Jondavid Klipp, Editor, jklipp@laboratoryeconomics.com

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LABORATORY ECONOMICS

Competitive Market Analysis For Laboratory Management Decision Makers

United's Preferred Lab Network Has No Teeth

UnitedHealthcare has selected seven laboratories, including Quest Diagnostics and LabCorp, to participate in its new Preferred Lab Network (PLN) effective July 1, 2019. However, the new PLN does not include a separate tiered network benefit design with lower copays or coinsurance as compared with regular in-network labs, according to Linda Simmons, UHC's Vice President, National Lab Program. Simmons says that the PLN will not limit a member's or physician's choices and they can continue to use any of the other 300 labs in UHC's existing lab network. *Full details on page 2.*

Anthem BCBS "Rate Alignment" Means Big Cuts For Some Pathology Services

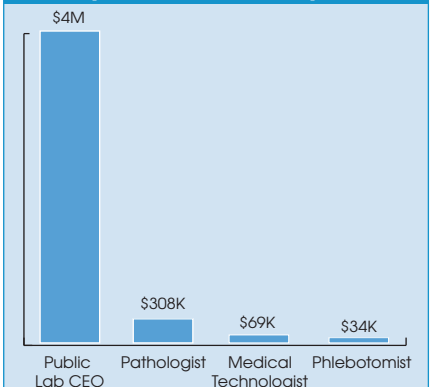
Anthem BCBS plans across the country are rolling out a new "rate alignment" strategy that equalizes reimbursement rates for clinical lab and pathology services regardless of whether the service is provided by a hospital-based lab or pathology group or an independent lab. Historically, hospital-based providers have received higher reimbursement rates than independent labs.

Anthem BCBS in Missouri was ground zero for the new strategy. Effective November 1, 2018, hospital-based pathologists in Missouri saw their 88305-26 rate from BCBS drop to $14.43 per interpretation versus the previous rate of $66. "The more than 70% reduction was so severe that we initially thought it was a typo," notes Mick Raich, CEO at the auditing and consulting firm Vachette Pathology (Sylvania, OH). *Continued on pages 5-6.*

Public Lab CEOs Paid Average $4 Million

The chief executives at 17 publicly-traded lab companies were paid an average of $4 million each last year, according to an analysis of shareholder proxy statements by *Laboratory Economics*. Altogether, the 17 CEOs earned a total of $67.6 million, including $10.7 million from salary, $9.1 million from bonuses, $47.1 million from stock and option awards, and $751,270 from other compensation. In comparison, the average pathologist earned $308,000 in salary and bonus last year, according to the latest survey by Medscape. *Continued on page 10.*

Compensation Comparison



Source: *Laboratory Economics* from SEC filings, Medscape and Salary.com

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United's Preferred Lab Network Has No Teeth (*cont'd from page 1*)

Simmons says that 91 labs out of approximately 300 labs with in-network contracts applied to join the Preferred Lab Network program. Joining the PLN did not require any change in contracted rates for independent labs, although hospital outreach labs that applied were required to have contracts under independent lab fee schedules as opposed to higher-priced outpatient lab fee schedules.

The following labs were selected to UHC's Preferred Lab Network, effective July 1, 2019:

- BioReference Labs (including GeneDx)
- Invitae
- LabCorp (and all subsidiary labs)
- Mayo Clinic Laboratory
- Quest Diagnostics (including AmeriPath)

Simmons says that among the criteria used to select labs in the PLN were lower-than-average cost, advanced certification beyond CLIA (e.g., accreditation from CAP or The Joint Commission), and ability to deliver online results to patients.

Labs selected to the PLN will be required to submit quarterly performance reports to UHC about access, quality and service. Physicians using a preferred lab should expect ease of use when ordering lab tests electronically, prompt test result turnaround time, and direct consultation with a lab medical director for questions on patient care, according to Simmons.

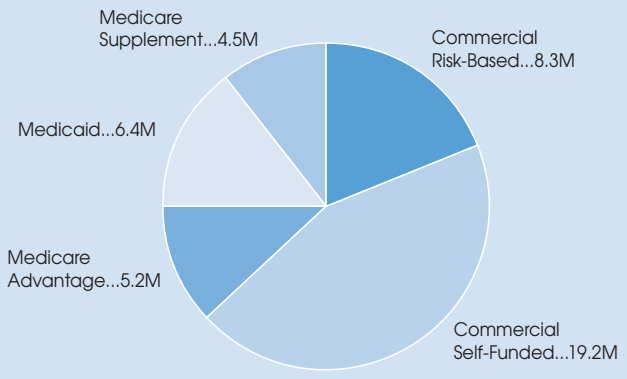
The benefit for labs selected to the PLN is that they will be highlighted with a notation or icon in UHC provider directories given to physicians and employer groups. Simmons says the PLN will get no special treatment in terms of prior authorization requirements or claims processing. Furthermore, she emphasizes that UHC has not terminated labs from its network as part of the establishment of the PLN.

