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ROBERT F. HIGGINS ERIN TRIMBLE

athenahealth's More Disruption Please Program

It was a chilly New England morning in March 2014. Kyle Armbrester (HBS 2012), VP of Business Development at athenahealth, a publically-held provider of cloud-based services for physician practices, was driving to work at the historic Arsenal on the Charles property in Watertown, MA. In just an hour, he would be meeting with Founder and CEO Jonathan Bush (HBS 1997) to discuss the future of More Disruption Please (MDP), the company's innovation and partnerships initiative.

Armbrester reflected back on his early conversations with Bush and the decision to launch MDP. He'd first met Bush back in 2010 when Armbrester was serving as the chief information officer for Charlie Baker's Massachusetts gubernatorial campaign. While the energetic, no-filter CEO quickly caught his attention, it was his vision for an open platform in health care—"the health care Internet," as Bush put it—that he found most convincing. Fresh out of Harvard Business School, Armbrester took Bush up on his offer to join athenahealth (athena) and spearhead what would become More Disruption Please.

By early 2014, MDP had reached a critical inflection point. The core of the program, the athenahealth Marketplace, had reached its near-term goal of 20 partner companies, with dozens more in the pipeline. Launched a year earlier, the Marketplace was athena's version of the Apple App Store for health IT, through which athenahealth clients could compare and "shop" for third-party products and services that were seamlessly integrated with their athena experience. But despite scaling costs and a rapidly growing team, the company had yet to monetize the platform. Armbrester's next challenge was to turn MDP into a real, sustainable business unit. With that challenge came a host of questions: How should the team think about structuring revenue share agreements with both existing and new potential partners, if at all? Considering the program's philosophy, were such agreements contrary to the idea of an "open platform"? Moreover, was the platform actually driving enough value to partners to justify such agreements?

As the team debated these and other issues surrounding the Marketplace, an idea emerged for what would be MDP's most ambitious endeavor yet: an athenahealth owned and operated startup accelerator. Venture capital had been flooding aggressively into niche, innovative health care products and services in recent years. The year 2013 had seen over \$1.9 billion in digital health venture funding, up 119% from 2011 (Exhibit 1). An accelerator would allow athena to make strategic investments in seed-stage startups that would not only ramp up the growth of participating companies, but of the

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platform itself, helping to fill athena's "empty sockets" and expand the range of capabilities offered via the athenahealth Marketplace.

Despite the program's initial success, Armbrester still found himself grappling with the core thesis behind MDP. While other cloud-based technologies had brought forth game-changing innovations with the transition from products to platforms, health care was an entirely different beast—a true dinosaur in the digital age. Traditional on-premise ("legacy") software vendors still dominated the health IT market. Partners HealthCare, a local health system that included the renowned Massachusetts General and Brigham and Women's Hospitals, had recently signed a multi-billion dollar deal with leading legacy EMR vendor Epic Systems, a company sometimes criticized for its "closed" approach and unwillingness to make strides towards interoperability.¹

Moreover, MDP aside, athenahealth's core business was still doing well. The company's flagship cloud-based revenue cycle and practice management product, athenaCollector, still comprised the majority of the company's revenues, which were growing at a rate of over 30% each year (Exhibit 2). This led Armbrester to wonder. Did MDP even make sense for athena? Was a platform play the right move to maintain, or better yet, accelerate athena's growth trajectory? Or were they wasting precious time and energy trying to fix something that simply was not broken to begin with? He also considered the possible accelerator program. Was athena well-suited to take on such an ambitious project? Or should the company wait until MDP was profitable before turning its attention to the accelerator?

Company History

Founded by Jonathan Bush (HBS '97) and Todd Park in 1997, athenahealth had grown to become one of the leading providers of cloud-based services for medical groups and health systems in the U.S. But that hadn't always been the plan.

