Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6047(e), 6057(b), and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210-0110
1210-0089

2011

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A This return/report is for:
- [ ] a multiemployer plan;
- [ ] a multiple-employer plan; or
- [X] a single-employer plan;
- [ ] a DFE (specify) ____

B This return/report is:
- [ ] the first return/report;
- [ ] the final return/report;
- [ ] an amended return/report;
- [ ] a short plan year return/report (less than 12 months).

C If the plan is a collectively-bargained plan, check here. . . . . ▶ [ ]

D Check box if filing under:
- [X] Form 5558;
- [ ] automatic extension;
- [ ] the DFVC program;
- [ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
MEDIDATA SOLUTIONS, INC. 401(K) PLAN

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 01/01/2004

2a Plan sponsor's name and address, including room or suite number (Employer, if for single-employer plan)

MEDIDATA SOLUTIONS, INC.

79 FIFTH AVENUE
NEW YORK, NY 10003

2b Employer Identification Number (EIN) 13-4066508

2c Sponsor's telephone number 212-918-1840

2d Business code (see instructions) 541600

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/12/2012	GARY ABRAHAMS
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

3a Plan administrator's name and address (if same as plan sponsor, enter "Same")
MEDIDATA SOLUTIONS, INC.

79 FIFTH AVENUE
NEW YORK, NY 10003

3b Administrator's EIN
13-4066508

3c Administrator's telephone number
212-918-1840

4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report:

a Sponsor's name

4b EIN

4c PN

5	Total number of participants at the beginning of the plan year	**5**	574
6	Number of participants as of the end of the plan year (welfare plans complete only lines **6a, 6b, 6c,** and **6d**).		
a	Active participants	**6a**	551
b	Retired or separated participants receiving benefits	**6b**	0
c	Other retired or separated participants entitled to future benefits	**6c**	75
d	Subtotal. Add lines **6a**, **6b**, and **6c**	**6d**	626
e	Deceased participants whose beneficiaries are receiving or are entitled to receive benefits	**6e**	0
f	Total. Add lines **6d** and **6e**	**6f**	626
g	Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	438
h	Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	0
7	Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	**7**	

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
2E 2F 2G 2J 2K 3D

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

9a Plan funding arrangement (check all that apply)

(1)		Insurance
(2)		Code section 412(e)(3) insurance contracts
(3)	X	Trust
(4)		General assets of the sponsor

9b Plan benefit arrangement (check all that apply)

(1)		Insurance
(2)		Code section 412(e)(3) insurance contracts
(3)	X	Trust
(4)		General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

(1)	X	**R** (Retirement Plan Information)
(2)		**MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
(3)		**SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

(1)	X	**H** (Financial Information)
(2)		**I** (Financial Information – Small Plan)
(3)		**A** (Insurance Information)
(4)	X	**C** (Service Provider Information)
(5)	X	**D** (DFE/Participating Plan Information)
(6)		**G** (Financial Transaction Schedules)

SCHEDULE C (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Service Provider Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection.

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MEDIDATA SOLUTIONS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
MEDIDATA SOLUTIONS, INC.

D Employer Identification Number (EIN)
13-4066508

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. . . . . [X] Yes [ ] No

b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

ALLIANZ GLOBAL INVESTORS DISTRIBUTO
1345 AVENUE OF THE AMERICAS
NEW YORK, NY 10105

(b) Enter name and EIN or address of person who provided you disclosure on eligible indirect compensation

ALLIANZ GLOBAL INVESTORS DISTRIBUTO
1345 AVENUE OF THE AMERICAS
NEW YORK, NY 10105

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

AMERICAN CENTURY INVESTMENT SERVICE

44-0640487

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

AMERICAN FUNDS DISTRIBUTORS, INC.

95-2769620

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

BLACKROCK INVESTMENTS, INC.

23-2784752

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

CALAMOS ADVISORS LLC

20-1647533

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

DWS INVESTMENTS DISTRIBUTOR, INC.

36-3976708

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

FIDELITY DISTRIBUTORS CORP.

500 SALEM STREET
MAIL ZONE O3N
SMITHFIELD, RI 02917

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

FRED ALGER & COMPANY, INCORPORATED

13-2510833

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

GUARDIAN INVESTOR SERVICES, LLC

388 MARKET STREET
SAN FRANCISCO, CA 94111

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

J.P. MORGAN INVESTMENT MANAGEMENT I

13-3200244

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

NATIXIS DISTRIBUTORS, L.P.

399 BOYLSTON STREET
BOSTON, MA 02116

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

NUVEEN INVESTMENTS

333 W. WACKER DR
CHICAGO, IL 60606

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

OPPENHEIMER FUNDS INC.

