Identifying and Meeting the Medical and Psychological Needs of Cancer Survivors

Ann H. Partridge, MD, MPH
The following relationships exist related to this presentation:

• NONE

Off-label/Investigational Discussion

• NONE
Number of US Cancer Survivors:
1971-2010 in Millions

Based on data from Surveillance Epidemiology and End Results.
Current and Projected Cancer Survivors in US: Proportion by Site of Disease

As of January 1, 2016

**Male**
- Prostate: 3,306,760
- Colon & rectum: 724,690
- Melanoma: 614,460
- Urinary bladder: 574,250
- Non-Hodgkin lymphoma: 361,480
- Kidney & renal pelvis: 305,340
- Testis: 266,550
- Lung & bronchus: 238,300
- Leukemia: 230,920
- Oral cavity & pharynx: 229,880
- **Total survivors: 7,377,100**

**Female**
- Breast: 3,560,570
- Uterine corpus: 757,190
- Colon & rectum: 727,350
- Thyroid: 630,660
- Melanoma: 612,790
- Non-Hodgkin lymphoma: 324,890
- Lung & bronchus: 288,210
- Uterine cervix: 282,780
- Ovary: 235,200
- Kidney & renal pelvis: 204,040
- **Total survivors: 8,156,120**

As of January 1, 2026

**Male**
- Prostate: 4,521,910
- Colon & rectum: 910,190
- Melanoma: 848,020
- Urinary bladder: 754,280
- Non-Hodgkin lymphoma: 488,780
- Kidney: 429,010
- Testis: 335,790
- Leukemia: 318,430
- Lung & bronchus: 303,380
- Oral cavity & pharynx: 293,290
- **Total survivors: 9,983,900**

**Female**
- Breast: 4,571,210
- Uterine corpus: 942,670
- Colon & rectum: 885,940
- Thyroid: 885,590
- Melanoma: 811,490
- Non-Hodgkin lymphoma: 436,370
- Lung & bronchus: 369,990
- Uterine cervix: 286,300
- Kidney & renal pelvis: 284,380
- Ovary: 280,940
- **Total survivors: 10,305,870**


15 million survivors

20 million survivors
What is Survivorship?

• The National Cancer Institute’s (NCI) Office of Cancer Survivorship and the National Coalition for Cancer Survivorship’s (NCCS) definition of survivorship:
  • from the time of diagnosis and for the balance of life
  • Includes not only the individual with cancer, but also family and loved ones

• In practice: survivorship usually focuses on the period in the cancer continuum after the completion of early active treatment
Survivorship Spans the Cancer Journey

- Needs vary between individuals
- Needs vary within individuals along the continuum

Adapted from NCI, 2005
What are the medical and psychological needs of cancer survivors?

**Non-Cancer Related Medical Care**
- Health promotion/disease prevention
- Chronic care (e.g. diabetes)
- Unrelated cancer screening

**Cancer Related Medical Care**
- Surveillance/prevention of recurrence or new primary breast cancer
- Screening and treatment of complications of treatment
- Related cancer screening
- Counseling/support re: cancer related lifestyle recommendations and cancer-related health decisions

**Psychosocial Care**
- Attention to quality of life, fear of recurrence, depression, anxiety
- Financial burden
- Family/genetic counseling

**Coordination of Care Between Primary Care, Oncology, and Other Providers**

Nekhlyudov and Partridge, 2013
Survivorship begins at diagnosis when one considers...

• Every patient has a different experience with his/her cancer, with varying priorities, perceptions, anxieties, concerns, limitations, responsibilities, toxicities, risks, and sequelae of the disease and its treatments

• Good communication and exploration of an individual’s issues at each step along the way will lead to optimized care and quality of life for all patients
Impact of Life Stage

• **Younger patients:**
  • Undergoing education, career building
  • Young relationships, young children
  • Social supports
  • May be more focused on body image
  • Fertility and family planning
  • ?More psychosocial distress

• **Older patients:**
  • More comorbidities, concurrent meds, cardiac risks
  • Transportation issues
  • Social, nutritional, functional support needed

• **Other minority groups (e.g., men with breast cancer):**
  • Distinct issues from the pack
  • Limited data available
Many Survivors Feel “Lost in Transition”

