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. 3)*

Medpace Holdings, Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

> 58506Q109 (CUSIP Number)

Hayley Tanguy Cinven Capital Management (V) General Partner Limited Level 4, Mill Court La Charroterie St Peter Port, Guernsey GY1 1EJ Tel: +44 1481 743650

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

November 30, 2017 (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*).

| CUSIP No. 58506Q109 13D | | | | | Page 1 of 8 Pages | | |
|-------------------------|--|------------|----------------------------------|---|-------------------|--|--|
| 1 | NAMES OF REPORTING PERSONS | | | | | | |
| | Cinven Capital Management (V) General Partner Limited | | | | | | |
| 2 | CHECK | THE (b) | APPROPRIATE BOX IF A M | IEMBER OF A GROUP | | | |
| | | | | | | | |
| 3 | SEC USE | ON | LY | | | | |
| 4 | SOURCE | OF | FUNDS | | | | |
| | 00 | | | | | | |
| 5 | Check if o | disclo | osure of legal proceedings is re | equired pursuant to Items 2(d) or 2(e) \Box | | | |
| 6 | CITIZEN | SHI | P OR PLACE OF ORGANIZA | TION | | | |
| | Guerns | ev | | | | | |
| | | 7 | SOLE VOTING POWER | | | | |
| NILINA | IBER OF | | 0 | | | | |
| SH | IARES | | SHARED VOTING POWER | 2 | | | |
| | FICIALLY NED BY | | 16,399,997 | | | | |
| | ACH ORTING | 9 | SOLE DISPOSITIVE POW | ER | | | |
| PERS | ON WITH | | 0 | | | | |
| | | 10 | SHARED DISPOSITIVE PO | DWER | | | |
| 11 | ACCDEC | י אידד | 16,399,997 | | | | |
| 11 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | | | |
| 12 | 16,399,997 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES □ | | | | | | |
| | | | | | | | |
| 13 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) | | | | | | |
| | 46.3% | | | | | | |
| 14 | TYPE OF | • KEI | PORTING PERSON | | | | |
| | СО | | | | | | |

| CUSIP No. 58506Q109 | | | 1 |] 13D | Page 2 of 8 Pages | | | |
|---|---|--------|---------------------------------|--|-------------------|--|--|--|
| 1 | NAMES | OF R | EPORTING PERSONS | | | | | |
| | Cinven | Сар | oital Management (V) I | Limited Partnership Incorporated | | | | |
| 2 CHECK THE APPROPRIATE BOX IF A MEMBER | | | | MEMBER OF A GROUP | | | | |
| | (a) 🗆 | (0) | | | | | | |
| 3 | SEC USE | ON | LY | | | | | |
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| 6 | CITIZEN | SHI | POR PLACE OF ORGANIZ | ATION | | | | |
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| NUM | IBER OF | | 0 | | | | | |
| SH | IARES | 8 | SHARED VOTING POWE | R | | | | |
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| v | VIII | 10 | SHARED DISPOSITIVE P | OWER | | | | |
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| 11 | | | DN | | | | | |
| | 16,399,9 | 997 | | | | | | |
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| | PN | | | | | | | |
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| CUSIP | CUSIP No. 58506Q109 13D Page 3 of 8 Page | | | | | | |
|-----------------------|--|--------|---------------------------------|--|---|--|--|
| 1 | NAMES OF REPORTING PERSONS | | | | | | |
| | Medpace GP Limited | | | | | | |
| 2 | | | APPROPRIATE BOX IF A M | EMBER OF A GROUP | | | |
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| NUM | IBER OF | | 0 | | | | |
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| | 46.3% | | | | | | |
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| CUSIP No. 58506Q109 13D Page 4 of 8 | | | | | Page 4 of 8 Pages | | |
|---|--|--------|----------------------------------|---------------------------|-------------------|--|--|
| 1 | NAMES OF REPORTING PERSONS | | | | | | |
| | Medpace Limited Partnership | | | | | | |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) \Box (b) \boxtimes | | | | | | |
| 3 | SEC USE | ON | LY | | | | |
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| 5 | Check if o | tisclo | osure of legal proceedings is re | equired pursuant to Items | 2(d) or 2(e) ∐ | | |
| 6 | CITIZEN | SHI | POR PLACE OF ORGANIZA | TION | | | |
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| | FICIALLY NED BY | | 16,399,997 | | | | |
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| | 46.3% | | | | | | |
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| L | | | | | | | |

13D

Explanatory Note

This Amendment No. 3 to Schedule 13D ("Amendment No. 3") amends and supplements the Statement on Schedule 13D filed with the United States Securities and Exchange Commission August 26, 2016, (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 4. Purpose of Transaction

Item 4 of the Statement is amended and supplemented by inserting the following information:

On November 30, 2017, Medpace Limited Partnership ("Medpace Limited") agreed to sell 4,600,000 shares of Common Stock at a price of \$30.16125 per share (the "Offering") to Jefferies LLC and Credit Suisse Securities (USA) LLC (the "Underwriters") pursuant to the terms and conditions of the underwriting agreement (the "Underwriting Agreement") entered into between the Issuer, Medpace Limited and the Underwriters. The sale was consummated on December 5, 2017.

