DIVISION OF CORPORATION FINANCE

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Mail Stop 3030

May 4, 2017

Via E-mail
Jarrett Gorlin
Chief Executive Officer
MedoveX Corporation
1950 Airport Road, Suite A
Atlanta, GA 30341

Re: MedoveX Corporation

Registration Statement on Form S-3

Filed April 18, 2017 File No. 333-217346

Dear Mr. Gorlin:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Heather Percival at (202) 551-3498 with any questions.

Sincerely,

/s/ Heather Percival for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Arthur S. Marcus, Esq.

Sichenzia Ross Ference Kesner LLP