• Survivorship care is a neglected phase of the cancer care trajectory

• Few guidelines on follow-up care

• Providers lacked education and training; patients had needs that were not being met

• Lack of coordination between cancer specialists and primary care
Survivorship Is a Relatively New Area of Focus

• Treating the cancer effectively has been such a focus

• Little research done historically to inform survivorship care
Increasing Focus of Research on Survivorship

Figure 1. Survivorship study designs by year

(Harrop et al. Cancer Epidemiol Biomarkers Prev. 2011;20:2042-72011)
A Growing Number of Guidelines-
New ASCO/ACS Cancer Survivorship Care Guidelines

American Cancer Society Prostate Cancer Survivorship Care Guidelines

American Cancer Society Colorectal Cancer Survivorship Care Guidelines

American Cancer Society/American Society of Clinical Oncology Breast Cancer Survivorship Care Guideline

American Cancer Society Head and Neck Cancer Survivorship Care Guideline
4 Major Areas of Focus in Cancer Survivorship

- Recurrence and new cancers
- Long-term and late effects
- Modifiable health behaviors
- Coordination of care
  - provider-provider
  - patient-provider
Surveillance, screening and prevention of recurrence and new cancers
To scan or not to scan
(or at least do some bloodwork!)

• Rationale for screening for recurrent cancer:
  • Detection of asymptomatic disease would improve morbidity or mortality
  • Lead to earlier additional testing and potential early intervention
  • Is cost-effective and safe in a population
  • Makes sense for that individual patient
Evidence for how breast cancer patients should be followed for recurrence

Randomized controlled trial of 1320 with stage I-III breast cancer

<table>
<thead>
<tr>
<th>Surveillance Strategy</th>
<th>Intensive history/PE</th>
<th>Standard history/PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every 3 months</td>
<td>✅ CXR, LFTs, bone scan, liver u/s</td>
<td>✅ as indicated</td>
</tr>
<tr>
<td>Regular mammography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% recurrences asymptomatic</td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td>% recurrences symptomatic</td>
<td>69</td>
<td>79</td>
</tr>
<tr>
<td>Time to recurrence</td>
<td>53.4 m</td>
<td>54.1 m</td>
</tr>
<tr>
<td>Overall survival (5 year)</td>
<td>80%</td>
<td>82%</td>
</tr>
</tbody>
</table>

Quality of life = =

Important lessons learned in screening for breast cancer recurrences

- Most (~75%) symptoms not related to recurrence
- Most (~75%) recurrences heralded by symptoms
  - Only a minority (< 25%) of recurrences are detected in asymptomatic patients
- Lab and radiology tests have significant false-positive rates
  ➔ excess evaluation and anxiety
- Patients can be educated about this
Evidence for CEA and CT Follow-up in Colorectal Cancer Survivors

1202 stage 1-3 dz randomized (2x2) to CT q 6-12 mos and/or CEA q3-6 mos

Primrose JN, et. al. JAMA 2014;311:263-270
Evidence for CEA and CT Follow-up in Colorectal Cancer Survivors

- Intensive follow-up by either CEA or CT increased the likelihood of detecting a recurrence that can be treated with curative intent.

- No advantage seen to combining both strategies.

- Absolute difference in the proportion of participants treated with curative intent was approximately 5% in the ITT analysis (8% in the “evaluable” subset).
ASCO Guideline Recommendations

• Medical history, physical examination, and CEA assay every 3-6 months for 5 years
  • 80% of recurrences occur during the first 2.0-2.5 years and 95% by 5 years

• CT imaging annually for 3 years
  • no justification for surveillance PET/CT scan testing

Meyerhardt et. al. J Clin Oncol 2013
New primary disease risk: update family history and re-visit genetics

• Survivorship care should entail updating family history and revisiting genetic issues
  • (re-) testing as needed

• Furthermore...
  • Barriers to testing at diagnosis may have diminished
  • Testing is evolving
  • Patient and systems level indications for testing are evolving

Prevention, Identification and Management of Long-term/Late Effects
Survivors Often Experience A Roller Coaster of Emotions

Isolation, Fear, Anger, Grief, Anxiety, Depression
Mental Health in Cancer Survivors

