TRIPLE TREE INDUSTRY PERSPECTIVE
Q1'17

Practice Management 2.0

Managing a physician practice is more complicated than ever, triggering a resurgence of market enthusiasm to invest in practice management companies and specialty physician practices – creating opportunities for physicians, patients, and investors in the coming years.

TripleTree is a healthcare merchant bank focused on mergers and acquisitions, growth capital, strategic advisory and principal investing services. Since 1997, the firm has advised and invested in some of the most innovative, high-growth businesses in healthcare.

We are continuously engaged with decision makers including best-in-class companies balancing competitive realities with shareholder objectives, global companies seeking growth platforms, and financial sponsors assessing innovative investments and first-mover opportunities.

CONTENTS

INTRODUCTION

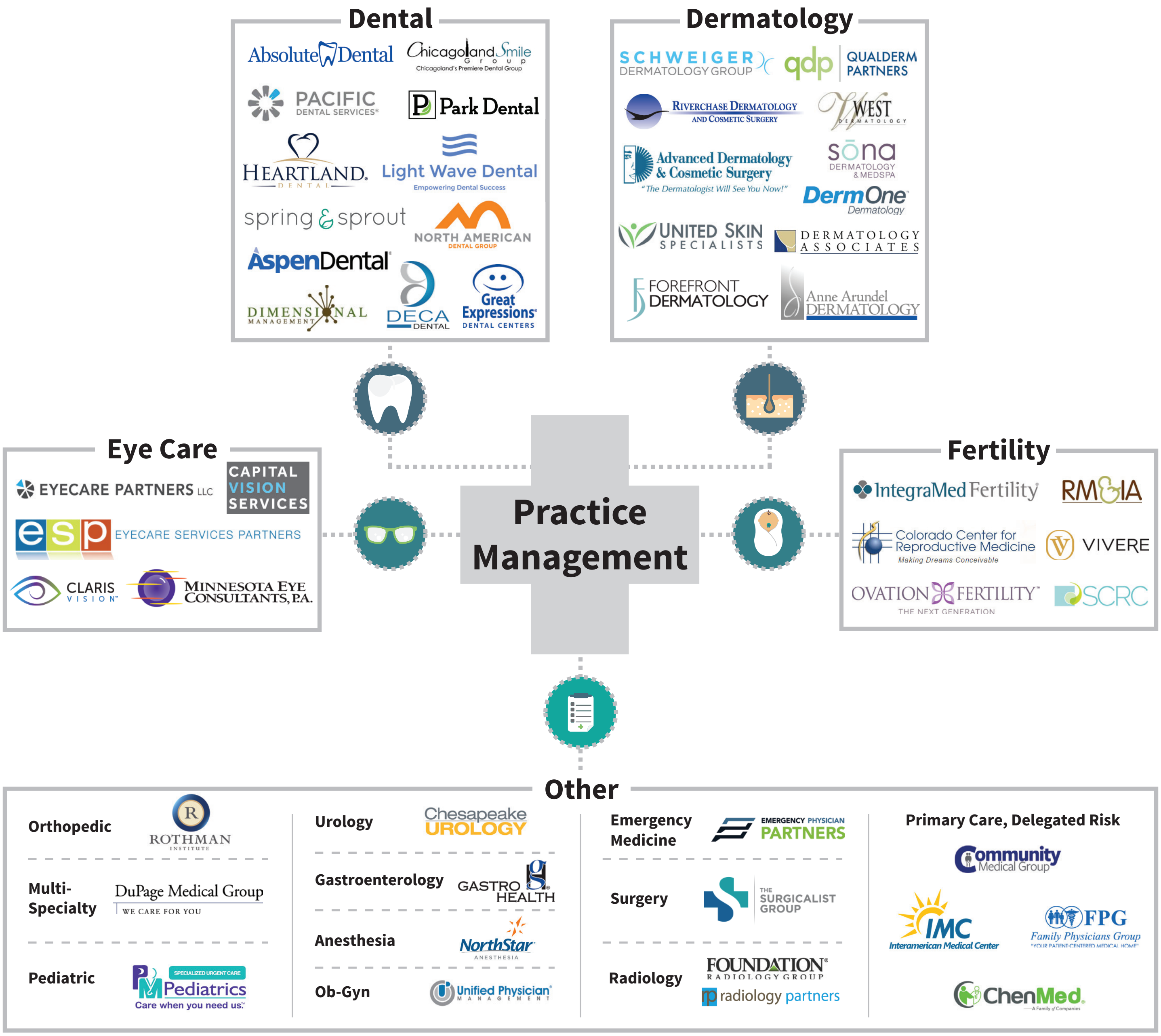
Practice management is back. A convergence of forces is once again driving interest and investment activity in practice management capabilities and the specialty practices of physicians, dentists, optometrists, etc. ("physicians").

In truth, practice management never really left over the course of the past 20+ years. Dental practice management took significant hold over the past two decades, with firms like **Heartland Dental**, **Dental Care Alliance**, and others building large chains of dental practices, creating options for dentists who no longer want to pursue the independent route. Optometry “went retail” long ago, with large chains like **Lenscrafters** and discount retailers like **Wal-Mart** aggregating significant scale for vision services, and then went online with e-retailers growing their presence in vision products. These mass retailers placed significant pressure on independent optometrists, who despite this pressure have maintained a relatively stable position representing approximately 50% of the total vision care market (including eye care services and products).[1] Elsewhere in the specialty practice arena, groups like **Sheridan Healthcare** (acquired by **AmSurg**), **TeamHealth**, and **MEDNAX** have driven significant consolidation in primarily hospital-based specialties like anesthesiologists, neonatologists, hospitalists, emergency physicians, and radiologists.

Today we are seeing a resurgence of market enthusiasm to invest in and manage physician specialty practices, which generally had fallen out of favor over the last 20+ years. In addition, we are seeing an expanded interest in a broader range of medical specialties, including diverse areas such as dermatology, ophthalmology, urology, fertility, orthopedics, gastroenterology, and others, both in pure-play specialty practices as well as broader practices that either span multiple specialties or deliver integrated care through a vertically integrated approach (e.g., comprehensive eye care, encompassing ophthalmology, optometry, surgery, and retail optical products) (See Figure 1).

This resurgence warrants an updated review of the landscape since the last time we saw such interest, which was in the 1990s. Led by **PHP Healthcare** in 1991, more than 35 physician practice management companies went public within a five-year period, alongside the purportedly more than 250 privately-owned practice management companies. Groups like **MedPartners**, **PhyCor**, **FPA Medical Management**, and others were successful in driving rapid growth via physician affiliation. At the time, the value proposition was largely centered on the promise for physicians to remain independent while assuaging concerns around aggressive payer contracting and capitated arrangements that made profitable independent operation challenging. Practice management companies offered an alternative path for physicians to remain independent.

FIGURE 1.
SELECT PRACTICE MANAGEMENT COMPANIES AND SPECIALTY PHYSICIAN PRACTICES



Source: TripleTree Analysis

Physicians also envisioned their incomes growing through more efficient back-office operations, improved payer contracting, and new revenue streams (e.g., extending into select outpatient services).

Unfortunately, the promise of more efficient and profitable independent physician specialty practices didn't materialize. Practice management companies raced on a roll-up path, acquiring hundreds of practices at valuations that were not tethered to the underlying business fundamentals. This was due to the practice management companies' market valuations generally requiring faster growth than was actually achievable and assumed vastly improved operating performance from cost efficiencies, improved payer contracting, and success in capitated reimbursement arrangements. Simply put, the economics of the model were off. The efficiencies required to drive profitability and increase physician compensation were not realized, and physician productivity generally declined. At the same time, physicians' equity value in the practice management companies plummeted with the market valuations. The models were not working, physician attrition piled up, and significant losses mounted. Eight of the ten largest public practice management companie s filed for bankruptcy by early 2000.

So what's different this time? Gone is the tenuous rationale of the 1990s that through professional management and growth capital, physician practices would effortlessly grow and become more profitable. Today's realities are that managing a practice is more complicated than ever, that more physicians are attracted to the prospect of practicing in a large group setting, and that practice management companies offer a legitimate and financially attractive alternative to independent practice while providing the opportunity for returns to external investors as well. The resurgence in practice management can be attributed to several forces and opportunities, including:

1. Managing the growing administrative and operational burden triggered by government regulation required to run successful practices, while allowing clinicians to focus on care delivery
2. Adapting to changing reimbursement models and the shift to value-based care
3. Creating efficiencies and economies of scale in very fragmented provider segments across multi-site models
4. Responding to changing lifestyle preferences and generational wants/needs of physicians
5. Optimizing clinical productivity and offsetting a growing shortage of specialists by better leveraging advanced practice providers and other non-physician clinicians
6. Supporting and keeping pace with growing consumer demand and needs
7. Expanding the range of services offered by practices

In this *Industry Perspective*, TripleTree takes a fresh look at why practice management is more relevant than ever and highlights three specific specialties, each at a different maturity level:

- **Dental** – in which practice management has matured and taken significant hold
- **Dermatology** – an area of practice management penetration that has garnered recent interest
- **Fertility** – an area of practice management that is emerging

After highlighting the market forces and unique characteristics of these three specialties, this report will also provide TripleTree's perspective on some of the unique considerations required to successfully invest in a practice management strategy.

"Today's realities are that managing a practice is more complicated than ever, that more physicians are attracted to the prospect of practicing in a large group setting, and that practice management companies offer a legitimate and financially attractive alternative to independent practice, while providing the opportunity for returns to external investors as well."

THE CASE FOR PRACTICE MANAGEMENT

The business case for practice management is sounder than ever and different from the experience in the 1990s. Today's practice management companies are confronting a multitude of issues and challenges — many that are new, brought on by broader industry forces and provide a clear and expanding value proposition.

Managing the Growing Administrative and Regulatory Burden

It has become increasingly difficult to manage the growing administrative and regulatory burden required to run a successful practice while also allowing physicians to focus on care delivery. A 2014 Physicians Foundation survey found that physicians are spending 20% of their time on non-clinical paperwork. Furthermore, new technology demands, including EHR implementation, achieving Meaningful Use, and managing through the ICD-10 transition, have required meaningful investment of time and attention and yet don't always yield positive benefits for the practice. In fact, the survey reports that only 24% of physicians say that EHR systems have improved efficiency.[2]

Meanwhile, physicians are working more than ever, with 81% reporting that they are over-extended or at full capacity. And across most specialties, physicians have felt the squeeze of flat or declining reimbursement, adding to the economic pressures felt by practices and for physicians to "work more for less" (see details of the Multiple Procedure Payment Reduction Policy instituted by the Centers for Medicare and Medicaid Services (CMS) and adopted by commercial payers as an example later in this report). Clearly, practices are looking for a better answer.

Practice management companies cannot solve for every one of these issues. They can, however, help practices ease the burden and support clinicians in their focus on providing care by administering many of the core functions necessary to operate the practice (See Figure 2):

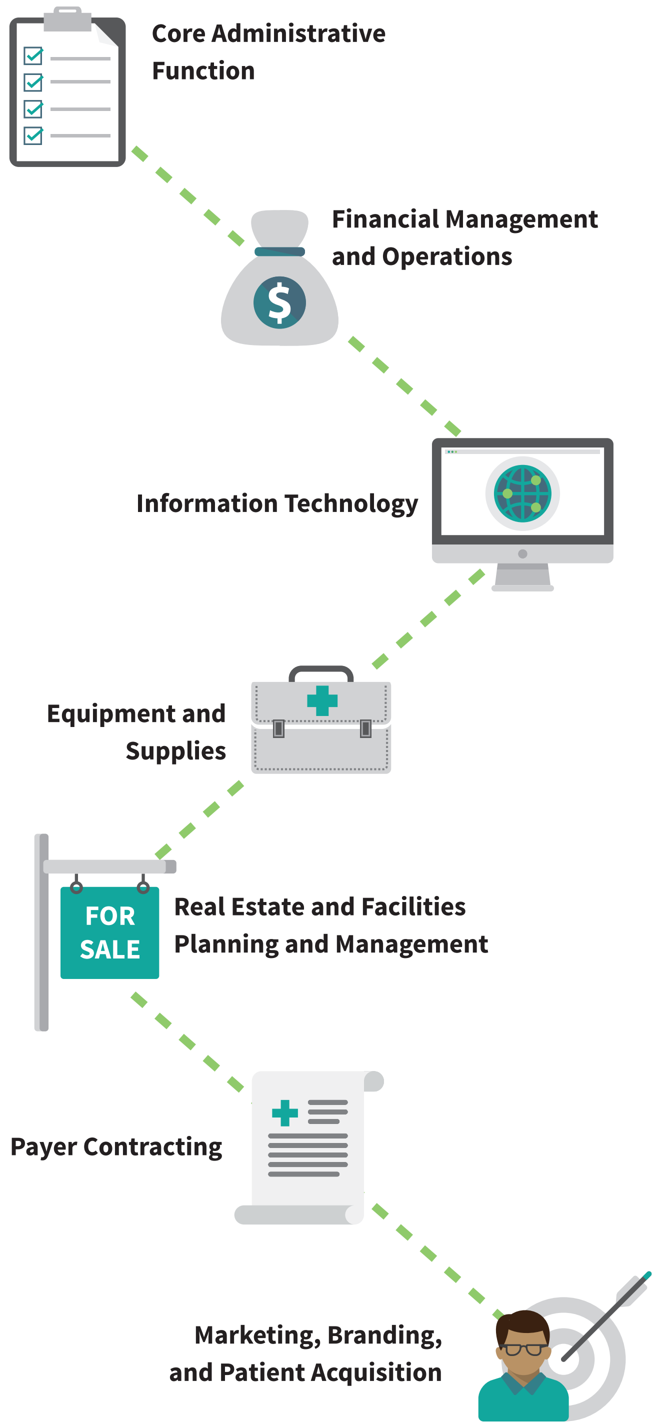
- Core Administrative Functions (including HR, training and development, legal and compliance, etc.)
- Financial Management and Operations (including billing and collections, accounting, budgeting, etc.)
- Information Technology
- Equipment and Supplies (sourcing and management)
- Real Estate and Facilities Planning and Management
- Payer Contracting
- Marketing, Branding, and Patient Acquisition

The extent to which a practice management company fully oversees these functions versus yields control to individual practices (which may have different clinical ownership) can vary significantly depending on the geographic footprint of the practices, the degree of administrative support centralization, the nuances of the particular specialty, and the philosophy of the specific practice management company.

