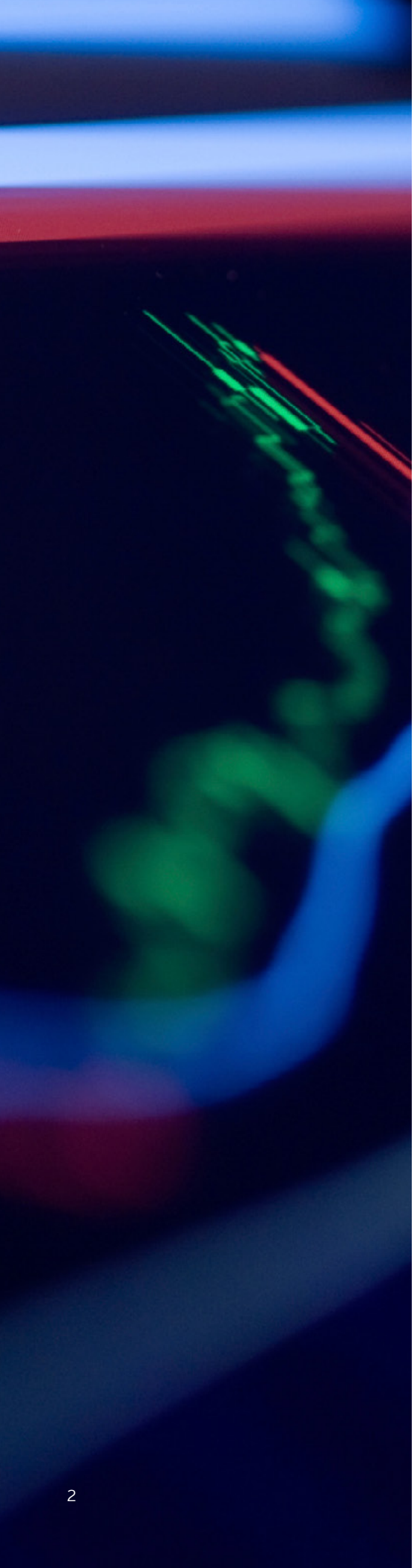
The future of health insurance

A road map through change

EY
Building a better working world



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Disruption comes to the disrupters

We are in the midst of an unprecedented revolution in health care, thanks to two huge shifts: the need to tame runaway cost inflation, which is spawning new incentives and payment structures, and digital health, which is democratizing data and empowering consumers.

Payers — health insurers and government agencies — are often perceived as being in the driver's seat in this transformation. Indeed, since payers control the purse strings, the changes they are unleashing are disrupting the business models of other health care entities. Payers' move to reshape economic incentives is driving **providers** to realign business models around increasingly outcomes-focused metrics and increasingly empowered patients. Their heightened scrutiny of the value of interventions in coverage decisions is disrupting the business models of drug and device **manufacturers** — who are responding with data analytics and "beyond-the-pill" services. Lastly, payers' ability to increase cost sharing with **patients** is even influencing how consumers make health care decisions and the rate at which they adopt digital health technologies.

But the fact that payers are the ones driving the disruption of others does not insulate them from these forces. When everyone in the health care business is being required to demonstrate how much value they deliver, it's only inevitable that payers will ultimately be held to the same standard. And it's not clear that payers would fare well under such scrutiny. The core services they deliver — underwriting risk and settling claims — are becoming increasingly commoditized. In essence, payers are middlemen — intermediaries between manufacturers, providers and patients. And, in industry after industry, disruptive innovation tends to do the same thing to intermediaries — whether travel agents or music retailers. It disintermediates them.

Private sector health insurers are particularly vulnerable to commoditization and disintermediation. In an era that demands patient centricity, insurers have limited and transactional relationships with consumers. At a time of focus on differential value, their core offerings are poorly differentiated and largely interchangeable. And despite the huge shift to data and analytics as value drivers and sources of growth, insurers make relatively little use of the data they already generate.

The catalysts of change are out there. Patients' expectations have increased, thanks to the ubiquity of e-commerce and social media. They are already demanding similar levels of transparency and access from health care providers, and will soon expect the same from insurers as well. As in other sectors, the first entities to respond to

these needs may not be mature incumbents, but rather newcomers — start-ups and other nontraditional entrants to the space.

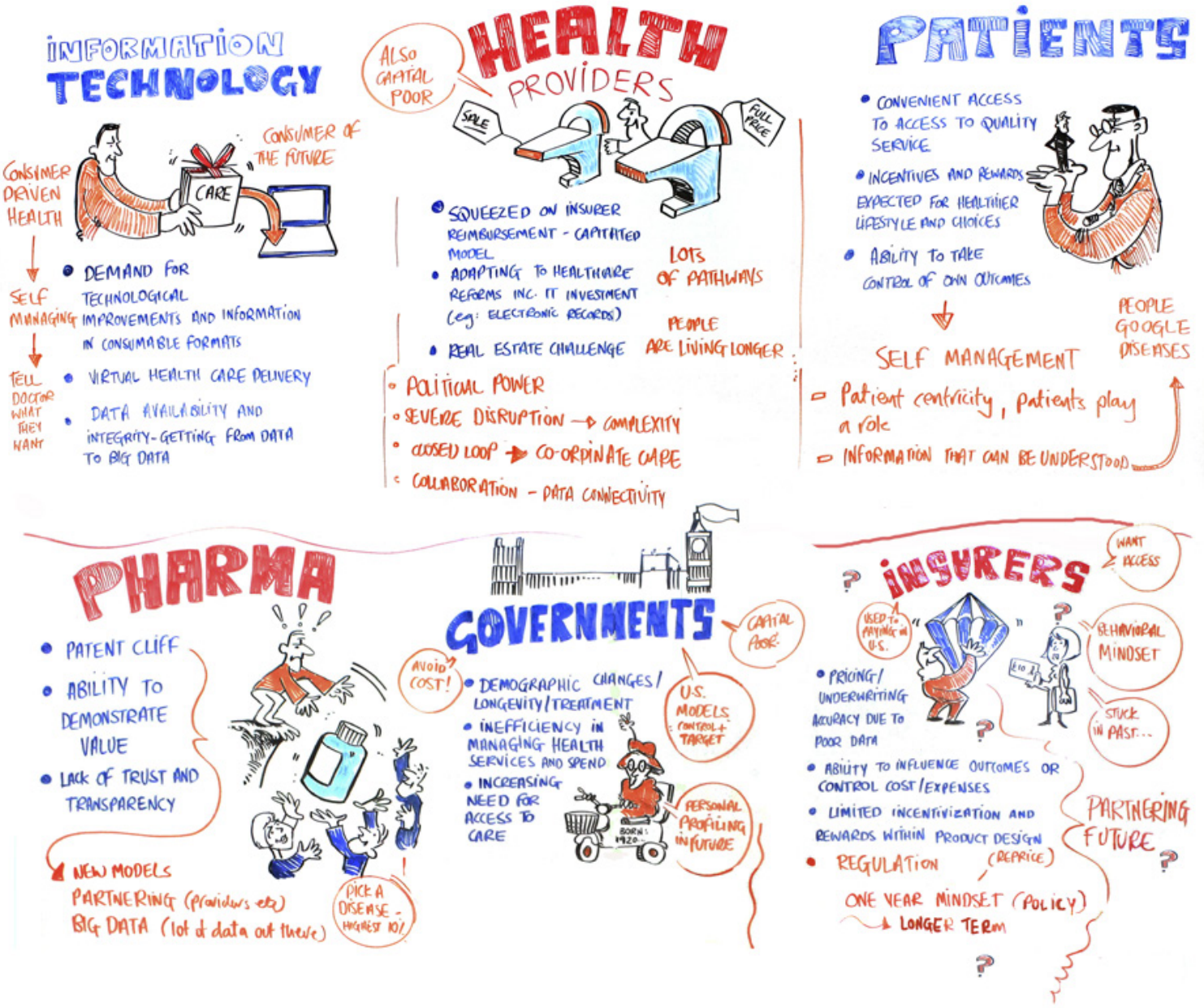
Indeed, examples are already starting to emerge. Oscar, a New York-based start-up, is billing itself as a new kind of insurance company — rewarding customers for healthy behaviors, communicating in plain English and providing free calls to physicians and greater price transparency. Another start-up, SimplyInsured aims to disrupt health insurance in the small business market. The site wants to improve price transparency by allowing employees to find the best quote in minutes, in much the same way that online booking sites have disrupted travel agents.