• Depression and anxiety in survivors
  • Associated with symptom distress, maladaptive coping
  • Depression associated with heightened risk for premature mortality (RR 1.22-1.39) and cancer death (RR 1.18)
  • Increased rates of suicide among populations of long-term breast and testicular cancer survivors

• Screen in your clinic

• Reassure, treat or refer as appropriate

• Guidelines from NCCN at www.nccn.org and from ASCO at www.asco.org

Andersen et al, JCO 2014
Local Therapy (Surgery and Radiation) Effects: Think Field/Site Specific Problems

- Pain, numbness, lymphedema, restricted motion or weakness
- Cellulitis, nerve damage, bone fracture, pneumonitis, lung fibrosis
- Functional, cosmetic or reconstruction changes
- Heart disease, sarcomas, skin and other second cancers, lung fibrosis
- Systemic effects from site-specific treatment (e.g., hypothyroidism, hypogonadism)
Systemic Therapy (Chemotherapy, Hormonal Therapy and Biologics): A Systems Approach
Effects of Androgen Deprivation Therapy

- Loss of libido
- Erectile dysfunction

ADT
Effects of Androgen Deprivation Therapy

- Cardiovascular morbidity
- Loss of libido
- Erectile dysfunction
- Cognitive decline
- Fatigue
- Altered body composition
- Metabolic syndrome
- Arterial stiffness
- Osteoporosis
- Skeletal fractures
Screening and Prevention of Long-term Effects

• HD or Lymphoma s/p chest irradiation-
  • 148 women with HD s/p chest RT age ≤ 35, at least 8 years prior
  • Followed for 3 years with annual mammogram and MRI
  • 63 biopsies in 45 patients (30%)
  • 18 of 63 biopsies (29%) showed malignancy
  • Sensitivity 63% for MRI; 68% for mammogram
  • Sensitivity for both MRI and mammogram together: 95%
  • All but 1 of the image detected malignancies were pre-invasive or sub cm and all were node negative

• Many studies ongoing- e.g.:
  • ACE inhibitor etc. for prevention of cardiac complications after xrt, anthracyline therapy
  • Low dose tamoxifen for prevention of breast cancer

(Ng et al, JCO 2013)
Management of Select Therapy Effects in Cancer Survivors

- Sexual dysfunction - ASK!
  - Often multifactorial
  - Treatment works

- Hot flashes
  - HRT if appropriate, SS/SNRIs, Gabapentin

- Neuropathy
  - Duloxetine, acupuncture

- Bone health
  - Screen patients in high risk groups, treat as needed

- Cardiovascular health and metabolic syndrome
  - Optimize cardiac risks, lipids
Fatigue

• Cancer-related fatigue (CRF)
  • Very common phenomenon among survivors

• Rule out and treat other causes of fatigue
  • Pain, malnutrition, hypothyroidism, anemia, insomnia, and depression, inactivity

• Rx:
  • Exercise, behavioral/psychotherapy
  • Complementary therapy
  • (Psychostimulants don’t seem to work!)

• Guidelines from NCCN at www.nccn.org and from ASCO at www.asco.org

Bower et al., JCO, 2014
Recommendations on Fertility Preservation in People Treated for Cancer

Eligible for proven fertility preservation method

Male:
- sperm cryopreservation

Female:
- Embryo cryopreservation
- Oocyte cryopreservation
- oophoropexy
- conservative gynecologic surgery

• Assessment of risk for infertility
• Communication with patient

• Patient at risk for treatment induced infertility
• Patient interested in fertility preservation options

Refer to specialist with expertise in fertility preservation

Investigational fertility preservation technique*
- Cryopreservation of testicular or ovarian tissue
*Clinical trial participation encouraged

2012

2015?

www.asco.org

Modified from Lee et al., J Clin Onc; 2006
POEMS Consort Diagram

257 Patients Randomized

131 Standard Chemotherapy
120 Eligible
9 withdrew consent; 6 hysterectomy/oophorectomy
113 Evaluable for Pregnancy, DFS & OS
14 deaths prior to 2 year f/u; 69 with missing FSH
69 Evaluable for Ovarian Failure

126 Chemotherapy plus goserelin
24 ineligible
113 Eligible
105 Evaluable for Pregnancy, DFS & OS
66 Evaluable for Ovarian Failure

