White paper

# Outpatient therapy delivered in the home to older adults demonstrates improved outcomes and manages downstream cost



In 2019, roughly 60 million Americans received Medicare benefits as a result of age or disability.[1] As the population continues to grow older, this number will increase significantly. By 2060, the number of Americans age 65 and older is expected to be about 95 million, nearly double what it is today.[2] And as soon as 2050, it's projected there will be 9.7 people age 100 or older for every 10,000 people in the United States, more than a fourfold increase over 2016 rates.[3]

Improved medical care has played an important role in our growing older adult population. Between 1950 and 2017, average life expectancy in the United States increased from 68 years to nearly 79 years.[4,5] But as people live longer, we must ask the question: Are they living well? Evidence would suggest that functionally, many are not.[6]

Chronic health conditions contribute to physical and cognitive decline that diminish one's ability to thrive functionally. One study found that 81% of people 65 years of age and older have multiple chronic conditions.[7] These patients frequently take many medications and access all types of health care far more often than those who are healthier.[8] That care is extremely costly. A 2014 analysis found that while Americans with at least five chronic conditions made up just 12% of the population, they accounted for 41% of total health care spending.[9]

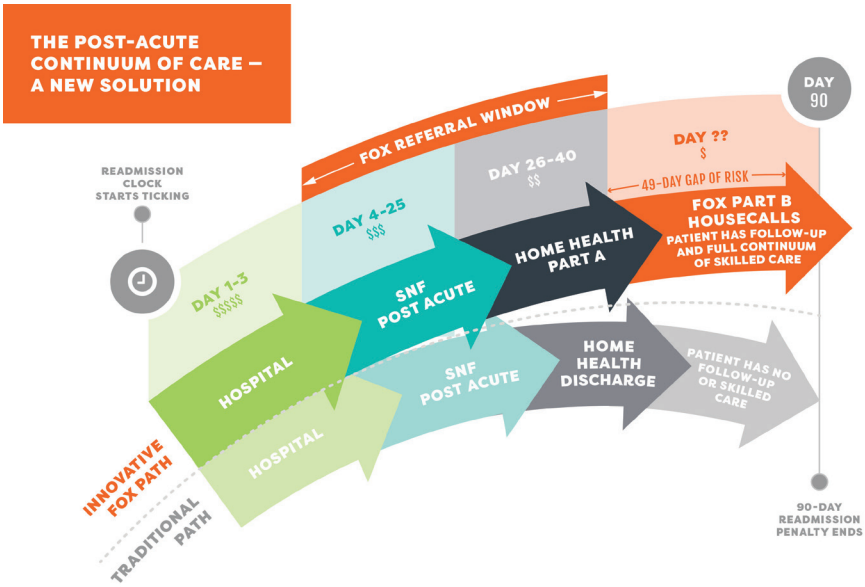
**FOX Rehabilitation,** a practice specializing in physical, occupational and speech therapy, partnered with Optum, a health services company, to validate its model of care for older adults by analyzing claims and financial data.

Our existing health system centers around curing acute medical conditions, and as a result, care for older adults may be fragmented.[10] Integrated care is not always offered to address what, in many cases, may be older adults' greatest need and pathway to living better — improved functional ability. With a growing older adult population, all of this is certain to be a challenge for Medicare and other payers in the years ahead as they work to deliver needed services to keep costs down.

There is a tendency in society and among many older adults themselves to believe there is little that can be done to improve functional wellness with advanced age. But innovative providers and the use of data analytics are proving that's not the case. By recognizing and addressing this population's needs, providers like FOX and health services companies like Optum are helping people live better as they live longer — and saving money in the process.

## Giving birth to innovation

FOX is a clinician-operated professional practice of physical, occupational and speech therapists built on the foundation of Geriatric House Calls™. The practice was established in 1998 by Tim Fox, PT, DPT, GCS-EMERITUS, CCI. Then a home health therapist, Dr. Fox would often see his older, medically complex patients discharged from his care and referred to a brick-and-mortar clinic for additional follow-up. Regrettably, many would eventually return to his service after attending few, if any outpatient therapy sessions. Essentially, he would have to start over with his patients.