13-2527171

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

PHOENIX - VIRTUS

56 PROSPECT STREET
PO BOX 150480
HARTFORD, CT 06115

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

PRUDENTIAL INVESTMENTS LLC

22-3468527

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

T. ROWE PRICE

100 EAST PRATT STREET
BALTIMORE, MD 21202

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

THORNBURG SECURITIES CORPORATION

2300 NORTH RIDGETOP RD.
SANTA FE, NM 87506

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

STATE STREET CORPORATION

04-1867445

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
28 52 15 64	DIRECTED TRUSTEE/CUSTODIA	0	Yes [X] No [ ]	Yes [X] No [ ]	23177	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

ADP

22-1467904

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
15 17 50 64 70 37 49 99	RECORD KEEPER	4548	Yes [X] No [ ]	Yes [X] No [ ]	0	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

ADP BROKER-DEALER

22-3319984

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
60 59 49 99 63	RECORD KEEPER	0	Yes [X] No [ ]	Yes [ ] No [X]	0	Yes [X] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
STATE STREET CORPORATION	52 64	23177

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
ADP 22-1467904	INVESTMENT MANAGEMENT FEES PAID INDIRECTLY BY PLAN RECORDKEEPING FEES

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	63 60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
ALLIANZ GLOBAL INVESTORS DISTRIBUTO 1345 AVENUE OF THE AMERICAS NEW YORK, NY 10105	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00200 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	63	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
ALLIANZ GLOBAL INVESTORS DISTRIBUTO 1345 AVENUE OF THE AMERICAS NEW YORK, NY 10105	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
AMERICAN CENTURY INVESTMENT SERVICE 44-0640487	ANNUAL RATE 0.00350 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00350 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
AMERICAN FUNDS DISTRIBUTORS, INC. 95-2769620	ANNUAL RATE 0.00050 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
BLACKROCK INVESTMENTS, INC. 23-2784752	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
CALAMOS ADVISORS LLC 20-1647533	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
DWS INVESTMENTS DISTRIBUTOR, INC. 36-3976708	ANNUAL RATE 0.00080 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
FIDELITY DISTRIBUTORS CORP. 500 SALEM STREET MAIL ZONE O3N SMITHFIELD, RI 02917	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59 99	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
FRED ALGER & COMPANY, INCORPORATED 13-2510833	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	63 60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
GUARDIAN INVESTOR SERVICES, LLC 388 MARKET STREET SAN FRANCISCO, CA 94111	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
J.P. MORGAN INVESTMENT MANAGEMENT I 13-3200244	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00050 OF AVERAGE DAILY ASSETS

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
NATIXIS DISTRIBUTORS, L.P. 399 BOYLSTON STREET BOSTON, MA 02116	ANNUAL RATE 0.00200 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
NUVEEN INVESTMENTS 333 W. WACKER DR CHICAGO, IL 60606	ANNUAL RATE 0.00150 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
OPPENHEIMER FUNDS INC. 13-2527171	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
PRUDENTIAL INVESTMENTS LLC 22-3468527	ANNUAL RATE 0.00250 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	99	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
STATE STREET CORPORATION 04-1867445	ANNUAL RATE 0.00550 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00670 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00670 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00670 OF AVERAGE DAILY ASSETS ANNUAL RATE 0.00420 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
T. ROWE PRICE 100 EAST PRATT STREET BALTIMORE, MD 21202	ANNUAL RATE 0.00150 OF AVERAGE DAILY ASSETS

Part I Service Provider Information (continued)

3 If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
ADP BROKER-DEALER	60 59	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
THORNBURG SECURITIES CORPORATION 2300 NORTH RIDGETOP RD. SANTA FE, NM 87506	ANNUAL RATE 0.00350 OF AVERAGE DAILY ASSETS

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)

(complete as many entries as needed)

a	Name:	**b** EIN:
c	Position:	
d	Address:	**e** Telephone:

Explanation:

a	Name:	**b** EIN:
c	Position:	
d	Address:	**e** Telephone:

Explanation:

a	Name:	**b** EIN:
c	Position:	
d	Address:	**e** Telephone:

Explanation:

a	Name:	**b** EIN:
c	Position:	
d	Address:	**e** Telephone:

Explanation:

a	Name:	**b** EIN:
c	Position:	
d	Address:	**e** Telephone:

Explanation:

SCHEDULE D (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

DFE/Participating Plan Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection.

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MEDIDATA SOLUTIONS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan or DFE sponsor's name as shown on line 2a of Form 5500
MEDIDATA SOLUTIONS, INC.

D Employer Identification Number (EIN)
13-4066508

Part I **Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)**
(Complete as many entries as needed to report all interests in DFEs)

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA CASH SERIES U.S. GOVT

b Name of sponsor of entity listed in (a): STATE STREET BANK & TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103 12 IE at end of year (see instructions)
04-0025081-000	C	0

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA S & P 500 INDEX FUND

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103 12 IE at end of year (see instructions)
04-0025081-065	C	0

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA US BOND INDEX

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
04-0025081-071	C	0

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA US INFL PRTC BOND INDEX

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
04-0025081-076	C	260571

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA RUSSELL SMALL CAP INDEX

b Name of sponsor of entity listed in (a): STATE STREET BANK & TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
04-0025081-084	C	665203

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA INTERNATIONAL INDEX

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
04-0025081-462	C	708316

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA TARGET RETIR INC STRAT FD

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
04-0025081-538	C	56704

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA TARGET RET 2010 STRAT FD

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN 04-0025081-539	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 11629

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA TARGET RET 2020 STRAT FD

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN 04-0025081-540	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 353519

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA TARGET RET 2030 STRAT FD

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN 04-0025081-541	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 801838

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA TARGET RET 2040 STRAT FD

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN 04-0025081-542	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 465060

a Name of MTIA, CCT, PSA, or 103-12 IE: SSGA STABLE VALUE FUND

b Name of sponsor of entity listed in (a): STATE STREET BANK AND TRUST CO

c EIN-PN 04-2675543-001	**d** Entity code C	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 0

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN
a Plan name	
b Name of plan sponsor	**c** EIN-PN

SCHEDULE H (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Financial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MEDIDATA SOLUTIONS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
MEDIDATA SOLUTIONS, INC.