These are isolated examples of relatively incremental, relatively small, shifts. But more is needed, and more is coming. The real opportunity for companies looking to get ahead of these trends and position themselves for the future of health care is to combine such approaches into a coherent strategy. How do you reinvent yourself as a fundamentally different kind of health insurance company — one that is strategically aligned with the future of health care rather than its past?

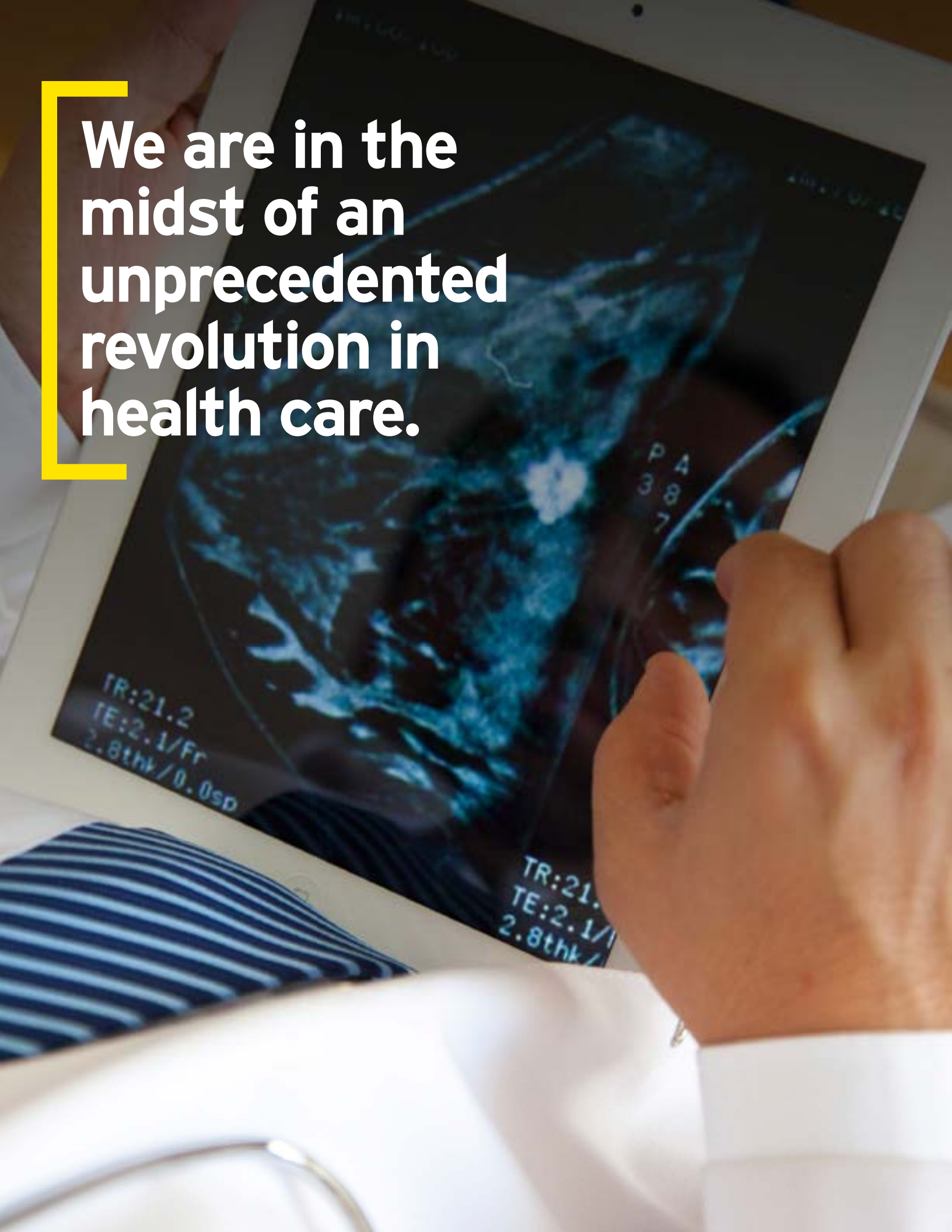
In this document, we present one such vision. In this model, the insurance contract changes from a short-term transaction to a longer-term partnership in which the insurer and the insured collaborate to improve behaviors and health outcomes. The role of the insurance company changes — from being just in the business of quantifying and pricing risk, the insurer expands into the business of influencing and lowering risk. The amount of information available to the insurer increases exponentially in this new data-centric, technology-enabled model — giving the company a much deeper understanding of the customer than has been possible so far.

Since the power of this model comes from how well aligned it is with the future of health insurance, let's start by summarizing some of the biggest trends disrupting this sector.

Exhibit 1. As business models get disrupted across health care, are insurers next?



Source: EY internal brainstorming session on the health insurer of the future, held in London in June 2014. Illustration by Charles Waples.


We are in the midst of an unprecedented revolution in health care.

Six trends disrupting health insurance

1. The chronic disease crisis

We are on the cusp of a looming chronic disease epidemic. Already, so-called "non-communicable diseases," such as heart disease, type 2 diabetes and hypertension, are the biggest drivers of global health care spending, accounting for about 75% of costs. Meanwhile, several trends — aging populations in industrialized nations and China, growing middle classes and sedentary lifestyles in emerging markets — portend that these trends will only be exacerbated over time.