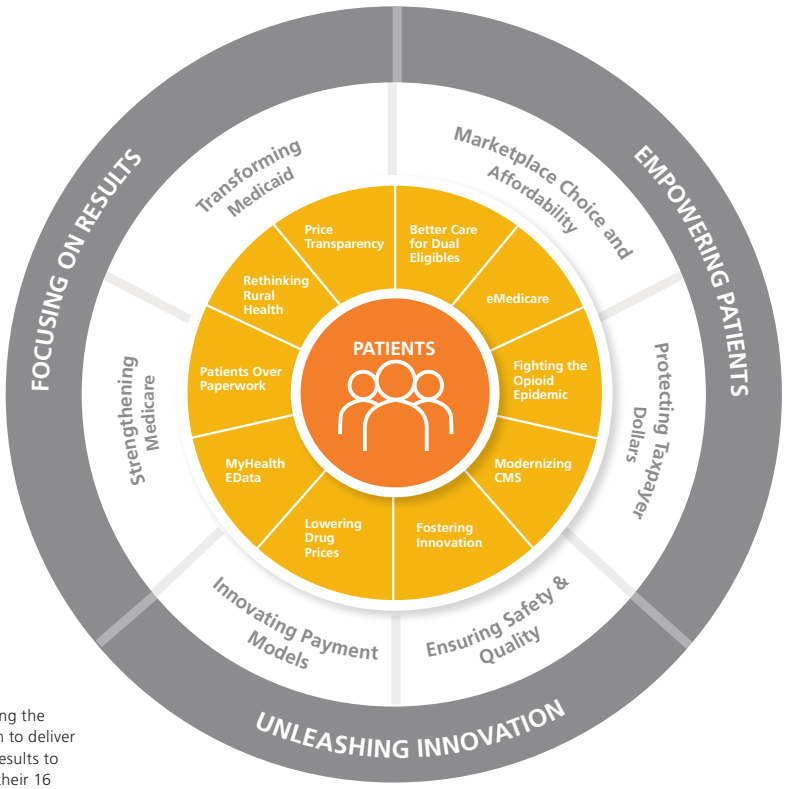

The FOX Geriatric House Calls model of care brings highly skilled physical, occupational and speech therapists into the homes of older adults. It provides a path to optimal function that is highly beneficial to the health care system.

Recognizing the shortcomings of the care delivery system for this population and the need to better serve these individuals, he developed a model of care centered around in-home visits. These "house calls" are billed under Medicare Part B and considered outpatient therapy. However, no brick-and-mortar clinics exist. All care is delivered in the patient's home by a mobile workforce of highly skilled experts expected to exceed 2,000 by 2020. This model helps see that older adults have access to needed and beneficial care that's at a lesser cost than traditional home health care.

To prove the value of its care and what the practice knows is true based on experience, FOX turned to Optum. Optum started working with FOX Rehab in early 2019 to analyze claims and financial data in order to validate that what FOX believed to be the best model of care could in fact be supported by the insights found within the data sets. Optum used advanced data techniques to assess FOX's position in the marketplace and compare its costs and outcomes to other providers. Optum® Advisory Services is a division within Optum dedicated to providing consultative services to clients in order to address the biggest challenges in health care. With a team of over 1,300 health care experts and unrivaled breadth and granularity of clinical and claims data — including 98 million lives of clinical data and 188 million lives of claims data — Optum Advisory Services is uniquely positioned to help providers like FOX address their needs.

The data provided by Optum showed FOX's model of care led to substantial downstream cost savings. Combined with the functional improvements the care produces for FOX patients, these results were especially noteworthy. Based on the data, it's clear FOX's model of care presents tremendous opportunity for Medicare Advantage (MA) plans, its members and the Centers for Medicare and Medicaid Services (CMS).

FOX and Optum are dedicated to helping CMS fulfill its pledge of putting patients first through focusing on results, empowering patients and unleashing innovation. One of the 16 Strategic Initiatives released by CMS in 2019 is to strengthen Medicare, which FOX and Optum have a desire to help accomplish. With the FOX model of care and the vast data and insights capability of Optum, there is evidence to show that this approach brings value to our growing population of older adults and supports the CMS goal to "empower beneficiary choices and unleash private sector innovation to improve care."[11]




CMS is transforming the health care system to deliver better value and results to patients through their 16 strategic initiatives.[17]

## Elizabeth: One patient's story
### The challenge

Elizabeth is a 91-year-old female living with her daughter's family, who assist her. Following shoulder replacement surgery for chronic pain and loss of function, she developed pneumonia. She was readmitted to the hospital and received nursing home care before ultimately returning to her home.

