INTRODUCTION: CANCER EXERCISE TREATMENT

Published research has demonstrated exercise to be beneficial throughout the cancer care continuum. Its unprecedented benefits significantly improve survival and quality of life in most cancers, even extending survival in patients with metastatic disease. Exercise has also demonstrated significant value when administered prior to, during, and after cancer treatment. Contrary to other cancer treatments, patients experience virtually no harmful side effects. Exercise is actually able to mitigate most side effects of chemotherapy (cardiotoxicity, chemo brain, fatigue, nausea, vomiting, depression, cardiovascular deconditioning and musculoskeletal sarcopenia) while simultaneously treating most co-morbidities present in 70% of cancer patients. Major Stakeholders (ACSO, ACSM, ACS, NCCN) now recommend exercise to be given as a component of routine cancer treatment along with chemotherapy and radiation treatment.

New advances in chemotherapy are focusing on targeted treatment such as enhancing immune function through check point inhibitors, T-cell function and mobilization of natural killer cells. Pre-clinical studies indicate that many of the benefits of exercise occur through enhancement of the same pathways as targeted therapy. The impact exercise has on health care costs should be emphasized as well. Reductions in surgical complications, hospital lengths of stay, hospital readmissions, and cost of routine cancer care are direct results of adherence to exercise treatment.

As healthcare continues to shift to a value based care model, it’s projected that the savings incurred from implementing exercise treatment in cancer care will far outweigh the costs incurred to treat a patient without it. However, calculations of cost effectiveness cannot be limited to Return on Investment because the exemplary value of administering this treatment far exceeds the monetary expenses; increases in survival, physical and mental functioning, and QOL cannot be calculated as they are priceless in value.

NO medicine will ever replace or replicate this “wonder drug” called EXERCISE. There is no other single medicine that effectively treats a multitude of disease simultaneously. It is very cost efficient and addresses the specific physical and psychological needs of each patient. Since 2001, Cancer Foundation for Life® has safely and effectively prescribed exercise treatment to over 20,000 cancer patients through its FitSteps for Life® program.
**Program Summary**

FitSteps for Life® (FitSteps) is the pioneer and leader in cancer exercise treatment; prescribing individualized and structured exercise treatment specifically for cancer patients. It is the only known community-based program that is provided free for the lifetime of the patient. Clinical Exercise Specialists work directly with each patient to prescribe appropriate exercises based on their diagnosis and physical capabilities. Exercise prescriptions include aerobic exercise, resistance training, and core strengthening along with upper and lower body stretching techniques. Monitoring of metrics during exercise (pulse oximetry, blood pressure, heart rate, heart rate recovery, RPE) ensures a safe environment for patients.

**Mission Statement:** To enhance the quality of life and survival for individuals living with cancer.

**Vision Statement:** To incorporate individually tailored and supervised exercise programs as a standard of care in oncology practice.

**Fundamentals of the Program**

- Patient must be physician referred
- All adult patients are eligible, regardless of:
  - Type or stage of cancer
  - Degree of disability including wheelchair or oxygen dependency
  - Position in the cancer care continuum (prehabilitation, during or following treatment and palliation)
  - Presence of any combination or complexity of co-morbid conditions
- Program is supervised by FitSteps Clinical Managers who are certified *Cancer Exercise Trainers* through the American College of Sports Medicine
- Provided free for the lifetime of the patient

**Experience**

Over 21,000 referred patients have participated in almost 500,000 exercise sessions in the program. FitSteps for Life® is thriving in 16 locations throughout Dallas, Arlington, Greenville, Abilene, Waco, and East Texas.

**Program Software**

FitSteps utilizes a proprietary internet-based software to make all facilities “paperless” and provides a common database for all patient activity. This HIPAA compliant software keeps track of all patient contact and medical information, exercise session data and staff/patient interactions. For accurate assessment, exercise data is computed using Met Hour Equivalents (METs). The software also provides a resource for the accumulation and analysis of research data. This enables FitSteps to be networked without boundaries.
**RESEARCH**

FitSteps creates research studies to bridge the gap between the demonstrated irrefutable and scientific benefits of exercise and its lack of incorporation into routine clinical cancer treatment.

The July 2011 issue of the *Journal of Oncology Practice* published an article chronicling the development of the FitSteps program - its growth and potential. In November 2012, a second article was published reporting the research findings from an accumulation of data over a five year period. The articles demonstrate the effectiveness, safety and cost efficiency of a community-based exercise intervention in oncology patients.