These chronic diseases share two characteristics that have significant implications for the payment and delivery of health care. First, they have a strong behavioral component. While genetics and environmental factors play a role in the incidence of such ailments, behaviors — diet, exercise, smoking, stress levels and even sleep patterns — are the most significant component. Second, as the name suggest, chronic diseases play out over the long-term — they are caused by the cumulative effect of years of behavioral patterns and, once diagnosed, patients have to live with these conditions for the rest of their lives.

The greatest need, therefore, is to focus on changing long-term behaviors and managing chronic diseases over the long run in more efficient ways. Yet, nobody in today's health care systems has the incentive to focus on the long-term needs of patients. In the fee-for-service model that has so far been dominant, providers are reimbursed for procedures conducted rather than results delivered — creating little or no incentive for preventive interventions. While this is changing, the move away from fee-for-service (discussed in the next section) is happening slowly, often in the form of small-scale experiments, and even these new incentive structures don't always align interests with long-term outcomes. Meanwhile, insurance companies and employers (who subsidize insurance in many markets) aren't very incentivized to focus on truly long-term behaviors and costs — doing so might end up lowering costs for the competition, thanks to employee and customer turnover. Even governments in single-payer systems — which ultimately have the most to lose from the ticking time bomb of chronic disease — have misaligned incentives, since the elected representatives who control budgets are more focused on near-term election cycles than the longer-term costs of chronic disease.

Disruptive idea: what if you could develop an offering that, for the first time, truly aligned incentives around long-term behavioral change?

2. The move to outcomes and value

As health care costs escalate — in large measure, thanks to the growing chronic disease burden — public and private payers are restructuring financial incentives to better align them with health outcomes and economic value. New models are emerging based on various forms of outcomes-based payments (e.g., rewarding or penalizing providers for their success or failure in delivering certain agreed-upon health outcomes) or capitation (e.g., paying providers a fixed amount per patient or episode of care). Many health systems are looking for ways to reduce variation in care, examining the comparative effectiveness of drugs and other treatments, and more.

While these are all positive developments, they are making only limited headway in aligning incentives with the drivers of long-term costs. In many cases, payers are moving slowly, starting with relatively limited experiments and pilots.

Disruptive idea: could you design an approach that embraces pay-for-performance not as a limited experiment, but as the basis for its entire health insurance offering?

3. M-health technologies

Health care is being democratized by a proliferation of m-health technologies that are empowering individuals as never before. Social media platforms are allowing patients and physicians to share information with each other, enabling them to learn in new ways and in real time. Mobile apps are blurring the lines between smartphones and medical devices, and allowing individuals to conveniently and continuously track everything from blood sugar to sleep patterns. Implantable and wearable sensors — ever cheaper and increasingly ubiquitous — are bringing the "internet of things" to health care and transforming everyday objects, from weighing scales to running shoes, into medical technologies that can help individuals monitor and manage their care.

These technologies may seem like novelties with niche appeal, particularly in these early days, but their potential for managing chronic diseases is nothing short of revolutionary.

These technologies may seem like novelties with niche appeal, particularly in these early days, but their potential for managing chronic diseases is nothing short of revolutionary. An inexpensive sensor or app that allows a patient to monitor key biometrics such as blood pressure or glucose levels is far more cost-effective than the alternative of in-person consultation at a clinic. Moreover, these technologies can monitor patients continuously as they go about their everyday lives, allowing for timely intervention only when needed. Deploying them with at-risk patients could supercharge prevention at a fraction of the cost.

Unfortunately, while these technologies are far more cost-effective at managing and preventing chronic diseases, payers have been slow to adopt them. In legacy fee-for-service systems, there is often no way to get reimbursed for using m-health technologies, which creates uncertainty in the minds of providers and patients and leads to spotty adoption. And while payers are moving from fee-for-service to pay-for-performance models, they are often doing so through limited experiments in which they transfer risk to providers. It is up to providers to then decide whether or not to adopt technologies, which may or may not happen. But payers themselves are not embracing m-health technologies or promoting them in a big way.

Disruptive idea: could your new approach be powered by m-health technologies — allowing much greater insight and influence over patients' behaviors and driving down costs through widespread adoption?

4. The big data revolution

The term "big data" seems to have gone from obscurity to buzzword almost overnight. Big data — which refers to a quantum increase in the volume, variety and velocity of information — is rapidly being generated in the form of electronic health records, payer claims, pharmacy data, laboratory test results, patient registries and the slew of m-health technologies discussed above.

However, much of this data remains siloed. These various forms of data are collected by different entities, so there are numerous obstacles — organizational boundaries, privacy and security issues — to pulling it together. This is a significant issue, because the real power of big data emerges from connecting dots across these streams of information — without which, on a practical level, this information isn't really big data as much as a big assortment of little data.

As a result of this data fragmentation, nobody in health care has the full picture of a patient. Different entities — payers, providers, pharmacies, device manufacturers and others — have individual pieces of information. And while companies have emerged to combine many pieces of the puzzle (e.g., Symphony Health Solutions and GNS Healthcare), nobody is yet consistently accessing and integrating data from the growing pool of m-health technologies that are generating real-time information about patients' behaviors.

Historically, insurers have not been very customer-centric.

For insurance companies, this compounds the problem of information asymmetry. While health insurers have extensive experience in underwriting and pricing health-related risks, the unfortunate reality is that these functions are based on relatively little information about the patient. Insurers don't know much about their customers (typically, their information consists of demographic characteristics and the insured's health and family history) and may be precluded by regulations from using some information (e.g., gender) in their pricing decisions. Emerging technologies, such as personal genome sequencing, are likely to increase this imbalance in information since insurers may be prohibited from using genomic information in their underwriting decisions.

The bottom line: while health care is entering the era of big data, and patients are increasingly empowered with information about their behaviors, risks and outcomes, insurance companies remain in the dark.

Health insurers have also traditionally not been very adept at using the data they already have. While insurers possess considerable amounts of customer data, this information is typically fragmented thanks to legacy systems and internal siloes. Data is often not shared across different product lines, or financial/management/IT systems.

Disruptive idea: what if you could make data a central component of a new insurance offering — creating the complete picture that has so far been missing to better understand and influence risk?

5. Customer centricity in insurance

At a time when customers are being empowered with more transparent information and more freedom of choice, companies in many industries are looking for ways to become increasingly customer-centric. The same trend is playing out across health care, as patients are gaining access to information and taking control of their health care decisions. With health systems becoming more focused on patient outcomes and behavioral change emerging as the paramount challenge, companies involved in health care are increasingly focused on getting closer to the ultimate customer.

For health insurance companies, this is particularly challenging. Historically, insurers have not been very customer-centric. Many insurance companies adopted the independent agent model — a more cost-effective alternative to full-time employees, but one that invariably created a buffer between insurers and the insured individuals they ultimately serve. Agents — who are naturally interested in protecting their role as intermediaries and shielding themselves from being disintermediated — have an incentive to control information about customers rather than share it. Insurers — cut off from the individuals they serve — often think of the agent, and not the insured, as their customer.

