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HMSY - Q3 2019 HMS Holdings Corp Earnings Call

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PRESENTATION

Operator

Ladies and gentlemen, thank you for standing by and welcome to the HMS third quarter conference call. (Operator Instructions) Please be advised that today's conference is being recorded. (Operator Instructions)

I would now like to hand the conference over to your speaker today, Robert Borchert, Senior Vice President, Investor Relations. Please go ahead, sir.

Robert P. Borchert - HMS Holdings Corp. - SVP of IR

Thank you, Victor, and good morning, everyone. Joining me are Bill Lucia, our Chairman and Chief Executive Officer; and Jeff Sherman, our Chief Financial Officer. This call is being webcast and can be accessed via the Investor Relations section of our company's website at hms.com. Today's press release highlighting our financial results is also posted on our IR website. Bill and Jeff will first provide their perspective on our recent financial and operating results and business outlook and then we will open the line for questions. (Operator Instructions)

I'd like to remind you that the financial results reported today and in this morning's press release are preliminary and are not final until our Form 10-Q for the third quarter ended September 30, 2019, is filed.

Some of the statements we will make today are forward-looking in nature based on our current expectations and a view of our business as we see it today. Such statements, including those related to our updated full year 2019 financial guidance, future financial and operating performance and future business plans and objectives are subject to risks and uncertainties that may cause actual results to differ materially. As a result, they should be considered in conjunction with the cautionary statements in today's press release and the risk factors described in the company's most recent SEC filings, including our Form 10-K.

Finally, we may refer to certain non-GAAP measures this morning. Reconciliations of these measures to comparable GAAP measures are included in our press release posted to our website.

With that, I will now hand the call over to Bill.

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Thank you, Robert, and good morning, everyone. HMS did post mixed results for the third quarter versus a strong quarter this time last year, with revenue and adjusted EBITDA down year-over-year, but cash flow is up significantly. Through the first 9 months of 2019, our total revenue increased 4.6%, with adjusted EBITDA up 16.5%, including the reserve releases in both years and an investment gain this quarter. We continue to generate strong cash flow, with year-to-date operating cash flow up 60% from a year ago on a comparable basis. This significant cash generation is enabling us to invest in our IT infrastructure and product capabilities in order to support our future growth. Overall, we remain confident in the trajectory and strength of our business given our year-to-date performance, recent expansions of client work and very strong contract signings in Q3 across all lines of business.

With respect to each of our service lines, we have mentioned on past calls the potential for quarter-to-quarter variability, which on a whole, impacted us favorably in Q2 and negatively in Q3. COB revenue did decline 10.5% when compared to one of the strongest COB quarters ever in the third quarter a year ago. This year-over-year decrease can also be attributed primarily to the timing of recoveries related to certain customers. And as we have said in the past, we have good visibility on an annual basis, but our quarterly COB revenue can be lumpy as third-party carriers do treat our Medicaid COB claims differently than original claims from providers. Their systems, at times, are just not prepared to handle the volumes of claims or eligibility transactions we generate. This is not a new phenomenon in COB, but it's important to understand that we cannot control the precise timing of third-party payer activity. The key point is that the revenue opportunity in COB is not lost, and we expect this revenue to rebound in the fourth quarter. We currently anticipate mid-single-digit revenue growth for COB for the full year as we had originally planned. We continue to work on enhancing our COB growth by leveraging machine learning and automation and through product development such as our real-time insurance identification and eligibility verification solution.

Payment Integrity delivered another strong quarter, with revenue up 11.1% (sic) [11.4%] from Q3 last year as we are seeing encouraging trends in new solution adoption within our existing client base for both commercial and government programs. Of course, our PI business opportunity is supported by CMS' heightened industry focus on program integrity as announced in the last 2 weeks by Administrator Verma.

Our population health revenue in the most recent quarter was essentially flat on a year-over-year basis but up 8.8% sequentially from our second quarter. Our consumer engagement platform, Eliza, continues to be the primary driver of our PHM revenue, which today is still primarily a volume-driven transactional business. We are working to balance our sales efforts between the signing of longer-term recurring revenue agreements and shorter-term transaction-oriented services and revenue. And at the beginning of 2019, we integrated PHM sales into our overall commercial sales force. This approach, unfortunately, did not work as we had planned, and we have not obtained our sales targets so far this year. As a result, we are refining our go-to-market strategy and rebuilding a sales team focused solely on PHM, which includes hiring both new sales leadership and talent. To be clear, we continue to gain traction in the market, and our sales pipeline for PHM is solid.

We did sign our second at-risk Eliza deal this quarter with a large national payer in which we have upside revenue potential based on the achievement of certain key performance indicators, including improvements in HEDIS scores and our ability to close gaps in care through appointment scheduling. A number of our recently signed contracts are much more complex but also recurring in nature, so revenue will ramp and then be recognized over a longer period of time.

We also continue to build awareness of our PHM capabilities with our state clients. In fact, our interactions with certain state leaders have led to specific discussions about how HMS can help with programs designed to increase childhood immunization rates, reminders to Medicaid members to complete their eligibility redetermination and very critical initiatives like reaching out to individuals on life-sustaining medications impacted by adverse weather events.

Most recently, we signed our first contract in which a customer will pair both our risk stratification and analytics solution, Elli, with our Essette Care Management platform, and we have a much similar sale pending. This win is a great example of why we acquired VitreosHealth, which is the predictive and prescriptive analytics engine within Elli. Our algorithms and analytics use historical claims and social determinants of health data to identify high- and rising-risk members as early as the point of enrollment so health plans can proactively engage members from day 1 to prevent high-cost events. It's also why we believe Elli is distinct from other risk-stratification tools. Our ability to connect high and rising risk with care management and consumer engagement places HMS in a very strong competitive position to help our customers actively manage their members' care. Our Eliza analytics then inform us how the engagement is executed, from the wording of the message, to the mode used to communicate, to the timing of the outreach and at scale.