D Employer Identification Number (EIN)
13-4066508

Part I Asset and Liability Statement

1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)	1478236	
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)	294446	351981
(9) Value of interest in common/collective trusts	1c(9)	6754553	3322839
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	9313116	17251602
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

		(a) Beginning of Year	(b) End of Year
1d Employer-related investments:			
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	17840351	20926422
Liabilities			
g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through1j)	1k	0	0
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	17840351	20926422

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: **(A)** Employers	2a(1)(A)	818219	
(B) Participants	2a(1)(B)	3441822	
(C) Others (including rollovers)	2a(1)(C)	195731	
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		4455772
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)	14005	
(F) Other	2b(1)(F)		
(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		14005
(2) Dividends: **(A)** Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	430183	
(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		430183
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: **(A)** Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line **2b(4)(B)** from line **2b(4)(A)** and enter result	2b(4)(C)		0

		(a) Amount	(b) Total
2b (5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		0
(6) Net investment gain (loss) from common/collective trusts	2b(6)		-26252
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		-650144
c Other income	2c		45641
d Total income. Add all **income** amounts in column (b) and enter total	2d		4269205
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	1151713	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		1151713
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		21935
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)		
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)	9486	
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		9486
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		1183134
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d	2k		3086071
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) [ ] Unqualified (2) [ ] Qualified (3) [X] Disclaimer (4) [ ] Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? [X] Yes [ ] No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: BDO USA, LLP (2) EIN: 13-5381590

d The opinion of an independent qualified public accountant is **not attached** because:

(1) [ ] This form is filed for a CCT, PSA, or MTIA. (2) [ ] It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete 4j and 4l. MTIAs also do not complete 4l.

During the plan year:

		Yes	No	Amount
a	Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	4a		X	
b	Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	4b		X	
c	Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d		X	
e	Was this plan covered by a fidelity bond?	4e	X		500000
f	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g	Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g		X	
h	Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i	Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i	X		
j	Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j		X	
k	Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l	Has the plan failed to provide any benefit when due under the plan?	4l		X	
m	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m		X	
n	If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	4n			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? If "Yes," enter the amount of any plan assets that reverted to the employer this year ☐ **Yes** ☒ **No** **Amount:**

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	**5b(2)** EIN(s)	**5b(3)** PN(s)

SCHEDULE R (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Retirement Plan Information

This schedule is required to be filed under section 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection.

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MEDIDATA SOLUTIONS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
MEDIDATA SOLUTIONS, INC.

D Employer Identification Number (EIN)
13-4066508

Part I Distributions

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions **1** 0

2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): 57-1198022

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year. **3**

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section of 412 of the Internal Revenue Code or ERISA section 302, skip this Part)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 **a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

Part III Amendments

9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ..... ☐ **Increase** ☐ **Decrease** ☐ **Both** ☐ **No**

Part IV ESOPs (see instructions). If this is not a plan described under Section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 **a** Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete items 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete items 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete items 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete items 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete items 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete items 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**14c**	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	**15a**	
b The corresponding number for the second preceding plan year	**15b**	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	**16a**	
b If item 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	**16b**	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete items (a) through (c)

a Enter the percentage of plan assets held as:
Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate item 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

MEDIDATA SOLUTIONS, INC.
401(k) PLAN

FINANCIAL STATEMENTS
AND SUPPLEMENTAL SCHEDULE

For The Years Ended December 31, 2011 and 2010
With Independent Auditors' Report

The report accompanying these financial statements was issued by BDO USA, LLP, a Delaware limited liability partnership and the U.S. member of BDO International Limited, a UK company limited by guarantee.

BDO

MEDIDATA SOLUTIONS, INC. 401(k) PLAN

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BDO

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633 Third Avenue
New York, NY 10017

Independent Auditors' Report

To the Plan Participants and Plan Administrator of the
Medidata Solutions, Inc. 401(k) Plan
New York, New York

We were engaged to audit the financial statements and supplemental schedule of the Medidata Solutions, Inc. 401(k) Plan (the "Plan") as of December 31, 2011 and for the year then ended, as listed in the accompanying table of contents. These financial statements and supplemental schedule are the responsibility of the Plan's management. The financial statements of the Plan as of and for the year ended December 31, 2010 were reported on by Salibello and Broder LLP, whose practice was combined with our firm, and whose report dated October 12, 2011 disclaimed an opinion for the reasons set forth below.

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the Plan Administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 3, which was certified by State Street Bank and Trust Company and DWS Trust Company, the Trustees of the Plan, except for comparing such information with the related information included in the financial statements and supplemental schedule. We have been informed by the Plan Administrator that State Street Bank and Trust Company held the Plan's investment assets and executed investment transactions for the period January 1, 2011 to January 3, 2011, and that DWS Trust Company holds the Plan's investment assets and executed investment transactions from January 4, 2011 to December 31, 2011. The Plan Administrator has obtained certifications from the Trustees as of and for the year ended December 31, 2011, that the information provided to the Plan Administrator by the Trustees are complete and accurate.

