Models of Care Delivery
Aligning Programs with Patient Needs

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Effective triage and referral: What’s needed?

- Ask
- Advise
- Assess
- Assist
- Arrange
Effective triage and referral: What’s needed?

Ask/Advise
Provider advice can support behavior change
Fisher et al BMJ, 2015

• 15,254 cancer survivors in UK National Health Service, 2010-2011

• Those who recalled advice from provider
  • more likely to be active
  • more likely to meet recommendations

Only 31% recalled receiving advice about PA from provider
Are Providers Asking/Advising?
Nyrop et al, Cancer, 2016

• Chart review of clinical encounters with early stage prostate, breast, colorectal cancer patients
• Identified documentation of inquiries or recommendations related to physical activity
• 55 oncology providers, 361 encounters
• Overall, 35% of the encounters included discussion of PA
Ask/Advise

Assess:
Physical condition

Assess:
Interests, experience
To consider before starting an exercise program

- Current activity level
- Sign/symptoms of certain disease
- Desired intensity level

For cancer survivors (Schmitz, MSSE, 2010)

- Fracture risk, lymphedema, neuropathy, ostomies
<table>
<thead>
<tr>
<th>Risk level of patient/survivor</th>
<th>Risk level of activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient/survivors experiencing cancer sx or side effects of treatment that could make exercise riskier.</td>
<td>Consult with physician prior to exercise</td>
</tr>
<tr>
<td>Patient/survivor at increased risk for symptoms/ side effects of treatment that could make exercise riskier (e.g., lymphedema)</td>
<td>Community/home based program</td>
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<tr>
<td>Patient/survivor with comorbidities in need of management (e.g., moderate hypertension)</td>
<td>Community/home based program</td>
</tr>
<tr>
<td>Post-treatment survivor, with comorbidities/symptoms that are known to benefit from physical activity (CVD, fatigue, constipation, metabolic syndrome, etc.)</td>
<td>Self-selected activity, self-monitoring</td>
</tr>
<tr>
<td>Post-treatment survivor, no/well-managed comorbidities, minimal treatment side effects</td>
<td>Self-selected activity, self-monitoring</td>
</tr>
<tr>
<td></td>
<td>Reduce sedentary behavior, light intensity</td>
</tr>
<tr>
<td>Risk level of patient/survivor</td>
<td>Patient/survivors experiencing cachexia, severe sarcopenia</td>
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</tr>
<tr>
<td>Morbidly obese (BMI ≥40, or ≥35 with obesity-related co-morbidities)</td>
<td>Community/home based program</td>
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<tr>
<td>Overweight or obese</td>
<td>Community/home based program</td>
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<tr>
<td>BMI &lt; 25</td>
<td>Community/home based program</td>
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</tbody>
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- **Healthy guidelines-based nutrition/eating behavior**
- **Weight loss program, 1-2 lb loss per week**
- **Weight loss program, targeted loss > 2 lbs per week**
- **Other, e.g., ketogenic diet**

**Degree of risk in activity**

Low ←-----------------------------------------------→ High
Ask/Advise

Assess:
- Physical condition

Assess:
- Interests, experience

Refer
Intervention Settings

• Home-based

• Community-based

• Clinic-based
Home-Based

- Print materials
- Videos
- Smart phone apps and wearables
- Social media interventions
- Telephone/video conference coaching
Community-Based
Active Living after Cancer: Lifestyle Physical Activity Intervention for Cancer Survivors

- Intervention group had higher self-efficacy, lower cons, increased use of some changes processes, increased stage of change
- QOL benefits: Increased physical functioning, improvements in general health, pain, & role limitations
- Received state funding to disseminate in the Houston community (CPRIT)

- At 6 months, survivors in the LPA intervention could walk farther in 6 minutes than controls (p=0.005).

![Bar chart showing feet walked by lifestyle intervention and standard care groups.](image)
Results in the community program

% with ≥ 150 Moderate-Vigorous PA min/week: 36.2% at Baseline; 65% at end of program
Clinic-Based

- Rehabilitation programs
- In-patient exercise and nutrition programs
- Nutrition programs, community dieticians
- Medical weight loss programs
Important program referral considerations

• Program quality and reliability – how to do providers know what to recommend

• Do we need cancer-specific programs
  • May depend on health condition of the survivor, the risk level of the activity, comfort level of the survivor
Ask/Advise
Assess:
Interests, experience

Assess:
Physical condition

Connect
Increasing uptake of tobacco quit line treatment

**Ask, Advise, Refer**  
N=5 clinics

- # Smokers: 10,772
- # referred/connected: 3,698
- # talked to quitline: 56
- # received quit line treatment: 53
- 0.5%

**Ask, Advise, Connect**  
N=5 clinics

- # Smokers: 7,237
- # referred/connected: 2,941
- # talked to quitline: 53
- # received quit line treatment: 1,060
- 14.6%
Putting the pieces together

• Need to take evidence-based programs and study models of implementation and dissemination
• In screening, consider patient health condition and interest/desires of patient
• Learn from those who have gone before...
• Think about more active models than referral only
• Move toward better/consistent program standards for a variety of programs