With six chronic conditions that were cardiac, rheumatologic and musculoskeletal in nature, Elizabeth took multiple medications. This fact, combined with her recent health issues, a history of frequent falls and Elizabeth's family's concerns about her safety, led her physician to prescribe physical therapy (PT) from FOX Rehabilitation.

**Elizabeth is a pseudonym.*

### Living better longer

Despite its 20-plus year history, FOX is seen as an innovator in the outpatient sector, due to the pioneering way it does business. The practice focuses on optimizing function and improving well-being and quality of life for medically complex older adults in their own home. These individuals may not meet the requirements for Part A home care services but have difficulty accessing a traditional outpatient practice.

While the medical community has helped extend life, the FOX model of care focuses on helping people live well as they live longer and to successfully age in place. Its patient-centered approach proactively identifies functional decline and works to strengthen patients based on their goals and its clinicians' professional judgment regarding what's realistic and modifiable. Services are tailored to individual patient needs and take into account patients' comorbidities and medical circumstances.

The average FOX patient is 82 years old (compared to 72 for Medicare patients seen in traditional outpatient brick-and-mortar clinics), lives with several chronic conditions and takes multiple medications. FOX patients' average risk adjustment scores is 2.61. It's closer to the score for those receiving home health care (3.18) than that of Medicare patients visiting brick-and-mortar outpatient clinics (1.72). This suggests that the costs of meeting FOX patients' health care needs should be expected to be higher than that for those receiving traditional outpatient therapy. However, the evidence identified by Optum clearly shows the overall cost savings for these patients more than balance this out.

**Risk adjustment score or risk adjustment factor (RAF) is a relative measure of the probable costs to meet the health care needs of the individual beneficiary. For example, older individuals typically have a higher RAF than younger individuals, and those individuals with a personal or family history of certain conditions may garner a higher RAF than individuals without such a history.[18]**

## FOX patients
FOX provides a unique therapy model to complex patients who tend to cost the system the most money.

### Patients



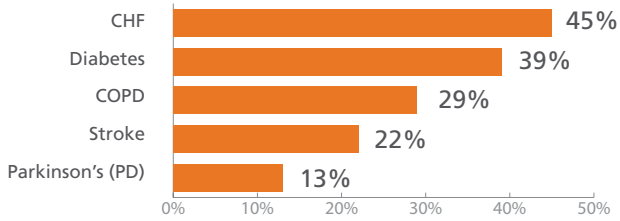
**82**
Average age

**2.61**
Average risk adjustment factor (RAF)

**65% | 35%**
Living in community vs. senior living

FOX treats older adults with multiple chronic conditions. FOX has the skill, experience, size and scope to manage effectively in an innovative way.

### Chronic conditions




Overview of services

Optum is committed to improving the lives of older adults and has put significant effort into understanding the needs of the aging population, particularly centenarians. UnitedHealth Group®, the Optum parent company, has assessed the lives of centenarians through their 100@100 survey to explore the secrets to aging successfully and examine the attitudes and lifestyles of American seniors. When asked which of the three — mental, physical or emotional health — is the most difficult to maintain as one ages, the greatest number of centenarians surveyed chose physical health.[12]