With visions of becoming a doctor, Bush had his first real foray into the U.S. health care system in the summer of 1989, when he worked as an Emergency Medical Technician on the steamy streets of New Orleans, Louisiana. The 21-year-old nephew of then-President George H. W. Bush was not immune to the pressure of family expectations. "Big things were expected of me," he said, "but I've always had trouble succeeding along traditional Bush family lines. So, I explored a new path. It involved doing good by running red lights and crashing through windshields to rescue people. I loved it."²

In 1997, Bush and his colleague Todd Park, former consultants at the management consulting firm Booz Allen Hamilton, raised \$1.4 million to buy an obstetrics practice in San Diego. Park and Bush had developed a close friendship: "[As consultants] we worked 24/7 traveling around the country together and fell deeply in love with each other," Park joked. "He's my brother from another mother." 3

The co-founders intended to build their obstetrics practice (named Athena Women's Health) into a national franchise, with a holistic model of delivery that incorporated preventative care and education in addition to traditional birthing services. "We started athena as a baby company," said Park. "[...] It was a crazy kamikaze move, but I think that every entrepreneur, at some point in their life, has to have some of that crazy kamikaze spirit to try to do something that hasn't been done before."⁴

Athena's impressive birthing outcomes—C-section rates were less than half the national average, new babies spent 20% less time in the neonatal intensive care unit, and breast feeding increased dramatically—combined with notably cheaper rates attracted expectant mothers from across the San Diego area. But despite its growing popularity, the company soon hit a major road block. As Bush

explained, "It was at this early stage that I came to grips with one reason that so many people had been steering me away from a health care startup: it's ridiculously hard to get paid." 5

The founders quickly learned that both private health insurers and Medicare/Medicaid ("payers") often took weeks, if not months, to reimburse their practice for patients' medical claims. As a result, the seemingly thriving business was "growing broke;" revenues skyrocketed, but cash flows increased by a meager 10%. The payment problem was not unique to athena. As Bush put it, "health care payments occupy their own circle of hell," and practices everywhere were struggling to get reimbursed for the care they provided.

Refusing to quit, Bush and Park pressed on through sleepless nights to keep the business—which by 1998 had grown to 13 clinics with 120 employees across California—up and running. Convinced that the only way to save the company was to expand it, Bush searched desperately for a willing investor to provide a much-needed injection of cash. In midst of the late 1990s Internet craze, he began promoting the company's proprietary web-based billing system as one of its prime assets in an attempt to gain investor attention.

The system, deemed athenaNet, had been built by Park's younger brother, Eddie. Fresh out of Harvard undergrad, Eddie had arrived in San Diego with a thirty-pound computer, set it up next to his mattress, and locked himself in his bedroom to code away. In an attempt to solve the tanking business' cash flow issues, Eddie (who knew nothing about health care at the time) built a software solution that could handle medical billing. In particular, the application would allow providers to run insurance eligibility checks—a tedious process that had traditionally been done manually via endless phone calls and sorting through piles of paper files. Bush explained:

We used athenaNet to keep track of patients as they flowed through all of our clinics. Our employees did not have high school educations, so we used it to coach them as patients came up to our various front desks for care. Over time, we used it to access the public website of the state Medicaid plan and we would use the software to extract, or screen scrape off, our patient's insurance eligibility. Since Medicaid patients are enrolled and dis-enrolled from Medicaid based on their income levels, every month there was huge turnover, and this was the only way to determine if someone was insured at the time they came in for treatment.

In the spring of 1998, Bush sat down with a potential investor from Dallas, one of the few he could get to take his desperate calls. But before he could even dive into his pitch, the investor cut him short. "I'm not interested in your birthing business," he said. "But I can get you eleven million dollars for rights to your software."

