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Oak Street Health: A New Model of Primary Care

From day one our goal was simple: to keep patients happy, healthy, and out of the hospital.

— Griffin Myers, Chief Medical Officer

Michael Pykosz, Geoff Price, and Griffin Myers opened Oak Street Health's first clinic in 2013. By 2016, with backing from venture capital, Oak Street was serving 22,000 patients in 19 locations in Chicago, Indianapolis, Rockford, Detroit, Fort Wayne, and Northwest Indiana (see **Exhibit 1**). Oak Street brought comprehensive primary care to residents in medically underserved communities. Most of Oak Street patients were seniors and covered by Medicare. A typical location served 2,000–4,000 patients, employing about 50 clinical and administrative personnel.

In 2016, the leadership team was considering a range of opportunities to improve the care model, grow in existing and new markets, take on new patient populations and create new partnership offerings for payers and providers.

The Health Status of Older Americans

In 2016, the older population in the U.S. was growing rapidly, with the earliest-born of the Baby Boom generation (born 1946 to 1964) reaching their 70s. More than one-third of older adults in 2012 met the criteria for obesity,[1] and older adults were experiencing an increasing prevalence of chronic diseases. Among Medicare members (citizens 65 years and older), 57% had hypertension, 46% hyperlipidemia, 28% diabetes, 31% arthritis, 28% ischemic heart disease, and 17% major depression.[2]

Among elder adults, lower socioeconomic status was associated with higher rates not only of chronic diseases[3] but also mental health challenges. In one survey, 57% of low-income elderly patients had met criteria for a psychiatric disorder at some point during their lives, and 28% had done so within the prior month. Mood disorders such as depression and substance abuse had lifetime prevalences of 27% and 23%, respectively. The most common existing mental health conditions of older citizens were cognitive disorders (10.5%), mood disorders (8%), psychotic disorders (5%), and substance abuse/dependence (4%).[4]

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Insurance Coverage

At age 65, U.S. citizens and permanent residents became eligible for Medicare, a federal government insurance program for older citizens. Medicare was the largest single purchaser of health care in the United States, accounting for 23% ($589 billion) of the $2.6 trillion in 2014 health care spending.[5] Medicare beneficiaries could obtain Medicare coverage in two basic ways: the original Medicare fee for service program, which directly reimbursed health care providers, or through Medicare Advantage (MA) Plans (see below).

The basic Medicare program had two major parts. "Medicare Part A" covered hospital; inpatient care; care in skilled nursing facilities after a hospital stay; home health care; and hospice care. Medicare Part B covered doctors' services and those of other health care providers for outpatient care, home health care, durable medical equipment, and some preventive services. Anyone eligible for Medicare Part A could enroll in Medicare Part B by paying a monthly premium, which was adjusted for income.

Medicare enrollees could also obtain coverage for prescription drugs through Medicare-approved insurance plans offered by private insurance companies, involving an extra monthly premium. This program was called Medicare Part D.

Traditional Medicare was "Fee for Service"—that is, it compensated providers for specific services (e.g., hospitalizations or office visits) based on claims submitted. Medicare covered a defined set of services and those not explicitly covered were not reimbursed—for example, physicians' calls to patients, telemedicine consultants, care coordinators, non-acute transportation, and community services. Services that led to the avoidance of claims (such as care that prevented the need for hospital admissions) were not covered or rewarded in Fee for Service.

The costliest 5% of Medicare beneficiaries accounted for 41% of annual Medicare spending in 2012, and the costliest 25% accounted for 83% (see **Exhibit 2**).[6] The most costly beneficiaries normally had multiple chronic conditions, were low income, or in the last year of life.

Medicare Advantage

In Chicago and most areas in the U.S., Medicare Part C (Medicare Advantage Plans) gave patients the option of receiving health care services through a private insurance company. Medicare Advantage (MA) plans were approved by Medicare and offered all services that were included under Medicare Parts A and B; MA plans also had the option of offering pharmaceutical and other benefits. In 2016, MA Plans covered about 17.6 million beneficiaries, or 31% of all Medicare beneficiaries.[7] MA plans had flexibility in payment methods, including ability to negotiate with individual providers and to provide financial incentives that rewarded improved coordination and efficiency for some or most health care expenses.[8]

Medicare payments to MA plans were based on the enrollee's risk score. Plans received a "capitated" payment per member per month. Risk adjustments were based on the CMS hierarchical condition category model (HCC) which adjusted payments to MA plans for enrollees based on the number and severity of their clinical conditions. Risk adjustment data were calculated based on Medicare claims data submitted by providers, which included patients' diagnoses.

Medicaid and Dual Eligibles

About 12.8% of those covered by Medicare were also covered by state Medicaid programs, the primary source of health insurance for low-income citizens and permanent residents of all ages, as well as those with certain disabilities. Medicaid was funded by a combination of state revenues and

contributions from the federal government. Within broad national guidelines, state Medicaid programs set their own eligibility standards, scope of covered services, and payment rates. The Affordable Care Act ("Obamacare") had expanded federal funding for Medicaid, and extended Medicaid benefits to all U.S. citizens and legal residents with income up to 133% of the poverty line. States could opt out of this expansion. Illinois had chosen to expand Medicaid up to an effective income threshold of 138% of the poverty line, which had led to an increase of 486,000 covered Illinois residents.

Illinois law required that at least 50% of Medicaid enrollees be in a "managed Medicaid plan." (Some states, such as Pennsylvania, required that all Medicaid members be in managed Medicaid plans). In 2016, about 60% of Illinois enrollees were in such programs, which were administered by private insurers including national for-profit payers such as Aetna and Humana and local nonprofits such as Blue Cross. Under these plans in Illinois (and other states), patients either selected or were assigned a PCP. Managed Medicaid plans were not required to contract with all Medicaid providers, but could create their own networks. They could also contract with providers in various ways, including fee-for-service or population-based payments (capitation.)