Disruptive idea: could you develop a proposition that places the customer squarely in the center — using deep data about customers to understand their needs and deploying m-health technologies to build relationships and guide customers' behavior?

6. Pressures on underwriting

The core underwriting business has come under increased pressure in recent years, thanks to a number of developments. Investment income has declined, increasing the demands on profits from the core insurance business. Regulatory constraints are putting even more pressure on underwriting performance. Micro-segmentation in some non-health lines of business (e.g., automotive) is allowing some competitors to take the best risks, which then leads to deteriorating claims experience for other firms.

Regulatory constraints are putting even more pressure on underwriting performance.

Disruptive idea: could your health insurance offering find new sources of revenue to supplement earnings from the core underwriting business?

Exhibit 2. Six trends that are disrupting health insurance

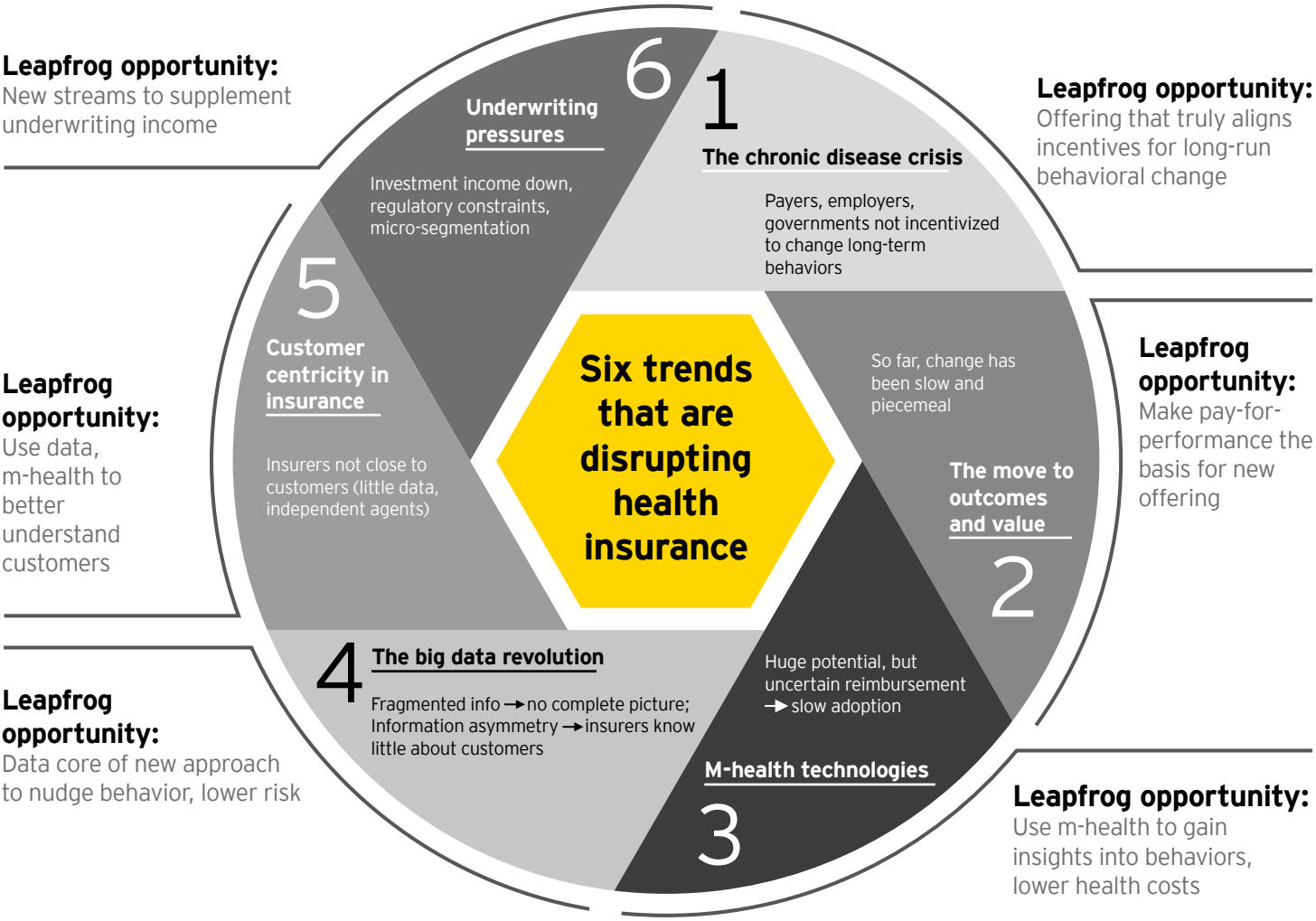


Exhibit 3. Essential characteristics of the insurer of the future

The insurer of the future will need to be ...

... customer centric

- Clear communications
- Predictive analytics to anticipate and understand customers' needs
- Relationships based on changing life events

Why?
- Higher customer expectations
- Increased demand for transparency
- Customer insight challenges across third-party channels

... data savvy and automated

- Data engine and analytics
- Automation using digital technologies

Why?
- Increased adoption of telematics, introduction of driverless cars
- Expanding influence of social media and mobile
- Growing pressure on traditional paper-based processes

... a partnering organization

- Partnering structure and governance for delivery of collective outcomes

Why?
- Growing need for outside capabilities for growth, efficiency
- Increased focus on partnering, alliance management

