United States Securities and Exchange Commission

Washington, D.C. 20549

SCHEDULE 13D

(Rule 13d-101)

Information to be Included in Statements Filed Pursuant to § 240.13d-1(a) and Amendments Thereto Filed Pursuant to § 240.13d-2(a)

Under the Securities Exchange Act of 1934 (Amendment No. 17)*

Medpace Holdings, Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

> 58506Q109 (CUSIP Number)

August J. Troendle c/o Medpace Holdings, Inc. 5375 Medpace Way Cincinnati, OH 45227 Tel: (513) 579-9911 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

> September 19, 2022 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of \$ 240.13d-1(e), 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAMES OF REPORTING PERSONS					
	August J. Troendle					
2		CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP				
	(a) 🗆 (t) 🛛				
3	SEC USE O	NLY				
4	SOURCE O	NDS				
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5	Check if disc	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)				
6	CITIZENSH	CITIZENSHIP OR PLACE OF ORGANIZATION				
United States						
		7	SOLE VOTING POWER			
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	SHARES	8	SHARED VOTING POWER			
	NEFICIALLY WNED BY					
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13	PERCENT (DF CL	ASS REPRESENTED BY AMOUNT IN ROW (11)			
	23.9%					
14	TYPE OF REPORTING PERSON					
	IN					

1	NAMES OF	REPO	ORTING PERSONS				
	Medpace Investors, LLC						
2		CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP					
	(a) 🗆 (1	o) 🛛					
3	SEC USE O	SEC USE ONLY					
4	SOURCE OF FUNDS						
	00						
5	Check if disc	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)					
6	CITIZENSH	CITIZENSHIP OR PLACE OF ORGANIZATION					
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			SHARED DISPOSITIVE POWER				
			6,331,474				
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON						
	6,331,474						
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES						
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)						
14	20.2% TYPE OF REPORTING PERSON						
ļ	OO (Limited	l liabil	lity company)				

This Amendment No. 17 to the Schedule 13D (this "Amendment No. 17") amends and supplements the Statement on Schedule 13D filed with the United States Securities and Exchange Commission on August 26, 2016, as amended by Amendment No. 1 filed on August 8, 2018, Amendment No. 2 filed on October 2, 2018, Amendment No. 3 filed on February 6, 2019, Amendment No. 4 filed on August 5, 2019, Amendment No. 5 filed on August 7, 2019, Amendment No. 6 filed on August 15, 2019, Amendment No. 7 filed on September 17, 2019, Amendment No. 8 filed on May 8, 2020, Amendment No. 9 filed on July 31, 2020, Amendment No. 10 filed on August 14, 2020, Amendment No. 11 filed on December 21, 2020, Amendment No. 12 filed on April 21, 2021, Amendment No. 13 filed on September 1, 2021, Amendment No. 14 filed on December 23, 2021, Amendment No. 15 filed on July 6, 2022, and Amendment No. 16 filed on September 13, 2022 (collectively, the "Statement"), relating to the common stock (the "Common Stock") of Medpace Holdings, Inc., a Delaware corporation (the "Issuer"). Capitalized terms used herein without definition shall have the meaning set forth in the Statement.

Item 5. Interest in Securities of the Issuer

Items 5(a) - (b) of the Statement are amended and restated in their entirety as follows:

(a) - (b): See Items 7 - 13 of the cover pages above.

Item 5(c) of the Statement is amended and supplemented by inserting the following information:

(c): On August 15, 2022, Medpace Investors, LLC ("MPI") entered into an amendment to its written stock purchasing plan entered into on March 17, 2022 and amended on May 3, 2022 in accordance with Rule 10b5-1 (as amended, the "MPI Plan"). MPI has acquired shares in open market transactions pursuant to the MPI Plan between September 13, 2022 and September 20, 2022 as follows:

