consumers should be aware what species of fish are most likely to be mislabeled or marketed misleadingly.

Another solution is to emphasize the lesser known species of seafood over the more popular fish. This has the additional benefit of lower costs for consumers, as less popular or less glamorous fish, such as porgies or perch, are usually cheaper than the most in-demand fish. Some restaurants are leading the way with this approach. For example, some Virginia, Maryland, and Washington, D.C. area restaurants and fishmongers sell snakehead, an invasive species found in the Potomac River and its tributaries. Other regions sell lionfish, an invasive species often found along the East Coast and in the Gulf of Mexico. These fish are often cheaper, tasty, and serve the added benefit of helping rid an invasive species from local waterways.

Lastly, prioritizing American-caught seafood can help partially address the issue. Because domestic-caught or farmed fish are subject to more regulations than imported seafood, it is easier to know what you’re getting. This has the added benefit of more sustainable seafood for consumers and more revenue for American fisheries.
Americans are not saving or investing money, which may have significant repercussions for the financial security of those nearing retirement age. According to the National Institute on Retirement Security (NIRS), “the median retirement account balance is $3,000 for all working-age households and $12,000 for near-retirement households.” Even when accounting for Social Security income, this sum is not nearly enough to live on during retirement. As life expectancy increases, retirement periods lengthen in tandem, meaning that retirees will have to stretch their money even further. This gap in savings may illustrate that not enough Americans are investing properly, and as a consequence are forgoing opportunities to build the assets that they will need later in life. According to Gallup, only 55 percent of Americans are investing in the stock market, as opposed to the 62 percent that held stocks before 2008. This may indicate that the financial crisis has made consumers wary of investing. Of those who do invest, certain behaviors and internal biases can prohibit investors from maximizing their returns.

To better understand this phenomenon, Consumers’ Research interviewed Gerard Downey, an experienced Certified Financial Planner (CFP) in Oak Park, Illinois and founder of Linden Wealth Management.

Q: According to Gallup, the percentage of Americans who own stocks still has not recovered from the 2008 crash. Might fear or apprehension be keeping people out of the market?

A: Yes, absolutely. I think the lingering effects of all the volatility through ’08, ’09, ’10 and the experience of seeing their IRAs and bank accounts evaporate has left a lingering effect that made people very concerned and risk adverse. But, what also happens is there is a large behavioral aspect to investing called recency bias. What happens is they experience this [loss] and it’s really vivid in their minds. That takes a long time to unwind itself. Unfortunately, recovery typically happens when markets reach new highs. When you see it reported in the media where we have things like the Trump effect and equities are doing really well, that tends to bring investors back into the market.

Case in point, I have several new clients who have come to me because they’re underinvested and have been out of the market for a long time. They’ve been sitting on cash and are afraid now that the market is getting away from them. Now, they are trying to turn around and get exposed to the market at absolutely the wrong time. What I tell them is you have to accept the fact that you missed this big rally but let’s broaden your horizon and think much longer term. If that’s the case you should invest now even if markets could go down.

Q: What are people missing out on by not owning stocks or bonds?

A: They are missing out on long-term wealth creation. One of the keys to investing is time. The earlier you start and more patient you are as an investor, the greater the reward will be in the long run, so individuals who are not investing today aren’t getting the benefits of compounding returns. The beautiful thing about investing is if you put it in the right framework and think long-term, you take out all the short-term noise. If you change your mindset away from these short-term phenomena and think in timeframes of five, ten, 15, 25 years, you can really see the benefits of investing. The bottom line is compounded annual returns build wealth, consistent savings and investing into the market builds wealth, and then a combination of stocks and bonds.

Q: Despite having access to defined contribution plans, many 401(k)s are underfunded. Why don’t more employees take advantage of them?

A: There could be several reasons for this. Not enough education takes place within the employees’ firm, so the plan’s sponsor isn’t educating employees about the benefits of a 401(k) plan and the long-term effects of putting money away at a tax differed rate. Employers need to do a better job explaining the benefits of why employees should have their 401(k) and receive a matching contribution as well. The other thing is lifestyle. They tend to want to support a lifestyle that is long on travel or things that they need, so savings becomes the last thing they try to prioritize. In many ways, their priorities are turned upside down. Instead of the plan as their first form of savings, they do it last.