Medicare enrollees who were low income and met eligibility criteria for both Medicare and Medicaid were known as "Dual Eligibles" or "Duals." In 2012, 61% of duals were below the federal poverty level, and 94% were below 200% of the poverty level. Compared to Medicare beneficiaries overall, duals were more likely to be female, African-American or Hispanic, lack a high school diploma, and have greater limitations in activities of daily living (see **Exhibit 3**). Per capita Medicare fee-for-service spending for duals was about twice as high as for other Medicare beneficiaries ($30,619 vs $15,583).[9]

Each State had different approaches to coordinating Medicare and Medicaid, and working with health plans that received capitation payments from both. In 2013, for example, the Illinois Medicare-Medicaid Alignment Initiative (MMAI), jointly administered by the Centers for Medicare & Medicaid Services (CMS) and the Illinois Department of Healthcare and Family Services, combined all of a member's health and prescription drug benefits under a single set of benefits. Providers who contracted with MMAI (and similar plans in other states) could assume financial risk for most health care expenses, and share in any financial savings that were achieved versus expected spending.

In addition, some Medicare Advantage plans enrolled dual eligible beneficiaries, and thus offered providers the option of taking financial risk for this patient population. The percentage of "duals" who were enrolled in MA plans was 1% in 2004, 23% in 2012, and 30% in 2014.[10]

Health Care for Older Citizens

Based on 2000–2002 data, the typical Medicare patient saw a median of two primary care physicians and five specialists working in four different practices (see **Exhibit 4**). Patients with diabetes, coronary artery disease, or lung cancer saw more physicians than the typical beneficiary, with the number of physicians rising with increasing numbers of chronic conditions.[11] Patients with 7 or more chronic conditions constituted 38% of Medicare beneficiaries; these patients saw a median of 3 different primary care physicians and 8 different specialists in 7 different practices. Nearly half (46%) of patients experienced a change in the physician who delivered the plurality of their care (more than any other physician) from one year to the next.

Care for Medicare patients was generally similar to care for private insurance patients. Medicare patients were seen by primary care physicians with 2,000 to 2,500 patients, who averaged about two visits per year. New patients typically received initial intake assessments lasting between 15–30

minutes, with physicians often prescribing diagnostic tests or medications. Primary care practices in the U.S. varied in staffing structures; for example, about half had nurse practitioners, and 42% had care managers. A survey found that for practices with 4–7 primary care physicians, the mean number of staff per FTE physician was 1.23 medical assistants, 0.38 nurse practitioners/physician assistants, 0.38 registered nurses, 0.24 care managers/coordinators, 0.13 social workers, and 0.17 community service coordinators.[12]

Adults with incomes below 200% of the Federal Poverty Level were less likely to have a regular doctor or source of care compared to those with higher incomes.[13] They were also less likely to have received preventive care screenings (e.g., blood pressure screening).

Reimbursement for physician services and for laboratory tests performed by the practice were higher for patients with commercial insurance than for patients with Medicare or Medicaid. Many private physician practices did not take patients with Medicare or Medicaid insurance, or limited taking on new patients. Access to primary care for Dual Eligibles was especially challenging because they tended to have more complex health needs requiring greater physician time, but fee-for-service reimbursement was less than would have been received by physician practices under Medicare alone. The reason was that standard Medicare paid 80% of the fee, with the patient bearing responsibility for a co-payment for the other 20%. For Dual Eligible patients, Medicaid was a secondary insurer and took responsibility for that 20%—but only for fees up the Medicaid allowable level. Since the Medicaid allowable level was less than 80% of Medicare payments, the physician practice would only receive the 80% covered by Medicare.

In lower income urban areas, access by residents to primary care was often limited to physicians employed by safety net hospitals, academic medical centers, hospitals associated with religious orders, or community health centers. Such primary care practices virtually all operated at a financial deficit, and required subsidies from their sponsoring organizations. This had been an important reason for the growth of community health centers, which were non-profit organizations funded by the Federal government (and sometimes state and local grants) to provide comprehensive primary care to medically under-served populations. As of 2016, there were more than 1,250 federally supported community health centers providing primary and preventive care to more than 20 million patients, of whom about one-third were children.

Primary care delivery models at community health centers and at other practices were evolving. Many practices had adopted the "Medical Home" model, which sought to use team-based approaches to deliver more timely and enhanced access to care that was more interactive with patients and better coordinated.[14] Lower-income patients receiving primary care in a medical home were more likely to receive recommended preventive care interventions, and to rate their care as excellent or very good.

History of Oak Street Health

Oak Street Health was founded in 2012 by Mike Pykosz (Chief Executive Officer), Geoff Price (Chief Operating Officer), and Griffin Myers (Chief Medical Officer), all 31 years old. Pykosz was a Harvard Law School graduate, Price a Harvard Business School graduate, and Myers a physician and graduate of the Harvard Affiliated Emergency Medicine Residency at the Massachusetts General and the Brigham and Women's Hospitals. All three had worked for The Boston Consulting Group. The concept for the company was developed by Pykosz and Price, with Myers joining the team after he became intrigued by the idea after hearing about it at a social dinner with Pykosz.

Initial capital was raised from private angel investors with health care backgrounds from Chicago, Nashville, and Minneapolis. A second infusion came from the same investors, and then Oak Street turned to private equity for two subsequent rounds of funding led by Harbor Point Capital (2014) and General Atlantic (2015).

Oak Street's first clinic opened in September 2013 in Edgewater, a northern Chicago neighborhood with large pockets of senior housing in which 16% of households live below the poverty line. A second clinic opened shortly thereafter in Portage Park, a densely populated neighborhood in northwest Chicago where 13% of the population lived below the poverty line. The first two sites had available real estate and were characterized by a wide range of incomes across a relatively dense city population. Subsequent sites more specifically targeted "health care deserts," or areas where patients had trouble finding physicians. For example, the sixth clinic opened in September 2014 in Bronzeville, a predominantly African-American neighborhood known as "The Black Metropolis," where 62% of people lived below the poverty line.

