

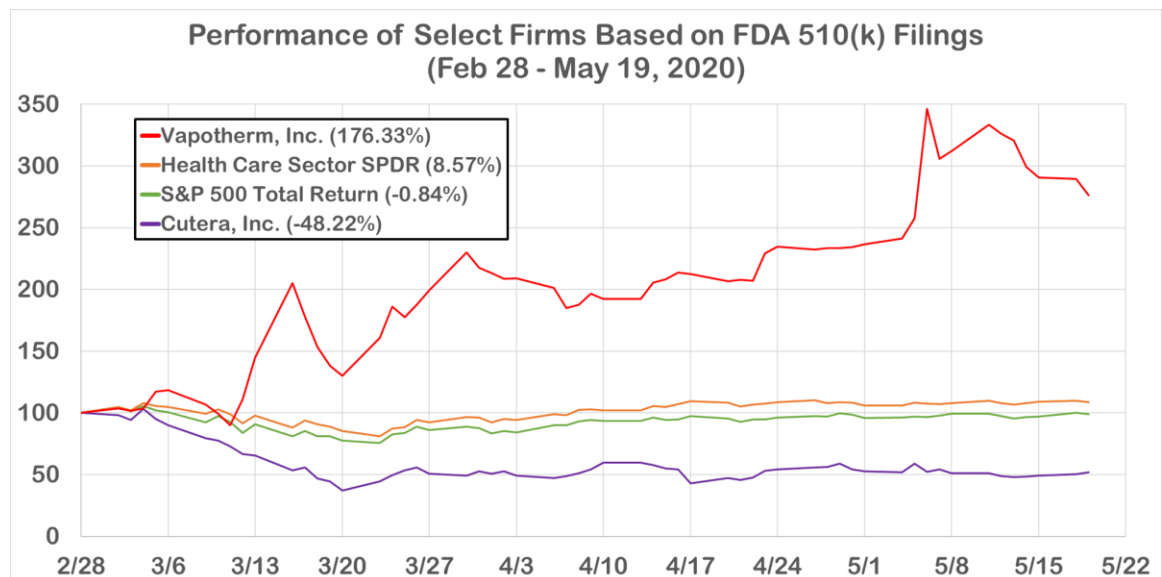
## Finding the Healthy Stocks in Health Care during Lockdown

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The COVID-19 pandemic has had myriad implications for companies around the world, including those within the Health Care sector<sup>1</sup>. The Health Care sector has returned more than 8% since month end February.<sup>2</sup> However, in this case, a rising tide has not equally lifted all boats. Elective and non-essential medical procedures have been indefinitely postponed, whereas essential medical services are being demanded beyond capacity in many locations. The result is a dichotomy in the returns for the Health Care sector stocks.

**Investors can identify potential opportunities in the Health Care Equipment and Services subsector by analyzing 510(k) premarket notifications, which are filings required by the U.S. Food and Drug Administration (FDA) for any company seeking to market a medical device in the United States. Examples of such analyses follow.**

One example of the aforementioned dichotomy, is Cutera Inc. versus Vapotherm Inc. (Figure 1). The former specializes in devices used in cosmetic surgery and has declined 48% from February 28 to May 19. In contrast, Vapotherm, which specializes in products used to treat respiratory distress, has seen a 176% return over the same period. Vapotherm's oxygen controller was awarded 'breakthrough device' status by the FDA on April 9.



**Figure 1. Performance of Vapotherm, Inc. and Cutera, Inc. alongside the S&P 500 Total Return and the Health Care Sector SPDR (XLV).**

Source: S&P Global Market Intelligence Quantamental Research. Data as of May 20, 2020.

Many Health Care equipment firms have diversified product lines, which will fare differently in the current environment and can be challenging to classify. One way to better understand the product mix of a medical device company is to analyze the company's 510(k) premarket

<sup>1</sup> In all places, Global Industry Classification Standard (GICS) taxonomy is used, where 'sector' refers to GICS level 1 and 'subsector' refers to GICS level 2.