Additionally, in early October, we invested in MedAdvisor, a leading digital medication management company in Australia. This aligns with our strategy to continue to evolve HMS' population management capabilities in the U.S. but also advance our international growth initiatives in Australia and the United Kingdom and nurture continued innovation to improve clinical outcomes. We intend to pair MedAdvisor's medication management software platform with our PHM solution as part of this strategic relationship.

In summary, for the quarter, we believe our recent sales momentum and strategic investments, combined with very positive market trends, offer numerous opportunities for growth and support our outlook for the remainder of 2019 and into 2020. We will remain focused on delivering on our clients' expectations to continue to help bend the cost curve and improve clinical outcomes and quality.

Jeff will now provide additional detail on our third quarter performance. Jeff?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Thank you, Bill, and good morning. While our financial performance in Q3 was not up to our expectations, we did deliver a solid quarter in terms of cash flow, and we currently anticipate sequential revenue and earnings growth in Q4. As Bill mentioned, our business model has the potential for some quarter-to-quarter revenue variability, which is why we provide annual guidance and remind you not to extrapolate any one quarter's performance as a trend. For COB specifically, we currently expect revenue to rebound in the fourth quarter.

Year-to-date, on a service line basis, COB revenue was up 2.5% compared to the same period a year ago; PI increased 9.1%, excluding the reserve releases; and PHM revenues up 5.8% during the same period. This implies that, overall, we are trending below our initial guidance for revenue growth communicated back in February.

Year-to-date, our adjusted EBITDA margin expanded 110 basis points when you exclude this quarter's investment gain and the reserve releases in both years. This is in line with our long-term expectations based on the inherent operating leverage of our business model.

Third quarter 2019 adjusted EPS was $0.30 per diluted share versus $0.31 per diluted share in Q3 a year ago. This quarter included an adjustment EBITDA benefit of $7.7 million and an adjusted EPS benefit of $0.06 per share from an investment gain we recognized in Q3 related to our investment in InstaMed following that company's sale back in July. Adjusted EPS this quarter also included about $1.7 million of deal-related costs or $0.01 a share in adjusted EPS.

Our cash flow in the quarter remained strong, with operating cash flow up 9.3% to $34.8 million compared to the third quarter of 2018. Year-to-date operating cash flow of $112.9 million increased 60% from a year ago on a normalized basis, adjusting for a settlement payment last year, and is higher than any full year of operating cash flow in the company's history.

With cash and cash equivalents of $281 million and total debt of $240 million at September 30, 2019, we continue to have a very strong balance sheet and liquidity profile. This is after a $36.6 million acquisition of VitreosHealth in September funded with cash on hand.

As Bill noted, in early October, we made a $7.5 million investment in MedAdvisor, a leading digital medication management company in Australia, for an approximately 13% ownership stake in this publicly traded company. This investment launched a strategic relationship and aligns with our strategy to evolve our PHM capabilities and advance our growth initiatives.

We remain focused on executing on our business plan at a high level, and our capital allocation strategy continues to be geared towards investing in our IT infrastructure and enhancing our products and sales capabilities. We are continuing to focus on potential acquisition opportunities, and we'll move forward with the transaction if it meets our strategic and financial criteria.

In addition, our Board of Directors has authorized the repurchase of up to $50 million of the company's common stock on a discretionary basis for a period of up to 2 years. We plan to be opportunistic in our approach to share repurchases.

We updated full year 2019 financial guidance today to take into account our recent performance and outlook for the remainder of the year. We now expect 2019 total company revenue of $630 million to $640 million. This would be year-over-year growth of 5.4% to 7% when you include the reserve releases from both years. This implies Q4 revenue of $167 million to $177 million, and we currently expect COB, PI and PHM to show growth both sequentially and on a year-over-year basis.

We are now projecting full year adjusted EBITDA of $182 million to $187 million, which represents growth of 12.3% to 15.4% over 2018. Similar to revenue, we are including the investment gain this quarter and the reserve releases in both years. And we are now projecting full year 2019 net income to be in the range of $89 million to $94 million, which would be year-over-year growth of 61.8% to 70.9%. Additional details on our revised outlook for the year were provided in this morning's press release, now posted on our IR website, which will help address more detailed modeling questions.

As we close the year, we will continue to focus on delivering positive results for our clients and for our shareholders. Bill will now offer some concluding remarks, and then we'll be ready for questions. Bill?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Thank you, Jeff. We do believe the overall industry environment should continue to be a tailwind for HMS. CMS continues to heighten its focus on program integrity, and we will leverage our significant payment accuracy experience to expand COB and PI services to both commercial and Medicare Advantage plans.

Recent data from Kaiser Family Foundation highlighted that the uninsured rate has been rising since 2017, and now approximately 15 million uninsured individuals are eligible for either Medicaid or other subsidized marketplace insurance coverage. HMS is very well positioned to provide services to government and managed care organizations as efforts continue to get these uninsured populations covered, including the 20 states that plan some type of Medicaid eligibility expansion in fiscal year 2020. Additionally, the Kaiser report showed many states have a planned focus on pharmacy cost containment, Medicaid buy-in, opioid misuse prevention and other payment accuracy and quality initiatives that are aligned with our offerings. These are solid indicators of the current and future business opportunity for HMS as we continue to help move the health care industry forward.

HMS has a large footprint across both the government and commercial marketplace. This clearly sets us apart from our competitors as we are uniquely positioned to deliver increased value and innovative solutions across a large set of diverse clients and partners.