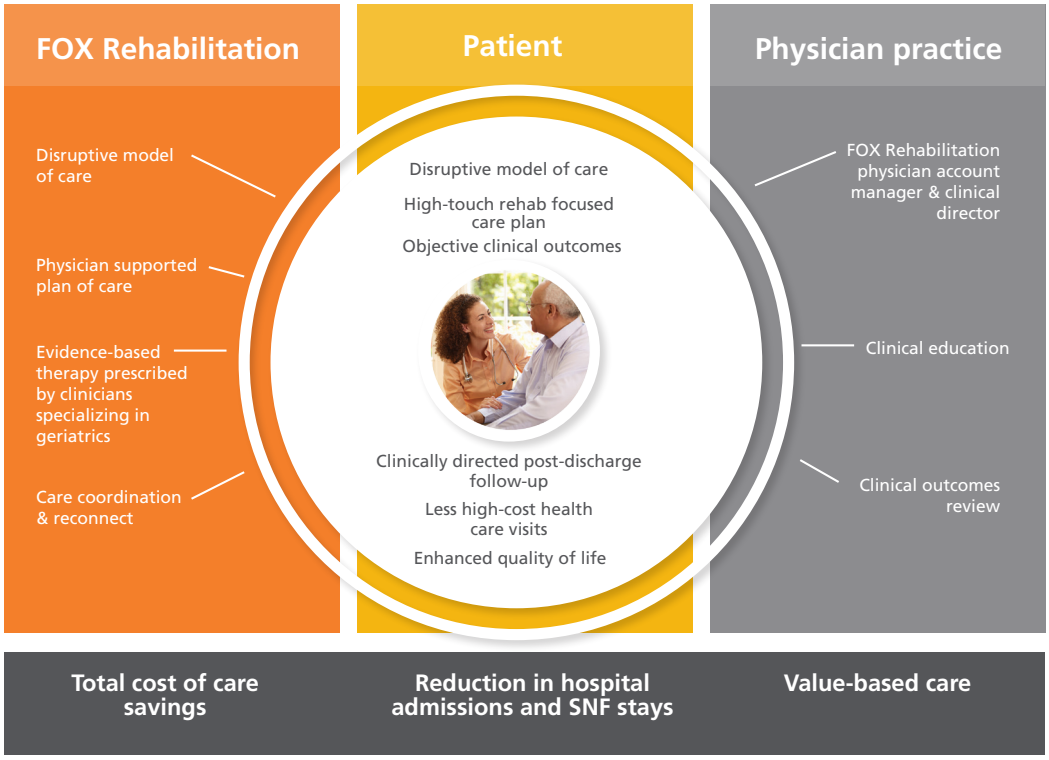
With its mission to make the health system work better for everyone, Optum is proud to work with FOX in providing outcome analysis and financial evaluation to help shed light on the benefits this model of care can bring to the Medicare population. Putting these patients at the center of the care model is critical to improving their quality of life.

## Bettering outcomes for a complex population

FOX collaborates with its patients and their health care provider to achieve the best possible outcomes. Once a patient is referred for therapy and evaluated, a detailed plan of care is developed and returned to the patient's physician. Visits are determined by patient need, and progress notes are documented throughout the episode of care and ultimately at discharge, just as they would be in an outpatient clinic.

Clinicians typically see patients multiple times each week over a period of several weeks — generally longer than most outpatients. The older, frailer population can lead to increased dosage of therapy than might be expected for a traditional MA member. However, research has shown that greater outpatient visits are associated with better outcomes.[13] And the functional improvements experienced by FOX patients are striking.

Scores on the patient-specific functional scale (PSFS), which individuals use to rate their ability to complete specific activities, increase significantly after therapy. FOX has developed and published quality indicators (N=30,001) using the PSFS and number of visits to predict one's ability to move to independence, as opposed to admission to a hospital or a skilled nursing facility.[14] With FOX care patients increase their functional ability. They get and they stay better.




FOX care model

## Elizabeth: One patient's story
### The treatment

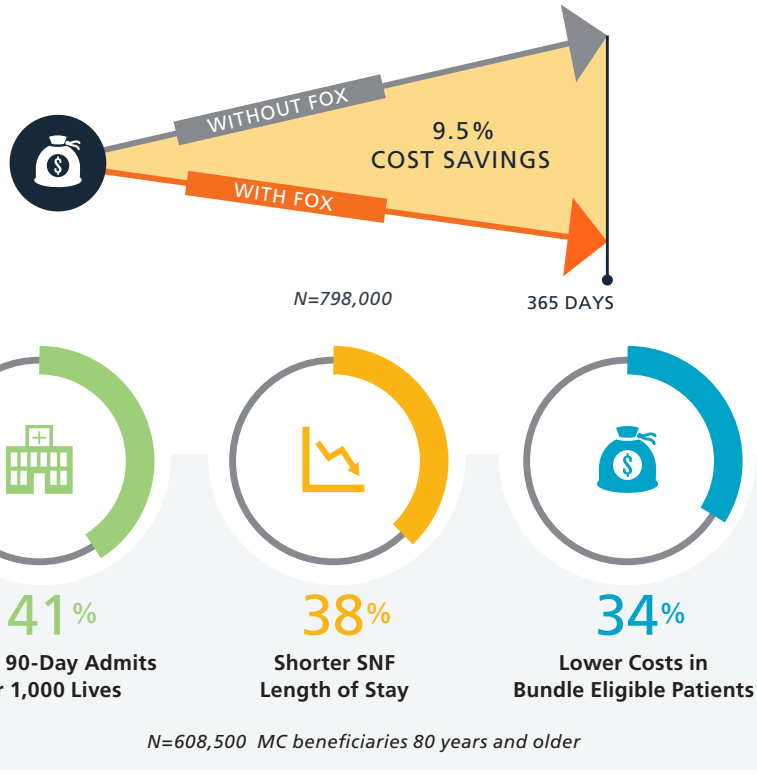
A FOX physical therapist evaluated Elizabeth and identified issues with balance, strength, pain and her ability to complete activities of daily living. As a result, occupational therapy (OT) from FOX was also called in for an evaluation and treatment was initiated.

