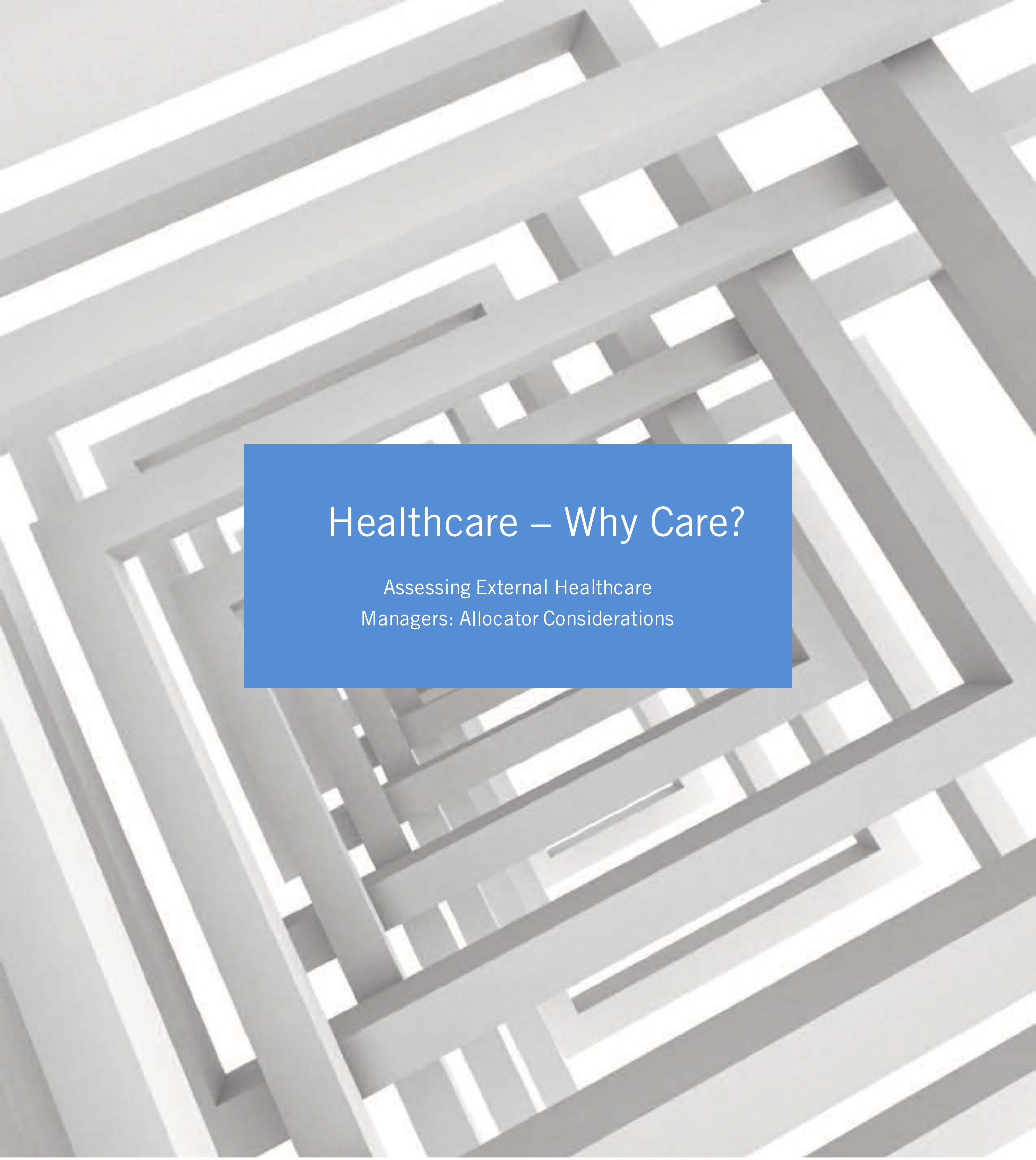


Healthcare – Why Care?

Assessing External Healthcare Managers: Allocator Considerations

JEFFERIES PRIME SERVICES WHITE PAPER | 2021

Jefferies

Healthcare – Why Care?

What external manager opportunities exist in healthcare and how can allocators think about making investment decisions to the space?

Will healthcare as we know it cease to exist?

We are in a period of disruption and innovation across sectors, and healthcare is at the forefront. The global COVID-19 Pandemic continues with positive news announcements around potential solutions. The U.S. election is behind us, pointing to slightly less uncertainty for many sectors. Hospitals and healthcare companies are flush with cash and looking for opportunities to innovate. It is entirely possible that by 2040, healthcare as we know it today will no longer exist, as 'health care' will have shifted to 'health'. [1 2]

Over the next decade, healthcare will be a transformative sector, and one allocators continue to lean into as they build and adapt portfolios - not only in search of investment returns but also investment in our future. *Healthcare – Why Care?* is meant to be an allocator's introductory guide to investing in the sector, mapping the investable universe, identifying key trends and themes, and exploring critical considerations when moving from interest to allocation.

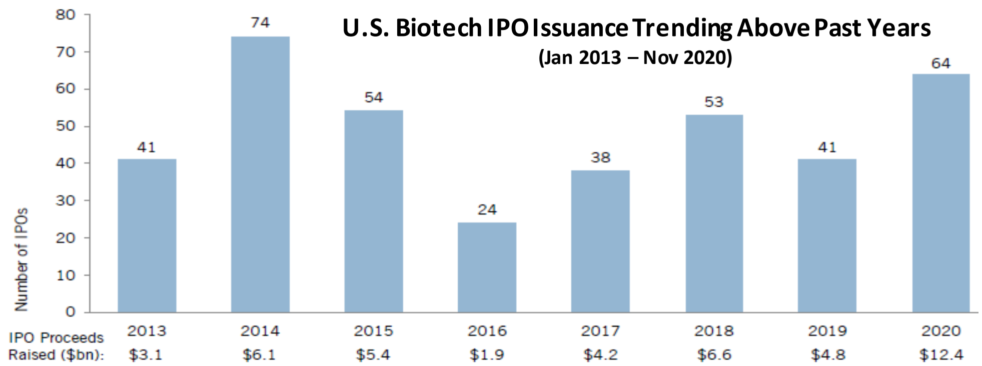
In our earlier pieces, *Checking the Pulse* (2018) and the *Anatomy of Healthcare* (2019), we noted healthcare is expected to be the fastest growing sector of the US economy in terms of GDP spend, new job creation, and wage growth. Employment in healthcare occupations is projected to grow 15% from 2019 to 2029, mainly due to an aging population, leading to greater demand for healthcare services, adding an estimated 2.4 million new jobs.[3] Additionally, exponential progress through technology-driven healthcare innovations could have deflationary impact on the cost of healthcare while delivering new medical advances.[4] CMS reports that technology enabled practical use cases that together have the potential to deliver between $350 billion and $410 billion in annual value by 2025 (out of the $5.34 trillion in healthcare spending projected for that year).[5]

In the wake of a global pandemic, the growth and demand for the sector is only accelerating. Retail and institutional investors want access and the ability to invest across a variety of product lines. Here, we aim to review the healthcare sector universe, and innovations that have also arisen in 2020 that have contributed to this area. It is our hope that *Healthcare – Why Care* provides a framework to understand the healthcare opportunity set, a snapshot of relevant products, and how to weigh the various factors involved when making an allocation to the space in the days and years to come.