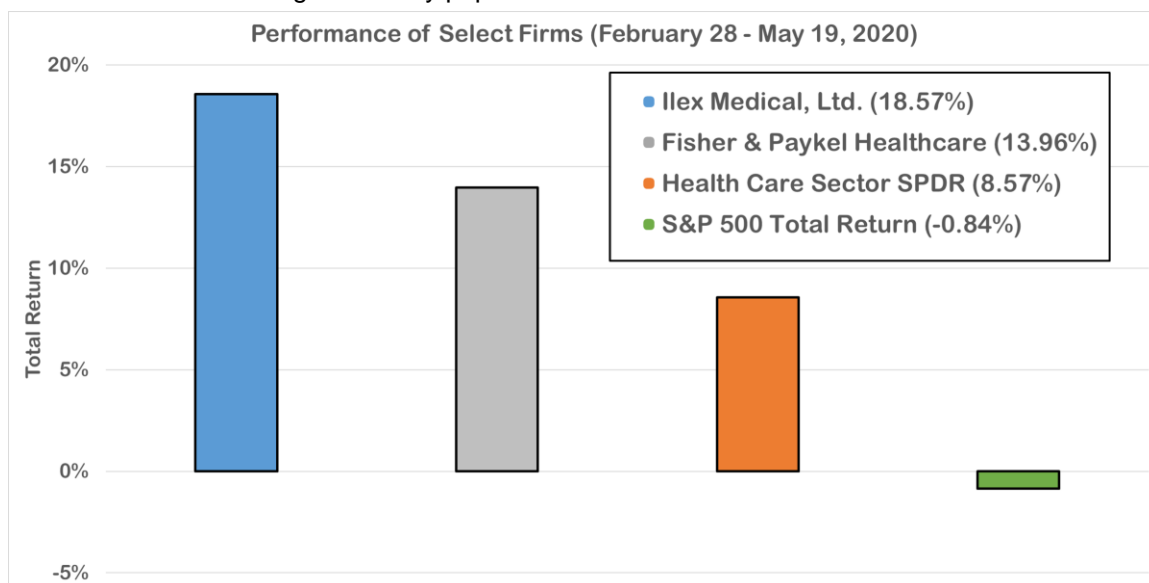
<sup>2</sup> Performance of the Health Care sector of the S&P 500 was proxied by the Health Care Sector SPDR ETF (XLV), which returned 8.57% from February 28 – May 19. The next best performing sector, which was technology (Technology Sector SPDR, XLK), returned 3.99% over the same time period.

notifications. A company's exposure to a particular device category<sup>3</sup> (or group of categories) can be calculated by determining the percentage of 510(k) filings in the category,

$$Exposure_C^{Product\_Code} = \frac{Number\_Filings_C^{Product\_Code}}{Number\_Filings_C} \quad \text{Eq. 1}$$

where  $Exposure_C^{Product\_Code}$  is the exposure of company  $C$  to a particular  $Product\_Code$ ; and  $Number\_Filings_C$  is the number of filings.

The 510(k) filings in the past 10 years for all companies in the Health Care Equipment and Services subsector were evaluated.<sup>4</sup> In search of 'pure play' companies in the ventilator space, we filtered for companies with more than 50% of 510(k) filings classified by the product codes specified in Table A1.<sup>5</sup> The result was four publicly traded firms: Vapotherm Inc. (see Figure 1), Ilex Medical Ltd., Inogen Inc., and Fisher & Paykel Health Care. Three of the four firms substantially outperformed both the S&P 500 and the Health Care Sector SPDR ETF (Figure 2). Inogen, Inc. had been outperforming the market by 15.55% prior to their May 5 earnings call. A large part of Inogen's business is direct-to-consumer sales of portable oxygen concentrators and CEO Alison Bauerlein cited a decline in that part of the business owed to a decrease in travel among the elderly population.



**Figure 2. Performance of select firms with more than 50% of 510(k) filings categorized by product codes listed in Appendix, alongside the S&P 500 Total Return and the Health Care Sector SPDR (XLV).**

Source: S&P Global Market Intelligence Quantamental Research. Data as of May 20, 2020.

<sup>3</sup> See table A1 for product codes flagged in this study.

<sup>4</sup> All publicly traded companies with share prices above \$5 USD were analyzed.

<sup>5</sup> Table A1 is found in the Appendix below. Product codes GEX, PBX, and PDZ, which relate to devices used in cosmetic surgery and describe all of the 510(k) filings by Cutera, Inc. (discussed above) were excluded when applying the filter.

Firms with ventilator-related 510(k) filings as a smaller portion (<50%) of their device portfolio include: Becton Dickinson & Co., Hill-Rom Holdings Inc., Invacare Corp., McKesson Corp., Medtronic PLC., Koninklijke Philips NV, Teleflex Inc., Resmed Inc., Draegerwerk AG, Masimo Corp, and Getinge AB.<sup>6</sup>

More information is available for the interested reader on 510(k) clearances via S&P Global's Alternative Data Marketplace,<sup>7</sup> as well as via the FDA website<sup>8</sup> and the FDA's congressional report on the Breakthrough Device Program<sup>9</sup>.

