Bringing PCPs ‘Back’ into Cancer (Survivorship) Care

Cancer Policy & Advocacy Team
June 23, 2023

Kevin C. Oeffinger, MD, FASCO
Director, DCI Center for Onco-Primary Care
Professor, Department of Medicine
• Historical perspective
• Current status of models of care
• Barriers to care
• Onco-Primary Care
• How to partner with your PCP
Historical Perspective

• Survivorship clinics for pediatric cancer survivors implemented in the 1980s – 1990s
• UT Southwestern – After Cancer Experience Young Adult Program - 1994
IOM Reports – 2003, 2005

1. Childhood Cancer Survivorship
   - Improving Care and Quality of Life

2. From Cancer Patient to Cancer Survivor
   - Lost in Transition
Models of Care

Concepts:
- Shared Care
- Risk-Stratified Care
- Role of the PCP
Integrating primary care providers in the care of cancer survivors: gaps in evidence and future opportunities

Larissa Nekhlyudov, Denalee M O’Malley, Shawna V Hudson

Since the release of the Institute of Medicine report: From cancer patient to cancer survivor: lost in transition, in 2005, there has been a national call in the USA to provide coordinated emphasis on the role of primary care. Several models of primary care providers (PCPs) as receiving cancer survivors who are transitioning from specific types of information from oncology-based care (e.g., survivorship team). In this Series paper, we assess the primary care literature, with a specific focus on strategies that aim to improve care in different settings. We offer insights differentiating PCPs’ expertise and how this expertise could be used. We provide recommendations for educational and organizational change that might advance the integration of PCPs in the care of cancer survivors.
Advanced Practice Providers and Survivorship Care: They Can Deliver

Bridgette Thom, MS¹; Annelies H. Boekhout, PhD, RN²; Stacie Corcoran, RN¹; Roberto Adsuar, MS¹; Kevin C. Oeffinger, MD³; and Mary S. McCabe, RN¹

J Oncol Pract 15:e230-e237. © 2019 by American Society of Clinical Oncology

- Advanced Practice Providers seeing survivors; clinic embedded in cancer disease groups
- **Pros**: large volume (10K-12K visits/yr), cost-effective, all cancer groups, high-quality care, SCP for patient and PCP
- **Cons**: ‘Moving the mouse down the snake’, space, lack of a primary care network, 1000 survivors = 1000 PCPs
Optimizing cancer survivorship in primary care: patient experiences from the Johns Hopkins Primary Care for Cancer Survivors clinic

Youngjee Choi¹, Elaina Parrillo², Jennifer Wenzel²,³,⁴ Victoria F. Grabinski³, Aamna Kabani³, Kimberly S. Peairs¹,⁴

- PCPs seeing survivors in their regular clinics
- **Pros**: integrated survivorship care with routine care, high-quality care, development of an SCP for patient
- **Cons**: only 6 general internists; low volume (400+/yr or about 1-2 survivors per PCP per week), predominantly breast cancer survivors
Oncologist perspective:
• Like to see ‘healthy’ survivors
• Trust bond with patient
• Difficulty finding a PCP for a survivor
• Lack of risk-stratified approach (ie, one-size fits all)
• Systems still operating in a volume-based manner (ie, RVUs)

PCP perspective:
• ‘Black hole’ of cancer care
• Poor communication from oncology team
NOT THIS WAY

- biopsy on 3/14 and this demonstrated invasive ductal carcinoma, grade 3, ER/PR negative, Her2 overexpressed (3+ by IHC).
- established care with Dr. ___ on 4/17 and underwent MRI breast, showing 2.7cm mass right breast and suspicious nodes
- tentatively scheduled for bilateral mastectomy and reconstruction, but when her biomarkers returned as her2 positive disease, this was put on hold to further consider the utility of neoadjuvant chemotherapy.
- 4/14 Axilla core biopsy + for metastasis to node.
- 4/14 staging studies demonstrated liver lesion, favoring focal fat infiltration
- liver MRI notable for hemangioma, no other concerning lesions
- 5/14-8/14 Neoadjuvant TCHP chemotherapy done; continue Herceptin only through 4/15
- 9/14 Bilateral Mastectomies with complete pathological response ypT0ypN0 (0/16); reconstruction with tissue expanders.
- Adjuvant radiation 9/14- 10/14
- continuing adjuvant herceptin through 4/2015
Oncologist perspective:

• Like to see ‘healthy’ survivors
• Trust bond with patient
• Difficulty finding a PCP for a survivor
• Lack of risk-stratified approach (ie, one-size fits all)
• Systems still operating in a volume-based manner (ie, RVUs)

PCP perspective:

• ‘Black hole’ of cancer care
• Poor communication from oncology team
• Complexity of care
• Systems are still operating in a volume-based manner
PCPs do not consider survivorship a phase; rather, they often think of their patient in the context of their life continuum, in which cancer was just one of the major events in their life. (paraphrased by Oeffinger)
• History of cardio-oncology (or onco-cardiology)
• Onco-fertility, Onco-nephrology
• Genesis of Onco-Primary Care
Aims of Center

1. Deliver evidence-based, patient-centered, personalized health care across the cancer continuum by enhancing the interface between cancer specialists and primary care clinicians;

2. Conduct innovative research with cutting-edge technology that can be translated to the community setting;

3. Train and educate clinicians and researchers to extend this mission; and

4. Generate policy to lead to practice redesign
Onco-Primary Care: The next frontier in value-based cancer care
Zafar SY, Patierno S, McLellan MB, Shah K, Oeffinger KC
# Duke Center for Onco-Primary Care

**DCI**
- Duke Durham, North, & Raleigh
- Duke Cancer Network
- WakeMed / CancerCare+

## DCI Onco-Primary Care

- Kevin Oeffinger, MD
- Cheyenne Corbett, PhD
- Leah Zullig, PhD
- John Ragsdale, MD
- Kevin Shah, MD, MBA
- Susan Dent, MD
- Danielle Brander, MD
- Rebecca Shelby, PhD
- Tamara Somers, PhD

- 28 members (virtual)
- 6 departments
- 8 current R01s

## DPC

- 40 clinics across 7 counties
- 300 providers
- 300,000 unique patients
Leadership at DCI Center for Onco-Primary Care
Duke Primary Care and Duke Primary Care Consortium

300 primary care providers
40 practice sites
7 counties
All on same EHR (Epic)
Existing research infrastructure (Practice-Based Research Network - PBRN)
DCI Center for Onco-Primary Care

Distributed Care Model

Duke Primary Care
(300 primary care physicians in 40 sites across 7 counties)

Onco-champions primary care physician
### ‘Screenable’ Cancers in the U.S.

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Cases/yr</th>
<th>% of total</th>
<th>% of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>246,660</td>
<td>14.6%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Colorectal</td>
<td>134,490</td>
<td>8.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Cervical</td>
<td>12,990</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Prostate</td>
<td>180,890</td>
<td>10.7%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Lung</td>
<td>224,390</td>
<td>13.3%</td>
<td>26.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>47.4%</strong></td>
<td><strong>46.7%</strong></td>
</tr>
</tbody>
</table>
U.S. Cancer Screening Rates – 2019-2020

ACS Facts and Figures, 2019-2020
EHR-BASED RISK-STRATIFIED PROSTATE CANCER SCREENING

- Screen Q2 Years
- PSA < 1.5 ng/mL and High risk (AA**)
- PSA ≥ 1.5 ng/mL
- PSA < 6.5 ng/mL
- Screen Q2 Years
- PSA < 3 ng/mL
- PSA ≥ 3 ng/mL
- Refer to Multi-Disciplinary Prostate Screening Clinic