Investable Healthcare Universe

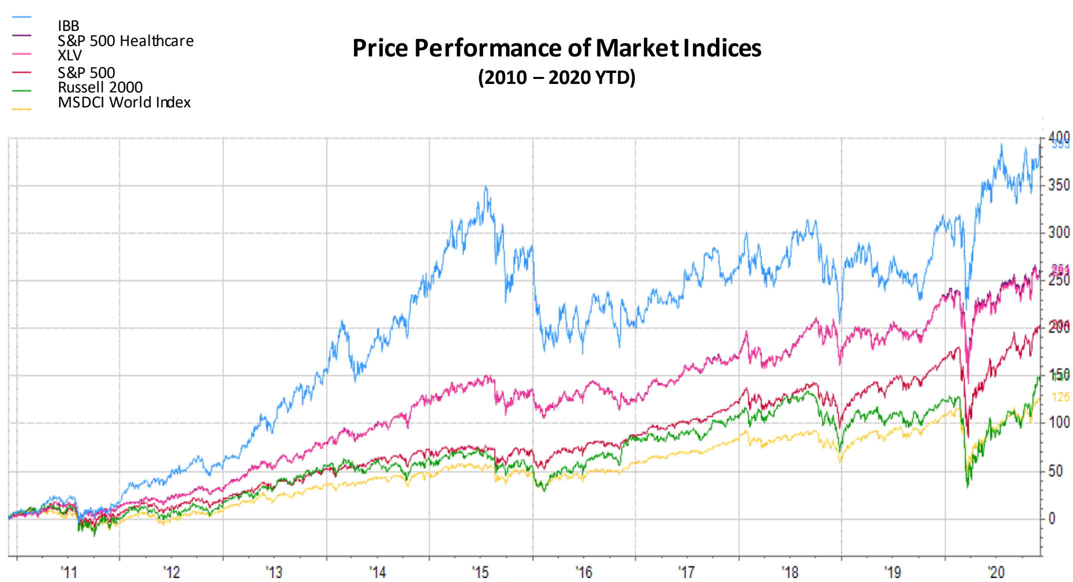
The pace of technological and product innovation in healthcare is quicker now than it was 10 years ago leading to the emergence of more and more private and publicly traded companies in the sector. As of Q4 2020, there were an estimated 3,800 public healthcare companies and 140,000 private ones globally.[6]

Amidst this flurry of innovation, some healthcare companies have stayed private for longer, reluctant to take venture money earlier in their lifecycle or during the development process, fearing a potential loss of strategic control. Even so, the US biotech IPO issuance has climbed back towards 2014 highs. Even with global travel at a near standstill, biotech companies have continued to raise near peak assets and ranks second in terms of number of issuances.[7] In addition to traditional means of accessing capital via public markets, companies are now going public via special purpose acquisition company (SPAC), in order to access capital in public markets and fund company growth.[8]



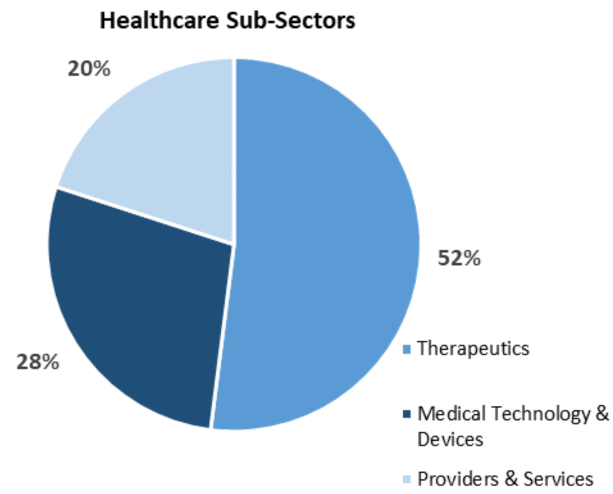
Source: Dealogic

Not only is there growth in the number of healthcare companies but there is also price and valuation growth in the sector as well. Healthcare has continued to be an outperforming sector with the IBB, S&P 500 Healthcare, and XLV all outperforming the S&P 500.[9]



Source: Factset

When assessing performance and benchmarking the sector, indices and categorizations can vary. While the XLV is not a perfect benchmark for the entire healthcare market, the categorizations many allocators use when breaking down the large cap public investable universe are as follows: 52% therapeutics, 28% medical technology and devices, and 20% providers and services.[10] With regards to therapeutics, the sub-sector can be broken down further into pharmaceuticals (drug companies that market and distribute drugs) and biotechnology (therapies to cure or suppress conditions). Pharmaceuticals can be further broken down into specialty pharma, which can include drug discovery and R&D, but tends to more commonly focus on acquisitions instead of innovation via direct creation. For therapeutics only exposure, most allocators will use Russell 2000 or IBB as a comparison as most of the investable universe is more small and midcap sized companies. With regards to providers, services and delivery, the sub-sector can be broken down further into managed care and hospitals and understanding the complex payments and reimbursement models.



Source: Factset

In addition to understanding the fundamental growth and valuation changes within the healthcare space, it is also important to understand the technicals surrounding the healthcare market. Many argue that the more passively managed capital invested in each market, the more valuable active management can be especially within healthcare.

Contextualizing Healthcare – Sector & Company Valuations

There are many ways to analyze the value of a company, including but not limited to: comparable analysis, precedented transactions and discounted cash flow analysis (DCF).