Oak Street had grown rapidly over its first 4 years, though recruitment of physicians had proven challenging. There was a general shortage of primary care physicians and an even more limited pool who had the experience or the interest in developing the skills required to care for Oak Street's population. Not all physicians recruited proved to be a good fit.

Most of Oak Street's leaders and managers had also been new to their roles. As experience grew, hiring decisions improved. In 2014, Oak Street expanded from its two initial centers to seven across Chicago which created capacity for the rollout of the new CMS integrated duel eligible program. The clinic expansion was partially funded through debt personally guaranteed by Pykosz, Myers and Price. The financial challenge of the expansion had been increased when unanticipated changes occurred in how Dual Eligible patients without PCPs were assigned to providers. Instead of being assigned by plans, patients were assigned by the State according to an algorithm developed by an external vendor and Oak Street received just 10% of expected patient assignments.

By late 2016, Oak Street had 19 locations including clinics throughout "Chicagoland," Northwest Indiana, Indianapolis, Rockford, Detroit, and Fort Wayne. It served about 22,000 patients with over 80 providers and nearly 700 employees. Most sites had four primary care physicians, with a targeted panel of patients per primary care physician of 400–500. Oak Street concentrated almost exclusively on patients covered by Medicare. According to its website, "Oak Street Health welcomes anyone with Medicare Part B. We take all forms of Medicare, including traditional Medicare, select Medicare Advantage plans, supplemental Medicare insurance, and dual Medicare and Medicaid. We also can treat anyone eligible for the new MMAI [Illinois Medicare-Medicaid integration] program. In special cases, we can take adults who have only Medicaid."

The majority of patients were enrolled in Medicare Advantage or Dual Eligible programs in which Oak Street took financial responsibility for all costs, including all primary, specialty, acute, and post-acute care. The average patient, cutting across insurance type, was 73 years old, with 55% female. The percentage of patients with diabetes was 32%and major depression 21%.[15]

Clinics

Oak Street clinics were often the first healthcare providers to open in its neighborhoods, and, sometimes, the first new business, in years. Each clinic could serve 2,000 to 4,000 patients in a footprint of about 8,000 to 12,000 square feet (see **Exhibit 5**). Staff consisted of about 30–50 people, drawn as much as possible from the Clinic's neighborhood. Floor plans were similar across clinics with limited

site-to-site variation. Clinics had small or no waiting rooms, and most patients actually waited in a large community room that was also open to members of the community who were not Oak Street patients. In the community room, patients and others could access the Internet through available computer terminals and participate in daily educational sessions and social events focused on arts and leisure activities (see **Exhibit 6**). Water, decaffeinated coffee, and tea were provided.

Patient care areas included rooms for examinations, meetings with patients and their families, and meetings of the teams involved in patient care. Team members and key administrative personnel (e.g., schedulers) were located in close proximity, working in cubicles in the same work area. Teams met at the beginning and as needed throughout the day in designated meeting spaces.

Laboratory spaces were small, and dedicated to point-of-care testing that enabled patients and clinicians to have timely access to data (e.g., diabetes control or anticoagulation levels). Unlike some primary care practices that included extensive in-house testing, Oak Street contracted with external vendors for other tests. An outside vendor operated pharmacy services at one clinic, supplying medications to patients at that clinic and other nearby Oak Street locations via courier. Pharmacists provided consultation to Oak Street clinicians on medication regimens for patients with complex medical needs.

The Care Team

Each Clinic had a Clinic Administrator, overseeing a small team of "Welcome Coordinators," a referral specialist, a population health coordinator, and a patient relations manager. Each clinic also had an "Outreach Team" consisting of "Outreach Associates," "Community Coordinators," and "Community Relations Managers," to engage with the community through in-center and out-of-center events.

Care delivery at Oak Street involved multidisciplinary care teams (see **Exhibit 7**). At most Clinics there were four teams, each responsible for 400–500 patients. The initial assignment of patients to teams was random, but some patients were subsequently transferred to another team with personnel having particular skills sets (e.g., serious wounds).

Each team typically included one primary care physician (PCP), who was a board-certified internist, family practitioner, or geriatrician. Additional members included one nurse practitioner (NP), one medical assistant, one care manager, one registered nurse, and a clinic informatics specialist who was known as the team's "Ninja." Behavioral Health Specialists, who were licensed psychiatric social workers, were shared across teams, as were phlebotomists, who drew blood for testing. Most clinics offered podiatry services, which were also shared across primary care teams.

The Nurse Practitioner saw patients alongside the physician or independently and performed many of the routine preventive care visits. The Medical Assistant served as the patient escort and would help the patient through his/her visit. The Medical Assistant would also help track down needed information, such as the medical record. The Care Manager coordinated care for patients who were or had recently been admitted to hospitals or post-acute care facilities, as well as provided behavioral health support. The RN responded to phone calls from patients, triaged urgent visits if needed, delivered patient education, assisted with procedures, and engaged patients during visits that were solely for test performance.

The Clinical Informatics Specialist, or "Ninja," was responsible for ensuring that relevant past and present clinical information was available at the point of care, served as scribe during clinic visits,

captured new data in a structured format for future analysis, and managed the list of tasks that needed to be completed throughout the day (e.g., patients who need to be called back). Ninjas also provided data support for daily and weekly "huddles," assisted in obtaining outside medical records, and organized Oak Street's population health dashboards. The typical ninja was a recent college graduate with interest in a career in health sciences. Many ninjas left Oak Street after 2–3 years to enter medical school or pursue other careers in healthcare.