... strong in the core insurance business

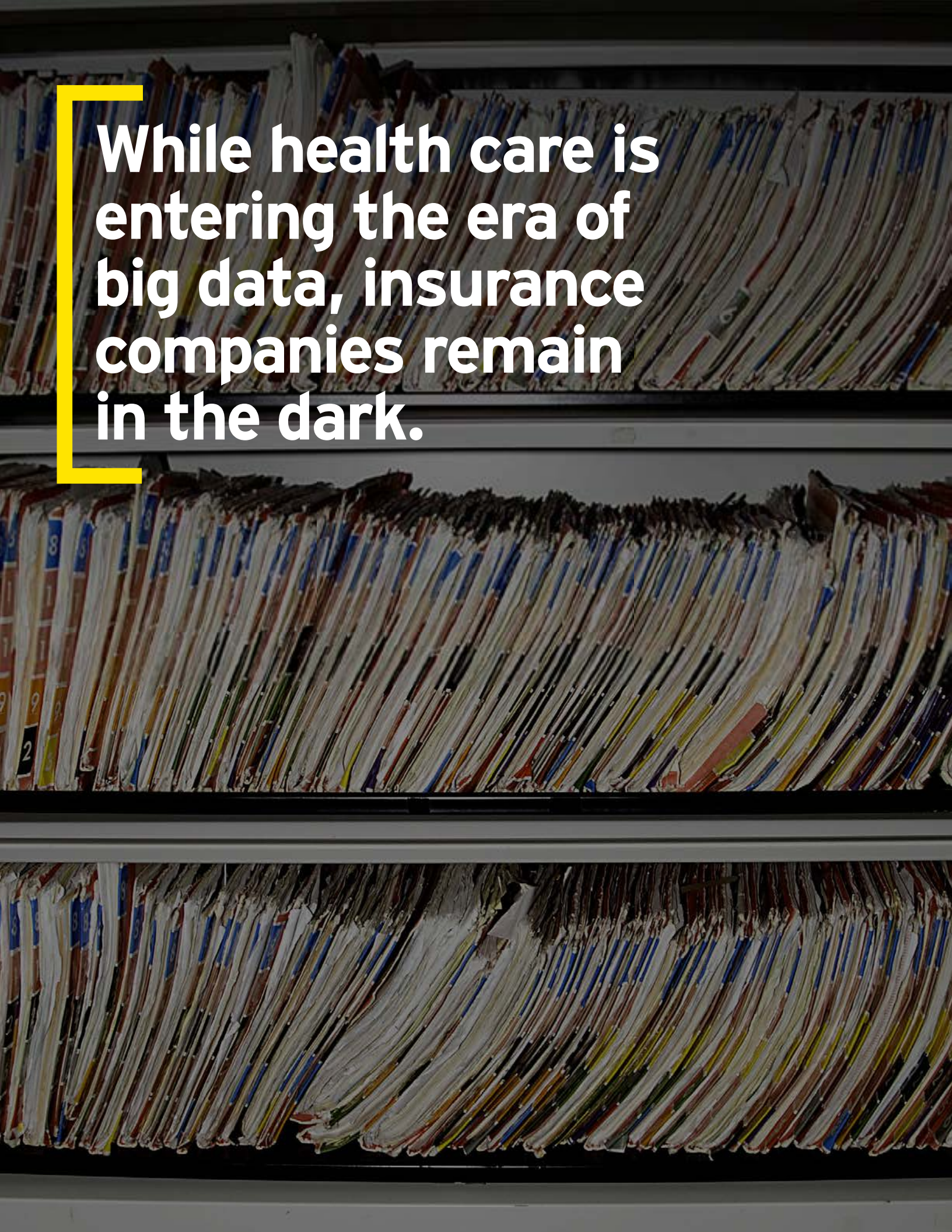
- Underwriting
- Pricing
- Enterprise risk management

Why?
- Underwriting pressures from low investment income, regulation and micro-segmenting
- Growing imperative to manage risk across organization

... flexible and cost-efficient

- Flexible, cost-effective infrastructure for finance, HR, operations management
- Services-oriented architecture business model

Why?
- Drive for efficiency due to cost and margin pressures
- Growing pressure on siloed and duplicative infrastructure across channels



While health care is entering the era of big data, insurance companies remain in the dark.

A new model for health insurance

The trends listed above will disrupt the health insurance business as we know it. To remain relevant, health insurers will need to reinvent their business models in fundamental ways: to get closer to customers, better understand their behaviors and risks, use data and technologies in new ways and more.

There is no one "correct" response to these demands, and companies could conceivably develop a number of innovative new models. In this paper, we present one possible new model that EY has developed to respond to these changes. After discussing this core new model, we also present several variants that take into account regulatory constraints in the largest potential market, the US.

This business model is a fundamentally new approach to health insurance. It transforms insurance from a short-term contractual relationship to a longer-term collaborative one by laying the foundation for ongoing engagement with customers. The model is powered by m-health technologies (which help influence customer behavior and also generate reams of valuable data). It is delivered by a consortium of health care-related entities, which collaborate to improve outcomes and share success. This model allows the insurer and its partners to create best-in-class health data — an extremely valuable asset in increasingly outcomes-focused health care systems that provides a lucrative revenue stream.

With this new approach, the insurer would enter a very different business — not just pricing and underwriting risk, but influencing and *reducing* risk as well.

Most importantly, the model recognizes that the health insurer of the future will need to be in a very different core business. So far, insurers have been in the business of pricing and underwriting risk — risk has been static and, unfortunately, quantified using relatively little information. With this new approach, the insurer would leapfrog over the competition and enter a very different business — not just pricing and underwriting risk, but influencing and reducing risk as well, and doing so with a much better understanding of customers' behaviors and risk factors.

Option 1. The core model (non-US private insurance markets)

The core model (which, due to regulatory constraints in the US, would largely be sold in non-US markets that have private insurance) would enter the market with a very different value proposition. Instead of positioning insurance as a traditional one-year contractual relationship, the new offering would seek to build a long-term collaborative relationship with customers. The basic **value proposition** would be something along these lines:

"Sign up with us and we will partner with you to keep you healthy for the rest of your life — or as long as you choose to stay with us. You'll get the latest apps and technologies to help you manage your health — your diet, activity, biometrics, sleep and more. Over time, you can expect that your premiums will increase more slowly than they would if you had signed up with another insurer — and you'll even earn additional rewards for proactively managing your health."

Customers would have **economic incentives** to stay with the program for multiple years. These could be in the form of a carrot (e.g., rebate checks) and/or a stick (e.g., a multi-year contract with an early-termination penalty), depending on regulatory restrictions in different markets. Since a key component of the model would be to keep this customer group healthier than the underlying population, it is also highly likely that premiums would increase at a slower-than-average rate: an additional economic incentive for customers to remain in the program for the long haul.

To make the model work, the insurer would need to assemble a **consortium** of partners with complementary assets and skills. Key members of the consortium might include:

- **The insurer.** The insurance company in the consortium would perform traditional insurance functions (e.g., acquiring customers, underwriting and pricing, collecting premiums, paying benefits). In addition, it could also function as the central node in the consortium as the host and founding member.
- **Provider network.** To reach patients in health care settings, it will be critical to partner with a health care provider network with broad reach (e.g., a hospital chain). In addition to the usual function of delivering traditional medical services, the provider network would play an active role in proactively guiding behavior through prevention programs, timely intervention, compliance monitoring and more. A key emphasis of the consortium would be to identify individuals who are at high risk of experiencing adverse medical conditions and/or incurring significant expenses — and intervening proactively.
- **Patient organization.** Organizations that represent the voice of the patient could be critical for building trust and gaining traction with consumers. For instance, disease foundations could play a very useful role in variants of this model that focus on specific diseases.
- **Data consolidator.** Since data is a central part of the business model and none of the other partners have the deep skills needed to combine and analyze data from multiple streams and in various formats, a data consolidator would be needed.
- **Technology provider.** In addition, a technology provider would provide the physical infrastructure needed for this data-centric approach. This would include data storage and management services run in the cloud.
- **Government.** Lastly, partnering with one or more governments would make sense. It would give governments a way to align interests around longer-term prevention and management, and any tax or other incentives provided would help make the consortium more economically viable.

