



Corporate Governance Guidelines

(Adopted May 18, 2009, as amended on August 16, 2011, July 22, 2015 and April 28, 2016)

The Board of Directors (the "Board") of Medidata Solutions, Inc. (the "Company") has established the following guidelines for the conduct and operation of meetings and deliberations of the Board. These guidelines will be reviewed periodically and are subject to future refinement or changes as the Board may find necessary or advisable.

General

The Board has developed corporate governance practices to help fulfill its responsibilities to the stockholders to oversee the work of management and the Company's business. It is the responsibility of the Board of Directors to provide guidance to management and to actively monitor the effectiveness of management's policies and decisions, including the execution of its strategies, with a view toward enhancing shareholder value over the long term. Each director owes a duty of care and loyalty to the Company and is expected to act in the best interests of the Company and its stockholders as a whole.

Board Composition and Selection

1. **Board Size.** The Nominating and Governance Committee periodically reviews the size of the Board and recommends changes that it deems appropriate.
2. **Selection of Board Members.** Each year at the Company's annual meeting, the Board will recommend a slate of directors for election by stockholders. The Board's recommendations are based on the Nominating and Governance Committee's determination as to the suitability of each individual, and the slate as a whole, to serve as directors of the Company, in accordance with its charter. The Board may fill vacancies in existing or new director positions between annual meetings with candidates identified and approved by the Nominating and Governance Committee.
3. **Board Membership Criteria.** The Nominating and Governance Committee works with the Board as a whole on an annual basis to determine the appropriate characteristics, skills and experience for the Board as a whole and its individual members. In evaluating the suitability of individual Board members, the Nominating and Governance Committee and Board take into account many factors, including general understanding of the industry and other elements relevant to the success of a publicly-traded company in today's business environment, understanding of the Company's business on a technical level and professional background. The Nominating and Governance Committee and the Board evaluate each individual in the context of the membership of the Board as a whole, with the objective of having a group with diverse backgrounds and experiences that can best perpetuate the success of the business, represent stockholder interests and enhance long-term shareholder value through the exercise of sound judgment.
4. **Candor and Avoidance of Conflicts.** The directors realize that candor and the avoidance of conflicts are hallmarks of the accountability owed to the Company's stockholders. Directors have a personal obligation to disclose a potential conflict of interest to the Chairman of the Board and the Lead Director before any decision related to the matter and, if the Chairman or the Lead Director in consultation with legal counsel determines a conflict exists or the perception of a conflict is likely to be significant, to recuse themselves from any discussion or vote related to the matter. Each Board member is also expected to ensure that other commitments do not materially interfere with the member's duties to the company and service as a director.
5. **Board Composition.** At least a majority of the Company's directors shall be independent directors. The Nominating and Governance Committee will review the independence of each Board member annually, and refer its conclusions to the Board for full discussion and approval. In determining the independence of a director, the Board will be guided by the definitions of "independent director" included in pertinent listing standards of the Nasdaq Global Market and any requirements of the Securities and Exchange Commission.
6. **Term Limits.** The Board does not believe it should limit the number of terms for which an individual may serve as a director. Directors of the Company are elected by stockholders annually. In addition, those Directors who have served on the Board for an extended period of time are able to provide valuable insight into the operations and future of the Company based on their experience with and understanding of the Company's history, policies and objectives. As an alternative to term limits, the Nominating and Governance Committee will review the continuation of each director nominated by such Committee every year. This will allow each director the opportunity to conveniently confirm his or her desire to continue as a member of the Board.

7. **Retirement Policy.** The Board does not have a mandatory retirement age for outside directors.
8. **Directors with Significant Job Changes.** The Board does not believe that directors who retire or change from the position they held when they came on the Board should necessarily leave the Board. There should, however, be an opportunity for the Board, via the Nominating and Governance Committee, to review the continued appropriateness of Board membership under these circumstances.
9. **Board Leadership.** The independent directors will annually appoint a Chairman of the Board. The Board has no established policy with respect to combining or separating the offices of Chairman and Chief Executive Officer. This decision will be made by the Board depending on what is in the Company's best interests at any given point in time. To ensure robust independent leadership on the Board, if the individual appointed as Chairman of the Board is not an independent director, or when the independent directors determine that it is in the best interests of the Company, the independent directors will also annually appoint an independent Lead Director. If appointed, the Lead Director (i) presides at all meetings of the Board of Directors at which the Chairman is not present, including executive sessions of the independent directors; (ii) is authorized to call meetings of the independent directors at any time; (iii) collects feedback from Board meetings and provides it to the Chairman, and serves as a liaison between the Chairman and the independent directors; (iv) consults with the Chairman regarding all material information sent to the Board, the agendas for Board meetings, and the meeting schedules to assure that there is sufficient time for discussion of all agenda items; (v) coordinates the activities of the independent directors; (vi) leads the annual CEO evaluation process; (vii) will be available, when appropriate, for consultation and direct communication with stockholders; and (viii) performs such other duties either specified in these guidelines or assigned from time to time by the Board.
10. **Other Board Service.** The Board does not believe that its members should be prohibited from serving on boards and/or committees of other organizations, and the Board has not adopted any guidelines limiting such activities. Directors should advise the Chairman of the Board and the Chairman of the Nominating and Governance Committee in advance of accepting an invitation to serve on another public company board or an appointment to serve on an audit committee or a compensation committee of another public company board. Service on boards and/or committees of other organizations must be consistent with the Company's Code of Conduct.
11. **Majority Voting; Advance Resignation as Prerequisite to Director Nomination.** In accordance with the Company's bylaws, unless the number of director nominees exceeds the number of directors to be elected at the meeting, a nominee for director must receive more votes cast for than against his or her election or reelection in order to be elected or reelected to the Board. The Board expects a director to tender his or her resignation if he or she fails to receive the required number of votes for reelection. The Board shall nominate for election or reelection as director only candidates who agree to tender, promptly following the stockholders' meeting at which they are elected as director or incumbent directors who have tendered, in advance of such nomination, irrevocable resignations in substantially the form attached as Exhibit A that will be effective upon (i) the failure to receive the required vote at the next stockholders' meeting at which they face reelection and (ii) Board acceptance of such resignation. In addition, the Board shall fill director vacancies and new directorships only with candidates who agree to tender, promptly following their appointment to the Board, the same form of resignation tendered by other directors in accordance with this guideline.