Bush turned down the offer, but he quickly realized that the company could have a greater impact as a software solution. In 1999, at the height of the dot-com boom, Athena Women's Clinic was reborn as athenahealth, a healthcare IT company.

athenahealth in 2014

By 2014, athenahealth was one of the fastest-growing cloud-based health care technology companies in the U.S. After helping take the company public in 2007, Todd Park left athena to co-found Castlight Health, and in 2009 was appointed Chief Technology Officer of the United States by President Barack Obama. Jonathan Bush remained as CEO, and by the end of 2013 the company was generating nearly \$600 million in annual revenue. athenahealth served over 50,000 providers across 49 states and

92 medical specialties, operating exclusively in the ambulatory (i.e., outpatient) care space. The company had a strong reputation in the small- and mid-size physician group market, and was increasingly winning business from large physician networks.⁶

Launched in 2000, athenaCollector, the company's revenue cycle and practice management solution, remained the company's flagship product (see **Exhibit 3** for an overview of the revenue cycle management process flow). However, athena had gradually expanded its cloud-based platform to include a full suite of service offerings:

- athenaCollector®: cloud-based medical billing and practice management service.
- athenaClinicals®: integrated electronic health record (EHR) service.
- athenaCommunicator®: patient engagement service, including patient portal and live, automated, and online communication tool.
- athenaCoordinator® Core: streamlined order transmission service (including referrals to specialists, imaging centers, laboratories, pharmacies, and inpatient admissions).
- Epocrates: mobile clinical intelligence application at the point of care.

athenaCollector, athenaClinicals, athenaCommunicator, and athenaCoordinator were offered as a package of integrated services known as athenaOne.

A Unique Combination of Software, Knowledge, and Work

The growth of managed care had dramatically added complexity to physician practice reimbursement. Private practices and medical groups repeatedly found themselves overwhelmed by the claim processing requirements of private health insurance and government plans to be paid for the services they provided to patients. The wide range of benefit structures offered by health insurers resulted in a myriad of rules regarding who was eligible for services, and what services were eligible for reimbursement. To add to that complexity, insurers were continuously updating their reimbursement rules based on consumption patterns, customer demands, and the introduction of new medical products and treatments.

athena's services were designed to help health care providers collect more revenue while reducing their administrative work burden. Every athena client used the same version of the company's centrally-hosted cloud-based software platform, athenaNet. Unlike locally or remotely-installed software products, which struggled to keep up with ever-changing payer rules, athena used its proprietary rules engine to update its database in real-time. Over time, athena had built the largest and most comprehensive continually updated database of payer reimbursement process rules in the U.S. The database included well over a decade of claims data from thousands of health plans, and became more accurate and more efficient as it grew in scale. "Practices were used to being angry at software vendors for 'nickel and diming' them for every single new feature or upgrade available for their practice," said Bush. "With athena, they didn't have that problem. If anything, our clients were frustrated with all of the changes we pushed into their lives with our stream of new releases." The network's shared knowledge also allowed clients to benchmark their performance against other practices on the network.

As a web-based platform, athenaNet could be installed quickly at low upfront cost to clients. In most instances, the company priced its software as a percentage of practice collections. There were no licensing or hosting fees. As a result, athena's financial success was directly tied to that of its clients

and its ability to drive revenue for them. "We only get paid when our doctors get paid," explained Bush. "If they do well, our revenue goes up, too."

The company backed up its cloud services with an array of human-powered services, performing much of the back-office administrative work on behalf of its clients. athenahealth staff followed up on claims that had been denied, manned a live operator service to field phone calls, and processed stacks of paperwork that came in via fax or snail mail. "We built a system to handle the administrative chores that the vast majority of doctors hated—and sucked at," said Bush. "With athena, our clients can minimize such hassles, and focus on what matters most: delivering high-quality care to their patients."

The Health Information Technology Industry

The global health care IT market, worth \$40.2 billion in 2014, had grown 35% since 2010 and was projected to surge another 64% over the next five years to more than \$66 billion in 2020.⁷ However, despite legislative reform efforts and government-enacted financial incentives for the use of EHRs, a disproportionate amount of communication still took place on paper or via outdated, inflexible systems. Traditional client-server software systems dominated the fragmented health care market, particularly in large enterprise hospitals and health systems. These software solutions, generally known as "legacy" systems, were highly customized, hosted on-site (versus in the cloud), and typically involved large up-front implementation fees and multi-year installation timelines.

