



April 21, 2016

Dear Stockholders:

We are pleased to invite you to attend the 2016 annual meeting of stockholders of Medidata Solutions, Inc., which will be held at 10:00 a.m., Eastern Daylight Time, on June 1, 2016. As a leading provider of cloud-based technology solutions, we are pleased that this year's annual meeting will again be a completely virtual meeting of stockholders, held over the Internet. You will be able to participate in the annual meeting, vote your shares electronically and submit your questions during the live webcast of the meeting by visiting [www.virtualshareholdermeeting.com/medidata2016](http://www.virtualshareholdermeeting.com/medidata2016) and entering your 16-digit control number.

At the meeting, we will ask you to elect seven directors, constituting the entire board of directors, to serve for the ensuing year; to approve an amendment to our Amended and Restated 2014 Employee Stock Purchase Plan ("ESPP") to increase by 500,000 the number of shares of common stock authorized for issuance under the ESPP; to approve an amendment to our Charter to eliminate restrictions on removal of directors; and to ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the year ending December 31, 2016. In addition, we will hold an advisory vote on the compensation of the named executive officers (commonly referred to as the "say on pay vote").

The meeting also will provide us an opportunity to review with you our business and affairs since our last annual meeting.

Your vote is important to us and to our business. Whether or not you plan to participate in the live webcast of our annual meeting, we hope you will vote as soon as possible. You may vote over the Internet, as well as by telephone or by mailing a proxy or voting instruction card. Voting over the Internet, by telephone or by written proxy will ensure your representation at the annual meeting regardless of whether you participate in our live webcast. Please review the instructions on the proxy or voting instruction card regarding each of these voting options.

We look forward to your participation at our virtual annual meeting.

Sincerely,

A handwritten signature in black ink that reads "Tarek Sherif". The signature is fluid and cursive, with a long, sweeping tail on the final letter.

Tarek A. Sherif  
*Chairman and Chief Executive Officer*

**Important Notice Regarding the Availability of Proxy Materials  
for the Annual Meeting of Stockholders  
To Be Held on June 1, 2016**

**This proxy statement, along with our 2015 annual report to stockholders, is available free of charge at the following website: [www.proxyvote.com](http://www.proxyvote.com).**



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**MEDIDATA SOLUTIONS, INC.**

**NOTICE OF 2016 ANNUAL MEETING OF STOCKHOLDERS  
To Be Held on June 1, 2016**

The annual meeting of stockholders of Medidata Solutions, Inc. will be held virtually (that is, over the Internet) on June 1, 2016, at 10:00 a.m., Eastern Daylight Time, for the following purposes:

1. To elect seven directors, constituting the entire board of directors, to hold office until the next annual meeting of stockholders or until their respective successors have been elected and qualified.
2. To hold an advisory vote to approve the compensation of the named executive officers (the “say on pay vote”).
3. To approve an amendment to our Amended and Restated 2014 Employee Stock Purchase Plan (“ESPP”) to increase by 500,000 the number of shares of common stock authorized for issuance under the ESPP.
4. To approve an amendment to our Charter to eliminate restrictions on removal of directors.
5. To ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the year ending December 31, 2016.
6. To transact such other business as may properly come before the meeting or at any and all adjournments or postponements thereof.

Attached to this notice is a proxy statement setting forth information with respect to the above items and certain other information. As a leading provider of cloud-based technology solutions, we are pleased that this year’s annual meeting will again be a completely virtual meeting of stockholders, held over the Internet. You will be able to attend the annual meeting, vote your shares electronically and submit your questions during the live webcast of the meeting by visiting [www.virtualshareholdermeeting.com/medidata2016](http://www.virtualshareholdermeeting.com/medidata2016) and entering your 16-digit control number.

If you owned our common stock at the close of business on April 4, 2016, you may participate in and vote at the meeting. A list of stockholders eligible to vote at the meeting will be available for review for any purpose related to the meeting, both during our regular business hours at our headquarters in New York, New York for the ten days prior to the meeting, and online during the Annual Meeting, accessible at [www.virtualshareholdermeeting.com/medidata2016](http://www.virtualshareholdermeeting.com/medidata2016).

In accordance with Securities and Exchange Commission rules, we are furnishing these proxy materials and our 2015 Annual Report to Stockholders over the Internet. We believe that posting these materials on the Internet enables us to provide stockholders with the information that they need more quickly, while lowering our costs of printing and delivery and reducing the environmental impact of our annual meeting. Stockholders may request mailed paper copies if preferred. On or about April 22, 2016 we will mail to stockholders as of the record date a notice containing instructions on how to access our Annual Meeting materials and vote via the Internet, mail or telephone. You may also vote electronically during the live webcast of the virtual meeting.

Your vote is very important to us and to our business. Whether or not you plan to participate in our virtual annual meeting, we encourage you to read this proxy statement and submit your proxy or voting instructions as soon as possible.

By order of the board of directors,



Michael I. Otner  
*Executive Vice President, General Counsel and  
Secretary*

April 21, 2016  
350 Hudson Street, 9<sup>th</sup> Floor  
New York, New York 10014

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**PROXY STATEMENT  
FOR  
2016 ANNUAL MEETING OF STOCKHOLDERS  
GENERAL INFORMATION**

This proxy statement is furnished in connection with the solicitation of proxies by our board of directors for use at the 2016 annual meeting of stockholders to be held on June 1, 2016 (the “Annual Meeting”), or at any adjournments or postponements of the Annual Meeting, at the time and for the purposes specified in the accompanying notice.

Our board of directors has made these proxy materials available to you via the Internet or, upon your request, has delivered printed versions of these materials to you by mail. We are furnishing this proxy statement in connection with the solicitation by our board of directors of proxies to be voted at our Annual Meeting. The Annual Meeting will be held on June 1, 2016 at 10:00 a.m. Eastern Daylight Time, or at any adjournment thereof. As a leading provider of cloud-based technology solutions, we are pleased that this year’s annual meeting will again be a completely virtual meeting of stockholders, held over the Internet.

**INTERNET AVAILABILITY OF ANNUAL MEETING MATERIALS**

We are making this proxy statement and our 2015 Annual Report to Stockholders for the year ended December 31, 2015, including our Annual Report on Form 10-K for the year ended December 31, 2015, available to our stockholders on the Internet. On or about April 22, 2016, we will mail our stockholders a Notice of Internet Availability of Proxy Materials containing instructions on how to access our proxy materials, including this proxy statement and our 2015 Annual Report, and vote. If you received a Notice of Internet Availability of Proxy Materials by mail, you will not receive a printed copy of the proxy materials in the mail unless you specifically request these materials. Other stockholders, in accordance with their prior requests, have received e-mail notification of how to access our proxy materials and vote over the Internet, or have been mailed paper copies of our proxy materials and a proxy card or a vote instruction form from their bank or broker.

Internet distribution of proxy materials is designed to expedite receipt by stockholders, lower the cost of our Annual Meeting, and reduce the environmental impact of our Annual Meeting. However, if you received a Notice of Internet Availability of Proxy Materials by mail and would like to receive a printed copy of our proxy materials, please follow the instructions for requesting such materials contained on the Notice of Internet Availability of Proxy Materials. If you have previously elected to receive our proxy materials electronically, you will continue to receive these materials via e-mail unless you elect otherwise.

**PARTICIPATING IN THE VIRTUAL ANNUAL MEETING**

Medidata Solutions will be hosting this year’s Annual Meeting live over the Internet at [www.virtualshareholdermeeting.com/medidata2016](http://www.virtualshareholdermeeting.com/medidata2016). This year’s Annual Meeting will be a completely virtual meeting of stockholders. A summary of the information you need to participate in our Annual Meeting online is provided below:

- Any stockholder can attend and listen to the Annual Meeting live over the Internet at [www.virtualshareholdermeeting.com/medidata2016](http://www.virtualshareholdermeeting.com/medidata2016);
- Only stockholders as of the record date for the Annual Meeting, by using their 16-digit control number, may vote or submit questions while participating in the live webcast of the Annual Meeting;
- Instructions on how to participate in the Annual Meeting are posted at [www.virtualshareholdermeeting.com/medidata2016](http://www.virtualshareholdermeeting.com/medidata2016);

- Questions regarding how to participate in the Annual Meeting will be answered by calling 1-855-449-0991 on the meeting date; and
- A webcast replay of the Annual Meeting will be available online until June 1, 2017.

In this proxy statement, the terms “our company,” “Medidata,” “we,” “us” and “our” refer to Medidata Solutions, Inc. and its consolidated subsidiaries and their predecessors. The mailing address of our principal executive office is Medidata Solutions, Inc., 350 Hudson Street, 9th Floor, New York, New York 10014.

All shares entitled to vote and represented by properly executed proxies delivered pursuant to this solicitation, and not later revoked, will be voted at the Annual Meeting in accordance with the instructions given in the proxy. If no instructions are indicated on a properly executed proxy, the shares represented by that proxy will be voted in accordance with the recommendations of the board of directors as follows:

- FOR the election of the seven director nominees;
- FOR the approval of the compensation of the named executive officers on an advisory basis (the “say on pay vote”);
- FOR the approval of an amendment to our Amended and Restated 2014 Employee Stock Purchase Plan (“ESPP”) to increase by 500,000 the number of shares of common stock authorized for issuance under the ESPP;
- FOR the approval of an amendment to our Charter to eliminate restrictions on removal of directors;
- FOR the ratification of Deloitte & Touche LLP as our independent registered public accounting firm for the year ending December 31, 2016; and
- in the discretion of the named proxies with respect to any other matters presented at the Annual Meeting.

**All shares of our common stock represented by properly executed and unrevoked proxies will be voted if such proxies are received in time for the meeting.**

#### **Who is entitled to vote?**

As of the close of business on April 4, 2016, the record date for determination of stockholders entitled to vote at the Annual Meeting, there were outstanding 57,213,008 shares of our common stock (excluding treasury shares, which cannot be voted), all of which are entitled to vote with respect to all matters to be acted upon at the Annual Meeting. Each stockholder of record is entitled to one vote for each share of common stock held by such stockholder. No shares of preferred stock of the company were outstanding as of April 4, 2016.

#### **How many shares must be present or represented to conduct business at the Annual Meeting?**

The required quorum for the transaction of business at the meeting is a majority of the total outstanding shares of our common stock entitled to vote at the meeting, either voted electronically during the live webcast or represented by proxy. Both abstentions and broker non-votes are counted for the purpose of determining the presence of a quorum.

#### **Why was I mailed a notice regarding the Internet availability of proxy materials instead of a full set of printed proxy materials?**

Pursuant to the “notice and access” rules adopted by the Securities and Exchange Commission (SEC), we have elected to provide stockholders access to our proxy materials over the Internet. Accordingly, we sent a Notice of Internet Availability of Proxy Materials to all of our stockholders as of the record date. The Notice of



Internet Availability of Proxy Materials includes instructions on how to access our proxy materials over the Internet and how to request a printed copy of these materials. In addition, by following the instructions in the Notice of Internet Availability of Proxy Materials, stockholders may request to receive proxy materials in printed form by mail or electronically by email on an ongoing basis.

Choosing to receive your future proxy materials by email will save us the cost of printing and mailing documents to you and will reduce the impact of our annual meetings on the environment. If you choose to receive future proxy materials by email, you will receive an email next year with instructions containing a link to those materials and a link to the proxy voting site. Your election to receive proxy materials by email will remain in effect until you terminate it.

## **What are my voting choices and what is the voting requirement to approve each of the proposals?**

### ***1. What are my voting choices when voting for director nominees identified in this proxy statement, and what vote is needed to elect directors?***

In the vote on the election of seven director nominees identified in this proxy statement to hold office until the next annual meeting of stockholders or until their respective successors have been elected and qualified, stockholders may:

- vote in favor of all nominees;
- withhold votes with respect to all nominees; or
- withhold votes with respect to specific nominees.

Directors will be elected by a majority of the votes cast by the holders of the shares of common stock voting electronically during the live webcast or by proxy at the meeting, meaning that a director nominee will be elected to the board of directors if the votes cast “for” the nominee’s election exceed the votes cast “against” such nominee’s election. Abstentions and broker non-votes are not counted as votes cast for purposes of the election of directors and, therefore, will have no effect on the outcome of such election. Even if a nominee is not re-elected, he will remain in office as a director until his or her earlier resignation or removal. Each of the current director nominees has signed a letter of resignation that will be effective upon the failure of the nominee to be re-elected at the meeting and the board of directors’ acceptance of such resignation. The nominating and governance committee and the board of directors will decide whether to accept the director’s resignation in accordance with the procedures listed in our corporate governance guidelines, which are available on our website at <http://investor.mdsol.com>.

The board of directors recommends a vote FOR all nominees.

### ***2. What are my voting choices when voting on the advisory proposal to approve executive compensation (the “say on pay vote”), and what vote is needed to approve the say on pay vote?***

In the advisory proposal on executive compensation, stockholders may:

- vote in favor of the advisory proposal;
- vote against the advisory proposal; or
- abstain from voting on the advisory proposal.

The favorable vote of a majority of the votes cast by the holders of the shares of common stock voting electronically during the live webcast or by proxy at the meeting will be required for the approval, on an advisory basis, of the say on pay vote. A properly executed proxy marked “Abstain” with respect to the say on pay proposal will have the same effect as a vote against the proposal. Broker non-votes will not affect the outcome of the vote. As an advisory vote, this proposal is not binding upon the company. However, the compensation

committee, which is responsible for designing and administering the company's executive compensation program, values the opinions expressed by stockholders and will consider the outcome of the vote when making future compensation decisions.

The board of directors recommends an advisory vote FOR the approval of executive compensation.

***3. What are my voting choices when voting on the proposal to approve an amendment to our Amended and Restated 2014 Employee Stock Purchase Plan ("ESPP") to increase by 500,000 the number of shares of common stock authorized for issuance under the ESPP, and what vote is needed to approve such proposal?***

In the proposal to approve an amendment to our ESPP to increase by 500,000 the number of shares of common stock authorized for issuance under the ESPP, stockholders may:

- vote in favor of the proposal;
- vote against the proposal; or
- abstain from voting on the proposal.

The favorable vote of a majority of the votes cast by the holders of the shares of common stock voting electronically during the live webcast or by proxy at the meeting will be required for the approval of an amendment to our ESPP to increase by 500,000 the number of shares of common stock authorized for issuance under the ESPP. Abstentions from voting on this proposal will have the practical effect of a vote against this proposal because an abstention results in one less vote for the proposal. Broker non-votes will have no effect on this proposal.

The board of directors recommends a vote FOR the increase in number of shares authorized under the ESPP.

***4. What are my voting choices when voting on the proposed amendment to our Charter to eliminate the restrictions on the removal of directors, and what vote is needed to approve such proposal?***

In the proposal to approve an amendment to our Charter to eliminate language providing that stockholders may remove directors only for cause, stockholders may:

- vote in favor of the proposal;
- vote against the proposal; or
- abstain from voting on the proposal.

The favorable vote of a majority of the outstanding shares of common stock is required to approve the proposed Charter amendment eliminating the restrictions on the removal of directors. Abstentions from voting on this proposal and broker non-votes will have the practical effect of a vote against this proposal because an abstention or a broker non-vote results in one less vote for the proposal.

The board of directors recommends a vote FOR the proposed Charter amendment to eliminate language providing that stockholders may remove directors only for cause.

***5. What are my voting choices when voting on the ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm, and what vote is needed to ratify their appointment?***

In the vote on the approval of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm, stockholders may:

- vote in favor of the ratification;

- vote against the ratification; or
- abstain from voting on the ratification.

The proposal to ratify the appointment of Deloitte & Touche LLP as independent auditors will require approval by a majority of the votes cast by the holders of the shares of common stock voting electronically during the live webcast or by proxy at the meeting. Abstentions from voting on this proposal will have the practical effect of a vote against this proposal because an abstention results in one less vote for the proposal. Broker non-votes will have no effect on this proposal.

The board of directors recommends a vote FOR the ratification.

### **How can I vote my shares?**

**By proxy.** Whether you hold shares directly as the stockholder of record or beneficially in street name, you may direct how your shares are voted without participating in our online Annual Meeting. If you are a stockholder of record, you may vote by submitting a proxy. If you hold shares beneficially in street name, you may vote by submitting voting instructions to your broker, trustee or nominee. For directions on how to vote, please refer to the instructions on your Notice of Internet Availability of Proxy Materials or proxy card or, for shares held beneficially in street name, the voting instruction card provided by your broker, trustee or nominee.

**At our virtual Annual Meeting.** Whether you are a stockholder of record or hold your shares in “street name,” you may vote electronically during the live webcast of our Annual Meeting. You will need to enter your 16-digit control number (included in your Notice of Internet Availability of Proxy Materials, your proxy card or the voting instructions that accompanied your proxy materials) to vote your shares at the Annual Meeting. *Even if you plan to participate in our virtual Annual Meeting, we recommend that you also submit your proxy or voting instructions as described above so that your vote will be counted if you are unable to, or later decide not to, participate in the live webcast of the meeting.*

If any matters are properly presented for consideration at the Annual Meeting, including, among other things, consideration of a motion to adjourn the Annual Meeting to another time (including, without limitation, for the purpose of soliciting additional proxies), the persons named in the proxy card and acting thereunder will have discretion to vote on those matters in accordance with their best judgment. We do not currently anticipate that any other matters will be raised at the Annual Meeting.

### **What if I am a beneficial owner and do not give voting instructions to my broker?**

As a beneficial owner, in order to ensure your shares are voted in the way you would like, you must provide voting instructions to your bank, broker or other nominee by the deadline provided in the materials you receive from your bank, broker or other nominee. If you do not provide voting instructions to your bank, broker or other nominee, whether your shares can be voted by such person depends on the type of item being considered for vote.

**Non-Discretionary Items.** The election of directors, advisory say on pay vote, and votes to approve an amendment to our Amended and Restated 2014 Employee Stock Purchase Plan and an amendment to our Charter to eliminate restrictions on removal of directors are non-discretionary items and may not be voted on by brokers, banks or other nominees who have not received specific voting instructions from beneficial owners. In tabulating the voting result for any particular proposal, shares that constitute broker non-votes are not considered votes cast on that proposal. Thus, broker non-votes will not affect the outcome of any matter being voted on at the Annual Meeting, assuming that a quorum is obtained.

**Discretionary Item.** The ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm is a discretionary item. Generally, brokers, banks and other nominees that do not receive voting instructions from beneficial owners may vote on this proposal in their discretion.

We encourage you to provide instructions to your broker regarding the voting of your shares.

**Can I change my vote or revoke my proxy?**

Any holder of our common stock has the right to revoke his or her proxy at any time prior to the voting thereof at the Annual Meeting by (1) filing a written revocation with the Secretary prior to the voting of such proxy, (2) giving a duly executed proxy bearing a later date or (3) participating in and voting electronically during the live webcast of the Annual Meeting. If you hold your shares in the name of a bank, broker or other nominee, you should follow the instructions provided by your bank, broker or nominee in revoking your previously granted proxy.

**How are proxies solicited and who will bear the cost?**

We will bear the cost of the solicitation of proxies. In addition to solicitation by mail, our directors, officers and employees may solicit proxies from stockholders by telephone, e-mail or in person. In accordance with SEC regulations, banks, brokers and other custodians, nominees and fiduciaries also will be reimbursed by us, as necessary, for their reasonable expenses for sending proxy solicitation materials to the beneficial owners of our common stock. If warranted, we may engage the services of a proxy solicitor in connection with this solicitation, and would pay customary fees and expenses for these services.

**Where can I find the voting results of the Annual Meeting?**

We will announce preliminary voting results at the Annual Meeting. Voting results will also be disclosed on a Form 8-K filed with the SEC within four business days after the Annual Meeting, which will be available on our website.

## **PROPOSAL 1**

### **ELECTION OF DIRECTORS**

At the Annual Meeting, seven directors, constituting the entire board of directors, are to be elected to hold office until the next annual meeting of stockholders or until their respective successors have been elected and qualified. The seven nominees for election at the Annual Meeting are listed below with their biographies. The board of directors, after careful consideration, approved the nomination of each of our currently serving directors. We are not aware of any reason why any nominee would be unable to serve as a director. If any nominee is unable to serve, the shares represented by all valid proxies will be voted for the election of such other person as the board of directors may nominate as a substitute.

The board of directors, acting through its nominating and governance committee, is responsible for nominating a slate of director nominees that collectively have the complementary experience, qualifications, skills and attributes to guide the company and function effectively as a board.

The nominating and governance committee seeks directors with established strong professional reputations and experience in areas relevant to the strategy and operations of our company's business. The nominees for director include individuals who hold or have held senior executive positions in organizations operating in industries and end-markets that our company serves and individuals who have experience serving on boards of directors and board committees of other public companies. In these positions, they have gained experience in core management skills, such as strategic and financial planning, public company financial reporting, compliance, risk management and oversight, leadership development and corporate governance practices and trends.

The nominating and governance committee believes that each of the nominees has other key attributes that are important to an effective board: integrity, candor, analytical skills, the willingness to engage management and each other in a constructive and collaborative fashion, and the ability and commitment to devote significant time and energy to service on the board of directors and its committees. The nominating and governance committee takes into account diversity considerations in determining the company's slate and planning for director succession and believes that, as a group, the nominees bring a diverse range of perspectives to the deliberations of the board of directors. Each of the nominees, other than Messrs. Sherif and de Vries, co-founders of the company, is also independent of the company and management. We believe the atmosphere of our board of directors is collegial and that all directors are engaged in their responsibilities. For additional information about our director independence requirements, consideration of director candidates, leadership structure of our boards of directors and other corporate governance matters, see "Corporate Governance and Board Matters" beginning on page 11 of this proxy statement.

In addition to the above, the nominating and governance committee also considered the specific experience described in the biographical details that follow in determining to nominate the individuals set forth below for election as directors.

#### **Nominees for Election**

**Tarek A. Sherif** is one of our founders. Mr. Sherif has served as our chief executive officer since 2001 and as a member of our board of directors since 2000. Prior to forming Medidata, Mr. Sherif was the managing member of Sherif Partners L.L.C., a company focused on public and private investments in technology and life science companies. Prior to that, Mr. Sherif served as portfolio manager at R.D.L. Securities, a privately held equity fund specializing in publicly traded technology companies, including those in the healthcare and information technology fields. Mr. Sherif has also served as assistant vice president of corporate finance at General Electric Capital Corporation, and mergers and acquisitions analyst at Brown Brothers Harriman & Company. Mr. Sherif holds a B.A. in economics from Yale College and an M.B.A. in business administration and finance from Columbia University.

Mr. Sherif brings to our board of directors detailed knowledge and unique perspective and insights regarding the strategic and operational opportunities and challenges, economic and industry trends, and competitive and financial positioning of our business. In addition, his leadership as chief executive officer of our company and his knowledge of the company's industry and business as a co-founder and chief executive officer position him well to serve as our chairman.

Director since 2000

Age 53

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**Glen M. de Vries** is one of our founders. Mr. de Vries has served as our president since February 2008 and as a member of our board of directors since 1999. From 2000 to 2008, Mr. de Vries served as our chief technology officer. Mr. de Vries has over 20 years of experience in medical software development, including electronic health records and consumer-targeted products. As president of OceanTek, Inc., a web development firm focused on applications for the healthcare industry, Mr. de Vries was the chief consultant for a Fortune 500 global e-commerce project, and was the author of web security components currently in use by websites and corporate intranets. Previously, he served as a research assistant at Columbia University focusing on both research science and creating a paperless clinical data management system. Mr. de Vries holds a B.S. in molecular biology and genetics from Carnegie Mellon University.

Mr. de Vries' significant experience as the company's co-founder, former chief technology officer and president provides our board of directors with unique perspectives and insights regarding the company's innovation and strategic vision.

