In the face of new customer demands and impending market disruption, US health insurers are pressed for capital necessary to navigate imminent industry change. The tap of free-flowing capital has long run dry and traditional sources of unlocking new value (e.g., systems consolidation, process improvement, contract reconciliation) are plateauing. How can US health insurers quickly generate new value for their enterprise to navigate a strategic course to “the new”?

According to Accenture analysis, US health insurers can unlock up to $7 billion in total value in 18 months, using solutions driven by artificial intelligence (AI). This value could be generated primarily from six different capability areas that align to an insurer’s operating model. (See Figure 1.) For an individual health plan, it equates to unlocking $1.5 million in operating income for every 100 full-time employees (FTEs), by the end of the next calendar year, as a result of automating core administrative functions using AI. By starting at the core, health insurers can not only modernize processes, but also develop a data-driven foundation that enables the enterprise to realize the significant long-term potential of improving clinical outcomes.

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**AI DEFINED**

AI in health represents a collection of multiple technologies enabling machines to sense, comprehend, act and learn,¹ so they can perform administrative and clinical healthcare functions. Unlike legacy technologies that are only algorithms or tools that complement a human, health AI today can truly augment human activity—taking over tasks that range from medical imaging to risk analysis to diagnosing health conditions.

FIGURE 1: US health plans can unlock up to $7 billion in operating income from six capabilities

- **Manage Membership and Billing**: Accelerate onboarding of customers and members while enhancing ability to advance product design, **$1.4 billion**
- **Manage and Support Reimbursement**: Intelligently automate and redefine claims processing and reviews, **$1.1 billion**
- **Manage Customer Interactions**: Apply “intelligence” to effectively anticipate and respond to customer demands, **$2.1 billion**
- **Manage Quality Improvement and Compliance**: Effectively ensure quality and compliance via automated reporting and regulatory updates, **$0.5 billion**
- **Perform Health Management**: Elevate ability to engage members and improve outcomes with intelligent solutions, **$0.9 billion**
- **Manage Network and Providers**: Streamline, with greater accuracy, processes associated to network management, **$1.0 billion**

Source: Accenture analysis
START AT THE CORE

Artificial intelligence has received tremendous buzz across the industry and 72 percent of payer executives say within the year, AI will be in the top three strategic priorities for their organizations. In today’s economic environment, health insurers are balancing competing in the present with preparing for the future, a difficult line to walk for C-suite leadership. The significant hype around advanced digital solutions such as AI only makes establishing a strategic focus that much more difficult. Focusing on core administrative functions today can provide leadership with the right tools to embark on a safe course to circumvent any impending storm looming over their business. The benefits of “starting at the core” confirm tangible value can be realized:

VIABILITY, TODAY:
A sizable portion of in-market solutions are tried and tested, across industries, removing uncertainties associated with the technology and implementation. Other insurers (e.g., property and casualty, life, auto) and financial institutions are adopting advanced solutions to enhance underwriting risk analysis, improve the quoting process for complex insurance products, or create a virtual workforce.

REAL VALUE, TOMORROW:
Solutions can maximize resource productivity, enabling the redirection of a portion of FTEs to high-value functions, and alleviating future need for additional FTEs while implementing lower-cost technologies. These newer solutions often stand on their own and run independently of legacy systems, bypassing the need for large-scale systems revamp. Accenture experience shows that a health plan could unlock up to 10 to 15 percent of operating expenses by automating and streamlining its core functions, such as claims, enrollment/billing and customer service.

TESTBED, FOR THE FUTURE:
Implementing solutions for core administrative functions can spur a mindset shift to maximizing value. Revisiting the enterprise’s data structure and models could better tie a health insurer’s administrative responsibility to enabling clinical innovation to improve healthcare, unlocking further value.

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2 Accenture 2017 Tech-Led Change for AI Survey
ACCELERATING PRIOR AUTHORIZATION AND CLINICAL REVIEW OF CLAIMS

The prior authorization process is inefficient and often requires multiple stakeholders to approve requests for treatment. To automate this process and standardize medical policy, RPA can be deployed to auto-approve requests. Intelligent automation and virtual agents can streamline the intake of information associated with initial steps of eligibility/prior authorization requests, allowing agents to focus on more complex cases. Machine learning can be applied based on utilization management trends to enable efficient clinical reviews.

Similarly, it can be taxing for clinical staff to provide timely reviews of claims. Machine learning can streamline this process by providing a recommendation for handling a pended claim that a human can approve or modify. Over time, self-learning will enable faster and more accurate responses to claims needing clinical review.

Technologies such as robotic process automation (RPA), intelligent automation, virtual agents and machine learning can be incredibly transformative, freeing up resource capacity to redeploy toward more strategic functions under a potentially self-funding model. According to Accenture analysis, within the six capabilities shown in Figure 1, the top three areas for health insurers to target for near-term value in the next 18 months are anticipating and resolving customer questions, improving the benefits loading and design process, and accelerating prior authorization and clinical review of claims. Each of these areas demonstrates near-term operating income impact combined with an enablement of future operating and business models.