Because of the significance of the information in the Plan's 2011 financial statements and supplemental schedule that we did not audit, we are unable to, and do not, express an opinion on these accompanying 2011 financial statements and supplemental schedule taken as a whole. The supplemental schedule of assets (held at end of year) as of December 31, 2011 is presented for the purpose of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security act of 1974. The form and content of the information included in the 2011 financial statements and supplemental schedule, other than that derived from the information certified by the Trustees,

have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

BDO USA, LLP

New York, New York
October 8, 2012

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MEDIDATA SOLUTIONS, INC. 401(k) PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

AS OF DECEMBER 31, 2011 AND 2010

	2011	2010
ASSETS		
Investments, at fair value	$ 20,574,442	$ 17,545,905
Receivables:		
Notes receivable from participants	351,981	294,446
Participant contributions	100,062	78,150
Employer contributions	23,637	61,276
Total receivables	475,680	433,872
Net assets available for benefits	$ 21,050,122	$ 17,979,777

See accompanying independent auditors' report and notes to financial statements.

MEDIDATA SOLUTIONS, INC. 401(k) PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

	2011	2010
ADDITIONS		
Contributions:		
Participants	$ 3,659,464	$ 3,616,786
Employer	780,580	804,839
Total contributions	4,440,044	4,421,625
Investment (loss)income:		
Net (depreciation) appreciation in fair value of investments	(676,396)	1,780,719
Interest and dividends	475,825	126,152
Total investment (loss)income	(200,571)	1,906,871
Interest income on notes receivable from participants	14,005	11,593
Total additions	**4,253,478**	**6,340,089**
DEDUCTIONS		
Benefits paid to participants	1,173,647	620,383
Administrative fees	9,486	4,500
Total deductions	**1,183,133**	**624,883**
Net increase	**3,070,345**	**5,715,206**
Net assets available for benefits:		
Beginning of year	17,979,777	12,264,571
End of year	**$ 21,050,122**	**$ 17,979,777**

See accompanying independent auditors' report and notes to financial statements.

1. Description of the Plan

The following description of Medidata Solutions, Inc. 401(k) Plan (the "Plan") is provided for general information purposes only. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan covering all employees who are age twenty-one or older of Medidata Solutions, Inc. (the "Company") and any participating affiliates. The Plan provides retirement benefits to eligible employees. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). Investments are participant directed and the Company controls and manages the operation and administration of the Plan. Effective January 4, 2011, DWS Trust Company serves as the Trustee. Prior to January 4, 2011, the Plan's Trustee was State Street Bank and Trust Company. Automatic Data Processing serves as the recordkeeper.

Effective January 1, 2011, the Plan was amended to change the definition of base compensation from W-2 wages to the simplified definition of compensation utilized in Section 415 of the Internal Revenue Code ("IRC"), and to allow participants to make after-tax Roth 401(k) contributions.

Contributions

Each year, participants may contribute up to 80% of pre-tax annual eligible earnings, as defined in the Plan, through salary reduction. Participants may also contribute amounts from other eligible retirement plans, as defined in the Plan. Contributions are subject to certain annual limitations as imposed by the Internal Revenue Service (the "IRS").

Participants may also choose to make some or all of their contributions on an after-tax basis through a Roth 401(k) option. Contributions and earnings for the Roth 401(k) option are not subject to taxation at the time of distribution, as long as the distribution is a "qualified distribution" made no earlier than five years after the first Roth contribution to the Plan. A qualified distribution is a distribution made as a result of disability, death, or having attained age 59 ½.

The Plan provides a 50% employer matching contribution of the first 4% of eligible compensation contributed by the participants. The employer matching contribution is invested in accordance with the election consistent with the participant contributions. The Company also might elect to make non-elective contributions, as defined in the Plan.

Participant accounts

The Plan maintains individual accounts for each Plan participant. Each participant's account is credited with the participant's contributions, the Company's contributions, if any, Plan earnings or losses, and administrative fees. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

1. Description of the Plan (continued)

Vesting

Participants are 100% vested in their rollover contributions, employee pre-tax contributions, company matching contributions, qualified matching contributions, qualified non-elective contributions and any earnings thereon.

Non-elective contributions (forfeitable) and earnings thereon vest in accordance with the following schedule:

Years of service	Vesting percentage
Less than 3	0
At least 3, but less than 4	50
4 years of more	100

Investment options

Participants may direct contributions in any investment options of the Plan, which are investments in interest-bearing cash, common collective trust funds and mutual funds.

Payments of benefits

A participant is eligible to receive a distribution on their vested account balance under the following circumstances: (a) retirement, (b) termination of employment, (c) disability, and (d) death. A participant also is eligible for in-service withdrawals. Types of in-service withdrawals available under the Plan are: (a) withdrawals after age 59-1/2, (b) withdrawals of rollover contributions, and (c) hardship withdrawals. A participant receives the value of their vested account balance in the form of a single lump-sum payment or direct rollover. The Plan allows for installment distributions if participant vested account balances exceed $5,000.

Notes receivable from participants

Participants may borrow from their vested accounts an amount not less than $500 and not to exceed the lesser of $50,000 or 50 percent of their vested account balance. Loan terms range from one to five years, or up to 30 years for the purchase of a primary residence. The loans are secured by the participant's account balance and bear interest at the rate in effect in the month the loan is effective. The interest rate is the prime rate as published in The Wall Street Journal on the 14th day of each month, plus two percentage points. This interest rate is effective for any loan processed as of the 16th day of the month. Principal and interest are repaid ratably through payroll deductions.