Teams met daily for structured "huddles" in special workspaces with computers and meeting tables. Teams reviewed the patients who were scheduled to be seen that day, and discussed issues involving other patients who might be in the hospital, at skilled nursing facilities, or with actively evolving problems. Weekly huddles were held to review issues related to patients on specific Oak Street registries (e.g., databases for patients with diabetes, wounds, or on anticoagulant medications).

There was ongoing discussion with patients and among clinicians. All members of the patient care teams collected information from patients as part of their roles. For example, the job description for Medical Assistants stated: "You will be expected to build relationships with Oak Street Health Members . . . [and] assist in assessing member's health conditions." The job descriptions for personnel shared across teams, such as Phlebotomist, also included the phrase "You will be expected to build relationships with Oak Street Health Members." As one physician described:

> In our model, you are constantly talking with one another. Taking care of our patients is like putting together a puzzle or solving a mystery. Sometimes the most valuable clues about a patient's condition surface in casual conversation with them, and patients may feel more comfortable talking with the appointment scheduler about their lives and lifestyles than with the nurse or doctor. Because we all work so closely together all day, this help us synthesize all the clues.

Patient Recruiting and Engagement

Oak Street had programs that were designed to educate patients on the value of primary care, draw patients to the practice, and maintain close associations with their clinicians. Each Clinic had an "Outreach Team," drawn from the neighborhoods around the Clinics. Oak Street Clinics provided door-to-door transportation services to help patients reach its facilities, operating branded, bright green vans for patients who would otherwise have difficulty getting to its Clinics. The vans were distributed across regions where Oak Street had clinics, and the scheduling of their use was coordinated by regional dispatchers.

As one patient described, "The clinic environment doesn't seem like a clinic. You cannot tell the staff from the visitors. I meet people here to have coffee or to play bingo and bridge. It gets me out of the house." During periods of extremely cold weather, such as January 2016, Oak Street opens its clinics as "warming centers for older adults." During hot spells, the clinics became "cooling centers."

The community room at each Clinic was booked heavily with locally targeted events. Across the 19 community rooms, there were over 500 scheduled events per month including computer classes, bingo, senior yoga, movie "nights" (which often began at 11 a.m.), Medicare Basics, Zumba, and crocheting. At the Brighton Park Clinic, located in a predominantly Spanish-speaking neighborhood, events included Loteria, a popular Mexican bingo game, during which attendees dressed up as characters from the game. At the first Oak Street Clinic, in Edgewater, clinic events during the same period included a Reading Club and a history class. A Medicare Basics class was offered at most Clinics, often multiple times per week, focusing on helping individuals to learn more about Medicare coverage and

options available. At these sessions, attendees and their caregivers were introduced to the different parts of Medicare.

The Initial Visit

Prior to the first appointment, enrollment specialists worked with the patient and family to obtain and identify all of the available information related to his or her medical history, including medical records and insurance claims data. Medicare beneficiaries could obtain their most recent three years of Medicare claims data, including information on services covered under Medicare Parts A and B and medications purchased under Part D. Oak Street enrollment specialists helped patients access these data using computer terminals in the Clinic community room. Oak Street analytics and population health teams were given permission by patients to access their data and incorporate it into Oak Street's medical record.

A patient's first appointment was a 90-minute "welcome visit" with his or her assigned team. Team members performed assessments aimed at detecting problems common among the elderly, including screening tools for depression, risk of falling, and measures of health status. The physician performed an evaluation including a physical examination, typically involving 40 minutes with the patient.

After the visit, the team met to make an initial assignment of the patient to one of the four risk categories or *tiers*, consisting of Good, Fair, Serious, and Critical, based on a combination of patient data and physician judgement (see **Exhibit 8**). All teams provided care to all four tiers of patients. Tiers were used to determine the frequency of primary care visits and the allocation of care management resources. A Fair patient was seen 1.5 times as often as a patient tiered as Good. A patient tiered as Serious was seen twice as often as the Good, and those in the Critical tier 4 times as often. The sickest 4% of patients were designated "Critical" and were expected to be seen at least every 22 days (Oak Street used the term "cadence" to describe the target interval between primary care visits). Care teams focused on avoiding acute admissions and readmissions for critical patients. Visits for patients in the "Good" tier focused primarily on preventive care.

Ongoing Care Model

Return visits followed the cadence associated with a patient's tier unless there was a new problem. Return physician visits typically lasted 20 minutes. Physician schedules included open "blocks" to accommodate patient visits on the same day or the next day based on patient requests. Non-physician providers on the team (e.g., the NP) saw patients during some visits and/or called patients as needed.

Patients tier assignments were re-evaluated whenever there was a change in the patient's clinical status or his or her performance as assessed via geriatric assessment tools including depression screening with the PHQ-2 (Patient Health Questionnaire-2), a falls risk assessment, functional status assessment, cognitive function assessment, screening for incontinence, speech, hearing, and vision problems, and evaluation of socioeconomic issues. Teams maintained their relationships with patients as they moved among tiers.

Oak Street care teams assisted in the choice of hospitals or specialists, but did not restrict patient/family choices. Rather, teams encouraged patients and families to explore its network of "preferred partners" when care was indicated. Oak Street had developed a network of independent specialists with whom they had collaborated well, and who provided care that was considered both high quality and efficient. Oak Street cultivated relationships with these physicians and their practices

to improve coordination and communication. Recently, Oak Street had began hiring part and full-time podiatrists and psychiatrists to meet prevalent needs in the Oak Street patient population, who would provide care across multiple sites.

At acute care hospitals that provided the most care to Oak Street patients, Transitional Care Nurses and Care Managers (social workers) were deployed to build face-to-face relationships with hospitalists, floor nurses, and hospital discharge planners. Oak Street personnel rounded in person or telephonically whenever an Oak Street patient was admitted, and sought to participate in care coordination during the hospitalization and the transition to post-discharge care.