Director since 1999

Age 43

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**Carlos Dominguez** has served as president and chief operating officer of Sprinklr Inc., a privately held social media management software company, since January 2015. Prior to joining Sprinklr, Mr. Dominguez held various executive positions at Cisco Systems, Inc. and served as its senior vice president, office of the chairman and chief executive officer, from January 2008 to January 2015. Mr. Dominguez joined Cisco in 1992 and previously served as senior vice president of its Worldwide Service Provider Operations group from 2004 to 2008 and as a vice president for U.S. Service Provider Sales from 1999 to 2004.

Mr. Dominguez brings to our board of directors significant managerial experience, which gives him the ability to address complex management issues at the most senior levels and provide critical insights into the operational requirements of global technology companies.

Director since 2008

Age 57

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**Neil M. Kurtz, M.D.** has served as president and chief executive officer of Golden Living, LLC, a privately held skilled nursing, hospice, home healthcare and institutional pharmacy company, since August 2008. Prior to joining Golden Living, Dr. Kurtz served as president and chief executive officer and a member of the board of directors of TorreyPines Therapeutics, Inc., a clinical-stage biopharmaceutical company, since 2002. Dr. Kurtz co-founded Worldwide Clinical Trials, a contract research organization, where he held the positions of president and chief executive officer until its acquisition by United Health Group, or UHG, in 1999. After the acquisition, Dr. Kurtz became president of Ingenix Pharmaceutical Services, a division of UHG, and also served as a member of the UHG Executive Board until joining TorreyPines Therapeutics, Inc. Dr. Kurtz's career includes senior positions with Boots Pharmaceuticals, Bayer Corporation, Bristol-Myers Squibb and Merck. He currently serves on the board of directors of Team Health Holdings Inc., a leading provider of outsourced physician staffing solutions for hospitals, and Golden Gate National Senior Care Holdings, and served previously on the board of directors of NeurogesX, Inc., a specialty pharmaceutical company. Dr. Kurtz holds a B.A. in psychology from New York University and an M.D. from the Medical College of Wisconsin.

Dr. Kurtz brings to our board of directors significant operational, regulatory, and financial experience as a senior executive and director in the healthcare industry.

Director since 2002

Age 65

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**George W. McCulloch** is currently a partner at Level Equity Management, LLC, a private investment firm he co-founded in 2009. Previously Mr. McCulloch served as a managing director at Insight Venture Partners, which he joined in 2003. Mr. McCulloch holds a B.A. in history from Stanford University.

Mr. McCulloch brings to our board of directors significant operational, financial, and investment experience from his involvement in Level Equity and Insight and their numerous portfolio companies.

Director since 2004

Age 39

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**Lee A. Shapiro** is currently managing partner and co-founder of 7wire Ventures, a private investment firm that seeks and invests in innovative ideas and entrepreneurs mostly in the areas of healthcare and education. Previously, Mr. Shapiro was president of Allscripts Healthcare Solutions, Inc., a provider of innovative technology solutions, from 2002 to December 2012, where he oversaw the company's strategy, international operations, health plan initiatives and entrepreneurial business investments, and was a consultant to Allscripts from December 2012 to June 2013. Prior to joining Allscripts, he was the chief operating officer of Douglas Elliman-Beitler, a commercial office management and development company, where he directed all business activities throughout the United States. Mr. Shapiro's career also includes serving as president of SES Properties, Inc., vice chairman of City Financial Bancorp and practicing commercial law at Barack, Ferrazzano, Kirschbaum, Perlman & Nagelberg. Mr. Shapiro was also appointed to the Economic Recovery Commission of the State of Illinois during its seating in 2009-2010. He currently serves on the board of directors of Healthways, Inc., the largest independent global provider of well-being improvement solutions, and Aptus Health (f/k/a Physicians Interactive Holdings), a subsidiary of Merck. Mr. Shapiro holds a J.D. degree from The University of Chicago Law School and a B.S. in Accounting from the University of Illinois Urbana-Champaign.

Mr. Shapiro brings to our board of directors significant experience in directing strategic initiatives at a global public healthcare technology company, including mergers and acquisitions, international expansion, business development and partnerships, and business activities in the areas of analytics and information services. Our board of directors also benefits from Mr. Shapiro's experience serving on the boards of several private and not-for-profit companies.

Director since 2011

Age 60

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**Robert B. Taylor**, currently our lead director, served as senior vice president for finance and administration of The Colonial Williamsburg Foundation from January 2001 to December 2014. Prior to joining The Colonial Williamsburg Foundation, Mr. Taylor previously served as vice president and treasurer of Wesleyan University from 1985 to 2001. Mr. Taylor also previously served on the board of directors of Zygo Corporation from 1988 to 2013, including as a member of its corporate governance/nominating committee and chairman of its audit committee. Mr. Taylor holds a B.A. from St. Lawrence University.

Mr. Taylor brings to his role as lead director significant experience in accounting and finance, which qualifies him as our "financial expert," and operational, investment and governance experience from his role as a senior executive and chief financial officer of two large enterprises. Our board of directors also benefits from Mr. Taylor's experience serving on the boards of for profit and not-for-profit companies, including as chair of the audit committee of another public company.

Director since 2008

Age 68

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**Vote Required**

If a quorum is present at the Annual Meeting, directors will be elected by a majority of the votes cast by the holders of the shares of common stock voting electronically during the live webcast or by proxy at the meeting, meaning that a director nominee will be elected to the board of directors if the votes cast “for” the nominee’s election exceed the votes cast “against” such nominee’s election. Abstentions and broker non-votes are not counted as votes cast for purposes of the election of directors and, therefore, will have no effect on the outcome of such election.

**Board Recommendation**

**Our board of directors recommends a vote FOR the election to the board of directors of each of the foregoing nominees.**



## CORPORATE GOVERNANCE AND BOARD MATTERS

### Director Independence

The board of directors has affirmatively determined that each of the director nominees standing for election, except Tarek Sherif as chief executive officer and Glen de Vries as president, has no relationship that, in the opinion of the board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and is “independent” within the meaning of the director independence standards of the company, The Nasdaq Stock Market Inc. (“NASDAQ”) and the Securities and Exchange Commission (“SEC”). Furthermore, the board of directors has determined that each member of each of the committees of the board of directors is independent within the meaning of applicable committee independence standards of the company, NASDAQ and the SEC, including Rule 10A-3(b)(1) under the Exchange Act of 1934, as amended (“Exchange Act”). In making that determination, the board of directors considered all relevant facts and circumstances, including (but not limited to) the director’s commercial, industrial, banking, consulting, legal, accounting, charitable and familial relationships.

At least annually, the board of directors evaluates all relationships between the company and each director in light of relevant facts and circumstances for the purposes of determining whether a material relationship exists that might signal a potential conflict of interest or otherwise interfere with such director’s ability to satisfy his or her responsibilities as an independent director. Based on this evaluation, the board of directors makes an annual determination of whether each director is independent within the meaning of the independence standards of the company, NASDAQ and the SEC.

### Board of Directors and Committees

Our board of directors currently consists of seven members. If all of the director nominees are elected at the Annual Meeting, our board of directors will continue to consist of seven members. The board of directors is responsible for oversight of our business and affairs. To assist the board of directors in carrying out its duties, the board has delegated certain authority to three standing committees: the audit committee, the compensation committee, and the nominating and governance committee.

The membership of each of the audit committee, the compensation committee, and the nominating and governance committee is composed entirely of independent directors. In determining the independence of compensation committee members, the board of directors considers the source and amount of compensation received by the members and whether the member is affiliated with the company. In addition, the members of the audit committee meet the heightened standards of independence for audit committee members required by SEC rules and NASDAQ rules.

The committee membership and the responsibilities of each of the committees are described below.

<u>Name</u>	<u>Audit</u>	<u>Nominating and Governance</u>	<u>Compensation</u>
Tarek A. Sherif . . . . .	—	—	—
Glen M. de Vries . . . . .	—	—	—
Carlos Dominguez(I) . . . . .	—	●	●
Neil M. Kurtz, M.D.(I) . . . . .	●	—	●
George W. McCulloch(I) . . . . .	●	—	●
Lee A. Shapiro(I) . . . . .	●	●	—
Robert B. Taylor(I)(L) . . . . .	●	●	—

- Chairman
- Member
- (I) Independent director
- (L) Lead director

The board of directors has adopted a written charter for each of the three standing committees. Each committee charter is available free of charge in the Corporate Governance section of our website at <http://investor.mdsol.com/corporate-governance.cfm> or by writing to Medidata Solutions, Inc., 350 Hudson Street, 9th Floor, New York, New York 10014, c/o Corporate Secretary.

#### ***Audit Committee***

Messrs. Taylor, Kurtz, McCulloch and Shapiro currently serve on the audit committee. Mr. Taylor is the chairman of our audit committee. The board of directors has determined that each member of the audit committee is independent within the meaning of the director independence standards of the company and NASDAQ as well as the heightened director independence standards of the SEC for audit committee members, including Rule 10A-3(b)(1) under the Exchange Act. The board of directors has also determined that each of the members of the audit committee is financially sophisticated and is able to read and understand consolidated financial statements and that Mr. Taylor is an “audit committee financial expert” as defined in the Exchange Act.

The composition and responsibilities of the audit committee and the attributes of its members, as reflected in the charter, are intended to be in accordance with applicable requirements for corporate audit committees. The audit committee charter will be reviewed, and amended if necessary, on an annual basis.

The audit committee assists the board in fulfilling its oversight responsibility relating to our financial statements and the disclosure and financial reporting process, our system of internal controls, our internal audit function, the qualifications, independence and performance of our independent registered public accounting firm, compliance with our code of ethics and legal and regulatory requirements. The audit committee has the sole authority to appoint, retain, terminate, compensate and oversee the work of the independent registered public accounting firm, as well as to pre-approve all audit and non-audit services to be provided by the independent registered public accounting firm.

#### ***Compensation Committee***

Messrs. Kurtz, Dominguez and McCulloch currently serve on the compensation committee. Dr. Kurtz is the chairman of our compensation committee. The board of directors has determined that each member of the compensation committee is a “non-employee” director within the meaning of Rule 16b-3 of the Exchange Act and independent within the meaning of the director independence standards of the company and NASDAQ. In addition, each member of the compensation committee is an “outside director” as defined in Section 162(m) of the Internal Revenue Code. In determining the independence of our compensation committee members, the board of directors considered several relevant factors, including but not limited to the source and amount of compensation received by the members and whether the member is affiliated with the company.

The compensation committee reviews and approves our general compensation strategy and on an annual basis reviews and evaluates our executive officers’ performance, and makes recommendations to the board of directors concerning compensation arrangements for all of our executive officers, including our chief executive officer. The Compensation Discussion and Analysis (“CD&A”) included in this proxy statement includes additional information regarding the compensation committee’s processes and procedures for considering and determining executive officer compensation.

The compensation committee is also responsible for, among other things, administering any incentive compensation plans, equity-based compensation plans and other benefit plans and making recommendations to the board of directors with respect to such plans; reviewing and recommending compensation programs for our non-employee directors; reviewing and approving the CD&A and compensation committee report that the SEC requires in our annual proxy statement; and reviewing the succession planning for our executive officers. In addition, the compensation committee is responsible for making recommendations with respect to the frequency of say on pay votes and for reviewing the results of the say on pay votes. The compensation committee has the

authority to engage independent advisors to assist it in carrying out its responsibilities and to approve any such advisor's fees and other retention terms, as well as the responsibility for oversight of the work of any independent compensation consultant or other advisor it has retained.

### ***Nominating and Governance Committee***

Messrs. Taylor, Dominguez and Shapiro currently serve on the nominating and governance committee. Mr. Taylor is the chairman of our nominating and governance committee. The board of directors has determined that each member of the nominating and governance committee is independent within the meaning of the director independence standards of the company, NASDAQ and the SEC.

The nominating and governance committee is responsible for, among other things: reviewing board composition, procedures and committees, and making recommendations on these matters to the board of directors; reviewing, soliciting and making recommendations to the board of directors and stockholders with respect to candidates for election to the board; and overseeing compliance by the board of directors and management with our corporate governance principles and ethics standards and code of conduct.

### **Majority Voting in Director Elections**

The board of directors amended our bylaws in July 2015 to adopt a majority voting standard in uncontested elections of directors, providing that a nominee for director shall be elected to the board if the votes cast for such nominee's election exceed the votes cast against such nominee's election, with a plurality vote standard retained for contested director elections, that is, when the number of director nominees exceeds the number of directors to be elected.

In connection with this bylaw amendment, the board of directors adopted a director resignation policy providing that, with respect to director nominations, the board shall nominate for election or reelection as director only (i) candidates who agree to tender, promptly following the stockholders' meeting at which they are elected as director or (ii) incumbent directors who have tendered, in advance of such nomination, irrevocable resignations that in each case will be effective upon the failure of such director to receive the required vote at the next stockholders' meeting at which they face reelection and board acceptance of such resignation.

If an incumbent director fails to receive the required vote for reelection, the nominating and governance committee shall make a recommendation to the board as to whether to accept or reject such director's resignation as previously tendered pursuant to our corporate governance guidelines or whether other action should be taken. The nominating and governance committee and the board may consider any factors they deem relevant in deciding whether to accept or reject a director's resignation or whether other action should be taken. Within 90 days from the date the election results are certified, we will publicly disclose the board's decision and the rationale behind such decision.

### **Consideration of Director Candidates**

***Director Qualifications.*** The nominating and governance committee has not formally established any specific, minimum qualifications that must be met by each candidate for the board of directors or specific qualities or skills that are necessary for one or more of the members of the board of directors to possess.

***Identifying Nominees.*** The nominating and governance committee has two primary methods for identifying director candidates (other than those proposed by our stockholders, as discussed below). First, the nominating and governance committee will solicit ideas for possible candidates from a number of sources, including members of the board of directors and Medidata executives. Second, the nominating and governance committee is authorized to use its authority under its charter to retain at the company's expense one or more search firms to identify candidates (and to approve such firms' fees and other retention terms).

***Stockholder Candidates.*** The nominating and governance committee will consider candidates for nomination as a director submitted by stockholders. Although the nominating and governance committee does not have a separate policy that addresses the consideration of director candidates recommended by stockholders, the board of directors does not believe that such a separate policy is necessary because our bylaws permit stockholders to nominate candidates and one of the duties set forth in the nominating and governance committee charter is to consider director candidates submitted by stockholders in accordance with our bylaws. The nominating and governance committee will evaluate individuals recommended by stockholders for nomination as directors according to the criteria discussed above and in accordance with our bylaws and the procedures described under “Stockholder Proposals and Nominations” on page 59 of this proxy statement.

***Review of Director Nominees.*** In evaluating proposed director candidates, the nominating and governance committee may consider, in addition to any minimum qualifications and other criteria for board of directors membership approved by the board of directors from time to time, all facts and circumstances that it deems appropriate or advisable, including, among other things, the proposed director candidate’s understanding of the company’s business and industry on a technical level, his or her judgment and skills, his or her depth and breadth of professional experience or other background characteristics, his or her independence, his or her willingness to devote the time and effort necessary to be an effective board member, and the needs of the board of directors. We do not have a formal policy with regard to the consideration of diversity in identifying director nominees. However, the board of directors believes that it is essential that its members represent diverse viewpoints, with a broad array of experiences, professions, skills, geographic representation and backgrounds that, when considered as a group, provide a sufficient mix of perspectives to allow the board of directors to best fulfill its responsibilities to the long-term interests of our stockholders. The nominating and governance committee considers at least annually, and recommends to the board of directors suggested changes to, if any, the size, composition, organization and governance of the board of directors and its committees.

### **Board Meetings and Attendance**

The board of directors meets on a regularly scheduled basis during the year to review significant developments affecting us and to act on matters requiring their approval. It also holds special meetings when an important matter requires action between scheduled meetings. Members of senior management regularly attend meetings to report on and discuss their areas of responsibility. Executive sessions, excluding management, are also regularly scheduled (see section “Meetings of Independent Directors” below).

During 2015, the board of directors held six meetings, the audit committee held ten meetings, the compensation committee held four meetings, and the nominating and governance committee held three meetings. In addition, the board of directors and its committees act by unanimous written consent from time to time.

Each director attended at least 75% of all board of directors and applicable committee meetings. Directors are expected to attend meetings of the board of directors and meetings of committees on which they serve and to spend as much time and meet as frequently as necessary to properly discharge their responsibilities. In addition, directors are encouraged to attend annual meetings of our stockholders; six of our seven directors participated in our 2015 virtual annual meeting, and all intend to participate in the 2016 virtual annual meeting.

### **Board Leadership Structure**

Under our corporate governance guidelines, the board of directors does not have a policy on whether or not the role of the chairman of the board and chief executive officer should be separate or combined and, if it is to be separate, whether the chairman should be selected from the non-employee directors or be an employee. The board of directors believes that Mr. Sherif’s dual role as both chairman of the board and chief executive officer serves the best interests of both the company and its stockholders. His combined role enables decisive leadership, ensures clear accountability, and enhances the company’s ability to communicate its message and strategy clearly and consistently to the company’s stockholders, employees, customers and suppliers. Mr. Sherif possesses

detailed and in-depth knowledge of the issues, opportunities and challenges facing the company and its businesses and is thus best positioned to develop agendas that ensure that the time and attention of the board of directors are focused on the most critical matters. This structure also enables our chief executive officer to act as a bridge between management and the board of directors, helping both to act with a common purpose.

The board of directors appreciates that the advantages gained by having a single chairman and chief executive officer must be viewed in light of potential independence concerns. The board considers, however, that we have adequate safeguards in place to address those concerns. In accordance with our corporate governance guidelines, our board of directors consists of a supermajority of independent directors. In addition, our audit, compensation and nominating and governance committees, which oversee critical matters such as the integrity of our financial statements, the compensation of executive management, the selection and evaluation of directors, and the development and implementation of corporate governance policies, each consist entirely of independent directors.

**Lead Independent Director**

As a further enhancement to our governance, in July 2015, the board of directors appointed as its lead director Robert B. Taylor, a director of the company since 2008 and the current chairman of the audit committee and the nominating and governance committee. Mr. Taylor’s duties and responsibilities as lead director are set forth in our corporate governance guidelines and include (but are not limited to) presiding at all meetings of the board of directors at which the chairman is not present, including executive sessions of the independent directors; serving as a liaison between the chairman and the independent directors; leading the annual CEO evaluation process; and, when appropriate, consulting and directly communicating with stockholders.

**Board’s Role in Risk Oversight**

Our board of directors as a whole has responsibility for risk oversight, with reviews of certain areas conducted by the relevant committees that report on their deliberations to the board of directors. The oversight responsibility of the board of directors and its committees is enabled by management reporting processes that are designed to provide visibility to the board of directors about the identification, assessment and management of critical risks and management’s risk mitigation strategies. Areas of focus include competitive, economic, operational, financial (accounting, credit, liquidity and tax), legal, regulatory, compliance, safety and reputational risks. The board of directors and its committees oversee risks associated with their respective principal areas of focus, as summarized below.

<u>Board/Committee</u>	<u>Primary Areas of Risk Oversight</u>
Full Board of Directors . . . . .	Strategic, financial and execution risks and exposures associated with the annual operating plan, and strategic planning (including matters affecting capital allocation); and other matters that may present material risk to the company’s operations, plans, prospects or reputation; and acquisitions and divestitures (including through post-closing reviews).
Audit Committee . . . . .	Enterprise risk management oversight, including risks and exposures associated with financial matters (particularly financial reporting, tax, accounting, disclosure, internal control over financial reporting, financial policies, investment guidelines and credit and liquidity matters) and cyber risks.
Nominating and Governance Committee . . . . .	Risks and exposures relating to our programs and policies relating to corporate governance; and director succession planning.

**Board/Committee**

**Primary Areas of Risk Oversight**

Compensation Committee . . . . .	Risks and exposures associated with leadership assessment, management development and succession planning, and executive and employee compensation programs and arrangements, including incentive plans. The compensation committee reviews compensation arrangements and programs to ensure that they do not create incentives for employees to take excessive or inappropriate risks that could have a material adverse effect on the company.
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**Meetings of Independent Directors**

Our governance guidelines provide that the independent directors of the company meet in regularly scheduled executive sessions without management participation, which sessions typically occur in conjunction with the regularly scheduled meetings of the board of directors. Mr. Taylor, as lead director, presides at these meetings.

**Outside Advisors**

Our board of directors and each of its committees may retain outside advisors and consultants of their choosing at our expense. The board of directors need not obtain management’s consent to retain outside advisors.

**Board Effectiveness**

Our board of directors performs an annual self-assessment, led by Mr. Taylor in his capacity as lead director, to evaluate its effectiveness in fulfilling its obligations.

**Corporate Governance Guidelines**

Our board of directors adopted corporate governance guidelines to assist and guide the directors in the exercise of their responsibilities. These guidelines should be interpreted in accordance with any requirements imposed by applicable federal or state law or regulation, NASDAQ and our certificate of incorporation and bylaws. Our corporate governance guidelines are available in the corporate governance section of our website at <http://investor.mdsol.com/corporate-governance.cfm>. Although these guidelines have been approved by the board of directors, it is expected that these guidelines will evolve over time as customary practice and legal requirements change. In particular, guidelines that encompass legal, regulatory or exchange requirements as they currently exist will be deemed to be modified as and to the extent such legal, regulatory or exchange requirements are modified. In addition, the guidelines may also be amended by the board of directors at any time as it deems appropriate.

**Code of Business Conduct and Ethics**

Our board of directors adopted a “code of ethics” as defined by regulations promulgated under the Securities Act of 1933, as amended (“Securities Act”), and the Exchange Act that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. The code of ethics is designed to codify the ethical standards that we believe are reasonably designed to deter wrong-doing and to promote, among other things, adherence to the following principles:

- honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- full, fair, accurate, timely and understandable financial statements;

- compliance with applicable governmental laws, rules and regulations;
- prompt internal reporting of violations of the code; and
- accountability for adherence to the code.

We have established procedures to ensure that suspected violations of the code may be reported anonymously. A current copy of our code of ethics is available at <http://investor.mdsol.com/corporate-governance.cfm>. A copy may also be obtained, free of charge, from us upon a request directed to Medidata Solutions, Inc., 350 Hudson Street, 9th Floor, New York, New York 10014, c/o Corporate Secretary. We intend to disclose any amendments to or waivers of a provision of the code of ethics granted to directors and officers by posting such information on our website available at [www.mdsol.com](http://www.mdsol.com) and/or in our public filings with the SEC.

### **Stockholder Communications with the Board**

Stockholders and other interested parties may make their concerns known confidentially to the board of directors or the independent directors by submitting a communication in an envelope addressed to the “Board of Directors,” a specifically named independent director or the “Independent Directors” as a group, in care of the Secretary. All such communications will be conveyed, as applicable, to the full board of directors, the lead director, the specified independent director or the independent directors as a group.

### **Compensation Committee Interlocks and Insider Participation**

During 2015, Messrs. Dominguez, Kurtz and McCulloch served as members of our compensation committee. No member of the compensation committee has been an officer or employee of the company, or had any other relationship with us requiring disclosure herein. None of our executive officers serves on the board of directors or compensation committee of a company that has an executive officer that serves on our board of directors or compensation committee.

### **Director Compensation**

The compensation committee has adopted a compensation structure that is applicable to all of our non-employee directors under which each such non-employee director receives the following compensation for service on our board of directors:

- an annual cash retainer of \$45,000;
- an additional annual cash retainer of \$25,000 for serving as chair of the audit committee, and \$12,000 for serving as a member of the audit committee;
- an additional annual cash retainer of \$15,000 for serving as chair of the compensation committee and \$10,000 for serving as a member of the compensation committee;
- an additional annual cash retainer of \$12,500 for serving as chair of the nominating and governance committee and \$7,000 for serving as a member of the nominating and governance committee; and
- upon first joining our board of directors and at each subsequent annual meeting of stockholders, an equity award valued at \$175,000 (with the audit committee chair receiving an additional annual equity award valued at \$25,000). The equity awards made to the non-employee directors in 2015 consisted entirely of restricted stock, with the number of awarded shares based upon the average closing price of our common stock for the 30 trading days immediately preceding our 2015 annual meeting of stockholders. Since our directors are elected to a one-year term of office, their annual equity awards vest in full one year after the date of grant, provided the director continues to serve through such date. Such awards provide for immediate vesting upon expiration of a director’s scheduled board term in the event that the director is not nominated for re-election at the next annual meeting of stockholders or is nominated for re-election but is not elected.