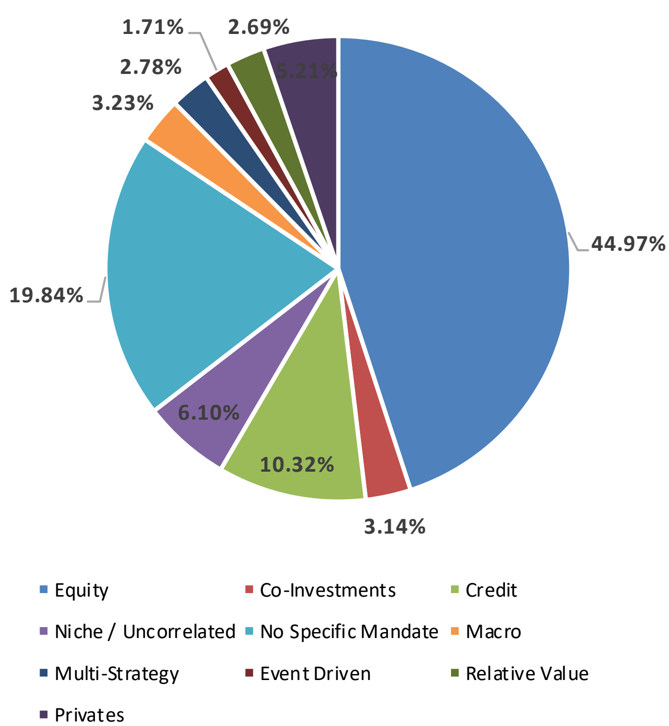
Many argue the U.S. healthcare system is a much more complex ecosystem to analyze and unravel. For example, in consumer retail, customers directly purchase goods. However, with regards to one's "health" – the patient is not simply buying Vitamin D at Costco. He deals with many intermediaries varying by diagnosis, prognosis and delivery – which is further complicated by a payer system in the U.S. that varies highly by groups. Given the complexities to the market dynamics associated with and embedded in the U.S. healthcare system, many argue healthcare requires a certain specialization not needed for investments in other sectors.

Therapeutics companies can also be compared to E&P companies when assessing risk and desired exposure given the binary nature of the businesses and challenges cash flow analysis and modeling present. Usually the movement in stock price of a biotechnology company is dependent on certain milestones of a product's success or failure as it moves through clinical testing and the FDA approval process which is similar to the long term nature and price movement of an E&P company that relies upon geological mapping and the discovery, drilling, and extraction processes.

Healthcare Demand – LP Themes and Trends

Given the growth in appetite for actively managed healthcare funds, particularly in the specialist healthcare manager space, let's explore the current environment.

LP Demand Strategy



Source: Jefferies Prime Services

Over the past three years, the Jefferies Capital Intelligence team spoke with over 500 allocators across verticals including family offices, pensions, endowments and foundations as well as other intermediaries and we continue to see strong demand for equity long short strategies. Two consistent theses emerged for investing in the space – either **capital protection** through lower net, risk controlled, idiosyncratic alpha oriented strategies or **return seeking** through longer term, buy and hold, concentrated, long biased and punchy managers.

Many allocators report a desire for scientific or medical expertise when assessing the products, processes, and technologies emerging in healthcare. Given the technical understanding needed, there is a view that investing in healthcare begets more stock dispersion in the space (and therefore a larger potential investment opportunity) when it comes to single stock valuation and analysis specifically in the therapeutics space. Many allocators are considering investments in healthcare given the current opportunity set, tailwinds stemming from innovation in the sector and the growing investable universe. Other investors prefer to have a PM with no scientific background but a team of scientists so as not to fall "in love" with the science but to be a prudent risk manager.

While there are investment opportunities across all sub- sectors of healthcare, many investors have spent a majority of their time assessing therapeutics as it is the largest sub-sector within healthcare by weighting within general indices and healthcare sub-sectors, innovation in the space is frequently in the news, and can have a higher return opportunities given the binary natures of companies available to invest. Preference varies in seeking strong healthcare performers. Many LPs will tell us that the organization is simply looking to partner with the "best of breed" managers or looking for the smartest and most diligent investors with repeatable processes regardless of sectors.

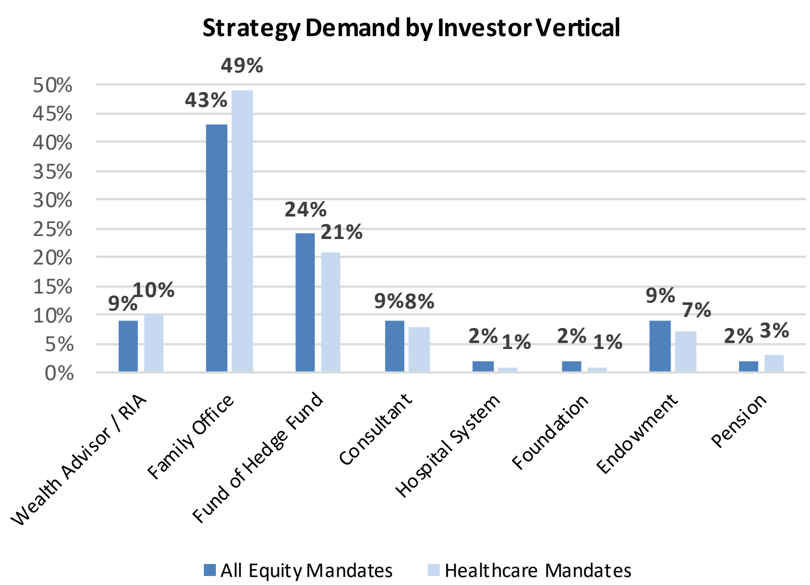
From a net exposure perspective, "Agnostic" exposure appetite seems to stem from LPs that are more tactical investors who are focused on a thematic opportunity. LPs who believe markets will be volatile in the short term and want to protect capital tend to look for relative value, lower net strategies and those with longer term time horizons that do not care about near term volatility are typically focused on "buy and hold," directional healthcare mandates.

LP Areas of Interest		
Demand By Sub-Strategy	**1 year**	**3 year**
Any Single Sector	37.92%	33.49%
Multi-Sector	30.14%	43.52%
Healthcare Only	24.35%	17.21%
Healthcare and Tech	6.39%	3.85%
Co-Investment	0.60%	0.20%
Demand By Within Healthca	**1 year**	**3 year**
Generalist / Agnostic Equity	68.46%	77.14%
Diversified Healthcare	20.16%	14.62%
Therapeutics Specific	10.78%	6.51%
Demand By Net Exposure	**1 year**	**3 year**
Agnostic	48.30%	64.98%
Long Biased (>70%)	24.75%	14.88%
Low net (+/-30%)	25.55%	18.14%
Short Only (<0%)	0.80%	0.27%

Source: Jefferies Prime Services

Compared to other equity long short strategies, there has been an uptick in demand not only for long short healthcare focused managers, but more specifically, for both low net and directional managers as compared to more variable net biased funds running 30% to 60% net exposures. There seems to be more demand for long biased directional biotech managers that are long term holders and add value via stock selection given the outsized returns generated more recently by managers with that portfolio construction profile.

Most of the uptick in demand here has stemmed from family offices that are willing to take on more volatility to achieve higher returns. Directional, concentrated buy and hold strategies also tend to be more tax efficient so net returns for taxable entities like onshore family offices benefit from this portfolio construction style. On the other side, there is also demand for lower net, diversified healthcare strategies, primarily from endowments and foundations that are seeing alpha generative strategies given the dispersion in the space. While many of these institutions have long term investment time horizons, they still have short term obligations and performance hurdles that need to be met (which were challenged and pressured by March COVID market sell off).