## Conclusion

Elective and non-essential medical procedures are on an indefinite hold in many places. Patients' willingness to undertake such procedures when the services become available is in question. Simultaneously, essential medical services are in high demand, and likely to remain in demand for the near future. This dynamic creates winners and losers among Health Care device manufacturers and distributors. **A medical device company's portfolio, which can be cataloged by its 510(k) premarket notifications, can provide investors with insights into the company's position, as the global pandemic continues to unfold.**

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<sup>6</sup> A caveat previously addressed in [Panjiva's Health Care research](#) report discusses the supply chain disruptions that many ventilator manufacturers are facing.

<sup>7</sup> <https://www.marketplace.spglobal.com/>

<sup>8</sup> 510(k) Clearances, Center for Devices and Radiological Health, <https://www.fda.gov/medical-devices/device-approvals-denials-and-clearances/510k-clearances>

<sup>9</sup> Report to Congress: Breakthrough Devices Program Submitted Pursuant to Section 3051 of the 21<sup>st</sup> Century Cures Act, <https://www.fda.gov/media/124747/download>

## Appendix

Contained in the table below are the product codes used to identify the 510(k) premarket notifications discussed in this research. The FDA classifies devices using over 6,500 unique product codes<sup>10</sup>.

PRODUCT CODE	DEVICE NAME
BSZ	Gas-Machine, Anesthesia
BTL	Ventilator, Emergency, Powered (Resuscitator)
BTR	Tube, Tracheal (W/Wo Connector)
BTT	Humidifier, Respiratory Gas, (Direct Patient Interface)
BYE	Attachment, Breathing, Positive End Expiratory Pressure
BYG	Mask, Oxygen
BZD	Ventilator, Non-Continuous (Respirator)
BZE	Heater, Breathing System W/Wo Controller (Not Humidifier Or Nebulizer)
CAI	Circuit, Breathing (W Connector, Adaptor, Y Piece)
CAT	Cannula, Nasal, Oxygen
CAW	Generator, Oxygen, Portable
CBK	Ventilator, Continuous, Facility Use
MNS	Ventilator, Continuous, Non-Life-Supporting
MNT	Ventilator, Continuous, Minimal Ventilatory Support, Facility Use
MOD	Accessory To Continuous Ventilator (Respirator)
NFB	Conserver, Oxygen
NHJ	Device, Positive Pressure Breathing, Intermittent
NHK	Resuscitator, Manual, Non Self-Inflating
NOU	Continuous, Ventilator, Home Use
NQY	Ventilator, Continuous, Minimal Ventilatory Support, Home Use
ONZ	Mechanical Ventilator
OQU	Airway Monitoring System
QAV	High Flow/High Velocity Humidified Oxygen Delivery Device
CAH	Filter, Bacterial, Breathing-Circuit
OFP	Anesthesia Breathing Circuit Kit (Adult & Pediatric)
GEX	Powered Laser Surgical Instrument
PBX	Massager, Vacuum, Radio Frequency Induced Heat
PDZ	Lasers For Temporary Increase Of Clear Nail In Patients With Onychomycosis

**Table A1. FDA Product Codes Discussed.** All codes, except for GEX, PBX, and PDZ were listed as product codes for devices used for essential services in "Enforcement Policy for Ventilators and Accessories and Other Respiratory Devices During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency".<sup>11</sup>  
Source: S&P Global Market Intelligence Quantamental Research. Data as of May 20, 2020.

<sup>10</sup> <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpdc/classification.cfm>

<sup>11</sup> <https://www.fda.gov/media/136318/download>

## Our Recent Research

**May 2020 Research Brief: No More Walks in the (Office) Park: Tying Foot Traffic Data to REITs**

**May 2020 Research Brief: Do Markets Yearn for the Dog Days of Summer? COVID, Climate, and Consternation**

**April 2020 Research Brief: Cold Turkey - Navigating Guidance Withdrawal Using Supply Chain Data**

**April 2020 Research Brief: Data North Star - Navigating Through Information Darkness**

**March 2020: Long Road to Recovery: Coronavirus Lessons from Supply Chain and Financial Data**

COVID-19 continues to disrupt global supply chains in unprecedented ways. Leveraging maritime shipping data from Panjiva, this report includes a review of trade and financial data to analyze the impact of the SARS-CoV-2 / COVID-19 coronavirus outbreak. Findings include:

- Second-order supply chain effects are also emerging with the apparel industry now seeing a shortage of materials globally due to earlier outages in China.
- Retailers including Costco and Target are gaining from increased sales of health- and personal care products. Yet, supply shortages are rapidly emerging in part due to medical supply export restrictions in several countries.
- There is a notable, but not statistically significant, relationship with firms with higher exposure to Asia having seen a weaker sector neutral stock price performance.