Simmons says that UHC will add or remove labs in its PLN on an annual basis.

Last year, when Quest Diagnostics announced its new national contract with UHC and LabCorp renewed its existing UHC contract, each company had suggested the potential for benefit design changes aimed at steering UHC physicians and patients to lower-cost labs. However, UHC's PLN does not provide any new economic incentives (eg., lower copays or coinsurance) for physicians or patients to choose a preferred lab. So when the PLN becomes effective on July 1, the sole benefit to preferred labs will be a notation in UHC's provider directory.

UHC provides health plan services to 43.6 million members in the United States, including provider network management and claims processing services for self-funded employer group plans covering 19.2 million employees and dependents. *Laboratory Economics* notes that the creation of UHC's PLN could be used by these self-funded employer groups to create a new lab benefit tier with incentives for their employees to utilize preferred labs. However, this would be a long-term sales and education process aimed at convincing each employer group to make benefit design changes.

UnitedHealthcare's Membership, March 31, 2019



Source: UnitedHealthcare

On an April 30 conference call, LabCorp CEO David King noted, "The likelihood that there will be a significant impact this year [from United's PLN] is minimal. As we go through the managed care selling cycle this summer and fall, and we see the implementation on January 1, a lot of it's going to depend on how the Preferred Lab Network is tied into benefit design. What are the out-of-network benefits, what are the benefits for employers of pushing their employees to the Preferred Lab Network? But if benefit design and the Preferred Lab Network are well tied together, in the long run, it's a significant opportunity for us."

And on an April 23 conference call, Quest CEO Steve Rusckowski, said, "We think this is the beginning of a trend that we would like to see in other relationships that we have. What this means will become more clear as we get into it. But what we indicated, clearly, there will be incentives for physicians and patients in the benefit designs to move more of the volume to the high-value lab providers like Quest Diagnostics."

Update on LabCorp's BeaconLBS

UHC's Linda Simmons says that LabCorp's BeaconLBS lab benefit management program will remain in effect for approximately 430,000 of its fully-insured commercial members in Florida. However, she says that the program, which has been in place for almost five years, is still considered a pilot project and UHC has no plans to roll it out into additional states.

Separately, BeaconLBS recently won a contract to provide its point-of-care decision support (PDS) services for lab test ordering to MagnaCare (Garden City, NY) starting on June 1. MagnaCare provides network management and administrative services to self-insured health plans for Taft-Hartley and self-insured employer health plans throughout the New York City area that collectively cover roughly 800,000 people.

The BeaconLBS PDS software program interfaces with electronic health records to provide physicians with access to evidence-based guidelines and laboratory selection when ordering lab tests. BeaconLBS says that its PDS system in now used by health plans covering a total of eight million members in the United States.

When Will The EKRA Ban On Commission-Based Sales Reps Be Lifted?

As part of ongoing efforts to combat the nationwide opioid crisis, Congress enacted the SUPPORT for Patients and Communities Act (SUPPORT Act) effective October 24, 2018. As part of the SUPPORT Act, Congress enacted the Eliminating Kickbacks in Recovery Act of 2018 (EKRA) which banned all CLIA laboratories from paying commissions to sales reps based on the number of patients referred, test volume, or the amount billed to a commercial health plan (see *LE*, April 2019 and December 2018).

Despite the threat of substantial fines and/or imprisonment, most labs have not yet changed the way they pay their sales reps in the hope that the law will soon be amended and directed more narrowly at toxicology labs.

On an April 30 conference call, LabCorp CEO David King said he believed the EKRA law was misguided and unintentionally overbroad. "We have been working with the legislative leadership in the Department of Justice. There has been legislative amendment language submitted to the congressional committees of jurisdiction and it's being evaluated by the Department of Justice to make sure that the fix that would address the over-inclusiveness of the language is acceptable to DOJ as well as to legislators. So we continue to be optimistic that we're going to get this resolved, but we don't have a good estimate on the timing."