Source: Jefferies Prime Services

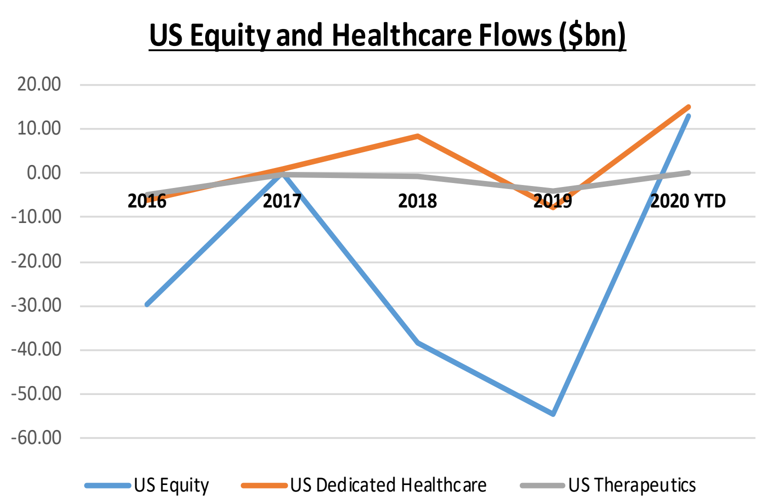
While many institutions are looking at equity-oriented strategies, family offices tend to favor dedicated healthcare mandates to other sectors or generalists slightly. Anecdotally, we are seeing more synergies around co-investments for family offices operating healthcare focused businesses or hospital systems that should consider the added benefits of partnering with healthcare focused managers as they have internal VC arms or have internal strategy teams that think about increasing operational efficiencies. In that vein, most managers interviewed historically did not have many relationships with hospital systems, but LP engagement from hospital systems have seemed to pick up post-COVID. Many hospital systems have abstained from investing in healthcare dedicated funds due to over exposure to the sector given its operating business; however, hospital systems should consider the mutually beneficial aspects of a partnership across the system. For example, the CEO of the hospital system could call the CIO of the fund to ask about new COVID protocols, costs associated with fewer elective procedures and insights into how the CEO could increase operational efficiencies within research, healthcare IP or services, and may benefit from VC funds with similar sub-sector investments or exposures.

COVID RELATED THEMES

For managers that invest in small and mid-cap companies focused on transformational changes to the industry, the COVID theme has not been an area that those managers will play. That isn't to say that large cap pharma is less likely to be investable, but managers have been consistent with their strategy – if they did not play in big pharma before, they are not suddenly getting involved in the next COVID vaccine. However, managers were concerned about a pause in clinical trial participation during a pandemic but that was not the case.

Other general areas of focus for healthcare have been in genetic medicines, particularly in the gene therapy and RNA medicine spaces. There are differences in opinion as to whether some of these genetic medicines will be affected near term by FDA approval process given the teams are the same that are reviewing COVID vaccines.

What is in a name (or structure)?



Source: EPFR

There are many avenues through which allocators can access the sector, including: public market active management, public market passive management, private markets, venture capital, SPACs, and healthcare focused hedge funds. Investors can get exposure to the healthcare landscape through a variety of products across asset classes including: public markets (long only equities and traditional fixed income, hedge funds), hybrids (entities that can invest in both markets), as well as privates (venture, growth equity, private equity, and private credit / lending). Investments can be made through SMAs, comingled external managers, indices / ETFs, and direct investments in a single public or private company.

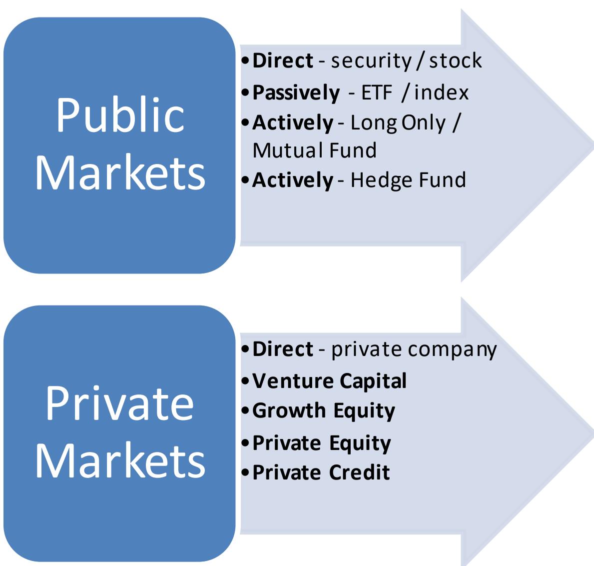
When assessing public markets, one can invest directly in a security via ETFs or mutual funds more passively, or through an external actively managed long only or hedge fund. US equity flows have been up and down over the past 5 years while flows into healthcare and therapeutics dedicated equities have been on the rise.[11] Over the same time period, more absolute dollars have moved from passive to active management by institutional investors to diversified healthcare and therapeutics manager.[12] 2020 EPFR data further shows that US healthcare funds are hitting recent all-time highs for both institutional and active flows.[13]

Managers that are therapeutics -focused have seen positive net inflows into the space since 2015. In the first half of 2020, investors globally put $16.55bn to work across over 450 deals in the therapeutics sub-sector, which is up considerably from the same period in H1 2019.[14]

Additionally, many believe more money coming in via passive channels to any sector benefit active managers in public markets.[15] Some LPs seek dedicated healthcare exposure via passive or index products, but many report the sector's volatility, complexity and technical nature prompts them to seek exposure via active management through hedge funds and other liquid alternatives. Actively managed funds particularly in the healthcare space have been the recipient of a large size of flows.[16] While there is an argument to made for passive management around most sectors, healthcare (and therapeutics specifically) is a sector that requires a bit more regulatory, scientific, and tactical expertise.

US Dedicated Fund Flows		
	Institutional	**Retail**
2016	(3,511.60)	(2,494.60)
2017	2,359.90	(1,241.60)
2018	8,336.00	91.60
2019	(5,948.10)	(1,748.30)
2020 YTD	14,350.40	593.50
	Active	**Passive**
2016	(3,245.90)	(2,760.30)
2017	(517.40)	1,635.80
2018	1,211.50	7,216.10
2019	(1,311.00)	(6,385.40)
2020 YTD	7,788.70	7,155.20

Source: EPFR



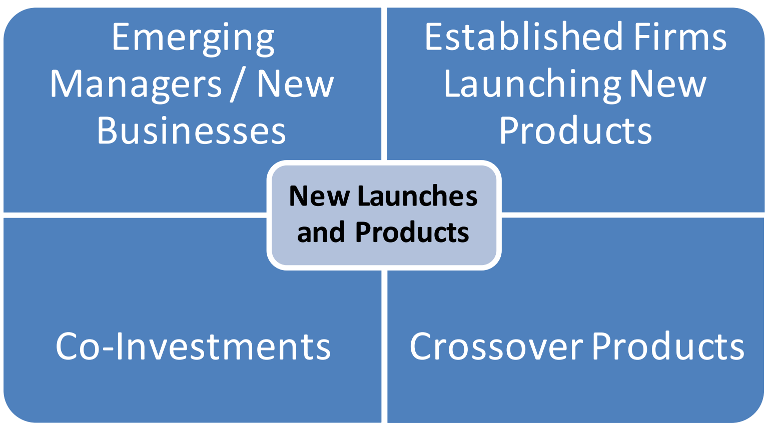
When assessing private markets, one can invest directly in a company or look to external managers that specialize in different life cycles of a company – from venture, growth equity, private equity and private credit investing.