Trade Date	Shares Purchased	e Per Share
9/13/2022	486	\$ 153.72(1)
9/13/2022	4,009	\$ 154.65(2)
9/13/2022	7,839	\$ 155.50(3)
9/13/2022	19,970	\$ 156.61(4)
9/13/2022	15,666	\$ 157.56 ⁽⁵⁾
9/13/2022	11,336	\$ 158.30(6)
9/13/2022	893	\$ 159.38(7)
9/13/2022	770	\$ 160.41(8)
9/13/2022	362	\$ 162.15(9)
9/13/2022	1,185	\$ 163.61(10)
9/14/2022	3,828	\$ 149.83(11)
9/14/2022	9,812	\$ 150.24(12)
9/14/2022	3,519	\$ 151.67(13)
9/14/2022	10,752	\$ 152.62(14)
9/14/2022	26,029	\$ 153.46 ⁽¹⁵⁾
9/14/2022	6,262	\$ 154.57(16)
9/14/2022	2,314	\$ 155.13(17)
9/15/2022	10,445	\$ 151.64(18)
9/15/2022	21,468	\$ 152.43(19)
9/15/2022	14,799	\$ 153.47(20)
9/15/2022	11,480	\$ 154.45(21)
9/15/2022	4,324	\$ 155.20 ⁽²²⁾
9/16/2022	1,185	\$ 147.85(23)
9/16/2022	10,754	\$ 148.66(24)
9/16/2022	40,522	\$ 149.60(25)
9/16/2022	6,548	\$ 150.42 ⁽²⁶⁾
9/16/2022	3,507	\$ 151.25 ⁽²⁷⁾
9/19/2022	1,916	\$ 149.59(28)
9/19/2022	8,698	\$ 150.45(29)
9/19/2022	3,402	\$ 151.59(30)
9/19/2022	10,212	\$ 152.60(31)
9/19/2022	25,286	\$ 153.48(32)
9/19/2022	40,289	\$ 154.53(33)
9/19/2022	4,316	\$ 155.05(34)
9/20/2022	366	\$ 151.82(35)
9/20/2022	5,049	\$ 152.53(36)
9/20/2022	4,848	\$ 153.66 ⁽³⁷⁾
9/20/2022	22,617	\$ 154.54 ⁽³⁸⁾
9/20/2022	43,539	\$ 155.44(39)
9/20/2022	17,339	\$ 156.36(40)
9/20/2022	361	\$ 157.01(41)

- (1) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$153.65 to \$153.75. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (2) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$154.00 to \$154.97. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (3) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$155.01 to \$155.94. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (4) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$156.00 to \$156.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (5) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$157.01 to \$157.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (6) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$158.01 to \$158.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (7) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$159.05 to \$159.87. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (8) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$160.14 to \$161.11. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (9) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$162.11 to \$162.19. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (10) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$163.39 to \$163.66. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (11) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$149.49 to \$149.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (12) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$150.01 to \$150.77. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (13) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$151.00 to \$151.95. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (14) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$152.00 to \$152.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (15) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$153.00 to \$153.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (16) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$154.00 to \$154.92 The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (17) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$155.00 to \$155.34. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.

- (18) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$150.94 to \$151.995. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (19) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$152.005 to \$152.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (20) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$153.00 to \$153.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (21) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$154.00 to \$154.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (22) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$155.025 to \$155.51. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (23) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$147.35 to \$147.97. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (24) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$148.01 to \$148.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (25) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$149.045 to \$149.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (26) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$150.00 to \$150.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (27) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$151.00 to \$151.65. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (28) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$149.50 to \$149.75. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (29) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$150.03 to \$150.80. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (30) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$151.02 to \$151.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (31) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$152.18 to \$152.95. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (32) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$153.00 to \$153.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (33) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$154.00 to \$154.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (34) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$155.00 to \$155.14. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.

- (35) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$151.72 to \$151.82. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (36) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$152.02 to \$152.88 The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (37) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$153.01 to \$153.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (38) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$154.02 to \$154.99. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (39) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$155.00 to \$155.995. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (40) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$156.00 to \$156.98. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.
- (41) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$157.00 to \$157.02. The Reporting Person undertakes to provide full pricing information to the Issuer, any security holder of the Issuer or the staff of the Securities and Exchange Commission upon request.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 6 of the Statement is amended and supplemented as follows:

Item 5 above summarizes certain provisions of the MPI Plan and is incorporated herein by reference.

Except as set forth herein and in the Statement, none of the Reporting Persons has any contracts, arrangements, understandings or relationships (legal or otherwise) with any person with respect to any securities of the Issuer, including, but not limited to, any contracts, arrangements, understandings or relationships concerning the transfer or voting of such securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or losses, or the giving or withholding of proxies.

Item 7. Materials to be Filed as Exhibits

Exhibit Number	Description
1	Joint Filing Agreement*
2	Registration Rights Agreement*

* Filed in the Statement.

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: September 21, 2022

/s/ August J. Troendle

August J. Troendle

Medpace Investors, LLC

/s/ August J. Troendle

Name: August J. Troendle Title: Sole Manager