ACLA Presents Oral Arguments To Appeals Court

On April 23, Ashley Parrish, attorney at King & Spalding (Washington, DC), presented oral arguments on behalf of the American Clinical Laboratory Association (ACLA) to a three-judge panel at the U.S. Court of Appeals for the District of Columbia Circuit. Parrish had approximately 30 minutes to convince the panel that the U.S. Department of Health and Human Services (HHS) failed to implement the Protecting Access to Medicare Act (PAMA) as Congress intended.


Ashley Parrish

The oral arguments presented to Circuit Judges Thomas B. Griffith, Patricia Ann Millett and Cornelia Pillard follow the dismissal of ACLA's lawsuit by U.S. District Judge Amy Berman Jackson last September. Judge Jackson had initially refused to weigh the merits of the case and dismissed the lawsuit on the grounds that PAMA law forbids judicial review of CMS's rate setting process (see *LE*, October 2018).

Parrish argued that Congress clearly intended for a two-step process for the implementation of PAMA: 1) to promulgate, after notice and comment rulemaking, the parameters for data collection and 2) to take that collected data and establish payment amounts. He said that Congress only intended for the establishment of the payment amounts to be exempt from judicial review, but not the rules for defining which labs are required to report.

Parrish said that HHS improperly implemented PAMA by redefining the definition of "applicable laboratory" so as to exclude private-payer data from nearly all hospital outreach labs, only because gathering this data was too difficult. In doing so, Parrish said that HHS overstepped its authority and exercised legislative power. As a result, he said the CLFS payment rates were improperly established for 2018-2020 and should be vacated.


Dennis Fan

On the other side, Dennis Fan, attorney for the U.S. Department of Justice, had approximately 30 minutes to convince the panel that PAMA law bars judicial review to the entire process of establishing payment amounts. Furthermore, Fan said that if any part of the process were open to judicial review, then every three years, the lab industry could "keep coming into court and challenge each new process so that PAMA may well never go into effect."

The appellate court judges questioned whether HHS's argument that preclusion of judicial review for data collection could have unintended consequences in future lawsuits. For example, does it preclude potential future lawsuits over monetary penalties that might be levied on non-reporting labs. There were also questions about what the potential remedies would be if the rule was struck down, given that Congress has put in a sunset provision on the old CLFS rates from 2017.

A decision from the Appeals Court will likely be issued by year's end, according to ACLA President Julie Khani.

If ACLA wins its appeal, then the lawsuit will most likely go back to Judge Amy Berman Jackson in the U.S. District Court for Washington, DC, to hear arguments and make a ruling.

But the odds are that the Appeals Court will uphold Judge Jackson's original decision. Statistics from the 12 regional U.S. courts of appeals show that less than 10% of total appeals result in reversals of lower court decisions.

If ACLA's appeal is denied, then ACLA could seek an en banc review by the entire circuit court or take its case to the Supreme Court.

Lobbying for a Delay in PAMA Data Collection and Reporting

In the meantime, lobbyists from ACLA, Quest Diagnostics and LabCorp are pushing members of Congress for a legislative fix that would delay the current PAMA data collection and reporting cycle. Some 3,000 hospital outreach labs that meet the minimum $12,500 Medicare CLFS revenue threshold are now required to report their private-payer payment data to CMS. Full participation of hospital outreach labs could have a meaningful impact in rate-setting calculations for the Medicare CLFS in 2021.

On an April 23 conference call, Quest CEO Steve Rusckowski, noted:

> We continue to push with members of Congress that CMS got it wrong. We need to take the time to get it right. We need to make sure that given all the data, because that was what was intended, that was the congressional intent and so we're working with members of Congress on the legislative fix to make sure that we take the time to get it right.
>
> And essentially, what that would mean is pushing out the data collection period for some period of time to get the right amount of time for everyone to submit the data. And again, that'd be 2019 data. So the data for first half of 2019 will be what is submitted, but we're pushing to make sure that's delayed. So that's where PAMA stands.

Under the current time schedule, labs are to collect private-payer data from January 1 to June 30, 2019, and report that data to CMS during the first quarter of 2020. The fear is that many hospital outreach labs will be unable to meet these timelines.