Biotechnology is a capital inefficient space that requires a variety of funding sourcing via both public and private markets. More healthcare companies are staying private for longer. "The average age of companies that went public in 2014 was 11 years old, compared to four in 1999."[17] Even though an IPO can be an effective way for companies to access large sums of capital, it can be an expensive endeavor that can easily spell doom for a business if unsuccessful. There can be less control, more mark to market volatility, and more required regulatory disclosures that make it less desirable to publicly list. While the IPO market is active and robust, more recently healthcare investors have looked towards private markets financing to provide these companies with capital via short term, bridge loans for later stage funding rounds or later stage private equity investments that can still reap high returns. "In 2018, private equity firms invested $130.9bn in biotech and tech companies alone."[18]

Venture funding to innovative companies can indicate future market performance and is often considered an important barometer of their value propositions and long-term success.[19] Venture investors are often accused of chasing "shiny new objects" without doing requisite diligence, however, a Deloitte study on health tech investment trends noted that companies with value propositions that address the present and future of health are the most successful when focused on enhancing care quality, reducing costs, and improving access to care with innovative technology as the foundation of the business.

New Products: We are starting to see a rise in new vehicles within the healthcare space across 4 primary verticals: *new businesses, established firms launching new public markets products, co-investments, and crossover funds.*

We have seen an increase in the number of healthcare manager launches. After a challenging 2018 healthcare tape, analysts and portfolio managers left prior firms to seek out new opportunities. The rise in new funds within healthcare is due to the growth of number of companies and general the opportunity set in healthcare, the opportunity for a long short strategy given a strong stock selection environment and need for specialization and expertise in the space combined with likely future shorter term market volatility.



Not only are new managers launching businesses, but established managers are launching secondary products with variant investable universes and portfolio constructions. **Almost 50 of the healthcare hedge fund managers we track (established managers with at least 3 years post launch) offer at least 2 products**. The first product tends to be a flagship long short equity fund and with additional products tend to be offshore vehicles, private/crossover funds, long only and separate sub-strategy (cannabis fund, biotech, smid cap).

Many allocators feel that an investor cannot fully understand the landscape if that individual is not looking at the private sector, particularly as more companies are staying private for longer. As such, we are seeing a number of private equity and venture funds launching hybrid strategies that include public companies to capitalize on the in-depth knowledge the manager has on that previously private investment that has gone public since the fund's initial investment. Firms that have exposure to both public and private markets tend to have a dedicated product or a share class offering, but many have launched hybrid funds as well that invests across both at the discretion of the manager. These products tend to be "buy and hold" strategies. However, some private equity firms are looking to launch long short products and are hiring long short or platform specialists to build out and diversifying the healthcare strategy offering. More and more managers that have the healthcare network and area of expertise are now also being presented opportunities in the credit space and are hiring talent to launch more private lending strategies to further diversify business lines and revenue streams.

Like many other sectors, healthcare managers are looking to launch co-investment funds or SPVs when the size of an investment within the portfolio gets too big or too illiquid. A number of managers are also considering launching crossover funds and asking for longer duration capital. As the number of publicly traded companies have declined, more and more investors are looking to private companies as a means to investing in companies with potentially higher returns. In addition to returns, another benefit of long duration capital in private market investing means limited intra month volatility and mark to market risk as well as the sandbox of what an LP can invest in.

Healthcare Manager Diligence – What are you looking for and where to begin?

Checking the Pulse reported on the variety of levers that need to align for an allocator to move from interest to ticket writing. We counted at least 30 different levers that allocators could flex when assessing the healthcare space. Of particular note:

1. **Topline Drivers.** Some of the reasons allocators will make macro calls on why there is an opportunity in healthcare is due to the bullishness around innovation in the sector, desire for downside protection in a volatile sub-sector, intra-sector dispersion and alpha generation, and more liquid hedging tool for other components of the broader portfolio.

2. **Generalist vs. Sub-specialists.** LPs can invest in diversified or sub-specialized healthcare managers across public and private markets through mutual fund, hedge fund, private equity and credit, venture or hybrid structures. Sub-specialties include therapeutics (biotechnology and pharma), healthcare technology, devices and services, equipment, and royalties.

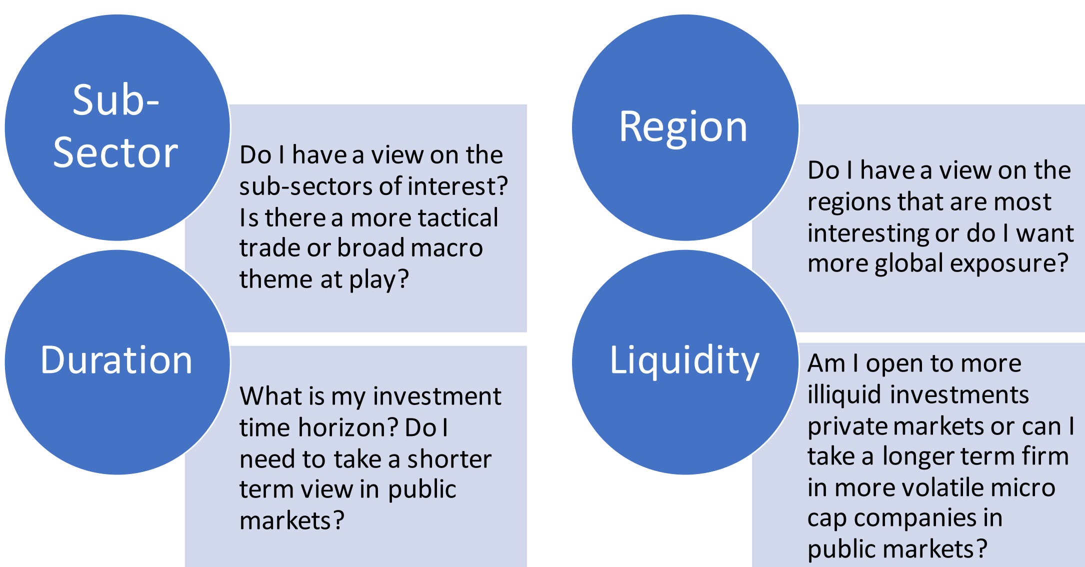
3. **Types of Technical Expertise.** Many healthcare focused managers have CIOs or senior investment professionals with technical expertise within the sector hiring individuals with advanced scientific or medical degrees or roles in epidemiology, CROs and clinical trial design specialists or those with regional and regulatory experience in addition to having investment and risk management experience. Most generalists long short funds tend to steer away from exposure to biotechnology given the technical expertise needed.