In addition, we reimburse our directors for all reasonable expenses incurred for attending meetings and service on our board of directors.

Our non-employee directors are covered by stock ownership guidelines adopted in August 2011. Under these guidelines, non-employee directors are required to obtain ownership of common stock equal to three times the amount of the annual cash retainer paid to non-employee directors for their service as directors within three years from the earlier of August 16, 2011 or from their date of appointment. All non-employee directors are in compliance with these guidelines as of April 4, 2016. The director stock ownership guidelines are part of our Corporate Governance Guidelines and are available at <http://investor.mdsol.com/corporate-governance.cfm>.

Other than as provided below, there were no other arrangements pursuant to which any director was compensated during the year ended December 31, 2015 for service as a director. We do not provide any retirement benefits or other perquisites to our directors. Neither of our employee-directors received compensation during 2015 for service as a member of our board.

<u>Name(1)</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Stock Awards (\$)</u>	<u>Option Awards (\$)</u>	<u>All Other Compensation (\$)</u>	<u>Total (\$)</u>
Carlos Dominguez .....	60,750	175,000	—	—	235,750
Neil M. Kurtz .....	72,000	175,000	—	—	247,000
George W. McCulloch .....	67,000	175,000	—	—	242,000
Lee A. Shapiro .....	62,750	175,000	—	—	237,750
Robert B. Taylor .....	81,458	200,000	—	—	281,458

- (1) At December 31, 2015, the directors named in the table above held unvested restricted stock as follows: Messrs. Dominguez, Kurtz, McCulloch and Shapiro, 3,283 shares; and Mr. Taylor, 3,752 shares. In addition, at that date, the following directors held options to purchase shares of our common stock as follows: Mr. Dominguez, 37,738; Dr. Kurtz, 1,520; Mr. McCulloch, 28,672; and Mr. Shapiro, 9,708.



## PROPOSAL 2

### ADVISORY VOTE TO APPROVE THE COMPENSATION OF THE NAMED EXECUTIVE OFFICERS (THE “SAY ON PAY VOTE”)

As we do each year, we included a non-binding advisory vote to approve the compensation of the named executive officers (also referred to as a “say on pay vote”) in our 2015 proxy statement. We are gratified that at our 2015 annual meeting of stockholders, our stockholders overwhelmingly approved the proposal, with approximately 99.5% of the votes cast voting in favor of the proposal.

In accordance with Section 14A of the Exchange Act, this year we are again asking our stockholders to vote “For” the compensation of our named executive officers as disclosed in this proxy statement. In considering their vote, stockholders may wish to carefully review our compensation policies and decisions regarding our named executive officers, as described in the Compensation Discussion and Analysis and related executive compensation information beginning on page 26.

We believe that our overall compensation program and philosophy support and help drive long-term value creation, business strategy and operating performance objectives. We ask you to indicate your support for the compensation of our named executive officers as described in the Compensation Discussion and Analysis, the compensation tables and the narrative disclosures set forth in this Proxy Statement.

The board of directors recommends that stockholders vote FOR the following resolution:

“RESOLVED, that the stockholders approve, on an advisory basis, the compensation of the company’s named executive officers, as disclosed in this proxy statement, including the Compensation Discussion and Analysis, the executive compensation tables, and the related narrative.”

Because your vote is advisory, it will not be binding upon the board of directors or the compensation committee. However, the board of directors values our stockholders’ opinions, and the compensation committee will take into account the outcome of the vote when considering future executive compensation arrangements.

#### **Board Recommendation**

**Our board of directors recommends an advisory vote FOR the approval of the compensation of the named executive officers.**

**PROPOSAL 3**  
**APPROVAL OF AN AMENDMENT TO**  
**AMENDED AND RESTATED 2014 EMPLOYEE STOCK PURCHASE PLAN**

On January 11, 2016, our board of directors adopted an amendment to the company's Amended and Restated 2014 Employee Stock Purchase Plan ("ESPP"), subject to approval by our stockholders at the Annual Meeting. We are asking our stockholders to approve the amendment, which would increase the number of shares available for issuance under the ESPP by 500,000, representing approximately 0.9% of our shares of common stock outstanding as of April 4, 2016. If approved by our stockholders, the amendment to our ESPP will become effective on the date of such approval.

The ESPP is a broad-based employee plan under which employees may elect to purchase a limited number of shares of our common stock at a discount. As of April 4, 2016, only 8 shares of our common stock remained available for future issuance under the ESPP. If this proposal is approved, an additional 500,000 shares will be added to the ESPP's share reserve. Our ESPP has been very well received by our employees since its adoption in 2014. The board of directors believes that, because of its broad-based nature, the ESPP has served and, if the proposal is approved, will continue to serve as a meaningful part of our compensation program. Indeed, the number of employees eligible to participate in the ESPP has increased by approximately 361 since the company adopted the ESPP and, as indicated below, more than 95% of the ESPP participants are non-executive employees. Our board of directors believes that, if the amendment is not approved, we will lose a key and relatively inexpensive contributor to our ability to motivate and retain our employees through stock ownership opportunities.

A summary of the ESPP is set forth below. The summary is qualified by the full text of the ESPP, as proposed to be amended, attached to this proxy statement as Exhibit A.

**Purpose**

The purpose of the ESPP is to provide our employees and employees of our subsidiaries with a convenient way to purchase shares of our common stock. The board of directors believes that participation in the ESPP will incentivize employees to exert maximum efforts for the success of the company and, in turn, enhance stockholder value. The ESPP Plan is intended to satisfy the requirements of Section 423 of the Internal Revenue Code.

**Administration**

The compensation committee of our board of directors, acting in its discretion in accordance with the plan provisions, has full authority and responsibility for administering the ESPP. The committee may delegate to non-committee members such plan-related functions as it deems appropriate. All determinations and decisions made by the compensation committee regarding the administration of the ESPP will be final and binding on all persons.

**Eligibility**

In general, our employees who (i) customarily work at least 20 hours per week, and (ii) have been employed by the company no less than ten days as of the first day of an offering period are eligible to participate in the ESPP. Employees who own (directly or indirectly) stock representing 5% or more of the total combined voting power or value of all classes of our stock are not allowed to participate. The company estimates that approximately 1,282 employees were eligible to become participants in the ESPP as of March 31, 2016.

**Share Reserve; Annual Purchase Limitation**

The total number of shares of common stock currently reserved for issuance over the term of the ESPP is 300,000. As of April 4, 2016, an aggregate 299,992 shares of common stock have been issued to employees

under the ESPP, and 8 shares of common stock remained available for future issuance. Assuming that this proposal is approved by the stockholders, the total number of shares of common stock reserved for issuance under the ESPP will be increased by an additional 500,000 shares. The shares of common stock issuable under the ESPP may be made available from authorized but unissued shares of common stock or from shares of common stock we reacquire, including shares of common stock repurchased on the open market. If any right to purchase shares of common stock terminates for any reason without having been exercised, the shares of common stock not purchased under such right will again become available for issuance under the ESPP.

In general, for each calendar year, no participant may purchase shares having a value of more than \$25,000, based upon the fair market value of our shares at the beginning of the applicable offering period. This limitation is imposed by Section 423 of the Internal Revenue Code and will be administered and applied accordingly.

### **Participation; Payroll Deductions**

Participation in the ESPP is completely voluntary. Eligible employees who wish to become participants may do so by completing an election form authorizing us to withhold a certain amount from their pay and apply such amount to the purchase of shares under the plan. Payroll deductions are made from after-tax pay. In general, payroll deduction elections are made prior to the beginning of an offering period and remain in effect until subsequently changed or terminated by the employee. See “Terms of Offerings” below.

### **Terms of Offerings**

*Offering Periods; Purchase Dates.* Since its inception, the ESPP has operated with a series of overlapping offering periods, each with a duration of 24 months. A new 24-month offering period begins on each January 1 and July 1. Existing offering periods terminate early if the fair market value of our shares on the first day of a new offering period is less than the fair market value of our shares on the first day of the existing offering period. An employee may participate in only one offering period at a time.

As the ESPP is currently administered, each offering period has four semi-annual purchase dates when participants’ accumulated payroll deductions will be used to purchase shares. For example, the scheduled purchase dates in the current offering period that began January 1, 2016 are: June 30, 2016, December 31, 2016, June 30, 2017 and December 31, 2017. Purchases will be made on the last trading day of each purchase period. See “Purchase of Shares” below for additional information.

Our compensation committee may change the frequency and duration of offering periods and purchase dates under the ESPP, subject to complying with Section 423 of the Internal Revenue Code.

*Purchase of Shares.* On each purchase date within an offering period, the amount of a participant’s accumulated payroll deductions will be used to purchase shares of common stock (subject to the \$25,000 annual statutory limit described above). Unless the compensation committee determines a different number, no more than 2,500 shares may be purchased by a participant in any 24-month offering period.

The purchase price per share will be equal to 85% of the fair market value of a share of common stock on the first day of the applicable offering period or, if lower, 85% of the fair market value per share on the applicable purchase date. For this purpose, the fair market value of a share of common stock on any date will be equal to the closing price of a share of common stock on the NASDAQ Global Select Market or, if no shares are traded on that date, the closing price per share on the last preceding date on which such shares are traded. The number of shares purchased by a participant on any purchase date will be equal to the quotient obtained by dividing the amount of the participant’s accumulated and unused payroll deductions by the applicable purchase price per share, rounded down to nearest whole share.

If the fair market value of our common stock on any purchase date during an offering period is less than the fair market value of our common stock on the first day of the offering period, then a participant's accumulated payroll deductions will be applied to purchase shares of common stock on that purchase date and that offering period will then terminate. In general, the participant will be automatically enrolled for the next succeeding offering period at the same level of payroll deductions in effect for the terminated offering period.

*Termination of Participation.* In general, employees may elect to withdraw their accumulated contributions before the end of an offering period, in which case they may not again become a participant before the beginning of a subsequent offering period. An employee's participation in the ESPP will automatically terminate if his or her employment terminates. Payroll deductions that have not been used to purchase shares will be returned to a terminated participant without interest.

### **Capital Changes; Change in Control**

In the event of a stock split, stock dividend, spin-off, recapitalization or other change in our capital structure, the compensation committee may make corresponding adjustments, if any, as it may deem appropriate to the number and class of shares that may be issued under the ESPP, the maximum number of shares that may be purchased during any offering period or calendar year, and the number and class of shares and the purchase price per share covered by purchase rights that are then outstanding under the plan.

If a change in control (described in the plan as a "Sale Event") occurs and if the surviving or acquiring company (or a parent of the surviving or acquiring company) does not assume and continue outstanding ESPP purchase rights or convert them into rights to purchase its own securities, the participants' unused payroll deductions may be applied to purchase shares which, in turn, would participate in the change in control transaction on the same basis as any other outstanding shares. Any such amounts that are not so applied (for example, by reason of applicable plan or legal limitations) will be refunded to the affected participants.

### **Amendment and Termination of the ESPP**

The board of directors and the compensation committee may amend, suspend or terminate the ESPP at any time and for any reason. In general, no such action may adversely affect a participant's then outstanding right to purchase shares with previously accumulated payroll deductions. Amendments may be made without stockholder approval unless such approval is required in order to comply with Section 423 of the Internal Revenue Code or applicable stock exchange rules. For example, stockholder approval would be required for an amendment increasing the number of our shares that may be issued and sold under the plan (other than increases made as a result of capital changes, as discussed above under the heading "Capital Changes; Change in Control") or which would expand the classes of employees who are eligible to participate in the plan (other than designations by the compensation committee of subsidiaries whose employees are eligible to participate).

### **Federal Income Tax Considerations**

The following is a general summary under current law of the material federal income tax considerations associated with the ESPP. This summary does not address other tax considerations, such as state, local and foreign taxes, and is for general information purposes only. The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Internal Revenue Code. The ESPP is not subject to any provisions of the Employee Retirement Income Security Act of 1974.

The money used by participants to purchase shares under the ESPP comes from after-tax payroll deductions (*i.e.*, all of the shares are purchased with previously-taxed dollars). No taxable income is realized by a participant upon the participant's purchase of shares under the ESPP.

Taxable income (or loss) will be realized, however, when a participant sells ESPP-acquired shares. In general, if the shares are sold more than two years from the first day of the offering period in which the shares are purchased and more than one year from the date of purchase, the participant will realize ordinary income equal to the lesser of (1) the excess of the fair market value of the shares on the date of the sale over the purchase price or (2) 15% of the fair market value of the shares as of the first day of the offering period. Any additional gain will be treated as long-term capital gain. If those shares are sold at a loss (*i.e.*, for less than the purchase price), however, no ordinary income will be realized on the sale and the participant will recognize a long-term capital loss equal to the difference between the sale price and the purchase price.

In general, if a participant sells ESPP-acquired shares before the expiration of the two- and one-year holding periods described above, the participant will realize ordinary income equal to the excess of the fair market value of the ESPP shares on the date the ESPP shares are purchased over the purchase price. If the shares are sold for an amount greater than the fair market value on the purchase date, then the remaining gain will be taxable as capital gain. Conversely, if the shares are sold for an amount that is less than fair market value on the purchase date, the participant will recognize a capital loss equal to the difference (without affecting the amount of ordinary income realized in connection with the sale). In general, we will be entitled to a deduction for the amount of any ordinary income realized by a participant upon the sale of ESPP-acquired shares within the two- and one-year holding periods.

### **New Plan Benefits**

The amounts of future stock purchases under the ESPP are not determinable because, under the terms of the ESPP, purchases are based upon elections made by participants. Future purchase prices are not determinable because they are based upon fair market value of shares of our common stock. For illustrative purposes only, the following table sets forth, for those named executive officers who purchased shares under our ESPP during 2015 and the groups identified below, (1) the number of shares of our common stock that were purchased under our ESPP during 2015, and (2) the aggregate purchase price paid:

<u>Name or Group</u>	<u>Number of Shares Purchased (#)</u>	<u>Aggregate Purchase Price (\$)</u>
Tarek A. Sherif . . . . .	565	37.54
Glen M. de Vries . . . . .	446	37.54
Michael L. Capone . . . . .	523	40.59
Steven I. Hirschfeld . . . . .	565	37.54
All current executive officers, as a group (8 persons) . . . . .	2,878	38.09
All current directors who are not executive officers, as a group (5 persons)(1) . . . . .	—	—
All current employees, as a group (approx. 760 persons) . . . . .	160,816	38.31

(1) Directors who are not our employees are not eligible to participate in our ESPP.

### **Vote Required**

Approval of the amendment to our ESPP requires the affirmative vote of the holders of a majority of the shares of common stock voted electronically during the live webcast or represented by proxy and voting on the matter. Abstentions from voting on this proposal will have the practical effect of a vote against this proposal because an abstention results in one less for vote the proposal. Broker non-votes will have no effect on this proposal.

### **Board Recommendation**

**Our board of directors recommends that the stockholders approve the amendment increasing the aggregate number of shares that may be issued under the ESPP.**

## PROPOSAL 4

### AMENDMENT TO CHARTER TO ELIMINATE RESTRICTIONS ON THE REMOVAL OF DIRECTORS

Stockholders are being asked to approve an amendment to the company's Fifth Amended and Restated Certificate of Incorporation ("Charter") to eliminate provisions providing that stockholders may remove directors only for cause. The board of directors approved this amendment on February 11, 2016, subject to stockholder approval, and directed that this amendment be submitted to a vote of the company's stockholders at this Annual Meeting. The board of directors has determined that this amendment is in the best interests of the company and its stockholders and recommends approval by the stockholders.

The Charter currently provides that directors may be removed by the stockholders only for cause by the affirmative vote of the holders of at least a majority of the voting power of the issued and outstanding shares of capital stock of the company then entitled to vote in the election of directors. The Court of Chancery of the State of Delaware held in a case construing the charter of another Delaware corporation that if a Delaware corporation has neither a staggered board nor provides for cumulative voting in the election of directors, provisions of the corporation's charter and bylaws providing that directors may be removed only "for cause" are contrary to Section 141(k) of the General Corporation Law of the State of Delaware and are therefore invalid and unenforceable. While this was not a decision by the Delaware Supreme Court and thus is not binding on other Delaware courts, because the company does not have a staggered board or cumulative voting in the election of directors, the decision raises a question whether the portion of Article VIII of the Charter which provides that directors may be removed by the stockholders only for cause is valid and enforceable. After review, the board of directors has determined that it is advisable and in the best interests of the company and its stockholders to eliminate the provision that stockholders may remove directors only for cause.

As a result, the board of directors has approved, and recommends that the stockholders adopt, an amendment to the Charter, which removes the language providing that stockholders may remove directors only for cause. If stockholders approve this Charter amendment, directors may be removed by the stockholders with or without cause by the holders of a majority of the company's common stock.

If approved, the proposed amendment to the Charter would become effective upon the filing of a Certificate of Amendment with the Secretary of State of the State of Delaware, which the company would do promptly after stockholder approval is obtained for the proposed amendment. The Certificate of Amendment is attached to this Proxy Statement as Exhibit B.

#### **Vote Required**

The affirmative vote of a majority of the outstanding shares of common stock is required to approve the proposed Charter amendment. Abstentions from voting on this proposal and broker non-votes will have the practical effect of a vote against this proposal because an abstention or a broker non-vote results in one less vote for the proposal.

#### **Board Recommendation**

**Our board of directors recommends a vote FOR the amendment of the Charter as set forth herein to eliminate provisions restricting the removal of directors.**

## EXECUTIVE OFFICERS

### Executive Officers

The following table sets forth certain information with respect to the persons serving as executive officers of Medidata as of April 4, 2016.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Tarek A. Sherif . . . . .	53	Chairman, Chief Executive Officer and Director
Glen M. de Vries . . . . .	43	President and Director
Rouven Bergmann . . . . .	43	Chief Financial Officer
Michael L. Capone . . . . .	49	Chief Operating Officer
Steven I. Hirschfeld . . . . .	53	Vice Chairman
Michael I. Otner . . . . .	45	Executive Vice President—General Counsel and Corporate Secretary
Michael C. Pinto . . . . .	47	Executive Vice President—General Manager of Global Sales
Eileen M. Schloss . . . . .	62	Executive Vice President—Human Resources

Set forth below is a brief description of the business experience of our executive officers who are not also directors of Medidata.

**Rouven Bergmann** joined us as our chief financial officer in May 2015, bringing with him significant software business experience in corporate strategy, managing growth, risk and performance management, and financial planning and reporting. Prior to joining the company, Mr. Bergmann worked in various leadership positions at SAP, most recently serving as chief financial officer of SAP North America from March 2014 to April 2015. Mr. Bergmann previously served as chief operating officer for SAP’s global R&D organization (2012-2014), chief financial officer for SAP’s technology, innovation and cloud division (2010-2012), chief financial officer for SAP’s Business Objects division (2008-2010), chief financial officer for SAP India (2007-2008) and head of SAP corporate financial planning & analysis (2005-2007). Mr. Bergmann earned masters degrees in mechanical engineering and business administration from Technical University of Kaiserslautern in Germany and a PhD in economics and finance from the University of Munich in Germany.

**Michael L. Capone** joined us as our chief operating officer in October 2014, bringing with him over 25 years’ experience in guiding product development, information technology, and operations. Prior to joining Medidata, Mr. Capone worked in various executive positions at Automatic Data Processing, Inc. (“ADP”), serving as corporate vice president of product development and chief information officer of ADP (from July 2008 to September 2014), and senior vice president and general manager of ADP’s Global HR/Payroll Outsourcing Business (from July 2005 to June 2008). Mr. Capone holds a B.S. in Computer Science from Dickinson College and an M.B.A. in finance from Pace University.

**Steven I. Hirschfeld** has served as our vice chairman since January 2016. Mr. Hirschfeld previously served as chief commercial officer (from November 2014 to December 2015), executive vice president and chief value officer (from January 2014 to November 2014), executive vice president—customer operations (from January 2011 to December 2013), executive vice president—global sales and alliances (from September 2005 to January 2011), and vice president—sales (from September 2002 to September 2005). From 1999 to 2001, Mr. Hirschfeld served as vice president of sales at I-Many, Inc., a provider of software and related professional services to support contract-based business-to-business relationships. Prior to that, Mr. Hirschfeld spent five years at The Janis Group as sales leader and general manager, where he launched and managed several of The Janis Group’s emerging business units and directed the corporate marketing department. Mr. Hirschfeld holds a B.S. in business administration from the University of Delaware.

**Michael I. Otner** has served as our general counsel and corporate secretary since November 2007 and was promoted to executive vice president in February 2013. Prior to joining us, Mr. Otner served as associate general counsel, vice president and assistant secretary of The BISYS Group, Inc. from 2005 to 2007, where he was responsible for a broad range of SEC and general corporate matters, as well as legal support for the company’s

private equity services business. Mr. Otner previously held various counsel roles of increasing responsibility at GlobespanVirata, Inc. and Conexant Systems, Inc., including serving as general counsel at both companies. Mr. Otner began his legal career specializing in corporate and securities law at Olshan (formerly, Olshan Grundman Frome Rosenzweig & Wolosky LLP), a law firm based in New York City. Mr. Otner holds a J.D. from Case Western Reserve University School of Law and a B.B.A. in marketing from the University of Wisconsin-Madison.

**Michael C. Pinto** has served as our executive vice president—general manager of global sales since September 2015. Prior to joining us, Mr. Pinto served as vice president and general manager of DocuSign’s enterprise and healthcare life sciences organization from August 2014 to September 2015. Prior to that, he was senior vice president and general manager of SAP’s US East Coast Market Unit. Mr. Pinto previously held positions at multiple healthcare companies and startups, including Bristol-Myers Squibb and American Home Products (now a part of Pfizer), and Model N. Mr. Pinto holds a BA in economics from Lafayette College and an MBA in finance and marketing from New York University Stern School of business.

**Eileen M. Schloss** has served as our executive vice president—human resources since October 2012. Prior to joining us, Ms. Schloss served as executive vice president at Rovi Corporation, a publicly traded digital media entertainment software and services company, from 2007 to 2012. Prior to that, she held leadership roles in human resources and administration at Caspian Networks, Inc., Exodus Communications, AppGenesys, Inc., Apple Computer, Charles Schwab, Inc. and Tandem Computers, Inc. Ms. Schloss holds a B.S. in Organizational Behavior from the University of San Francisco and an M.S. in Technology Management from Pepperdine University.

## Compensation Discussion and Analysis

This Compensation Discussion and Analysis (“CD&A”) is intended to assist our stockholders in understanding our executive compensation program by providing an overview of our executive compensation-related philosophy, policies, practices, and decisions. It also explains how we determined the material elements of compensation for our “named executive officers” (as in accordance with SEC rules), who for 2015 were:

- **Tarek A. Sherif**, our Chairman and Chief Executive Officer (our “CEO”);
- **Glen M. de Vries**, our President;
- **Rouven Bergmann**, our Chief Financial Officer (our “CFO”);
- **Michael L. Capone**, our Chief Operating Officer;
- **Steven I. Hirschfeld**, our Vice Chairman; and
- **Cory A. Douglas**, our former Executive Vice President – CFO\*

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\* Mr. Douglas entered into a separation agreement with the company on May 13, 2015, pursuant to which he served as CFO until May 18, 2015, at which time he ceased to be an executive officer of the company. In compliance with SEC rules, information regarding Mr. Douglas’s compensation is being included in this proxy statement because he served as the company’s principal financial officer during 2015.