*Clinical Journal of Oncology Nursing* published the most recent article, “Incorporating Exercise Into the Cancer Treatment Paradigm,” in December 2016.

FitSteps is currently collaborating with Texas Oncology, Baylor Scott & White, and UT Tyler to study the effects of exercise during the infusion of chemotherapy in breast cancer. The study began in May 2013. Patient accrual is complete. Interim analysis demonstrates a trend in improvement in fatigue, nausea, vomiting, quality of life and exercise adherence in those exercising the day of treatment.

**EDUCATION**

FitSteps acts as a preceptor for required clinical experience and provides internships to undergraduate and graduate students in Exercise Science and nursing careers. Students from area universities including UT Arlington, SMU, TCU, UT Tyler and North Texas State participate in these opportunities.

FitSteps is active in the community collaborating with healthcare providers, physicians, and cancer service organizations to promote exercise in cancer care.

**RECOMMENDED SPACE**

Recommended space depends on number of individuals to be served and configuration of allocated space. (Minimum of 600 sq. ft. suggested)
**GRANT OPPORTUNITY**

In 2016, Cancer Foundation for Life® launched a national expansion campaign and movement to incorporate its FitSteps for Life® exercise treatment into routine cancer care. Grant Funds have been made available to qualifying health care providers who are committed to incorporating and networking FitSteps into their cancer treatment facilities. These funds have been made available through private donations and will be awarded in amounts up to $100,000.00.

**GRANT CONTRACT AGREEMENT**

Cancer Foundation For Life® will provide a grant in the form of cash, equipment, software and services, including implementation, training and staff certification, provision of its FitSteps for Life® program and on-site consulting, to be allocated more specifically as follows:

a. Services for implementation of program (including training and certification of your staff);
b. Access and training for customized program software;
c. Equipment and supporting materials to provide the program;
d. Equipment maintenance and repair
e. Consulting services, including time and travel, to your facility by FitSteps for Life® management as necessary, to ensure quality of the FitSteps for Life® Program.

Any exercise equipment purchased with grant funds is the property of Cancer Foundation For Life®. In the event that you cease to provide FitSteps for Life®, the equipment shall remain property of Cancer Foundation For Life®. Cash contributions from the grant will be distributed based on invoices received from you. Once grant funds have been fully disbursed, you will agree to continue FitSteps for Life® for a minimum period of five (5) years.

*Final grant approval will require a signed agreement between grantor and grantees.*
WHY FitSTEPS FOR LIFE®?

Patient Benefits:
- Increases survival
- Reduces reoccurrence
- Improves Quality of Life
- Increases treatment effectiveness
- Mitigates treatment side effects
- Improves most co-morbidities
- ALL patients are eligible
- Free of charge for lifetime

Provider Benefits:
- Distinguishes provider as a leader in cancer exercise treatment
- Provides comprehensive treatment for cancer patients with improved outcomes
- Improves patient satisfaction and appreciation of care
- Demonstrates commitment to exemplary community-based cancer care
- Serves as a consulting resource for physicians, nurses and patients
- Provides research opportunities
- Provides employee access to wellness program; insurance incentives
- Gives cost savings with value based care reimbursement

Cost Benefits:
- Reduces healthcare costs
- Reduces hospital readmissions
- Reduces surgical complications
- Reduces costs of caring for co-morbidities
- Shortens hospital lengths of stay
- Mitigates treatment complications

FitSteps For Life®
An ESSENTIAL COMPONENT of cancer treatment
The evidence of the benefits of exercise is so compelling now that all cancer patients deserve this medicine. Together, we can successfully accomplish this and set the gold standard for cancer care.
First Year Costs

The FitSteps Estimated Budget shows an itemized summary of the first-year set up cost. Program equipment and personnel costs are included in the budget, if not already available. An annual renewal fee is also included. All costs are estimated and may be subject to change.

Program Fee $5,000

Sixteen years of dedicated time and effort to develop an exemplary exercise intervention for cancer treatment

⇒ Provide FitSteps program training in:
  • Exercise components
  • Use of monitoring metrics (pulse oximetry, heart recovery, B.P.)
  • Starting new patients
  • Patient progression
  • Managing co-morbidities (diabetes, heart disease, HBP, lung, arthritis, Parkinson’s, etc.)
  • Managing Special Needs Patients
    ◦ Assisted devices for ambulation (cane, walker)
    ◦ Wheel chair dependent
    ◦ Oxygen dependent
    ◦ Stroke
  • Instruction in providing group exercise classes

⇒ Research
  • Access to a large database of oncology patients and a network of institutions to collaborate in research