4. **Terms and Fee profile.** Allocators will look at fee structures when making investment decisions. While this is similar across all sub-sectors, there tends to be more variation in the healthcare space given the variety of products and hybrid vehicles in the marketplace

5. **Fund Capacity and Construction.** Pending some of the decisions above, allocators will also need to assess the fund itself in terms of capacity, number of and concentration of positions, as well as market cap, regional and gross / net exposures.

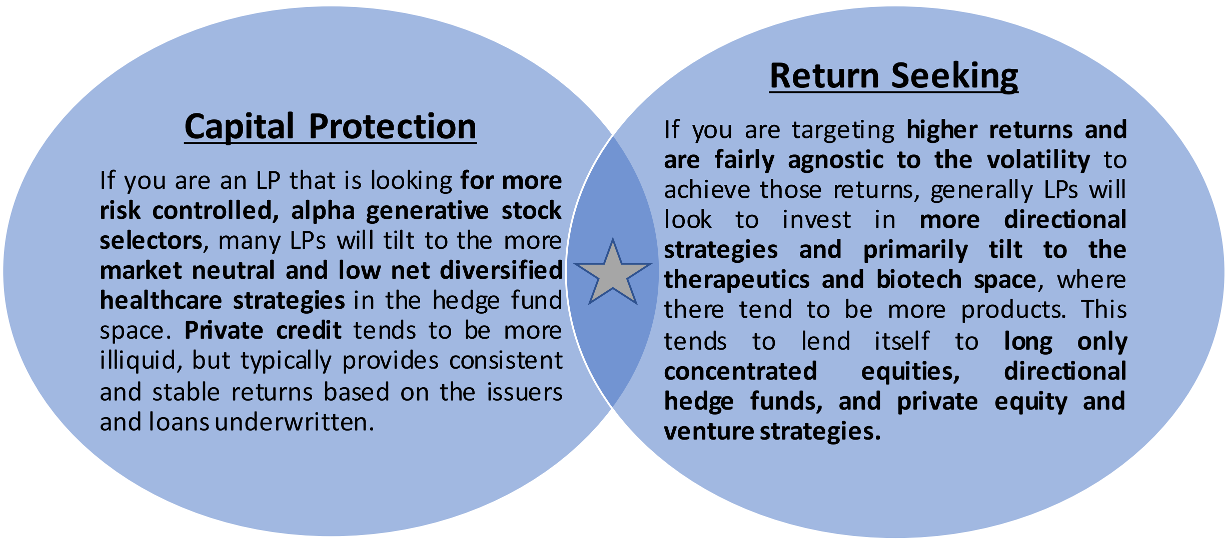
Drivers for active healthcare fund allocation

Given the specialization and expertise needed due to the longer time horizon and challenging modelling as well as the complexity of the regulatory environment, most allocators prefer to invest in external active managers with a deep network.



Considerations for Healthcare Investments in External Managers

When an LP determines what the topline drivers to investing in healthcare, like most allocations, the LP must decide whether the ***purpose* for investment is for capital protection or for return generation.** These options are not mutually exclusive and there are a variety of products that fall in the middle that can offer more directional privates exposure through a secondary share class or an opt-in deal structure or managers that run more variable nets, toggling net exposure based on sub-sector opportunity sets.



There are a variety of ways to assess the healthcare universe - some of these assessments apply to all hedge funds and some are dedicated to the healthcare space. When allocators are looking to invest in healthcare broadly, most allocators will look top down (taking a view on the sector) and bottom up (identifying a benchmark and assessing the manager).

There is usually a bullish house view on innovation, which tends to be associated with drug development, new therapies and devices for diseases with clinical unmet needs. So, when assessing investments in healthcare, an allocator should think about how a company's R&D process and early stage identification, clinical studies and regulatory expertise. However, there is the other side of health tech innovation across data platforms and e-medical records, care delivery and telehealth, as well as care enablement that should be considered. Allocators should understand how these technologies can integrate, who will pay and when, and how can we change behavior and whether there will be regulatory barriers to enter this new landscape.

Once a house view is determined, most allocators will identify and set a benchmark that corresponds to the manager whether by asset class or sector. [20] Allocators can create internal benchmarks, but funds will also compare themselves to benchmarks to demonstrate absolute and relative performance. When investing in healthcare public markets, most managers and investors compare public markets healthcare investments to the S&P 500, XLV, IBB, MSCI World HC, and HFRI EH: Healthcare. [21] When looking at smaller cap or regionally focused funds, allocators leverage other relevant benchmarks as well.

When looking at a hedge fund specifically, allocators should understand the number and concentration of positions, gross and net exposure ranges, and typical market caps of the companies with which the firm will invest as well as regional and sub-sector exposure ranges. The chart below summarizes the portfolio construction of most long short and long biased healthcare managers.

Portfolio Characteristics - Public Equity Managers	Long Short	Long Biased / Only
Strategies	Varies – Earnings Traders, Catalyst Oriented, Buy & Hold	Buy & Hold, Activism
Factors	Varies – Value, Growth, GARPy, Momentum	Value
Long Positions	20 to 30	10 to 20
Short Positions	20 to 30	0 to 5
Concentration (Top 10)	50% - 70% of AUM	20% - 30% of AUM
Holding Period	Longs: 1-3 year	Longs: 5+ years
	Shorts: 3 to 9 months	Shorts: NA
Gross Exposure	Lower Net: 150% - 200% Variable Net: 125% - 150%	80% - 120%

Source: Jefferies Prime Services

There are a variety of strategies and factors to analyze when assessing long short equity strategies, but the bulk of managers tend to have a similar concentration of positions (by total number and by percent of AUM) as well as maintain a similar holding period.

While most healthcare focused hedge funds self-identify as either a fundamental or catalyst driven long short equity manager or a concentrated buy and hold equity manager, allocators noted that the most common products offered tend to be earnings traders, fundamental long short buy and hold equity, and then activists.[1] Because managers and investors can categorize strategies differently based on the parameters above, we are going to take a step back and define these three strategies so we are working off the same framework. Earnings traders are managers that turn over the names in their book or size positions around earnings announcements. Fundamental long short buy and hold strategies tend to use discounted cash flow analysis to determine the fundamental value of a company over 1 to 5 years and hold that stock until it hits its pre-determined price targets. Activist oriented managers seek to buy significant stakes in a public company in order to influence how the company is run and like buy and hold strategies activists seek to unlock value in a company.