Administrative expenses

Investment management expenses, transactional costs and service charges are deducted from the participants' accounts. Other expenses in the administration of the Plan are paid by the Company.

2. Summary of significant accounting policies

Basis of accounting

The financial statements of the Plan are prepared on the accrual basis of accounting.

Investment contracts held by a defined contribution plan are required to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined contribution plan attributable to fully benefit-responsive investments contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. At December 31, 2010 the difference between fair value and contract value of the stable value fund was considered immaterial and, accordingly, the statement of net assets available for benefits was not adjusted from fair value to the contract value for such investment contract.

Use of estimates

The preparation of the Plan's financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect certain reported amounts and disclosures in the financial statements. Accordingly, actual results could differ from those estimates.

Investment valuation and income recognition

The Plan's investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (the exit price). See Note 5 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. The Plan presents in the statements of changes in net assets available for benefits the net appreciation or depreciation in the fair value of investments, which consists of realized gains or losses and the unrealized appreciation or depreciation on investments.

Notes receivable from participants

Notes receivable from participants are recorded at the unpaid principal balance plus accrued interest.

Payment of benefits

Benefits payments to participants are recorded upon distribution.

2. Summary of significant accounting policies (continued)

Risks and uncertainties

The Plan provides for investments in various investment securities that, in general, are exposed to various risks, such as interest rate, credit and overall market volatility risks. Further, due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the value of investment securities will occur in the near term, and such changes could materially affect the amounts reported in the statements of net assets available for benefits.

Relevant accounting developments

In May 2011, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2011-04, "Amendment to Achieve Common Fair Value Measurements and Disclosure Requirements in U.S. GAAP and IFRSs." ASU No. 2011-04 was issued to provide a consistent definition of the fair value between U.S. GAAP and International Financial Reporting Standards ("IFRSs"). This pronouncement is effective for reporting periods beginning on or after December 15, 2011, with early adoption prohibited. Plan management is currently evaluating the impact of the adoption of ASU No. 2011-04 on the Plan's financial statements.

3. Information certified by the Trustees

The following is a summary of the investment information regarding the Plan, as of December 31, 2011 and 2010 and for the years then ended, included in the Plan's financial statements (including footnotes) and supplemental schedule, that was prepared by, or derived from, information prepared by the Trustees for the periods noted in Note 1 and furnished to the Plan Administrator. The Plan Administrator has obtained certifications from the Trustees that such information is complete and accurate:

	2011	2010
Statements of net assets available for benefits:		
Investments, at fair value	$ 20,574,442	$ 17,545,905
Notes receivable from participants	$ 351,981	$ 294,446
Statements of changes in net assets available for benefits:		
Net (depreciation) appreciation in fair value of investments	$ (676,396)	$ 1,780,719
Interest and dividends	$ 475,825	$ 126,152
Interest income on notes receivable from participants	$ 14,005	$ 11,593

The Plan's independent auditors did not perform auditing procedures with respect to this information, except for comparing such information with the related information included in the financial statements and supplemental schedule.

4. Investments

The following table presents the fair value of investments as of December 31, 2011 and 2010 as reported by the Trustees. Investments that represent 5% or more of the Plan's net assets are separately identified by *:

	2011		2010	
Interest bearing cash:				
SSgA Government Money Market Fund	$ -		$ 1,478,236	*
Common collective trust funds:				
SSgA International Index Fund	708,316		743,349	
SSgA Russell Small Cap Index Fund	665,203		662,606	
SSgA S&P 500 Index Fund	-		2,594,116	*
SSgA Stable Value Fund (at contract value)	-		955,218	*
SSgA Treasury Inflation Protected Fund Series A	260,571		144,450	
SSgA Target Retirement Income Strategy Fund	56,704		47,367	
SSgA Target Retirement 2010 Strategy Fund	11,629		13,326	
SSgA Target Retirement 2020 Strategy Fund	353,519		301,704	
SSgA Target Retirement 2030 Strategy Fund	801,838		721,198	
SSgA Target Retirement 2040 Strategy Fund	465,060		326,233	
SSgA U.S. Bond Index Fund	-		244,986	
	3,322,840		6,754,553	
Mutual funds:				
JPMorgan Equity Index Fund	2,761,590	*	-	
Virtus Insight Government Money Market Fund	2,634,691	*	-	
T. Rowe Price Mid Cap Value Fund	1,846,023	*	1,651,095	*
JPMorgan U.S. Equity Fund	1,466,538	*	-	
Allianz NFJ Small Cap Value Fund	1,423,553	*	1,262,323	*
American Century Equity Income Fund	1,220,491	*	-	
RS Value Fund	743,431		655,450	
Alger Small Cap Growth Fund	732,540		621,757	
Oppenheimer Global Fund	699,347		-	
PIMCO Real Return Fund	696,478		535,804	
Blackrock Global Allocation Fund	651,766		459,011	
PIMCO Total Return Fund	496,671		484,182	