Q: What is the biggest hurdle that prevents people from investing, whether it is a lack of resources, information, or something else?
A: It’s a lack of education, and that has nothing to do with someone’s general level of education. My observation is, and I deal primarily with high-net-worth individuals, that whether you’re a lawyer, doctor, or a teacher, individuals lack investment knowledge. What is indexing? What are Exchange Traded Funds? What is passive versus active investing? They are especially unsure about the roles that bonds play in their portfolios. A lot of things meant to grab investors’ attention are more about marketing than education. They don’t have access to clear, concise educational tools they can use. The more educated you are, the more confident you are and able to understand these different processes as well as sit down with an advisor like me. Together [you and your advisor] can assess your goals and based on that create a portfolio that shows what return [you] can expect to accomplish your retirement goal or education savings goals.

Q: Regarding retirement savings, the vast majority of Americans are underinvested a lack of awareness or that they feel they don’t have enough income left over to invest?

A: I think it’s a combination of the two. It’s kind of a passive situation where they’ve ignored this long looming obligation or liability if you want to look at it that way. They’re a young individual in their 20s who say, ‘look I have 30 to 40 years to save for retirement.’ One is, it’s a lack of awareness for how retirement savings work in that you’re saving a modest amount yearly in the hopes that it compounds over time so that in the end you have an adequate amount to retire on and maintain your current lifestyle. The other thing is, if you take a look at the statistics the average person does not have a reserve fund greater than $400, which is nothing. People are spending way beyond their means. It gets back to notion that savings are the lowest priority for them. They spend and think about savings later, which is not how it should be.

Q: Is it still possible for people in their 50s or older to plan for retirement?

A: Yes. It helps if you have higher income no doubt about it. I’m dealing with some affluent individuals who for whatever reason have not really invested in the market. They’re in their early to mid-50s and realize they’re going to be retiring in 10 to 15 years. Some even realize they’re going to have to work longer than that. It’s never too late to save. If you think that market has an average return of eight to nine percent annually, you can double your investment about every eight years based on the 72-rule. So, if you’re in your early 50s, by your early 60s your savings will have doubled and that will have doubled by your early 70s. It helps if you have higher income and can divert more towards your savings. For individuals who don’t have the income, it’s a looming catastrophe in a lot of ways.

The other thing that’s a huge issue is individuals are living longer. No longer are we running projections in your early 80s, we’re running them to your early 90s. Not only will you live longer, your retirement costs will go up exponentially. It is all dependent on how much an individual can bring in at latter stages of life. Those with more income can more easily get out of the hole but it’s a much bigger challenge for those with lower income.

Q: Related to this, how prepared do you believe the average American is to make investment decisions?

A: They are poorly prepared. If you think that the average investor underperforms the market at an average of three to five percent annually, any given year that doesn’t sound like a lot but over time that’s a huge amount. The reason why they underperform is behavioral aspects of what they’re doing. They make emotional decisions, they chase the market, they try to market time, they heard something down the street where this guy’s just invested in that and they decide, ‘I’m going to go invest in it too.’ The other problem that I see with a lot of individual investors is they don’t do their homework. If they invest in a fund they don’t realize it has front loaded fees in it, or it has annual expenses that are extremely high, it tends to underperform an index. You combine all those things together, it is a poor investment.

Q: Do you feel that Americans have an appropriate understanding of asset diversification?

A: No. I think the biggest stumbling points are two things: the role of bonds in terms of what they do for a portfolio and international exposure. We have a strong home bias to the U.S. so most investors who own stocks are heavily invested in the U.S. They lack global diversification. What diversification gets you is reduced volatility and, ideally, higher risk adjusted returns. If an individual takes on a lot of risk by investing in high beta sectors, sectors that are extremely influenced by the direction of the market, their portfolio is going to have higher volatility. Diversification allows you to do two things: get rid of idiosyncratic risk by buying an index over individual stocks and tie into all sectors of the markets. If I gain some international exposure, I’m also getting further diversification, in that, international stocks tend to outperform when U.S. stocks underperform, and vice versa. Bonds are another form of diversification in balance. They are less volatile and tend to be less correlated with stocks so as equities go down bond valuations tend to go up.

Q: For a little more about financial literacy, how do emotions play in investment decisions, and what prevents investors from making rational decisions with their money?

