Company Name: HMS Holdings Corp. (HMS)
Event: William Blair 38th Annual Growth Stock Conference
Date: June 13, 2018

<<Ryan Daniels, Analyst, William Blair & Company>>

We're a wee bit early but I'll go ahead and get started as we've got a decent forum here. First off, for those of you whom I've not yet met, my name is Ryan Daniels, I am the healthcare, information technology and services analyst here at William Blair who covers HMS Holdings. So, my great pleasure to introduce Bill Lucia, who is the Company's Chairman and CEO, Dennis Oakes who runs Investor Relations is towards the middle and they'll both be available for the Q&A session.

Logistically, that will take place downstairs on the seventh floor in the Bellevue Room. Immediately following this, so I'll ask you to hold your questions for that. Very, pleased to have the team back here again at our Growth Stock Conference. It's one of our anchor participants been coming for a number of years and a great healthcare story. Unique to my universe, and then it's one of the few providers, it's a solution to the problem working to reduce healthcare costs, reduce fraud, waste and abuse, increase efficiencies and they're doing that not only through some organic developments with some new product offerings but also M&A activity.

So, a little bit different story than what you've heard in the past few years. So, excited to give an update from Bill and the team about some of those developments in the growth opportunity that the company is seeing, which is clearly accelerated especially in the commercial side over the last few years.

So, I think a very exciting time to have them here and learn a little bit more about that. Again, two quick housekeeping website williamblair.com has our disclosures and again we will go down to Bellevue, which is on the seventh floor for the breakout. So, with that I will go ahead and turn over to Bill. Thank you.

<<Bill Lucia, Chairman and Chief Executive Officer>>

Thank you Ryan and thanks for attending our presentation this afternoon. We'll these are the fine print disclaimers that you can read at your leisure. So basically, I am going to try to give you an overview of the company for those who are less familiar with HMS. Little bit about our background, why we do what we do. The macro environment and those, the favorable growth environment that we exist in today and then a little bit about what we're doing to harness technology and continue to expand and of all of our products suite.

We really have three verticals in our business, our heritage business is coordination of benefits for Medicaid. We built it, we've innovated on it for thirty years and we are still the leader in this space. It's a business with a wide moat around it, primarily because we

have all of the data from third party carriers. So, all of us in the room who have health insurance in the U.S. are in this database.

And, we match that on a regular basis to Medicaid because Medicaid is the payer of last resort and any resource prior to that should pay and employer sponsored insurances is one of those resources.

And, then the other two lobes are captured under what we call analytical services. And that's payment integrity, so in COB, we're looking to make sure the right payer has paid the claim. In Payment Integrity, we're looking to make sure that claim has been paid appropriately or will be paid appropriately. And, that could be based on up-coding based on whether it was clinically valid.

It could be a duplicate, it could be within the contract terms between the payer and provider. There's a lot of reasons that a claim could be paid inaccurately. And, then both of those services COB and Payment Integrity are primarily contingency or success fee, we don't get paid until we find savings and recoveries for our clients and our average ROI is 10 to 15 to 1. So, very significant returns for our clients.

And then most recently, we have entered what we call the total population management marketplace. And, that's really an area where we're applying HMS built analytics and then some services that we acquired through two acquisitions, to identify the highest risk members that a health plan or provider taking risk has or emerging members those who will become higher risk and making sure that they are managed well in the care management process and that they are engaged to change their behavior to do the things they need to do to become healthier and also to close gaps in care that impact the client's HEDIS scores or star ratings.

So, we used to always talk about our marketplace or our total addressable market as $180 billion. And, appropriately paid claims whether it's COB or Payment Integrity. But, with our new vertical and total population management, we believe we can address all the other inefficiencies in the delivery system. And, so it's reducing unnecessary medical services. It's making sure people are getting medical services where they are under utilized.

So a diabetic, who's not getting a 1C test and taking insulin becomes more chronically ill members. So, there's a lot of areas in the and an encouraging preventative care. So, there's a lot of areas in what is now estimated to be about a trillion dollars of waste in the healthcare system that we now can address through our analytics, services and our total population management.