Oak Street clinicians also steered patients who needed post-acute care to preferred Skilled Nursing Facilities (SNFs) and Long-term Acute Care hospitals (LTACs). Oak Street care managers rounded on their patients at "preferred partner" sites and participated in family meetings and care planning meetings at these sites.

Finally, Oak Street worked to build collaborations and partnerships with payers who offered Medicare Advantage plans. For example, Oak Street worked closely with Humana's Utilization Management teams to ensure patients were discharged to an appropriate post acute venue.

Patient Information Management

Oak Street clinical informatics and analytics staff had developed an IT platform with a patient database that integrated all information from different sources and was used to create reports that were used to guide clinical practice. Outputs from geriatric assessments, existing medical records and pharmacy claims were fed into a population health function that created registries (i.e., lists of patients with specific conditions or needs), "to-do" lists, and tools to guide teams as they cared for patients.

Reports identified patients at increased risk for being readmitted to the hospital, who had missed appointments, or who were at increased risk for complications of their medical conditions. Clinicians could use these data to take preventive steps—e.g., calling patients with heart failure in the days before Thanksgiving to tell them that the offices would be open on the Friday so that patients knew they did not need to go to the emergency department, and encouraging patients to avoid canned foods that might have high salt content.

The informatics team also created the daily huddle form for each of Oak Street's 60 clinical teams. Usually printed on one sheet of paper, it listed all of the patients scheduled to be seen by a clinical care team on a given day. It resembled a mini-intake form and highlighted key metrics and indicators pulled from electronic medical record and claims data such as the date of a patient's last flu shot or colonoscopy, and whether the patient had recently been to the emergency room. The huddle form helped clinicians identify gaps in care and other priorities for the upcoming patient visit. It also contained the current inpatient census for the care team to review.

Data from payers, hospitals and, partner specialty practices were incorporated into Oak Street records daily. This was used to compare outcomes and resource used for each team's panel of patients compared to other Oak Street teams. Another daily report listed each team's highest resource utilizers (see **Exhibit 9**).

Reimbursement

At the time of enrollment, Oak Street patients were covered by Medicare, often its fee-for-service Parts A and B. Because Oak Street provided many services that were not reimbursed by Medicare Parts A and B, it lost money on many of these patients. Oak Street had negotiated capitated contracts with Medicare Advantage plans and plans for dual eligibles, and many patients chose to sign up in these plans when educated on their plan options.

By 2016, a majority of Oak Street's patients were in Medicare Advantage plans with capitated contracts. For these patients, Oak Street received risk-adjusted amounts per month, which were intended to cover all medical services delivered including any inpatient and specialty care. Oak Street could decide how to spend the overall pool of payments across its entire population. COO Geoff Price explained: "Because we have taken financial responsibility for the entirety of care for many of our patients, including primary, specialty, acute, and post-acute care, we can invest in primary care services that have a positive health (and therefore economic) return for our practice."

When patients needed care outside of Oak Street (specialty care, emergency department, hospitalization, non-acute facilities), the company bore the costs, reimbursing for such care on a fee-for-service basis. It had developed collaborative relationships with some specialists and hospitals, but these relationships were informal and did not involve salaries or retainer payments.

Performance Measurement

In 2016, Oak Street routinely tracked three broad metrics to evaluate performance—Net Promoter Score, clinical quality, and hospital use. Net Promoter Score was a widely used indicator in business but just emerging in health care. It gauged patients' overall experience of care, and was calculated as the difference between the percentages of patients giving the provider a top rating for "Likelihood to Recommend" versus the lowest rating. In 2015, Oak Street achieved a net promoter score of 91 (on a +100 to -100 scale). One 2015 study with comparable methodology found an average net promoter score of 3 for a sample of about 2,000 PCPs.[16]

For clinical quality, Oak Street used the Healthcare Effectiveness Data and Information Set (HEDIS), a set of process-oriented measures in use by more than 90% of U.S. health plans. It included measures such as: asthma medication use, control of high blood pressure, measures of comprehensive diabetes care, and breast cancer screening. As of 2016, Oak Street had achieved performance levels on HEDIS metrics that corresponded to a 5-star rating (top 10 percentile of health plans) for managed care patients who had been in the Oak Street practice for at least 12 months.

Hospital use was also tracked and benchmarked. In 2016, Oak Street was averaging 230 hospital admissions per 1,000 patients, which was lower than the national average of 315, the Chicago average of 359.5, and the average for dual eligible males in Cook County of 770.[17] After adjusting for age, sex, and race, Oak Street's hospital admission rate was 43% lower than the Chicago benchmark. Similar reductions had been achieved in both Emergency Room usage and 30 day readmission rates.

Oak Street analysis had found that the longer a patient's tenure in the practice, the lower the likelihood of a hospital admission. Oak Street providers had shown improving quality performances with longer tenure.

Organization and Human Resources

Physicians had to be Board certified or Board-eligible (i.e., having met the training requirements to be eligible to sit for the certification examination) in Internal Medicine or Family Practice. Fellowship training in Geriatrics was welcome but not required. All physicians were employed, with compensation packages that were described as "above-market" and consisting of base salaries and bonuses based upon quality metrics. There were no incentives for volume of services or visits.

Oak Street also included variable compensation for employees at all levels of the organization, based on quality metrics. Senior administrators' compensation was linked to overall organization performance, with specific focus on hitting milestones such as the number of patients served and the percentage of patients receiving preventative treatments. Reviews for individual employees were conducted on a quarterly basis, but reviews were explicitly not combined with compensation adjustments. Instead, they focused on the employee's contribution to Oak Street's mission and vision. In 2015, Oak Street had been ranked #31 among mid-sized employers in the Chicago Tribune's annual listing of Chicago's "Top Workplaces," based on an employee survey.