In closing, we remain committed to both organic and inorganic growth, and I am confident the entire HMS organization is up to the task of delivering enhanced value for our customers. I'd like to thank our employees, our Board and our shareholders for their continued support.

Operator, we are now ready for the first question.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) And our first question will come from the line of Ryan Daniels from William Blair.

Ryan Scott Daniels - William Blair & Company L.L.C., Research Division - Partner & Healthcare Analyst

Bill, hoping you could provide a little bit more detail on the Population Health Management business. Can you talk a little bit more about the sales force restructuring, kind of what the initial thought was in integrating that with the existing sales team? And then what didn't occur to drive sales and how the new reorganization there will, in your view, help going forward based on the pipeline?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Yes. Thank you, Ryan. So we do have a strong pipeline, by the way, I should reiterate that, and had strong sales closing in Q3. But I think what we decided early on was that we would consolidate it primarily under our commercial sales team, and that we would attempt to train the entire team and account management team on what are pretty unique complexities of the PHM business. While we do sometimes sell to the same buyers, I think what we found was that we needed a different type of individual to sell the PHM product line. We needed people who are immersed in understanding the quality measures that help plans focus on the unique programs that we can deliver. And then, of course, a fair amount of this is also a technology sale, which is not always the case with our COB and PI services. So when we realized that we were not getting the traction we had anticipated, we decided to regroup, build a new sales force focused solely on PHM sales and particularly knowledgeable about the integration of the 3 products that we are now delivering. And you could imagine, Elli is a very complex sale because of its predictive and prescriptive analytics. It's an importation of social determinants of health. You really do need a different type of salesperson for that. And so we chose to do that and recruit a leader over PHM sales and have that report directly into our Division President, who leads the Population Health Management business. So we're starting to see the early fruits of that change but we should expect to see more volume from that and more cross-sales activity in the balance of the year and in 2020.

Ryan Scott Daniels - William Blair & Company L.L.C., Research Division - Partner & Healthcare Analyst

Okay. So is that team build-out fully complete at this point? And are we seeing that sales and marketing spend reflected? Or are there still a number of hires, leadership or direct sales? So kind of what's the size of the team and how far along are you in the process of establishing that new group?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Yes, I don't know the exact size of the team, but we are still building out the team. So we are still interviewing and hiring. And it's not to say that we are not leveraging our existing customer base. We have sold to existing HMS clients that previously had not used either Eliza, Essette or Elli. So we have done that, and we will continue to drive those leads from our account management team. But we're not done completing the build-out of the sales team. With that said, we did have, as I said, a strong Q3 sales closing -- contract closing quarter. And as we've said before, for most of our PHM products, but particularly Eliza, it's a pretty fast path from closing a contract to revenue generation. It may build up over time, but it's a pretty fast path for implementation.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. And I would just add, our PHM products continue to be well received by our clients and prospects in the market. So we are optimistic about the growth potential for this service line given the breadth of opportunities in what we consider to be a multibillion-dollar market. And our care management product, Essette, we are up 30% year-over-year through the first 9 months of the year, so we are seeing traction there. It's obviously smaller numbers, but I think the 3 products combined, we believe, there's very good opportunity. As we came into the year, Elli, our risk-stratification product, we expect it was going to be a slower ramp. As Bill noted, we are getting some traction in the state market, which we knew was going to be a much longer sales process. But getting some more traction with Elli and some wins, we think we'll build momentum as we head into 2020.

Operator

And our next question will come from the line of Matthew Gillmor from Baird.

Matthew Dale Gillmor - Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst

Wanted to ask about the COB performance. I appreciate you had a difficult comp this quarter. I think Bill also mentioned there were some payers that had some system issues processing the volume of COB claims. I was hoping you could provide some more details about what causes delays. And was that specific to a subset of payers? Or was it more of a broad-based trend?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Thanks, Matt. No, this happens relatively consistently in our business, but sometimes it piles on, as it had in Q3 of 2017. So we had -- and I'm not going to name payers -- but we had a PBM whose system was not capable of managing the volume of eligibility verifications that we pushed through. Now that's very important to us because our clients, while we get data on a daily, weekly or monthly basis, our clients really want us to verify very detailed information about a policy, whether it's a pharmacy benefit or a medical benefit. And it could get down to group number and pharmacy. I'm going to use some weird words, but PCN and BIN. It's that specific. So to be able to load that into our client system, we verify. And if they can't handle our verification transactions at volume, and you'd consider with 40-plus states and a couple hundred Medicaid plans, we are processing a lot of volume because people's coverage changes frequently. So that happens. We had another PBM that was not capable due to system limitations of processing all of our claims. So doling out, I don't know, 1,000 claims a week or something. That's very low volume for us. And then a couple of payers -- typically, they are large regional payers that have problems or their systems for Medicaid claims shuts down, and then it picks back up, and we process. Again, this is where we don't lose the revenue. We process backlog when their system is ready. So we, unfortunately, had more of that in this quarter than we typically do. And what happens after they turn the funnel back on or turn the tap back on is basically we catch up. Sometimes in a rapid fashion, sometimes not so rapid and it bleeds out over a couple of quarters because their processing systems are still can only handle x number of claims per week. So that happened a little more in Q3 and obviously a lot less in Q2 based on our Q2 overperformance.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. And I would just add. Recall that this did occur in 2018. We had a very strong Q3 in COB, and we are up 8% year-to-date through 3 quarters, and we finished the year up about 3.8%. It also happened in 2017 when we had a weak Q3 and finished the year with a strong Q4. So I think, as Bill said, it's not a new phenomena. There are quarters where we have more of this go against us. Q3 was certainly that way, a lot more than we expected, but we do expect it to rebound in Q4. And still expect COB overall in the up mid-single digits, in line with our original expectations.

