Venture capital's bold move into population health

By Dave Barkholz  | January 7, 2017

Rahul Jain got the entrepreneurial bug when a medical school friend and former classmate found it difficult to take seven medications a day to battle a blood disorder.

If his friend couldn't manage that regimen, how could seniors taking even more pills—often with no supervision—manage their daily load, thought Jain, a Duke University economics graduate. An idea for a new business was born.

His research quickly discovered improper medication adherence causes 125,000 deaths and wastes $100 billion annually in avoidable hospitalizations. Jain joined forces with his friend Nick Valilis and others to create TowerView Health, a low-tech prescription management service.

The 2-year-old business attracted $2 million in seed money last year to launch the company.

Jain expects more venture capital to flow into his start-up early this year to finance an expected expansion beyond the nearly 1,000 patients that insurers have lined up to use the service.

“We'll be looking for more funding in the spring,” said Jain, whose four founders were just named to the Forbes “30 Under 30” list.

Raul Jain joined forces with a friend and others to create TowerView Heath, a low-tech prescription management service. Maintaining medication adherence for chronically ill patients is a crucial part of the population health management strategies being adopted by healthcare systems across the U.S. Staying on their meds helps keep patients out of hospitals, which in turn helps health systems and other providers meet the reimbursement criteria in their new value-based payment contracts.

That's why start-ups like TowerView that offer practical solutions for managing populations are attracting serious investor interest. Global population health management as an industry is expected to grow from $11.1 billion in 2015 to $31.6 billion by 2020, according to a January 2016 report by the research firm MarketsandMarkets.
Venture capital firms are chasing that growth. Rock Health, which tracks healthcare venture funding, reported last week that nearly $200 million was invested in population health management start-ups last year, making it one of the top six fields in healthcare attracting new money. Overall investment fell slightly to $4.2 billion in 2016, down from a record $4.6 billion invested the previous year.

The term population health has different meanings in different settings. Most major health systems and insurers see it as managing the healthcare of large groups of people, often the chronically ill, to ensure they are getting care at the right time in the appropriate setting. To do that, hundreds of companies have sprung up or started divisions to provide the data analytics and software tools to help hospitals, physicians and insurers manage that care.

Dreamit, a Philadelphia-based accelerator that invests in promising start-ups and introduces them to venture capitalists, is bullish on population health players, said Karen Griffith Gryga, partner and chief investment officer. Of 80-plus companies in its healthcare portfolio, which is Dreamit's largest segment, one-third are involved in population health and 25% of its total investment is in population-health start-ups, Griffith Gryga said.

She said a healthcare industry that uses some of the world's most-sophisticated technology to diagnose and treat illnesses is “decades behind” in using data and analytic tools to assist clinicians with managing populations.

Moreover, the move from fee-for-service to putting providers at financial risk for care is only going to work well for those that can put data to work to help maintain patient health. “Opportunities are huge for the industry,” Griffith Gryga said.
Venture capitalists are investors who bet early on promising companies and are generally willing to wait several years for a return on their investment. They typically take an equity position in a company of 6% or more in exchange for a few million dollars to commercialize a product or service.

That first big breakthrough in financing is getting harder to come by, though, Griffith Gryga said. There are so many companies with promising technology that just 11% of companies today desiring to graduate from the seed-money stage can attract a multimillion-dollar investment, she said. That compares with one in four companies two years ago.

To help companies in its early-stage portfolio reach venture capital investors, Dreamit often takes their key personnel on road shows to make their case to potential funders, Griffith Gryga said.

Those introductions are crucial for TowerView, Jain said. His firm received $50,000 from Dreamit in 2014 and was put into a 13-week accelerator program that included business advice and a series of road shows.

Dreamit took no equity at the time, instead getting notes that allowed it to buy future equity at a discount, he said. That can run from 10% to 20% of what other investors are paying. Dreamit has since invested another $150,000 in TowerView.

TowerView's product is a relatively low-tech approach to getting patients to take their medicine on time, Griffith Gryga said. “It isn't brain surgery,” she said.

The company arranges with a patient's pharmacy to receive a 28-slot medication tray of their daily medications that lasts a week. The pre-sorted tray is then put in a cellular-connected pillbox that senses when a patient misses their medications and sends a text, phone and in-box reminder to patients, loved ones and case managers. TowerView also handles the prescription refills.

In a 2015 randomized controlled trial conducted by Penn Medicine in Philadelphia, a test group of patients achieved 99% adherence compared to 70% before the patients enrolled in the program. The trial was funded by Independence Blue Cross in Philadelphia.

Adherence was measured by prescription refill rates, the same way that the CMS measures medication adherence, Jain said. Those results enabled TowerView to win eight contracts with Medicare Advantage and managed Medicaid plans, Jain said.

With more than 25 million Americans 65 and older taking at least five medications per day, the opportunities for small companies selling medication adherence technologies is already vast. The aging baby boomer generation is expected to drive that number to more than 30 million ultra-high medication users within 10 years.
Caring for elderly patients in less expensive settings—another key to successful population health management strategies—is also on the radar screen of private equity firms. In May, private equity giant Welsh, Carson, Anderson & Stowe led a group that paid $196 million to buy home senior-care company InnovAge.

Welsh Carson was attracted to the company, which was not-for-profit at the time, because of its focus on a CMS-designated plan for frail seniors to keep them in their homes called the Program of All-Inclusive Care for the Elderly, or PACE, said Tom Scully, Welsh Carson general partner who served as CMS administrator between 2001 and 2004. PACE is a capitated, holistic way of managing that population that includes everything from transportation and home nursing to adult day care and meals. “I've always loved PACE,” Scully said.

His firm outbid other suitors with the plan to help CEO Maureen Hewitt build the company far beyond its center in Denver and satellite operations in Albuquerque and San Bernardino, Calif. InnovAge's client base averages 80 years old and is 85% women. The company touched 93,000 lives in 2015.

Welsh Carson hasn't set a timeframe for when it plans to get a return on the investment, Scully said. But with the growth of the senior population and the market for PACE around the country, he said an initial public offering in four years or so wouldn't be out of the question.

Dr. Betty Rabinowitz, CEO of EagleDream Health in Rochester, N.Y., said population health is crowded with start-ups, all of which are looking for ways to prove themselves and grow. EagleDream provides data analytics and software that allow clinicians and practice managers to track patient admissions and discharges, identify high-risk patients in their populations and compare cost, quality and clinical variations between providers in their networks.

Customers include the University of Rochester (N.Y.) Medical Center, the Greater Macomb PHO physician network in suburban Detroit and the Massachusetts Health Quality Partners, Rabinowitz said. EagleDream stayed close to home raising its money for growth. It is completing a $6 million equity placement funded by more than 50 individuals who now own about one-third of the company.

Rabinowitz said the company will use that funding to grow and hopefully separate itself from the pack. “It's almost like the wild west,” she said.