⇒ Availability of FitSteps staff for consultation and support
⇒ Program informational materials
⇒ License agreement to maintain integrity and quality of FitSteps program
⇒ Proprietary Software
  • Provide program and software updates
⇒ FitSteps clinical and administrative personnel to set up the program
⇒ Policy &Procedure Manual
⇒ Exercise & Nutrition Manual
⇒ Monitoring facility activity via custom reports
  • Number of physician referrals to each location
  • Number of patients exercise sessions at each location
  • MET Hour Equivalents of each patient’s exercise session
  • Names of physicians referring patients to each facility
⇒ Site visits by FitSteps Clinical Manager to your facility to monitor quality of service
### Program Equipment (if not already available)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treadmills:</strong></td>
<td><strong>$19,400.00</strong></td>
</tr>
<tr>
<td>Landice L9 club and L8 rehab treadmills with side rails</td>
<td>$4850.00 ea. x 4</td>
</tr>
<tr>
<td><strong>Elliptical:</strong></td>
<td><strong>$6,400.00</strong></td>
</tr>
<tr>
<td>Landice E9</td>
<td>$3,200.00 ea. x 2</td>
</tr>
<tr>
<td><strong>Seated Squat/Shoulder Press</strong></td>
<td><strong>$2,400.00</strong></td>
</tr>
<tr>
<td><strong>Multi-hip Machine</strong></td>
<td><strong>$4,500.00</strong></td>
</tr>
<tr>
<td><strong>Equipment Mats</strong></td>
<td><strong>$250.00</strong></td>
</tr>
<tr>
<td><strong>Stretching Benches</strong></td>
<td><strong>$600.00</strong></td>
</tr>
<tr>
<td><strong>Free weights</strong></td>
<td><strong>$220.00</strong></td>
</tr>
<tr>
<td><strong>Weight racks</strong></td>
<td><strong>$420.00</strong></td>
</tr>
<tr>
<td><strong>Bosu ball</strong></td>
<td><strong>$70.00</strong></td>
</tr>
<tr>
<td><strong>Foam stability pad</strong></td>
<td><strong>$30.00</strong></td>
</tr>
<tr>
<td><strong>Stretch bands (case of light, medium, heavy)</strong></td>
<td><strong>$1,200.00</strong></td>
</tr>
<tr>
<td><strong>Computer or iPad (internet access)</strong></td>
<td><strong>$1,000.00</strong></td>
</tr>
<tr>
<td><strong>Software user fee</strong></td>
<td><strong>$600.00</strong></td>
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<tr>
<td><strong>Gait belt</strong></td>
<td><strong>$15.00</strong></td>
</tr>
<tr>
<td><strong>Stool</strong></td>
<td><strong>$40.00</strong></td>
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<tr>
<td><strong>Pulse oximeters (2)</strong></td>
<td><strong>$360.00</strong></td>
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<tr>
<td><strong>Blood pressure cuffs (2)</strong></td>
<td><strong>$110.00</strong></td>
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<tr>
<td><strong>Commercial Delivery &amp; Installation</strong></td>
<td><strong>$2,500.00</strong></td>
</tr>
<tr>
<td></td>
<td><strong>$40,115.00</strong></td>
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</tbody>
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Equipment inventory needs for sale to patients:
- Stability balls
- Pedometers
- Fit Balls (9’’)
- Exercise and nutrition manuals
**Personnel Cost for Full Time Employee**

$35,000

A FitSteps facility operated by one Clinical Exercise Specialist open 5 days a week can annually accommodate minimally 500 new patient referrals and 8,000 patient visits. The ACSM C.E.T. certification is desired and preferred.

<table>
<thead>
<tr>
<th>First Year Estimated Cost</th>
<th>$80,115</th>
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<tbody>
<tr>
<td>• Program fee</td>
<td>$5,000</td>
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<tr>
<td>• Equipment</td>
<td>$40,115</td>
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<tr>
<td>• Full-time personnel (5 days)</td>
<td>$35,000</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Estimated Cost (after first year)</th>
<th>$40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Renewal of program fee</td>
<td>$5,000</td>
</tr>
<tr>
<td>• Full-time personnel (5 days)</td>
<td>$35,000</td>
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**Renewal of FitSteps for Life® Licensed Program Fee Includes:**
- Annual training of your staff
- Updates to Policy & Procedure manual
- Software updates
- Software IT Retainer fee
- Clinical and administrative support
- Monthly reports monitoring the facility activity
  - New patient referrals reports
  - Number of exercise session reports