Matthew Dale Gillmor - Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst

And then I was hoping just -- if you could, have you seen any of those trends accelerate as we're earlier in the fourth quarter? Or just bigger picture you're looking at the business and normally, you see when you have a sort of a slower period in one quarter, it tends to bounce back. I just wanted to see if you had sort of visibility into some of those claims processing accelerate here in the fourth quarter?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes, we have a lot of work going on, on a client-by-client basis, Matt. We track it that way. We are actually looking at some new ways of doing some of our work that can help with some of the backlogs that have occurred, maybe introducing more automation or technology into it. So I would say, at this point, knowing what we know, we expect to see a rebound in Q4. And we have it very detail on a carrier- or a client-specific basis. And I think we remain confident that we'll see that rebound in Q4 at this point.

Operator

And our next question will come from the line of Jailendra Singh from Crédit Suisse.

Jailendra P. Singh - Crédit Suisse AG, Research Division - Research Analyst

So I want to follow-up on the previous question. I mean you guys talked about the shortfall in third quarter to -- it's just kind of related to quarter-to-quarter variability into your business. But at the same time, you guys actually reduced your full year revenue outlook by essentially the same amount as the miss in the quarter. So are you actually -- are you reflecting any reversal or recovery of the third quarter revenue shortfall in the fourth quarter? Or is it more just being conservative, that let's assume that just whatever $19 million, $20 million shortfall in third quarter does not reoccur in fourth quarter? Help us reconcile those comments around the business.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Well, so there's 2 components. COB was the principal driver of the revenue shortfall for us. PHM, our Population Health Management business, was the remainder. So I'd say roughly about 2/3 of the shortfall is related to COB, and the remainder, for the most part, majority of it was on the PHM side from our own expectations. We've already addressed the PHM side of it. So we expect to see growth in there. But to the extent we were short there in the quarter, we won't expect that to catch up in -- for the year. And then in the COB side, as Bill said, we'll see some of that come back in Q4, and then we'll see some of that bleed over probably into the next year because at times, there are still so many volume of claims that the carriers can process. And then finally, I would say we are expecting in our implied guidance, revenue of $167 million to $177 million. Each of those ranges would be almost the single-largest revenue quarter we've had. So we do expect a pretty strong rebound in revenue in Q4. And from the COB side, we'll get some of that back, but some of it could bleed into the following year.

Jailendra P. Singh - Crédit Suisse AG, Research Division - Research Analyst

Okay. And then my follow up. I mean there have been some concerns in the marketplace around Medicaid eligibility verifications having impact on Medicaid enrollment and utilization trends. Have you seen that having any impact on your business, especially in the COB segment? Any thoughts there will be helpful.

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

No, Medicaid enrollment has not grown as fast, but we have not seen a negative impact on the volumes that we -- so our key indicator, our leading indicator is claims spend, dollars of claims and number of claims coming through our systems and number of lives, right? We've not seen a big delta in that as we process month to month. Now some of it is because we continue to get increased scope, clients expand what we're able to do, we may get additional lives. So a client turns on their CHIP population. They may, in the past, have restricted us from pursuing the dual eligibles, and now we get those, those in our data feed. Look, we also have states that are expanding some Medicaid eligibility. Some is more broad like it's in the legislature in Kansas, and Utah has a waiver in front of CMS that was on the ballot actually this year and tasked to expand much more broadly than initially proposed. So we continue to see expansion in some states more broadly, in other states on specific populations. So I think our revenue will likely outgrow the pace of Medicaid enrollment. And I think it's primarily because you have to remember, there's always churn. People move on and off Medicaid, they move between health plans and they move on and off commercial insurance or employer insurance. All of that churn creates revenue activity for HMS.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

And I would just add, the most recent data shows Medicaid enrollment actually down 2% year-over-year. And we're expecting COB revenue to grow in the mid-single digits. So our yield activities are continuing to drive revenue there. And our COB revenue is broken into cost avoidance where we find other coverage. And then when we find other coverage, the other half is recoveries. And we continue to see good opportunities to recover more dollars for where we find a policy. It can go back 3 years. And so there's opportunities there. The technology investments we're making are continuing to help drive higher returns in yields there, and that remains a focus as we go into Q4 and 2020, continuing to invest in those yield activities.

Operator

And our next question will come from the line of Jamie Stockton from Wells Fargo.

James John Stockton - Wells Fargo Securities, LLC, Research Division - Director & Senior Equity Research Analyst

I guess maybe just to follow-up on some of those other questions on COB. It sounds like you guys are saying that there isn't really any shortage of demand. The issues from a shortfall standpoint aren't on the client side at all. Is that correct?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Yes, we have scope changes that happen almost quarterly. But net-net, every quarter or every year, the scope changes net out to be positive for us, right? Because whether you're a state or you're a Medicaid plan, which is on razor-thin margins, you really want to bring those dollars back or you want to make sure you're being as innovative as possible and rejecting those claims early on and getting the provider to bill a commercial payer and/or typically a payer that pays that provider more. So it's a win-win for the health care system. But we've been doing COB for 40 years. And in that 40 years, while we've grown the business significantly, for a 40-year-old service -- technology-based service business to continue to grow at mid-single digits while the enrollment is not growing, we are going to see lumpy quarters. But we've seen lumpy quarters in the past in this business, and it will continue. I don't expect that this will always be a smooth line. And again, it's because we don't control the behavior of third parties.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

And this continues to be a very high-ROI product for both our commercial and government customers, Jamie. So I think on the demand side, given the ROI we deliver, we haven't seen a slowdown in demand. This is more in the claims execution side where, again, we don't always control the data feed coming in when we get data from carriers, and we can't control the processing timing, per se, on a quarter-to-quarter basis. But again, at the end of the day, it's federal law that they process these claims, but we still see opportunities to continue to get better and recover more dollars.