In addition to these core members, the consortium would likely also include other service and product providers. Chief among these would be numerous **device and app manufacturers**, whose technologies would be vital for monitoring patients, tracking outcomes and influencing behaviors. **Gyms or fitness centers** and **supermarket chains** might be included to provide additional incentives for customers to adopt healthy behaviors. For instance, individuals might receive heavily discounted gym memberships and coupons for healthier food options.

To structure and manage the consortium, an independent alliance management function would need to be built. This function would recruit additional partners, negotiate terms and support the consortium with additional services and tools.

The terms under which consortium members join and participate would be based on individual preferences and negotiations. It is likely that most of the supporting organizations (e.g., gyms, supermarkets) will prefer to participate on a fee-for-service basis. However, one or more of the core members (e.g., the provider network) should participate on a risk-sharing basis — contributing assets and providing services in return for a share of profits.

> **This integrated, comprehensive, real-time data should be very valuable for other organizations in health care.**

The partners in the consortium would collaborate to influence behaviors and provide **behavioral feedback** to individuals. Mobile technologies could monitor behaviors (e.g., diet, exercise) and outcomes (e.g., blood sugar, blood pressure) and provide timely input to users — all in real time. The data analytics component could be used to identify patients most at risk. Providers could provide human intervention and guidance, with a particular emphasis on these high-risk patients. The combined effect of these interventions would be to nudge individuals toward healthier behaviors, leading to slower increases in costs and premiums over time.

Combining data from all of the consortium members, as well as the m-health technologies used by patients in real time, would have the potential to create a state-of-the-art database with information and capabilities that simply don't exist in today's health systems. This would be a complete picture of customers' health outcomes, behaviors, tests, genetic information, medication and more — and based not just on periodic measurements generated in the clinic but on continuous streams of real-time, real-world information. Attracting other members to the consortium such as retailers and supermarket chains could create the opportunity to add even more sources of data, such as

retail purchasing patterns. This data would not be a health record (information captured from procedures conducted in the clinic) as much as a "life record" (a wide-ranging set of parameters tracked over the course of customers' everyday lives), and it would allow the insurer to leapfrog past the competition in developing a deep understanding of the customer. The insurer could, for instance, predict changes in customers' needs and preferences based on life events and approach them proactively with tailored offerings.

This integrated, comprehensive, real-time data should be very valuable for other organizations in health care. While it is tempting to dismiss m-health technologies and apps as novelties and niches, the data they are starting to generate will over time prove truly revolutionary. Today, a patient's blood pressure may be measured once a year, during an annual physical. This is an almost meaningless exercise, since that single measurement could have been influenced by any number of factors (a stressful argument earlier in the day, a decision to walk up a few flights of stairs rather than taking the elevator, etc.) While the blood pressure data produced by a wearable sensor or smartphone app may be less accurate than a measurement in the clinic, it is far more valuable because it provides a trend line. And that trend information allows one to see how a user's blood pressure changes over the course of time and, more importantly, correlate those fluctuations with changes in medication regimes, diet, exercise, sleep patterns and more. Context and continuity trump differentials in precision.

Furthermore, disruptive innovation tends to follow a predictable pattern — something that has been well documented in studies of other industries, from personal computing to mobile telephony. When a disruptive technology first emerges (e.g., the personal computer in 1980), it isn't as robust as the traditional offering it seeks to replace (e.g., the mainframe computers that were dominant in that era). They are therefore only adopted by passionate early adopters, and dismissed by mainstream businesses as novelty products with niche appeal. But the disruptive offerings improve more quickly than most people expect, and quickly supplant the more traditional offerings. This same pattern has been repeated with countless other technologies — examples range from free smartphone apps that have disrupted standalone GPS/satnav systems and digital printing/desktop publishing, which has disrupted traditional offset printing. There is no reason to think health data will be any different. Quicker than many expect, accuracy will improve, the data points measured will increase, patient adoption will take off — and the database created by the consortium to combine all of this contextual data with information generated in health care settings should be a very lucrative asset. We therefore see **data monetization** as a key revenue source of this model — providing access to this life record data to nonmembers for a fee.

Monetizing this data would, in turn, be predicated on **informed consent and opt-in** from customers. During the enrollment process, customers would be informed that their data will be shared with consortium members on an identified basis, and with nonmembers on an anonymized basis. The disclosure would highlight the sorts of uses for which the data would be shared (e.g., improving health care delivery, accelerating the development of new life-saving drugs). The consortium would also create well-defined standard practices for **robust security and privacy**; any organization obtaining access to the data would have to agree to adhere to these standards.

This data monetization could provide a valuable revenue stream, but it is not the only way in which this model could be more profitable than the traditional insurance offerings produced by competitors. Overall, these **differential sources of profitability** include:

- **Better claims experience:** from having a younger, healthier demographic
- **Behavioral change:** leading to better prevention and disease management
- **More efficient care delivery:** from real-time monitoring, predictive analytics, etc.
- **Data monetization:** fees generated by providing state-of-the art data to other health care companies.

In addition to these new sources of profitability, the insurer would also have the opportunity to build **brand and reputation** through this model. The company could improve its brand by emphasizing that this new approach is:

- Investing in addressing the biggest health care challenges threatening to undermine the sustainability of health care systems
- Aligning interests for the long run (something largely absent from existing approaches)
- Innovative and collaborative

The offering would also need to be positioned carefully to address potential brand risks. These include privacy concerns and negative perceptions related to the fact that the insurer would profit from customer data. To some extent, the variations presented in Options 2-4 address these risks.

The need for these options stems from the fact that US regulatory changes, in particular the Patient Protection and Affordable Care Act (ACA or "Obamacare"). For instance, the risk adjustment provisions of the ACA do not allow insurers to benefit from having lower-risk customer populations. Therefore, any differential profit the insurer earns from having a younger demographic would effectively be given back to its competitors. In addition, the ACA requires that insurers spend at least 80% of premiums on medical losses (i.e., benefits paid to customers). In effect, this caps the profit that insurers can earn at 20% of premiums (though, of course, this would be further reduced because of overhead). Therefore, the ability to generate additional profits from the model would be constrained.

In light of these regulatory constraints, we have developed three alternative options that adjust the core model presented above for compatibility with US market regulations.

Option 2. US individual market

This variant of the core model would be marketed in the US individual market — a segment poised for significant growth under the ACA, which expands access and creates new insurance exchanges for individuals to buy coverage. Because of the constraints placed by the ACA's risk adjustment provisions, the product would not target a younger demographic, but would instead be marketed broadly to all age groups. The customer base may still end up trending somewhat toward younger age groups in practice, since these individuals may be more drawn to the technology-enabled, data-sharing proposition.

The ACA restrictions would have implications for the profitability of the model. The model would not benefit from any efforts to increase prevention. To the extent that the insurer was more successful than other insurers at prevention, it would end up with a healthier, lower-risk population — the benefits of which would be negated by risk adjustment. However, the insurer would still benefit financially from behavior change aimed at better disease management of existing patients and from delivering care more efficiently.