Adapting to Changing Reimbursement Models and the Shift to Value-Based Care

Many practices across a number of specialties face new demands brought on by the rise of various payer and CMS led initiatives focused on quality, value-based care, and new payment models. Beginning in 2019, most Medicare Part B clinicians will be required to join one of two performance-based payment programs under the Medicare Access and CHIP Reauthorization Act (MACRA). One of those programs, the Merit-Based Incentive Payments System (MIPS), will combine parts of other quality reporting programs — Physician Quality Reporting System (PQRS), the Value-Based Payment Modifier, and the Medicare Electronic Health Record (EHR) incentive programs — into a unified program to measure and reward clinicians for quality and effectiveness of care. Under this new program, providers' base Medicare rates will be adjusted up or down by 4% in 2019, and by 9% in 2022. However, CMS proposes to begin measuring performance in 2017 so medical

FIGURE 2.
PRACTICE MANAGEMENT CAPABILITIES



Source: TripleTree Analysis

practices must be ready. Compliance under MIPS will not be easy as the operational requirements are complex.

The practice management value proposition is extending to help practices succeed under these new arrangements. Smaller practices, in particular, may be severely challenged as they generally lack the IT and operational infrastructure to track, measure, report, and improve upon key measures. By aggregating scale across many practices, practice management companies can deploy technology, tools, and management expertise to optimize performance in this new paradigm.

Select models of new risk arrangements present both a challenge and an opportunity for significant upside. The Bundled Payments for Care Improvement (BPCI) initiative went live in 2013 and is providing hospitals, physician groups, and other stakeholders the opportunity to “convene” a bundle of care and financially benefit from improvements in cost and outcomes. A newer initiative from CMS, the mandated Comprehensive Care for Joint Replacement (CJR) bundles for lower extremity joint replacements, has emerged to provide yet another challenge and opportunity for participants needing to align clinical and administrative operations to successfully manage and improve care administered across the continuum in these bundled arrangements. While BPCI is currently slated to expire late in 2018, we expect continued durability of voluntary programs given broad-based government support for these initiatives and continued scrutiny of mandatory programs such as CJR. With these newer reimbursement models, orthopedic practices in particular — and especially those with market-leading outcomes and repeatable success in joint replacements — are well-positioned to succeed in this environment. Further, the new models provide an opportunity for new practice management entities to emerge and provide the operational infrastructure for success in these risk-taking arrangements.

Creating Greater Economies of Scale in Very Fragmented Provider Segments

Most provider specialty practices are highly fragmented, with the largest groups representing only a small fraction of the market. For instance, **Advanced Dermatology & Cosmetic Surgery** claims to be the largest dermatology group practice in the United States. The Company lists more than 165 physicians on its website, representing just over 1% of all dermatologists. This creates great opportunity to generate significant efficiencies and economies of scale through industry consolidation. Multi-site models like physician specialty practices are well-suited for growth via a "buy and build" strategy, facilitating rapid scaling of well-run platforms.

Furthermore, accelerating growth via buy and build expansion is a critical lever for value creation given that medical spending is only modestly growing in many specialties. Thus, the key ingredients for success delivered by practice management companies are both the capital to fuel the growth strategy and the operational infrastructure to help source and integrate acquisitions. In addition, these companies are helping to identify, secure, and build out de novo office locations, while recruiting medical and administrative talent to grow the practice.

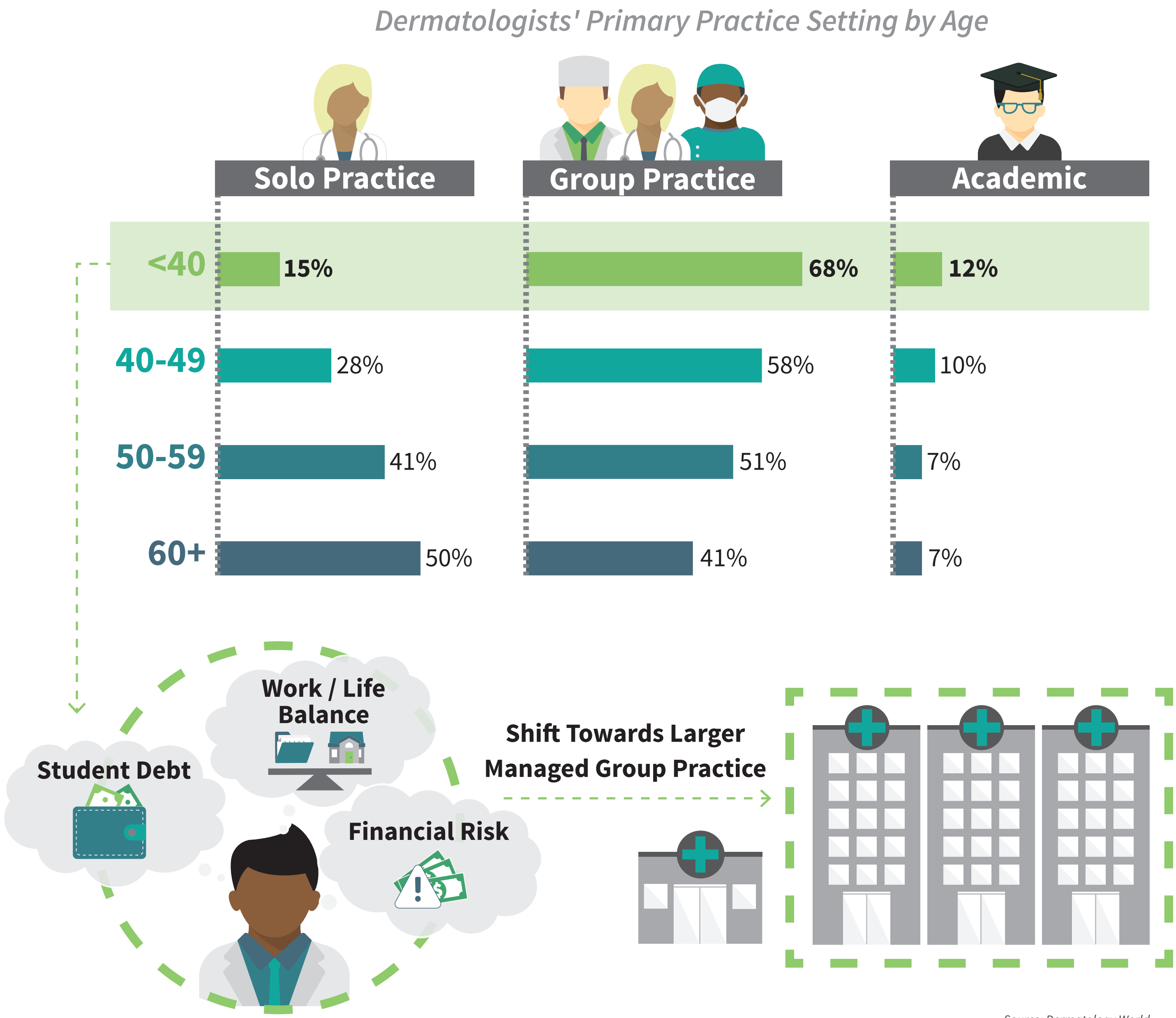
Scale required for success typically takes on two forms: local market density and aggregate operating scale. Both are important to practice management companies. Achieving critical mass or local market density is key to gaining and/or improving payer contracts. In models that leverage a single brand (at least within a specific geography), marketing spend effectiveness and the power of name recognition referrals is significantly improved through greater density. While there is no magic formula, we generally observe that groups that attain market share (by number of providers or offices) on the order of 20% or more appear to gain significant benefits from local scale. Aggregate operating scale is obviously also important in order to leverage shared costs and investments across a much larger footprint and revenue base, thus reducing overhead and operating expenses.

Responding to Changing Lifestyle Preferences of Physicians

Today's newer and younger physicians and other advanced practitioners are different than those in past generations. Today's professionals are much more likely to favor employment arrangements — and thus larger group practice settings — rather than setting out on their own to build a practice (See Figure 3).[3] While many independent physicians still wish to remain so, the percentage of independent physicians declined from 60% in 2013 to 53% in 2014.[4] The rise of student debt accrued during their training is clearly a driving factor, as the reality of starting and building a practice can seem more challenging when confronted with a mountain of student debt.

However, the larger forces at play have more to do with changing attitudes and lifestyle preferences. Many newer practitioners are displaying a preference for different practice patterns, including more flexible schedules and reduced working hours. In dentistry, for example, women now represent 38% of new professionally active dentists.[5] This new group of dentists is also choosing to work differently, with more female dentists opting for the flexibility to practice less than 30 hours per week. When combined with the fact that practices are more stretched than ever, the grind of being an owner/operator can seem less appealing. Meanwhile, the pace of retirement of older practitioners has slowed in recent

FIGURE 3.
CHANGING LIFESTYLE PREFERENCES OF TODAY'S CLINICAL PROFESSIONALS



Source: Dermatology World

years, making it more challenging for younger practitioners to enter arrangements to take over these established practices.

As a result, these trends have made larger group practices more appealing for younger practitioners. While practice management is not necessarily the same as a large group practice, the model offers employed practitioners essentially the same benefits. Some practice management models support small practices maintaining a high degree of autonomy at the local practice level (often maintaining the local/independent brand), while leveraging the scale advantages in the back-office. Others look and feel like a single, large, integrated practice. Further, in some specialties, other benefits of being in a large group practice (e.g., more flexible and accommodating office and call schedules, partnering with a range of sub-specialists to expand services and keep referrals within the practice, etc.) can also fit in a practice management model for smaller practices.

Despite the recent slowdown in retirements, a sizeable portion of older practitioners are still looking to realize the value of the equity they have built in their practices while continuing their clinical practice for a few more years. These dynamics are another driving force behind the acceleration of practice management models, as they are providing a very stable supply of practitioners who are good fits.

Leveraging Advanced Practice Providers and Other Non-Physician Clinicians

Across many specialty practices, advanced practice providers such as nurse practitioners (NPs) and physician assistants (PAs) are being more heavily utilized to optimize clinical productivity and, in some fields, to offset a growing shortage of specialists. In many areas, these advanced practitioners can see patients independently, be reimbursed for their services, and in some cases can drive their own repeat patient volume. In dermatology, for instance, a high-performing PA can see up to 40 patients per day, in addition to directing additional pathology volume and cosmetic procedures, ultimately developing ongoing patient relationships. Strong practices with high volume-generating dermatologists can fully staff up to two PAs per physician — generating significant additional revenue for the practice.

Many practice management companies are attempting to leverage best practices to help physicians successfully add advanced practice providers to the team, in addition to optimizing new patient acquisition, scheduling, and repeat visits. In doing so, they are able to accommodate growth in new patient volume and greater availability in urgent/same day access to care. These companies also focus on improving clinical outcomes and ensuring that physicians are being positioned to provide the necessary level of oversight where required. Compliance is an important piece of the practice management value proposition as well – making sure that the services being provided are appropriate to be billed by the particular provider.