If an incumbent director fails to receive the required vote for reelection, the Nominating and Governance Committee will act on an expedited basis to determine whether to accept or reject the director's resignation or whether other action should be taken, and will submit such recommendation for prompt consideration by the Board. The Board expects the director whose resignation is under consideration to abstain from participating in any decision regarding that resignation. 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, the Company will publicly disclose the Board's decision and the rationale behind such decision.

Board Meetings

12. **Agendas.** The Chairman of the Board and/or CEO, taking into account suggestions from the Lead Director and other members of the Board, will set the agenda for each Board meeting, and will distribute this agenda in advance to each director.
13. **Meeting Frequency and Attendance at Meetings.** The Board shall meet at least four times a year. Directors are expected to attend, and prepare for, Board meetings and meetings of committees on which they serve, to review relevant materials, and to spend the necessary time to properly discharge their duties diligently and responsibly.
14. **Advance Distribution of Materials.** All information and data that is relevant to the Board's understanding of matters to be discussed at an upcoming Board meeting, where feasible, should be distributed in writing or electronically to all

members of the Board in advance of the meeting. This will help facilitate the efficient use of time at Board meetings to deliberate and make decisions on key Company issues. The Board acknowledges that certain items to be discussed at Board meetings are of an extremely sensitive nature and that the distribution of materials on these matters prior to Board meetings may not be appropriate.

15. **Executive Sessions of Independent Directors.** The independent directors will regularly meet in executive session without management, at least twice a year, generally in connection with regularly scheduled Board meetings. The Lead Director will preside at all executive sessions. If the Lead Director is absent the independent directors will choose another independent director to preside at the executive sessions. These executive session discussions may include such topics as the independent directors determine, but any formal actions by the Board should be taken separately at a Board meeting.

Director Access to Officers and Employees

16. The Board has complete access to any Company employee in order to ensure that directors can ask all questions and glean all information necessary to fulfill their duties. It is expected that directors will use their judgment to ensure that any such contact is not disruptive to the business operations of the Company and that, to the extent appropriate, the Chief Executive Officer is given advance courtesy notice of any such contact. The Chairman of the Audit Committee need not advise the Chief Executive Officer of his or her contact with the Company's finance or internal audit department. At the Chief Executive Officer's discretion, senior officers and other personnel of the Company may attend Board meetings. The Board also welcomes informal consultation of the Chief Executive Officer and senior management with its members between Board meetings.

Retention and Compensation of Outside Advisors

17. The Board has the authority to engage independent legal, financial or other advisors as it may deem advisable in fulfilling its obligations and responsibilities, without consulting, or obtaining the approval of, any officer of the Company, and the Company shall cause sufficient funds to be available to compensate such advisors as is determined by the Board. Each committee of the Board shall also have such power, unless otherwise provided in its charter.

Performance Review of the Company and Chief Executive Officer

18. Management should review the financial and competitive performance of the Company with the Board on a regular basis. The Board should also periodically (but not less than once each year) review, and be briefed on, the Company's long-term strategic plans, including their development, execution and ongoing implementation, including performance relative to goals, and the principal issues that the Company will face in the future.
19. The Compensation Committee will conduct an annual review of the CEO's performance, as set forth in its charter. All directors are encouraged to review the Compensation Committee's report.

Performance Evaluation of the Board

20. The Nominating and Governance Committee shall develop, recommend to the Board and coordinate an annual evaluation of the Board and its committees, as required by applicable law, the Nasdaq Global Market and/or any other applicable rules or regulations, to determine whether they are functioning effectively. The Nominating and Governance Committee will receive comments from all directors executive officers and any other persons it deems appropriate and report annually to the Board following the end of each fiscal year. The assessment will focus on the Board's organization, policies, performance, effectiveness and contribution to the Company and specifically focus on areas in which the Board could improve.