Together, with their unique expertise, Elizabeth's physical and occupational therapists developed a plan to address her areas of deficit. Over a period of a month and a half, she received 29 home PT/OT visits tailored to her specific needs.

### Saving downstream dollars

The cost savings associated with the FOX model of care are as significant as the benefits those receiving this care achieve. Optum analyzed all claims data (excluding pharmacy claims) for Medicare beneficiaries in a three-state sample of Pennsylvania, New Jersey and South Carolina between mid-2015 and mid-2016. This included information from nearly 800,00 individuals. Results showed the total cost of care for FOX patients is 9.5% lower within one year of beginning therapy compared to non-FOX patients. Specifically, in those 80 years of age and older:

- 90-day admits per 1,000 lives are 41% lower
- Length of stay for skilled nursing facility care is 38% shorter
- Risk adjusted, the total cost of care is 10% lower compared to patients mostly seen by home health agencies and 5–16% lower compared to patients primarily seen in traditional outpatient clinics




Total cost of care includes 12 months post initiation of therapy services.

All material prepared using CMS Qualified Entity (QE) data which represents a 100% sample of Medicare data for NJ/PA/SC 2015-2016. All findings and use of materials subject to QE Data Use agreement.

Optum found that when evaluating bundle-eligible patients*, regardless of age, in the above-mentioned states who received PT, OT or SLP, savings for patients receiving therapy through FOX were also remarkable.

- In Pennsylvania, total costs are 30%-plus lower for FOX patients in 70%-plus of all bundles. Savings are achieved through reduced inpatient and skilled nursing facility costs (55% lower).
- In New Jersey, total costs are over 30% lower for FOX patients in 70%-plus of all bundles. Savings are achieved through reduced inpatient and skilled nursing facility costs (60% lower).
- In South Carolina, total costs are 40%-plus lower for FOX patients in 70%-plus of all bundles. Savings are achieved through reduced inpatient and skilled nursing facility costs (63% lower).

*Evaluation based on 263,000 total bundle-eligible patients. Of these, 221,000 were not seen by a FOX clinician within 90 days, while 3,447 were.

These cost savings command attention, especially when viewed in conjunction with the improvements in day-to-day function and overall quality of life patients experience.

## What makes this model of care work?

**Several factors contribute to success:**

**Ease of access.** Existing health conditions, transportation barriers and lack of social support are among the many challenges that can make it difficult for older adults to attend an outpatient clinic. This model brings its services to the home and fits appointments around patient needs. This makes it easier for patients to receive their full course of therapy on schedule — and reap the benefits that come with that.

**An ideal setting.** In addition to making access to therapy easier, working from the patient's home offers comfortable, familiar surroundings. This is valuable for everyone, but especially patients with cognitive impairment. The home environment also allows providers to tailor therapies to specific activities of daily living that the patient must accomplish in that environment in order to thrive, such as cooking, bathing or climbing stairs. In general, care delivered in the home saves money, leads to better health outcomes and reduces hospital stays.[15]

**Specialized geriatric focus.** FOX therapists receive specialized geriatric training. Older adults often have complex needs and the ongoing training and support provided to clinicians helps ensure clinicians are up to date on all the latest medical advances, so patients receive top-level care. Therapists take and respond to blood pressure, auscultate the lungs, measure lower extremity edema, and monitor peripheral oxygen perfusion and pulse rate, which allows the therapist to serve as a practitioner who can identify an underlying health condition. Communicating this condition to the health care team allows the acute problem to be resolved by the patient's primary care provider, and alleviates the need of expensive hospital admissions.