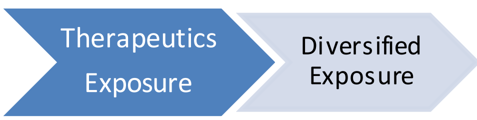
Many shorter term, earnings traders will also focus on healthcare, actively sizing down positions into events as a means to de-risking pre-announcement and sizing back up once a company has hit or missed based on clinical trials and FDA approval announcements. Buy and hold tends to be more catalyst oriented with positions held for a medium term (about 2 to 5 years). Healthcare also lends itself to a successful activist strategy given the robust M&A environment, the private equity style to investing in public markets, binary events, and potential trade structuring within activism. Many healthcare focused hedge funds that take a private equity style to investing in public markets tend to be more comfortable getting involved in the IPO market, incorporating SPAC and PIPEs into already developed public market strategies to allow for managers to access the company in the market at a strong price.[22]

Most of the managers in the investable universe are global in scope but tilt towards the US exposure. A number of Asia dedicated healthcare funds that launched in the past 3 years have been senior portfolio managers that are leaving established Asia based sleeves of platforms and other blue chip funds that see a similar opportunity set in Asia (growing populations and move to generics).

Based on Jefferies Capital intelligence team's conversations with LPs over the past 5 years, we have noted a number of commonalities across investment mandates including[23]:

Bullish healthcare innovation > Dispersion: about 2/3 of investors cite that their investment is due to the perceived opportunity set stemming from broad industry innovation while the remaining 10% and 25% invested is because of long short dispersion and then idiosyncratic stock selection respectively.

Risk Manager > Graduate Degree: LPs tend to prefer CIOs that are risk managers first who then surround themselves with MDs and PHDs; at the end of the day, most LPs care about the person at the helm managing risk within the portfolio and are concerned about that person's love of the science which can create unintended emotional biases that conflict with optimizing the best risk adjust reward of an investment decision.



Therapeutics > Diversified Healthcare (or a mix of the two): most managers spend time assessing the pharmaceuticals and devices sub-sectors because it tends to be more fundamentally driven. Whether diversified healthcare, sub-sector focused healthcare only or a generalist with some healthcare exposure, most GPs stay away from biotech and well as services, which both tend to be more volatile. Biotech tends to be too binary focused on one event and services tend to be trades based on macro market news and regulatory landscape.

Small Cap > Large / All Cap: While most of the larger products tend to be more all cap focused given capacity needs, there are a growing number of small cap dedicated managers because there are more companies in the investable universe and less coverage by the sell side. While LPs like long short managers that are generating alpha on the short side, LPs are always concerned about the short squeezes in illiquid smaller cap names and shorting in non-US markets given regulations and short interest.

Fee Considerations

Fees and liquidity will vary by product and structure. Long only funds tend to charge only a management fee (sub 1%) or only an incentive fee (20% to 30%) over a hurdle (usually relative to a healthcare benchmark). Hedge funds tend to charge 1.5% / 18% on average (and closer to 1% / 10% in founders and discounted share classes) while hybrids and private equity funds tend to charge closer to 2% / 20% with crystallization of incentive fees upon exiting a position. Long only funds tend to have monthly liquidity and 30 days redemption notice and no lock while hedge funds tend to have quarterly liquidity with 60 days redemption notice with 1 year hard or soft lock with a 2% to 5% early redemption fee. Hybrids and private equity funds tend to have a 1 to 3 year investment period and 4-6 year harvest period (with 1-2 year extensions).

Healthcare Terms Analysis

	Long Only	Hedge Fund	Hybrids / Privates
Fees	<1% / 0% 0% / 20% to 30%	1.5% / 18%	2% / 20%
Liquidity	M30 and no lock	Q60 with 1 year lock and early redemption fee	1-3 year investment, 4-6 year harvest (with 1-2 year extension)

Source: Jefferies Proprietary Data

Compliance Considerations

Given the binary nature of healthcare investing due to clinical trials and FDA approvals, there is a lot more sensitivity around compliance when investing in healthcare. While insider trading exists in all sectors, there is a sensitivity around compliance and material non-public information when investing in healthcare given the history of investing in the space. Each manager creates its own compliance culture and has specific processes and protocols regardless of whether an expert-network is leveraged, or the manager participates in management company meetings. In addition to regular compliance training, many managers keep a very aggressive restricted list and even keep names on that list years after going over the wall in addition to stringent documentation protocols around note taking and memos post-meetings. While many managers highlighted the focus on compliance, there were rarely any reports / escalations directly to SEC, primarily because managers cited the rigors of the internal trainings and protocols.

When thinking about compliance from an LP's perspective, one should ask some of the following questions:

Do you have internal outsourced compliance? Who is responsible for overseeing this function?	**How do investment professionals memorialize their meetings?**
What are your compliance protocols for analysts on expert network and management company calls?	**What does your MNPI self-examination reporting look like? How many incidents have been reported / escalated to the SEC?**

Many managers cultivate their own expert networks or can use an outsourced firm for opinions on use or whether drugs will be approved or successful as well as understanding the path and experience of the patient. Some managers will also use social networking tools to better understand how patients get diagnosed and understand the patient networks. Managers that do use expert networks like Guidepoint and GLG have very clear protocols that are required during engagement. For example, many read sentences at the beginning of a meeting to not disclose MNPI, have protocols around the number of times analyst can speak to a specific expert, and chaperoning to name a few. When a manager is looking at private investments, there is so much legal documentation around non-disclosures, MNPI tends to be very clear and even more black and white than investing in public markets. Specifically, while it is clear what analyst should / should not ask, it is less clear about what the analyst learns that could need to be reported. MDs, PHs, and other specialists often have opportunities to gain insider knowledge about new drugs, devices, and other healthcare innovations as they tend to act as experts.[24] Many of these experts sit on boards, advise publicly traded companies, or run clinical trials where the outcomes can dramatically affect a company's value or share price.

Some of the best practices for compliance that particularly apply to healthcare are recorded lines and dial ins[25], electronic communication surveillance especially in a WFH environment, and chaperoning during expert network calls[26] and management company meetings. Each manager usually has an internal system that houses all notes. Post meetings, notes are sent around and the CCO is included to review. CCOs will also hop on about 15% to 25% of analyst calls occasionally unannounced throughout the year. The important aspect of chaperoning is memorializing what has been done and spoken about by keeping meticulous records.[27]

Example of protocols that take place before, during & after management meetings and expert network calls to ensure NMPI is not disclosed

Before

- Most hedge funds have a process by which analysts will ask for internal approval to contact a network and the network has its own review process.
- Calls are usually set up through a bridge line - never directly between analyst and expert.

During

- Many firms will have an automated disclosure played to the expert and analyst and a hedge fund's CCO or outsourced compliance will sometimes join without prior notice at random.
- Chaperoning can be done on a risk-based selection process, or just based on availability or randomness.