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

And I think we have talked about this being Medicaid COB. But in reality, the COB opportunity, while in Medicaid continues to grow, is strong in both the commercial and Medicare markets. And so this year, we've had some good successes in helping our clients in their Part D COB, which we will be expanding that and our sales activity to other Part D plans, as well as Medicare Advantage and then eventually, a product offering that will serve the commercial-to-commercial COB market. So COB is a, I hate to call it this, but a gift that keeps giving because we are the experts in it and we plan to expand it into other market areas.

James John Stockton - Wells Fargo Securities, LLC, Research Division - Director & Senior Equity Research Analyst

Okay, that's great. And then the buyback, I mean, is this just kind of a technical? The old program was expiring. And from a capital allocation standpoint, you guys are still going to be disproportionately focused on M&A?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. We still continue to view a share repurchase program as an important component of just a prudent capital allocation strategy and consistent with our overall commitment to building shareholder value. I mean our cash flow gives us the ability to continue to invest in our business, continue to do strategic acquisitions. And we'll be opportunistic on the share buyback side. In the last 4-plus years, we've bought back over $90 million of stock, over 7 million shares at an average price of below $13 a share. So I think we've been a good deployer of share buybacks, and we've been opportunistic. And I would expect, over time, we'll be opportunistic as well with this buyback program.

Operator

And our next question will come from the line of Richard Close from Canaccord Genuity.

Richard Collamer Close - Canaccord Genuity Corp., Research Division - MD & Senior Analyst

Great. I appreciate the questions. Jeff, I was just curious. I appreciate the breakdown, 1/3, 2/3 on the revenue shortfall. Is that how you think about the EBITDA as well in terms of shortfall there, in terms of 1/3 population health and the remaining COB?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes, we don't generally break it down by a product-level basis, Richard. We've said basically that PHM, particularly Eliza, had margins similar to the company's overall blended margins. And COB is a high-margin product for us as well. So clearly, with the majority of the revenue shortfall in COB, that had an impact on earnings in the quarter. In our revised guidance -- if you look at our revised guidance, our previous range of $185 million to $190 million. We're now at $182 million to $187 million with the revenue shortfall. So we are continuing to see good margin performance and good leverage on the revenue we're generating. Q4 last year was our highest-margin quarter for the year. But as I said in my prepared remarks, we're still up 110 basis points. And margin, through first 3 quarters of the year, normalizing for the reserve release and the gain we had in the quarter. So we are continuing to get leverage on our revenue, and we expect that, that trend will continue into 2020. The things that we're doing to drive yield: investments in technology that are allowing us to become more efficient on the processing side and generate incremental yield in revenue, both will allow us to continue to drive margins, we believe, in the fourth quarter as well as into 2020 and beyond.

Richard Collamer Close - Canaccord Genuity Corp., Research Division - MD & Senior Analyst

Okay. And then with respect to the population health and the sales force restructuring or building an independent or specific sales force there, do you think this changes the time lines associated with trying to move the business from a volume or transactional perspective to a subscription? And just any thoughts on how we should think about that revenue model trending over time?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. So I would say with the Eliza piece, which is the biggest piece of the PHM revenue today, we are still seeing the subscription-model sales. We are expecting those to grow. I would say for the Essette Care Management and Elli risk-stratification product, those are principally, if not entirely, subscription-model sales now. Essette was a software model as we bought it. And when we bought it, and now we're moving that sale more into a subscription model. So I think our view is still to sell them as a combined package over time, and a subscription model is where we're headed. But the subscription sale, we expect on the Eliza side is going to come from existing customers. We don't expect we're going to sell that into a new customer without the ability to prove what our capabilities can do.

Operator

And our next question will come from the line of Steve Halper from Cantor Fitzgerald.

Steven Paul Halper - Cantor Fitzgerald & Co., Research Division - Analyst

So you talked a lot about the strong sales closings and the pipeline. I know it's a little bit early, but can you give us some thoughts about growth in 2020 specifically and just in terms of general sort of guideline?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes, we'll give guidance, Steve, in February. We certainly think we're positioned for continued growth as we head into 2020. As I look at where we're at, we had a similar quarter 2 years ago in the third quarter of 2017. I think the company is much better positioned today to pivot into the following fiscal year given just the overall what we view as strengthened market position in COB, our emerging growth in Payment Integrity and, I think, just the product offerings and market acceptance we're getting for PHM. And as I said earlier, we expect to be able to continue to expand margins as well. So I think we're optimistic heading into 2020, that we'll be able to continue to grow the business and see margin expansion. We'll give more specifics as we give guidance in February.

Steven Paul Halper - Cantor Fitzgerald & Co., Research Division - Analyst

That's fair. And one other question on PHM and rebuilding a stand-alone sales force. Were there individuals who moved into the larger sales organization and who will now move out? Or is it really a full rebuild, going out and rehiring or hiring new people?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Well, look, we do have a staff of salespeople. It's just not as large as we'd like. And we didn't necessarily have people who moved around, meaning they moved into PHM from other areas. We just consolidated under single leadership. And it didn't get the focus it needed, again because the sale is pretty complex. I mean the thing that I like about it is, and we did say this when we bought Eliza, it will take a while for our state clients to see the value of some of our PHM product line. But I've been to probably a half a dozen states this year. I've got about 5 lined up in November alone who have interest in talking about how we can help them move the needle on the CMS scorecards, which are basically HEDIS scores, and they're often around things that are very important. Asthmatic kids getting flu shots, very important thing to happen this time of year. Raising childhood immunization rates, making sure people have a more electronic way to be reminded that they have to go through their Medicaid eligibility redetermination instead of sending them stuff in the mail that gets a 10% response rate. So the state market is just starting to become a market where -- and of course, the sales cycle there is longer because of a more structured procurement process. And we have hired a state market subject matter expert in this space that we will be deploying to help in presale and sales-support activity. So I think we feel very strong about the product line and its fit, but we just didn't make the right moves in terms of consolidating the sales team and now we're fixing them.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

And then on the state side, about 1/4 of the lives are in traditional fee-for-service Medicaid, but the states are still managing half the cost. So the states are still managing the really sick patients and are not using much of any technology to do that. So I think our ability to help them manage populations at scale with our Population Health Management solutions is going to be very attractive.