So, we've dramatically increased what we believe is our TAM. And, what do we bring to the table. So, what are the important things about HMS that establish us for growth and for further penetration with our customers. Well one is data, so we have 90% of all the Medicaid data in the nation in our database. So, that was our heritage, it's also what we're known for.

So, all of the Medicaid pay claims data across the nation sit on the database that can be easily mined. And we'll talk to you about how we do that across multiple products. We've built purpose built analytics, most of this is HMS built. So, we do use some cost tools but for the most part it's HMS built whether it's our very sophisticated matching logic for COB all the way to the clinical algorithms we use to find claims that have been potentially up coded. And, then analytics to determine, which people need engagement to get them to do a certain thing. Get a child, with asthma getting a flu shot, so that you can get a higher score from your upstream entity that's paying you.

We've got over 300 health plans, 44 states and the federal government has clients, multiple agencies in the federal government. So, we have a very diverse customer base and we have no customer at over 10% of our revenue. And then of course, we've built over the years a very large scale operation. Clinicians, data scientists, experts and health and health care reimbursement.

I talked a little bit about this but we are the only database of its size of healthcare coverage information in the nation. So, it was under over 300 million unique lives in this database. It tracks a person from, if your employer went from Aetna to UnitedHealthcare to a Blue Cross plan over the course of 15 years, we have all of that history.

And if you, if you've changed PBM's through that process, if you changed dental carriers, we have a segment for all of that. And that's important because it has to be matched at that level with Medicaid. Our active database, so this is where we keep three years of active claims history for processing. It is over seven petabytes of data, so I'm told that's like the height of the Willis Tower or what used to be known as the Sears Tower here but it's a lot of data.

And then about 1,250 partners bring data to us. So, this is on behalf of Medicaid and other government programs. So, the eligibility as I said from third party administrators, pharmacy benefit manager, all of the health plans in the nation, self insured unions, dental plans, behavioral health carriers all that is amassed into what we call our national eligibility database.

And what's unique about it is, it's in a standard format. So, if you know healthcare, we have standards throughout healthcare. We have ANSI standards for everything and once you've seen one, you've seen one. An ANSI 835 from a provider and a 837 from a carrier is going to look different carrier by carrier, even though we have standards. So, HMS standardizes all that, so that we can match that to our Medicaid clients data.

We receive about three billion paid claims a year that's the number of claims, not dollars. Of course, the dollars are significantly higher and as I said we have over 90% of the Medicaid population in our database.

So our analytics as I talked about, we're really purpose built initially for COB, so very sophisticated matching logic. So we just don't match Bill Lucia to Bill Lucia, we will

match B Lucia to Bill Lucia or B Lucia to William Lucia, so if we don't have a social security number, we're looking at address. We've got Soundex, I mean everything in that to identify, to best identify where a Medicaid member has other coverage. And, then validate that match and prospectively add that match to the client system, so they can avoid paying claims in the future.

We have fraud and abuse detection mechanisms that we've built over the years. So because of our breath across the nation we're able to tell providers who are more likely to either up code a service, or potentially patterns of fraud and we have tools that identify that. And again in our risk stratification models, which we build ourselves, those are around looking at who are the highest cost members and they may not be the ones who are incurring costs now, but should be. And if you've incurred the cost now, you'd keep them out of the ER an ER to admin situation.

And then member engagement techniques that have been built over the years determining using third-party data and behavioral science, what's the best way to outreach to you to get you to change your behavior? And as I said a very large customer database we've talked about this. But one thing I didn't mention is every year over 160 employers run through our systems for dependent and eligibility audit. And we're now starting to sell to those employers some of our total population management and our Payment Integrity solutions. So it's a way to get into the self insured population that we haven't had in the past.

