## 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. 16)\*

# 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 9, 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(f) or 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 OF FUNDS			
PF				
5	Check if disc	closure	e of legal proceedings is required pursuant to Items 2(d) or 2(e)	
6				
	United States	5		
<b>!</b>		7	SOLE VOTING POWER	
N	UMBER OF		806,643	
	SHARES	8	SHARED VOTING POWER	
	NEFICIALLY WNED BY			
	EACH	9	5,893,172 SOLE DISPOSITIVE POWER	
	EPORTING PERSON	-		
	WITH	10	806,643 SHARED DISPOSITIVE POWER	
		10	SHARED DISTOSTITVE FOWER	
11	ACODECA		5,893,172	
11	AGGREGAI	EAN	10UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	7,056,261			
12	2 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			
13	PERCENT (	OF CL	ASS REPRESENTED BY AMOUNT IN ROW (11)	
	22.5%			
14	TYPE OF R	EPOR	TING PERSON	
	IN			
·				

1	NAMES OF REPORTING PERSONS			
	Medpace Investors, LLC			
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP			PROPRIATE BOX IF A MEMBER OF A GROUP	
	(a) $\Box$ (b) $\boxtimes$			
3	SEC USE O	NLY		
4	SOURCE OF FUNDS			
	00			
5	5 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)			
6		IP OF	R PLACE OF ORGANIZATION	
	Delaware	_		
		7	SOLE VOTING POWER	
N	UMBER OF		0	
	SHARES	8	SHARED VOTING POWER	
	NEFICIALLY WNED BY			
	EACH	9	5,893,172 SOLE DISPOSITIVE POWER	
	EPORTING PERSON	7	SOLE DISTOSTITVE TOWER	
	WITH		0	
		10	SHARED DISPOSITIVE POWER	
			5,893,172	
11	AGGREGAT	TE AN	MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
12	5,893,172			
12	2 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES			
13	PERCENT (	OF CL	ASS REPRESENTED BY AMOUNT IN ROW (11)	
18.8%				
14	TYPE OF R	EPOR	TING PERSON	
	OO(I)	lichi	lity company)	
	OO (Limited liability company)			

This Amendment No. 16 to the Schedule 13D (this "Amendment No. 16") 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. 13 filed on September 1, 2021, Amendment No. 14 filed on December 23, 2021, and Amendment No. 15 filed on July 6, 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 "August 2022 MPI Plan"). The August 2022 MPI Plan became effective on September 6, 2022 and adjusts the price on the trading schedule. MPI has acquired shares in open market transactions pursuant to the August 2022 MPI Plan between July 5, 2022 and September 12, 2022 as follows:

Trade Date	Shares Purchased	Price Per Share
7/14/2022	2,291	\$143.57 <sup>(1)</sup>
7/14/2022	19,999	\$144.71 <sup>(2)</sup>
7/18/2022	8,330	\$145.00 <sup>(3)</sup>
9/1/2022	7,005	\$143.61(4)
9/1/2022	35,071	\$144.70(5)
9/2/2022	48,714	\$144.98(6)
9/6/2022	1,762	\$144.89(7)
9/6/2022	3,639	\$145.54 <sup>(8)</sup>
9/6/2022	13,334	\$146.58(9)
9/6/2022	12,462	\$147.39(10)
9/6/2022	19,598	\$148.53(11)
9/6/2022	5,762	\$149.27(12)
9/7/2022	1,499	\$145.58(13)
9/7/2022	7,521	\$146.48(14)
9/7/2022	1,656	\$147.42(15)
9/7/2022	3,614	\$148.62(16)
9/7/2022	9,467	\$149.52(17)
9/7/2022	4,144	\$150.56 <sup>(18)</sup>
9/7/2022	5,559	\$151.29 <sup>(19)</sup>
9/7/2022	8,341	\$152.71(20)
9/7/2022	8,970	\$153.48(21)
9/7/2022	5,786	\$154.17(22)
9/8/2022	928	\$151.34(23)
9/8/2022	1,381	\$152.36(24)
9/8/2022	1,778	\$154.54(25)
9/8/2022	3,326	\$155.67(26)
9/8/2022	4,715	\$156.38(27)
9/8/2022	11,306	\$157.60 <sup>(28)</sup>
9/8/2022	27,799	\$158.50 <sup>(29)</sup>
9/8/2022	5,324	\$159.22(30)
9/9/2022	2,082	\$160.49(31)
9/9/2022	2,551	\$161.67(32)
9/9/2022	4,218	\$162.69(33)
9/9/2022	9,231	\$163.61(34)
9/9/2022	18,648	\$164.53(35)
9/9/2022	17,947	\$165.53(36)
9/9/2022	1,880	\$166.12(37)
9/12/2022	2,076	\$164.35(38)
9/12/2022	4,413	\$165.71 <sup>(39)</sup>
9/12/2022	8,676	$$166.70^{(40)}$
9/12/2022	19,574	\$167.49(41)
9/12/2022	27,776	\$168.46 <sup>(42)</sup>

- (1) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$142.97 to \$143.99. 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.
- (2) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$144.01 to \$145.00. 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 \$144.885 to \$145.00. 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 \$143.20 to \$143.97. 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.
- (5) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$144.05 to \$145.00. 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 \$144.70 to \$145.00. 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 \$144.76 to \$144.99. 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.
- (8) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$145.01 to \$145.97. 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.
- (9) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$146.02 to \$146.98. 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.
- (10) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$147.00 to \$147.99. 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.
- (11) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$148.00 to \$148.98. 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 \$149.01 to \$149.51. 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.
- (13) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$145.30 to \$145.93. 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 \$146.06 to \$146.77. 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.
- (15) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$147.04 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.
- (16) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$148.30 to \$148.98. 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.
- (17) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$149.01 to \$149.99. 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.