Steven Paul Halper - Cantor Fitzgerald & Co., Research Division - Analyst

Right. And when do you think that the majority of that rebuild will be done?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

I would say, we're looking to be done with the rebuild in Q4, and expect that as those people come on board and become part of the sales process, that we'll see growth from that in 2020.

Operator

And our next question comes from the line of Don Hooker from KeyBanc.

Donald Houghton Hooker - KeyBanc Capital Markets Inc., Research Division - VP and Equity Research Analyst

Great. Just wanted to get maybe some thinking around the VitreosHealth acquisition and the collaboration with MedAdvisor. In my mind, should I think about that being a tailwind to revenue growth in as near as 2020? Or is this going to be kind of a longer-term revenue synergy story?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. So we've been working with Vitreos over the past year-plus, and they have been really the predictive analytics component of our risk-stratification product, Elli. And so as we view that comprehensive sales approach now with Elli and fully integrate Vitreos, it's certainly going to be part of our growth story for Elli in 2020. As Bill said, we are just continuing the early ramp of the risk-stratification product. I think most importantly, for us, as we have talked with some of the large national payers as well as some of the states that Bill has been meeting with, there really is not a product similar to this in the marketplace. And when you combine that with our ability to, once we have risk stratified to actually help engage patients to actually change their behavior to improve clinical outcomes, that's where we think we're well positioned, uniquely positioned from both our client base and our product offering to see traction here.

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Yes. And I would just add. Particularly when it comes to the investment in MedAdvisor, that was for numerous reasons. One, there is a significant international problem of medication adherence. And there's clearly a lot of stakeholders interested in that. First of all, the quality and outcomes for the patient, but also pharma is very interested in making sure -- particularly in nations where they don't get paid as much as the U.S., very interested in making sure people are taking their drugs and refilling their prescriptions. So medication adherence is a global issue. And we think with our investment in MedAdvisor, we can address that better in the U.S. and also help address that internationally by also plugging in our Eliza and Elli risk analytics into the solution. So it is a multiyear plan. We're in this for the long game. I mean, I know we get measured quarter by quarter, but we're in this for the long game. And we believe we have the trifecta in Population Health Management. And it's just going to take some time for these very complex sales to come to fruition, both in the U.S. and in Australia and the U.K., which are the other markets we'll be focusing on.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. And when we think about the MedAdvisor investment in the U.S., I mean, interestingly, based upon what they've done in Australia, there's really 3 potential customer segments: there's Big Pharma that's interested in seeing medication adherence improve; there's the large national chains; and equally important, if not more important for us, it's the health plans, making sure patients are taking their medication. It's a very complementary product to our Eliza outreach and really opens up an interesting opportunity for us in the U.S. And then also, it gives us a channel to expand our Population Health Management offerings internationally.

Donald Houghton Hooker - KeyBanc Capital Markets Inc., Research Division - VP and Equity Research Analyst

Super. And maybe my follow-up would be on the Payment Integrity area, which seems like you had some nice numbers there in the quarter. It's good to see that. So maybe I'd love to hear kind of high-level view of the competitive environment there, maybe in the context of some United and other players. Or anything to talk about there competitively?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Well, the United/Optum acquisition of Equian really doesn't impact us much because we do very little what you consider traditional payment integrity with United. They are a Coordination of Benefits customer, but Equian doesn't do Medicaid coordination of benefits. So that really hasn't impacted us. And our traditional competitors in the payment integrity space continue to be the same competitors we've talked about in the past. And it's an area where we just continue to invest in technology, invest in the account management framework around that business and get better at delivery.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

And I think...

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

That's our goal.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

I'm sorry. But I think as we look at the total addressable market for Payment Integrity, we still think is $5 billion to $6 billion plus. And so there's a lot of white-space opportunity to capitalize on there, both with our historical client base in managed Medicaid, Medicare Advantage, we still see a lot of opportunities there. RAC continues to perform well for us. We have been getting more audits approved than the other RAC auditors. We're continuing to see new audit scenarios approved there and are expecting to continue to see growth on the RAC side. So really in all 3 of our market segments, federal with the CMS RAC, managed Medicaid and the state side, and Medicare Advantage, we're seeing opportunities for Payment Integrity and are optimistic we'll continue to see growth there as well.

Operator

And our next question will come from the line of Dave Windley from Jefferies.

David Howard Windley - Jefferies LLC, Research Division - Equity Analyst

If I'm interpreting your comments correctly, your sales force build-out here in PHM is an add as opposed to kind of reassignments of existing. Could you quantify how much additional cost or investment you're planning to make in the sales force, what you think that would be?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. At the end of the day, I don't think it's going to be material. Some of it is just bringing on different talent, Dave. So I think there could be a little bit of incremental cost. It would not be material to the overall P&L activity for us. And we're certain that bringing on those costs are going to drive the revenue and more than pay for themselves.