We talked about our expertise. We're recognized by Gartner for our total population management as really the achieving triple aim in that market. We win awards every year from our security, our security function. And that's probably the most important because we probably sit on more health care data, second to CMS we sit on the most health care data in the nation. So having a very secured infrastructure, we're high trust-certified we went and information security wards every year at least two or three. And this year we won the ACE Award from confirm it for both customer engagement and employee engagement. And then we won the Stevie Award from the American Business Awards for the new product we developed called ELLI, and that's our risk intelligence product.

So how are we growing? What are the things that are really boosting HMS' growth? It comes in a number of areas that I'll go into a little more detail on each of the favorable healthcare macro environment, how we grow our COB business, our Payment Integrity business and then this new leg on the stool total population management. I think everybody knows that the nations faced with an aging population, with higher cost, multiple co-morbidities an increase of people who are moving into either memory care units in assisted living or long-term care, I'm a baby boomer there's more of us moving into Medicare every day, rapid rate, I think, 10,000 a day are Medicare eligible. The Medicare program is expected to run out of money. I forgot what the latest estimate was 20, 25 or something. So this is this is a very critical issue across the nation.

And so with all of that rising costs the government itself is basically saying they have about a 10% error rate on paying claims. So it's a very important task to find those errors,

resolve them and prevent them from happening in the future. So that's a big, big opportunity for us both in the Medicare Advantage Plans, in the Medicaid managed care plans, but also with the government if they open the reigns from our auditing.

And then the employer-sponsored plan even though with the ACA there was a lot of talk about the doom and gloom of employer-sponsored plans. It's still expected to cover more than half of the U.S. population and continue to grow. And a lot of that is at risk, so where the employer is at risk. So those employers are demanding more services and we have what is an interesting opportunity to bring our total population management and Payment Integrity into that space.

And one of the things we listened to years ago from our clients was they realized, our health plan clients realized they have to become consumer-centric. Remember health plan started selling to the employers and they viewed the provider as their client, but with all the risk shifting from the employers down to the employer with high-deductible health plans – high-deductible health plans C and D and the health carriers that said the consumer and the consumer experience is important to them. And that's one of the reasons that we acquired a member engagement organization.

In terms of COB, COB continues to grow, we've said it's a low- to mid-single-digit grower last year grew 8%. It grows because there's churn in the Medicaid population, people move on and off Medicaid, they lose jobs, they start jobs, they get new coverage all of that are revenue events for HMS. It is the payer of last resort. And this year through some work we've done with Congress we got the laws passed that CHIP, which is the Children's Health Insurance Program is also now deemed the payer of last resort. So we can start doing what is the same as Medicaid COB on the CHIP population. And that adds about nine million new lives that we'll be working on as we convert our clients' CHIP populations. So that's just some wind in our sails for 2000 – primarily 2019.

As I said before 10% to 15% ROI for our clients, so very high returns. Most of our work is contingency fees so they don't pay a dime other than the implementation, the people they're using for implementation. And then in 2017 COB was about 72% of our company revenue. This year we're expecting about 65% and it's got extremely high margins and it's been critical to our strong cash flow as a company.

Payment Integrity was the other business that we grew both through acquisition and through organic growth at HMS. And both in our state market, federal market, but primarily in the health plan marketplace. But through any business as you grow we had growing pains. And we spent all of last year reengineering that business for execution. And so the second half of the year is when we had the leading indicators. And for us leading indicators are how many claims are we tagging that need to be audited and how many medical quests are we sending out to providers so that we can do a clinical audit? And all of those leading indicators were rising. And as you saw in Q4 and Q1 of this year, our Payment Integrity business grew pretty dramatically.

We also dramatically improved our implementation process. The good news is we had an implementation backlog from our sales funnel. The bad news is we weren't staying on top of it. So we turned that completely around, our goal is to have no more than two quarters worth of sales and implementation. And we removed, eliminated all the delays that are HMS based and we're now working much closer with our clients on delays that could be their cause whether it's getting it through their medical office, or getting data for through their IT systems.

So we expect that our PI business will continue to be a double-digit grower for the foreseeable future. And we grow that through increasing the yield of each audit, but continuing to bring new audit scenarios to our clients.