Supporting and Keeping Pace with Growing Consumer Demand and Needs

Patients are growing more sophisticated in their healthcare savviness and their demands on the healthcare system. Practices, in turn, are growing more sophisticated in their efforts to acquire, retain, and better serve their patients as consumers. This, too, is an area where practice management companies are evolving their value proposition to better support practices' revenue growth. For many practices that see high recurring patient volume (notably, dental and dermatology), it is critical to drive highly efficient scheduling and reminders to ensure repeat volume is consistent and reliable, and that care and preventive regimens are being followed appropriately. However, it is more valuable (and yet more difficult) to attract a new patient, particularly in fields with preventive and/or persistent treatments in which patients may be receiving sub-optimal treatments today. Practice management companies are helping practices with more sophisticated approaches to consumer marketing, including harnessing best practices in leveraging the internet and social media, to drive new referrals, directly impact patient volume, and even target specific payer mix and patient demographics.

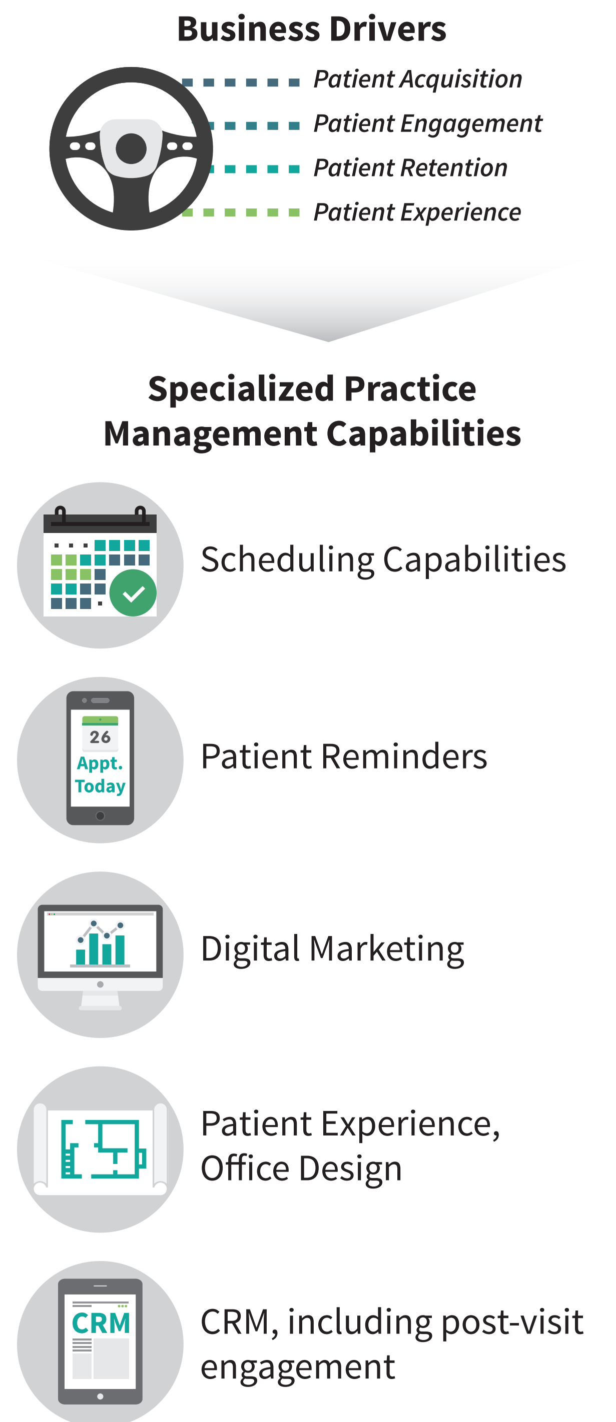
Another area of innovation around the consumer is in providing a distinctive patient experience. We see this happening most notably in verticals such as urgent care where convenience is the primary component of the value proposition. For instance, **GoHealth**, an operator of urgent care centers in partnership with market-leading health systems across the country, builds out a consistent clinic design marked by a clean, contemporary look with cutting-edge features such as exam rooms encased in glass that turn opaque when the room is occupied. Increasingly, practices are also pursuing similar efforts to build a unique consumer experience from pre-appointment (utilizing digital/online appointment scheduling, check-in, and reminders), to sleek and comfortable waiting and exam rooms, and coordinated post-visit customer relationship management (CRM). Here, too, we see practice management companies bringing best practices and investing in both the physical spaces of the offices as well as in technology tools to assist in engaging with patients (See Figure 4).

Expanding Services Offered by Practices

A major lever for growth of many practices is expanding the range of services provided, in particular ancillary services that can amplify the revenue per physician. This includes surgical procedures (often performed out of the office setting, in an ambulatory surgery center [ASC]), pathology laboratory services, and value-added medical and cosmetic products. These ancillary services are commonly referred out by many practices to other providers, or are simply foregone by the patient. Practice management companies are very focused on expanding practices' ancillary services capabilities and volume by providing the capital, and in many cases the best practice experience, to guide successful growth initiatives.

Some examples of ancillary service expansion require gaining additional operating scale and diversity of clinical specialties, often by recruiting new specialists and/or opening new offices in a market. In dermatology, for instance, many small practices are not able to support the volume required to recruit a specialist who can provide Mohs surgery for skin cancer treatment. However, larger practices and practice management companies can create a network of locations in a given market with specialized services (such as Mohs) provided at one or just a few locations. Thus, by building out this service line, these practices can capture a revenue source that

FIGURE 4.
PRACTICE MANAGEMENT SUPPORT OF MORE SOPHISTICATED CONSUMERS



Source: TripleTree Analysis

is otherwise lost to external referrals. Other examples require significant capital expenditures and “bricks and mortar,” particularly to assist in the growth of surgery-focused service lines — for instance, cataract surgery and vitreoretinal surgery performed by ophthalmologists in an ASC; multiple types of general urologic surgery as well as select case of radiation oncology overseen by urologists. All of these examples can be significant contributors to overall revenue and financial performance, which explains practice management companies’ focus on these opportunities.

"Today’s practice management companies are helping practices in a number of specialty areas...providing a clear and expanding value proposition."

A Growing and Evolving Sector in Healthcare

According to IBISWorld, the dental segment is estimated to be a $123.9 billion business in the United States, and the pace of growth is accelerating. Supported by over 195,000 dentists across roughly 175,000 practices, the industry is expected to experience an annual growth rate of ~5% through 2021. There are many trends that support the future growth of the industry, including:

An Aging U.S. Population as a Catalyst for Growth. The population of adults age 65 and over numbered 46.2 million in 2014, representing an increase of 10 million (or 28%) since 2004.[6] This trend makes older Americans one of the fastest growing populations in the United States, and impacts both overall dental demand as well as the services mix within dental practices. For example, dental practices have benefited from elderly individuals' demand for veneers and other geriatric restorative care services. Additionally, more adults are retaining their teeth on average, which increases the amount of preventive services and dental visits that are being provided to the elderly. This is important given that seniors have the highest per-patient dental care expenditures of any age group for two reasons: first, as patients age, they tend to require more expensive dental services and procedures; and second, they are increasingly willing to undergo procedures to maintain oral health. While demand for these types of services is expected to increase, seniors' dental care spending is generally more sensitive to income, given that Medicare does not cover dental benefits (Medicare Part A only covers hospital dental services). This results in an increased dependency on out-of-pocket healthcare spending within this demographic.

Expansion of Pediatric Coverage. The expansion of dental coverage resulting from the Patient Protection and Affordable Care Act (ACA) represented a compelling opportunity for growth in the industry, particularly regarding pediatric dental coverage in state Medicaid plans. The ACA mandated that all individual and small group plans purchased on or after January 1, 2014 (including plans sold both on and off the exchanges) must include pediatric dental coverage to be considered a qualified health plan. Additionally, states are required to provide dental benefits to children covered by Medicaid and the Children's Health Insurance Program (CHIP), resulting in substantial gains in dental access for these children. From 2000 to 2013, the national access rate increased from 29% to 48%, with only one state not experiencing an increase.[7] The American Dental Association (ADA) estimates that 8.7 million children will gain access to dental benefits by 2018 via provisions in the ACA.[8]

Meeting the Dental Needs of an Aging Population

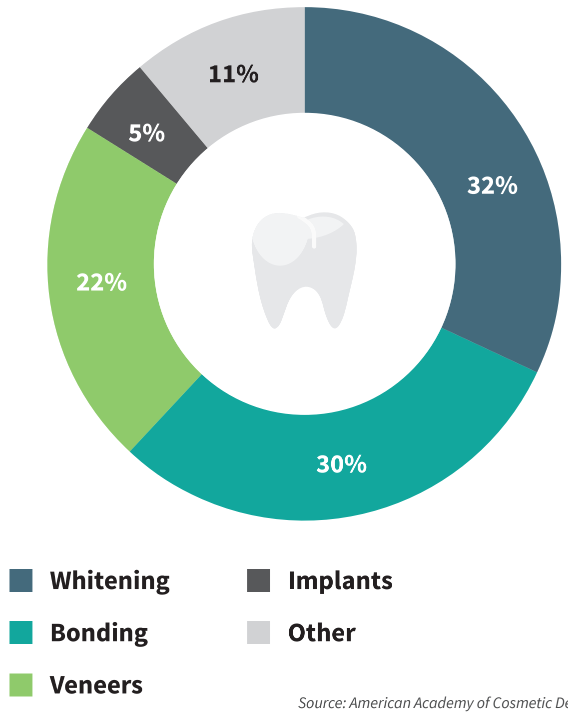
The growing senior population combined with the lack of traditional dental benefits offered through Medicare (other than for a covered medical condition) is driving private health plans to create dental plans tailored to this growing demographic. One example is the **AARP** Dental Insurance Plan administered by **Delta Dental**. This program offers flexible private coverage in the form of two plans available to AARP members: Delta Dental Plan A, which provides extensive dental benefits for most procedures at a moderate monthly premium; and Delta Dental Plan B, which offers a lower monthly premium than Plan A with reduced benefits for some preventive and basic services. Since Medicare generally doesn't cover dental procedures, the addition of an AARP Dental Insurance Plan provides seniors with additional peace of mind when combined with Medicare Part A (hospital coverage), Medicare Part B (medical coverage), and a Medicare Supplement (or Medigap) insurance plan. The partnership between AARP and Delta Dental is mutually beneficial as AARP can offer a valuable benefit to its large membership base (and receive revenue from Delta Dental) and Delta Dental can reach a large number of consumers with a compelling product that is associated with the AARP brand. A second approach for private insurance companies is the inclusion of dental benefits in Medicare Advantage (MA) plans. Not to be confused with Medicare Parts A&B and Medicare Supplement plans, MA plans are all-in-one plans offered by private insurance companies that combine Medicare Parts A&B, sometimes Part D (prescription drugs) and other benefits into one plan. As a way to differentiate in the marketplace, private insurance companies like **Humana**, **Aetna,** and **UnitedHealthcare** have started to offer dental benefits with their MA plans (usually as an add-on with a monthly premium). With more than 11,000 people now aging into Medicare every day, and the potential for continued emphasis on private insurance resulting from the Trump administration, TripleTree anticipates continued growth of dental benefit offerings tailored for seniors.

While the future of the ACA faces uncertainty resulting from the Trump administration, it is unlikely that an immediate and significant impact to Medicaid will occur, resulting in a continued trend of increased access to pediatric dental coverage in the near term. It is worth noting that despite these strong tailwinds for pediatric Medicaid dental growth, investment in Medicaid-focused practices has been more muted given the significant scrutiny some groups have received relating to alleged unnecessary and questionable care provided to children in state Medicaid plans.

Trend Toward Preventive Care Bolstered by a Strong Demand for Cosmetic Services. In addition to demographic shifts, attitudinal changes are having a significant impact on the dental industry. Over the last 50 years, dentistry has seen a change in the type of services commonly provided within a dental office as the overall oral health of the U.S. population has improved. The industry has experienced a continued shift from a disease-based dental approach, focused on repair and replacement procedures such as extractions and amalgam restorations (i.e., dental fillings), toward an approach focused on routine check-ups and preventive oral health maintenance. Just as fundamentally, and as a byproduct of this shift towards more routine care, the U.S. population's appetite for cosmetic and elective procedures has increased due largely to the desire to improve one's physical appearance, with these procedures now projected to account for roughly 32% of total industry revenues (as of 2016).[9] According to the 2015 State of Cosmetic Dentistry survey commissioned by the American Academy of Cosmetic Dentistry (AACD), 40% of responding doctors experienced more than 15% growth in cosmetic procedures over the past five years, with the most popular cosmetic treatments as follows in Figure 5.[10, 11]

Other common types of procedures include inlays and onlays, which are known as indirect fillings made by a dental laboratory, used when a tooth has a mild to moderate decay in which there is not enough tooth to support a filling.