Moore et al, ASCO 2014, NEJM 2015
# POEMS Ovarian Failure

## Ovarian failure at 2 years

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>One-sided</td>
<td>Two-sided</td>
</tr>
<tr>
<td>Univariate</td>
<td>0.30</td>
<td>0.10 – 0.87</td>
<td>p=.01</td>
</tr>
<tr>
<td>Stratified*</td>
<td>0.30</td>
<td>0.09 – 0.97</td>
<td>p=.02</td>
</tr>
<tr>
<td>Multivariate*</td>
<td>0.36</td>
<td>0.11 – 1.14</td>
<td>p=.04</td>
</tr>
</tbody>
</table>

*Accounting for age and regimen through stratification (“Stratified”) or covariate (“Multivariate”) adjustment, respectively

Moore et al, ASCO 2014, NEJM 2015
POEMS Pregnancy

<table>
<thead>
<tr>
<th></th>
<th>Standard Chemotherapy n=113</th>
<th>Chemotherapy + Goserelin n=105</th>
<th>Adjusted OR</th>
<th>Adjusted P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempted pregnancy</td>
<td>18 (16%)</td>
<td>25 (24%)</td>
<td></td>
<td>p=.12</td>
</tr>
<tr>
<td>Achieved pregnancy</td>
<td>12 (11%)</td>
<td>22 (21%)</td>
<td>2.45</td>
<td>p=.03</td>
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<tr>
<td>Patients with ≥ 1 delivery</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Delivery or ongoing pregnancy</td>
<td>8 (7%)</td>
<td>16 (15%)</td>
<td>2.51</td>
<td>p=.05</td>
</tr>
<tr>
<td></td>
<td>10 (9%)</td>
<td>19 (18%)</td>
<td>2.45</td>
<td>p=.04</td>
</tr>
<tr>
<td>Total number of babies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ongoing pregnancies</td>
<td>12</td>
<td>18</td>
<td></td>
<td></td>
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<tr>
<td>Total adverse events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscarriages</td>
<td>3</td>
<td>5</td>
<td></td>
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<tr>
<td>Elective termination</td>
<td>5</td>
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<tr>
<td>Delivery complication</td>
<td>2</td>
<td>2</td>
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Moore et al, ASCO 2014, NEJM 2015
Ovarian Suppression Through Treatment: 9 RCTs

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Rawady</th>
<th>Sverrisdottir</th>
<th>Del Mastro</th>
<th>Leonard</th>
<th>Gerber</th>
<th>Munster</th>
<th>Elgindy</th>
<th>SWOG 0230</th>
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<tbody>
<tr>
<td>Patients (n)</td>
<td>80</td>
<td>285</td>
<td>281</td>
<td>227</td>
<td>60</td>
<td>49</td>
<td>100</td>
<td>257</td>
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<tr>
<td>Study type</td>
<td>Phase II RCT</td>
<td>Substudy from combined analysis of 4 RCTs using core protocol</td>
<td>Phase III RCT</td>
<td>Phase III RCT (abstract only)</td>
<td>Phase II RCT</td>
<td>Phase III RCT</td>
<td>Phase II RCT</td>
<td>Phase III RCT</td>
</tr>
<tr>
<td>Treatment arms</td>
<td>CT + goserelin vs CT</td>
<td>TAM^ +/- CT Goserelin +/- CT Goserelin/TAM +/- CT TAM +/- CT</td>
<td>CT + triptorelin vs CT</td>
<td>CT + goserelin vs CT</td>
<td>CT + triptorelin vs CT</td>
<td>‘Delayed CT’: CT + triptorelin vs CT ‘Early CT’: CT + triptorelin + cetorelix vs CT</td>
<td>CT + goserelin vs CT</td>
<td></td>
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</tbody>
</table>

- Meta-analysis planned
- No hint of a safety problem
- Reasonable to consider as an additional option for preservation of menstrual functioning and fertility