A: There are seven key behavioral heuristics that impact whether someone is a good investor. Gender-associated biases affect behavior since men and women embrace different elements of these biases. Many of the individuals
I deal with are men, who tend to be extremely un-objective and are concerned that if they open up and share information they will be perceived as a poor performer. Women tend to be less confident, more risk-adverse, and want a lot more collaboration. Investors are affected by recency bias as well, but if you are chasing returns you are almost certainly going to lock in underperformance. If you market time so you sold, you made a bet that you can outperform the market or that you know when to invest or not. The market timer has a habit of sitting on the sidelines once the market goes down but has a difficult time getting back into the market. There’s a combination of all these behavioral heuristics that impacts their ability [to invest].

Q: How should people evaluate how much risk they should take on in their portfolio, and what level of risk is appropriate?

A: Risk will vary based on the individual. Just because someone is wealthy or poor does not make them more or less risk adverse than another. What I do is, I have a 20-point questionnaire that walks them through: what is their time horizon, how comfortable are you with the concept of investing more once the market goes down, and other indicators. Based on their risk tolerance level, there’s a score. That tells us their asset allocation, which could be anything from 50-50 to 75-25 to 90-10 in equities versus bonds. We don’t just leave it at that. We try to make sure they are comfortable and fully understand what risk is.

At the end of that process, we put together a model portfolio, and then we show them how that portfolio would have performed over periods of time including the subprime crisis, long-term capital, and the Russia crisis. It’s a backward looking data point for them to better understand there will be up periods and down periods. We really take the time to educate them to see not only, here’s your risk score, but also here’s what would have happened if you invested that way. It helps builds a confidence factor on how their portfolio will do over time.

Q: Should consumers try to pick and choose individual stocks or focus more on Exchange Traded Funds (ETFs) and mutual funds?

A: There is very strong evidence that active managing underperforms a passive indexing approach. I tend to be a disciple of John Bogel at Vanguard who is a strong proponent of indexing. In order to outperform [the market], you have to make bets on what the market is going to do or where there’s greater value. That speculative bet, given the behavioral heuristics I talked about, are more often than not going to be wrong. It is a select group that can consistently outperform an index. If you cannot find a person who can do it consistently you are better off buying ETFs and mutual funds and indexing your portfolio to get the best returns you can at low fees.

Q: Now on to the fiduciary rule. The current administration is in the process of delaying or possibly revising it. How will this affect consumers?

A: I personally think the rule is an extremely important one. It serves an important purpose for investors. I think there is a big difference between the culture of a firm that is a broker-dealer and a fiduciary. There are two aspects to that. One is a fiduciary is required to invest clients the best way possible in ways that always puts their interest first. The costs of a fiduciary are totally transparent. I charge a fee for assets under management and you know what that fee is. The fees for brokers are less transparent and often clients are befuddled when they realize that not only are they paying a transaction cost, they may be paying a commission on top of that or even be in a high-fee fund that will then pay the broker additional fees.

But, a fiduciary may actually cost an individual more. That’s part of the concern individuals now have. It serves a great purpose aligning the interests of a fiduciary and client, but at the same time it potentially introduces higher costs that can lead to lower returns. The fundamental question is how can we best inform the investor of a fiduciary and broker and keep fees as low as possible so the client can earn the highest return without losing money to hidden fees. I think [the rule] speaks to the culture of investing that brokers are inherently out there to get clients’ money while fiduciaries serve their best interest. That’s my own personal experience. I’ve brought in clients from broker firms who thought the quality of service was very poor, and they paid a lot of different fees they didn’t realize.

Q: What steps should investors take when considering someone managing their money? What questions should they ask?

A: First, is the person a broker or fiduciary? What is their investment philosophy and the process that they go through? Third, what are the implicit and explicit fees I will be paying you? How do you communicate with clients? Ideally, get as many reviews of a financial consultant as possible. You do not have to immediately sign with that person. You can do other things like review their website or go to FINRA’s online broker check to see if they have any violations. Also, sit down with multiple candidates to get a sense for the culture of a firm and the advisors’ experience. What is their succession? If anything were to happen to your advisor, who would take over for them? That’s important and often overlooked.

Q: What tools can investors use to improve their own financial literacy?