TARGET NEAR-TERM VALUE

ANTICIPATING AND RESOLVING CUSTOMER QUESTIONS

The plethora of questions or requests that come through any health plan’s customer service likely follow a similar pattern of content and timing. The time it takes for a typical representative to handle inflows can be significant. Applying advanced call analytics to deploy proactive outreach combined with automated communications can deflect the potential influx of avoidable calls, while improving overall satisfaction by anticipating the needs of customers and members.

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IMPROVING BENEFITS LOADING

The benefit-capture process is cumbersome and redundant. While benefits data is captured in the field, the same information has to be repeatedly entered in downstream steps. Identifying and compiling claims to test benefits and simulate the cost of care is a time-consuming and often manual process. To streamline this process, a benefits-capture utility can be developed using natural language processing (NLP) and RPA to simplify and validate benefits data entry in the field that then informs the structure required in the claims system through integration.

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WHERE TO (RE)INVEST: STANDING OUT FROM THE PACK

Industry demands are becoming more complex and more expensive to address. Given challenging industry trends and changing consumer behavior, health plans need to rethink existing business models and challenge the status quo.

Payers are experiencing pressure to adapt to stay competitive in a challenging healthcare landscape. Consumers are bearing increasingly greater out-of-pocket costs, with 63 percent of employee single-coverage deductibles rising from 2011 to 2016.⁴ In addition to cost concerns, consumers are increasingly seeking personally tailored and anticipatory service over value when they elect to stay with a given health plan, as 37 percent of millennials cited service as a primary driver for switching health plans.⁵ Furthermore, payer loyalty is low across the board, with overall Net Promoter Score (NPS)⁶ for health insurers at 5 in 2017.⁷

To mitigate frustration and protect incumbency, payers can reinvest savings from automating the core in more advanced capabilities aimed at leapfrogging the competition. According to Accenture research, the top three capabilities that drive NPS lie in evaluating insurance, buying insurance and resolving administrative functions.⁸ Payers can invest in technologies to provide a richer shopping and support experience to members to increase retention and loyalty.

As payers start to shift resources to more strategic functions, they will need to invest in advanced capabilities around workforce management. Implementing solutions that can track, measure and forecast workforce productivity in real-time by function will enable management to proactively staff to meet demand, which can be particularly useful around seasonal spikes like open enrollment. The payers that can continuously automate their core operations and fuel investment in more strategic priorities will win the consumer in this new payer world.

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⁶ Net Promoter, Net Promoter System, Net Promoter Score, NPS and the NPS-related emoticons are registered trademarks of Bain & Company, Inc., Fred Reichheld and Satmetrix Systems, Inc.
⁸ Accenture 2017 Customer Experience Payer Benchmark Survey
CHALLENGES AHEAD
Possessing a survival guide does not guarantee ease or success.

While AI can be the vehicle to achieve such change, health plans must understand that AI is a much more complex and dynamic innovation with the potential to evolve beyond expectations. Vendors range from large established players to startups, each offering different solutions with the promise of high ROI and seamless integration.

To thrive, health plans must identify the right solutions, partner with the right vendors, define the appropriate governance structure to manage a sustainable and profitable program, and outline a road map for implementation. As new AI vendors and solutions continue to crop up, health plans face a challenge to cut through the noise and develop a sustainable strategy and program for long-term success.

THE PATH FORWARD
There are four key questions a health plan should be able to answer to be ready for AI transformation: What obstacles may prohibit implementation? What governance structure should be set up? What is the approach to vendor management? What is the road map for implementation?

OBSTACLES:
The success of AI solutions relies heavily upon existing technology and processes. If existing infrastructure is not stable or efficient, it will not make sense to implement new technology. Payers must identify gaps, such as data quality, infrastructure or security, that may prohibit them from moving forward with AI solutions.

VENDOR MANAGEMENT:
The volume of vendors and newness of the technology make it difficult to vet, assess a solution’s efficacy and evaluate its potential downstream effects on existing operations. Defining a holistic approach to vendor management and tapping the potential from across the ecosystem will be critical to identifying the right vendors for success in both the short and long term.

GOVERNANCE:
Organizations must define a governance structure and process to manage projects from inception through implementation. New roles and talent may need to be hired, such as a data scientist and solution architect, to ensure that payers have the capability to select vendors and stay up to date with the ever-changing trends in technology.

ROAD MAP:
AI technologies exist across the value chain, so it’s important to come up with a road map for implementation. This road map will be based upon organizational priority, institutional capacity and expected financial returns. Creating a multi-year road map will prepare the organization for change and stage investments in a responsible way.
The Accenture 2017 Customer Experience Payer Benchmark Survey surveyed 10,000 consumers to understand how their insurance companies perform across nine key healthcare consumer experience touchpoints. Overall satisfaction was calculated by taking an average of respondents’ satisfaction across all the touchpoints they evaluated and scaling it from 0 to 100 to get their satisfaction percentage. We segmented and analyzed consumers in the 80 to 89 percent satisfaction range (1,037 respondents) and those in the 90 percent satisfaction range (2,819 respondents). Respondent data was aggregated and normalized for age, income, region and gender. The survey was conducted online between October and November 2017.