Oak Street's leadership team included Pykosz, Price, and Myers, as well as a Chief Financial Officer, a Chief Technology Officer, a Senior Vice President for Growth & Business Development, and a Senior Vice President of Accountable Care, who led the complex care and other medical management initiatives as well as serving as a liaison with the medical management teams of payers with whom Oak Street contracted. Regional Vice Presidents were responsible for all aspects of the business within a given region, including financial outcomes, growth, medical costs, operating expenses, managed care enrollment, and team development. Five Medical Directors oversaw practices for groups of clinics.

The corporate office was in Chicago's West Loop, a neighborhood near downtown Chicago, which was home to numerous start-ups and technology companies. Known as "The Treehouse," the office covered 2 floors. The higher floor consisted of a large, open loft-like space, in which personnel sat at tables and cubicles. The lower floor included conference rooms, a training room, and a kitchen.

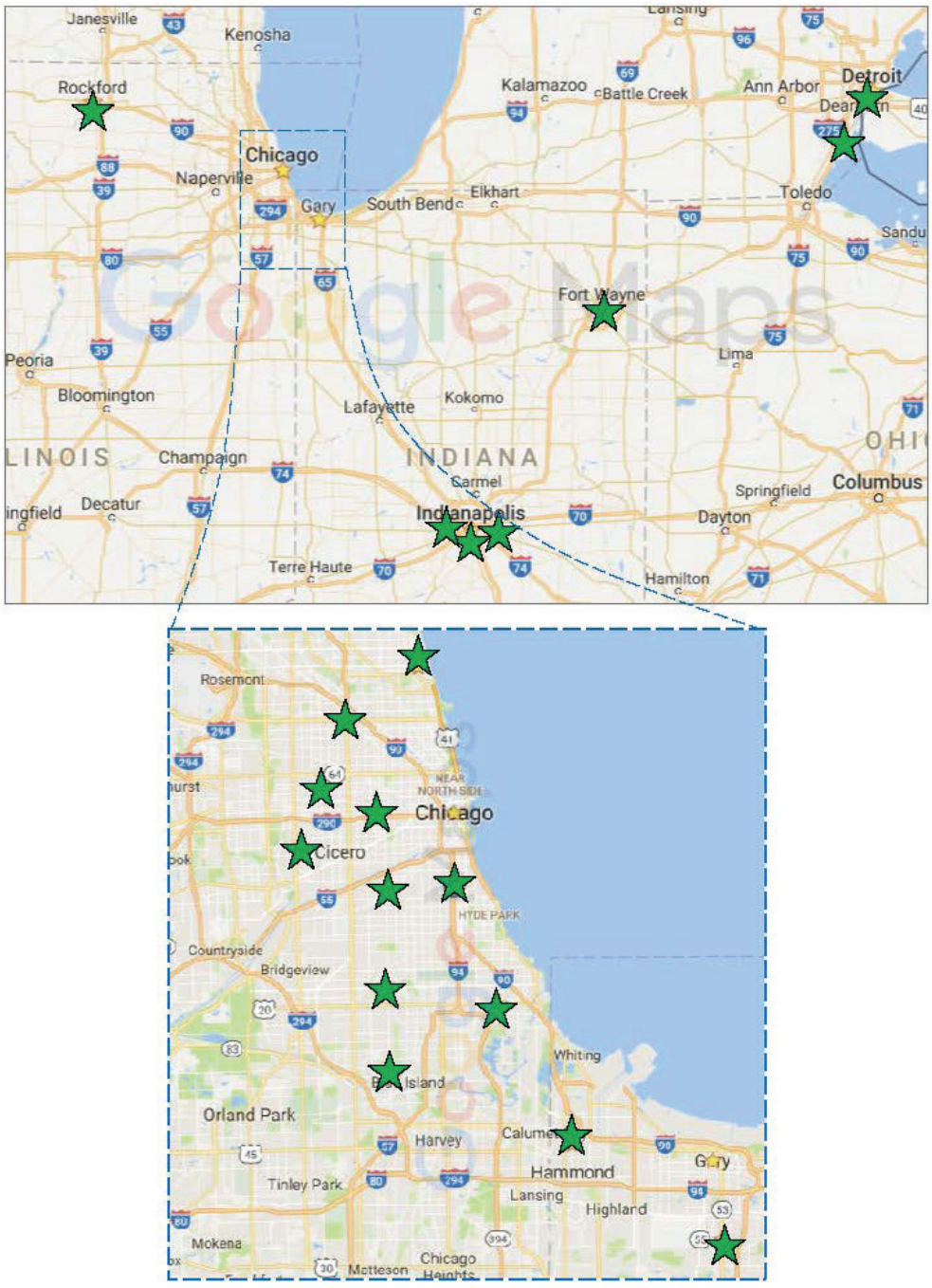
Financial

Oak Street Health was a privately held for-profit company, and financial results were not publicly reported. Financial performance at the clinic level followed a predictable trajectory reflecting the growth of the patient panel and the return on investments in primary care in terms of downstream medical costs. There was also a lag time between when patients were enrolled in capitated plans, and when savings were achieved through avoidance of costs from hospitalizations and emergency department visits. At the patient level, Oak Street's risk-adjusted costs of delivery were significantly lower than the amounts allocated by MA plans under its contracts. Well-established clinics had achieved profitability, and newer clinics were generally experiencing a faster improvement in financial performance than earlier vintages.