Anthem BCBS "Rate Alignment" Means Big Cuts (*cont'd from p. 1*)

Raich says that Vachette clients in California, Indiana, Ohio and Wisconsin, have recently received "material change" notices from Anthem warning of fee schedule adjustments that will become effective in July-August for commercial PPO and traditional plans. Other states that have reportedly received similar notices from Anthem include Colorado, Georgia and Virginia. Raich believes it may only be a matter of time before Anthem BCBS plans in all other states make similar fee schedule changes. In total, Anthem's BCBS and other health plans cover 41 million members in 25 states. Raich notes that BCBS represents the second biggest payer (after Medicare) for many pathology groups and labs.

Mick Raich

Anthem has described the rationale for its new fee schedule policy as follows:
"Anthem members should experience the same out of pocket costs regardless of site of service. Anthem updated their professional fee schedules to align compensation for lab rates in all settings. This change helps drive a consistent out-of-pocket cost experience based on services rendered."

Ann Lambrix, Vice President of Client Services at Vachette, notes that Anthem's rate changes for pathology vary greatly depending upon the state and type of service. However, she notes that, on average, Anthem's professional and technical rates are going down.

In Ohio, for example, Anthem BCBS rates for hospital-based pathologists for 88305-26 are set to increase from $45.42 to $53.01 effective July 10. However, the rate for 88342-26 is decreasing from $50.73 to $16.34, representing a 68% decline, while 88342-TC is scheduled to drop by 35% to $29.66.

In California, Anthem's rates for hospital-based pathologists for 88305-26 are set to decrease from $36.67 to $24.13 effective July 1.

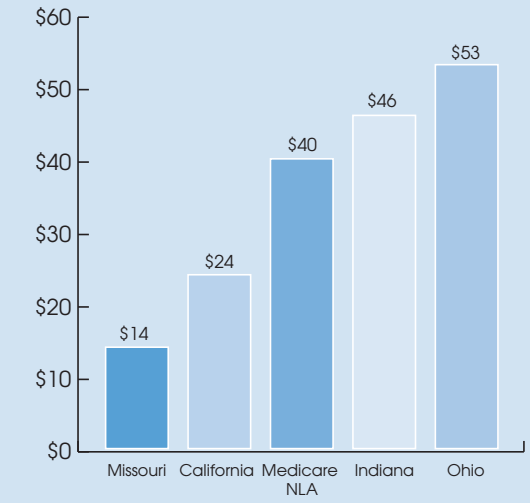

Ann Lambrix

Lambrix notes Anthem BCBS's new rate for 88305-26 in Missouri (at $14.43) looks way off base when compared with BCBS plans in other states as well as Medicare's national rate of $40. She says that Anthem may be reconsidering its rate changes in Missouri after receiving significant pushback from pathologists.

Lambrix says that some pathology groups in Missouri are considering dropping their contracts with Anthem BCBS and going out of network. But this is difficult because most hospital-based pathology groups have contracts with their hospitals that require them to remain in-network with major insurers such as BCBS.

In addition, many Anthem BCBS plans send reimbursement checks for non-network provider services directly to the patient/member, along with an Explanation of Benefits (EOB). Non-participating providers are responsible for collecting payment directly from patients (a difficult task).

New Anthem BCBS Rates for 88305-26 (Professional reads)



Source: Anthem, Vachette Pathology and CMS

Anthem's New Uniform Clinical Lab Fee Schedule

Meanwhile, Anthem's new rate alignment strategy is also equalizing reimbursement rates for clinical lab testing. Its new clinical lab fee schedule seems to pay uniform rates throughout the country, unlike its pathology rates which still vary widely by state.

Anthem's new rate for lipid panel testing (CPT 80061) is being set at $6.02 for both non-facilities (i.e., independent labs and POLs) as well as for facilities (i.e., hospital labs). This represents a rate equal to just 40% of the current Medicare CLFS rate of $14.88.

Anthem's rates for other high-volume codes, including PSA Total (CPT 84153), Complete CBC (CPT 85025) and liquid-based Pap testing (CPT 88175), are set at approximately 40-50% of current Medicare rates.

Sample of Anthem's New Clinical Lab Reimbursement Rates

CPT	Description	Anthem Non-facility Rate	Anthem Facility Rate	2019 Medicare Rate
80053	Metabolic Panel	$5.99	$5.99	$11.74
80061	Lipid Panel	$6.02	$6.02	$14.88
81025	Urine Pregnancy test	$5.17	$5.17	$8.61
84153	PSA Total	$10.42	$10.42	$20.44
85025	Complete CBC w/auto diff wbc	$3.68	$3.68	$8.63
87804	Influenza assay w/optic	$16.00	$16.00	$16.55
87880	Strep A assay w/optic	$9.92	$9.92	$16.53
88175	Cytopath c/v auto fluid redo	$15.01	$15.01	$29.44

Source: Anthem Inc.