4. Investments (continued)

	2011	2010	
Mutual funds (continued):			
Fidelity Puritan Fund	416,374	-	
American Century Heritage Fund	333,560	-	
Oppenheimer Developing Markets Fund	279,254	-	
DWS U.S. Bond Index Fund	225,330	-	
Thornburg International Value Fund	121,865	-	
Prudential Short Term Corporate Bond Fund	116,876	-	
Oppenheimer International Bond Fund	107,498	-	
Nuveen Mid Cap Index Fund	105,336	-	
JPMorgan Core Bond Index Fund	56,166	-	
American Funds The Growth Fund of America	49,735	-	
Blackrock Equity Dividend Fund	38,004	-	
Calamos Market Neutral Income Fund	22,326	-	
Loomis Sayles Limited Term Government and Agency Fund	6,159	-	
American Century Inc. & Growth Fund	-	1,015,410	*
DWS Mid Cap Growth Fund	-	258,152	
Templeton Growth Fund	-	641,178	
The George Putnam Balanced Fund	-	341,189	
Victory Diversified Stock Fund	-	1,387,565	*
	17,251,602	9,313,116	
	$ 20,574,442	$ 17,545,905	

For the years ended December 31, 2011 and 2010, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) (depreciated) appreciated in value, as follows:

	2011	2010
Common collective trust funds	$ (26,252)	$ 709,995
Mutual funds	(650,144)	1,070,724
	$ (676,396)	$ 1,780,719

5. Fair value measurements

The Plan follows the provisions of FASB Accounting Standards Codification ("ASC") Topic 820, "*Fair Value Measurement.*" FASB ASC Topic 820 establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy under FASB ASC Topic 820 are described as follows:

Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for these items, as well as the general classification of such items pursuant to the fair value hierarchy of FASB ASC Topic 820:

Interest-bearing cash - The investment includes a government money market fund, which is valued based on the Plan's interests in the net asset value of its underlying assets reported by the trustee of the fund.

5. Fair value measurements (continued)

Common collective trust funds - The investments include certain index funds, target retirement strategy funds and a stable value fund. The Plan's interests in the index and target retirement strategy funds are valued based upon unit values. Unit values are based on fair value of the underlying assets of the funds derived from inputs principally from or corroborated by observable market data by correlation or other means. The stable value fund is valued at contract value, which approximates fair value.

Mutual funds - Valued at unadjusted quoted price of shares held by the Plan at year end.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, and, for mutual funds, their investment class, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2011 and 2010:

	Assets at Fair Value as of December 31, 2011			
	Level 1	Level 2	Level 3	Total
Common collective trust funds	$ -	$ 3,322,840	$ -	$ 3,322,840
Mutual funds:				
Growth and income	1,636,865	-	-	1,636,865
Growth	1,815,182	-	-	1,815,182
Income	2,695,021	-	-	2,695,021
Value	4,134,872	-	-	4,134,872
Bond	1,705,178	-	-	1,705,178
Blend	2,397,558	-	-	2,397,558
Index	2,866,926	-	-	2,866,926
Total	$ 17,251,602	$ 3,322,840	$ -	$ 20,574,442

5. Fair value measurements (continued)

	Assets at Fair Value as of December 31, 2010			
	Level 1	Level 2	Level 3	Total
Interest-bearing cash	$ 1,478,236	$ -	$ -	$ 1,478,236
Common collective trust funds	-	5,799,335	955,218	6,754,553
Mutual funds:				
Growth and income	1,015,410	-	-	1,015,410
Growth	1,521,087	-	-	1,521,087
Value	3,568,868	-	-	3,568,868
Bond	1,019,985	-	-	1,019,985
Blend	1,846,577	-	-	1,846,577
Balanced	341,189	-	-	341,189
Total	$ 10,791,352	$ 5,799,335	$ 955,218	$ 17,545,905

The following table sets forth a summary of changes in the fair value of the Plan's Level 3 assets for the years ended December 31, 2011 and 2010:

	SSGA Stable Value Fund	
	For the Year Ended December 31,	
	2011	2010
Balance at the beginning of the year	$ 955,218	$ 708,575
Purchases	8,240	380,350
Sales	(963,550)	(143,987)
Realized gains	92	2,063
Unrealized gains	-	8,217
Balance at the end of the year	$ -	$ 955,218

5. Fair value measurements (continued)

The following table as of December 31, 2011 and 2010 is a summary of the investments held by the Plan reported at net asset value (unit value):

	Fair Value Estimated Using Net Asset Value per Share December 31,		
	2011	2010	Frequency
Various SSgA index funds	$ 1,634,090	$ 4,389,507	Daily
Various SSgA target retirement strategy funds	1,688,750	1,409,828	Daily
	$ 3,322,840	$ 5,799,335	

The investment objective of various SSgA index funds was to match, as closely as possible, the performance of their respective benchmark indices. The investment objective of various SSgA target retirement strategy funds was to match the return of the composite benchmark, comprised of several indices. There are no unfunded commitments at December 31, 2011.

6. Related party transactions

Certain investments are managed by the Trustee. Any purchases and sales of these funds are performed in the open market at fair value and qualify as party-in-interest transactions. Such transactions, while considered party-in-interest transactions under ERISA regulations, are permitted under the provisions of the Plan and are specifically exempt from the prohibition of party-in-interest transactions under ERISA. Notes receivable from participants also qualify as party-in-interest transactions.

7. Plan termination

Although it has not expressed any intention to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants will become fully vested in their accounts.

8. Tax status

The Plan has adopted Automatic Data Processing Inc.'s standardized 401(k) prototype plan, which has received a favorable opinion letter from the IRS. The Plan Administrator believes the Plan is designed and operated in accordance with, and continues to qualify under the applicable requirements of the IRC and that the Plan is exempt from Federal income taxes.