David Howard Windley - Jefferies LLC, Research Division - Equity Analyst

Got it. Sticking with PHM. Has a pattern informed at all in terms of which of the 3 products captures the attention and the imagination of a new client -- potential client? Or is that something that, perhaps with meeting the sales force, kind of forms its pattern after this rather than already?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

That's a good question, Dave. So the Eliza member engagement is something that really, all clients -- really, I would say, anybody who's either managing risk or needs to communicate effectively with patients or members at scale, so think about even a large health care system, could benefit from Eliza. But even public health could benefit from Eliza. It's one of the areas we're starting to have conversations. The key behind Eliza is not only do we do it at scale, about 1.5 million outreaches a day, but we also have the behavioral science backed up behind it. So that has always -- when you really uncover the -- when you dig into that at a detailed level with purchasers, they understand why they cannot do that and they can't do it with just a robocall company. In fact, that's been the brightest bulb in Australia in our dialogues there. But I have to tell you, when people actually see Elli, they get an understanding of the predictive and prescriptive side of it, and they understand that we incorporate social determinants of health to better prescribe who are those patients that they should focus on now to avoid cost and/or poor outcomes. People are very excited about it. The challenge is when you don't have a sales force used to selling a clinical-analytics product, it's a little difficult. And so you can only take so many subject matter experts out on a sales call. So that's the critical component. We believe that -- and of course, as Jeff said, Essette is up 30% year-over-year. So we're having good success with that product line. We believe the integration of the 3 across a number of, what I'd say, small- to midsized health plans and MSOs and IPAs is going to be very, very attractive. But Elli, once it's in front of the customer, most of them have said their existing analytics programs can't compare. Now the challenge is getting enough of those types of analytics salespeople out in the market, both at the state and commercial level. It's one of the reasons we announced a couple of months ago that we brought in a new Chief Analytics Officer to lead that product line because we've seen the value of it, and he's been very, very intimately involved in the sales and go-to-market strategy on that product.

Robert P. Borchert - HMS Holdings Corp. - SVP of IR

We've got several people still in the queue, so we're going to try and get everybody in. (Operator Instructions)

Operator

And our next question will come from the line of Charlie Strauzer from CJS.

Charles S. Strauzer - CJS Securities, Inc. - Senior MD of Sales & Trading and Analyst

Just a couple of quick ones for you. Are you expecting any onetime benefits in Q4 that's included in your guidance?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

No, we're not. The guidance doesn't anticipate any onetime benefits in Q4.

Charles S. Strauzer - CJS Securities, Inc. - Senior MD of Sales & Trading and Analyst

Got it. And then also direct project costs as a percent of revenue seems to kind of have a little spike in the quarter despite the decline in revenue year-over-year. Any further thoughts or color behind that?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes, it's mainly driven by some additional temporary work we brought on to help on some specific projects. And when we have some of these technical challenges, sometimes, we do try to bring in some additional staff. If we're not being able to process things automatically, we'll bring in some temporary help to do that. That was the main driver on that cost line.

Operator

And our next question will come from the line of Daniel Grosslight from SVB Leerink.

Daniel R. Grosslight - SVB Leerink LLC, Research Division - Associate

Jeff, I want to pick up on a comment that you made that at the midpoint of guidance, it implies that you're going to have one of your best quarters on a growth basis ever. So it sounds like you are pretty confident in the COB rebound to mid-single digits, but that still leaves about a, call it, 15% growth hole to reach your guidance here. And from your commentary, it sounds like most of that is going to have to come from Payment Integrity. So just curious how confident you are that Payment Integrity is going to really have a strong Q4 and how much visibility you have into that line specifically.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. I'd say one of the things we've seen in Payment Integrity is we are seeing our inventory of claims to be reviewed continues to increase. So we've got a strong inventory, where we actually have the medical record in-house to actually work, and have seen good success in getting new edits approved. PI is always an area where we have edits that we've submitted to customers, including our commercial and CMS, where we know there's findings, but we have to go through an approval process. Some of those approval processes are more complex and bureaucratic than we would like at times. But we are seeing good traction there and getting more audits and edits approved, and that's certainly contemplated on our PI revenue growth that we're expecting in Q4.

Daniel R. Grosslight - SVB Leerink LLC, Research Division - Associate

Got it. And then just one quick one on the PHM side. As I understand, the budgetary cycle of most states and large plans, it seems like they make most of their vendor decisions in 3Q. So if you're building the PHM team up this quarter, it probably won't start until the first quarter of '20. Does that mean that PHM is really a 2021 revenue opportunity?

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes. I think on the PHM side, in particular, we always see the back half of the year generally have more opportunities as payers look to close gaps in care. So there's not a beginning-of-the-year sales cycle per se for closing gaps in care on our engagement side of our business. And I think we continue to have sales really in all product lines in each of the quarters this year. I do think to our earlier comment and Bill's note on the government side, the procurement process for a state can be a 12- to 18-month process. And so getting in front of the state with some capabilities you have may lead to an opportunity the next time they reprocure. So I think that's more of a state-driven phenomena than it is a commercial-driven phenomena.

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Yes, the only thing I would add is, remember, Star Ratings just came out, right? So we impact Star Ratings as well. So plans that didn't do as well in Star Ratings, some of it related to what are the self-reported customer satisfaction scores, HOS and CAHPS scores. There's other areas where we impact Star Ratings. So while typically a gap in care closure sales cycle happens Q3 and Q4, we impact Star Ratings. So we're still selling into those Medicare Advantage plans in Q1, Q2 so that we can impact their future Star Ratings. So it's a year-long sales cycle. And of course, all of the other things that we've introduced this year: our crisis management program, our incentive management program, all of those things are starting to get traction beyond just health plans but also attention in the state market.

Operator

And our next question will come from the line of Stephanie Demko from Citi.