<table>
<thead>
<tr>
<th>Premenopausal definition</th>
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<td>%ER+</td>
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<td>Marker of fertility preservation</td>
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<td>Primary endpoint</td>
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<td>Median T/u [range]</td>
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<td></td>
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<tr>
<td>Rate of recovery of menstruation</td>
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</tbody>
</table>
| 90% (goserelin) vs. 33% (control), p<0.001 | At 6 months post CT cessation 36% (goserelin) vs. 10% (control), 13% (TAM), 7% goserelin + TAM), p<0.006 | NR | No statistically significant difference between treatment arms (further details not published) | 70% (goserelin) vs. 56.7% (control) | 88.5% (triptorelin) vs. 90.5% (control) Trial stopped early for futility | At 12 months post CT Delayed CT: 72% (triptorelin) vs. 52% (control), p<0.15 Early CT: 60% (triptorelin + cetorelix) vs. 48% (control), p<0.39 | 8% (goserelin) vs. 22% (control) | Trial stopped prior to full accrual due to funding issues

Pregnancies

- No data on pregnancies
- No data on pregnancies
- 3 pregnancies in triptorelin arm, 1 in control arm
- No data on pregnancies
- 1 pregnancy in each group
- 2 pregnancies in control arm
- 3 pregnancies, one in early CT + triptorelin + cetorelix arm, 1 in early CT control arm
- 21% vs. 11% pregnancy favouring goserelin

Adapted from N. Turner et al., Ann Oncol 2013
Is it safe to become pregnant after breast cancer?: Matched analysis

Outcomes for those who became pregnant were not compromised, ER+ or ER-
Pregnancy after Breast Cancer— Is it Safe?
The Bottom Line:

• No clear adverse effect of subsequent pregnancy on prognosis from retrospective data
  • (caveat: “healthy mother” bias)

• Conventional wisdom is to wait until >2 years, to get through early risk of recurrence period or receive endocrine therapy

• No data to suggest harm in pregnancy sooner

• Ultimately the decision to get pregnant is a very personal one
Pregnancy Outcome and Safety of Interrupting Therapy for women with endocrine responsive (I)VE Breast Cancer

IBCSG 48-14 / BIG 8-13
ALLIANCE # A221405

POSITIVE TRIAL

INTERNATIONAL PI: OLIVIA PAGANI
NORTH AMERICAN PI: ANN PARTRIDGE
The POSITIVE Trial: Endocrine therapy interruption for pregnancy in breast cancer patients

• Phase II trial designed to evaluate safety and pregnancy outcomes of interrupting ET for young women with ER+ disease who desire pregnancy

• Enroll 512 women, <42, premenopausal, have completed between 18-30 months of ET

• Study participants come off endocrine therapy for up to 2 years for a pregnancy attempt, restart hormonal therapy

• Outcomes: disease, reproductive, psychosocial
Improving Health Behaviors: Can we capitalize on the teachable moment?
Energy balance matters for cancer survivors

• Risk of weight gain, obesity and metabolic syndrome in breast, colorectal, prostate, testicular, pediatric cancer survivors
  • Effects cancer outcomes in breast, colorectal and prostate survivors
  • Effects cardiovascular and overall mortality

• Fortunately …
  • Physical activity, diet and attention to diabetic and cardiovascular risk factors likely helps
  • Associated with lower risk of cancer recurrence and death

Ligibel and Meyerhardt, UpToDate, last accessed 3-30-15
Physical Activity and Breast Cancer Survivorship: Results from the Nurses’Health Study

MET-Hrs/week
- 3>
- 3-8.9
- 9-14.9
- 15-23.9

Dietary Patterns and Stage III Colon Cancer

The graph illustrates the hazard ratio for cancer recurrence or death across quintiles of dietary pattern. The blue line, representing a prudent diet, shows a consistently lower hazard ratio, while the red line, representing a Western diet, increases steadily with higher quintiles, reaching a hazard ratio of 3.9 in the 5th quintile, with a trend of $P < 0.001$.