FIGURE 5.
MOST POPULAR COSMETIC DENTAL PROCEDURES



Source: American Academy of Cosmetic Dentistry

Regardless of the type of cosmetic procedure performed, participation in these types of procedures is expected to increase as the overall oral health of Americans continues to improve.

Resulting from these significant growth drivers for the industry, TripleTree expects the concepts of managed group practices and Dental Service Organizations (DSOs) to increasingly become the new norm in dental.

Long History with Practice Management

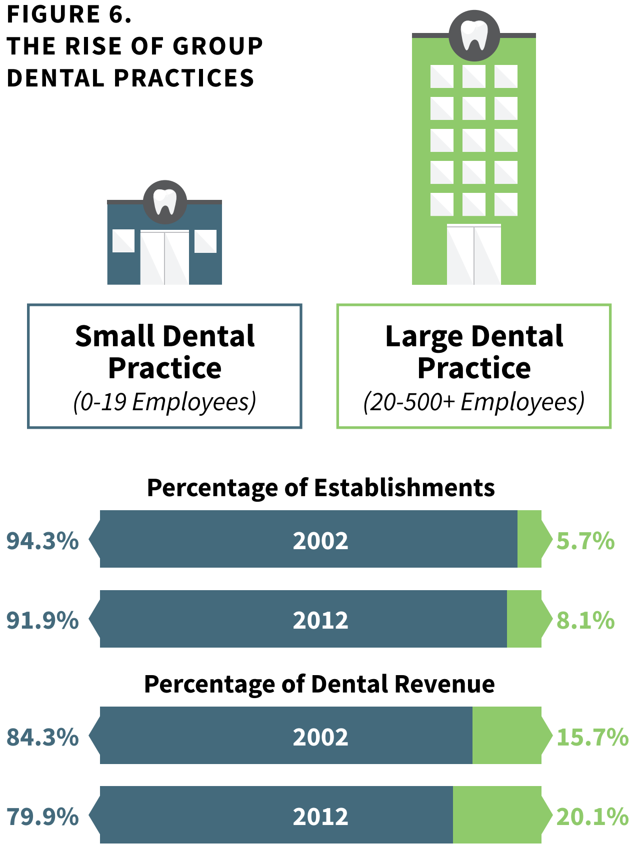
As noted previously, the resurgence of practice management companies across the specialty practice landscape is on the rise. While some specialties are less mature in the penetration of practice management models, dentistry and dental practices have had a long-standing and (for the most part) successful history with the utilization of practice management services, typically known in dentistry as DSOs or Dental Practice Management Companies (DPMCs).

While there are a wide range of reasons contributing to the advanced maturity of practice management within dental, several overarching factors have helped make the concept stick, including:

Dentistry is an Attractive Business Model for Practice Management, Plain and Simple. Though highly correlated with the performance of the economy, dentistry has traditionally been one of the most profitable industries in healthcare, with private clinics ranking in the nation's top five most profitable industries in 2015, achieving an estimated net profit margin of roughly 15%.[12] Further, the industry is less dependent on health insurance reimbursement than the healthcare sector as a whole, in which patients largely pay for services and treatments out-of-pocket.

The Fragmented Dental Provider Landscape Provides Significant Opportunity for Consolidation. In addition, the multi-site model of dental practices provides favorable conditions for DSOs to exploit economies of scale across practices and subsequently, experience lower overhead costs while still benefitting from the unique local market characteristics of each practice. The historically fragmented nature of dental providers has provided a significant opportunity for industry consolidation, and DSOs are well suited for continued growth in this environment, through either the acquisition of practices or opening offices de novo. In concert with DSO penetration, practices themselves have experienced significant change, with the increasing concentration of large, multi-site group dental practices.[13] While most dentists in private practice today own or share in the ownership of their practice, the industry has seen a continued increase in the rise of group practices since the early 2000s. In 2002 roughly 94.3% of the dental establishments in the United States employed fewer than 20 dental professionals and accounted for 84.3% of dental revenue. In 2012, they made up 91.9% of establishments and generated 79.9% of dental revenue in the U.S. Conversely, dental establishments employing greater than 20 professionals saw an increase in terms of both percentages of establishments, from 5.7% in 2002 to 8.1% in 2012, and in terms of dental

FIGURE 6.
THE RISE OF GROUP DENTAL PRACTICES



Source: American Dental Association

Note: This data does not contain information regarding the type of firm (e.g., ownership status, DSO/DPMC affiliated, not-for-profit or government practices).

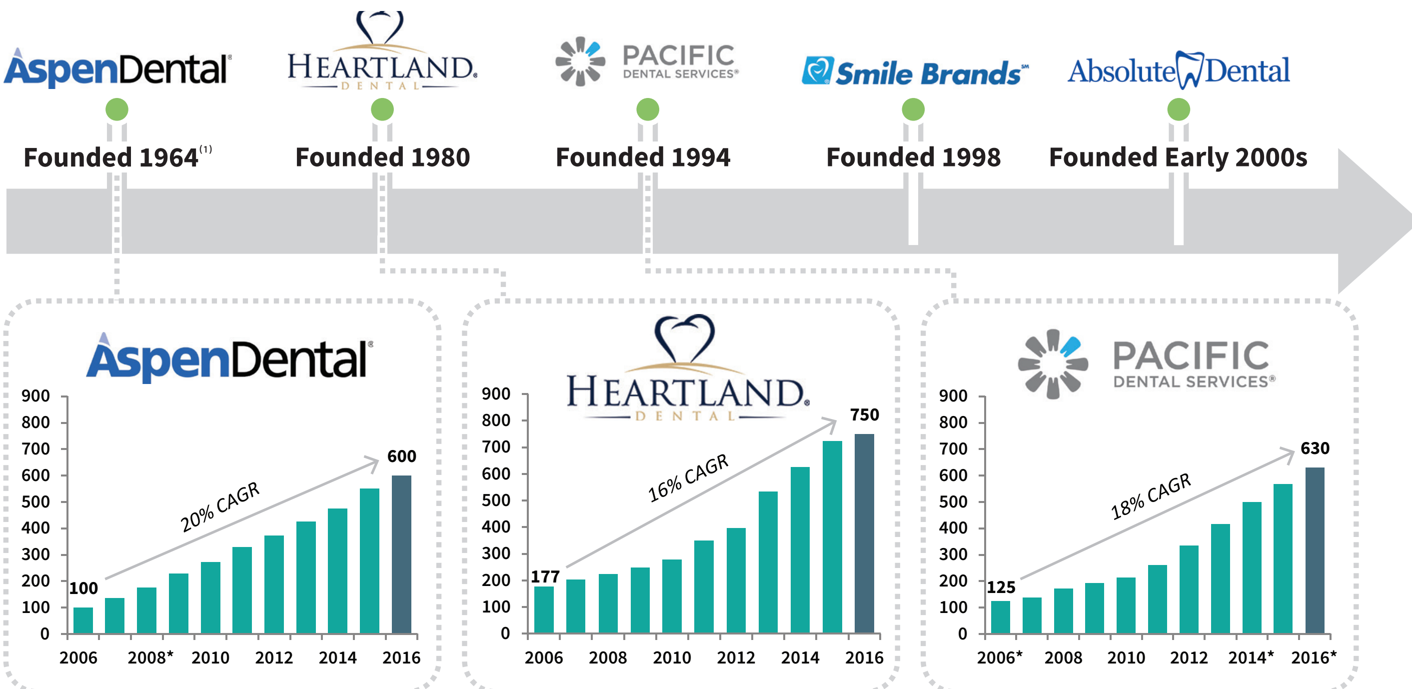
revenue, from 15.7% to 20.1%, respectively.[14] The increase of larger group practices combined with accelerating market consolidation is forcing traditional dental practices to find new ways to remain viable. While many dental practices have contended with rising dental costs, one way firms have been able to help boost profitability is through affiliation, or acquisition, by DSOs. Many solo practitioners and group practices have formed contracts with DSOs to lower their operational costs by leveraging greater economies of scale. Though dental practice management companies have a growing footprint in the market, there remains significant runway for continued expansion.

The Supporting Labor Market Continues to Change. As noted previously, the needs and preferences of the clinical labor market are continuing to change. With ever-increasing amounts of student debt saddling recently graduated dentists, joining a DSO presents an attractive option for young physicians looking for stability of employment. According to the American Student Dental Association, the average 2016 graduate will have over $261,149 in debt upon graduation, an increase of more than four times the average graduate debt of $55,000 in 1990. When coupled with the slowing rate of retirement for older practitioners, these economic realities are creating traction for DSOs as younger dentists enter the workforce and begin practicing day-to-day.

The Continued Rise of DSOs is a Self-Fulfilling Prophecy. The reality of today's environment is that running a dental practice is more complicated than ever, with dentists and office managers facing an ever-growing list of demands and challenges. DSOs provide dentists with a single source for practice administration by addressing all non-clinical aspects of practice management, enabling dentists to focus on the provision of care. As such, DSO affiliation represents an important option for dentists to consider — both well-established dentists when evaluating their practices' performance and long-term financial viability, as well as newly trained dentists upon entering the workforce. With the continued rise of DSOs, this option is increasingly relevant and is accelerating acceptance of the model by dentists.

Many DSOs have been formed in response to these factors, and several have significantly expanded their footprint across the U.S., including organizations such as **Heartland Dental**, **Aspen Dental**, **Smile Brands Group**, and **Absolute Dental**, among others.

FIGURE 7.
EVOLUTION OF SELECT DENTAL SERVICE ORGANIZATIONS



(1)Predecessor company
*TripleTree estimates
Source: Heartland Dental, www.aspendental.com, www.pacificdentalservices.com

Recent Investment Activity

As a result of these favorable industry characteristics, dental has been a hotbed of activity over the past several years. The opportunity for continued consolidation across the historically fragmented industry has been a catalyst for continued M&A volume, with several common market themes underpinning many of the transactions:

Increased Interest from Financial Sponsors. Small and large DSOs alike are garnering interest from investors. Whether operating on a national scale or with a smaller regional platform, DSOs are continuing to find opportunities to scale and consolidate the market through acquisitions of small practices and de novo growth. Take Smile Brands Group, as an example. Recently backed by **Gryphon Investors**, Smile Brands Group provides support services to general and multi-specialty dental groups, supporting over 350 affiliated dental offices across 16 states primarily under the brands of **Bright Now! Dental**, **Castle Dental**, and **Monarch Dental**. In August 2016, Gryphon Investors acquired Smile Brands for an undisclosed amount. Gryphon, having previously owned Bright Now! Dental from 1998 to 2005, pursued the transaction with the goal of building a comprehensive DSO platform and acquiring additional dental practices.[15] Smile Brands Group has wasted no time expanding its operations since the transaction, recently completing the acquisition of **A+ Dental**, a four-location dental practice in Northern-California, and **OneSmile Silicon Valley**, a group of three practices in the Silicon Valley, CA area. Both transactions closed in February of 2017

Focus on Specialty Practices and Geographic Expansion. In addition to general dental groups, some DSOs have taken a specialty practice-focused growth strategy. One such example is **Spring & Sprout Dental Holdings**, a Texas-based DSO formed to provide practice support services to pediatric dentistry and orthodontics specialists. Backed by **Huron Capital Partners**, Spring & Sprout has expanded its geographic presence within the past year by acquiring Ohio-based **Dan German Orthodontics** in March 2016, and **Rich Orthodontics**, a Pennsylvania-based orthodontics group, in February 2016. Since 2014, Spring & Sprout has completed eight affiliations in Michigan, Ohio, Tennessee, Texas, and Pennsylvania.[16]

Another example is **Affordable Care** (with retail locations branded as **Affordable Dentures** or **Affordable Dentures & Implants**), which is the leading DSO focused exclusively on tooth replacement services. **Berkshire Partners** acquired a majority interest in Affordable Care in 2015.

While there is ample opportunity across the market for continued consolidation, there remains a level of fragmentation that presents challenges when pursuing the acquisition of solo or small group practices. Some best practices that DSOs

FIGURE 8.
SELECT PRIVATE EQUITY INVESTMENTS IN DENTAL

Target Company	Investor	Investment Date	Number of Locations*	Number of Dentists*
D4C Dental Brands, Inc.	Cressey & Company (New Investor) Beecken Petty O'Keefe & Company (Existing Investor)	December 2016	30+	-
Light Wave Dental	Alpine Investors	December 2016	6	-
Great Expressions Dental Centers	Roark Capital Group	September 2016	260+	900+
Smile Brands	Gryphon Investors	August 2016	~350	-
familia Dental	The Halifax Group	April 2016	30+	-
Mid-Atlantic Dental Partners	S.C. Goldman & Company	March 2016	0	-
Dimensional Management	Waud Capital Partners	February 2016	30	-
Absolute Dental	Beecken Petty O'Keefe & Company	January 2016	25	70+
Smile Doctors	Sheridan Capital Partners, Thurston Group LLC	November 2015	-	-
Affordable Dentures & Implants	Berkshire Partners	October 2015	200+	
North American Dental Group	ABRY Partners, The Riverside Company	August 2015	70+	-
Deca Dental	Blue Sea Capital	July 2015	30+	50+
Dental Care Alliance	Harvest Partners	July 2015	157+	-
Chicagoland Smile Group	Shore Capital Partners	April 2015	4+	-
Aspen Dental	American Securities	March 2015	550	1,000+
Smile Design Dentistry	Pine Tree Management	March 2015	14	26
Hero Practice Services	Silver Oak Services Partners	February 2015	20	-
spring & sprout	Huron Capital Partners	June 2014	0	-

*Represents number of locations and dentists at the time of the transaction

Source: providenthp.com, businesswire.com, prnewsire.com, thehalifaxgroup.com, waudcapital.com, pehub.com, abry.com, blueseacapital.com, silveroaksp.com, huroncapital.com look for when evaluating a potential acquisition include whether the practice has consistently maintained or grown production levels, remained technologically current, and maintained well-organized financial records.