Specifically, this CD&A provides an overview of our executive compensation philosophy, the overall objectives of our executive compensation program, and each compensation element that we provide to our named executive officers. In addition, it explains how and why our compensation committee arrived at specific compensation decisions for 2015 for our named executive officers. It should be read together with the executive compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs.



To assist our stockholders in locating important information, this CD&A is organized as follows:

<u>CD&amp;A Section</u>	<u>Page</u>
Overview . . . . .	27
Compensation Philosophy and Guiding Principles . . . . .	31
CEO and President Compensation . . . . .	32
Compensation-Setting Process . . . . .	32
Compensation Elements . . . . .	36
Post-Employment Compensation . . . . .	42
Other Compensation Policies . . . . .	43
Tax Considerations . . . . .	44
Risks Presented by Compensation Programs . . . . .	44

## **Overview**

Medidata is focused on helping our customers improve the way new drugs are developed by providing cloud-based clinical development solutions that enhance the efficiency of clinical trials. To achieve our corporate mission, we rely on our employees. We encourage teamwork and collaboration among our employees and we demand accountability and strong results. The goal of our executive compensation program is to attract, motivate and retain the best possible executive talent. We believe that executive compensation should support our company strategy and business objectives and encourage increased stockholder value. We maintain compensation plans and arrangements that link executive compensation to the achievement of key financial measures, including revenue and profitability, and other stockholder value creation measures. To achieve our objectives, we use a mix of compensation elements including base salary, performance-based cash incentives, long-term incentive compensation in the form of equity awards and employee benefits.

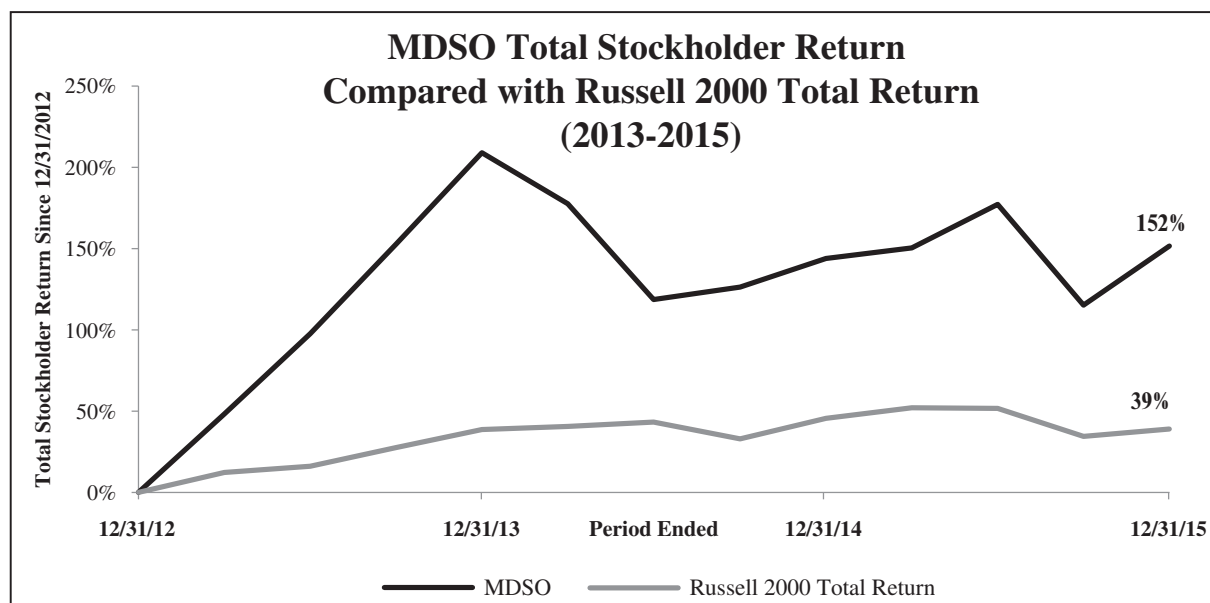
### ***2015 Business Highlights***

Although we did not fully achieve our ambitious financial performance objectives for the year, we nevertheless demonstrated strong financial and business performance in 2015:

- Revenue grew to a record \$392.5 million (97.6% of target), representing an increase of \$57.4 million or 17% year over year.
- Subscription revenue was a record \$336.2 million, an increase of 20% over 2014.
- EBITDAO (earnings before interest, taxes, depreciation, amortization and stock-based compensation, as further described below) grew approximately 20% to \$89.0 million (95.7 % of target).

Our one-year total stockholder return (TSR) (measured by comparing the closing price of our common stock on NASDAQ on December 31, 2015 vs. December 31, 2014) increased by about 3%. Our stock price has increased significantly over the longer term, as reflected by our three-year TSR of 152% (measured by comparing the closing price of our common stock on NASDAQ on December 31, 2015 vs. December 31, 2012).

The graph below illustrates the three-year TSR of both our common stock and the Russell 2000 Total Return Index.



### 2015 Say-on-Pay Vote

We conducted an advisory vote on the 2014 compensation of our named executive officers (a “say-on-pay” vote) at our 2015 annual meeting of stockholders. Approximately 99.5% of the shares that were voted on this proposal were cast in favor of our named executive officers’ compensation. We appreciate this extremely positive feedback and consider it a reflection of our senior management team’s continued constructive dialogue with our major stockholders and the resulting actions taken by our board of directors with respect to our executive compensation program. We conducted our additional investor outreach in 2015 with the following major stockholders (representing more than 40% of our outstanding shares, based on their most recent SEC filings): Brown Capital Management, FMR, Sands Capital Management, BlackRock, The Vanguard Group and ClearBridge Investments.

### 2015 Executive Compensation Summary

Consistent with our performance and compensation philosophy, the compensation committee took the following actions with respect to our named executive officers’ 2015 compensation:

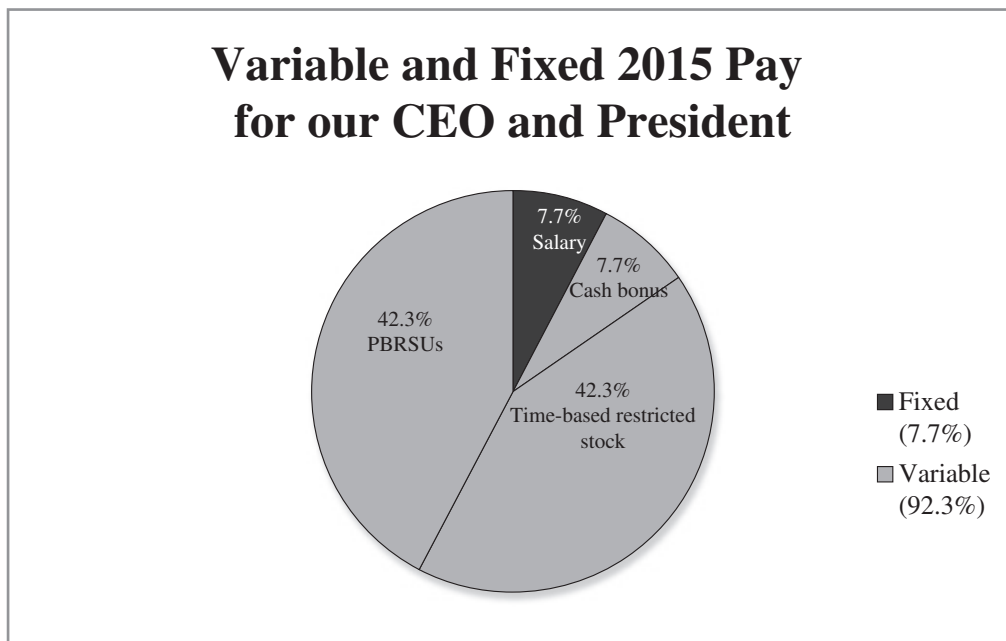
Named Executive Officer	2015 Base Salary Increase from 2014	Annual Bonus Paid in 2016 for 2015 Performance, as a Percentage of Target Bonus	2015 Annual Time-Based Restricted Stock Award (# of shares)	2015 Annual PBRSU Award (total # of units that may be earned in 2016, 2017 and 2018)	Percentage of Eligible 2015 Annual PBRSU Award Actually Earned in 2016
Tarek A. Sherif	10%	57%	66,890	66,890	128%
Glen M. de Vries	10%	57%	66,890	66,890	128%
Michael L. Capone	0%	92.8%	22,297	22,297	128%
Steven I. Hirschfeld	18%	41.0%	22,297	22,297	128%

Mr. Bergmann is not included in the above table and certain others because he joined us in May 2015 and was therefore not present when the 2015 compensation program was established. Mr. Douglas is also not included in the above table and certain others because his compensation for 2015 was determined under the terms of his separation agreement with the company. Messrs. Bergmann’s and Douglas’s 2015 compensation is fully set forth in the Summary Compensation Table and also as appropriate in the discussion below of each primary compensation element.

### Emphasis on Variable and Performance-Based Compensation

The annual compensation earned by our executive officers, including our named executive officers, varies from year to year based on our corporate financial and operational results and individual performance. Consistent with our compensation philosophy, our executive compensation program emphasizes “variable” pay (including an annual cash bonus opportunity under our annual bonus plan and long-term incentive compensation in the form of equity awards for which the value will fluctuate based on our stock price) over “fixed” pay (in the form of base salary) and seeks to balance short-term and long-term incentives, as well as performance-based and time-based incentives.

As illustrated in the following chart, 92.3% of the target total direct compensation of our CEO and our President in 2015 consisted of variable pay, with only 7.7% classified as fixed pay.



The compensation committee believes that our executive compensation program continues to reflect a strong “pay-for-performance” orientation and is well-aligned with the interests of our stockholders. A significant portion of the target total direct compensation of our named executive officers is performance-based, with the realization of compensation dependent upon the achievement of our ambitious performance objectives designed to enhance stockholder value. For example, based on our results relative to the rigorous financial performance target levels set by the compensation committee at the beginning of 2015, the cash bonuses paid to our CEO and President for 2015 performance represented 57% of their target cash bonus opportunities.

Non-performance-based pay, consisting of base salary and time-based restricted stock, made up 50% of our CEO’s and President’s target total direct compensation in 2015, while target performance-based pay, consisting of target annual cash bonuses and performance-based restricted stock units (“PBRsUs”), made up 50% of their target total direct compensation. The PBRsUs granted in 2015 (“2015 PBRsU Awards”) are earned with respect to one-third of the units based on our relative one-year TSR (2015), one-third based on our relative two-year TSR (2015-16), and one-third based on our relative three-year TSR (2015-17), in each case compared to the Russell 2000 Index (see “Earnings Determination for 2015 PBRsU Awards”). By making relative TSR the only basis for earning the 2015 PBRsU Awards, we have aligned the ultimate outcome of the 2015 PBRsU Awards with our stockholders’ return. The PBRsUs awarded in 2016 are to be earned over a full three-year performance period, completing our transition to longer performance periods for PBRsUs.

Similar allocations apply to our other executive officers, including our other named executive officers. The following chart shows the percentages of target performance-based pay versus non-performance-based pay for our CEO and our other named executive officers (except for Mr. Bergmann, who joined us in May 2015) determined in February 2015:

Named Executive Officer	Non-Performance-Based Pay (Salary + Time-Based Restricted Stock Award Economic Value at Time of Grant) *	Non-Performance-Based Pay Percentage of Total	Target Performance-Based Pay (Target Annual Cash Bonus for 2015 + 2015 PBR SU Award at Target Economic Value at Time of Grant) **	Target Performance-Based Pay Percentage of Total
Tarek A. Sherif .....	\$3,550,000	50.0%	\$3,550,000	50.0%
Glen M. de Vries .....	\$3,550,000	50.0%	\$3,550,000	50.0%
Michael L. Capone .....	\$1,450,000	52.5%	\$1,315,000	47.6%
Steven I. Hirschfeld .....	\$1,382,000	50.0%	\$1,382,000	50.0%
Cory A. Douglas .....	\$ 990,000	53.7%	\$ 854,000	46.3%

\* For time-based restricted stock award component, represents dollar amount (economic value) approved by our compensation committee.

\*\* For PBR SU award component, represents dollar amount (economic value) approved by our compensation committee.

### ***Executive Compensation Best Practices***

We endeavor to maintain best practices in our executive compensation program, including compensation-related corporate governance standards, consistent with our executive compensation philosophy. During 2015, the following executive compensation policies and practices were in place, including both policies and practices we have implemented to drive performance and policies and practices that either prohibit or minimize behaviors that we do not believe serve our stockholders' long-term interests:

#### What We Do

- ✓ ***Compensation Committee Independence*** – Our board of directors maintains a compensation committee comprised solely of independent directors who have established effective means for communicating with our stockholders and regularly engage in stockholder outreach regarding their executive compensation ideas and concerns.
- ✓ ***Compensation Committee Advisor*** – The compensation committee engages and retains its own advisors. During 2015, the compensation committee engaged Compensia, Inc., a national executive compensation consulting firm, to assist with its responsibilities. Compensia performs no consulting or other services for us.
- ✓ ***Annual Compensation Review*** – The compensation committee conducts an annual review of our executive compensation philosophy and strategy, including a review of the compensation peer group used for comparative purposes.
- ✓ ***Compensation-Related Risk Assessment*** – We mitigate undue risk, including the use of multiple performance factors in determining our annual cash bonuses, so that employees do not focus on a single financial measure, and multiple-year vesting of our equity awards to support long-term stockholder value creation.
- ✓ ***Emphasize Performance-based Incentive Compensation*** – We tie pay to performance. A significant portion of executive pay is not guaranteed. For example, as indicated above, performance-based

compensation represented more than 46% of the target total direct compensation opportunity for each of our named executive officers in 2015. We set clear financial goals for corporate performance and differentiate based on individual achievement. The compensation committee regularly reviews how executive pay aligns with our financial performance.

- ✓ ***Emphasize Long-Term Equity Compensation*** – The compensation committee uses equity awards to deliver long-term incentive compensation opportunities to our executive officers, including our named executive officers. These equity awards vest or may be earned over multi-year periods, which better serves our long-term value creation goals and retention objectives.
- ✓ ***Limited Executive Perquisites*** – We provide modest amounts of perquisites or other personal benefits to the named executive officers, which serve a sound business purpose. In addition, the named executive officers participate in our health and welfare benefit programs on the same basis as all of our employees.
- ✓ ***Stock Ownership Policy*** – We have adopted stock ownership guidelines for our executive officers, which require each of them to own a specified amount of our common stock, and therefore significantly aligns their interests with our stockholders’ interests.
- ✓ ***Executive Incentive Compensation Recoupment Policy*** – We have adopted a compensation recovery (“clawback”) policy that provides for the recoupment of cash incentive compensation from our executive officers in the event of a financial restatement resulting from the misconduct of an executive officer.
- ✓ ***“Double-Trigger” Change in Control Arrangements*** – We have reasonable “double trigger” change in control arrangements, which provide payments and benefits to an eligible executive officer only if there is both the occurrence of a change in control of the company and the involuntary or constructive termination of employment of the individual within a designated protection period.
- ✓ ***Prohibition on Hedging*** – All employees are prohibited from engaging in hedging transactions in our common stock shares.
- ✓ ***Succession Planning*** – Our board of directors reviews the risks associated with our key executive positions on an annual basis so that we have an adequate succession strategy and plans are in place for our most critical positions.

#### What We Do Not Do

- × ***Retirement Programs*** – We do not have an executive retirement plan that provides extra benefits to our executive officers.
- × ***No Tax “Gross-Ups” or Payments*** – We do not provide any “gross-ups” or tax payments in connection with any compensation element (other than de minimis amounts relating to travel expenses for employee participants’ partners for our President’s Club sales awards meeting) or any excise tax “gross-up” or tax reimbursement in connection with any change in control payments or benefits.
- × ***No Employment Agreements*** – We have no employment agreements or multi-year compensation guarantees for any of our named executive officers.
- × ***No Stock Option Repricing*** – Our equity plan prohibits the repricing of options without stockholder approval.

#### **Compensation Philosophy and Guiding Principles**

Our executive compensation programs are designed to:

- attract and retain talented and experienced executives by offering market competitive compensation programs;

- motivate key executives to achieve strategic business initiatives and to reward them for their achievements;
- support a “pay-for-performance” environment that differentiates bonus amounts among our executives based on their responsibilities and contributions toward company performance; and
- align the interests of our executives with the long-term interests of our stockholders through equity awards whose value over time depends upon the market value of our common stock.

To achieve these objectives, our executive compensation program provides a mix of compensation elements, including base salary, annual cash bonus opportunities, long-term incentive compensation in the form of equity awards, and broad-based employee benefits. In addition to these key elements of compensation, our executive compensation program includes “double-trigger” termination change in control protections.

In summary, our “pay-for-performance” philosophy places a much greater emphasis on the at-risk earnings of our named executive officers so that their interests are better aligned with the interests of our stockholders. The compensation committee therefore awards significant levels of at-risk compensation in the form of performance-based equity awards that are directly tied to our financial performance and the creation of stockholder value. The weighting among the compensation components is structured such that a majority of an executive officer’s target total direct compensation will be incentive-based (annual cash bonuses and equity awards), rather than fixed (base salary). Our compensation committee believes that this structure strongly emphasizes the performance-based nature of our compensation program.

### **CEO and President Compensation**

The compensation committee considers the company fortunate to have, in Messrs. Sherif and de Vries, founders who have provided continuous guidance as co-leaders of the company. Given the long-term complementary nature of their co-leadership responsibilities and their ongoing integral contributions to our success, the compensation committee has determined that it is appropriate to compensate them at a commensurate level. To reflect this unique management structure and to prevent compensating each of our co-leaders at the higher “chief executive officer” level, when developing compensation recommendations for our CEO and President, the compensation committee considers the *average* pay of the two highest-paid executives at the companies in our compensation peer group with separate CEO and President positions.

### **Compensation-Setting Process**

At the direction of our board of directors, the compensation committee endeavors to ensure that the compensation programs for the executive officers of the company and its subsidiaries are competitive and consistent with market conditions to attract and retain key executives critical to our long-term success. The compensation committee also must ensure that the compensation is attractive to key executives with the proper background and experience required for our future growth. The compensation committee believes that our overall financial performance and long-term stockholder value should be the most important factors in determining the total compensation of our executive officers. At the executive officer level, the compensation committee has a policy that a significant proportion of target total direct compensation should consist of variable, performance-based components, such as PBRSU awards and annual cash bonuses, which can increase or decrease to reflect changes in company and individual performance.

The compensation committee evaluates the total compensation of our executive officers, including our named executive officers, in light of information regarding the compensation practices and corporate financial performance of similar companies in our peer group. Market compensation levels are important inputs into the decision-making process. Additional factors considered include job scope, individual skills/experience, relative importance of the individual’s role, internal pay equity, historical pay levels and equity holdings, and recent company performance.

### ***Role of the Compensation Committee***

The compensation committee determines all compensation for our CEO and President and (taking into account our CEO's recommendation) also for our other executive officers, including base salaries, annual cash bonuses and long-term incentive compensation in the form of equity awards. The compensation committee directs management, including our CEO, to prepare reports and recommendations for the review, discussion, modification and final approval by the compensation committee with respect to various aspects of our executive officers' total compensation. The compensation committee believes, for example, that the executive officers have greater day-to-day insight into the key metrics on which company performance should be evaluated. Consequently, the compensation committee directs our CEO, and for certain matters, our CFO or executive vice president— human resources, to prepare recommendations with respect to appropriate qualitative and quantitative criteria on which our executive officers' performance might be based. In the case of determining the compensation of our CEO and President, the compensation committee meets outside the presence of our CEO and President.

The compensation committee considers many factors in setting pay levels. Factors considered in setting the compensation levels for individual executive officers include the executive's experience, role and responsibilities, past performance, expected future contributions, criticality to the organization, competitive market data and internal fairness between executives.

When reviewing external market data, the compensation committee generally considers the middle two quartiles (*i.e.*, from the 25th to the 75th percentiles) as the competitive "market," but does not specifically target a specific pay percentile for setting compensation levels because it considers multiple market sources (which do not always agree with one another), and our executive officers' positions and responsibilities do not always match well with the positions referenced in the market data. Rather, the purpose of this analysis is to determine whether the compensation offered to each executive officer, both in total and with respect to each of the constituent components, is competitive with the applicable market comparables that the compensation committee has reviewed for the corresponding period. Where total compensation or a specific component of compensation is not within a competitive range, the compensation committee uses the competitive market data as one factor in making its compensation decision, but may also take into account factors specific to an executive officer as described in the previous paragraph.

The compensation committee considers these reports and recommendations in discharging its duties with respect to reviewing and setting the compensation of our executive officers, including our named executive officers. Other resources that our compensation committee may rely upon include the individual director's respective experience and recommendations, recommendations of Compensia, and competitive market data provided by Compensia or management.

### ***Role of our CEO and Other Management***

Generally, our internal personnel responsible for our compensation analysis attend a portion of each compensation committee meeting and leave before certain executive sessions. No executive officer is present or participates directly in the compensation committee final determinations regarding the amount of any component of his or her own compensation. However, given his responsibilities for managing the performance of our executive officers, our CEO plays a primary role in establishing the performance goals for, and evaluating the performance of, our other executive officers. The compensation committee solicits and considers his evaluations and recommendations, including his recommendations regarding compensation in a given year.

### ***Role of Compensation Consultant***

The compensation committee has the authority under its charter to engage the services of outside advisors, experts and others to assist the committee. For purposes of its 2015 executive compensation review, the

compensation committee directly retained the services of Compensia, Inc., a national executive compensation consulting firm. Compensia reviewed and advised on all principal aspects of the executive compensation program, including, but not limited to:

- providing recommendations regarding the composition of our compensation peer group;
- analyzing compensation peer group data, compensation survey data, and other publicly available data (including applying its experience with other companies); and
- reviewing and advising on executive compensation.

For 2015, Compensia also assisted the compensation committee with our equity compensation strategy, including the appropriate mix and weight of different equity vehicles. Representatives of Compensia attend meetings of the compensation committee as requested and also communicate with the compensation committee outside of meetings. Compensia reports to the compensation committee rather than to management, although Compensia will meet with members of management for purposes of reviewing the market data it compiles and analyzes, gathering information on current compensation practices and providing feedback to management on proposals that management may make to the compensation committee. As part of its engagement, Compensia also assists with reviewing and advising on compensation-related disclosures.

The compensation committee may replace Compensia or hire additional advisors at any time. Based on the consideration of the various factors as set forth in the rules of the SEC and NASDAQ, the compensation committee has determined that Compensia is independent and does not believe that its relationship with Compensia and the work of Compensia on behalf of the compensation committee have raised any conflict of interest.

### ***Compensation Peer Group***

In the course of its deliberations, the compensation committee assesses our executive compensation program and each individual element of compensation against the competitive market, as represented by a group of publicly-traded peer companies. In August 2014, with the assistance of Compensia, the compensation committee evaluated and updated our compensation peer group using the following criteria:

- companies with similar revenue and market capitalization as us;
- software, healthcare technology and software-as-a-service companies; and
- companies against which the compensation committee believes we compete for talent and for stockholder investment.

As a result of this process, the compensation committee approved an updated compensation peer group in August 2014 consisting of the following 19 companies:

- Aspen Technology, Inc.
- athenahealth, Inc.
- Blackbaud, Inc.
- Bottomline Technologies, Inc.
- BroadSoft, Inc.
- comScore, Inc.
- Constant Contact, Inc.
- Cornerstone OnDemand, Inc.
- Infoblox Inc.



- LogMeIn, Inc.
- MedAssets, Inc.
- NetSuite Inc.
- Omnicell, Inc.
- Quality Systems, Inc.
- RealPage, Inc.
- ServiceNow, Inc.
- SolarWinds, Inc.
- Synchronoss Technologies, Inc.
- The Ultimate Software Group, Inc.