Bush articulated the potential for innovation enabled by cloud-based software and services:

Cloud-based technology is the most future-proof infrastructure for innovation. I'm not saying that because I'm in the business. Just look at other aspects of your life—finance, travel, shopping—it's all backed by the Internet. Why not health care? For health care, the foundation of a cloud platform and insight into a real-time network provide an incredible knowledge base from which to drive performance, enact intervention, and ensure continued improvement. Part of the beauty and the added benefit of the model is the nimble nature in which the athenaNet platform accepts change and can introduce new capabilities through APIs (Application Programming Interfaces).^a It is the antithesis of a closed and uniform ecosystem like Epic's. You can't write one API into Epic. All the copies of Epic are different, sitting in different places on different servers under the governance of different institutions.

Competition

athena's competitors used either locally installed software or cloud-based software-as-a-service to manage the various clinical and financial workflow needs within the physician practice, including practice management, EHR, and care coordination solutions. Such competitors included eClinicalWorks, Allscripts, Practice Fusion, CareCloud, NextGen and Greenway, among others. As athenahealth moved up-market into the enterprise space, it found itself increasingly bumping into major health IT players like Epic, Cerner, and McKesson. (Exhibit 4 provides an overview of the top 20 most popular EMR solutions and their target audiences.)

5

^a An Application Programming Interface (API) was a set of protocols and tools for building software applications.

The More Disruption Please (MDP) Program

No matter who you are, most of the smartest people work for someone else.

Joy's Law

What if there was an eBay of applications, where companies could buy and sell software, running in our platform? What if there was an iTunes Music Store of online applications?

Marc Benioff, CEO of Salesforce.com⁸

The Age of the Platform

Once upon a time, businesses succeeded by competing with each other at the product level. As Ralph Waldo Emerson once said, "Build a better mousetrap, and the world will beat a path to your door." But with the rapid proliferation of cloud computing, social networks, and mobile technologies, a better mousetrap was no longer sufficient. Companies now competed not only at the product level, but at the ecosystem level, creating digital platforms which other businesses could easily connect to and build products or services on top of. This "plug-and-play" concept was central to the emerging field of platform thinking.⁹

From a technical perspective, platforms enabled third-party developers to extend a product's functionality by leveraging APIs. Often paired with a Software Development Kit (SDK), a good API provided the building blocks (i.e., data), making it easier to develop a program. A developer could then leverage this data to build an integrated application.

From a business perspective, platforms allowed users to not only consume value, but to create it. The mid-to-late 2000s saw many large tech companies reinventing themselves along platform lines, adopting more collaborative business models and building out their ecosystems. Salesforce.com and Apple in particular were seen by athena as model platforms. "It's not features and functions that drive their success these days. Rather, they've created huge value by supporting developers and startups that want to plug into their businesses," said Armbrester.

The MDP Vision

Through MDP, athenahealth is looking to bend the innovation curve in health IT to make health care work as it should.

athenahealth 2013 10-K

Launched in 2010, MDP was athenahealth's innovation and partnerships program. Investing heavily in community-building and outreach initiatives, MDP started as a network of likeminded thinkers, bringing together entrepreneurs, investors, health care professionals and companies passionate about athena's vision. athena fostered that network through a variety of events including hackathons and its annual MDP Conference, which brought over 75 health care startup CEOs to a rustic, company-owned resort on the Maine coast each year.

Frustrated by a U.S. health care system desperate for innovation, Bush saw MDP as a response to a moral imperative to support emerging companies in the space:

One question I hear over and over from entrepreneurs: "How do I get my foot in the door with large health care systems?" The answer is, you don't! Two large barriers exist

for any company—small, medium, or large—trying to scale in the health care vertical. First, it's incredibly hard to access and then sell to physicians or hospital systems; and second, even if you can get buy in, getting connectivity into discrete technology systems is nearly impossible, extremely time-consuming, and requires compromises to the product that invariably strip away the initial innovations. This is where the story ends for too many entrepreneurs who lack the resources to go from high-potential concept to built-out service in market. And it's devastating to the advancement of care delivery, as well as to providers' and patients' care experiences.