- (18) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$150.01 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.
- (19) 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.
- (20) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$152.02 to \$152.97. 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.
- (21) 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.
- (22) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$154.00 to \$154.52. 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 \$150.98 to \$151.77 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.
- (24) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$152.04 to \$152.86. 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 \$154.12 to \$154.78. 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 \$155.03 to \$155.99. 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 \$156.00 to \$156.86. 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 \$157.06 to \$157.96 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 \$158.00 to \$158.99. 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.
- (30) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$159.03 to \$159.70 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 \$159.77 to \$160.75 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.
- (32) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$161.27 to \$161.87. 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.
- (33) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$162.26 to \$162.97. 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.
- (34) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$163.00 to \$163.99. 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.

- (35) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$164.03 to \$164.97. 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.
- (36) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$165.00 to \$165.98. 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.
- (37) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$166.01 to \$166.21. 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 \$163.95 to \$164.95. 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.
- (39) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$165.03 to \$165.92. 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.
- (40) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$166.03 to \$166.89. 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 \$167.00 to \$167.98. 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.
- (42) The reported price is a weighted average price. These shares were purchased in multiple transactions ranging from \$168.00 to \$168.93. 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 August 2022 MPI Plan and is incorporated herein by reference. A copy of the August 2022

MPI Plan is attached as Exhibit 3 hereto, and is incorporated 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*
3	Rule 10b5-1 Stock Trading Plan of Medpace Investors, LLC amended August 15, 2022

\* 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 13, 2022

/s/ August J. Troendle

August J. Troendle

Medpace Investors, LLC

/s/ August J. Troendle

Name: August J. Troendle Title: Sole Manager

#### Amendment to Rule 10b5-l Trading Plan

The Trading Plan dated **3/17/2022 and amended 5/3/2022** (the "Trading Plan") entered into between **Medpace Investors LLC** ("Purchaser") and UBSFS, acting as agent, for the purpose of establishing a trading plan that complies with Rule 10b5-1(c)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is amended on August 15, 2022 as follows, with the consent of UBSFS:

On the amendment effective date Order A-2 shall be canceled and the following shall be added to Exhibit A:

### Trading Schedule A (For purchase of Issuer's Stock)

Order #	Order Entry Date	Number of Shares to be Purchased	Type of order: Limit Price (\$) or Market	Duration of order (Day, GTC)	Order Cancel Date
3	First allowable	969,380 or lesser remaining from A-2		Day	

The above Order will be executed on a Best Efforts / Not Held basis.

- a. Each Trading Day available for this plan UBSFS, shall purchase the maximum number of shares allowable pursuant to Rule 10b-18; UBSFS agrees that it shall use good faith efforts to effect any purchase of the Stock in accordance with the timing, price, and volume restrictions in sections(b)(2)-(4) of Rule 10b-18 ("Rule 10b-18") under the Exchange Act.
- b. The maximum number of shares acquired on behalf of Purchaser during the Plan Purchase Period shall not exceed 1,000,000 shares of Stock (the "Purchase Amount").

# PLEASE NOTE: "Not Held" is defined as a market or limit order that gives UBSFS both time and price discretion to attempt to get the best possible price.

This Amended Trading Plan will become effective on September 6, 2022, which shall be no earlier than 3 weeks from the contract signature date. UBS Financial Services Inc. will continue to exercise Options and/or purchase Stock pursuant to the terms of the original Trading Plan until this Amended Trading Plan goes into effect. Purchaser certifies that the representations and warranties of Purchaser contained in the Trading Plan are true at and as of the date hereof as if made at and as of such date.

Purchaser has obtained a new Issuer Certificate in the form of Exhibit B.

PURCHASER REPRESENTS AND WARRANTS THAT THEY WILL RETAIN A COPY OF THIS AMENDMENT AFTER EXECUTING/DATING IT BELOW.

By executing this Trading Plan Amendment, Purchaser represents and warrants that Purchaser has carefully reviewed in detail the specific Trading Instructions set forth in Exhibit A, that the Trading Instructions are accurate, complete, and accurately reflect the intent and instructions of Purchaser.

/s/ Dr. August J. Troendle	August 15, 2022		
Name: Dr. August J. Troendle	Date		
UBS FINANCIAL SERVICES INC.			
/s/ Lars Soderberg	8-16-2022		
Name: Denis Murphy	Date		
Title: Director			
/s/ Christopher DeLuca	08-16-2022		
Name: Christopher DeLuca	Date		
Title: Executive Director			