Stephanie July Demko - Citigroup Inc, Research Division - VP & Senior Analyst

With the idea there's nothing you can do to change the internal systems at your payer clients, are there any investments you can make on your end in the COB business to help make your claims submissions more digestible for some of these payers?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Actually, our claims submissions are more digestible for these payers than probably anyone who attempts to compete with us because 90-plus percent -- 95% of the claims we send to a third party is electronic. That doesn't mean they process them electronically. We do know that some carriers take our electronic file and then print them to paper because their system can't adjudicate a Medicaid reclamation claim. So there's not a lot we can do. I mean we do work very, very closely and arm in arm with the large PBMs and the large payers to make sure that whatever we send them is as easy for them to process as possible. Unfortunately, they still have processing issues. And as Jeff said, one of the areas that we spent temporary labor on this quarter was the fact that a large PBM could not handle our verification transactions, so we needed to have people manually do that work. So -- but we're very, very accommodating, work with payers all the time to see what we can do to help them in that process. And then there are some payers that just, at the end of the day, cannot and will not process these claims but legally are required to, and we end up doing negotiated settlements. And those take a while. They can move from quarter-to-quarter. But at any given time, we have 2 or 3 payer settlements that we're working on.

Stephanie July Demko - Citigroup Inc, Research Division - VP & Senior Analyst

Understood. And does that cause some of the lumpiness then in the business?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Could you repeat that question?

Stephanie July Demko - Citigroup Inc, Research Division - VP & Senior Analyst

Just a quick follow up on that one. When you talk about payer settlements, is that why we will see some lumpiness in the business outside of just this claims volume?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

It's part of it, yes. I mean, we could anticipate in any given quarter that we're closing 2 or 3 settlements. And they don't close because of various reasons. The actuarial department doesn't like the claims sample we sent them. We send them a new claims sample. We're negotiating back and forth. And we're doing it on behalf of our client, right? So we get the state involved in the negotiation. We get potentially the Medicaid health plan involved. But I just want to reiterate for everybody, this is not a new phenomena. I mean this is something -- again, having done this work, of course, on a much larger scale now, but for 40 years, we've seen this. And harking back to third quarter 2017, same set of challenges that we talked about, and we rebound in Q4. So I think it's a -- look, you can't compare our COB business with anybody else. So I know it's difficult to say, "Gee, can we extrapolate a trend from this?" You really can't. We're the experts in this space, and we've seen this before, and we know how to overcome it. So it's just a process that is part of the business.

Stephanie July Demko - Citigroup Inc, Research Division - VP & Senior Analyst

All right. Understood. And then on the PHM side of things, this is primarily a subscription business model on a life basis. So was there some compression on the PMPM or any attrition to call out that was driving the revenue down year-over-year? Or was this just a function of the nonsubscription sales falling through?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

No, it was more the nonheightened transaction scale -- sales not coming through because we didn't have the qualified sales force to actually make those sales. And a combination of the fact that we -- while we didn't expect to have a surge in Elli sales, we have a higher sales queue with Elli now than we ever have, and it's unleashing more knowledgeable salespeople on that product.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

Yes, the revenue is actually up, Stephanie, year-over-year through 3 quarters. And for Eliza, which is the biggest component of the revenue, still the majority of Eliza of revenue is transactional in nature. Now we generally characterize it as recurring transactional because we do the same work typically year-over-year in terms of closing gaps in the sale. Overall, the business is up. It's just not up as much as we expected it to be up.

Operator

And our final question will come from the line of Vikram Kesavabhotla from Guggenheim.

Vikram Kesavabhotla - Guggenheim Securities, LLC, Research Division - Analyst

Just a quick one on PHM. It sounds like you'll be mostly done hiring at the end of Q4, but is there anything to offer in terms of the time line it takes for those new hires to get fully ramped up? And at what point in 2020 do you think you'll be at full productivity in terms of the broader sales effort in that business?

And then just as a quick follow up on the capital deployment side. Given the acquisition you made and the strategic partnership, any update around what the areas of focus are for M&A in terms of building out the platform?

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

So let me start with the sales team. So look, I will tell you that we are always opportunistic to bring in strong talent. Building our bench across all of our product lines is always important. Will we finish building the team to the degree we wanted to by the end of the quarter? We hope so. But in reality, you have people waiting for year-end bonuses at other companies. And so it could bleed into Q1. But we're looking for people who have experience either selling this type of product or experience selling clinical analytics into health plans and at-risk providers. So we expect that their learning curve will not be as steep or it will be pretty quick. And we're also bringing in additional subject matter experts to augment the sales team. So I think that we'll see next -- in 2020, a rebound from the sales activity in the PHM space because we'll be well prepared for it.

And then on the acquisition side, we are very focused on acquisitions in really any of our product areas, whether it's COB, payment accuracy, Payment Integrity or PHM. And we're active in all of those areas, looking at both products that we can plug in or markets that we can expand to with product acquisitions. And like Vitreos, we'll be opportunistic where we see a technology that we believe moves the needle for our product lines.

Jeffrey S. Sherman - HMS Holdings Corp. - Executive VP, CFO & Treasurer

And we continue to have a very active pipeline, as Bill noted. So we're continuing to manage that and look at that and continue to expect that, that we'll be making strategic acquisitions over time. Just hard to predict the timing.

Operator

Thank you. And I'm not showing any further questions at this time. I would now like to turn the call back over to Mr. Lucia for any closing remarks.

William C. Lucia - HMS Holdings Corp. - Chairman, President & CEO

Well, I want to thank everybody for attending the call. We are looking forward to speaking to you again on our fourth quarter call. Have a great weekend.

Operator

Ladies and gentlemen, this concludes today's conference call. Thank you for participating. You may now disconnect.