Revenues of the compensation peer group ranged from \$178 million to \$678 million, with a median of \$373 million, for the four quarters completed as of June 30, 2014; market capitalization of the peer group ranged from \$684 million to \$8.315 billion, with a median of \$1.42 billion, as of July 7, 2014; and headcount of the peer group ranged from 603 to 3,337 employees, with a median of 1,328 employees, as of the end of each company's most recently completed year. Our revenue for the same four quarters was \$290 million, our market capitalization as of July 7, 2014 was \$2.207 billion, and we had 923 employees at the time of the 2014 peer group evaluation.

The compensation committee conducted another peer group review using similar criteria in July 2015, to be used in connection with its compensation deliberations with respect to 2016. The July 2015 review resulted in the removal of three companies (MedAssets, Inc., Quality Systems, Inc., and ServiceNow, Inc.) from, and the addition of three companies (Manhattan Associates, Inc., Tableau Software, Inc., and Veeva Systems Inc.) to the peer group, which still numbers 19 companies.

The compensation committee intends to continue reviewing the compensation peer group annually, recognizing that our compensation policies and practices must be competitive in the marketplace, and this peer group information is useful in assessing the reasonableness and appropriateness of individual executive compensation elements and of our overall executive compensation packages. This information is only one of several factors that the compensation committee considers, however, in making its decisions with respect to the compensation of our executive officers.

## Compensation Elements

The three primary elements of our executive compensation programs are: (1) base salary, (2) annual cash bonus opportunities, and (3) long-term incentive compensation in the form of equity awards, as described below:

<u>Compensation Element</u>	<u>What This Element Rewards</u>	<u>Purpose and Key Features of Element</u>
Base salary . . . . .	Individual performance, level of experience, expected future performance and contributions.	Provides competitive level of fixed compensation determined by the market value of the position, with actual base salaries established based on the facts and circumstances of each executive officer and each individual position.
Annual cash bonuses . . . . .	Achievement of pre-established corporate performance objectives for the year (and individual performance objectives for our named executive officers other than the CEO and President).	Motivate executive officers to achieve specific company and individual performance objectives.  Generally, performance levels are established to encourage our executive officers to achieve or exceed performance objectives.
Long-term incentive compensation . . . . .	Achievement of corporate performance objectives designed to enhance long-term stockholder value and attract, retain, motivate, and reward executive officers over extended periods for achieving important corporate objectives.  Vesting requirements promote retention of highly valued executive officers.	Time-based equity awards vest over several years, providing a variable “at risk” pay opportunity. Because the ultimate value of these equity awards is directly related to the market price of our common stock, and the awards are only earned over an extended period of time subject to vesting requirements, they serve to focus executive officers on the creation of sustainable long-term stockholder value. In addition, a substantial percentage of each equity award for our executive officers is in the form of Performance-Based Restricted Stock Unit (“PBRSU”) awards, with respect to which shares will be earned only if our performance meets or exceeds criteria established at the time of the PBRSU award, thus further encouraging our executive officers to attain key corporate objectives over time.

### ***Base Salary***

In 2015, the compensation committee reviewed the base salaries of our executive officers, including our named executive officers, focusing on the competitiveness of these salaries, based on compensation survey data and our select peer group. Based on that information, a review of each named executive officer's performance, the recommendations of our CEO (other than with respect to his base salary and the base salary of our President), and the factors described above, the compensation committee approved base salary increases for certain of the named executive officers.

The base salaries of our named executive officers for 2015 were set as follows:

<u>Named Executive Officer**</u>	<u>2014 Base Salary</u>	<u>2015 Base Salary</u>	<u>Percentage Adjustment***</u>
Tarek A. Sherif . . . . .	\$500,000	\$550,000	10%
Glen M. de Vries . . . . .	\$500,000	\$550,000	10%
Michael L. Capone . . . . .	\$450,000*	\$450,000	0%
Steven I. Hirschfeld . . . . .	\$325,000	\$382,500	18%
Cory A. Douglas . . . . .	\$340,000	\$340,000	0%

\* On an annualized basis. Mr. Capone joined us in October 2014.

\*\* In connection with his appointment as our Chief Financial Officer in May 2015, the compensation committee set Mr. Bergmann's initial annual base salary at \$450,000.

\*\*\* The base salary increases for 2015 for Messrs. Sherif and de Vries reflect market-based adjustments, and for Mr. Hirschfeld reflects his change of role in November 2014 to chief commercial officer.

The base salaries of our named executive officers during 2015 are set forth in the "2015 Summary Compensation Table" below.

### ***Annual Cash Bonuses***

Performance-based cash bonuses are paid to our executive officers, including our named executive officers, based on the achievement of corporate performance objectives and a qualitative assessment of the executive officer's individual performance, each as determined by the compensation committee. These corporate objectives may change from year to year as our company and market conditions continue to evolve and different priorities are established in the discretion of the compensation committee. Annual cash bonuses are paid to reward achievement of critical operating, financial, strategic and individual measures and goals that are expected to contribute to stockholder value creation over time.

The cash bonuses paid for the 2015 performance of our CEO and President were determined by the compensation committee based solely on the achievement of corporate financial performance objectives, and the cash bonuses for the 2015 performance of each of our other named executive officers (other than Mr. Hirschfeld) were determined by the compensation committee based 75% on the achievement of corporate financial performance objectives and 25% on the achievement of individual performance objectives, which were established based on his or her individual responsibilities. In the case of Mr. Hirschfeld, our vice chairman, his cash bonus was based 50% on the achievement of corporate financial objectives, 25% on a sales objective (net new revenue generated in 2015 through sales activities), and 25% on the achievement of individual performance objectives.

### **Target Bonus Opportunities**

For 2015, the target cash bonus opportunities for our executive officers were established as a percentage of their annual base salary. The compensation committee used external market data to determine the applicable

target cash bonus opportunities for each executive officer. For 2015, the target annual cash bonus opportunities for each of our named executive officers, expressed as a percentage of his annual base salary, were as follows:

<u>Named Executive Officer</u>	<u>Annual Base Salary</u>	<u>Target Bonus Opportunity (as a percentage of base salary)</u>	<u>Target Bonus Opportunity*</u>
Tarek A. Sherif . . . . .	\$550,000	100%	\$550,000
Glen M. de Vries . . . . .	\$550,000	100%	\$550,000
Michael L. Capone . . . . .	\$450,000	70%	\$315,000
Steven I. Hirschfeld . . . . .	\$382,500	100%	\$382,500
Cory A. Douglas . . . . .	\$340,000	60%	\$204,000

\* In connection with his appointment as our Chief Financial Officer in May 2015, the compensation committee set Mr. Bergmann’s initial target cash bonus opportunity at 50% of his base salary. In addition, Mr. Bergmann received a sign-on bonus of \$300,000 in 2015 upon joining the company.

Corporate Performance Objectives – Financial Bonus Factor

For 2015, the compensation committee selected revenue and EBITDAO (as defined below) as the two measures of our corporate performance objectives to be used in determining the financial bonus factor that is used for the payment of annual cash bonuses. Growth in revenue and profitability are paramount objectives of our strategy and broad indicators of the success of our business. The compensation committee believes that rewarding these strategic imperatives through effective and appropriate compensation and retention tools yield the desired alignment with stockholder interests, including stockholder value creation. Accordingly, the compensation committee uses EBITDAO as its primary profitability measure, which is a non-GAAP measure that represents net income calculated in accordance with GAAP, excluding interest, taxes, depreciation, amortization and stock-based compensation. The compensation committee believes that EBITDAO provides a meaningful measure of core financial performance and supports our short-term and long-term business objectives.

Both corporate financial measures are weighted in determining the total financial bonus factor, with the opportunity to earn an annual cash bonus in excess of that level based on achieving performance superior to the target levels established by the compensation committee. The performance target levels for the annual cash bonuses for 2015 performance were \$402 million of revenue (representing a 20% increase over actual 2014 revenue) and \$93 million of EBITDAO (representing a 25% increase over actual 2014 EBITDAO). The compensation committee established a target matrix comparing revenue and EBITDAO at different performance levels, with each combination of revenue and EBITDAO providing for a specific payout level (not to exceed 300%). The matrix was established to ensure that bonuses would be earned for corporate performance only where we substantially achieved our revenue goal for the year while, at the same time, demonstrating a significant level of profitability. To further illustrate the rigorous nature of the required performance levels, either (a) 2015 revenue of \$398 million (more than 99% of target) combined with 2015 EBITDAO of \$84 million (more than 90% of target) or (b) 2015 revenue of \$390 million (more than 97% of target) combined with 2015 EBITDAO of \$87 million (more than 93% of target) would result in a financial bonus factor of only 55%. The bonus factors resulting from each combination of revenue and EBITDAO were, in the judgment of the compensation committee, appropriate, with the higher bonus factors achievable but nevertheless subject to a number of uncertainties and extraneous influences which could prevent their achievement. Earned bonus amounts were subject to decrease (a “negative adjustment”) but not increase at the compensation committee’s discretion.

After reviewing our 2015 revenue and profitability, and ascertaining the intersection of actual revenue and EBITDAO in the target matrix described above, the compensation committee determined a financial bonus factor of 57% for our corporate performance objectives, as reflected in the following table (showing target and actual revenue and EBITDAO reference points for the calculation, with intermediate points on the matrix interpolated). The compensation committee determined the financial bonus factor entirely through reference to the target matrix.

	<u>Revenue (\$M)</u>	<u>EBITDAO (\$M)</u>	<u>Financial Bonus Factor</u>
2015 Minimum Threshold .....	\$390.0	\$84.0	55%
2015 Target .....	\$402.0	\$93.0	100.0%
<b>2015 Actual</b> .....	<b>\$392.5</b>	<b>\$89.0</b>	<b>57%</b>

### Individual Performance Objectives

For the individual performance component, payments are determined at the discretion of the compensation committee based on our CEO's subjective evaluation of each individual's performance (which involves both quantitative and qualitative considerations) and collaborative contribution to our overall success. For our CEO and President, individual performance was not a factor in determining their annual cash bonuses.

At that time, the compensation committee also determined, based on its review of the recommendation of our CEO, that the individual performance objectives of each named executive officer had been attained at the following percentage levels.

<u>Named Executive Officer*</u>	<u>Individual Performance Objectives Attainment Level</u>
Tarek A. Sherif .....	N/A
Glen M. de Vries .....	N/A
Rouven Bergmann .....	150%**
Michael L. Capone .....	200%**
Steven I. Hirschfeld .....	50%

\* Mr. Douglas is not included in the above table because he did not receive a cash bonus for 2015. His compensation was determined under the terms of his separation agreement with the company.

\*\* The individual performance component rewards each executive's functional contribution to the company's performance. For example, Mr. Capone's COO organization greatly exceeded its objectives regarding delivery of the product roadmap, quality goals and leadership and talent goals, and Mr. Bergmann exceeded his leadership and Finance organization objectives during his first year as our CFO.

### ***Bonus Results***

Based on its review of our overall corporate performance, and taking into account each named executive officer's attainment of his individual performance objectives for 2015, the compensation committee approved bonus payments as follows for our named executive officers. Because the annual cash bonuses for our CEO and President were based entirely on our corporate performance objectives, their actual annual cash bonus payments were 57% of their target annual cash bonus opportunities, in accordance with the 57% financial bonus factor described above.

<u>Named Executive Officer***</u>	<u>Target Annual Cash Bonus Opportunity</u>	<u>Amount Related to Company Performance Objectives</u>	<u>Amount Related to Individual Performance Objectives</u>	<u>Actual Annual Cash Bonus Payment</u>	<u>Percentage of Target Annual Cash Bonus Opportunity</u>
Tarek A. Sherif .....	\$550,000	\$313,500	N/A	\$313,500	57.0%
Glen M. de Vries .....	\$550,000	\$313,500	N/A	\$313,500	57.0%
Rouven Bergmann .....	\$225,000	\$ 61,402	\$ 84,375	\$145,777	64.8%*
Michael L. Capone .....	\$315,000	\$134,663	\$157,500	\$292,163	92.8%
Steven I. Hirschfeld .....	\$382,500	\$109,013**	\$ 47,813	\$156,825	41.0%

\* Mr. Bergmann commenced employment with the company on May 13, 2015.

\*\* Mr. Hirschfeld received no payout with respect to the sales component of his 2015 performance objectives.

\*\*\* Mr. Douglas is not included in the above table because he did not receive a cash bonus for 2015. His compensation was determined under the terms of his separation agreement with the company.

The annual cash bonuses paid to our named executive officers for 2015 are set forth in the “2015 Summary Compensation Table” below.

### ***Long-Term Incentive Compensation***

We believe that long-term performance is achieved through an ownership culture that aligns the long-term interests of our executives with those of our stockholders. Our incentive plans have been established and operated in order to achieve that objective. The compensation committee recognizes that while the annual cash bonus rewards management actions that impact short- and mid-term performance, the interests of our stockholders are also served by giving key employees the opportunity to participate in the long-term appreciation of our common stock through equity awards. In addition, equity awards are an effective tool for management retention because they are subject to vesting over an extended period of time and, in the case of stock options, provide for only a limited exercise period following termination of employment.

The annual equity awards granted to our executive officers are in the form of restricted stock awards and performance-based restricted stock units (“PBR SU”) awards. Generally, stock options are granted to our executive officers only as part of new hire awards (for example, for Mr. Bergmann in connection with his initial employment in May 2015). The compensation committee believes that restricted stock and stock unit awards provide a stronger incentive to create and preserve long-term stockholder value. Restricted stock and stock unit awards promote employee retention and stock ownership and also help manage stockholder dilution by using fewer shares than would result from the exclusive or principal use of stock options.

For 2015, 50% of the value of the equity awards granted to our executive officers was in the form of shares of restricted stock subject to time-based vesting conditions (annually over four years), contingent on our achieving positive EBITDAO for 2015, and 50% of the value of such awards was in the form of PBR SUs. Toward transitioning to a longer performance period for the Company’s PBR SUs, the PBR SUs awarded in 2015 (“2015 PBR SU Awards”) are to be measured and can be earned in three increments based on our relative total stockholder return (“TSR”) performance (compared with the Russell 2000 Index) as follows: (a) 1/3 in February 2016, based on our 2015 TSR; (b) 1/3 in February 2017, based on our cumulative 2015-16 TSR; and (c) 1/3 in February 2018, based on our cumulative 2015-17 TSR, in each case relative to the Russell 2000 Index’s TSR for the same period. Each 2015 PBR SU Award represented a contingent right to receive 0% to 200% of the target number of shares of our common stock subject to the award. There is no “catch-up” provision with respect to each increment of the 2015 PBR SU Awards; very favorable relative TSR during one performance period will not permit recapture of shares not earned during another performance period with less favorable relative TSR.

To determine the size of each 2015 equity award, the compensation committee considers the recommendation of our CEO (except with respect to his own award and the award for our President), its assessment of each executive officer’s past performance and expected future contributions, competitive market data about similar awards for their respective positions, and its assessment of the retention value of each executive officer’s outstanding and unvested equity awards. The number of shares of restricted stock and PBR SUs awarded to our named executive officers was calculated based on the stock price value equal to the average closing NASDAQ market price for our common stock for the 30 trading days prior to the grant date, and, in the case of PBR SUs, reflects their value assuming performance at the target level.

The equity awards granted to our named executive officers in February 2015 were as follows:

<u>Named Executive Officer</u>	<u>2015 Annual Time-Based Restricted Stock Award (Economic Value)*</u>	<u>2015 Annual Time-Based Restricted Stock Award (# of shares)</u>	<u>2015 Annual Performance-Based Restricted Stock Units Award (Economic Value)*</u>	<u>2015 Annual Performance-Based Restricted Stock Units Award (# of units)</u>
Tarek A. Sherif . . . . .	\$3,000,000	66,890	\$3,000,000	66,890
Glen M. de Vries . . . . .	\$3,000,000	66,890	\$3,000,000	66,890
Michael L. Capone . . . . .	\$1,000,000	22,297	\$1,000,000	22,297
Steven I. Hirschfeld . . . . .	\$1,000,000	22,297	\$1,000,000	22,297
Cory A. Douglas . . . . .	\$ 650,000	14,493	\$ 650,000	14,493

\* Represents dollar amount (economic value) approved by our compensation committee for time-based restricted stock and PBRUSU awards. The values given for the corresponding equity awards in the “2015 Summary Compensation Table” below were computed in accordance with ASC 718.

In connection with his appointment as our Chief Financial Officer, on May 13, 2015 Mr. Bergmann was granted an option to purchase 57,643 shares of our common stock and restricted stock awards for 32,839 shares of our common stock.

*Earnings Determination for 2015 PBRUSU Awards*

For 2015, the number of shares of our common stock to be earned with respect to the first third of the 2015 PBRUSU Awards was based on our TSR performance for the year ending December 31, 2015 relative to the 2015 TSR of the Russell 2000 Index. For these purposes, TSR (a) was computed comparing the average closing price per share for the last 30 trading days of 2015 with the average closing price per share for the 30 trading days preceding January 1, 2015, and (b) takes into account (using the ex-dividend date) any dividends (including the cash value of non-cash dividends) paid or payable with respect to the relevant stock during 2015.

The following table indicates select reference points (representing 0%, 100% and 200% of target, with intermediate points interpolated) for the calculations leading to the 128% PBRUSU earnings determination made by the compensation committee in February 2016. Pursuant to the 128% earnings determination, Messrs. Sherif, de Vries, Capone and Hirschfeld respectively earned 28,562, 28,562, 9,520 and 9,520 shares of our common stock, all of which were fully vested.

<u>Medidata TSR Relative to Russell 2000 TSR</u>	<u>Percentage of target achieved</u>
75th percentile or greater . . . . .	200.0%
50th percentile . . . . .	100.0%
20th percentile or less . . . . .	0.0%
<b><u>2015 TSR CALCULATIONS FOR PBRUSU EARNINGS DETERMINATION</u></b>	
2015 Medidata TSR . . . . .	3.81%
2015 Russell 2000 TSR . . . . .	(3.2%)
<b>Medidata TSR &gt; RUSSELL 2000 TSR . . . . .</b>	<b>7.01%</b>

The equity awards granted to our named executive officers in 2015 are set forth in the “2015 Summary Compensation Table” and the “2015 Grants of Plan-Based Awards Table” below.

*Employee Benefits and Perquisites*

In 2015, our named executive officers, like our other employees, participated in various employee benefit plans, including medical and dental care plans, a qualified Section 401(k) retirement plan, our employee stock

purchase plan, life, accidental death and dismemberment and disability insurance, paid time off and other benefits. In addition, some of our named executive officers (along with all other trip participants from the company) also received de minimis travel expenses for a company-sponsored trip for spouses or significant others who attend our President's Club sales incentive trips to accompany them, including a gross-up for income tax purposes for those travel expenses related to the President's Club.

For further information about the employee benefits and perquisites provided to our named executive officers in 2015, see the "2015 Summary Compensation Table" below.

We do not generally differentiate the benefits we offer our named executive officers from the benefits we offer our other employees. In 2015, we did not maintain any benefit programs exclusively for our executive officers, such as executive pension plans, deferred compensation plans, supplemental insurance or other executive retirement benefits.

### **Post-Employment Compensation**

We have entered into change in control agreements with each of our executive officers, including each of our named executive officers. These agreements require us to provide certain payments and benefits upon a qualifying termination of employment, which includes a termination of employment without cause or where the executive officer resigns with good reason, during the severance protection period, which begins on the date a definitive transaction agreement is signed and ends two years after the date of a change in control. The receipt of these payments and benefits are contingent upon the named executive officer's execution, delivery, and non-revocation of a release and waiver of claims satisfactory to us following the termination of employment. In addition, for six months following termination of employment, and as a condition to the payments and benefits, the named executive officer must cooperate with any transition efforts that we request and must not disparage us, or our employees, executive officers, or members of our board of directors.

We believe that these agreements act as an incentive for our executive officers to remain employed and focused on their responsibilities during the threat or negotiation of a change-in-control transaction, which preserves our value and the potential benefit to be received by our stockholders in the transaction.

The agreements provide for payments and benefits which are payable only upon a "double trigger"; that is, only following a change in control of the company and a qualifying termination of employment, including a termination of employment without cause or a resignation for good reason.

For a summary of the material terms and conditions of the post-employment compensation arrangements with our named executive officers, see "Potential Payments upon Termination or Change in Control" below.

In May 2015, we entered into a separation agreement with Mr. Douglas relating to his separation from the company as CFO. Under the terms of the separation agreement, Mr. Douglas continued as our CFO until May 18, 2015 and then continued to serve as executive advisor to provide advice and assistance as to transitional matters through September 30, 2015, or the "Termination Date". Under the separation agreement, Mr. Douglas received his existing base salary through the Termination Date and a lump sum payment equal to three months' base salary in the amount of \$85,000, which was paid in October 2015. Mr. Douglas was eligible for continued vesting of previously awarded but unvested equity awards in accordance with the applicable plan documents through the Termination Date. He also was eligible to participate in the company's medical, dental and vision insurance/benefit programs through the Termination Date and we paid his applicable COBRA premiums through March 31, 2016.



## **Other Compensation Policies**

### ***Stock Ownership Guidelines***

In February 2013, our board of directors adopted stock ownership guidelines for our executive officers to help ensure that we maintain close alignment between the interests of our executive officers and those of our stockholders. Under our stock ownership guidelines, our CEO and President are each expected to own shares of our common stock valued at five times his annual base salary, and each other executive officer is expected to own shares of our common stock valued at two times his or her annual base salary. This guideline is subject to a five-year pro-rated phase-in period for newly appointed executive officers. At the end of 2015, all of our named executive officers were in compliance with their respective ownership guidelines.

### ***Executive Incentive Compensation Recoupment Policy***

In February 2015, our compensation committee adopted an Executive Incentive Compensation Recoupment Policy. Under this “clawback” policy, in the event that we are required to prepare an accounting restatement due to the misconduct of any covered executive officer (that is, our Section 16 reporting officers), we may seek to recover reimbursement of cash incentive compensation from each covered executive officer who, at any time after January 1, 2015 and during the three-year period preceding the date on which we are required to prepare the accounting restatement, received payment of such compensation based on the erroneous financial data. The amount of compensation to be recovered is the excess of the amount paid to the covered executive officer calculated by reference to the erroneous financial data, over the amount that would have been paid to the covered executive officer calculated by reference to the corrected financial data. In adopting this recoupment policy, our compensation committee elected not to include equity-based incentive compensation because of the complexity and absence of guidance as to how to calculate the recovery of equity incentives based on a relative TSR performance measure.

The compensation committee intends to amend this policy, as necessary and appropriate, to comply with the SEC’s final rules regarding the recoupment policies of the Dodd-Frank Wall Street Reform and Consumer Protection Act once adopted.

### ***Equity Award Grant Policy***

Under our equity award grant policy, grants made in conjunction with the hiring of a new employee or the promotion of an existing employee will be made on the first trading day of the month following the hire date or the promotion date. Under certain limited circumstances, our board of directors or the compensation committee may approve equity awards that are exceptions to the policy. With respect to equity awards granted to existing employees other than in connection with a promotion, typically such awards are made on an annual basis. Our preference is for the annual equity award grants to be made in the first quarter of the calendar year to align the annual awards with the determination of the prior year’s financial results and performance reviews. Options are granted with an exercise price equal to the fair market value of our common shares on the grant date.

Generally, our annual restricted stock and PBRISU awards are determined as dollar amounts and then converted into shares or units (respectively) based on a stock price value equal to the average closing price for our common stock for the 30 trading days prior to the grant date.

### ***Hedging Prohibition***

Our employees (including our executive officers) and members of our board of directors are prohibited from engaging in hedging transactions in our equity securities.