Regardless of the acquisition rationale, the previous examples are not the only players in the industry that have been active as of late. Figure 8 shows a table of select acquisitions across the dental landscape, in which financial sponsors have taken an interest in both large and smaller group dental practices and DSO platforms.

Conclusion

Practice management has gained significant credibility within the dental industry. Despite an already 20+ year history with practice management, the space continues to attract an incredible amount of interest and investment, as evidenced by the sheer volume of recent private equity transactions. As the dental industry continues to grow, resulting from a compelling business model, growing consumer demand, and expanded service offerings, there is a strong opportunity for continued innovation by and investment in dental practice management companies.

"Resulting from these significant growth drivers for the industry, TripleTree expects the concepts of managed group practices and Dental Service Organizations (DSOs) to increasingly become the new norm in dental."

DERMATOLOGY SPECIALTY SPOTLIGHT

Strong Tailwinds Support Dermatology's Rapid Acceleration

Compared to dental, practice management solutions for the dermatology industry are still emerging. Over the past several years, this trend has triggered significant investment and innovation around new management and investment models.

Private investment in dermatology came to prominence starting around 2011, and has gained significant momentum since then. The fragmented, high-margin industry is ideal for a platform-building strategy. The combination of a highly cosmetic yet foundationally medical subsect of medicine has attracted investors due to a variety of factors.

"Dermatology" itself has become a broad term used as an umbrella for several different specialty areas. Historically, dermatology was comprised of practitioners who specialize in the diagnosis and treatment of conditions and diseases of the skin. However, with an aging population, coupled with significant strides in cosmetic products and procedures, the industry has expanded to offer a large and diversified set of services.

Dermatology is estimated to be nearly $13 billion in size. It includes over 9,000 practices and employs more than 34,000 individuals (See Figure 9). The industry grew 2.9% annually from 2010 – 2015; with accelerated demand and robust industry trends, dermatology is now projected

FIGURE 9.
DERMATOLOGY INDUSTRY OVERVIEW

Source: IBISWorld

to grow 5.2% annually from 2015 – 2020.[17] However, it is worth noting the close correlation of dermatology revenue growth with economic performance and consumer discretionary income, given that a significant portion of dermatology services are elective in nature and a significant portion of reimbursement is patient pay. Dermatology has boomed during economic expansions and declined during downturns.

One of many reasons that dermatology has seen such significant growth and profitability is due to the breadth of services offered. Dermatology is now composed of several major practices, including:

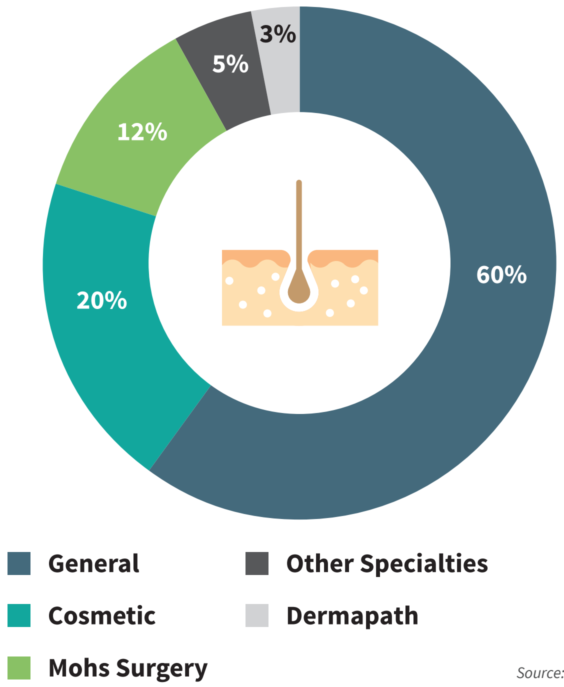
- Medical dermatology, which involves diagnosis and treatment of skin conditions and disorders such as acne, psoriasis, athlete's foot, moles, dandruff, and skin cancer
- Cosmetic dermatology, which focuses on the aesthetics of the skin, much of which is elective in nature
- Mohs Surgery, a highly lucrative procedure that is generally accepted to be the most effective method for removing Basal Cell Carcinoma and Squamous Cell Carcinoma, the two most common skin cancers
- Dermatopathology, a specialized sector within dermatology that focuses on the study and diagnosis of skin diseases and conditions at a microscopic level
- Pediatric dermatology, which is focused on providing general dermatology services to infants and children

Revenue by service type is shown in Figure 10.

Due to the large scale of different sub-verticals within the dermatology umbrella, dermatology is composed of a multitude of medical professionals, including:

- Board-certified dermatologists – physicians who perform surgeries and procedures at their practice
- Cosmetic dermatologists (generally Board-Certified as well) – physicians who perform services such as surgery to diminish scars, filler injections and Botox, and laser surgeries
- Physician assistants (PAs) – licensed healthcare providers who, within dermatology, work under a dermatologist. They help with the diagnosis and treatment of a variety of skin conditions, and some help to perform certain procedures and surgeries. PAs are often major revenue-earners for dermatology practices
- Aestheticians – professionals who provide pre- and post-operative skin care, and may perform some non-invasive procedures

FIGURE 10.
DERMATOLOGY REVENUE BY SERVICE TYPE



Source: IBISWorld

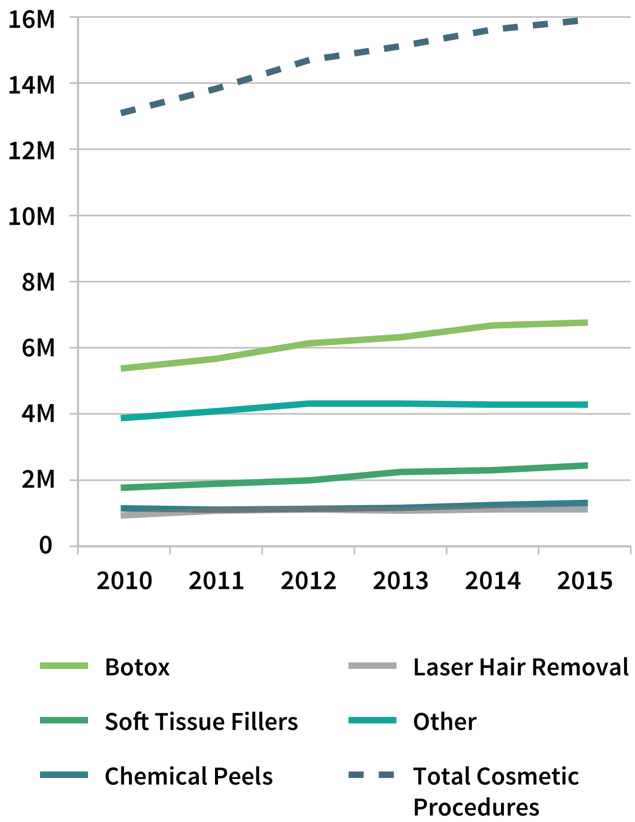
Several factors and market tailwinds have helped support the acceleration of the dermatology industry as a whole, and of practice management penetration in the sector. The major overarching trends include:

Reimbursement Outlook is Attractive and Stable. Dermatologists are currently the third highest paid specialists, with only orthopedists and cardiologists earning more.[18] This is supported by a strong reimbursement environment and significant out-of-pocket, consumer-pay revenue. This is not to say that dermatology reimbursement and revenues haven't faced scrutiny. Beginning in 2007, under CMS's multiple procedure payment reduction policy, subsequent surgical procedures performed during a session by the same physician received a 50% reimbursement cut.[19] In addition, in 2013 CMS instituted several major reimbursement cuts to some of the most common dermatology procedures, such as the code for the most common pathology procedure and a code for complex closures on the face, seriously impacting total revenue.[20] However, most industry observers believe that dermatology reimbursement is now stable, with greater confidence that CMS is unlikely to make significant additional reductions. Coupled with the high margins and significant out-of-pocket reimbursement, this stable outlook has attracted practice management models to dermatology – both to enjoy the attractive reimbursement environment and to leverage economies of scale to help dermatologists realize margins previously unachieved.

High Margin, High Demand Cosmetic Procedures and Products. Medical ailments continue to be the major business driver for a dermatologist's practice. Additionally, a growing number of empowered healthcare consumers who are concerned about their image and are increasingly demanding more value for their dollar, are fueling business growth into new areas. To meet these new demands, dermatologists have continuously offered more and higher-margin cosmetic procedures. With few exceptions, these procedures — such as Botox injections, soft tissue fillers, chemical peels, and laser hair removal — are cosmetic in nature, are paid for entirely out-of pocket, and are minimally invasive, typically making them quite lucrative. For instance, a single Botox procedure may cost a patient anywhere from $100 to $1,000, while utilizing anywhere from 10-80 units of Botox; a vial of 100 units may cost the physician approximately $525, illustrating the high margin of the service.[21] As noted in Figure 11, the annual growth rate from 2010-2015 for these cosmetic procedures is an impressive 4.9% from 2010-2015. Surprisingly, much of this growth is due to the somewhat recent demand millennials have shown for cosmetic procedures. For instance, Botox precedures for women aged 19-24 have increased by 41% from 2011 to 2015. This highlights the fact that cosmetic procedures are no longer reserved for older individuals looking to better the appearance of their skin, it has become preventative in nature as well.

In addition to cosmetic procedures, cosmeceutical products (products with biologic ingredients offering medical or pharmaceutical benefits) are also extremely popular, with these products currently representing approximately $5.9 billion in sales. Anti-aging products comprise about 30% of this figure, while dry skin and lip care account for 36%.[22] These products are sold directly to dermatologists by pharmaceutical companies for sale in the dermatologist's office. Many large, sophisticated practices and practice management-led practices are leaders in identifying higher quality and innovative products, as well as in becoming leading distributors in their respective markets.

FIGURE 11.
NUMBER OF COSMETIC PROCEDURES PERFORMED ANNUALLY



Source: "American Society of Platstic Surgeons National Clearinghouse of Plastic Surgery Procedural Statistics," *PlasticSurgery.org*

Consumer-Centric Approaches in Focus in Dermatology. The need for sophisticated marketing and engagement tactics has become more imperative than ever for dermatology practices, as dermatology is one of the most consumer-centric areas in healthcare. In response, practice management organizations have more heavily utilized technologies to improve their ability to attract, retain, and engage patients. These capabilities also act as lucrative upsell opportunities. One of the most popular companies offering these services is **Iagnosis**, a platform focused on delivering treatment to patients through web-enabled solutions. Its flagship product, DermatologistOnCall, offers patients 24/7 online mobile service. The adoption of Iagnosis has been fairly widespread; **Advanced Dermatology & Cosmetic Surgery (ADCS)**, the largest dermatology practice management organization in the U.S., began offering the service in Q4 2016 at an attractive $59 per online appointment. An additional platform gaining traction is offered by **Spruce**, a company that facilitates live out-of-office communication and care via an app. Another is **NextMD**, which provides dermatologists and other specialty practices a web-based portal to allow patients to send emails to physicians for non-urgent medical questions, as well as request or cancel appointments, request prescription refills, and receive test results and referrals. Other organizations use more traditional marketing tactics that are less sophisticated but equally effective at engaging patients and driving business. For example, the use of email marketing to reach a targeted patient segment with a seasonal offer on a specific procedure is still very effective. Another example common to dermatology is leveraging consumer loyalty and proven refer-a-friend strategies to offer discounts on expensive cosmeceutical products in exchange for generating new patients for the practice.

A Shortage of Specialists. Another factor critical to the opportunity within dermatology and the imperative for effective practice management is a general shortage in the number of practicing dermatologists, whose numbers have not adequately kept up with the high levels of demand that the practice has historically seen. With only 13,847 active dermatologists in the U.S., most patients who have tried to schedule an appointment can attest to the seemingly limited supply.[23] In addition, new dermatologists are being trained at a low rate, with just 399 dermatology residency positions being offered in 2016. With such a small supply and such high demand for services, it should come as no surprise that dermatology practices remain busy and margins remain high.