Other data suggest high glycemic load particularly risky

WINS Study: Impact of Low-fat Diet on RFS in Breast Cancer Survivors

<table>
<thead>
<tr>
<th></th>
<th>Diet</th>
<th>Control</th>
<th>HR</th>
<th>95% CI</th>
<th>P-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Events</td>
<td>96/975</td>
<td>181/1462</td>
<td>0.76</td>
<td>0.60 to 0.98</td>
<td>.034</td>
</tr>
</tbody>
</table>

% With Relapse-Free Survival Events

Years

Diet  Control

Womens’ Healthy Eating & Living Study (WHEL)

- RCT to ↑ fruit, vegetable, and fiber among breast cancer survivors - 1537 intervention + 1551 control
  - Monthly telephone counseling and group sessions

Observational studies: Soy, Alcohol, Marine fatty acids
Banked bloods from years 1,2,3,4,5

American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Survivors

• Achieve and maintain a healthy weight
  • If overweight or obese, limit consumption of high-calorie foods and beverages and increase physical activity to promote weight loss

• Engage in regular physical activity
  • Avoid inactivity and return to normal daily activities as soon as possible following diagnosis
  • Aim to exercise at least 150 minutes per week.
  • Include strength training exercises at least 2 days per week.

• Achieve a dietary pattern that is high in vegetables, fruits, and whole grains
  • Follow the American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention

Rock et al., CA Journal for Clin 2012
Future Directions

• Prospective exercise and weight loss studies ongoing

• Prospective RCTs ongoing testing NSAIDS
Modifiable Health Behaviors for Cancer Survivors

Habits to DROP or DECREASE

- Tobacco
- Alcohol
- High risk sexual behavior
- Illicit drug use

Habits to MAINTAIN OR INCREASE

- Physical activity
- Prudent diet
- Weight management

COMMON SENSE!
Coordination of Care: How can we deliver all of this care effectively and efficiently?
# Follow-Up Care Standards for Breast Cancer
## What Do You Need to Consider for Every Patient?

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>Standard of Practice / Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visit Frequency</strong></td>
<td>Diagnosis</td>
</tr>
<tr>
<td>Diagnosis History, exam +/- lab with ?</td>
<td>History, exam +/- lab with ?</td>
</tr>
<tr>
<td><strong>Screening &amp; Imaging—</strong></td>
<td>Routine lab work</td>
</tr>
<tr>
<td>Disease and risk-based</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Screening &amp; Imaging—</strong></td>
<td>Screening for Recurrence</td>
</tr>
<tr>
<td>Disease and risk-based</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Screening &amp; Imaging—</strong></td>
<td>Bone density</td>
</tr>
<tr>
<td>Disease and risk-based</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Site Specific Screening</strong></td>
<td>Echocardiogram</td>
</tr>
<tr>
<td>Site Specific Screening</td>
<td>If issue</td>
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<tr>
<td><strong>Site Specific Screening</strong></td>
<td>Mammogram</td>
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<td>Site Specific Screening</td>
<td>If remaining breast tissue</td>
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<tr>
<td><strong>Site Specific Screening</strong></td>
<td>Breast MRI</td>
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<tr>
<td>Site Specific Screening</td>
<td>If high risk</td>
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<tr>
<td><strong>Counseling</strong></td>
<td>Genetics</td>
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<td>Counseling</td>
<td>Fertility and contraception</td>
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<td><strong>Counseling</strong></td>
<td>Psychosocial</td>
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<td>Counseling</td>
<td>Health behaviors</td>
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<td><strong>Counseling</strong></td>
<td>Sexual functioning</td>
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<td>Counseling</td>
<td>Calcium/Vitamin D</td>
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<tr>
<td><strong>Disease &amp; Site Specific Counseling</strong></td>
<td>Lymphedema, chemobrain, hot flashes, menopausal symptoms</td>
</tr>
<tr>
<td><strong>Follow-up</strong></td>
<td>Primary Care</td>
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<tr>
<td>Follow-up</td>
<td>Vaccine schedule</td>
</tr>
<tr>
<td>Follow-up</td>
<td>GYN follow up</td>
</tr>
</tbody>
</table>
## Follow-Up Care Standards: When and with whom?