Director Compensation

21. The Compensation Committee will conduct an annual review of director compensation and recommend the form and amount of director compensation in accordance with the policies and principles set forth in its charter.

Director Stock Ownership Requirements

22. The Board believes that directors should hold meaningful equity ownership positions in the Company, which helps to more closely align their economic interests with those of other stockholders. As a guideline, non-employee directors should own common stock of the Company equal in value to at least three times the amount of the annual Board

retainer fee. Directors are expected to achieve the guideline within three years of joining the Board, or, in the case of directors serving at the time the guidelines were adopted, within three years of the date of adoption. For this purpose, stock ownership includes shares of vested restricted stock, shares acquired as the result of the exercise of stock options and shares held in a trust for which a director is a trustee with voting and investment powers. The Board will evaluate whether exceptions should be made in the case of any director who does not achieve this expectation.

Committees

23. **Number and Type of Committees.** The Board has three committees - an Audit Committee, a Compensation Committee, and a Nominating and Governance Committee. The Board may add new committees or remove existing committees as it deems advisable for purposes of fulfilling its primary responsibilities. Each committee will perform its duties as assigned by the Directors in compliance with the applicable committee charter and Company bylaws.
24. **Composition of Committees; Committee Chairpersons.** The Board is responsible for the appointment of committee members and committee chairpersons according to criteria that it determines to be in the best interest of the Company and its stockholders. The Board may remove a member from membership on any Committee at any time, with or without cause. The Chairman of the Committees in consultation with the appropriate members of management and input from Committee members will develop the Committee's procedures and agenda.
25. In addition to the requirement that the majority of the Board be independent in accordance with paragraph 5, above, the members of the Audit Committee, Compensation Committee, and Nominating and Governance Committee shall satisfy the applicable independence requirements of the Nasdaq Global Market listing standards and the rules and regulations of the Securities and Exchange Commission.

Director Orientation and Continuing Education

26. All new directors must participate in the Company's Orientation Program. This program will include background materials and presentations by senior management to familiarize new directors with the Company's strategic plans, its significant financial, accounting and risk management issues, its compliance programs, its Code of Business Conduct, these Guidelines, its principal officers, and its internal and independent auditors. In addition, the Company's Orientation Program will include a visit to the Company's headquarters. All directors are expected to participate in any additional continuing education programs offered by the Company to help directors maintain the level of knowledge and expertise necessary to perform their duties as directors of a public company. Directors are also encouraged to attend external continuing director education programs. The Company will reimburse each director for the costs associated with attending such continuing education programs. The Company will provide a budget to each member of the Board for the purpose of attending director education programs of the director's choosing.

Succession Planning

27. The Nominating and Governance Committee shall review corporate succession planning with the Chief Executive Officer on a periodic basis, with respect to emergency situations in which the Chief Executive Officer becomes unavailable to serve, a retirement of the Chief Executive Officer and the identification, cultivation and promotion of talented individuals within the senior levels of the organization as part of the normal succession process. The Chief Executive Officer shall at least annually provide to the Nominating and Governance Committee his or her recommendations and evaluations of potential successors, along with a review of any development plans recommended for such individuals. The Chairman of the Nominating and Governance Committee should report to the full Board, in executive session and in the absence of management directors, a summary of this discussion and should receive input on the issue of succession.

Communications with the Public

28. The Board shall look to management to speak for the Company. Absent unusual circumstances or as contemplated by committee charters, Board members should refer all inquiries from and communications with the press, institutional investors, analysts, customers/clients or other constituencies regarding the Company to the Chief Executive Officer, President or Chief Financial Officer. It is expected that communications between Board members or retired Board members and constituencies outside the Company would be done only at the request of management. If a Board communication is required, it will be coordinated through the Chairman.

Independent Advisors

29. The Board and each committee has the sole authority to retain, at the expense of the Company, independent legal, financial or other advisors as it may deem necessary, without consulting or obtaining the approval of any officer of the

Company in advance.

Exhibit A: Form of Resignation - Majority Voting in Director Elections

Attention: The Chairperson of the Board of Directors of Medidata Solutions, Inc.

In accordance with the Corporate Governance Guidelines of Medidata Solutions, Inc., a Delaware corporation (the "Company"), regarding majority voting in director elections, I hereby tender my resignation as a director of the Company, provided that this resignation shall be effective only in the event that (i) I fail to receive a sufficient number of votes for reelection at a meeting of the stockholders of the Company in which the majority voting rule applies for the election of directors (the "Applicable Stockholders' Meeting") and (ii) the Board of Directors accepts this resignation following my failure to be reelected at the Applicable Stockholders' Meeting.

This resignation shall be irrevocable by me. The Board of Directors may by resolution provide that this resignation shall expire on a specified date and thereafter be of no force and effect. I recognize that this letter of resignation may remain in force so long as I am a director of the Company.

Very truly yours,

Director

Dated: _____