Increasing Physician Preference to be a Part of a Larger Organization. Consistent with the macro-forces discussed earlier in this report, dermatologists are increasingly looking to be part of a larger organization and/or avoid the economic realities of starting and managing a successful dermatology practice. Heavier industry regulation, expensive startup costs, increasingly painful overhead costs, looming amounts of medical student debt, and extensive competition have made it near-impossible to operate a solo practice unless the individual already has an exceptional track record and a loyal book of patients. By comparison, large dermatology practices such as Advanced Dermatology & Cosmetic Surgery, **Riverchase Dermatology**, **QualDerm Partners**, and **Golden State Dermatology** have the capital, brand name, and experience necessary to provide an exceptional professional environment for both relatively new, as well as tenured dermatologists, alike.

The Aging Population and the Prevalence of Skin Cancer. The aging population is a trend with exceptional relevance to dermatology. As of 2014, 42% of dermatology patients were over the age of 60, a trend that will continue to increase until 2030.[24] By 2019, there will be 54 million Americans over the age of 65, up from 46 million in 2014.[25] A large portion of the potential dermatology practice success in this age demographic has to do with skin cancer, the most common form of cancer, with one in five Americans now poised to develop skin cancer in their lifetimes. About 50% of individuals who live to age 65 will develop either basal cell carcinoma or squamous cell carcinoma.[26] That said, the average age of diagnosis for melanoma is 52, and the incidence is rising faster than any form of cancer. This growth has sparked a preventive and vigilant mentality in aging individuals; as a result, the U.S. market for skin disease treatment totaled $7.5 billion in 2015, and is expected to reach $8.6 billion by 2020.[27]

Recent Investment Activity

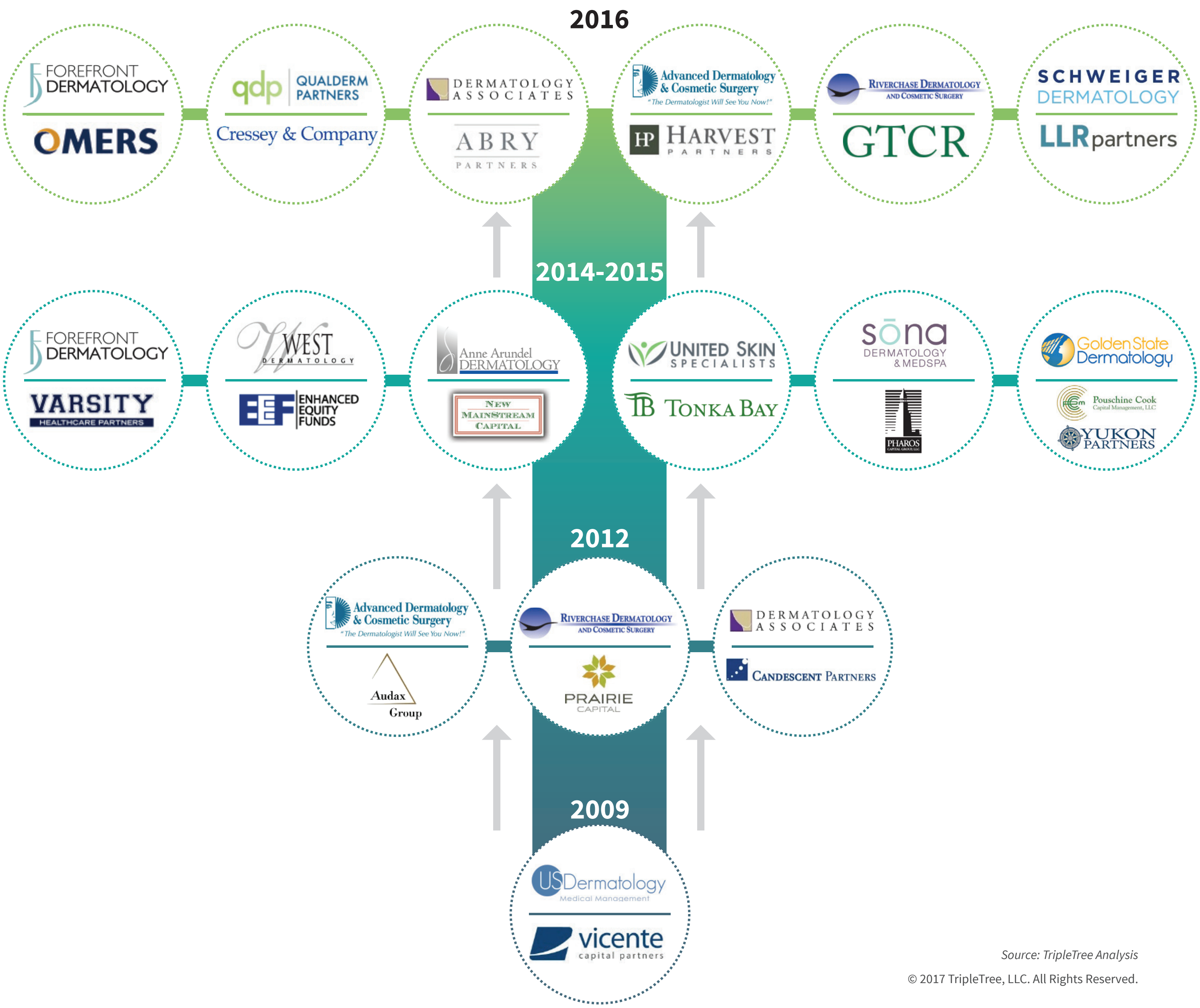
While many dermatology practices still operate as physicians practicing in a private group setting, investors have started to be an active part of the market, consolidating smaller practices into larger organizations.

Practice management companies are able to thrive in the sector because they are able to leverage their significant capital and expertise to not only support physicians in delivering top-tier care, but also flaunt newer equipment and facilities, same day services, large-scale marketing campaigns, and the newest and most cutting-edge products, which have shown to resonate with patients.

Practice management has also been particularly attractive because of how fragmented the industry is, with no single group practice representing more than about 2% of the industry.

A well-known example of private investment success is Advanced Dermatology & Cosmetic Surgery, purportedly the largest dermatology practice in the industry. The Company first received investment from **Audax Private Equity** in October of 2011, and after more than quadrupling revenue through 40 add-on acquisitions, five de novo clinic openings, and various organic growth initiatives, ADCS was recently sold to **Harvest Partners** in May of 2016 in a deal reportedly worth more than $600 million. Today, ADCS operates close to 160 practices in 13 states with the most substantial footprint in Florida, and continues

FIGURE 12.
GROWING PRIVATE EQUITY INVESTMENT IN DERMATOLOGY



Source: TripleTree Analysis

to be focused on inorganic growth with a stated aim to acquire or open at least two practices each month. Interestingly enough, though the Advanced Dermatology brand is well known in the industry, acquired practices are not required to change their name. Local staff at the practices often remain the same, but are provided with additional tools, assistance, and training from ADCS. The Company also prides itself on providing a high quality of care, with numerous dermatologists commonly being named top doctors in the country.

Says CEO Dr. Matt Leavitt, “In our model, we purchase [physicians'] practices, and they can practice as long they want. We make it easier by giving them resources, so they can enjoy being doctors again.”

Another significant platform is **Forefront Dermatology**. Originally acquired by **Varsity Healthcare Partners** in May of 2014, it was recently sold to **OMERS Private Equity**, reportedly for more than $450 million. Since Varsity’s initial 2014 investment, Forefront has grown from three states and 37 clinics to 11 states and 92 clinics, with significant geographic footprint in the Midwest, and Wisconsin in particular. Like ADCS, Forefront has a focus on providing consumer-focused, five-star service with exceptional quality of care.

Yet another platform is **GTCR**’s portfolio company, **Riverchase Dermatology and Cosmetic Surgery**. The Company is an exemplary testament to the rapid consolidation taking place within the dermatology space. In 2013, **Prairie Capital** made an initial investment into the Company, which was composed of just six locations. In three short years, through the acquisition of West Coast Dermatology & Plastic Surgery and multiple smaller locations, the platform has grown to 25 locations total. This highlights the changing M&A environment within dermatology: over the course of the past half-decade or so, practice management platforms have been individually seeking out single locations one at a time. Though this trend continues, it is likely that in the near future larger platforms will begin to target some of the smaller platforms, which could potentially offer synergies in a variety of forms, such as a pre-established brand name, geographic diversification, and additional access to industry expertise in the form of senior management. In addition, smaller platforms have already made significant capital expenditures; integrating them into larger practice management companies may be cheaper than seeking out individual practices.

Conclusion

With a clearly defined business model and a solid track record of success, the dermatology industry and the practice management companies that support it are poised to evolve, innovate, and thrive. The margin profiles for dermatology practices are compelling, with practice management companies helping to significantly grow new revenue streams and leverage economies of scale to drive higher margins. Additionally, the market dynamics continue to support a solid growth trajectory with the opportunity for practice management companies to create efficiency and scale in the dermatology industry.

"The market dynamics continue to support a solid growth trajectory with the opportunity for practice management companies to create efficiency and scale in the dermatology industry."

Overview of Fertility Treatment

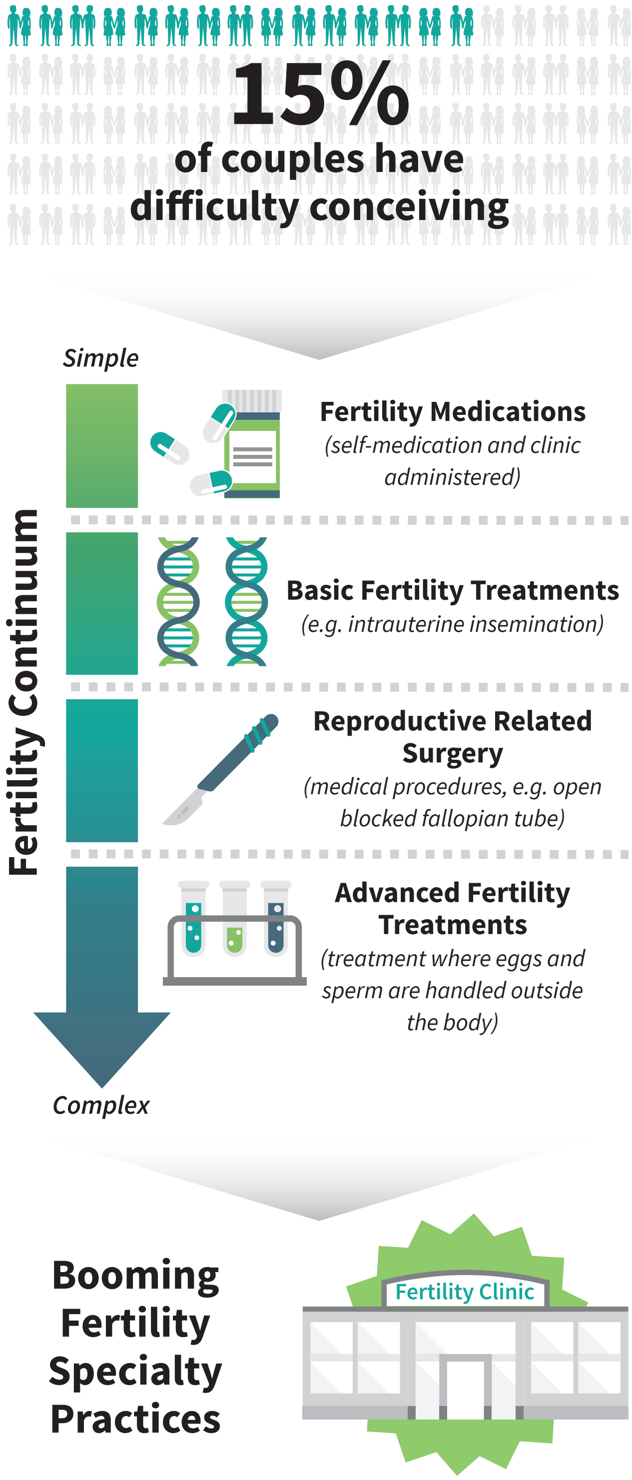
Fertility as a specialty practice is booming. More specifically, infertility is booming as approximately 15% of couples now have some difficulty conceiving a child.[28] The rise in infertility is driven by a number of factors, including:

- More women having children later in life, with about 20% of women in the U.S. now having their first child after age 35, and a direct linkage between advanced maternal age and declining fertility[29]
- More men experiencing difficulty, with approximately 40% of infertility cases resulting from the male partner as the sole or contributing cause[30]

As a result, more individuals are turning to fertility treatments, featuring ever-advancing techniques and therapies providing new and improved options for conceiving, driving a boom in the business of providing fertility treatment.