In the TPM space this is – and we call it Total Population Management, not to be confused with population health because we think we do much more. This is the one where I said we built a system called ELLI, it's the population risk intelligence tool. We acquired Eliza, which was a leader in health engagement solution so getting people to change their behavior to take action to do something and then a set which was population, health and care management technology. And if you think about it, ELLI really is the tool that says these are the people that you have to focus on that are either the current high risks or emerging risks. Essette is the kind of care traffic controller, so the software that you can track all of the activities about that member and their care. And it's integrated with the HRs and lab systems. So it's a highly automated cloud-based solution. And ELLI is once you've identified what has to be done it's the engagement engine.

So through whatever modality is best to reach that member, you're getting them to get in for a well-baby visit, a child with asthma getting a flu shot all the way up to reminding a person who's not taking their anti-depression medication that while you feel better, you probably should take it because it's going to impact your other co-morbidities. So that's the kind of trisector in our – total population management solution. ELLI is the product we built ourselves. And this is the one that we – I think it was last night we accepted the Stevie bronze product award American Business. And this was initially built because HMS has all the Medicaid data in the nation. So in any given state we have the data for all the Medicaid plans and for Medicaid fee-for-service.

And what happens in Medicaid? In Medicaid you have the freedom of choice to move from plan to plan every 30 days if you want. Doesn't always happen, but you can also be in Medicaid. And let's say you're on Medicaid for six months, you get a job, you earn out of Medicaid, you lose that coverage or you lose that job, something else happens you requalify for Medicaid six months later. And over the course of a couple years, you could be in Centene's plan in that state, you might be in Molina's, you might be in UnitedHealthcare's but that data is not shared.

And so when they see that member, they're brand new and if they are non-compliant diabetic they don't know it because they're not getting claims. And the plans told us that they took about four to six months to really understand the risk they got, and they had members for an average of six to nine months. So think of Medicaid plans with thin

margins, how am I going to impact that. So we built this tool where we could take all of that data.

And so if you show up in a Medicaid plan next month and we've seen you before we have a clinical profile for that individual. And we have built through our own risk algorithms, what are the top 10 risks you really should be worried about and they just click through the system and then look at the members and all of their history. And I'll give you some examples of some of the things that we developed and show them.

The one that was very important with our pilot state, which is now a paying customer and that's a state of Louisiana was opioid abuse so a big problem in our nation. So we built opioid analytics engine. So that's one of the screens that you get that pops up in your system every day. And it looks at it from a couple perspective, it looks at the member who is getting a dosing that's inappropriate, it's a morphine level dosing. But what plans did, was they said gee, I'm getting – I've got this person with really high dosage. But if they are in Stage 4, if they have Stage 4 cancer and they're on chemo, that's probably appropriate dosage, you don't need to look at that member.

You need to look at the pregnant mom who went and got four scripts of opioids from four different docs last month. And by the way 80% of the opioid addicted children in the nation are in Medicaid. So this is a way for Medicaid plan to quickly get at that and do intervention. We also have a provider lens so we're able to look at from a geospatial ability, a plan can click on it and say, gee, these are the four providers in this service area that prescribe opioids at a higher rate than the others.

So they can quickly get at it from a provider perspective. So it's one of the key features in the Elli dashboard. And again its dashboard analytics, so it tells them at a glance when they sign on you've got 146,000 members and x number of those members are high risk. And these are your risks and it gives them the top 10 diagnosis is that they have to pursue and they click through it and they have the highest members. And again they're not always the most costly members. They're the member that if you don't do something, something bad is going to happen and again that's a risk algorithm that we build.

And then you can drive all the way down into the member and you can slice and dice it any way you want to look at the diagnosis where they're going for treatment. In the Medicaid population, you'll see a lot of people who go to the ERs, their primary care so they can use us to redirect that member through Eliza to use a PCP. Here is the PCP in your area, this is who you should be using doing our – using our outreach engines for that.