8. Tax status (continued)

U.S. GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan Administrator has analyzed the tax positions taken by the Plan and has concluded that as of December 31, 2011 there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan Administrator believes it is no longer subject to income tax examinations for years prior to 2008.

9. Reconciliation of Financial Statements to Schedule H Form 5500

The following is a reconciliation of the net assets available for benefits as reported in the financial statements to net assets as reported on the 2011 Form 5500:

	2011	2010
Net assets available for benefits as reported in the financial statements	$ 21,050,122	$ 17,979,777
Less: total contributions receivable	(123,699)	(139,426)
Net assets as reported on Form 5500	$ 20,926,423	$ 17,840,351

The following is a reconciliation of the net increase in assets available for benefits as reported in the financial statements to the net income as reported on the 2011 Form 5500:

	2011
Net increase in assets available for benefits as reported in the financial statements	$ 3,070,345
Less: current year total contributions receivable	(123,699)
Plus: prior year total contributions receivable	139,426
Net income as reported on Form 5500	$ 3,086,072

10. Subsequent events

For purposes of determining the effects of subsequent events on these financial statements, management has evaluated events subsequent to December 31, 2011 and through October 8, 2012, the date on which the financial statements were available to be issued.

SUPPLEMENTAL SCHEDULE

MEDIDATA SOLUTIONS, INC. 401(k) PLAN

SCHEDULE H (FORM 5500) - LINE 4i:
SCHEDULE OF ASSETS (HELD AT END OF YEAR)

ID #13-4066508; PLAN 001

DECEMBER 31, 2011

	(a)	(b) Identify of issue, borrower, lessor or similar party	(c) Description of investments including maturity date, rate of interest, collateral, par, or maturity value	(d) Cost**	(e) Current Value
		Common and Collective Trust Funds:			
*		State Street Bank and Trust Co.	SSgA International Index Fund		708,316
*		State Street Bank and Trust Co.	SSgA Russell Small Cap Index Fund		665,203
*		State Street Bank and Trust Co.	SSgA Treasury Inflation Protected Fund Series A		260,571
*		State Street Bank and Trust Co.	SSgA Target Retirement Income Strategy Fund		56,704
*		State Street Bank and Trust Co.	SSgA Target Retirement 2010 Strategy Fund		11,629
*		State Street Bank and Trust Co.	SSgA Target Retirement 2020 Strategy Fund		353,519
*		State Street Bank and Trust Co.	SSgA Target Retirement 2030 Strategy Fund		801,838
*		State Street Bank and Trust Co.	SSgA Target Retirement 2040 Strategy Fund		465,060
					3,322,840
		Mutual Funds:			
		J.P. Morgan Funds	JPMorgan Equity Index Fund		2,761,590
		Virtus Investment Partners	Virtus Insight Government Money Market Fund		2,634,691
		T. Rowe Price Financial Institution Services	T. Rowe Price Mid Cap Value Fund		1,846,023
		J.P. Morgan Funds	JPMorgan U.S. Equity Fund		1,466,538
		Allianz Global Investors	Allianz NFJ Small Cap Value Fund		1,423,553
		American Century Investments	American Century Equity Income Fund		1,220,491
		RS Investments	RS Value Fund		743,431
		Alger Investments	Alger Small Cap Growth Fund		732,540
		Oppenheimer Funds	Oppenheimer Global Fund		699,347
		PIMCO	PIMCO Real Return Fund		696,478
		Blackrock, Inc.	Blackrock Global Allocation Fund		651,766
		PIMCO	PIMCO Total Return Fund		496,671
		Fidelity Investments	Fidelity Puritan Fund		416,374
		American Century Investments	American Century Heritage Fund		333,560
		Oppenheimer Funds	Oppenheimer Developing Markets Fund		279,254
*		DWS Advisor Funds	DWS U.S. Bond Index Fund		225,330
		Thornburg Funds	Thornburg International Value Fund		121,865
		Prudential Investments	Prudential Short Term Corporate Bond Fund		116,876
		Oppenheimer Funds	Oppenheimer International Bond Fund		107,498
		Nuveen Investments	Nuveen Mid Cap Index Fund		105,336
		J.P. Morgan Funds	JPMorgan Core Bond Index Fund		56,166
		American Funds	American Funds The Growth Fund of America		49,735
		Blackrock, Inc.	Blackrock Equity Dividend Fund		38,004
		Calamos Investments	Calamos Market Neutral Income Fund		22,326
		Loomis, Sayls & Company	Loomis Sayles Limited Term Government and Agency Fund		6,159
					17,251,602
		Total investments per financial statements			20,574,442
*		Notes receivable from participants	Interest rates at 4.25% - 10.25%	-	351,981
		Total			$ 20,926,423

* A party-in interest as defined by ERISA

See accompanying independent auditors report.

Schedule C, Line 2(h) Formula Description

For those service providers listed on Line 2 for which Line 2(h) has been checked "yes":

For a description of indirect compensation received by service providers listed on Line 2 that was disclosed as a formula, please see Line 3(e). Please note: If indirect compensation disclosed as a formula was received by a service provider from more than one source, there will be multiple Lines 3(e) for that service provider.