From a product perspective, the overarching goal for MDP was to transition athenaNet from a single-sided, Software-as-a-Service (SaaS) application to a Platform-as-a-Service, complete with an integrated ecosystem of partner companies. As Armbrester described it, athenahealth would severely limit its own growth potential by operating exclusively as a product builder. "It's simply impossible for us to be the best in the world at developing everything our clients could possibly need, and we need to offer more services than we could ever possibly build ourselves," he said. "Instead, we can take pride in being the guy who introduces our clients to those who are best at a certain service. *Not* building and owning everything actually allows us to go to market with richer products. By offering connectivity to the athenaNet core, we open our platform to an array of innovative solutions for our client base." (See **Exhibit 5** for an internal company presentation outlining the vision for MDP.)

The athenahealth Marketplace: The App Store for Health IT

At the core of the MDP was the athenahealth Marketplace. Introduced in 2013, it was described as athena's health IT version of the Apple App Store. Through the Marketplace, athena enabled its clients to compare and shop for third-party solutions that expanded the functionality of athena's core products and addressed key client pain points. For prospective partners, the Marketplace offered an immediate scaling opportunity — with full integration into the physician workflow and access to athena's network of 50,000+ providers. It was considered a go-to-market strategy in a box for young companies.

Once partners were live on the Marketplace, they had standard connectivity to all providers on the platform. But athena's support for its Marketplace partners didn't end there. Dedicated MDP team members actively managed the partner relationship, marketed the technology to clients, gathered customer feedback, and monitored outcomes and performance.

In 2013, Armbrester likened the introduction of the MDP program to launching a startup within the walls of a large, public company. "We spent all of 2012 just getting people bought in," he said. "We had to get R&D to prioritize this. We had to get sales excited about it. It was all about understanding what factors motivate people, and using that to generate momentum. And that was just the beginning."

The next step was to lay the groundwork for a functioning program. With the support of a small, scrappy team, Armbrester drafted partner contracts and began building out the necessary API infrastructure. He recalled, "At first, all we had was a scheduling API. It was literally just a few lines of code. But it was a start, and our roadmap was aggressive."

As the basic technical foundation was put into place, the team nailed down the parameters for Marketplace partnerships. First and foremost, everything on the platform would have to abide by athena's security and privacy standards, be sold as a service (with only implementation costs upfront), and measure outcomes as promised. Beyond that, that platform would welcome any partner with whom integration was feasible, as long as the product met one of three conditions: it drove revenue to clients, reduced inefficiencies, or improved results. In Bush's view, it was a win-win-win. "Our clients

win by gaining increased value and efficiencies, entrepreneurs expand their client base and make money, our services grow richer, and, eventually, we'll keep a slice of our partners' revenue."

By the end of 2013, the Marketplace was up and running with over 20 partners across a variety of capabilities, and 150 athena clients (from single-doctor practices to enterprises) were using an MDP partner solution. (Exhibit 6 shows screen shots of the Marketplace website, while Exhibit 7 shows a more detailed partner page.) Sample capabilities and partner solutions included the following:

- Patient Queue Management: Clockwise.MD allowed patients to choose a visit time, control
 their wait experience, and stay informed about wait times and delays on any web-enabled
 device.
- Speech-to-Text: Entrada allowed providers to convert speech to text instantly in the cloud, with
 easy self-editing and seamless EHR integration.
- **Digital Check-In:** Utilizing its durable, anti-bacterial tablets, Phreesia leveraged patient self-service to digitize intake, capture electronic consent forms, and collect patient responsibility.

The Future of athenahealth and MDP

Looking ahead, MDP partnerships would be critical in helping athenahealth expand its business beyond the ambulatory setting to support the full continuum of care. The partnerships would also help build a unified clinical experience that followed providers and patients from the hospital to the home. "If we're going to accomplish the vision we have in mind, every node of health care is going to need to be on athenahealth or on something that connects easily to athenaNet and reliably shares information," Bush said. "We need nursing, we need pharmacy, we need every step of care."