The practice of fertility medicine ranges from fertility medications (both those procured through specialty and retail pharmacy channels for self-medication, and others administered in a clinic setting); to "basic" fertility treatments such as intrauterine insemination; to "reproductive-related" surgery (e.g., medical procedures to open blocked fallopian tubes); to more "advanced" fertility treatments known as assisted reproductive technology (ART) services. ART is defined as any treatment in which either eggs or sperm are handled outside of the body (See Figure 13).[31]

FIGURE 13.
FERTILITY TREATMENT OVERVIEW



Source: TripleTree Analysis

The primary ART treatment is in-vitro fertilization (IVF). In an IVF cycle, egg growth is stimulated in a woman's ovaries by a course of medications, mature eggs are extracted from the ovaries, and then the eggs are fertilized in a laboratory and allowed to develop for approximately five days (at which point surviving embryos have typically achieved the blastocyst stage). Typically, one or more embryos are then transferred into the woman's uterus through the cervix. These embryos can be either "fresh" embryos which were created days before the transfer in the laboratory, or "thawed" embryos, which were frozen, or "cryopreserved", after reaching mature stage, then thawed for transfer. Additional advanced services include: Intracytoplasmic Sperm Injection (ICSI), in which severe male infertility is addressed by directly injecting a single sperm into a mature egg followed by IVF; donor insemination; gestational carrier ("surrogacy"); egg freezing (for a woman to preserve eggs for potential future use); and preimplantation genetic diagnosis (PGD, in which cells are biopsied from a blastocyst and tested either for a single abnormal gene) or preimplantation genetic screening (PGS, in which cells are similarly biopsied but are tested for aneuploidy, the wrong number of chromosomes).

A typical fertility clinic offers many of these services but often specializes in ART and IVF. Most clinics are led by physicians who specialize in fertility and are board-certified in Obstetrics and Gynecology, as well as the subspecialty of Reproductive Endocrinology and Infertility. Also critical to the success of a clinic are specially trained technicians who staff the embryology laboratory. These embryologists are responsible for the fertilization, culturing, and manipulation of eggs, sperm and embryos, as well as the tracking of embryo deployment, embryo selection and transfers, and cryopreservation of embryos. It is in these state-of-the-art embryology laboratories that continued innovation in new techniques drives improved ART success rates – and where clinics can demonstrate differentiated results and distinguish their practice in the marketplace.

Market Overview

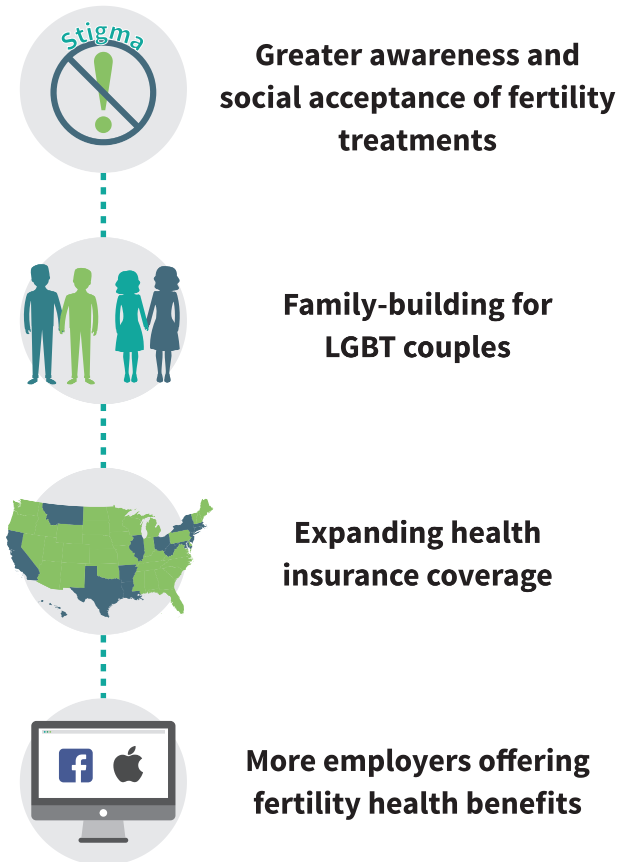
The Center for Disease Control (CDC) reports that over 200,000 ART cycles were performed in 2014 (the most recent data available) in the 450+ fertility clinics across the country. Market research reports suggest that this represents an approximately $2 billion market, with an additional $1 billion market for fertility medications, as well as additional fertility treatments (e.g., reproductive-related surgery), for a total fertility treatment market size that is nearly $4 billion today.[32]

Industry observers estimate that the market is now growing at a modest rate of 3-4% annually, relying primarily on CDC data on the number of ART cycles. However, this understates the total growth of the fertility industry by ignoring the impact of new technologies and treatments. For instance, the most commonly quoted CDC data excludes "banked" ART cycles, in which all embryos generated are frozen instead of any being transferred fresh. This course of treatment is growing dramatically because it affords the advantage of allowing genetic screening of all embryos before selecting one or more for implantation without a significant impact on success rates. In addition, advances in techniques (namely vitrification, a very fast freezing process) have led to success rates for frozen embryos that are now essentially on-par with those of fresh embryos. This is driving significantly more growth through services and medication spending, than is commonly assumed in a quick evaluation of the CDC data. We see growth rates of total ART cycles approaching 10% over the 2013-2014 timeframe, the most recent year for which CDC data is available, and expect this trend to continue in the near-term. Furthermore, ancillary services such as egg freezing, PGS, and surrogacy options are all leading to additional choices for patients and are driving additional market opportunity.

Attractive Area for Investment

The fertility market has grown exponentially since the first IVF baby was born in 1978, and it has attracted no shortage of physicians who have received specialized training to pursue a career in fertility treatments, with over 1,650 reproductive endocrinologists in the U.S. today.[33] A number of factors point to accelerated interest in fertility, as well as the broader women's health arena, as an area for investment from corporations and investors who see fertility as one of the next frontiers in physician practice management opportunities (See Figure 14).

FIGURE 14.
MARKET FORCES CREATING DEMAND FOR FERTILITY SERVICES



Source: TripleTree Analysis

Significant growth tailwinds. As outlined above, interrelated medical and social factors are driving the growth of fertility treatments. These drivers include consumer spending that has risen with disposable income and has remained very resilient even during economic downturns, greater awareness of infertility and social acceptance of fertility treatments, and family-building for gay and lesbian couples. As health insurance coverage of fertility treatment increases, this too will bolster market growth moving forward. Today, insurance generally covers very little for fertility treatments, and typically nothing for IVF, though some coverage is starting to emerge. 15 states currently require some level of fertility coverage, while a few states specifically exclude coverage for IVF. Even when it is covered, IVF benefits are typically small relative to treatment costs, which can be well in excess of $10,000 for an average IVF cycle (including both the treatment and medication costs). Furthermore, employers are being more innovative in adding and supplementing fertility and maternity-related benefits to attract and retain talented women to the workforce. For instance, in 2014 Apple and Facebook added egg freezing as a benefit to women who do not currently wish to conceive but wish to guard against future fertility risks (See Figure 14).

The Ability to Draw from an Expansive Patient Population Beyond the Local Market. The specialized, high-cost, and meticulously scheduled treatment affords leading fertility clinics the ability to attract patient populations from beyond just their local geography. For instance, the **Colorado Center for Reproductive Medicine (CCRM)** has gained national recognition for its advanced research and innovations in technique and technology. Despite having built out clinics in seven markets CCRM still routinely attracts out-of-state patients to its flagship Colorado clinic given the history of its success rates. Considering the extreme cost and inconvenience of choosing to travel for IVF treatment (a cycle includes multiple clinic visits for monitoring, though some of this can be performed at a local clinic with results sent to a patient's IVF clinic), this is a testament to the draw of CCRM's leading reputation in the market. Some clinics can even draw international patients, including some leading clinics on the West Coast that have seen a rise in referrals from China and other countries across Asia. Agents acting on behalf of families sometimes drive these referrals in what is called "medical tourism", which can account for nearly 25% of business for some clinics.

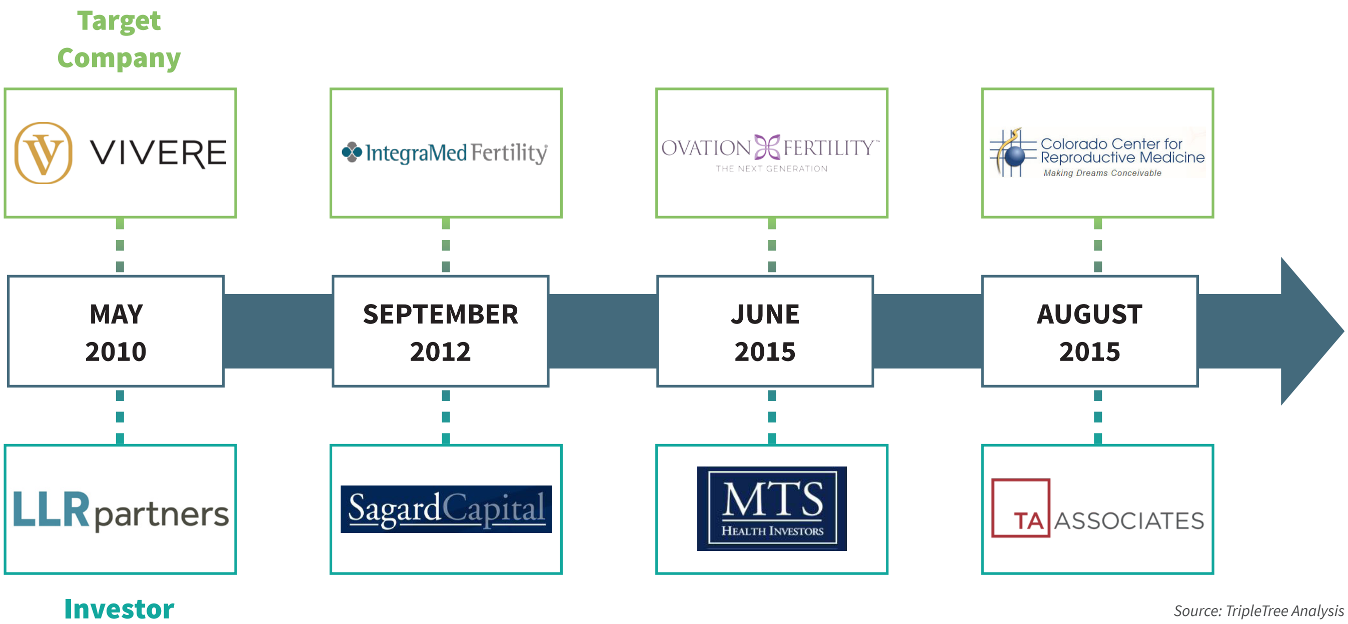
Clinics Can Achieve Differentiated Results, and Prove It. One of the interesting aspects of fertility treatment is how much more transparent clinical outcomes data are for ART and IVF in comparison with so many other medical procedures. These statistics play a large role in informing patients' selection of a provider. By federal law — the Fertility Clinic Success Rate and Certification Act — all certified ART clinics are required to submit success rate data to the CDC to ensure clinics are not overstating success in order to attract patients. While some clinics do not report data, the CDC estimates that it collects data for over 95% of the ART procedures in the U.S. Many centers also voluntarily submit their data to the **Society for Assisted Reproductive Technology** (SART), an organization that represents the vast majority of ART clinics in the U.S. These data provide patients — who are typically footing most, if not all, of the bill — the opportunity to be true healthcare consumers and shop for the best quality/outcome provider. SART and other entities such as **FertilitySuccessRates.com** compile the information, allowing consumers to easily compare various metrics across a range of clinics and geographies. Standard data that are evaluated include percent of embryo transfers that result in live births, the average number of embryos transferred, and the total number of cycles performed. The data are "normalized" to the extent possible, but the comparisons across clinics are obviously never perfect. For instance, different clinics attract patients with different risk profiles (due to differences in patient acceptance criteria, local demographics, or both), and different techniques can lead to good success rates but may require higher cost or treatment intensity (e.g., some clinics heavily utilize "banked" cycles, wherein the embryo was frozen without first attempting a fresh transfer).

Recent Investment and Innovation

While most practices that focus on fertility to-date have been owned and operated by physicians practicing in a group setting, corporate and investor groups have become active in the market, supporting a number of platforms through practice management models and driving growing M&A volume. Much of this activity has been centered on fertility clinics, but broader women's health and gynecology practices are receiving attention as well, given the attractive self-referral opportunities and broader range of services that can be provided through a more integrated approach (See Figure 15).