Pursuant to the Underwriting Agreement, Medpace Limited has agreed that, subject to specified exceptions, without the prior written consent of Jefferies LLC, it will not, during the period ending 90 days after the date of the final prospectus supplement with respect to the Offering: (i) sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, or enter into any similar transactions with respect to the Common Stock; (ii) otherwise dispose of any shares of Common Stock, options or warrants to acquire shares of Common Stock, or securities exchangeable or exercisable for or convertible into shares of Common Stock currently or hereafter owned either of record or beneficially; or (iii) publicly announce an intention to do any of the foregoing.

The foregoing description of the Underwriting Agreement does not purport to be complete and is qualified in its entirety by reference to the Underwriting Agreement, which is filed as Exhibit 6 hereto and is incorporated herein by reference.

CUSIP No. 58506Q109

13D

Item 5. Interest in Securities of the Issuer

Item 5 of the Statement is hereby is amended and restated in its entirety as follows:

(a) – (b)

The following sets forth the aggregate number and percentage of shares of Common Stock beneficially owned by each of the Reporting Persons, as well as the number of shares of Common Stock as to which each Reporting Person has the sole power to vote or to direct the vote, shared power to vote or to direct the vote, sole power to dispose or to direct the disposition, or shared power to dispose or to direct the disposition of as of the date of this filing, based on 35,429,686 shares of Common Stock outstanding as of December 5, 2017.

| Reporting Person(1) | Amount beneficially owned | Percent of class | Sole power to vote or to direct the vote | Shared power to vote or to direct the vote | Sole power to dispose or to direct the disposition of | Shared power to dispose or to direct the disposition of |
|--|---------------------------------|---------------------|--|--|---|---|
| Cinven Capital Management (V) General Partner Limited | 16,399,997 | 46.3% | 0 | 16,399,997 | 0 | 16,399,997 |
| Cinven Capital Management (V) Limited Partnership Incorporated | 16,399,997 | 46.3% | 0 | 16,399,997 | 0 | 16,399,997 |
| Medpace GP Limited | 16,399,997 | 46.3% | 0 | 16,399,997 | 0 | 16,399,997 |
| Medpace Limited Partnership | 16,399,997 | 46.3% | 0 | 16,399,997 | 0 | 16,399,997 |

(1) Shares beneficially owned by Dr. August J. Troendle are not the subject of this Schedule 13D, and the Reporting Persons expressly disclaim beneficial ownership of the shares of Common Stock held by Dr. Troendle.

Medpace Limited is the record holder of 16,399,997 shares of Common Stock. Cinven MGP is the Managing General Partner of GPLP, which is the Managing General Partner of a majority of the stockholders of Medpace GP, which is the general partner of Medpace Limited. The board of directors of Medpace GP has voting and investment discretion with respect to the shares held of record by Medpace Limited. Cinven MGP, as Managing General Partner of the Managing General Partner of a majority of the stockholders of Medpace GP, indirectly controls Medpace GP. Decisions of Cinven MGP are taken by its board of directors, which is comprised of Robin Hall, Brian Linden, Hayley Tanguy, John Boothman, Rupert Dorey and William Scott. Each such director disclaims beneficial ownership of the shares reported herein.

Except as set forth in this Item 5(a)-(b), each of the persons named in this Item 5(a)-(b) disclaims beneficial ownership of any shares of Common Stock owned beneficially or of record by any other person named in this Item 5(a)-(b).

(c) Except as reported in Item 4, during the past 60 days none of the Reporting Persons or Related Persons has effected any transactions in the Common Stock.

(d) None.

(e) Not applicable.

CUSIP No. 58506Q109

13D

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 4 above summarizes certain provisions of the Underwriting Agreement and is incorporated herein by reference. A copy of the Underwriting Agreement is attached as Exhibit 6 hereto, and is incorporated herein by reference.

Except as set forth herein, none of the Reporting Persons or Related 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

6

Description

Underwriting Agreement, dated as of November 30, 2017, by and among Medpace Holdings, Inc., Medpace Limited Partnership, Jefferies LLC and Credit Suisse Securities (USA) LLC (incorporated by reference to Exhibit 1.1 to the Issuer's Current Report on Form 8-K filed on December 5, 2017).

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: December 7, 2017

Cinven Capital Management (V) General Partner Limited

| By: | /s/ Hayley Tanguy |
|--------|-------------------|
| Name: | Hayley Tanguy |
| Title: | Director |

Cinven Capital Management (V) Limited Partnership Incorporated

By: Cinven Capital Management (V) General Partner Limited, its general partner

By: /s/ Hayley Tanguy

Name: Hayley Tanguy Title: Director

Inter Director

Medpace GP Limited

By:/s/ Belinda RidoutName:Belinda RidoutTitle:Director

Medpace Limited Partnership

acting through its general partner Medpace GP Limited

By: /s/ Belinda Ridout Name: Belinda Ridout

Title: Director