Monetizing the Platform

By 2014, MDP had grown its platform into a thriving marketplace. The team had more than doubled in size, and substantial progress had been made in operationalizing and streamlining the partner selection and onboarding process. But Armbrester's job was far from done. The next step was to turn MDP into a sustainable business unit.

In an effort to gain traction, MDP had allowed its initial 20 partners to join the platform at no cost for the first year of the program, which meant zero revenue to athena. The only commitment required of these partners was favorable pricing for the athenahealth clients they serviced. As these initial yearlong contracts reached their end and new partners joined the Marketplace, the team struggled with how to best transition the platform into a revenue-generating business. Few, if any, benchmarks existed in the health care space. Model platforms like Salesforce's AppExchange and Apple's App Store charged companies anywhere from 15-30% of revenues generated via the platform, often with additional upfront and annual app review fees that could total several thousands of dollars.

Armbrester was unsure how aggressive athena should be with its Marketplace partner terms. The company's open philosophy meant that it would not charge MDP partners to apply to join the Marketplace or connect to the platform by leveraging the company's APIs. Would the proposal of a revenue share agreement, in which athena took a percentage of the revenues generated by partner solutions via the Marketplace, anger existing partners and scare away potential prospects? Moreover, was the platform actually driving enough value to partners to justify such agreements? Given these concerns, Armbrester and Bush wondered if the timing was right to start an accelerator.

The MDP Accelerator

The MDP Accelerator, first proposed in 2013, was an opportunity to ramp up both the growth of participating companies and the platform itself. If athenahealth wanted to be the cloud-based information backbone for health care, Armbrester believed it needed to foster the growth of more cloud-based companies in the space.

The impact of an accelerator program could extend far beyond athena's own strategic interests. Such a program would bring new energy from aspiring entrepreneurs. Bush envisioned a Watertown campus with the accelerator at its heart, "athenistas" and entrepreneurs collaborating on the next game-changing ideas. Above all, an accelerator would lower the barriers to entry for health care entrepreneurs by providing access. This idea of access—to capital, expertise, and customers—resonated with Bush, as he had struggled with it first hand in building athenahealth.

The startup accelerator concept was by no means new. Y Combinator had pioneered the idea back in 2005, and was now considered the premier accelerator program for tech startups, counting Airbnb, Reddit, and Dropbox among its 500+ alumni. While models varied widely, traditional accelerator programs focused on turning early-stage ventures into sustainable and scalable enterprises through intense, short-term educational programs and infusions of seed capital, typically in exchange for equity. These programs often came with a range of perks, including free office space, discounted business services, and access to extensive mentor networks, with the end goal of quickly attracting follow-on funding from outside investors. VC firms appreciated the screening function of accelerators, and culminating "demo days," where startups pitched to an audience of qualified investors, were well-attended.

The startup accelerator space had seen a proliferation of new programs in recent years, ranging from large, cross-industry programs like TechStars, 500 Startups, and the Boston-based MassChallenge to more niche programs focused on specific industry verticals. In the health tech arena, leading programs included Healthbox (with multiple locations across the U.S. and in London), NYC-based Blueprint Health, and Rock Health, an accelerator turned full-service seed fund based in San Francisco, among others. If athena were to launch its own accelerator, a key challenge would be positioning the program in this increasingly crowded space.

Armbrester felt that the value proposition of an MDP Accelerator was unique relative to existing health-focused programs. Giving entrepreneurs the opportunity to integrate with athenaNet, access athena's customer base, and see their solution in the clinical workflow was something no stand-alone accelerator program could offer. Moreover, the ability to pull in functional experts ("Jedis," as the company called them) from across athena's 3,000+ employees, Physician Advisory Board, and broader ecosystem could open up a world of opportunity for participating companies. But if athena were to move forward with an accelerator and begin investing in and incubating early-stage companies, what exactly would the program look like? What types of companies would they target? How would they market it? Would existing accelerators be seen as competitors, or potential collaborators?