Future Plans

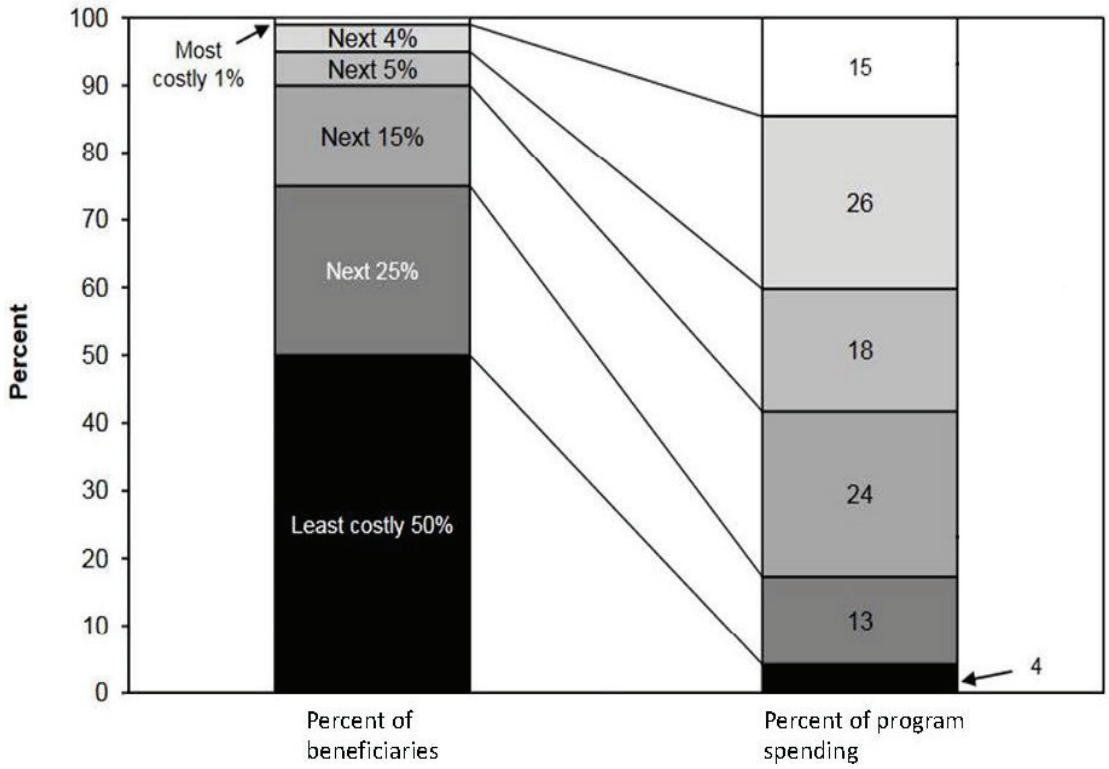
In late 2016, Oak Street opened clinics in Detroit and was planning on new sites elsewhere in the Midwest. Oak Street leadership was receiving invitations from health plans, academic medical centers, and integrated delivery systems to consider sites in other cities around the U.S. Also, there were questions about whether the organization should extend its services to non-elderly populations, such as younger patients covered by Managed Medicaid plans.

Exhibit 1 Map of Nineteen Oak Street Health Clinic Locations: November 2016



Source: Oak Street Health.

Exhibit 2 Medicare FFS Program Spending by Beneficiary Segment, 2014



Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use files, 2014.

Note: FFS (fee-for-service). Analysis excludes beneficiaries with any group health enrollment during the year.

Exhibit 3 Differences between Medicare Dual-Eligible Beneficiaries and Non-Dual-Eligibles

CHARACTERISTIC	DUAL-ELIGIBLE BENEFICIARIES (PERCENT) [a]	NON-DUAL-ELIGIBLE MEDICARE BENEFICIARIES (PERCENT)
SEX		
Male	39%	46%
Female	61	54
RACE/ETHNICITY		
White, non-Hispanic	58	78
African American, non-Hispanic	18	8
Hispanic	16	9
Other	8	5
LIMITATIONS IN ACTIVITIES OF DAILY LIVING (ADLs)		
No limitations in ADLs	38	65
Limitations in 1—2 ADLs	27	23
Limitations in 3—6 ADLs	35	12
RESIDENCE [b]		
Urban	70	78
Rural	30	22
LIVING ARRANGEMENT		
Institution	17	2
Alone	31	28
With spouse	14	53
Children, nonrelatives, others	39	17
EDUCATION		
No high school diploma	45	17
High school diploma only	28	28
Some college or more	25	54
INCOME STATUS [c]		
Below Poverty	61	9
100—125% of poverty	18	7
125—200% of poverty	15	20
200—400% of poverty	5	35
Over 400% of poverty	1	28

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2015.

[a] Dual-eligible beneficiaries are designated as such if the months they were enrolled in Medicaid exceeded the months they were enrolled in other supplemental insurance. b "Urban" indicated beneficiaries living in metropolitan statistical areas (MSAs). "Rural" indicates beneficiaries living outside of MSAs. c In 2012 poverty was defined as income of $11,011 for people living alone and $13,892 for married couples. Totals may not sum to 100% due to rounding and exclusion of an "other" category. Poverty thresholds are calculated by the U.S. Census Bureau (https://www.census.gov/hhes/www/poverty/data/threshold).

Exhibit 4 Providers Treating Medicare Beneficiaries in 2000

Medicare Beneficiary Groups	Number of Beneficiaries		Number of Unique Providers							
	Number	%	Total Physicians		PCPs		Specialists		Practices	
			Median	*Interquartile Range*	*Median*	*Interquartile Range*	*Median*	*Interquartile Range*	*Median*	*Interquartile Range*
All beneficiaries	1,787,454	100%								
All physician visits			7	4—11	2	1—4	5	2—8	4	3—7
Evaluation and management visits			3	2—5	1	1—2	2	1—3	3	2—4
Beneficiaries with chronic conditions (all physician visits†)										
Diabetes	430,461	25%	8	5—14	3	1—4	6	3—10	5	3—8
Coronary artery disease	633,750	38%	10	6—15	3	1—5	7	4—11	6	4—8
Lung Cancer	40,086	3%	11	7—16	3	2—5	8	5—12	6	4—9
Number of Conditions										
0—2	257,471	13%	3	2—5	1	1—2	2	1—3	2	1—3
3 or 4	451,774	24%	5	3—7	2	1—3	3	2—5	3	2—5
5 or 6	448,855	25%	7	5—10	2	1—3	4	3—7	4	3—6
≥7	629,354	38%	11	8—16	3	2—5	8	5—12	7	5—9

Source: Pham HH, Schrag D, O'Malley AS, Wu B, Bach PB. Care patterns in Medicare and their implications for pay for performance. *N Engl J Med*. 2007;356:1130-1139.