**February 2020: Ship to Shore: Mapping the Global Supply Chain with Panjiva Shipping Data in Xpressfeed™**

World merchandise trade accounted for an estimated \$19.7 trillion in 2018, about 90% of which is by sea. While financial data tells us “how a company has done in the past,” shipping data provides a closer-to-real time indicator of “what a company is doing now.” Panjiva’s shipping data allows investors to track trends, identify anomalies, and assess risks for companies engaged in international trade. This paper illustrates how to find investment insights in Panjiva’s US seaborne and Mexican datasets using the US auto parts industry as a case study.

Findings include:

- Shipment trends often lead fundamentals: Rising shipments amid flat or declining fundamentals may signal future financial trend reversal
- Growth in the number of a company's suppliers and in the types of products it imports may signal strengthening demand and/or product line diversification.
- Tracking industry-level product-line trends can help identify companies with significant exposure to rising or declining product lines.

**January 2020: Natural Language Processing – Part III: Feature Engineering Applying NLP Using Domain Knowledge to Capture Alpha from Transcripts**

Unstructured data is largely underexplored in equity investing due to its higher costs. One particularly valuable unstructured data set is S&P Global Market Intelligence's machine readable earnings call transcripts.

- Topic Identification – Firms that referenced the most positive descriptors around their financials outperformed historically.
- Transparency – Firms that provided greater call transparency exhibited by executives' behaviors and decisions outperformed historically.
- Weighted Average Sentiment – Quantifying call sentiment using a weighted average construct led to better returns and less volatility historically.
- Additive Forecasting Power – The newly introduced signals demonstrated additive forecasting power above commonly used alpha and risk signals historically.

### **December 2019: The “Trucost” of Climate Investing: Managing Climate Risks in Equity Portfolios**

Does sustainable investing come at a “cost”, and is the fear of investors around the performance concessions of “green” portfolios warranted? Our latest research suggests investors' fears are misplaced – carbon-sensitive portfolios have similar returns and significantly better climate characteristics than portfolios constructed without carbon emission considerations. Other findings include:

- Highly profitable firms are likely to be leaders in reducing their carbon emission levels.
- There is no degradation in fundamental characteristics for the carbon-sensitive portfolios compared to the baseline portfolio, even though the difference in constituents can be as high as 20%.
- Carbon-sensitive portfolios were observed as having significant reductions in water use, air pollutants released and waste generated.

### **October 2019: #ChangePays: There Were More Male CEOs Named John than Female CEOs**

This report examines the performance of firms that have made female appointments to their CEO and CFO positions. Our research finds that firms with female CEOs and/or CFOs:

- Are more profitable and generated excess profits of \$1.8 trillion over the study horizon.
- Have produced superior stock price performance, compared to the market average.
- Have a demonstrated culture of Diversity and Inclusion, evinced by more females on the company's board of directors.

### **June 2019: Looking Beyond Dividend Yield: Finding Value in Cash Distribution Strategies**

Examines the relationship between yield-oriented strategies (dividend yield, buyback yield, and combined shareholder yield) and future stock return, across multiple countries/regions. Also provides insights into two additional topics:

- Which company fundamental characteristics support and enhance future shareholder payouts?
- Under which interest rate environment should investors favor yield-oriented strategies?

### **June 2019: The Dating Game: Decrypting the Signals in Earnings Report Dates**

The first part of this report focuses on companies that deviate from a historical reporting pattern, while the second part examines a related topic – the market’s reaction to companies that postpone a previously scheduled (announced) earnings release date.

- “Advancers” (companies that advance their earnings report date by at least 6 days) are likely to report improving year-year on sales, better earnings surprises, and more positive conference call sentiment readings than their industry group peers and “delayers” (companies that delay their earnings report date by at least 6 days).
- Advancers outperform delayers by over 7% on an annualized basis (Russell 3000). This return rises to 8.80% (Russell 2000) and falls to 2.21% (Russell 1000).
- The annualized return to stocks identified as buy candidates and tagged as advancers is 10.77%, compared to 6.29% for buy candidates tagged as delayers.
- Companies that postpone a previously announced earnings release date underperform the broad market by 2.44% in the 3 days surrounding the announcement. These companies are also likely to report deteriorating fundamentals.

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**February 2019: International Small Cap Investing: Unlocking Alpha Opportunities in an Underutilized Asset Class**

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