## **Tax Considerations**

Section 162(m) places a limit of \$1.0 million on the amount of compensation we may deduct for federal income tax purposes in any one year with respect to our chief executive officer and certain other highly compensated executive officers, unless the conditions of an available exemption from the deduction limit are met. An exemption to this deductibility limit is available for various forms of “performance-based” compensation. In general, the compensation committee is authorized to grant incentive awards under our 2009 Long-Term Incentive Plan that qualify for the performance-based compensation exemption from Section 162(m). While the compensation committee has not adopted a formal policy regarding tax deductibility of compensation paid to our named executive officers, the compensation committee considers tax deductibility under Section 162(m) as a factor in compensation structure, and seeks to qualify the incentive compensation paid to the covered executive officers for the “performance-based compensation” exemption from the deduction limit under Section 162(m) when it believes such action is in the best interests of our company. In approving the amount and form of compensation for our executive officers, the compensation committee considers all elements of the cost to us of providing such compensation, including the potential impact of the Section 162(m) deduction limit. However, the compensation committee reserves the discretion, in its judgment, to authorize compensation payments that do not comply with an exemption from the deduction limit when it believes that such payments are appropriate to attract and retain executive talent.

## **Risks Presented by Compensation Programs**

We have reviewed our compensation policies for all employees, including employees who are not executive officers, as they pertain to risk, including factors listed above under “What We Do” and “What We Do Not Do,” and we have determined that our compensation programs do not create or encourage the taking of risks that are reasonably likely to have a material adverse effect on our company. Several elements of the compensation program are designed to promote long-term stockholder value creation and incorporate components to mitigate risk, including a balanced mix of cash and equity compensation and annual and long-term incentives; multiple performance measures with payouts subject to the compensation committee’s overall assessment of performance; and equity compensation having a multi-year vesting period and weighted more heavily towards restricted stock than stock options to provide greater incentive to create and preserve long-term stockholder value. Based on its evaluation, the compensation committee has determined, in its reasonable business judgment, that our compensation practices and policies for all employees do not encourage excessive risk and instead promote behaviors that support long-term sustainability and stockholder value creation.

## **Compensation Committee Report**

The material in this report shall not be deemed to be (i) “soliciting material,” (ii) “filed” with the SEC, (iii) subject to Regulations 14A or 14C of the Exchange Act, or (iv) subject to the liabilities of Section 18 of the Exchange Act. This report shall not be deemed incorporated by reference into any of our other filings under the Exchange Act or the Securities Act, except to the extent the company specifically incorporates it by reference into such filing.

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis with management. Based upon such review, the related discussions and such other matters deemed relevant and appropriate by the compensation committee, the compensation committee recommended to our board of directors that the Compensation Discussion and Analysis be included in this proxy statement.

THE COMPENSATION COMMITTEE

Neil Kurtz (Chairman)  
Carlos Dominguez  
George McCulloch

## 2015 Summary Compensation Table

The following table provides information regarding the compensation in the years ended December 31, 2015, 2014 and 2013 of (i) our chief executive officer, (ii) chief financial officer, (iii) each of the next three most highly compensated executive officers, and (iv) an additional individual who would have been among the group of persons described in the preceding clause (iii) except that the individual was not serving as an executive officer at December 31, 2015. We refer to these officers as our named executive officers.

Name and Principal Position	Year	Salary (\$)	Option Awards(1) (\$)	Stock Awards(1) (\$)	Non-Equity Incentive Plan Compensation(2) (\$)	All Other Compensation(3) (\$)	Total (\$)
Tarek A. Sherif . . . . . <i>Chairman and Chief Executive Officer</i>	2015	545,833	—	7,596,917	313,500	5,990	8,462,241
	2014	497,917	—	4,017,492	94,000	5,890	4,615,299
	2013	475,000	—	5,343,927	1,076,615	5,100	6,900,642
Glen M. de Vries . . . . . <i>President</i>	2015	545,833	—	7,596,917	313,500	5,300	8,461,551
	2014	497,917	—	4,017,492	94,000	5,200	4,614,609
	2013	475,000	—	5,343,927	1,076,615	5,100	6,900,642
Rouven Bergmann(4) . . . . . <i>Chief Financial Officer</i>	2015	262,500	1,349,999	1,749,990	145,777	304,675	3,812,941
	2014	—	—	—	—	—	—
	2013	—	—	—	—	—	—
Michael L. Capone(5) . . . . . <i>Chief Operating Officer</i>	2015	450,000	—	2,532,348	292,163	9,112	3,283,623
	2014	112,500	750,003	2,250,011	30,791	112	3,143,417
	2013	—	—	—	—	—	—
Steven I. Hirschfeld . . . . . <i>Vice Chairman</i>	2015	377,708	—	2,532,348	156,825	5,990	3,072,871
	2014	325,000	—	1,249,893	111,800	7,342	1,694,035
	2013	325,000	—	2,545,168	628,206	5,100	3,503,474
Cory A. Douglas(6) . . . . . <i>Former Executive Vice President—Chief Financial Officer</i>	2015	127,500	—	1,646,018	—	233,771	2,007,289
	2014	339,167	—	1,160,623	55,835	7,237	1,562,862
	2013	330,000	—	1,985,092	386,083	5,100	2,706,275

- (1) The dollar amounts reported for option awards, restricted stock awards and performance-based restricted stock unit awards (“PBRUs”) represent the aggregate grant date fair value computed in accordance with ASC 718. For information on the assumptions used to calculate the value of the awards, refer to Note 11 to consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the Securities and Exchange Commission on February 29, 2016.
- (2) Represents performance-based cash incentives.
- (3) Includes (i) employer contributions to 401(k) plan of \$5,300 for each of Messrs. Sherif, de Vries, Capone and Hirschfeld, and of \$4,500 and \$4,517 respectively for Messrs. Bergmann and Douglas; (ii) life insurance premiums of \$690 paid for each of Messrs. Sherif and Hirschfeld, and of \$175, \$337 and \$450 paid respectively for Messrs. Bergmann, Douglas and Capone; and (iii) \$3,362 in tax gross-up payments for Mr. Capone relating to travel expenses for his spouse for our President’s Club sales awards meeting.
- (4) Mr. Bergmann joined us effective May 13, 2015. The amounts reported in the table above represent his 2015 base salary, performance-based cash incentive and life insurance premiums prorated for the period of May 13, 2015 to December 31, 2015. In addition, Mr. Bergmann received a sign-on bonus of \$300,000 and new hire equity awards consisting of an option to purchase 57,643 shares of our common stock and 32,839 shares of restricted stock in May 2015 outside of the annual grant process.
- (5) Mr. Capone joined us effective October 1, 2014. The amounts reported for 2014 in the table above represent his 2014 base salary, performance-based cash incentive and life insurance premiums prorated for the period of October 1, 2014 to December 31, 2014. In addition, Mr. Capone received new hire equity awards

consisting of an option to purchase 38,285 shares of our common stock and 51,125 shares of restricted stock in October 2014 outside of the annual grant process.

- (6) The amount reported for Mr. Douglas for 2015 in the “All Other Compensation” column includes the following amounts received by him under his separation agreement, as described on page 42: salary continuation through September 30, 2015 in the amount of \$127,500; a lump sum payment equal to three (3) months’ base pay in the amount of \$85,000, paid on October 15, 2015; and payment by the company of COBRA premiums for the period of October 1, 2015 through March 31, 2016 in the amount of \$16,417.

**Note to the Summary Compensation Table:** SEC rules require that the Summary Compensation Table include in each year the aggregate grant date fair value of all stock, option or other equity awards granted during that year, regardless of whether such awards were granted based upon the average closing price for the 30 trading days immediately preceding the grant or are subject to service- or performance-based vesting conditions. The value of the equity awards reported in the Summary Compensation Table is often very different from the actual realized and realizable/current values (if any amount is even earned) of such awards, and therefore the equity awards and total annual compensation data is not indicative of how the compensation committee views executive compensation for the corresponding year in its decision-making process. We encourage shareholders to review the “Compensation Discussion and Analysis” for a full discussion about our executive compensation decisions for 2015.

### 2015 Grants of Plan-Based Awards Table

The following table provides information regarding grants of plan-based awards to our named executive officers during the year ended December 31, 2015:

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards(1)(2)			All Other Stock Awards: Number of Shares of Stock or Units(1)	All Other Option Awards: Number of Securities Underlying Options(1)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards(3)
		Threshold (\$)	Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)				
Tarek A. Sherif . . . . .	2/13/2015(4)	—	550,000	1,375,000	—	22,297	44,594	—	—	—	1,421,657
	2/13/2015(5)	—	—	—	—	22,297	44,594	—	—	—	1,500,588
	2/13/2015(6)	—	—	—	—	22,296	44,592	—	—	—	1,558,936
	2/13/2015(7)	—	—	—	—	—	—	66,890	—	—	3,115,736
Glen M. de Vries . . . . .	2/13/2015(4)	—	550,000	1,375,000	—	22,297	44,594	—	—	—	1,421,657
	2/13/2015(5)	—	—	—	—	22,297	44,594	—	—	—	1,500,588
	2/13/2015(6)	—	—	—	—	22,296	44,592	—	—	—	1,558,936
	2/13/2015(7)	—	—	—	—	—	—	66,890	—	—	3,115,736
Rouven Bergmann . . . . .	5/13/2015(7)	—	225,000	562,500	—	—	—	25,333	—	—	1,349,996
	5/13/2015(8)	—	—	—	—	—	—	7,506	—	—	399,995
	5/13/2015	—	—	—	—	—	—	—	57,643	53.29	1,349,999
Michael L. Capone . . . . .	2/13/2015(4)	—	315,000	787,500	—	7,432	14,864	—	—	—	473,864
	2/13/2015(5)	—	—	—	—	7,432	14,864	—	—	—	500,174
	2/13/2015(6)	—	—	—	—	7,433	14,866	—	—	—	519,715
	2/13/2015(7)	—	—	—	—	—	—	22,297	—	—	1,038,594
Steven I. Hirschfeld . . . . .	2/13/2015(4)	—	382,500	956,250	—	7,432	14,864	—	—	—	473,864
	2/13/2015(5)	—	—	—	—	7,432	14,864	—	—	—	500,174
	2/13/2015(6)	—	—	—	—	7,433	14,866	—	—	—	519,715
	2/13/2015(7)	—	—	—	—	—	—	22,297	—	—	1,038,594
Cory A. Douglas . . . . .	2/13/2015(4)	—	204,000	510,000	—	4,831	9,662	—	—	—	308,025
	2/13/2015(5)	—	—	—	—	4,831	9,662	—	—	—	325,126
	2/13/2015(6)	—	—	—	—	4,831	9,662	—	—	—	337,784
	2/13/2015(7)	—	—	—	—	—	—	14,493	—	—	675,084

- (1) Each stock option, restricted stock award and performance-based restricted stock unit award (“PBRSU”) was granted pursuant to our 2009 Long-Term Incentive Plan. The stock options granted to Mr. Bergmann vest 25% on the first anniversary of the grant date and in 36 equal monthly installments thereafter. The restricted stock awards vest 25% on each anniversary of the grant date. The PBRsUs are earned 1/3 on each anniversary of the grant date, subject to performance conditions.
- (2) Represents the threshold, target and maximum number of shares of our common stock that may be earned under the PBRsUs granted to the named executive officers in 2015.

- (3) The amounts in this column represent the aggregate grant date fair value, computed in accordance with ASC 718, of each stock option, restricted stock award and PBRUSU granted to the named executive officer in 2015.
- (4) The performance period for these PBRUSUs, which contain market conditions related to our 2015 total shareholder return relative to that of the Russell 2000 index, ended on December 31, 2015.
- (5) The performance period for these PBRUSUs, which contain market conditions related to our 2015—2016 total shareholder return relative to that of the Russell 2000 index, ends on December 31, 2016.
- (6) The performance period for these PBRUSUs, which contain market conditions related to our 2015—2017 total shareholder return relative to that of the Russell 2000 index, ends on December 31, 2017.
- (7) These restricted stock awards vest 25% on each anniversary of the grant date, subject to the named executive officer's continued employment.
- (8) These restricted stock awards granted to Mr. Bergmann as part of his sign-on package vested in full on September 30, 2015.

### Outstanding Equity Awards at December 31, 2015 Table

The following table provides information regarding option awards granted to our named executive officers that were outstanding at December 31, 2015:

Name	Grant Date	Option Awards		Option Exercise Price (\$)	Option Expiration Date
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)		
Tarek A. Sherif	8/13/2008	73,460	— (1)	\$ 9.88	8/13/2018
	6/24/2009	107,566	— (2)	7.00	6/24/2019
	5/18/2010	75,058	— (2)	7.68	5/18/2020
	5/31/2011	70,300	— (2)	11.50	5/31/2021
	5/16/2012	64,656	7,518(2)	13.99	5/16/2022
Glen M. de Vries	8/13/2008	26,836	— (1)	9.88	8/13/2018
	6/24/2009	107,566	— (2)	7.00	6/24/2019
	5/18/2010	75,058	— (2)	7.68	5/18/2020
	5/31/2011	70,300	— (2)	11.50	5/31/2021
	5/16/2012	64,656	7,518(2)	13.99	5/16/2022
Rouven Bergmann	5/13/2015	—	57,643(1)	53.29	5/13/2025
Michael L. Capone	10/1/2014	11,166	27,119(1)	44.01	10/1/2024
Steven I. Hirschfeld	5/18/2010	29,462	— (2)	7.68	5/18/2020
	5/31/2011	13,150	— (2)	11.50	5/31/2021
	5/16/2012	29,455	3,425(2)	13.99	5/16/2022

- (1) The shares underlying these option grants vested 25% on the first anniversary of the grant date, and then 1/36 of the remainder per month after that date until the option became fully vested on the fourth anniversary of the grant date.
- (2) The shares underlying these option grants vest in 48 equal monthly installments commencing one month after the grant date.

The following table provides information regarding stock awards granted to our named executive officers that were outstanding at December 31, 2015:

Name	Stock Awards				
	Grant Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
Tarek A. Sherif	5/16/2012	24,133(1)	1,189,516	—	—
	2/14/2013	15,468(1)	762,418	—	—
	2/14/2013	20,624(2)	1,016,557	—	—
	2/14/2013	10,312(3)	508,278	—	—
	2/10/2014	14,016(1)	690,849	—	—
	2/13/2015	66,890(1)	3,297,008	—	—
	2/13/2015	—	—	22,297(4)	1,099,019.13
	2/13/2015	—	—	22,297(5)	1,099,019.13
	2/13/2015	—	—	22,296(6)	1,098,969.84
Glen M. de Vries	5/16/2012	24,133(1)	1,189,516	—	—
	2/14/2013	15,468(1)	762,418	—	—
	2/14/2013	20,624(2)	1,016,557	—	—
	2/14/2013	10,312(3)	508,278	—	—
	2/10/2014	14,016(1)	690,849	—	—
	2/13/2015	66,890(1)	3,297,008	—	—
	2/13/2015	—	—	22,297(4)	1,099,019.13
	2/13/2015	—	—	22,297(5)	1,099,019.13
	2/13/2015	—	—	22,296(6)	1,098,969.84
Rouven Bergmann	5/13/2015	25,333(1)	1,248,664	—	—
Michael L. Capone	10/01/2014	38,344(1)	1,889,976	—	—
	2/13/2015	22,297(1)	1,099,019	—	—
	2/13/2015	—	—	7,432(4)	366,323.28
	2/13/2015	—	—	7,432(5)	366,323.28
	2/13/2015	—	—	7,433(6)	366,372.57
Steven I. Hirschfeld	5/16/2012	10,994(1)	541,894	—	—
	2/14/2013	6,500(1)	320,385	—	—
	2/14/2013	8,666(2)	427,147	—	—
	2/14/2013	4,332(3)	213,524	—	—
	2/10/2014	4,361(1)	214,954	—	—
	2/13/2015	22,297(1)	1,099,019	—	—
	2/13/2015	—	—	7,432(4)	366,323.28
	2/13/2015	—	—	7,432(5)	366,323.28
	2/13/2015	—	—	7,433(6)	366,372.57

- (1) The restricted stock awards vest 25% on each anniversary of the grant date, subject to the executive's continued employment.
- (2) The performance period for these performance-based restricted stock units, which contain performance conditions related to our 2013 revenue, ended on December 31, 2013. Share numbers are therefore based upon actual units earned. The shares underlying these performance-based restricted stock units vest 1/3 on each anniversary of the grant date, subject to the executive's continued employment.
- (3) The performance period for these performance-based restricted stock units, which contain market conditions related to our 2013 total shareholder return relative to that of the NASDAQ composite index, ended on December 31, 2013. Share numbers are therefore based upon actual units earned. The shares underlying

these performance-based restricted stock units vest 1/3 on each anniversary of the grant date, subject to the executive's continued employment.

- (4) The performance period for these performance-based restricted stock units, which contain market conditions related to our 2015 total shareholder return relative to that of the Russell 2000 index, ended on December 31, 2015. In February 2016, the compensation committee determined that the named executive officers received 128% of their target amounts.
- (5) The performance period for these performance-based restricted stock units, which contain market conditions related to our 2015—2016 total shareholder return relative to that of the Russell 2000 index, ends on December 31, 2016.
- (6) The performance period for these performance-based restricted stock units, which contain market conditions related to our 2015—2017 total shareholder return relative to that of the Russell 2000 index, ends on December 31, 2017.

### 2015 Option Exercises and Stock Vested Table

The following table sets forth information regarding options exercised by our named executive officers during 2015 and restricted stock awards that vested during 2015. The value realized for such options and restricted stock awards is also provided. For options, the value realized on exercise is equal to the difference between the market price of the underlying shares of common stock at exercise and the exercise price of the options. For restricted stock awards, the value realized on vesting is equal to the market price of the underlying shares of common stock at vesting.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Tarek A. Sherif . . . . .	—	—	499,413*	24,729,788
Glen M. de Vries . . . . .	—	—	499,413*	24,729,788
Rouven Bergmann . . . . .	—	—	7,506	316,078
Michael L. Capone . . . . .	—	—	12,781	531,051
Steven I. Hirschfeld . . . . .	3,875	146,407	265,804*	13,147,831
Cory A. Douglas . . . . .	76,817	2,929,772	171,157*	8,431,498

\* Includes shares received upon the vesting, at the conclusion of a three-year performance period (from January 1, 2013 through December 31, 2015), of the February 2013 long-term PBRSU awards in the amounts of 374,904, 374,904, 213,912 and 127,431 (prorated) for Messrs. Sherif, de Vries, Hirschfeld and Douglas respectively. These long-term PBRSU awards, which were initially reported in our 2013 proxy statement, were earned at 300% of the target amount due to our results during the 2013—2015 performance period, namely our three-year TSR of more than 100% and our three-year revenue compound annual growth rate of more than 20%.

## Securities Authorized for Issuance under Equity Compensation Plans

The following table sets forth information regarding our equity compensation plans in effect as of December 31, 2015. Each of our equity compensation plans is an “employee benefit plan” as defined by Rule 405 of Regulation C of the Securities Act.

<u>Plan Category</u>	<u>(a) Number of Securities to be Issued Upon Exercise of Outstanding Options</u>	<u>(b) Weighted-Average Exercise Price of Outstanding Options</u>	<u>(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))</u>
Equity compensation plans approved by security holders .....	1,939,460	\$21.73	2,241,879(1)
Equity compensation plans not approved by security holders .....	—	—	—
<u>Total .....</u>	<u>1,939,460</u>	<u>\$21.73</u>	<u>2,241,879(1)</u>

- (1) Includes 2,241,871 shares remaining for issuance pursuant to the Second Amended and Restated 2009 Long-Term Incentive Plan and 8 shares remaining for issuance under the Amended and Restated 2014 Employee Stock Purchase Plan.

## Potential Payments upon Termination of Employment or a Change of Control

### *Change in Control Scenarios*

We have entered into change in control agreements with our chief executive officer and our other named executive officers. These agreements provide payments and benefits based on a “double trigger” arrangement and only arise if there is an involuntary termination of employment during the severance protection period, which begins on the date a definitive transaction agreement is signed and ends two years after the date of a change in control. Payments and benefits will be due in the event the named executive officer’s employment is involuntarily terminated by us without “cause” during the severance protection period or by the executive for “good reason” during the post-change in control protection period. These agreements provide that, upon a qualifying termination event, a named executive officer will be entitled to:

- a pro rata payment of the annual incentive award he would have earned for the year of termination if his employment had continued through the end of the year, based on the portion of the year elapsed prior to the date of termination;
- a lump sum severance payment equal to the sum of his base salary and target bonus (or prior year’s bonus, if greater); and
- continuing group health and life insurance coverage for 12 months.

The effect of a change in control on our equity-based awards will depend on whether the awards are subject to performance conditions or vest solely on the basis of continuing service. In general, if an equity-based award is subject only to a time-based vesting condition at the time of a change in control, the acquiring or surviving company may assume the award on an economically equivalent basis. The assumed award will be subject to substantially the same vesting and other terms and conditions as the original award, except that any previously unvested portion of the award will become fully vested if the acquiring or successor company terminates the named executive officer’s employment without “cause” or he terminates his or her employment for “good reason” within 24 months after the change in control. If the award is not so assumed by the acquiring or successor company, then it will become fully vested in connection with the change in control transaction.



In the case of outstanding annual PBRsUs that have been earned and remain subject to time based vesting, the unvested portion of the award will be treated much like other awards that vest solely on the basis of continuing service (that is, the awards may be assumed subject to accelerated vesting upon involuntary termination of employment within 24 months after the change in control and, to the extent not assumed, will become fully vested as part of the change in control).

In the case of outstanding PBRsUs that have not yet been earned, if a change in control occurs during the performance period and the award is not assumed by the acquiring or successor company, some or all of the PBRsUs that otherwise could have been earned under the award will be deemed to have been earned and will be settled or paid out accordingly in connection with the change in control. The number of PBRsUs deemed to have been earned will be based in whole or in part upon actual performance for the portion of the applicable performance period ending prior to the change in control.

Each named executive officer would have been entitled to the following estimated payments and benefits if a “change in control” occurred on December 31, 2015, and his employment was then terminated by us without “cause”:

<u>Executive</u>	<u>Cash(1)</u> <u>(\$)</u>	<u>Welfare</u> <u>Benefits</u> <u>(\$)</u>	<u>Stock</u> <u>Options(2)</u> <u>(\$)</u>	<u>Restricted</u> <u>Stock(2)</u> <u>(\$)</u>	<u>Restricted</u> <u>Stock</u> <u>Units(2)</u> <u>(\$)</u>	<u>Total</u> <u>(\$)</u>
Tarek A. Sherif . . . . .	1,100,000	20,571	370,562	10,397,304	—	11,888,437
Glen M. de Vries . . . . .	1,100,000	6,610	370,562	10,397,304	—	11,874,476
Rouven Bergmann . . . . .	900,000	19,997	2,841,223	1,248,664	—	5,009,884
Michael L. Capone . . . . .	900,000	734	1,336,696	3,458,255	—	5,695,685
Steven I. Hirschfeld . . . . .	765,000	20,571	168,818	3,926,855	—	4,881,244

- (1) The amount does not reflect a pro-rata bonus for 2015. This is because we are required to assume an employment termination date of December 31, 2015. On this date, each named executive officer would have already earned a bonus for 2015 regardless of whether he terminated employment. Please refer to the “Non-Equity Incentive Plan Compensation” column of the Summary Compensation Table for the amount of the 2015 bonus paid to each executive.
- (2) Equity values are based on the following assumptions: (i) a closing price of our common stock on December 31, 2015 of \$49.29 per share; and (ii) the awards are not assumed in the corporate transaction, vest immediately prior to the change in control in accordance with the applicable award agreements and are cashed out.

Our named executive officers are not entitled to an excise tax gross-up with respect to their change-in-control payments and benefits. The payments and benefits will be reduced, however, to avoid the imposition of such excise tax if such reduction would enable the named executive officers to net more on an after-tax basis than they would in the absence of a reduction. In any event, the named executive officers would be personally responsible for the payment of any excise tax liability associated with any change in control payments and benefits.