So for us it's a big part of our growth and it should be the fastest growing, we're expecting it to be the fastest growing part of our business. So what are we doing to go forward to grow our business? One of the things we've been focusing heavily on is harnessing technology, a lot of people talk about AI and natural language processing and all the tools that are out there today and we've really been using all of them to streamline our processes. And I'll give you a couple examples of what we've done.

So on the AI space, we deploy a lot of nurses and registered medical record coders to look at cases after the medical record comes in, we think there's an upcoding on this record, the hospital charge DRG for a level of service that they deliver. We now use, we get those records and they're optically scanned, OCR digitized, natural language processing is going out and saying what we called this, we call this record in for this specific type of service on this incident.

It will go out to the right pages instead of – you get 100 page medical records. This goes out and pulls the three pages in for the nurse or coder to review. And then we've added an AI tool that's mimicking and learning what the coders doing to review it. So we're automating these processes, it's not necessarily to reduce labor spend but as we're growing in payment integrity, we're not adding labor. So we're able to automate more of this, that's one of the use cases. And other is where we're valuing on a subrogation claim we have to determine where are these claims part of the accident or not but we have a system that's now doing that instead of a person.

So those are the kinds of ways we're using technology to move our business forward. And it's part of what we used to help us scale our PI business and kind of turn the corner in that business in Q4 and Q1. We recently hired our CTO who was the CIO and Head of Product at WebMD, significant experience in deploying new technologies, the large organizations. So he'll be leading a lot of our initiatives, one of the things he's looking at now is what's our position in blockchain as a company.

We had strong cash flow generation as a company about $90 million to $100 million of cash flow from operations. And we've been deploying it really and investing in growth, and part of that is IT. So that's really determining that we can continue to have the IT platforms that will improve automation and help us scale. We are active probably our other first use of capital is acquisitions. We're very selective, we've probably looked at 100 companies and we bought two in the last 18 months. But that's the plug capabilities into our total population management our payment integrity businesses. And then we've opportunistically repurchase shares and done that both in 2017 and 2016.

We have a low leverage as a company so conservatively managed balance sheet, we can lever up if we need to do a larger acquisition. And recently amended our credit facility that's given us a bigger capability and of course, we've benefited from the recent tax cuts, lowered our effective tax rate to what we say an estimated 28% to 30% from what was well over 40%. And we're now – and we shared a little bit of that with our employees by increasing our match rate for the 401(k) rather than give everybody a bonus we felt we wanted to have something as a kind of lasting memory.

So how are we going to grow this year and beyond. It's boosting that organic revenue growth primarily from all the up sells we've had to existing clients on payment integrity. We'll continue to leverage our data assets. So this Elli product is leveraging our data assets but we're also focused on getting data use rights broadened to be able to use data in more innovative ways in the marketplace both from fraud solutions but also in a care

management setting for risk intelligence. We have a couple of 100 health plans that were cross-selling the total population management solutions into. Most of the companies in the space that Eliza was in were all in the top health plans right.

If you're a smaller company, you're going to sell to the big guys. But what's happened is the mid-sized health plans were less penetrated. And HMS is a 100% in the mid-sized Medicaid managed care plans and they need to service as much as anyone so a big effort to cross-sell into the HMS customer base. We're expanding margins through technology and through increase in revenue we've targeted 100 to 150 basis points per year for the foreseeable future.

We every year our Net Promoter Score from our clients goes up, it's an independent process we run with a company called Confirmit and employee engagement scores go up every year. So those are two of the leading indicators about where we're moving from a cultural perspective and all that leads to growth in our business. And of course, where our goal is to maximize shareholder return and recently our stock has moved in the right direction.

So we're happy to take your questions in the Q&A, we are excited about the opportunities for our company and the ability to continue to grow the platform. And we like the fact that we are diversified across a large customer base and continuing to grow and innovate in the products that we have.

<<Ryan Daniels, Analyst, William Blair & Company>>

Thank you.

<<Bill Lucia, Chairman and Chief Executive Officer>>

Thanks.