A: There are numerous online tools available. There is the Khan Academy, Investopedia, FINRA itself, Fidelity, and there are extensive online materials that provide the basics for investing. I don’t want to plug Vanguard too much, but
they are a leader in investment education. They make their materials available to the public free of charge. There is also a growing trend of new groups focused on education. I’m trying to form my own financial literacy non-profit in the Chicago area to provide basic materials and a portal people can go to access them. We’re also starting to see more high schools make it mandatory for students to attend a graded financial literacy class.

Q: When is it helpful to hire a financial advisor? At what point should people consider that?

A: I personally believe that since behavioral problems and lack of education are the biggest single determent to performance, individuals should seek out an advisor as early as possible. It shows a commitment to their investment, it will get them more educated, it will get them invested in the market in the most diversified way possible, and it prevents them from making emotional, ad hoc changes over time.

Here’s something that also works. Let’s say I just graduated from college and only have $5,000: go to Vanguard. Vanguard will assist you over the phone and will help you invest. Let’s say I’ve accumulated $100,000 and I need more wealth-building strategies. Find a local individual in your neighborhood, through the things we talked about before, and develop a relationship with them. An advisor is going to want someone who will come to them with a core amount of assets. Let’s say arbitrarily that’s $50,000. If you have less than that go seek out a larger service like Vanguard or Fidelity. I would stay away from robo-advisors. What they do is put you in a model, sometimes it works sometimes it doesn’t, but it still doesn’t solve the behavioral issue. No one is there to advise you to stop what you’re doing. I have discretion over my clients’ assets and we have a dialogue. If they want to pull money from the market, I’m there to advise them not to do that and how that will hurt their long-term performance. An advisor serves as an important stopgap to keep you from making errors.

Q: What strategies are helpful for adopting the right mindset for long term investing and managing emotions?

A: Investments work best over time. Do not follow an investment over a short horizon, a six-month to three-year period. Dollar costs average into the market over long periods of time, which gives you the effect of always investing at lower prices. If you know the tendency is for markets to go up, if you dollar-cost-average you can buy at lower prices. Think about when you are going to need this money. If your time horizon is three years or longer, you can invest in the market and not actively change your allocation. Let that play out over long periods of time. If your time horizon is shorter, these investments are not suitable for you because they are too volatile. Keep it in safe secure assets. If you can invest in long horizons, invest in a well-diversified way and then, importantly, fight your own behavioral tendency to make changes.

In conclusion, consumers should remember that not all solutions for saving and investing will work for everyone. Before making any substantial financial commitment, consumers should give serious thought to their future financial needs, their current and future cash flows, and their investment goals. They should seek out the best education and expertise they can find on the topic. Doing this will enable consumers to save and invest for the future while hopefully avoiding the financial mistakes that hurt many people.

Gerard Downey is a Certified Financial Planner and the founder and principal of Linden Wealth Management, a boutique Registered Investment Advisor and fiduciary. Linden is dedicated to helping clients realize their full investment potential with informed advice, education, and sound investment management.

Disclosure: Colin and Gerard Downey are related, which is why David Weissman participated in the drafting of this article. No financial compensation was exchanged in relation to this interview and article.
Ten years ago, the mention of “driverless cars” would have prompted flashbacks to The Jetsons or Back to The Future. The concept of an autonomous vehicle (AV) navigating city streets or carrying a family down I-95 seemed out of reach, if not impossible. Fast-forward to 2015, when the first passenger rode in a fully self-driving Google vehicle on public roads. The vehicle carried Steve Mahan, a legally blind man from Santa Clara, California, on the streets of Austin, Texas. Great Scott! This accomplishment is one that even Doc Brown and George Jetson would call revolutionary.

Today, the biggest names in the automobile and technology industries are racing to be first in the autonomous vehicle market. The driverless car phenomenon is approaching quickly, and its effects are unavoidable. This means drastic changes are coming to the way consumers get around. This movement is worrisome to the many people who do not want to place their safety in the hands of a computer.

However, many advocates for AVs argue that this new technology could help ameliorate the negative safety impacts of social media, smartphone use, and other distractions. Mobile devices and the ever-rising rate of Internet engagement have become as dangerous as drugs and alcohol when it comes to driver impairment. According to a McKinsey & Co. report, AVs are estimated to reduce traffic accidents by 90 percent. Riding in a car with no one at the wheel—perceived by some as a novelty—may in fact be the most significant development in driver safety that the industry has ever seen. However, fully-autonomous cars are not yet available for purchase, and we do not know how quickly they will become a reality.