Spotlight Interview With Ipsum Diagnostics CEO & Co-Founder Colin Rogers

Colin Rogers

Ipsum Diagnostics (Atlanta, GA) opened 2½ years ago, initially offering epidermal nerve fiber density testing. It recently added a molecular diagnostics division and is now expanding both its histology and molecular test menus. *Laboratory Economics* recently spoke with CEO and co-founder Colin Rogers.

How did Ipsum Diagnostics get started?
Lauren Spanjer Bricks, my co-founder, and I worked together at a toxicology lab [eLab Consulting Services]. I was the national sales director and she was responsible for our national operations. As the toxicology market became more saturated and experienced new challenges, we decided to develop our own laboratory.

Epidermal nerve fiber density (ENFD) really appealed to us because of the significant clinical value it provides to the specialists we were already working with. The market research showed there was a need for this test in specialties other than where it was being used. The technical component requires highly specialized technicians and slides must be reviewed by a dermatopathologist or a neuropathologist. Ipsum's Laboratory Director is Henry Skelton, MD, and Maggie Hopkins, MD, is Director of Molecular Diagnostics.

We had early success in podiatry, where the test is used to diagnose small fiber neuropathy. We've added a molecular division and are now performing testing for wound care, onchomycosis and UTI. We are expanding in other areas by adding testing for women's health, gastroenterology and respiratory panels.

How many clients do you have? What areas do you serve?
We have over 100 clients sending samples, over half on a consistent basis. Geographically, we are national. We currently have clinical laboratory licenses in every state required except NY and are working towards that. Our short-term goals include expanding in certain metropolitan areas. Our largest volume comes from the eastern corridor and we've seen a lot of growth in states like Texas, California, Arizona, New Mexico and states in the Midwest.

Are your volumes and revenues growing? If yes, by how much? Also, what is driving your growth?
Yes, adding the molecular has really increased the number of providers we can service. We doubled our volume in the fourth quarter of 2018 and have grown another 50% in the first quarter of 2019. Our 2019 goal is to double our Q1 volume, and I feel this is attainable with the new tests that are being added in both molecular and histology.

Have you been affected by the new Medicare payment systems for laboratory testing?
The Medicare rates for our histology tests have been pretty consistent with the 2018 rates. With the molecular testing, we were able to use current Medicare rates for our projections, so we have not had any surprises. Our biggest challenge is with the private payers, as some of the bigger private payers are excluding many labs from becoming in-network providers.

Who are your biggest competitors?
Some of the larger national labs do not offer the testing we provide. However, there are a few podiatry-focused labs—Bako Diagnostics and Advanced Pathology Solutions in Arkansas.

Have you seen reductions in reimbursement from private payers?
Our biggest challenge is contracting with private payers. As a small lab, we want our patients to have the advantages of using an in-network laboratory, so this is very important for us. We've had success with some and continue to work on expanding our in-network contracts. With the higher deductibles and lower out-of-network coverage, the adjudication rate is obviously lower for private payers. This year we have put in more resources and are really focused on addressing this issue. We have a team both outside and inside dedicated to working on contracts.

What do you see as Ipsum's opportunities?
With the technology we have, our ability to offer new tests focused on different specialties can be implemented in a much more seamless manner. We dedicated Q3 and Q4 of 2018 on developing and expanding our LIS program. As we grow into other areas with molecular diagnostics and histology, we can efficiently accommodate the workflow requirements, chain of custody identification, order entry process and data review. For clients, requisition forms and reports have become much more accessible. We've developed our mobile app, web portal, perform EMR integrations and can offer customization with reporting.

Construction on our new laboratory (4,000 square feet) was recently completed, we've added more employees (current total of 15), and expanded our client services department. We feel very well positioned to meet our 2019 projections and continue growing in our markets. For all these reasons, we feel the most opportunities are in expanding our molecular division and offering a much more comprehensive option of histology tests, to better serve our podiatry and dermatology clients.

Caris Life Sciences Acquires Pharmatech

Caris Life Sciences (Irving, TX) has purchased Pharmatech Inc. (Denver, CO) for an undisclosed sum.Pharmatech provides contract research organization (CRO) and site management organization (SMO) services to pharmaceutical and biotechnology firms for the development and management of oncology drug clinical trials. The company's "Just-In-Time" clinical trial site activation and patient enrollment system is being used by more than 200 cancer clinic offices, hospitals and universities in the United States.