Note: *PCP denotes primary care physician, and IQR interquartile range (i.e., the 25th and 75th percentiles). The numbers of beneficiaries are unweighted, and the percentages of beneficiaries and median numbers of providers are weighted. The medians are based on the number of providers billing for any type of physician-related visit, or for physician-related evaluation and management visits, among all complete Medicare professional-services claims for 1.79 million beneficiaries who were treated at least once by a Community Tracking Study physician in 2000. Beneficiaries under 65 years of age, those with end-stage renal disease or disability, and those who did not have claims in 2000 are excluded.

† Beneficiaries could have more than one chronic condition. The number of chronic conditions was determined by using the method of Hwang et al.15 based on ICD-9-CM codes for chronic conditions assigned to mutually exclusive clinical categories based on the Clinical Classification System of the Agency for Healthcare Research and Quality.

Exhibit 5 Floor Plan of Oak Street Englewood Clinic

Source: Oak Street Health.

Exhibit 6 Oak Street Avalon Park Clinic Community Room

Source: Oak Street Health.

Exhibit 7 A Typical Oak Street Multidisciplinary Care Team

Source: Oak Street Health.

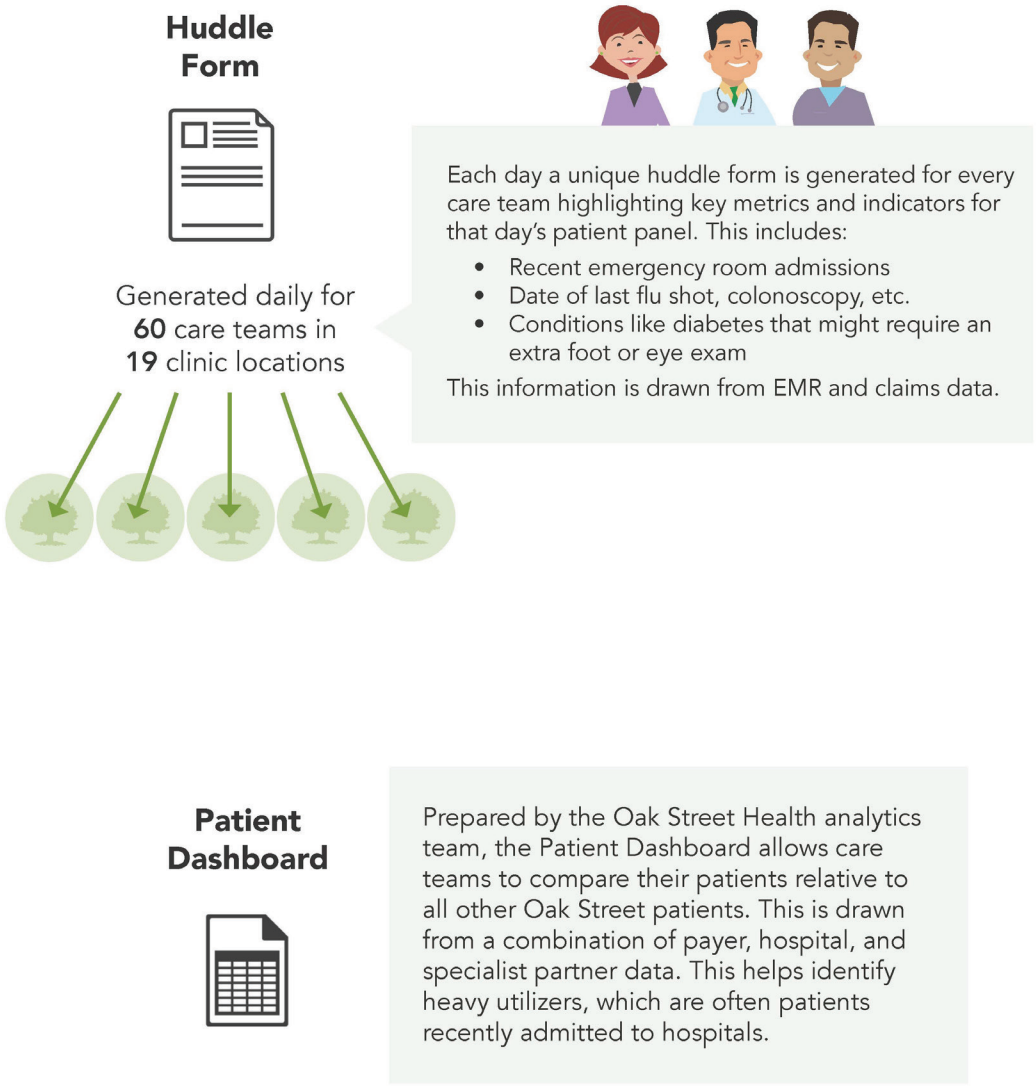
Exhibit 8 Oak Street Health Risk-Tiering Methodology

	Patient Acuity	Tier	% of Total Patients	Visit Cadence (days)	Focus
IV	Very Sick	Critical	4%	22	Specialty/ family coordination, avoid readmissions
III	Sick	Serious	25%	30	Family coordination, avoid admissions
II	Average	Fair	41%	60	Secondary prevention
I	Well	Good	30%	90	Preventive care, primary prevention

Source: Oak Street Health.

Note: Physicians and team judge "how sick" a patient is relative to the others in his/her patient population using "sickness percentile" logic called "tiering." Analytics and clinical teams match resources to need and set and monitor visit cadence and care management.

Exhibit 9 Oak Street Health Reports and Dashboards



Source: Oak Street Health.

Endnotes

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