***Non-Change in Control Scenarios***

In general, our executive officers are not entitled to severance payments or benefits upon termination of employment outside the context of a change in control (as discussed above). Certain equity awards do, however, provide special rules in the event of certain terminations of employment. These are summarized below. Except as noted below, all unvested equity awards will be forfeited by an executive officer upon termination of his employment.

*Death or Disability*

Our post-2012 restricted stock awards provide that the unvested shares of our common stock subject to the awards will become fully vested upon termination of a named executive officer's employment due to his death or disability. Our *annual* PBRUS awards provide that, if a named executive officer's employment is terminated due to death or disability during the applicable performance period, then he or she will be deemed to have earned a pro rata portion of the PBRUS that would have been earned if his employment had not terminated (based upon the portion of the year elapsed at the time of the termination of employment), and all earned (or deemed earned) PBRUS will become fully vested.

We would have provided each named executive officer or his beneficiary with the following estimated payments or benefits had he died or become disabled on December 31, 2015.

<u>Executive</u>	<u>Life Insurance(1)</u> <u>(\$)</u>	<u>Disability Payments(2)</u> <u>(\$)</u>	<u>Restricted Stock(3)</u> <u>(\$)</u>	<u>Restricted Stock</u> <u>Units(3)</u> <u>(\$)</u>	<u>Total</u> <u>(\$)</u>
Tarek A. Sherif . . . . .	600,000	313,500	10,397,304	—	11,310,804
Glen M. de Vries . . . . .	50,000	313,500	10,397,304	—	10,760,804
Rouven Bergmann . . . . .	600,000	268,500	1,248,664	—	2,117,164
Michael L. Capone . . . . .	600,000	268,500	3,458,255	—	4,326,755
Steven I. Hirschfeld . . . . .	600,000	238,125	3,926,855	—	4,764,980

- (1) Proceeds would be payable by a third-party insurer. Benefits provided upon death depend on the individual level of benefits chosen by the named executive officer during the annual benefits enrollment process. The named executive officers receive the same company-provided life insurance coverage as is generally offered to U.S.-based employees. The coverage is 200% of base salary for life insurance up to a maximum of \$600,000. Each U.S.-based employee has the option of choosing a higher level of coverage at his or her own expense.
- (2) The named executive officers receive the same short-term and long-term disability coverage as is generally offered to U.S.-based employees. The coverage is (i) for short-term disability, 100%, 90%, 80% and 70% of base salary for months one through three, four, five and six, respectively, and (ii) for a subsequent period of long-term disability, 66.6% of base salary (up to a maximum monthly payment of \$11,000) for, generally, the duration of an employee's long-term disability. The payments above assume the annualized payout for the year immediately following disability and are funded through a combination of third party insurer benefits and salary continuation.
- (3) Equity values are based on a closing price of our common stock on December 31, 2015 of \$49.29 per share.

## **SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE**

Section 16(a) of the Exchange Act requires our directors, executive officers and persons who own more than ten percent of a registered class of our equity securities (collectively, the “Reporting Persons”) to file reports of ownership and changes in ownership with the SEC. Such persons are required by SEC regulations to furnish us with copies of all such filings.

Based solely on our review of copies of such filings, or written representations from Reporting Persons that all reportable transactions were reported, we believe that during 2015, the Reporting Persons timely filed all reports they were required to file under Section 16(a).

## COMMON STOCK OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the beneficial ownership of our common stock as of April 4, 2016 by:

- each of our directors;
- each of our named executive officers;
- all our directors and executive officers as a group; and
- each person or entity who is known by us to beneficially own 5% or more of our outstanding common stock.

The amounts and percentages of common stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a “beneficial owner” of a security if that person has or shares “voting power,” which includes the power to vote or to direct the voting of such security, or “investment power,” which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed a beneficial owner of the same securities and a person may be deemed a beneficial owner of securities as to which he has no economic interest. The number of shares of common stock outstanding used in calculating the percentage for each listed person includes the shares of common stock underlying options held by such person that are, or within 60 days will become, exercisable, but excludes shares of common stock underlying options held by any other person.

Except as indicated by footnote, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them, subject to community property laws where applicable. Percentage of ownership is based on 57,213,008 shares of common stock outstanding on April 4, 2016.

Unless otherwise indicated below, each person or entity has an address in care of our principal executive offices at 350 Hudson Street, 9th Floor, New York, New York 10014.

<u>Name and Address of Beneficial Owner(1)</u>	<u>Number of Shares Beneficially Owned(2)</u>	<u>Percent</u>
<b>Named Executive Officers and Directors:</b>		
Tarek A. Sherif(3) . . . . .	1,341,341	2.3%
Glen M. de Vries(4) . . . . .	1,441,810	2.5%
Rouven Bergmann(5) . . . . .	89,083	*
Michael L. Capone(6) . . . . .	167,903	*
Steven I. Hirschfeld(7) . . . . .	211,359	*
Carlos Dominguez(8) . . . . .	86,180	*
Neil M. Kurtz, M.D.(9) . . . . .	110,762	*
George W. McCulloch(10) . . . . .	77,604	*
Lee Shapiro(11) . . . . .	39,839	*
Robert Taylor . . . . .	54,494	*
<b>All Executive Officers and Directors as a group (13 persons)(12) . . . . .</b>	<b>3,921,534</b>	<b>6.7%</b>
<b>5% Stockholders:</b>		
Brown Capital Management, LLC(13) . . . . .	6,205,701	10.8%
FMR LLC(14) . . . . .	5,611,153	9.8%
Sands Capital Management, LLC(15) . . . . .	5,465,577	9.6%
BlackRock, Inc.(16) . . . . .	5,164,649	9.0%
The Vanguard Group, Inc.(17) . . . . .	4,073,971	7.1%

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- \* Represents beneficial ownership of less than one percent (1.0%) of the outstanding common stock.
- (1) Shares shown in the table above include shares held in the beneficial owner's name or jointly with others, or in the name of a bank, nominee or trustee for the beneficial owner's account.
  - (2) For each of our executive officers and directors, the shares listed in this column include the following shares of restricted stock (which are subject to forfeiture and shall be automatically transferred back to the company upon termination or cessation of service if the vesting conditions have not been satisfied): 156,463 shares for each of Messrs. Sherif and de Vries; 69,942 shares for Mr. Bergmann; 131,539 shares for Mr. Capone; and 59,366 shares for Mr. Hirschfeld.
  - (3) Includes 398,558 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (4) Includes 351,934 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (5) Includes 14,410 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (6) Includes 15,952 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (7) Includes 79,492 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (8) Includes 37,738 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (9) Includes 1,520 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (10) Includes 28,672 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (11) Includes 9,708 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (12) Includes an aggregate of 968,838 shares of common stock that may be acquired upon exercise of stock options that are exercisable or will become exercisable within 60 days of April 4, 2016.
  - (13) This information is based solely on a Schedule 13G/A filed with the SEC on April 11, 2016 by Brown Capital Management, LLC, and The Brown Capital Management Small Company Fund. Brown Capital Management, LLC reported sole voting power and sole dispositive power with respect to 3,593,411 and 6,205,701 shares of common stock, respectively, and The Brown Capital Management Small Company Fund reported sole voting and dispositive power with respect to 2,867,624 shares of common stock. The address of the principal business office for the reporting persons is 1201 N. Calvert Street, Baltimore, MD 21202.
  - (14) This information is based solely on a Schedule 13G/A filed with the SEC on March 10, 2016 by FMR, LLC, which reported sole voting power and dispositive power with respect to 57,891 and 5,611,153 shares of common stock, respectively. The address of the principal business office for the reporting person is 245 Summer Street, Boston, MA 02210.
  - (15) This information is based solely on a Schedule 13G/A filed with the SEC on February 16, 2016 by Sands Capital Management, LLC, which reported sole voting power and sole dispositive power with respect to 3,596,399 and 5,465,577 shares of common stock, respectively. The address of the principal business office for the reporting person is 1101 Wilson Blvd., Ste. 2300, Arlington, VA 22209.
  - (16) This information is based solely on a Schedule 13G/A filed with the SEC on January 26, 2016 by BlackRock, Inc., which reported sole voting power and sole dispositive power with respect to 5,042,336 and 5,164,649 shares of common stock, respectively. The address of the principal business office for the reporting person is 55 E. 52<sup>nd</sup> Street, New York, NY 10055.
  - (17) This information is based solely on a Schedule 13G/A filed with the SEC on February 10, 2016 by The Vanguard Group, Inc., which reported sole voting power and sole dispositive power with respect to 121,510 and 3,952,761 shares of common stock, respectively, and shared voting power and shared dispositive power with respect to 3,100 and 121,210 shares of common stock, respectively. The address of the principal business office for the reporting person is 100 Vanguard Blvd., Malvern, PA 19355.

## **RELATED PERSON TRANSACTIONS**

### **Policy and Procedure for Approval of Related Person Transactions**

We require that all related party transactions, which includes transactions with directors, officers and holders of five percent or more of our voting securities and any member of the immediate family of and any entity affiliated with any of the foregoing persons, to be approved by our audit committee or another independent body of our board of directors. In approving or rejecting any such proposal, our audit committee (or other independent committee) is to consider the relevant facts and circumstances available and deemed relevant to the committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction.

### **Transactions with Related Persons**

Based on a review of the transactions and arrangements between the company and any related person or related person affiliate, we did not engage in any other transactions or series of similar transactions in which the amount involved exceeded \$120,000 and in which any of our directors or executive officers, any holder of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons had a direct or indirect material interest.

## PROPOSAL 5

### RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Deloitte & Touche LLP served as our principal independent registered public accounting firm for the year ended December 31, 2015. Deloitte & Touche LLP has been appointed by the audit committee as the independent registered public accountant firm for us and our subsidiaries for the year ending December 31, 2016. This appointment is being presented to the stockholders for ratification. Representatives of Deloitte & Touche LLP are expected to be present at the Annual Meeting and will be provided an opportunity to make statements if they desire to do so and to respond to appropriate questions from stockholders.

#### Vote Required

If a quorum is present at the Annual Meeting, the ratification of the appointment of Deloitte & Touche LLP requires the affirmative vote of at least a majority of the votes cast on the matter.

#### Board Recommendation

**Our board of directors recommends a vote FOR such ratification.** If the stockholders fail to ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm, it is not anticipated that Deloitte & Touche LLP will be replaced in 2016. Such lack of approval will, however, be considered by the audit committee in selecting our independent registered public accounting firm for 2017.

#### Fees Paid to Independent Registered Public Accounting Firm

The following table sets forth fees billed for professional audit services and other services rendered to the company by Deloitte & Touche LLP and its affiliates for the years ended December 31, 2015 and 2014.

	<u>2015</u>	<u>2014</u>
Audit Fees . . . . .	\$1,775,000	\$1,813,000
Audit-Related Fees . . . . .	—	21,000
Tax Fees . . . . .	150,000	—
All Other Fees . . . . .	—	—
Total . . . . .	<u>\$1,925,000</u>	<u>\$1,834,000</u>

*Audit Fees.* Audit fees for both years consisted of aggregate fees billed for professional services rendered for the audit of our consolidated annual financial statements, review of interim consolidated financial statements, consultations on accounting matters directly related to the audit, or services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings or engagements.

*Audit-Related Fees.* Audit-related fees consists of aggregate fees billed for accounting consultations and other services that were reasonably related to the performance of audits or reviews of our financial statements and were not reported above under Audit Fees.

*All Other Fees.* All other fees consists of aggregate fees billed for products and services provided by the independent registered public accounting firm other than those disclosed above. These fees consisted of amounts paid for the use of an online accounting research tool.

## **Audit Committee Report**

*The material in this report shall not be deemed to be (i) “soliciting material,” (ii) “filed” with the SEC, (iii) subject to Regulations 14A or 14C of the Exchange Act, or (iv) subject to the liabilities of Section 18 of the Exchange Act. This report shall not be deemed incorporated by reference into any of our other filings under the Exchange Act or the Securities Act, except to the extent the company specifically incorporates it by reference into such filing.*

The audit committee operates under a written charter approved by the board of directors, that provides that its responsibilities include the oversight of the quality of the company’s financial reports and other financial information and its compliance with legal and regulatory requirements; the appointment, compensation, and oversight of the company’s independent registered public accounting firm, Deloitte & Touche LLP, including reviewing its independence; reviewing and approving the planned scope of the company’s annual audit; reviewing and pre-approving any non-audit services that may be performed by Deloitte & Touche LLP; the oversight of the company’s internal audit function; reviewing with management and the company’s independent registered public accounting firm the adequacy of internal financial controls; and reviewing the company’s critical accounting policies and estimates and the application of accounting principles generally accepted in the United States.

The audit committee oversees the company’s financial reporting process on behalf of the board of directors. Management is responsible for the company’s internal controls, financial reporting process, and compliance with laws and regulations and ethical business standards. Deloitte & Touche LLP is responsible for performing an independent audit of the company’s consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). The audit committee’s main responsibility is to monitor and oversee this process.

The audit committee reviewed and discussed our audited financial statements for the year ended December 31, 2015, with management. The audit committee discussed with Deloitte & Touche LLP the matters required to be discussed by Statement on Auditing Standards No. 61, as amended (Communication with Audit Committees). The audit committee has received the written disclosures and the letter from the independent accountant required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant’s communications with the audit committee concerning independence, and has discussed with the independent accountant the independent accountant’s independence.

The audit committee considered any fees paid to Deloitte & Touche LLP for the provision of non-audit-related services and does not believe that these fees compromise Deloitte & Touche LLP’s independence in performing the audit.

Based on the review and discussions referred to above, the audit committee recommended to the board of directors that such audited financial statements be included in the company’s Annual Report on Form 10-K for the year ended December 31, 2015, for filing with the SEC.

### **THE AUDIT COMMITTEE**

Robert B. Taylor (Chairman)  
Neil M. Kurtz, M.D.  
George McCulloch  
Lee Shapiro

## **Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors**

The audit committee pre-approves all audit and non-audit services provided by our independent registered public accounting firm prior to the engagement of the independent registered public accounting firm with respect to such services. The audit committee shall pre-approve any additional audit services and permissible non-audit services.



## **ADDITIONAL INFORMATION**

### **Stockholder Proposals and Nominations**

In order for a stockholder proposal to be considered for inclusion in the proxy statement for the 2017 annual meeting of stockholders, the written proposal must be received by the Corporate Secretary at the address below. The Corporate Secretary must receive the proposal no later than December 23, 2016. The proposal will also need to comply with the SEC's regulations under Rule 14a-8 regarding the inclusion of stockholder proposals in company sponsored proxy materials. Proposals should be addressed to:

Corporate Secretary  
Medidata Solutions, Inc.  
350 Hudson Street, 9th Floor  
New York, New York 10014.

For a stockholder proposal that is not intended to be included in the proxy statement for the 2017 annual meeting of stockholders, or if you want to nominate a person for election as a director, you must provide written notice to the Corporate Secretary at the address above. The Secretary must receive this notice not earlier than February 1, 2017 and not later than March 3, 2017. However, if our 2017 annual meeting of stockholders is held more than 30 days before or more than 60 days after June 1, 2017, then the Secretary must receive this notice not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which we make a public announcement of the date of the meeting. The notice of a proposed item of business must provide information as required in our bylaws which, in general, require that the notice include for each matter a brief description of the matter to be brought before the meeting; the reason for bringing the matter before the meeting; the text of the proposal or matter; your name, address, and number of shares you own beneficially or of record; and any material interest you have in the proposal.

The notice of a proposed director nomination must provide information and documentation as required in our bylaws which, in general, require that the notice of a director nomination include the information about the nominee that would be required to be disclosed in the solicitation of proxies for the election of a director under federal securities laws; the nominee's written consent to be named in the proxy statement as a nominee and to serve as a director if elected; a description of any transaction or arrangement during the last three years between the stockholder making the nomination and the nominee in which the nominee had a direct or indirect material interest; and a completed and signed questionnaire, representation and agreement. A copy of the bylaw requirements will be provided upon request to the Corporate Secretary at the address above.

### **Transaction of Other Business**

Management does not intend to bring before the annual meeting any matters other than those disclosed in the notice of annual meeting of stockholders attached to this proxy statement, and it does not know of any business that persons other than management intend to present at the meeting. If any other matters are properly presented at the Annual Meeting for action, the persons named in the form of proxy and acting thereunder generally will have discretion to vote on those matters in accordance with their best judgment.

### **Annual Report on Form 10-K**

Copies of our annual report on Form 10-K for the year ended December 31, 2015, as filed with the SEC, are available without charge to stockholders upon request to Investor Relations, at the principal executive offices of Medidata Solutions, Inc., 350 Hudson Street, 9th Floor, New York, New York 10014.

## **Incorporation by Reference**

To the extent that this proxy statement is incorporated by reference into any other filing under the Securities Act or the Exchange Act, the sections of this proxy statement entitled “Compensation Committee Report” and “Audit Committee Report” (to the extent permitted by the rules of the SEC) will not be deemed incorporated unless specifically provided otherwise in such filing. Information contained on or connected to our website is not incorporated by reference into this proxy statement and should not be considered part of this proxy statement or any other filing that we make with the SEC.

## **Householding**

The SEC’s proxy rules permit companies and intermediaries, such as brokers and banks, to satisfy proxy delivery requirements with respect to two or more stockholders sharing the same address by delivering a single proxy mailing to those stockholders. This method of delivery, often referred to as householding, should reduce the amount of duplicate information that stockholders receive and lower printing and mailing costs for companies. Medidata and certain intermediaries are householding proxy materials for stockholders of record in connection with the Annual Meeting. This means that:

- Only one proxy mailing will be delivered to multiple stockholders sharing an address unless you notify your broker or bank to the contrary;
- You can contact Medidata by calling 212-918-1800 or by writing to Investor Relations, Medidata Solutions, Inc., 350 Hudson Street, 9th Floor, New York, New York 10014 to request a separate set of the proxy materials and for future meetings or, if you are currently receiving multiple copies, to receive only a single copy in the future or you can contact your bank or broker to make a similar request; and
- You can request delivery of a single set of the proxy materials from your bank or broker if you share the same address as another Medidata stockholder and your bank or broker has determined to household proxy materials.

**MEDIDATA SOLUTIONS, INC.**  
**SECOND AMENDED AND RESTATED**  
**2014 EMPLOYEE STOCK PURCHASE PLAN**

1. Purpose. The purpose of the Medidata Solutions, Inc. Second Amended and Restated 2014 Employee Stock Purchase Plan (the “Plan”) is to provide eligible employees of Medidata Solutions, Inc. (the “Company”) and its Subsidiaries with a convenient way to purchase shares of the Company’s common stock (the “Common Stock”). It is believed that participation in the Plan will incentivize employees to exert maximum efforts for the success of the Company and, in turn, enhance stockholder value. The Plan is intended to satisfy the requirements of Section 423 of the Internal Revenue Code of 1986 (the “Code”).

2. Definitions. Capitalized terms that are not otherwise defined in this document shall have the meanings ascribed to them below.

(a) “Account” means the bookkeeping account established in the name of a Participant to reflect the payroll deductions made and accumulated on his or her behalf for the purchase of Common Stock under the Plan.

(b) “Board” means the Board of Directors of the Company.

(c) “Committee” means the Compensation Committee of the Board or such other persons (including the Board) who may be appointed to administer the Plan pursuant to Section 3.

(d) “Common Stock” means the common stock of the Company, \$.01 par value per share.

(e) “Eligible Employee” means an Employee whose customary employment is more than twenty (20) hours per week. The Committee may establish additional or different eligibility conditions hereunder and/or under one or more sub-plans covering Employees who are subject to the laws of a foreign jurisdiction, provided that such conditions do not affect the qualified status of the Plan under Section 423 of the Code.

(f) “Employee” means an individual who performs services for a Participating Company in an employer-employee relationship. An individual who is a non-employee director or who is classified in the Participating Company’s records as an independent contractor or “leased employee” shall not be an Employee for purposes of the Plan.

(g) “Fair Market Value” means, on any date, the closing price per share of the Company’s Common Stock on the principal securities exchange on which such shares are traded or, if no shares are traded on that date, the closing price per share on the last preceding date on which such shares are traded.

(h) “Offer Date” means the date on which an Offering is made, which shall occur only on the first day of the Offering Period for such Offering.

(i) “Offering” means the grant of Purchase Rights under the Plan, which shall occur on the first day of each Offering Period.

(j) “Offering Period” means each period of time during which Purchase Rights granted pursuant to an Offering may be exercised, as described in Section 7.1 of the Plan.

(k) “Participant” means an Eligible Employee who participates in an Offering under the Plan and for whom a payroll deduction Account is maintained.

(l) “Participating Company” means the Company and any Subsidiary of the Company that is designated as a participating employer by the Committee.

(m) “Purchase Date” means, with respect to an Offering, each date during the Offering Period on which shares of Common Stock may be purchased pursuant to the exercise of a Purchase Right.

(n) “Purchase Period” means, with respect to an Offering, the period of time from one Purchase Date to the next Purchase Date.

(o) “Purchase Right” means the right to purchase shares of Common Stock granted to a Participant pursuant to an Offering.

(p) “Sale Event” means the occurrence of any of the following: (i) any person (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (“Exchange Act”)), other than the Company, any employee benefit plan of the Company, any entity owned directly or indirectly by the shareholders of the Company in substantially the same proportion as their ownership of stock of the Company or any person who becomes a beneficial owner directly or indirectly of securities of the Company pursuant to a transaction described in (ii) below, becomes the beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of securities of the Company (not including in the securities beneficially owned by such person any securities acquired directly from the Company or its affiliates) representing 50% or more of the combined voting power of the Company’s then outstanding voting securities; or (ii) there shall have been consummated a consolidation, merger or reorganization of the Company, unless (1) the stockholders of the Company immediately before such consolidation, merger or reorganization own, directly or indirectly, at least a majority of the combined voting power of the outstanding voting securities of the corporation or other entity resulting from such consolidation, merger or reorganization, (2) individuals who were members of the Board immediately prior to the execution of the agreement providing for such consolidation, merger or reorganization constitute a majority of the board of directors of the surviving corporation or of a corporation directly or indirectly beneficially owning a majority of the voting securities of the surviving corporation, and (3) no person beneficially owns more than 50% of the combined voting power of the then outstanding voting securities of the surviving corporation (other than a person who is (A) the Company or a subsidiary of the Company, (B) an employee benefit plan maintained by the Company, the surviving corporation or any subsidiary, or (C) the beneficial owner of 50% or more of the combined voting power of the outstanding voting securities of the Company immediately prior to such consolidation, merger or reorganization); or (c) the stockholders of the Company approve the complete liquidation or dissolution of the Company, or a sale or other disposition of all or substantially all of the assets of the Company (other than to an entity described in (ii) above).

(q) “Subsidiary” means a corporation 50% or more of the total combined voting power of which is owned directly or indirectly by the Company, as described in Section 424(f) of the Code.

3. Administration. The Plan shall be administered by the Committee. Subject to the provisions of the Plan, the Committee, acting in its sole and absolute discretion, will have full power and authority to interpret the provisions of the Plan, to establish the start dates and durations of future Offering Periods and the Purchase Date(s) within such Offering Periods, to determine which Subsidiaries will be designated as Participating Companies, to establish one or more sub-plans (including, without limitation, sub-plans intended to achieve certain tax or other objectives in locations outside the United States or to comply with local laws applicable to offerings in such foreign jurisdictions), to supervise the administration of the Plan, and to take such other action as it deems necessary or desirable in order to carry out the provisions of the Plan. All determinations and decisions made by the Committee in administering the Plan shall be final, conclusive, and binding on all persons. Subject to the requirements of applicable law, the Committee may delegate to any person or group or subcommittee of persons (who may, but need not be members of the Committee) such Plan-related functions within the scope of its responsibility, power and authority as it deems appropriate. The Company shall indemnify and hold harmless each member of the Committee and any employee or director of the Company or any

Subsidiary to whom any duty or power relating to the administration or interpretation of the Plan is delegated from and against any loss, cost, liability (including any sum paid in settlement of a claim with the approval of the Board), damage and expense (including reasonable legal and other expenses incident thereto) arising out of or incurred in connection with the Plan, unless and except to the extent attributable to such person's fraud or willful misconduct.