In a future driven by autonomous transportation, liability becomes incredibly complicated. Picture this: your new driverless car is chauffeuring you around and arrives at a four-way stop. You proceed into the intersection at the same time as another human-driven vehicle and you collide, damaging both vehicles. Who is liable for all of this damage? If the blame falls on your car, does your insurance cover the costs? Is the car manufacturer responsible? Do you even have car insurance, in this new model of driving? “Drivers” may question why they should have to pay for damages if they weren’t personally navigating the car that caused the accident. Manufacturers may claim that their vehicles will be able to avoid all accidents and will always make choices that are superior to those of human drivers – the elimination of human error, after all, is a major selling point of this technology. If the car is at-fault in an accident, then, it may be assumed that the technology failed. If so, how will carmakers handle this?

All of these are valid questions, given the rapid approach of AV technology. Autonomous driving creates an unprecedented liability debate that will prove to be complicated and difficult to resolve. As these technologies become mainstream, consumers will need to stay informed about the risks and implications of driverless transportation technology.

Consumer opinions on driverless car technology and liability are a good barometer for what consumers may want liability to look like in the future. An Insurance Information Institute (III) report found that 55 percent of consumers would not ride in an autonomous vehicle, 43 percent would, and 2 percent are undecided. This survey represents the apprehension and hesitation of consumers regarding autonomous vehicles that manufacturers will have to overcome. Further, 50 percent believe that car manufacturers should bear the responsibility in the case of an accident. The other 50 percent of these voters provide an interesting insight into consumer opinions of AV technology. 24 percent of voters believe the car owner should be held responsible, 11 percent think it should be the car insurer, 9 percent answered the “car occupant,” and 2 percent are undecided. Some survey takers may consider “car owner” and “car occupant” as the same thing; however, these voters may also consider the prospect of shared autonomous vehicles in which the “car occupant” is not the owner, but merely a rider. As ridesharing companies like Uber and Lyft pour money into AV technology, these “car occupants” will be much more common. Regardless of these differences, half of those polled believe that manufacturers should be held liable, which is more than enough reason for car companies to consider the cost of insurance as they roll out new and expensive autonomous vehicles.
Auto manufacturers and technology developers will have to consider whether their vehicles meet an adequate safety standard and their technology is reliable. This is not a cheap endeavor, and if manufacturers expect to bear the liability for their vehicles, they will likely factor that cost into their sales prices. Consumers may face a disproportionately high price tag for driverless cars, relative to what they pay for cars now. However, car buyers may not be ready to face this reality. In the same report, the Insurance Information Institute found that only 25 percent of consumers would be willing to pay more for a driverless car to cover the manufacturer’s liability. Further complicating this issue is the fact that self-driving vehicles will already cost more than conventional cars, because of the high costs of research, development, and manufacturing. Current semi-autonomous features have reduced accidents, but the cost of these technologies is so high that the total dollar amount of insurance claims is actually increasing. III reports that the frequency of property-damaging accidents is decreasing at a rate of 1.6 percent per year while the size of claims is increasing at almost 6 percent annually. Therefore, if manufacturers are forced to pay for claims, they will most likely defray their costs by demanding a premium for autonomous vehicles. The extent to which liability impacts the price of AVs will largely depend on insurance policies and how the government chooses to regulate this complex problem. Specific, active change has not taken place regarding insurance for driverless cars, but there are frameworks in place and serious discussions for policies moving forward.

In September 2016, the National Highway Traffic Safety Administration (NHTSA) and the Department of Transportation (DOT) issued a “Federal Automated Vehicles Policy” that provided guidelines for the development and adoption of autonomous vehicles. The guidance addresses insurance and liability as a part of the “Model State Policy” which notes that, in regards to AVs, “States retain their traditional responsibilities for vehicle licensing and registration, traffic laws and enforcement, and motor vehicle insurance and liability regimes.” According to the document, the policy’s objective is “to ensure the establishment of a consistent national framework rather than a patchwork of incompatible laws.” In other words, states will maintain their autonomy over car insurance practices, but they must collaborate to reduce complications between states. The current car insurance framework virtually eliminates any confusion over liability regardless of the state in which an accident occurs. However, AVs create a more complicated situation of liability, and if states do not promote consistency, consumers may face costly headaches. AV manufacturers and technology companies will prefer a consistent framework as well, to reduce the cost and complexity of their product planning state-by-state. Typically, regulation lags technological innovation, but in this case both the AV industry and government regulators cannot afford to move slowly. The Federal Automated Vehicles Policy also notes that insurance and liability changes could have a significant impact on prices, and it suggests that}