David Spetzler, PhD, President and Chief Scientific Officer, is hoping that Caris can sell its molecular profile testing services to Pharmatech's network of cancer centers. Together, Caris and Pharmatech will then be able to identify and help enroll patients in oncology drug trials in as little as 10 days, according to Spetzler. He says it will also reduce the amount of time that treating physicians spend to identify patients who are appropriate for various clinical trials. This should dramatically increase the percentage of cancer patients (currently at only 5%) that enroll in oncology drug trials.

PathGroup Acquires Pathologists Bio-Medical Labs

PathGroup (Brentwood, TN) has acquired Pathologists Bio-Medical Laboratories (PBM-Dallas, TX) for an undisclosed amount. PBM employs approximately 45 pathologists covering a broad range of specialties, including hematopathology, cytopathology and nephropathology. Key hospital contracts for PBM's pathologists include Baylor University Medical Center (824 beds).

PBM had been a founding partner, along with Baylor Scott and White Health, McKesson's US Oncology Network and Texas Oncology, in the startup of Med Fusion (Lewisville, TX). Med Fusion opened for business in 2010 with the intent of becoming a national reference lab, but was ultimately sold to Quest Diagnostics for $150 million in 2017.

Together, PathGroup and PBM have more than 1,800 employees, including approximately 125 pathologists, serving more than 75 hospitals and thousands of physician clients

The Pritzker Group, a private equity and venture capital firm, acquired a majority stake in PathGroup in the summer of 2016, while PathGroup's pathologists and management have a minority share. The Pritzker Group is owned by Anthony "Tony" Pritzker and his brother J.B. Pritzker, who became Governor of Illinois in January 2019. Tony and J.B. are among the heirs to the Chicago-based Pritzker family fortune, which includes Hyatt Hotels.

PathGroup at a Glance

Chairman	Tony Pritzker
President & CEO	Ben Davis, MD
# Pathologists	125
Hospital contracts	>75
Total employees	1,800
Est'd Annual Revenue	>$300M

Source: PathGroup, PBM and *Laboratory Economics*

Quest Diagnostics Pays $61 Million For Boyce & Bynum Clinical Lab Business

Quest Diagnostics' latest quarterly report reveals that it paid $61 million, including upfront cash consideration of $55 million and contingent consideration estimated at $6 million, to complete its acquisition of the clinical lab services business of Boyce & Bynum Pathology Laboratories (Columbia, MO) effective February 11, 2019. The $6 million contingent consideration arrangement is dependent upon the achievement of certain testing volume benchmarks. The acquired revenue was not revealed, although *Laboratory Economics* estimates it was roughly $30 million per year.

Separately, Boyce and Bynum Pathology Laboratories sold its nursing home lab division to Gamma Healthcare (Poplar Bluff, MO) late last year. Gamma Healthcare is a family-owned independent laboratory, with 450 employees, that provides lab testing and portable radiology services to over 1,800 nursing home clients throughout the Midwest.

The acquisition of Boyce and Bynum's substantial nursing home business makes Gamma Healthcare the second largest independent nursing home lab company in the nation, after Trident Holding Company (dba U.S. Lab & Radiology and Schryver Medical) which recently filed for bankruptcy reorganization (see *LE*, March 2019).

Following these two transactions, Boyce & Bynum Pathology Laboratories, which has 20 pathologists, is now focused on its core anatomic pathology services business.

Public Lab CEOs Paid Average $4 Million In 2018 (*cont'd from page 1*)

LabCorp's David King, age 62, was the highest paid lab CEO in 2018. He received total compensation of $12.3 million. In comparison, the median of the annual total compensation of all LabCorp's employees was $43,230 in 2018. King's compensation included: 1) salary of $1.2 million; 2) stock awards of $7.5 million; 3) stock options of $1.8 million; 4) incentive plan cash bonus of $1.6 million; and 5) other compensation of $189,068, which included financial planning services, 401K matching contributions, long-term disability insurance, use of a company car and aircraft, and home security services.