After

- Analysts usually document their call notes into a fund's internal system to memorialize what has been done and what has been spoken about.
- After management company meetings, many compliance teams will monitor the trading of a specific company for a certain number of days after the meeting

How Jefferies Can Help

Jefferies is a global investment bank with a variety of offerings but has spent a great deal of time, capital and human resources on building out its healthcare franchise across research, trading, corporate access, and banking. See below for a bit of detail on each line of business – Please reach out to your prime brokerage coverage person for more details.

- **Prime Brokerage and Outsourced Trading:** Jefferies is one of the leading healthcare prime brokerage providers and has financing relationships with most healthcare managers across the new launch and established hedge fund landscape.

- **Trading**: There are 16 dedicated sector traders and 5 desk strategists of which 4 individuals are dedicated to healthcare in addition to healthcare specialists across derivatives, international, high yield, convertible, trading and ECM.

- **Research**: We have 48 research professionals in the United States, Europe, and Asia dedicated to covering healthcare companies. 27 publishing analysts covering over 365 healthcare equity stocks and over 40 high yield healthcare bonds. 52% of the Healthcare Stocks Covered by Jefferies are covered by 0 or 1 of Our Top 5 Peers

- **Corporate Access**: In 2019, we hosted 450 Healthcare non-deal roadshows and over 30 KOL events. We source most experts ourselves – without the help of an expert network – which allows us to reach untapped resources. Our conference in New York in June is the largest sell side Healthcare conference on the East Coast with 400+ presenting companies, several keynote panels and 2700+ institutional investors in attendance. Our conference in London in November is the largest sell side. Healthcare conference in Europe with 550+ presenting companies, several keynote panels and 2400+ institutional investors in attendance.

- **Banking**: The largest healthcare investment banking team in the world. 100+ bankers worldwide, including 21 coverage officers in the United States, Europe, China, India, and Japan

Book recommendations from COVID:

- **Anatomy: The Body: A Guide for Occupants https://www.amazon.com/Body-Guide-Occupants-Random-House/dp/0593106296/ref=tmm_pap_swatch_0?_encoding=UTF8&qid=&sr=**

- **Opioids: Dreamland: The True Tale of America's Opiate Epidemic: https://www.amazon.com/Dreamland-True-Americas-Opiate-Epidemic/dp/1511336404**

- **Oncology*:* The Breakthrough: Immunotherapy and the race to cure cancer: https://www.amazon.com/Breakthrough-Immunotherapy-Race-Cure-Cancer/dp/1455568503**

CONTACTS

Julia Dworkin
jdworkin@jefferies.com
+1 (212) 708.2732
SVP, Capital Intelligence Team

Leor Shapiro
lshaprio@jefferies.com
+1 (212) 336.6267
MD, Head of Capital Intelligence Team

Shannon Murphy
shannon.murphy@jefferies.com
+1 (212) 336.1139
MD, Prime Services Strategic Content

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[1] NY Times and Boston Business Journal https://www.nytimes.com/2020/05/25/business/coronavirus-hospitals-bailout.html and https://www.bizjournals.com/boston/news/2019/12/30/2020-vision-vc-firms-are-flush-with-cash-here-s.html
[2] Deloitte Insights – Health Tech Investment Trends: https://www2.deloitte.com/us/en/insights/industry/health-care/health-tech-investment-trends.html#endnote-sup-1
[3] US Bureau of Labor Statistics: https://www.bls.gov/ooh/healthcare/home.htm
[4] McKinsey: The era of exponential improvement in healthcare? https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/the-era-of-exponential-improvement-in-healthcare
[5] Centers for Medicare & Medicaid Services' (CMS) Office of the Actuary (OACT): https://www.hcinnovationgroup.com/policy-value-based-care/article/13028126/medicare-actuaries-us-healthcare-spending-will-rise-to-5548-trillion-and-199-percent-of-gdp-in-2025
[6] FactSet
[7] Dealogic and Jefferies Proprietary IPO data* as of November 30th, 2020
[8] SPAC issuance in 2020 has offering greater optionality for companies across sectors. SPACs don't come without tradeoffs and companies need to think through costs of capital vs. time to market and other management considerations. Some have argued healthcare companies may particularly lend themselves to this form of financing – especially therapeutics -if they have high cash burns, do not have cash flows and/or may need short term capital raised to get to a key milestone or FDA approval.
[9] Factset
[10] XLV Fund Industry Allocation Breakdown: https://www.ssga.com/us/en/individual/etfs/funds/the-health-care-select-sector-spdr-fund-xlv
[11] EPFR
[12] EPFR
[13] EPFR. Note: US healthcare dedicated would consist of funds that only invest in healthcare. Sectors and industries are loosely based on MSCI categorizations. Industries would be a layer down from sectors, so healthcare would contain also groups not shown such as healthcare equipment. Retail is defined by a minimum investment equal to or less than $100,000, non-ETF while institutional are minimum investments greater than $100,000 and ETFs in the EPFR datav
[14] Crunchbase: https://news.crunchbase.com/news/life-science-funding-spikes-in-2020/#:~:text=In%20the%20first%20half%20of%202020%2C%20investors%20globally%20put%20%2416.55,nearly%20600%20known%20funding%20rounds.
[15] EFPR Fund Flows & Allocation Insight
[16] Financials Times: *Active tech, healthcare and ESG funds outpace passives:* https://www.ft.com/content/ea7bc600-5ac6-4ca1-a4e7-0f6a55383e47
[17] McKinsey: https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/grow-fast-or-die-slow-why-unicorns-are-staying-private
[18] Deloitte Insights https://www2.deloitte.com/us/en/insights/industry/health-care/health-tech-investment-trends.html#endnote-sup-1
[19] Deloitte Insights https://www2.deloitte.com/us/en/insights/industry/health-care/health-tech-investment-trends.html#endnote-sup-1

[20] Benchmarks are indices created to include multiple securities representing some aspect of the total market. Many allocators will already have set investment objectives and asset allocations that have pre-determined benchmarks that is a component used to measure performance of the portfolio and a component of how employers may assess employee compensation.
[21] Data from over 80 hedge fund managers monthly tearsheets
[22] https://www.businessinsider.com/healthcare-startup-founders-should-know-blank-check-spacs-2020-8
[23] Jefferies Prime Services
[24] Forbes - Expert Networks: A Billion Dollar Opportunity For Freelancers https://www.forbes.com/sites/jonyounger/2020/02/12/the-global-expert-network-business-is-growing-fast-meet-inex-one/?sh=240939ae2f25
[25] NY is a two-person consent state so when engaging with someone in New York, the recorder will need to disclose that the line is being recorded
[26] Some of the approval criteria may include information pertaining to whether the expert has had access to MNPI regarding the project, the current or past employment with public companies, whether the expert is involved in any governmental regulatory bodies and the context of the request.
[27] Some announced CCO at the start of call (and let them read the opening statement) while others remain "incognito" and have the analyst do it. For those calls that are not chaperoned, the best practice is for CCO to schedule a post-call check in with the analyst.