<table>
<thead>
<tr>
<th>Type of Cancer</th>
<th>Treatment Summary &amp; Care Plan</th>
<th>Shared Oncology Care (MD &amp; NP, PA visits)</th>
<th>Disease Center Survivorship Visits NP/PA only</th>
<th>Discharge to PCP **</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER -</td>
<td>1st or 2nd visit after completing active treatment</td>
<td>every 3-6 months for 5 years*</td>
<td>2-5 years</td>
<td>at 5 years</td>
</tr>
<tr>
<td>ER +</td>
<td>1st or 2nd visit after completing active treatment</td>
<td>every 6-12 months while on hormone*</td>
<td>yearly forever</td>
<td>N/A</td>
</tr>
<tr>
<td>Prostate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Risk</td>
<td>1st F/U post completion of XRT/Surg</td>
<td>1st year</td>
<td>4 years</td>
<td>At year 5</td>
</tr>
<tr>
<td>High Risk</td>
<td>1st F/U post completion of XRT/Surg</td>
<td>1-2 years</td>
<td>8-9 years</td>
<td>At year 10</td>
</tr>
<tr>
<td>GI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal</td>
<td>1st F/U post completion of treatment</td>
<td>2 years</td>
<td>3 years</td>
<td>At year 5</td>
</tr>
</tbody>
</table>
### Treatment Summaries & Survivorship Care Plans

- Can help to communicate your tailored needs

- New tools, apps
  - ASCO
  - ACS

---

#### Breast Cancer Treatment Plan

**The Breast Cancer Treatment Plan provides a brief record of major aspects of breast cancer adjuvant treatment. This is not a complete patient history or comprehensive record of intended therapies.**

**Treatment Plan report date:** 02/20/2011

**Patient name:** Number Five Patient

**Patient ID:** 00007

**Support contact name:** Husband of Patient

**Patient phone 1:** 123-456-7890

**Support contact relationship:** spouse

**Patient date of birth:** 1/1/1955

**Support contact phone:** 123-456-7890

**Medical oncologist name:** Singer Norris

---

**BACKGROUND INFORMATION**

- **Hysterectomy status:** No hysterectomy
- **Menstrual status:** Last menstrual period more than 1 year before diagnosis date
- **Age of menopause:** 52

---

**BCR DIAGNOSIS INFORMATION**

- **ICD-9 CM code:** 174.3
- **Date of diagnosis:** 01/10/2011
- **Age at diagnosis:** 55
- **Breast cancer site:** Right
- **Tumor type:** Infiltrating ductal
- **Breast cancer surgical status:** Local excision
- **Lymph node evaluation:** Complete
- **Surgical resection results:** Tumor resected, clear margins
- **Number lymph nodes removed:** 14
- **Number lymph nodes positive:** 3
- **Pathologic T-stage:** T1a
- **Pathologic N-stage:** N1
- **AJCC stage at diagnosis:** I
- **ER status:** Undetectable
- **PR status:** PR negative

---

**TREATMENT PLAN**

**ECG performance status:** 1

**Comorbid conditions:** Dementia, Diabetes

**Chemotherapy**

- **Chemotherapy planned:** Adjuvant chemotherapy
- **Planned chemotherapy start date:** 02/01/2011
- **Chemotherapy regimen planned:** CAF Chemotherapy: Cyclophosphamide 100 mg/m2 PO days 1, 8, 15, and 22; Adriamycin 50 mg/m2 IV days 1 and 8; and Fluorouracil 600 mg/m2 IV days 1 and 8 given every 28 days for 6 cycles
- **Possible side effects of this regimen:**
  - X Hair loss
  - X Nausea/Vomiting
  - X Neuropathy
  - X Low blood count
  - X Fatigue
  - X Cardiac symptoms
  - X Other

**Trastuzumab**

- **Trastuzumab planned:** No

**Hormonal Therapy**

- **Hormonal therapy planned:** No
- **Planned start date:**
- **Hormonal therapy type:**

**Radiation Therapy**

- **Radiation therapy:**
  - **Radiation start date:** 01/20/2011
  - **Radiation end date:** 01/30/2011

**Provider Type**

- **Medical oncologist:** George
  - **First Name:** George
  - **Last Name:** Onswell
  - **Contact Info:** (123) 654-0987

**Comments**

- Discussed Mrs. Patient’s concerns about the implication for her three daughters
ACS Cancer Survivorship Care Guidelines: Clinician Mobile App
In Conclusion

• Enormous progress has been made yet many challenges (opportunities!) remain in optimizing cancer survivorship care

• Awareness of what does help our patients and good communication with them and their other providers are both critical factors

• Increased focus on the importance of the survivorship phase of care in care and research, along with improvements in technology and self-management should lead to better outcomes
Thank you!
Questions & Answers