Moreover, a key source of revenue and profit — data monetization — would not be affected by the ACA medical loss ratio and risk adjustment provisions, since those only apply to income from premiums. In addition, in this model, the insurer would no longer have to contend with potential brand risk from perceptions that it is cherry picking the healthiest customers. Even if it ends up with a somewhat younger demographic, it would still not benefit financially — increasing the perception that the company is doing the right thing for customers and the health care system by investing in a model even if it means giving up some of its profits to competitors.

Option 3. US large group market

Option 3 would be marketed to large US employers that provide insurance to their workers. In this offering, the insurer would not explicitly target a younger demographic, and the age distribution of its customer base would roughly mirror that of the employers it is serving. To the extent that some employers (e.g., high-tech firms) have younger-than-average employees, the insurer's customer base might skew young, but across multiple employers the age distribution should roughly mirror that of the US working population.

Since large groups are not subject to risk adjustment, the insurer would retain the ability to focus on behavioral change to improve both disease management and prevention. The data monetization component could also still be deployed.

Option 4. US self-insured employer market

Option 4 is similar to Option 3, except that it is designed for large employers that are self-insured. The core insurance functions performed by the insurer under this variant would be different from those in any of the models described above. The insurer would provide reinsurance/stop-loss coverage and administration services for large employers.

Since the core insurance function is not being provided by the insurer, but rather by employers, and since employers are not regulated as insurance companies, the risk adjustment and medical loss ratio requirements would not apply. So, as in Option 3, the insurer could focus on behavioral change to improve both disease management and prevention. As with all of the other variants, the data monetization component could still provide a significant revenue and profit stream.

Exhibit 4. Potential model options

	Option 1: "core" model non-US private insurance	Option 2: US individual market	Option 3: US large groups	Option 4: US self-insured employers
Marketed to	Individuals/employers	Individuals	Large employers	Self-insured employers
Long-term relationship	Yes (behavioral rebates and/or early penalty)	Yes (behavioral rebates)	Yes (behavioral rebates)	Yes (behavioral rebates)
Insurer role: core insurance function	Providing insurance (underwriting and pricing risk)	Providing insurance (underwriting and pricing risk)	Providing insurance (underwriting and pricing risk)	Providing reinsurance/stop loss and administration for employers
Insurer role: other	Guiding consortium, influencing behavior	Guiding consortium, influencing behavior	Guiding consortium, influencing behavior	Guiding consortium, influencing behavior
Technology-enabled	Yes	Yes	Yes	Yes
Behavioral feedback, incentives	Yes	Yes	Yes	Yes
Consortium	Yes	Yes	Yes	Yes
Data monetization	Yes	Yes	Yes	Yes
Differential sources of profit:				
Behavioral change: prevention	Yes	No (ACA risk adjustment)	Yes (large groups not subject to risk adjustment .)	Yes (employers not regulated as insurance cos.)
Behavioral change: disease management	Yes	Yes	Yes	Yes
More efficient care delivery (RT care, prediction, etc.)	Yes	Yes	Yes	Yes
Data monetization	Yes	Yes	Yes	Yes
Brand benefits:				
Investing in biggest health challenges	Yes	Yes	Yes	Yes
Innovative and collaborative	Yes	Yes	Yes	Yes
Aligning interests for long run	Yes	Yes	Yes	Yes
Brand risks:				
Privacy concerns	Yes	Yes	Yes	Yes
Profiting from data	Yes	Yes	Yes	Yes


If you want to transform into the health insurer of the future, where do you start?

Building a road map to the future

What next? How do you respond to the disruptive forces buffeting the health insurance market? If you want to transform into the health insurer of the future, where do you start?

For companies pondering these questions, it's worth keeping in mind one sobering fact from scores of industries that have been shaken by disruptive innovation in the past: it's very difficult for mature incumbent organizations to disrupt themselves. Disruption almost invariably comes from the outside — start-ups with radically different approaches or companies from other sectors — and the vast majority of the time, established incumbents struggle to respond, with many even being driven out of business altogether.

The reasons for this somewhat discouraging pattern have been well documented by Harvard Business School Professor Clayton Christensen. Disruptive innovations are often dismissed as niches and novelties. They are seen as not having much revenue potential (particularly compared to the sizeable revenue streams mature incumbents have from their established products) and as not meeting the needs of existing customers. For instance, when the first personal computers emerged in the late 1970s, they were dismissed as inconsequential novelties by incumbent (mainframe) computer manufacturers and their existing corporate customers. However, as is typically the case with disruptive innovation, personal computers improved much faster than incumbents expected. When these companies belatedly realized the growth potential of this new segment, they scrambled to enter the PC market. A few survived the transition. Most did not.

The strategic stumbles incumbents make are typically underpinned by cost-benefit and risk-return calculations that subsequently prove to be flawed. Managers often subject investments in disruptive innovation to the same metrics used in evaluating the other investments they make. As a result, they focus prematurely on revenue and earnings potential — and dismiss these opportunities because it is difficult to appreciate their true growth potential in early stages. In addition, companies often make comparisons based on the wrong counterfactuals and baselines — for instance, evaluating revenue potential against their existing products' current revenues without accounting for the fact that those existing revenue streams might shrink significantly in the face of disruptive innovation. Lastly, since disrupting one's existing business is by definition a big leap, companies focus on the potential risk associated with such a significant change without fully appreciating the risk inherent in standing still.

What can you do to avoid falling into these decision traps? We recommend three approaches:

1. Use the right metrics

The famous dictum that "what gets measured gets done" applies in spades to disruptive innovation. Metrics matter. Managers should make comparisons based on the right counterfactuals. Don't assume that revenue streams from existing approaches will continue indefinitely in the face of market disruption — instead, develop forecasts using what-if scenarios that imagine very different futures. Don't compare yourself only to existing competitors — instead, consider who your new competitors are likely to be. And rather than worrying about revenue and profit potential on day one, focus instead on creating and delivering value for customers in new ways. If you can do that, the profits will typically follow.

2. Experiment using pilots

Pilots are a practical way to approach business model experimentation. With smaller investments, companies are able to contain the risk. This is important since, as discussed above, perceived risk can be a barrier to investing in new approaches. Pilots allow companies to experiment on a smaller scale and get to proof of concept. Successful pilots can then be scaled up — for instance, by expanding outward to other customers or adjacent disease states.

3. Build a learning map

As discussed above, managers often hesitate when considering investments in disruptive new approaches because disrupting one's business model is by definition a significant change, and therefore seen as inherently risky. In addition, disruptive innovation almost invariably occurs in spaces that are new and hence, unproven. It's only natural for company leaders to have a number of unanswered questions about the viability of these approaches — giving them further pause.