Attachment to 2011 Form 5500
Schedule H, line 4i - Schedule of Assets (Held at End of Year)

Plan Name MEDIDATA SOLUTIONS, INC. 401(K) PLAN **EIN:** 13-4066508

Plan Sponsor's Name MEDIDATA SOLUTIONS, INC. **PN:** 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value.	(d) Cost	(e) Current value
	OPPENHEIMER GLOBAL Y	REGISTERED INVESTMENT COMPANY		699,347
	DWS US BOND INDEX - S	REGISTERED INVESTMENT COMPANY		225,330
	JPMORGAN U.S. EQUITY - SELECT	REGISTERED INVESTMENT COMPANY		1,466,538
	OPPENHEIMER INTL BOND Y	REGISTERED INVESTMENT COMPANY		107,498
	RS VALUE FUND - A	REGISTERED INVESTMENT COMPANY		743,431
	VIRTUS INSIGHT GOV MONEY MKT A	REGISTERED INVESTMENT COMPANY		2,634,691
	PRUDENTIAL SH TERM CORP BD Z	REGISTERED INVESTMENT COMPANY		116,876

Attachment to 2011 Form 5500
Schedule H, line 4i - Schedule of Assets (Held at End of Year)

Plan Name MEDIDATA SOLUTIONS, INC. 401(K) PLAN **EIN:** 13-4066508

Plan Sponsor's Name MEDIDATA SOLUTIONS, INC. **PN:** 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value.	(d) Cost	(e) Current value
	LS LTD TERM GOV AND AG Y	REGISTERED INVESTMENT COMPANY		6,159
	NUVEEN MID CAP INDEX I	REGISTERED INVESTMENT COMPANY		105,337
	CALAMOS MKT NEU INC I	REGISTERED INVESTMENT COMPANY		22,326
	THORNBURG INTL VALUE - R5	REGISTERED INVESTMENT COMPANY		121,865
	BLACKROCK GLBL ALLOCATION INST	REGISTERED INVESTMENT COMPANY		651,766
	FIDELITY PURITAN FUND	REGISTERED INVESTMENT COMPANY		416,374
	AMERCENT HERITAGE FUND - INV	REGISTERED INVESTMENT COMPANY		333,560

Attachment to 2011 Form 5500
Schedule H, line 4i - Schedule of Assets (Held at End of Year)

Plan Name MEDIDATA SOLUTIONS, INC. 401(K) PLAN **EIN:** 13-4066508

Plan Sponsor's Name MEDIDATA SOLUTIONS, INC. **PN:** 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value.	(d) Cost	(e) Current value
	AMERICAN FUNDS GRO FND AMER R5	REGISTERED INVESTMENT COMPANY		49,735
	PIMCO REAL RETURN - ADMIN	REGISTERED INVESTMENT COMPANY		696,478
	ALLIANZ NFJ SMALL-CAP VALUE -A	REGISTERED INVESTMENT COMPANY		1,423,553
	PIMCO TOTAL RETURN - ADMIN	REGISTERED INVESTMENT COMPANY		496,671
	AMERICAN CENTURY EQTY INC FD-I	REGISTERED INVESTMENT COMPANY		1,220,491
	TR PRICE MID CAP VALUE	REGISTERED INVESTMENT COMPANY		1,846,023
	JPMORGAN CORE BOND FD - SELECT	REGISTERED INVESTMENT COMPANY		56,166

Attachment to 2011 Form 5500
Schedule H, line 4i - Schedule of Assets (Held at End of Year)

Plan Name MEDIDATA SOLUTIONS, INC. 401(K) PLAN **EIN:** 13-4066508

Plan Sponsor's Name MEDIDATA SOLUTIONS, INC. **PN:** 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value.	(d) Cost	(e) Current value
	BLACKROCK EQ DIV - INSTL	REGISTERED INVESTMENT COMPANY		38,004
	ALGER SMALL CAP GROWTH INSTL-I	REGISTERED INVESTMENT COMPANY		732,540
	JPMORGAN EQ INDEX SEL	REGISTERED INVESTMENT COMPANY		2,761,590
	OPPEN DEVELOP MARKETS - Y	REGISTERED INVESTMENT COMPANY		279,254
	PARTICIPANT LOANS	INTEREST RATES (0.00% TO 0.00%)		351,981
	SSGA US INFL PRTC BOND INDEX	COMMON/COLLECTIVE TRUST		260,571
	SSGA RUSSELL SMALL CAP INDEX	COMMON/COLLECTIVE TRUST		665,203

Attachment to 2011 Form 5500
Schedule H, line 4i - Schedule of Assets (Held at End of Year)

Plan Name MEDIDATA SOLUTIONS, INC. 401(K) PLAN **EIN:** 13-4066508

Plan Sponsor's Name MEDIDATA SOLUTIONS, INC. **PN:** 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value.	(d) Cost	(e) Current value
	SSGA INTERNATIONAL INDEX	COMMON/COLLECTIVE TRUST		708,316
	SSGA TARGET RET INC STRAT FD	COMMON/COLLECTIVE TRUST		56,704
	SSGA TARGET RET 2010 STRAT FD	COMMON/COLLECTIVE TRUST		11,629
	SSGA TARGET RET 2020 STRAT FD	COMMON/COLLECTIVE TRUST		353,519
	SSGA TARGET RET 2030 STRAT FD	COMMON/COLLECTIVE TRUST		801,838
	SSGA TARGET RET 2040 STRAT FD	COMMON/COLLECTIVE TRUST		465,060