Moreover, given that athena was a public corporation, it was unclear how the accelerator would be structured financially. What reporting and regulatory requirements would the company have to consider? What would the investment terms look like? Would they need to hire additional staff to run it, and if so, who should they hire? While compelling, the idea of an MDP Accelerator left Armbrester with far more questions than answers. His mind still racing, he pulled into the Arsenal complex, parked his car, and headed into the athena office for his meeting with Bush.

Exhibit 1 Digital Health Funding, 2013

Digital health funding surpassed \$1.9B in 2013, growing 39% over the previous year and more than doubling since 2011



Exhibit 2 athenahealth Income Statements, 2011 to 2013 (in \$ millions)

	2013	2012	2011
Revenue:			
Business services	\$563,237	\$408,496	\$312,768
Implementation and other	31,766	13,775	11,299
Total Revenue	595,003	422,271	324,067
Expenses:			
Direct operating	238,672	166,886	122,795
Selling and marketing	149,488	104,300	79,775
Research and development	57,639	33,792	23,343
General and administrative	99,776	57,025	48,711
Depreciation and amortization	43,575	25,641	16,710
Total Expenses	589,150	387,644	291,334
Operating income	5,853	34,627	32,733
Other (expense) income:			
Interest expense	(3,905)	(407)	(314)
Other income	283	658	461
Total other (expense) income	(3,622)	251	147
Income before income tax benefit (provision)	2,231	34,878	32,880
Income tax benefit (provision)	363	(16,146)	(13,834)
Net income	\$2,594	\$18,732	\$19,046

Exhibit 3 Revenue Cycle Management

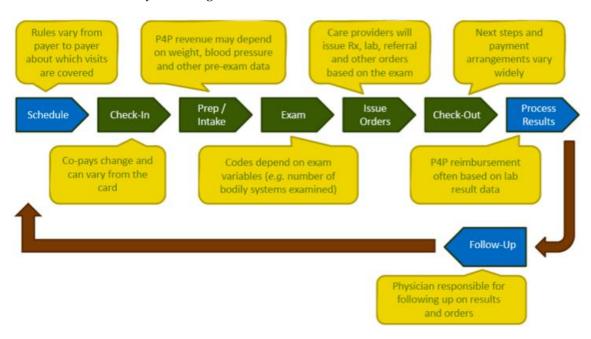


Exhibit 4 EMR Competitive Landscape

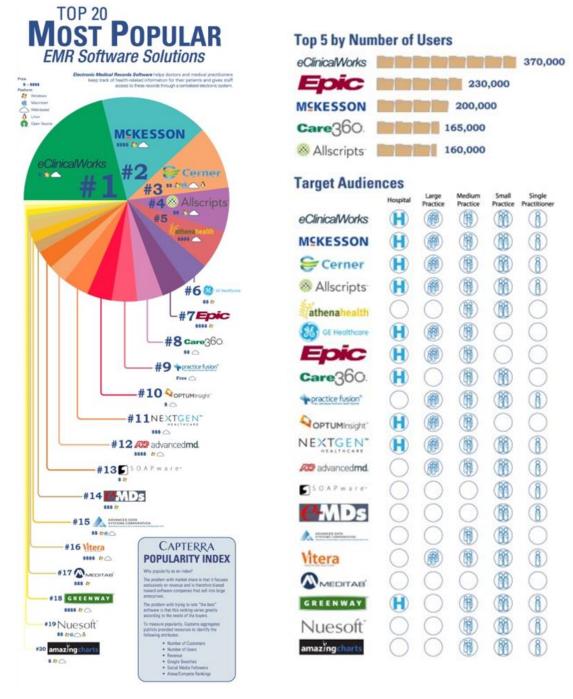


Exhibit 5 The MDP Vision



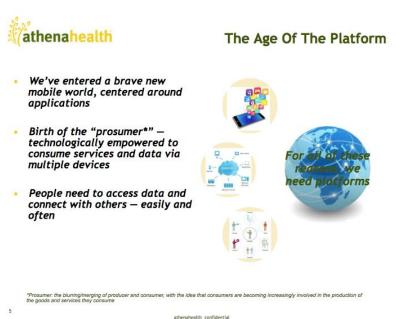


Exhibit 5 (continued)



In addition, many large businesses are trying to reinvent themselves along platform lines... adopting more collaborative business models, embracing new partnerships and ecosystems, and building their own platforms and planks.