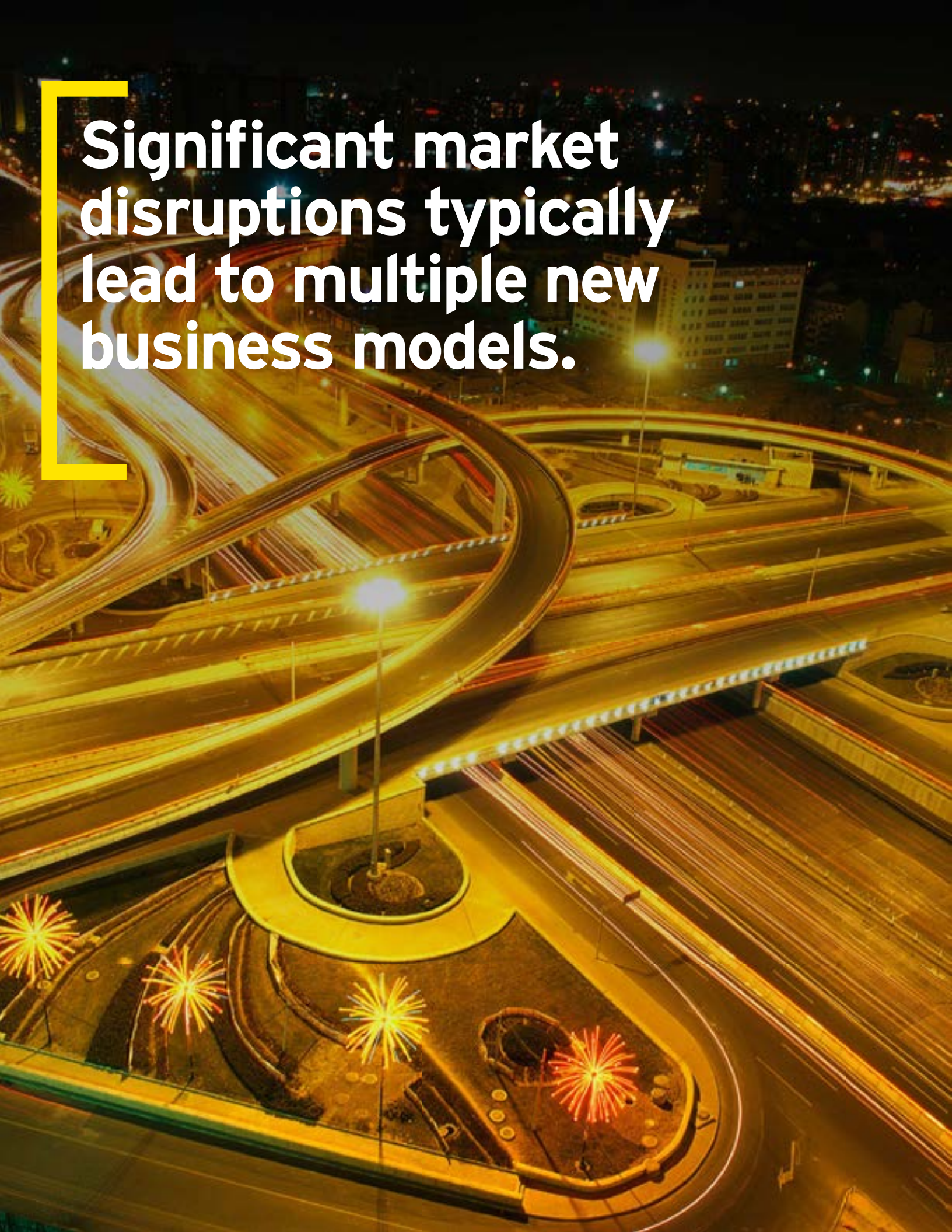
The good news is that a pilot-based approach can be a critical tool here as well. The first step is to list skill/capability gaps that need to be filled as well as key questions that need to be answered.

Some questions could potentially be answered through market research — questions like "What is the m-health adoption rate by age group in a particular market?" or "Which organizations could we partner with around data analytics?" Such questions can and should be answered to give management greater insight into specific issues.

However, there will invariably be questions that cannot be answered with additional research, such as, "To what extent will privacy concerns prevent customers from signing up for such an offering?" or "Will data analytics provide the actionable insights that actually nudge behaviors and control costs?" Such experiential questions can only be answered by "doing."

The list of skill/capability gaps and experiential questions forms the universe of issues that have to be addressed for management to feel confident in the overall approach. A company could now develop a sequence of pilots that serve as demonstration projects to answer key questions and develop key skills. Over time, these projects provide a pathway — something we refer to as a "learning map" — from the company's current business model to a new business model built around the health insurer of the future concept.

The sequence in which questions and skill gaps are addressed will vary from company to company, based on individual circumstances. To a large extent, it will need to be opportunistic and guided by the focus and strengths of partners willing to engage in such demonstration projects. For instance, if an insurer finds a like-minded partner in a disease foundation, it might focus initially on answering questions with respect to a specific disease cohort and then expand out to adjacent disease states over time. Alternately, if the initial partner was a city or state government, the insurer might focus on a local patient population and then expand to demonstration projects in other geographies.



Significant market disruptions typically lead to multiple new business models.

Guiding principles

The model described in this report is not the only approach that one could take. Significant market disruptions typically lead to multiple new business models, and companies might wish to explore other models to respond to disruptive challenges. Regardless of the specific model chosen, many of the components of the approach described in this document — customer centricity, a focus on outcomes and data, collaboration — will be critical in today's rapidly changing health care systems. As they innovate new approaches for a changing market, companies might want to keep in mind the five "rules of the road" listed below.

Exhibit 5. Five rules of the road to navigate through a disrupted insurance landscape

1 Be customer-centric

Changing patient behaviors is the single biggest opportunity to contain costs.
How well do you understand your customers?

2 Go digital

Data analytics and m-health are vital for boosting efficiency and nudging behaviors.
How effectively are you leveraging rapidly developing digital technologies?

3 Partner

Tackling complex challenges requires many skills and capabilities. You can't go it alone.
How are you partnering with innovators and disruptors?

4 Use appropriate metrics

The right metrics and baselines are critical for evaluating business model innovation.
Are you comparing yourself to today's market — or that of the future?

5 Act now

Disruptive innovation happens faster than most expect.
Are you being proactive — or assuming time is on your side?

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Health care is in the midst of a once-in-a-lifetime transformation that is blurring traditional boundaries and redefining health care as we know it. The move to "Health 2.0" — the patient-centric, technology-enabled, prevention-focused future of health care — is being catalyzed by nontraditional entrants from far-flung sectors, including technology, telecommunications, retail trade and more. These disruptive forces demand bold new approaches, alliances and business models.

EY's Health Reimagined initiative is a cross-sector program that brings together professionals and perspectives from multiple industries to develop insights and solutions that are aligned with the future of health. We can help you navigate your way forward and achieve success as you transition to Health 2.0.

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