States will bear the primary responsibility for the future of driverless car liability and insurance. They must balance the unique needs of their own localities and citizens with the need for a consistent and reliable framework across state borders. While concrete policies are not yet in place, as driverless technology becomes readily available, these policies will soon follow. In light of this debate, another question looms: Will car ownership be worth it in the future? Or, will AV ride-sharing companies be sufficient to meet all of our travel needs? Based on consumer sentiment and policy development, it seems that the question of ownership and the debate over liability are fundamentally connected. Thus, state and federal regulation will not only affect what consumers pay for cars, but also how they interact with them.
Lost in all the chaos surrounding the failed attempt to repeal the Affordable Care Act is a modest but important effort to reform healthcare. The Trickett Wendler Right to Try Act currently before Congress would achieve significant strides in making cutting-edge treatments available to patients who need them most.

Introduced in January by Senator Ron Johnson (R-WI), and co-sponsored by 45 other Senators including Joe Manchin (D-WV) and Angus King (I-ME), the bill is named after a Wisconsin mother of three who died in 2015 after a battle with ALS. Her daughter Tealyn poignantly explained why the legislation is necessary: without access to the newest treatments, “it feels like you’re stuck, like the government is in charge of your life and they haven’t been in your shoes either.”

The bill has two primary components. The first prevents the federal government from restricting experimental drugs or other medical products that are “intended to treat a terminal illness, provided that treatment is in accordance with state law, is approved/certified by the patients’ physician, and that the patient has exhausted all other possible treatment options.” This element of the bill would help give patients access to a broader array of medical options while preserving the ability of regulators to ensure these drugs are dispensed safely.

For the loosening of regulations to incentivize drug-makers to participate in “Right to Try” efforts, it’s important these companies are insulated from litigation or punishment for trying to help, and the second component of the legislation does just that. It would also prevent federal agencies from using any outcome of “Right to Try” use to negatively affect a drug approval decision. For example, if a terminally ill patient – after exhausting all possible treatment options, getting approval from her physician, and following state law – used an experimental drug and subsequently experienced an adverse event, the FDA could not take that patient’s experience into account when considering whether to approve the product for wider use. Without the appropriate scientific methods in place, like those employed in clinical trials, determining the source of complications is problematic. Therefore, such cases should not influence the decision of regulators to green-light treatments for terminal illnesses.

Another patient who illustrates the importance of the legislation is Josh Hardy, a Fredericksburg, Virginia cancer sufferer who contracted a viral infection after a bone marrow transplant. His family learned of an experimental drug that could help him, but the company refused to provide it, explaining that they did not have the resources to offer the drug to Hardy while still working on getting into a clinical trial that would benefit all patients. A social media campaign convinced them to provide the drug after all, but it was too late to be effective.

Virginia is now one of thirty states allowing drug companies to give unapproved drugs to terminally ill patients. There is also an existing federal “compassionate use” program that allows patients some access to lifesaving remedies. The problem with current program, though, is that adverse events from experimental treatments are still taken into account by the FDA - regardless of whether the adverse event can be clearly attributed to the use of the drug. FDA reviewers should consider instances of compassionate use differently than actual clinical trials, given that there are no scientific controls in place to properly attribute cause and effect. Otherwise, the potential exposure from unfounded bias is a clear discouragement for the drug companies to participate in such programs.

The Right to Try Act improves on the current law by preventing FDA regulators from taking unclear compassionate use results into account when approving a new drug. Yet even this component could be strengthened: once the FDA learns of a result, it’s impossible to ensure that result won’t factor into an agency decision. To ensure unwarranted bias does not come into play, it would be preferable if the companies did not have to report instances of compassionate experimental use in advance of approval decisions.

While no law is perfect, the Right to Try Act is an important bill that deserves the bipartisan support it has garnered. It represents a rare opportunity for Congress to provide clear comfort to the suffering, and to extend – and even save – lives.

Kyle Burgess

Editorial