"The Cloud Wars": Open vs. Closed



- Vertical Integration Horizontal Integration
- Single platforms Best-in-Breed Solutions

15

Exhibit 5 (continued)



HIT: Cloud-Based vs. The Biosphere



athenahealth

Joy's Law

No matter who you are, most of the smartest people work for someone else.

Froduct Builder

- We can't build fast enough for our clients
- We need to offer more services than we can possibly build
- We can go to market with richer tools and solutions if we don't need to build and own everything

MDP (Open Network)

- athenaNet: 50,000+ providers, 25+ million patient records
- Provide connectivity to the athenaNet core
- Open our platform to an array of innovative solutions for our client base

athenahealth confidential

Exhibit 6 The athenahealth Marketplace

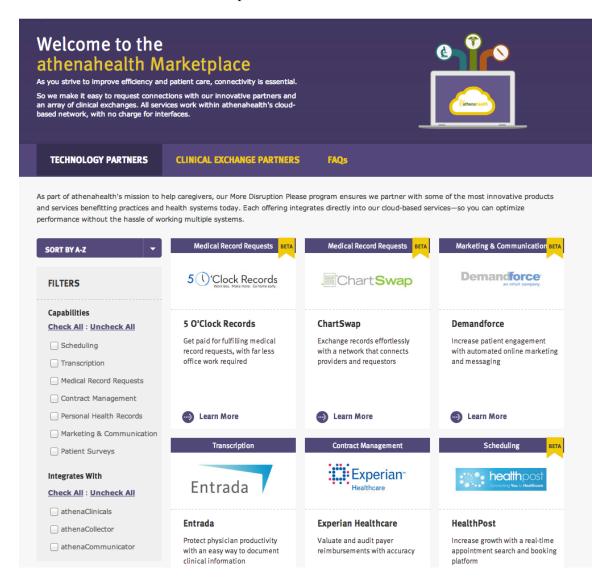
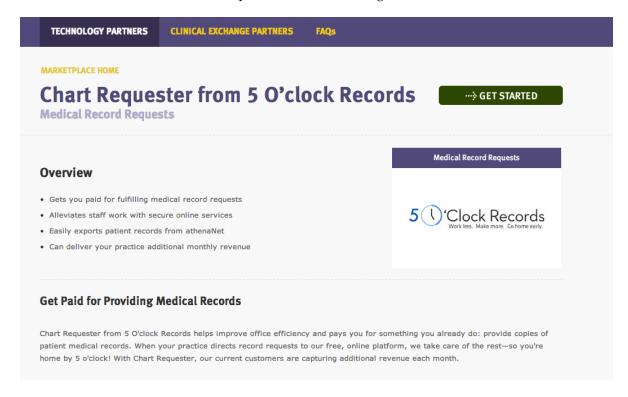


Exhibit 7 The athenahealth Marketplace: Partner Detail Page



Endnotes

¹ Darius Tahir, "Epic Systems Feeling Heat Over Interoperability," Modern Healthcare, October 1, 2014, http://www.modernhealthcare.com/article/20141001/NEWS/310019945, accessed May 2015.

² Jonathan Bush, Where Does It Hurt? An Entrepreneurs Guide to Fixing Healthcare (New York, NY: Portfolio, 2014).

³ "HIStalk Interviews Todd Park, athenahealth Co-Founder," http://histalk2.com/2008/09/15/histalk-interviews-todd-park-athenahealth-co-founder/, accessed May 2015.

 $^{^4}$ "HIStalk Interviews Todd Park, athenahealth Co-Founder," http://histalk2.com/2008/09/15/histalk-interviews-todd-park-athenahealth-co-founder/, accessed May 2015.

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⁶ athenahealth Form 10-K, 2013, accessed May 2015.

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