#### 4. Enrollment and Participation.

4.1 General. Any Eligible Employee may enroll in the Plan and participate in an Offering, provided that he or she is an Eligible Employee on the Offer Date and has been an Eligible Employee for at least ten days before such Offer Date (or for such other period of time, not to exceed two years, as the Committee may prescribe). No individual may become a Participant in an Offering on a date other than the first day of the Offering Period.

4.2 Enrollment. An Eligible Employee who desires to become a Participant may do so by enrolling in the Plan before the first day of an Offering Period in such manner (including by electronic signature) and in accordance with such procedures as the Committee may prescribe for this purpose.

4.3 Participation. A Participant may be enrolled for only one Offering at a time and may not participate in multiple Offerings at the same time within overlapping Offering Periods. If an Eligible Employee participates in an Offering and continues to be an Eligible Employee through the end of the Offering Period, then he or she will automatically participate in the next succeeding Offering without having to re-enroll. If a Participant receives a Purchase Right pursuant to one Offering and if, before the end of the Offering Period, he or she ceases to be a Participant (by reason of the Participant's withdrawal, termination of employment or otherwise), then he or she may not resume participation in that Offering. Such former Participant may, however, participate in a subsequent Offering, provided that he or she satisfies the applicable eligibility and enrollment requirements of the Plan before the Offer Date of such subsequent Offering.

4.4 Five Percent Shareholders. No Employee may be granted a Purchase Right under the Plan if, immediately after the grant of such Purchase Right, the Employee would own stock possessing 5 percent or more of the total combined voting power or value of all classes of stock of the Company or any Subsidiary. For this purpose, the rules of Section 424(d) of the Code will apply in determining an Employee's stock ownership, and stock which the Employee may purchase under any outstanding options (including outstanding Purchase Rights) will be treated as stock owned by the Employee.

4.5 Transfer to Related Corporation. In the event that an Employee leaves the employ of one Participating Company to become an Employee of another Participating Company, such Employee shall be deemed to continue as an Employee for all purposes of the Plan.

#### 5. Common Stock Subject to Plan; Structure of the Plan.

5.1 Shares Reserved for Issue. Subject to Section 12, the Company may issue a total of 800,000 shares of Common Stock under the Plan (including any sub-plan established as part of the Plan). If the total number of shares for which Purchase Rights to be granted on any Offer Date exceeds the number of shares then available for issuance under the Plan or a given sub-plan (after deduction of all shares for which Purchase Rights have been exercised under the Plan or are then outstanding), the Company shall make a pro rata allocation of the shares remaining available in as nearly a uniform manner as is practicable and equitable. In such event, the payroll deductions to be made pursuant to the authorizations for the applicable Offering Period may be reduced accordingly and the Company shall give written notice of any such reduction to each affected Participant. Shares issued under this Plan may consist, in whole or in part, of authorized and unissued shares or treasury shares reacquired in private transactions or open market purchases. If any Purchase Rights granted under this Plan shall

expire or terminate for any reason without having been exercised in full, the un-purchased shares subject thereto shall again be available for issuance under the Plan.

## 5.2 Plan Structure.

(a) This Plan document is an omnibus document which includes the primary Plan (the “Statutory Plan”) designed to permit offerings of grants to employees of Participating Companies where such offerings are intended to satisfy the requirements of Section 423 of the Code (although the Company makes no undertaking nor representation to obtain or maintain qualification under Section 423 for any Subsidiary, individual, offering or grant) and also separate sub-plans (each a “Non-Statutory Plan”) which permit offerings of grants to employees of Participating Companies (including certain Non-U.S. Subsidiaries) that are not intended to satisfy the requirements of Section 423 of the Code.

(b) The Statutory Plan shall be a separate and independent plan from the Non- Statutory Plan, provided, however, that the total number of shares authorized to be issued under the Plan applies in the aggregate to both the Statutory Plan and the Non-Statutory Plan. Offerings under the Non-Statutory Plan may be made to achieve desired tax or other objectives in particular locations outside the United States or to comply with local laws applicable to offerings in such foreign jurisdictions. Without limiting the generality of the foregoing, the Board and the Committee are specifically authorized to include in any Non-Statutory Plan such different terms and conditions as it deems appropriate under applicable local law requirements, including, without limitation, terms and conditions regarding eligibility to participate, the definition of compensation, the handling of payroll deductions, the establishment of bank or trust accounts or other funding vehicles to hold payroll deductions, the payment of interest, the conversion of local currency, and the determination or designation of beneficiaries of deceased Participants.

(c) The terms of the Statutory Plan shall be those set forth in this Plan document to the extent such terms are consistent with the requirements for qualification under Section 423 of the Code. The Committee may establish Non-Statutory Plans applicable to particular Participating Companies or locations that are not participating in the Statutory Plan. The terms of a Non-Statutory Plan may take precedence over other provisions in this document, with the exception of Section 5.1 of the Plan (relating to the total number of shares of Common Stock that may be issued under the Plan). Unless otherwise superseded by the terms of such Non-Statutory Plan, the provisions of this Plan document shall govern the operation of such Non-Statutory Plan. Except to the extent expressly set forth herein or where the context suggests otherwise, any reference herein to “Plan” shall be construed to include a reference to the Statutory Plan and the Non-Statutory Plan(s).

6. Payroll Deduction Elections. The purchase price of shares of Common Stock acquired by a Participant under the Plan will be paid with amounts withheld from the Participant’s pay pursuant to the Participant’s payroll deduction election(s) made in accordance with this Section.

6.1 General. As part of the enrollment process, an Eligible Employee must make a payroll deduction election, authorizing the Company to deduct a certain amount from each regular paycheck for the purchase of Common Stock under the Plan. Unless the Committee determines otherwise, the amount to be deducted from each regular paycheck pursuant to an Employee’s payroll deduction election will be determined under the formula:  $(A \times B) \div C$ , where—

A = the Employee’s annual rate of base salary in effect at the time of the payroll deduction election,

B = the deduction percentage (not to exceed 50%) specified by the Employee, and

C = the number of regular pay periods in a year.

Once established, an Employee's per-pay-period payroll deduction election will remain in effect (subject to limitations under the Plan) unless and until the Employee changes his or her election or ceases to be a participant in Plan, as provided herein. The Committee may modify the rules and procedures applicable to payroll deduction elections at such time(s) and in such manner as it deems necessary or appropriate for the orderly administration of the Plan; provided, however, that no such action may be taken if it would cause the Plan to be in violation of Section 423(b)(5) of the Code (which provides that all Employees participating in the Plan must have equal rights and privileges). Notwithstanding the foregoing, (a) the total amount deducted from a Participant's compensation under the Plan shall not exceed \$21,250 in any calendar year, and (b) the amount that may be deducted from a Participant's compensation on any payroll date may not exceed the net amount of cash compensation otherwise payable to the Participant on such date, after taxes and other authorized payroll deductions. If a Participant has an unused Account balance immediately following the last Purchase Date of an Offering Period, such balance will be refunded to the Participant.

6.2 Effect of Election; New Elections. Once a payroll deduction election is in effect, it shall remain in effect unless and until it is revoked or modified. A payroll deduction election may be modified by the filing of a new payroll deduction election in the manner described in Section 6.1. A new payroll deduction election will become effective as soon as practicable after its receipt by the Company and will supersede all prior payroll deduction elections. Unless the Committee determines otherwise, only one rate reduction and one rate increase may be made by any Participant during any Purchase Period. A Participant may increase or decrease the rate of his or her payroll deductions for a subsequent Offering Period by filing a new payroll deduction election before the first day of such subsequent Offering Period, and any such new election will not be taken into account in determining the number of changes the Participant may make during any Purchase Period.

6.3 Participants' Accounts. The Committee will establish a bookkeeping Account or cause a bookkeeping Account to be established and maintained in the name of each Participant in order to reflect the amount of the Participant's payroll deductions made and accumulated under the Plan. Each Participant's Account will be credited with the amounts deducted from the Participant's compensation under the Plan and, on each Purchase Date, will be reduced by the purchase price paid for any shares of Common Stock acquired by the Participant on such date pursuant to the exercise of the Participant's Purchase Right. No interest or other earnings will be credited to the Participants' Accounts. The cash retained by the Company pursuant to a Participant's payroll deduction election(s) will be considered to be general assets of the Company and may be held or used by the Company as it deems appropriate. As and when a Participant's Account is charged for the purchase price of shares of Common Stock acquired upon the exercise of the Participant's Purchase Right(s), a like amount of the Participant's payroll deductions will be deemed to have been paid to the Company in exchange for such shares.

7. Terms and Conditions of Each Offering. Each Offering under the Plan will be made on the first day of an Offering Period and each purchase of shares of Common Stock pursuant to the exercise of a Purchase Right will be made on a Purchase Date, as described below.

7.1 Offering Periods and Purchase Dates. The first Offering Period under the Plan shall be the 24-month period beginning on January 1, 2014 and, unless the Committee determines otherwise, a new 24-month Offering Period will begin on each subsequent July 1 (starting July 1, 2014) and January 1. Each 24-month Offering Period will have four Purchase Dates, on June 30 and December 31 of each year during the Offering Period (e.g., June 30, 2014, December 31, 2014, June 30, 2015 and December 31, 2015 in the case of the first Offering Period under the Plan). The Committee may prescribe a different start date and/or duration for any future Offering Period, provided that no Offering Period shall have a duration of more than 27 months. The Committee may also establish different Purchase Dates within any future Offering Period, provided that each Offering Period must have at least one Purchase Date and the last day of each Offering Period must be a Purchase Date. The Committee will notify Eligible Employees of any change in future Offering Periods and Purchase Dates as soon as reasonably practicable prior to the scheduled beginning of the first Offering Period to be affected by such change.

7.2 Early Termination of Offering Periods. Unless the Committee determines otherwise, if the Fair Market Value per share of Common Stock on the first day of a new Offering Period is less than the Fair Market Value per share on the first day of an outstanding Offering Period, then (a) the earlier Offering Period shall be deemed to have terminated on the date immediately preceding the first day of such subsequent Offering Period, (b) the deemed termination date of the outstanding Offering Period will also be deemed to be a Purchase Date, (c) the Purchase Right held by each Participant will be exercised on such deemed Purchase Date in accordance with its terms and the terms of the Plan for the exercise of a Purchase Right generally, and (d) the Participant will be automatically enrolled in the new Offering on the first day of such new Offering Period.

7.3 Purchase Rights. An Eligible Employee who participates in an Offering will receive a Purchase Right on the first day of the Offering Period. Each Purchase Right will permit the Employee/Participant to purchase shares of Common Stock on each Purchase Date within the Offering Period for a purchase price per share equal to the lesser of 85% of the Fair Market Value per share of Common Stock on the first day of the Offering Period, or 85% of the Fair Market Value per share on the Purchase Date. Except as otherwise provided herein, the number of shares of Common Stock that may be purchased by a Participant on any Purchase Date pursuant to the exercise of a Purchase Right will be equal to the amount accumulated in the Participant's payroll deduction Account on such Purchase Date divided by the purchase price per share determined in accordance with the above formula, rounded down to the nearest whole number. Notwithstanding the foregoing, (a) unless the Committee prescribes a different maximum number with respect to an Offering, no more than 2,500 shares of Common Stock may be covered by a Purchase Right granted to any Participant pursuant to such Offering, and (b) no Participant may be permitted to purchase shares of stock under all qualified employee stock purchase plans of the Company and its Subsidiaries (including the Plan) at a rate that exceeds \$25,000 in fair market value of the stock (determined at the time the purchase rights are granted) for any calendar year in which any such purchase right granted to the Participant is outstanding at any time, determined in accordance with Section 423(b)(8) of the Code and the regulations issued thereunder.

7.4 Purchase of Shares. Except as otherwise provided and subject to the limitations contained herein, a Participant's Purchase Right will be exercised on each Purchase Date within an Offering Period for the number of whole shares determined by dividing the amount then credited to the Participant's Account by the applicable purchase price per share determined under Section 7.3 above. An amount equal to the aggregate purchase price of the shares being acquired will then be charged against the Participant's Account, and a corresponding amount of the Participant's payroll deductions will be deemed to have been paid to the Company in full payment of such purchase price. The Company shall issue the purchased shares to the Participant (in certificated or book entry form) as soon as practicable after the Purchase Date. The Committee may permit or require that the purchased shares be deposited for the Participant's account with a broker or agent designated by the Committee. The Committee may require that some or all of such shares be retained by such broker or agent for a designated period of time and/or may establish other procedures as it deems appropriate in connection with the administration of the Plan. The shares acquired pursuant to the exercise of a Purchase Right will be fully paid and non-assessable.

7.5 Withdrawal. Each Participant may withdraw from the Plan during an Offering Period by providing written notice to the Committee (at such time and in such form and manner as the Committee may prescribe) of his or her election to withdraw. A Participant's withdrawal will become effective as soon as practicable following receipt of such withdrawal notice by the Company, at which time the Participant's payroll deduction election will be canceled and the balance credited to the Participant's Account (to the extent not previously applied to the purchase of Common Stock, and, if the withdrawal is effective on or within ten days before a Purchase Date, to the extent not applied to the purchase of Common Stock on such Purchase Date) will be refunded to the Participant, without interest, in full and final satisfaction of the Participant's interest in the Plan. A Participant who withdraws from the Plan during one Offering Period may not resume his or her participation within the same Offering Period, but he or she may re-enroll in the Plan for a new Offering beginning on the first day of any subsequent Offering Period, subject to the same eligibility and other conditions and the same enrollment procedures as are applicable to any other person who desires to enroll in the Plan.



7.6 Termination of Employment. An individual's participation in the Plan will automatically terminate and any outstanding Purchase Right held by such individual will be automatically cancelled if he or she ceases to be employed by a Participating Company (regardless of the reason therefor). Upon or as soon as practical after such termination, the balance credited to the Participant's Account (to the extent not previously applied to the purchase of Common Stock, and, if the termination is effective on or within ten days prior to a Purchase Date, to the extent not applied to the purchase of Common Stock on such Purchase Date) will be distributed, without interest, to the Participant (or, if applicable, the Participant's beneficiary) in full and final satisfaction of the Participant's (or beneficiary's) interest in the Plan.

7.7 Nontransferable Rights. All Purchase Rights acquired pursuant to the Plan shall be nontransferable, except by will or the laws of descent and distribution, and shall be exercisable during the lifetime of a Participant only by the Participant.

7.8 Other Terms and Conditions. Purchase Rights granted under the Plan shall be subject to the terms and conditions set forth herein, and to such other terms and conditions not inconsistent herewith as the Committee may deem appropriate, provided that, except as otherwise permitted or required by applicable law, such terms and conditions shall be identical for each Participant granted Purchase Rights pursuant to any particular Offering under the Statutory Plan or any Non-Statutory Plan, as the case may be.

7.9 Registration of Shares. Notwithstanding anything to the contrary contained herein, no Purchase Rights granted under the Plan may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise are covered by an effective registration statement pursuant to the Securities Act of 1933, as amended (the "Securities Act") and the Plan is in material compliance with all applicable laws. If on any Purchase Date, the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights granted under the Plan shall be exercised on such Purchase Date, and the Purchase Date shall be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date shall in no event be more than twenty-seven (27) months from the commencement of the Offering Date. If on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws, no Purchase Rights shall be exercised and all accumulated but unused payroll deductions shall be refunded to the Participants, without interest.

8. Tax Withholding. To the extent any (i) grant of a Purchase Right, (ii) purchase of shares, or (iii) disposition of shares purchased under the Plan gives rise to any tax withholding obligation (including, without limitation, income and payroll withholding taxes imposed by any jurisdiction) the Committee may implement appropriate procedures to ensure that such tax withholding obligations are met. Those procedures may include, without limitation, withholding amounts credited to a Participant's Account, increased withholding from an employee's current compensation, cash payments to the Company or another Participating Company by the Participant, or a sale of a portion of the stock purchased under the Plan, which sale may be required and initiated by the Company.

9. Equal Rights and Privileges. Notwithstanding anything to the contrary contained herein, all Participants granted Purchase Rights under any Offering shall have the same rights and privileges, except (a) the amount of Common Stock which may be purchased by any Participant pursuant to such Purchase Rights may bear a uniform relationship to the Participant's total compensation, or his or her basic or regular rate of compensation, and (b) no Participant may purchase more than the maximum amount of Common Stock permitted by the Plan or applicable law. The provisions of this Section are intended to reflect the requirements of Section 423(b)(5) of the Code, and such provisions will be interpreted, construed and administered accordingly.

10. Stock Issuance and Rights as Stockholder. Notwithstanding any other provisions of the Plan, no Participant shall have any rights of a stockholder (including the right to vote and receive dividends) with respect

to shares of Common Stock covered by Purchase Rights granted under the Plan unless and until such shares have been purchased and delivered to him or her in accordance with the provisions hereof.

11. Beneficiary Designation. A Participant may designate a beneficiary who will receive any shares of Common Stock and/or unused cash credited to the Participant's Account in the event of such Participant's death subsequent to the end of a Purchase Period but prior to delivery of such shares and/or cash to the Participant. Such designation may be made by delivering a written beneficiary designation to the Committee (or its designee) in such form and in such manner as the Committee (or its designee) may prescribe for this purpose. Each beneficiary designation duly filed with the Committee (or its designee) will have the effect of superseding and revoking any prior beneficiary designation. If a Participant does not designate a beneficiary or if no designated beneficiary survives the Participant, then the Participant's beneficiary will be deemed to be his or her surviving spouse, if any, or, if there is no such surviving spouse, the Participant's estate.

12. Adjustments Upon Changes in Capitalization or Sale Event.

12.1 Capital Changes. In the event of reorganization, recapitalization, stock split, stock dividend, combination of shares, merger, consolidation, offering of rights, or any other change in the structure of the Company's Common Stock, the Committee may make such adjustment, if any, as it may deem appropriate in the number and class of shares that may be issued under the Plan, the maximum number of shares that may be purchased during any Offering Period or calendar year, and the number and class of shares and the purchase price per share covered by Purchase Rights that are then outstanding under the Plan. Such adjustments may include, without limitation, closing an Offering Period or Purchase Period early and permitting purchase on the last business day of the shortened Offering Period or Purchase Period, or terminating an offering and refunding Participants' Account balances.

12.2 Sale Event. If a Sale Event occurs, the Board or Committee may permit the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume and continue outstanding Purchase Rights or to substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Sale Event) for outstanding Purchase Rights, in either case on an economically equivalent basis. If outstanding Purchase Rights are not so assumed, continued or substituted, then, unless the Committee or the Board determines otherwise, the balance of each Participant's Account will be applied to purchase shares of Common Stock within ten business days prior to the date of the Sale Event pursuant to automatic exercise of such Participant's outstanding Purchase Rights in full and final satisfaction of such Participant's interest in the Plan, and the shares so acquired will be entitled to participate in the Sale Transaction on the same basis as other holders of the Company's Common Stock, provided that any such automatic exercise of Purchase Rights will be subject to the applicable limitations and provisions that would otherwise be applicable and provided further that any amounts remaining in the Participant's Account after such automatic exercise of the Participant's Purchase Rights shall be distributed to the Participant in cash on or as soon as practicable (but not more than five business days) after the consummation of such Sale Event.

12.3 Committee or Board Determination Conclusive. All adjustments under this Section 12 shall be made by the Committee or the Board as constituted immediately prior to the capital change or Sale Event, as the case may be, and the Committee's or Board's determination as to what adjustments shall be made, and the extent thereof, shall be binding and conclusive.

12.4 Reservation of Rights. The grant of a Purchase Right pursuant to this Plan shall not affect in any way the right or power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure or to merge or consolidate or to dissolve, liquidate, sell or transfer all or any part of its business or assets.

### 13. Securities Law Requirements.

13.1 Investment Representations. The Company may require a Participant as a condition of the grant and/or exercise of a Purchase Right, to represent and establish to the satisfaction of the Company that all shares of Common Stock to be acquired pursuant to such grant and exercise will be acquired for investment and not for resale. The Company may cause such legends to be placed on certificates evidencing any such shares as, in the opinion of the Company's counsel, may be required by federal and applicable state securities laws.

13.2 Compliance with Applicable Securities Laws. No shares of Common Stock shall be issued to a Participant under the Plan unless and until counsel for the Company determines that: (i) the Company and the Participant have satisfied all applicable requirements under the Securities Act of 1933, as amended, and the Exchange Act; (ii) any applicable requirement of any stock exchange or quotation system on which the Company's Common Stock is listed or quoted has been satisfied; and (iii) all other applicable provisions of state and federal law have been satisfied.

14. Amendment. The Committee and the Board shall have the right at any time and without notice to amend, modify, suspend or terminate the Plan, provided that no Participant's existing rights under any outstanding Offering made under the Plan may be adversely affected thereby; and provided further that, except as permitted by Section 12 (relating to adjustments for capital changes and Sale Events), stockholder approval shall be required for any amendment if and to the extent such approval is required by Section 423 of the Code or other applicable law or listing requirements (including, as applicable, any amendment that would (i) increase the number of shares of Common Stock issuable under the Plan, or (ii) change the class of persons eligible to participate in the Plan).

15. Termination. Unless sooner terminated by the Board or the Committee, the Plan will automatically terminate on the earlier of the issuance of all the shares of Common Stock that may be issued under the Plan, or the date which is ten years from the date the Plan was adopted by the Board.

16. Reservation of Shares. The Company will at all times during the term of this Plan reserve and keep available such number of shares of its Common Stock as shall be sufficient to satisfy the requirements of the Plan.

17. No Rights Conferred. Neither the Plan nor an individual's participation in the Plan shall interfere with or limit in any way the right of a Participating Company to terminate or modify the terms and conditions of such individual's employment at any time or otherwise confer upon such individual a right to continue in the employ of such Participating Company.

18. Use of Funds. All payroll deductions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions.

19. Governing Law. The Plan shall be governed by the laws of the State of Delaware without regard to its conflicts of law provisions.

20. Effective Date. This Plan was adopted by the Board of Directors of the Company on January 11, 2016. The Plan will be effective upon approval by the Company's stockholders at the 2016 Annual Stockholders' Meeting, provided, however, that no shares of Common Stock may be issued under the Plan unless the Plan is approved by the Company's stockholders at the 2016 Annual Stockholders' Meeting, and provided further that the Plan will automatically terminate and be of no force or effect on the date of such Annual Meeting if the Plan is not so approved.

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**CERTIFICATE OF AMENDMENT OF  
FIFTH AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF MEDIDATA SOLUTIONS, INC.**

Medidata Solutions, Inc. (the “Corporation”), a corporation organized and existing under the General Corporation Law of the State of Delaware, hereby certifies as follows:

1. This Certificate of Amendment (the “Certificate of Amendment”) amends the provisions of the Corporation’s Fifth Amended and Restated Certificate of Incorporation filed with the Secretary of State on July 31, 2014 (the “Certificate of Incorporation”).
2. Article VIII of the Certificate of Incorporation is hereby amended and restated in its entirety as follows:

**ARTICLE VIII**

Any director may be removed from the Board of Directors only by the affirmative vote of the holders of at least a majority of the voting power of the issued and outstanding shares of capital stock of the corporation then entitled to vote in the election of directors. Vacancies occurring on the Board of Directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by a vote of a majority of the remaining members of the Board of Directors, although less than a quorum, or by a sole remaining director, at any meeting of the Board of Directors. A person so elected by the Board of Directors to fill a vacancy or newly created directorship shall hold office until the next annual meeting of stockholders and until his or her successor shall be duly elected and qualified. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

This amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

All other provisions of the Certificate of Incorporation shall remain in full force and effect.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by the undersigned, a duly authorized officer of the Corporation, this        day of        , 2016.

By: \_\_\_\_\_  
Name:  
Title:

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