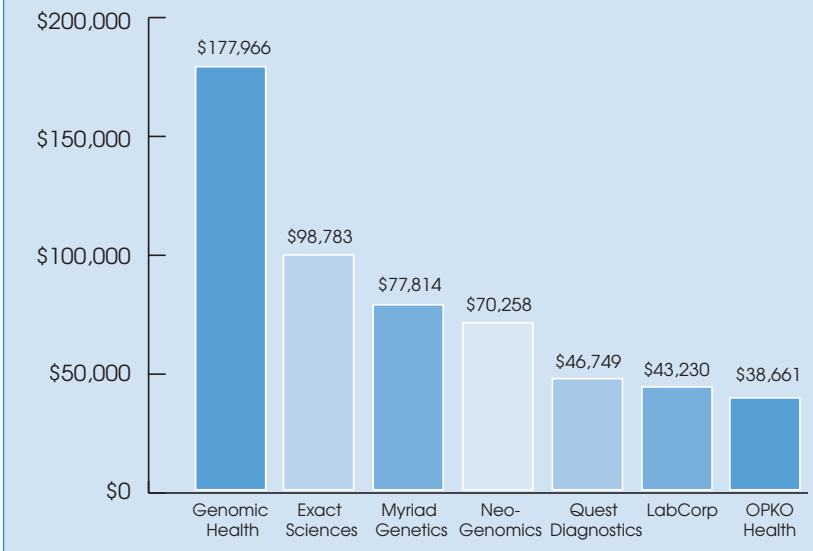
Quest Diagnostics' Stephen Rusckowski, 61, was paid total compensation of $10 million last year versus median compensation of $46,749 for all other Quest employees. Rusckowski received: 1) a salary of $1.1 million; 2) stock awards valued at $4.7 million; 3) stock option awards of $3.1 million; and 4) cash incentives of $788,700. He also received $314,585 in perks, which included $87,414 for personal use of a company car and driver plus $100,000 for personal use of company aircraft.

Myriad Genetics' Mark Capone, 56, got total compensation of $7.1 million versus median compensation of $77,814 for all other Myriad employees. Capone's pay included: 1) salary of $852,000; 2) bonus and cash incentives totaling $817,920; 3) stock awards of $5.4 million; and 4) other compensation totaling $10,980, which included company-paid life insurance premiums and matching 401K contributions.

Exact Sciences' Kevin Conroy, 53, was paid total compensation of $7 million last year versus median compensation of $98,783 for all other Exact employees. Conroy's pay included: 1) salary of $695,800; 2) bonus and cash incentives totaling $794,952; 3) stock and option awards of $5.5 million; and 4) other compensation totaling $16,500.

Meanwhile, IRS 990 tax forms for 2017 (the latest year available) show that CEOs at the nation's largest not-for-profit health systems receive compensation that often exceeds the pay earned by their counterparts at for-profit publicly-traded companies. For example, Ascension Health CEO Tony Tersigni earned $17.5 million in 2017 in total compensation when base salary, bonuses and other compensation are added.

Median Employee Compensation at Select Public Companies



Source: *Laboratory Economics* from company proxy statements

Kenneth Davis, MD, President and CEO of Mount Sinai Health System (New York City) took home nearly $12.4 million in cash compensation, including a supplemental executive retirement plan benefit of $8.3 million, in 2017.

Jim Skogsbergh, President and CEO of Advocate Aurora Health, the largest health system in Illinois, received $11.7 million in 2017.