**Continuity of care.** The therapist that completes each patient's initial assessment develops the plan of care and works with that patient for the entire course of his or her therapy. The solid one-on-one relationship and trust that forms between patient and clinician helps patients complete the hard work necessary to accomplish their goals. Because clinicians work with their patients throughout their therapy, it is also easier for them to recognize patient progress and barriers to improvement.

**Evidence-based therapy.** Highly skilled clinicians offer treatments based on the best available scientific evidence. They understand the intricacies of dosed exercise and use their expertise to factor in patients' comorbidities and response to activity when planning care. They "push" patients just hard enough to safely create functional improvement. Importantly, they also offer emotional support and guidance, encouraging patients not to give up on themselves.

**A dedicated quality assurance (QA) division.** Within its QA team, FOX employs: a chief quality officer; clinical directors for physical therapy, occupational therapy and speech-language pathology; four senior directors of QA; and 60-plus regional quality assurance liaisons. FOX also maintains a full documentation review team and medical records specialists. Quality assurance ensures patients receive excellent care and FOX complies with all CMS regulatory requirements, as well as the operational policies and procedures of the health plans with which it works.

## Elizabeth: One patient's story
### The outcome

By the conclusion of treatment, Elizabeth's scores on the patient-specific functional scale, a tool patients use to self-identify their level of disability, showed dramatic improvement. Her numbers related to walking, transfers and standing went from 80% disabled when she was admitted, to just 27% disabled at discharge. Improvement pertaining to preparing meals was even more noteworthy, with her score at discharge standing at 12%.

Elizabeth felt less pain and was no longer falling. She was even able to take a trip to Florida with her daughter's family. To help Elizabeth maintain her improvement, her therapists trained her and her family on her home exercise program and how to sustain her progress. They also instructed the family on when and how to follow up should Elizabeth's status change. The level of improvement seen on the patient-specific functional scale also puts her at a lower risk of re-hospitalization.[14]

## Challenges of innovation

FOX and Optum offer a glimpse into what the health care system can be. FOX's methods of operation can sometimes be at odds with the system as it exists today. An audit of its services might suggest, for example, that FOX exceeds the standard of care for outpatient therapy under Medicare Part B. However, in reality, FOX is establishing the standard of care for the population it serves. Older, more complex patients do not neatly fit into existing norms.

The services that will benefit them most are not the same as those originally developed and benchmarked with a younger, healthier target audience in mind. FOX stands ready to share what it has learned about caring for this unique population and to partner with CMS to help establish useful, realistic auditing parameters with the data and insights Optum has brought to the surface.

Another challenge: Existing CMS network adequacy requirements may unintentionally limit MA plan members' access to providers like FOX. While the CMS regulations are intended to ensure MA members have access to timely care where they need it, network adequacy requirements were designed with brick-and-mortar outpatient practices in mind. As a result, MA plans can be reluctant to contract with practices like FOX because they are not "counted" when evaluating network adequacy.

MA enrollees and spending are projected to experience continued growth in the coming years. Roughly 40% of Medicare beneficiaries are expected to participate in MA plans by 2028.[16] Increased recognition of the value FOX provides and out-of-the-box thinking that results in a greater willingness to contract with FOX will enable those who need it most to receive transformational care. This care may lead to improved function, a better quality of life and overall cost savings for the health care system.

## Looking to the future — Meeting the needs of older adults

The FOX model of care has a proven track record of more than two decades, offers substantial benefits for patients and payers and leaves those it serves highly satisfied. 99% of patients report they would recommend FOX and their provider to others. The analysis done by Optum proves this model of care can and does lead to successful outcomes.



With a growing aging and medically complex population, this approach to care makes sense for MA plans and CMS. Models of care need to be more inclusive of the sicker, more complex and centenarian communities and put the patients' needs first. As life expectancy increases, it is important to focus on the quality of those years, not just the quantity.

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If you are interested in hearing more about the FOX model of care, **please reach out to FOX leadership at livebetterlonger@foxrehab.org.** For general inquiries about FOX Rehabilitation, please **visit foxrehab.org.**

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