The nation's largest player is **IntegraMed Fertility**, which has a network of 39 centers (15+ company-managed partner centers and 20+ affiliate centers), comprising over 150 locations across more than 30 states. Approximately 25% of the IVF cycles performed in the U.S. are performed in an IntegraMed Fertility partner or affiliate center. IntegraMed Fertility (a division of IntegraMed America, a specialty healthcare services company) offers a spectrum of services to practices through different financial relationships. Affiliate practices typically receive access to IntegraMed's proprietary Attain® IVF patient financing programs and marketing support in exchange for fee income for the services rendered. Partner centers can receive turnkey business services and infrastructure, with IntegraMed Fertility sharing in the practice profits.

FIGURE 15.
SELECT PRIVATE EQUITY INVESTMENTS IN FERTILITY



Source: TripleTree Analysis

Southern California Reproductive Center (SCRC)

Southern California Reproductive Center (SCRC) is a full-service fertility clinic with locations in Los Angeles and surrounding areas. The Company is the largest fertility center in Southern California and operates two full-service IVF centers in Los Angeles and Santa Barbara that combine a fertility clinic, surgery center, and ART laboratory. These full-service sites are supported by seven consult and monitoring clinics that allows SCRC's physicians to offer patients convenient access to comprehensive fertility treatment. Its ART laboratories are recognized as leading centers in the industry, and SCRC continues to contribute to advances in research and treatment options. In addition to serving the local area patient base, SCRC also serves a contingent of international patients. Over the past few years, SCRC has seen a dramatic growth in medical tourism. The company has launched narrow marketing campaigns targeting patients in China as well as patients seeking third party support. Its campaigns use a variety of offline and online technologies including US-based social media and Chinese social networking and blogging sites, such as **WeChat** and **Weibo**.

Another player of significant size already mentioned is CCRM. Like several other platforms in fertility, CCRM is a single practice rather than a practice management entity that has contracted and/or invested in other practices. Recognized as an industry pioneer, CCRM is often at the forefront of innovation and has demonstrated success rates that are seen to be among the highest in the country. As is the case in many surgical specialties, it is the clinics and clinicians themselves who are inventing new techniques and designing upgraded laboratory equipment to continue driving improvements in success rates and reductions in complications. CCRM has been noted for accomplishments and innovation in blastocyst culture, vitrification techniques, and blastocyst biopsy in conjunction with comprehensive chromosomal screening.[34]

Conclusion

Fertility practices have made significant technological strides since the early days of IVF, and demand for their services is continuing to rise unabatedly. It is only natural to see that practice management capabilities have emerged to help this industry continue to flourish. TripleTree expects significant growth and the emergence of consolidation in the sector.

"Fertility practices have made significant technological strides since the early days of IVF, and demand for their services is continuing to rise unabatedly. It is only natural to see that practice management capabilities have emerged to help this industry continue to flourish."

TRIPLE TREE'S PERSPECTIVE

As evidenced by the impact of practice management solutions in Dental, Dermatology, and Fertility, TripleTree anticipates the outlook is optimistic for continued innovation, consolidation, and investment in these areas.

- **Dental:** Practice management has gained significant credibility within the dental industry. As the dental industry continues to grow due to a compelling business model, growing consumer demand, and expanded services offerings, there is a strong opportunity for continued innovation by and investment in dental practice management companies. TripleTree anticipates the evident needs met by practice management companies will continue for the foreseeable future.

- **Dermatology:** With a clearly defined business model and a solid track record of success, the dermatology industry and the practice management companies that support it are poised to evolve, innovate, and thrive. The margin profiles for dermatology practices are compelling, with practice management companies helping to significantly grow new services and product revenue streams and leverage economies of scale to drive higher margins. Additionally, the market dynamics continue to support a solid growth trajectory with the opportunity for practice management companies to create efficiency and scale in a growing specialty area. In short, TripleTree believes the optimistic outlook for the dermatology industry presents a good opportunity for both innovators, investors, and larger acquirers.

- **Fertility:** Fertility practices have made significant technological strides since the early days of IVF, and demand for their services is continuing to rise unabatedly. It is only natural that practice management capabilities have emerged to help this industry continue to flourish. TripleTree expects significant growth and the emergence of consolidation in the sector.

INVESTING CONSIDERATIONS

As the pace of activity increases in the coming years, there are several unique considerations that corporate buyers and investors must evaluate and consider when investing in specialty practices. These factors include regulatory oversight requirements, establishing a framework for practice profitability and valuation, and designing compensation packages for physicians and other clinicians that align interests and incentives for performance going forward.

Corporate buyers (including not-for-profit hospitals and other entities) in particular must pay special attention to a number of regulations, such as the Stark Law, that govern physician-related transactions and compensation. Principally, the practices cannot be valued at greater than fair market value (FMV). The regulatory framework governing FMV is principally constructed to ensure physicians are not inappropriately benefiting economically from self-referrals (Stark Law) or receiving payment for referrals (Anti-Kickback Statute). Though beyond the scope of this *Industry Perspective*, there are multiple valuation methodologies and factors to consider relating to FMV.

How to Assess Earnings. Private equity investors commonly approach investments in specialty practices with the familiar EBITDA (earnings before interest, taxes, depreciation, and amortization) multiple valuation methodology. However, many practices are not structured to produce and report EBITDA. Rather, everything flows to income of the physician or other clinician owners. The most common approach taken by investors to arrive at a valuation in these situations is to align with owner physicians on go-forward compensation that reduces physician income in order to generate current earnings used to value the business. In most situations, physician owners of successful practices are earning compensation in excess of the market average, or of their “replacement cost”, if they were to recruit a new physician to the practice. We observe that compensation reductions are commonly anywhere from 20-50% in order to arrive at an agreed upon valuation for the practice and future compensation for the physicians. Obviously, the larger the pay cut, the larger the EBITDA and thus upfront valuation. Clearly, this financial exercise is relatively less challenging when there are few owner physicians, with employed physicians delivering most of the services.

Physician and Clinician Compensation. What physician wants to take a pay cut? None that we’re aware of. So how do investors and physicians design compensation packages that align interests and incentives for performance going forward? Most commonly we see a few approaches that work well:

- A compensation model that provides incentives for performance – for production, but also potentially for other attributes such as clinical quality and outcomes as well as practice leadership and responsibility for administrative functions
- Physician rollover equity, typically in the range 20-40%, to align physician and investor incentives to participate in future value creation
- An equity option pool, not unlike a management option pool, for new additions to the physician ranks or to executive leadership

In these structures, we see a path to greater success for practice management models than what was experienced in the 1990s, with physicians still highly motivated to remain productive and significant upside in equity. However, there are obviously still challenges to maintaining alignment between physicians and practice management companies. Ultimately, it is up to the management style and decisions of a practice management company to continue to deliver an ongoing value proposition to physicians to retain them and keep them satisfied and productive.

TripleTree will continue to monitor activities in these areas, and is excited to watch how practice management organizations will innovate in the coming years as they strive to improve patient care, streamline the management of increasingly more complex specialty practices, and deliver financial benefits to payers, providers and investors.

"As evidenced by the impact of practice management solutions in Dental, Dermatology, and Fertility, TripleTree anticipates the outlook is optimistic for continued innovation, consolidation, and investment in these areas."

ENDNOTES

1. Elizabeth Spaulding, “The Future of Independent Optometry,” Bain Insights, March 19, 2012

2. The Physicians Foundation, 2014 Survey of America’s Physicians

3. Nelson, Richard. "Move Away From Solo Practice Continues." *Dermatology World*, June 2015.

4. Nataloni, Rochelle. “Acquisition Trends: Consolidation in Dermatology.” *The Dermatologist*, vol. 24, issue 10. October 2014. http://www.the-dermatologist.com/content/acquisition-trends-consolidation-dermatology

5. Diringer J, Phipps K, Carsel B. "Cricial Trends Affecting the Future of Dentisty." *Diringer and Associates*, May 2013. Retrieved from http://www.ada.org/~/media/ADA/Member%20Center/FIles/Escan2013_Diringer_Full.ashx

6. "Profile of Older Americans: 2015." Administration on Aging (AoA). U.S. Department of Health and Human Services, Administration for Community Living. May 2016. https://aoa.acl.gov/aging_statistics/Profile/2015/2.aspx

7. “ADA Health Policy Institute Releases Comprehensive State-by-State Analysis of the U.S. Oral Health Care System.” *American Dental Association*, December 2015. http://www.ada.org/en/press-room/news-releases/2015-archive/december/hpi-releases-comprehensive-state-by-state-analysis

8. Nasseh K, Vujicic M, O’Dell A. "ADA Health Policy Institute Brief: Affordable Care Act Expands Dental Benefits for Children But Does Not Address Critical Access to Dental Care Issues." Health Policy Resources Center Research Brief. American Dental Association, April 2016.

9. “Dentists in the US: Market Research Report.” *IBISWorld*, July 2016.

10. "Cosmetic Denistry Continues to Explode." *DentistryiQ*, April 2005. http://www.dentistryiq.com/articles/de/2005/04/cosmetic-dentistry-continues-to-explode.html

11. “Cosmetic Dentistry, State of the Industry, Survey 2015.” *American Academy of Cosmetic Dentistry*, 2015.

12. “The Most Profitable Industries in the U.S.” *Sageworks*.

13. Guay A, Warren M, Starkel R, Vujicic M. " A Proposed Classification of Dental Group Practices." Health Policy Institute Research Brief. *American Dental Association*, February 2014.

14. Wall T, Guay A. "Very Large Dental Practices Seeing Significant Growth in Market Share." Health Policy Institute Research Brief. *American Dental Association*, August 2015.

15. "Gryphon Investors Acquires Smile Brands." *BusinessWire*, August 2016. http://www.businesswire.com/news/home/20160818005574/en/Gryphon-Investors-Acquires-Smile-Brands

16. Rogan, Stephanie. "Huron Capital’s dental platform Spring & Sprout buys Dan German Orthodontics." *PE Hub Network*, March 2016. https://www.pehub.com/2016/03/huron-capitals-dental-platform-spring-sprout-buys-dan-german-orthodoni/#

17. "Dermatologists in the US: Market Research Report." *IBISWorld*, July 2015.

18. Peckham, Carol. "How Much Do Physicians Earn Overall?" Medscape, April 2016. *http://www.medscape.com/features/slideshow/compensation/2016/public/overview#page=2*

19. TBD Please provide a citation (to verify year and 50% cut – and to confirm this applied to dermatology

20. Hilton, Lisette. "Dermatologists take 'hammering' with cuts to three reimbursement codes." *Dermatology Times*, January 2013. http://dermatologytimes.modernmedicine.com/dermatology-times/content/tags/brett-coldiron-md/dermatologists-take-hammering-cuts-three-reimbursem

21. "How Much Do Botox Treatments Cost?" *CostHelper*. http://health.costhelper.com/botox.html

22. "Dermatologists in the US: Market Research Report." *IBISWorld*, July 2015.

23. "Marekt Profile of U.S. Dermatologists: OneKey Market Insight Report." *OneKey*, 2015. http://us.imshealth.com/Marketing/GTMN/Market-Profile-of-Dermatologists.pdf

24. Nataloni, Rochelle. “Acquisition Trends: Consolidation in Dermatology.” *The Dermatologist*, vol. 24, issue 10. October 2014. http://www.the-dermatologist.com/content/acquisition-trends-consolidation-dermatology

25. Krause, Patrick. "Private equity firms are suddenly buying dermatology practices — here's why." *Business Insider*, August 2016. http://www.businessinsider.com/why-private-equity-firms-buy-dermatology practices-2016-8?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+businessinsider+%28Business+Insider%29

26. *Skin Cancer Foundation*, June 2016. http://www.skincancer.org/skin-cancer-information/skin-cancer-facts

27. Nataloni, Rochelle. “Acquisition Trends: Consolidation in Dermatology.” *The Dermatologist*, vol. 24, issue 10. October 2014. http://www.the-dermatologist.com/content/acquisition-trends-consolidation-dermatology

28. "Infertility." *MedlinePlus*. https://medlineplus.gov/infertility.html

29. "Infertility FAQs." *Centers for Disease Control and Prevention*, April 2016. https://www.cdc.gov/reproductivehealth/infertility/

30. "Quick Facts About Infertility." *The American Society for Reproductive Medicine*. https://www.asrm.org/detail.aspx?id=2322

31. https://www.cdc.gov/

32. "U.S. Fertility Clinics & Infertility Services Market Worth $3.5 Billion. Recession Is Not A Factor." *Marketdata Enterprises, Inc.*, November 5 2013. *https://www.marketdataenterprises.com/wp-content/uploads/2014/01/Fertility%20Clinics%20PR%202013.pdf*

33. http://www.usnews.com/

34. https://www.ccrmivf.com/

HEALTHCARE MERCHANT BANKING	TRIPLE-TREE.COM

triple-tree.com/blog	@tripletreellc	tripletreellc	linkedin.com/company/tripletree

0217_PM2.0_vF