Filed Pursuant to Rule 424(b)(4) Registration No. 333-235385 Registration No. 333-236050

PROSPECTUS SUPPLEMENT Dated September 3, 2021 (To Prospectus Dated January 27, 2020)



130,246 Warrants to Purchase Common Stock (and 130,246 Shares of Common Stock Underlying the Warrants to Purchase Common Stock)

This prospectus supplement (this "Supplement") modifies, supersedes and supplements certain information contained in, and should be read in conjunction with, that certain prospectus (including the information incorporated by reference therein, the "Prospectus") filed by Nuwellis, Inc. (f/k/a CHF Solutions, Inc.) (the "Company"), dated January 27, 2020, related to the underwritten public offering (the "January 2020 Offering") of the Company's Class A Units consisting of shares of common stock and warrants and Class B Units consisting of Series H convertible preferred stock and warrants (each as defined in the Prospectus) and later supplemented by the prospectus supplement filed by the Company on March 24, 2020. This Supplement is not complete without, and may not be delivered or used except in connection with, the Prospectus, as previously supplemented.

The Company's common stock is listed on the Nasdaq Capital Market under the symbol "NUWE." On September 3, 2021, the last reported sale price of the Company's common stock on the Nasdaq Capital Market was \$4.12 per share.

The information contained in this Supplement modifies and supersedes, in part, the information in the Prospectus. Any information that is modified or superseded in the Prospectus shall not be deemed to constitute a part of the Prospectus, except as modified or superseded by this Supplement.

We may amend or supplement the Prospectus from time to time by filing amendments or supplements as required. You should read the entire Prospectus and any amendments or supplements carefully before you make an investment decision.

Investing in our securities involves risks. See "Risk Factors" beginning on page 7 of the Prospectus and in the documents incorporated by reference into the Prospectus.

FORWARD-LOOKING STATEMENTS

You should carefully consider the risk factors set forth in the Prospectus, as well as the other information contained, or incorporated by reference, in this Supplement or the Prospectus. The Prospectus contains forward-looking statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance that are not historical facts. You are cautioned that any forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties. Actual results may differ materially from those included within the forward-looking statements as a result of various factors. Cautionary statements in the "Risk Factors" section of the Prospectus and in the documents incorporated by reference therein identify important risks and uncertainties affecting our future, which could cause actual results to differ materially from the forward-looking statements made or included in this Supplement and the Prospectus. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

REDUCTION OF EXERCISE PRICE OF WARRANTS TO PURCHASE COMMON STOCK

Pursuant to the terms set forth in the Warrants to Purchases Common Stock, issued on January 28, 2020 (the "Warrants"), such Warrants are subject to adjustment in certain circumstances, including in connection with stock splits or if the Company sells common stock at a price lower than the then-exercise price of the Warrants. As a result of a registered direct offering that closed on March 23, 2020 (the "March 2020 Offering"), the exercise price of the Warrants was adjusted to \$0.30, the per share price to the public in the March 2020 Offering, upon the closing of the March 2020 Offering on March 23, 2020. On October 16, 2020, the Company effected a 1-for-30 reverse stock split, which further adjusted the exercise price of the Warrants to \$9.00. As a result of an underwritten public offering that closed on March 19, 2021 (the "March 2021 Offering"), the exercise price of Warrants was further adjusted to \$5.50, the per share price to the public in the March 2021 Offering, upon the closing of the March 2021 Offering on March 19, 2021. As of March 19, 2021, there were 130,246 shares of our common stock issuable upon the exercise of outstanding warrants, following such exercise price adjustment.

This Supplement is being filed to reflect the foregoing adjustments in the exercise price of the Warrants, as described above.

The date of this prospectus supplement is September 3, 2021.