2018 Laboratory CEO Compensation

Company/Executive	Salary	Bonus and Incentives	Value of Stock & Option Awards	Other Comp*	2018 Total Comp	2018 Revenue Growth	2018 Stock Price Total Return
Cancer Genetics Inc.							
John Roberts, 60, President & CEO	$331,154	$0	$220,754	$1,188	$553,096	-6%	-87%
CareDx Inc.							
Peter Maag, PhD, 52, CEO & Director	483,750	693,000	4,053,081	1,560	5,231,391	82%	243%
Enzo BioChem							
Elazar Rabbani, PhD, 75, Chairman & CEO	611,000	500,000	181,540	184,132	1,476,672	-3%	-66%
Exact Sciences							
Kevin Conroy, 53, Chairman & CEO	695,800	794,952	5,484,745	16,500	6,991,997	71%	20%
Fulgent Genetics							
Ming Hsieh, 63, Chairman & CEO	240,000	0	0	0	240,000	14%	-28%
Genomic Health							
Kim Popovits, 60, Chairman & CEO	720,400	905,430	3,129,642	0	4,755,472	16%	119%
Guardant Health							
Helmy Eltoukhy, PhD, 40, CEO	480,000	336,000	0	2,405	818,405	82%	98%
Interpace Diagnostics							
Jack Stover, 65, President & CEO	337,634	270,000	686,200	14,046	1,307,880	38%	-22%
Invitae							
Sean George, PhD, 45, President & CEO	500,000	0	1,733,360	0	2,233,360	117%	22%
LabCorp							
David King, 62, Chairman & CEO	1,175,000	1,584,513	9,315,655	189,068	12,264,236	10%	-21%
Myriad Genetics							
Mark Capone, 56, President & CEO	852,000	817,920	5,374,050	10,980	7,054,950	0%	-15%
Natera Inc.							
Matthew Rabinowitz, 46, Chairman & CEO	500,000	323,621	4,543,886	0	5,367,507	23%	55%
NeoGenomics							
Douglas VanOort, 63, Chairman & CEO	641,923	774,000	1,928,296	3,000	3,347,219	15%	47%
Opko Health Inc.							
Phillip Frost, MD, 82, Chairman & CEO	960,000	0	1,065,000	11,000	2,036,000	4%	-39%
Psychemedics							
Raymond Kubacki, Jr., 74, Chairman & CEO	512,500	105,000	160,160	10,800	788,460	8%	-23%
Quest Diagnostics							
Stephen Rusckowski, 61, Chairman & CEO	1,100,000	1,443,420	7,500,007	304,591	10,348,018	2%	-15%
Veracyte Inc.							
Bonnie Anderson, 61, Chairman & CEO	550,000	514,250	1,764,990	2,000	2,831,240	28%	93%
Totals, 17 companies	10,691,161	9,062,106	47,141,366	751,270	67,645,903		
Averages, 17 companies	$628,892	$533,065	$2,773,022	$44,192	$3,979,171	29%	22%

*Other compensation includes reimbursement for financial planning services, car allowance, personal liability insurance premiums, executive physical exams, home security systems, country club memberships, personal use of company jets and other perks.

Source: *Laboratory Economics* from company proxy statements

Lab Stocks Up 28% Year To Date

Eighteen lab stocks have risen by an unweighted average of 28% year to date through May 10. In comparison, the S&P 500 Index is up 16% so far this year. The top-performing lab stock thus far in 2019 is Guardant Health, which has jumped 102%, followed by Veracyte, up 88%, and Invitae, up 78%. Shares of LabCorp are up 32%, while Quest Diagnostics is up 19%.

Company (ticker)	Stock Price 5/10/19	Stock Price 12/31/18	2019 Price Change	Enterprise Value ($ millions)	Enterp Value/ EBITDA	Enterp Value/ Annual Revenue
LabCorp (LH)	$166.34	$126.36	32%	$22,800	12.0	2.0
Quest Diagnostics (DGX)	99.17	83.27	19%	17,840	11.9	2.4
Sonic Healthcare (SHL.AX)	26.31	22.11	19%	14,200	15.3	2.5
Exact Sciences (EXAS)	92.38	63.10	46%	11,460	NA	21.8
Guardant Health (GH)	76.00	37.59	102%	6,120	NA	55.4
NeoGenomics (NEO)	22.89	12.61	82%	2,300	56.6	7.5
Myriad Genetics (MYGN)	28.04	29.07	-4%	2,170	18.5	2.5
Genomic Health (GHDX)	58.27	64.41	-10%	1,990	44.0	4.9
Invitae (NVTA)	19.69	11.06	78%	1,610	NA	10.0
Opko Health (OPK)	2.12	3.01	-30%	1,460	NA	1.5
Natera (NTRA)	21.70	13.96	55%	1,400	NA	5.3
CareDx (CDNA)	32.27	25.14	28%	1,310	NA	14.8
Veracyte (VCYT)	23.65	12.58	88%	944	NA	9.3
Enzo Biochem (ENZ)	3.71	2.78	33%	135	NA	1.5
Psychemedics (PMD)	10.47	15.87	-34%	54	5.8	1.3
Cancer Genetics Inc. (CGIX)	0.22	0.24	-6%	25	NA	0.9
Interpace Diagnostics (IDXG)	0.76	0.80	-5%	23	NA	1.0
Biocept (BIOC)	0.91	0.86	6%	-6	NA	NA
Unweighted Averages			28%	$85,835	23.4	8.5

Source: *Laboratory Economics* and Capital IQ

Jondavid Klipp, Editor and Publisher Jennifer Kaufman, Associate Editor Kimberly Scott, Associate Editor