- PSA < 1.5 ng/mL and Average risk
- PSA < 3 ng/mL
- PSA ≥ 6.5 ng/mL
- PSA ≥ 3 ng/mL
- PSA < 6.5 ng/mL
- 70-75

40-49*

Baseline PSA (middle gray circle)

Refer to Multi-Disciplinary Prostate Screening Clinic

INFORMED DECISION
Implementation Resulted in Improved Screening

Change in PSA Testing Pre-Post February 22, 2017

Without increasing total number of PSAs

Pre-implementation: 27,146
Post-implementation: 27,498

% up-to-date increased in all clinics

• Problem: increased referrals to urology and an increasing time to evaluation (>90 days)
• Pilot: elevated PSA clinic
  – Staffed by onco-primary care APPs
  – Men with PSA <10 referred by Duke Primary Care (DPC)
  – Virtual visit to biopsy or return to primary care
• In first 12 months:
  – Average time to (virtual) visit = 14 days
  – 209 men – 15% with prostate ca (26/32 w Gleason ≥7)
  – Average time for urology visit (PSA >10) = 46 days
  – Very positive responses from men and from DPC
• Patients with a suspicious imaging study but without a pathologic diagnosis
• eConsult to APP for (virtual) evaluation and scheduling IR biopsy
• Fast track to appropriate Oncology team
The PATHFINDER Study: Assessment of the Implementation of an Investigational Multi-Cancer Early Detection Test into Clinical Practice


Cell-Free DNA–Based Multi-Cancer Early Detection Test in an Asymptomatic Screening Population (NHS-Galleri): Design of a Pragmatic, Prospective Randomised Controlled Trial

Richard D. Neal 1,*, Peter Johnson 2, Christina A. Clarke 3, Stephanie A. Hamilton 4, Nan Zhang 3, Harpal Kumar 4, Charles Swanton 5,6,8 and Peter Sasieni 7,8
Process Overview of Multi-Cancer Early Detection With Galleri® Test

Cancer can be anywhere: using a targeted methylation, next-generation sequencing (NGS)-based assay analyzing cfDNA and machine learning to detect cancer and predict cancer signal origin.

cfDNA, cell-free DNA. *Bisulfite treatment; targeted probes pull out fragments matching regions of interest.
The Galleri® test does not detect all cancers and should be used in addition to routine cancer screening tests recommended by a healthcare provider.
Galleri is a registered trademark of GRAIL, LLC.
### Key Performance Features of Multi-Cancer Early Detection Test

**Demonstrated in CCGA substudy 3**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 50</td>
<td>MCED test detected a cancer signal across more than 50 AJCC cancer types</td>
</tr>
<tr>
<td>44%</td>
<td>Positive predictive value&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>0.5%</td>
<td>False-positive rate</td>
</tr>
<tr>
<td>41%</td>
<td>Sensitivity stages I-III for all cancer&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>68%</td>
<td>Sensitivity stages I-III for 12 prespecified cancers representing ⅔ of cancer mortality in US</td>
</tr>
<tr>
<td>89%</td>
<td>Rate of cancer signal origin predicted correctly&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Estimated values were adjusted to SEER (Surveillance, Epidemiology, and End Results) cancer incidence and stage distribution in the 50–79 years age group. Including missing stage and cancer classes that do not have staging per AJCC staging manual.  
<sup>b</sup>For cancer participants with a positive cancer signal.  
<sup>c</sup>Corpus uteri carcinoma and carcinosarcoma, Corpus uteri sarcoma.  
<sup>d</sup>Corpus uteri carcinoma and carcinosarcoma; Corpus uteri sarcoma.  
<sup>e</sup>Esophagus and esophagogastric junction.  
<sup>f</sup>Distal bile duct; Perihilar ducts; Intrahepatic bile ducts.  
<sup>g</sup>Neuroendocrine tumors of the appendix; Neuroendocrine tumors of the colon and rectum; Neuroendocrine tumors of the pancreas.  
<sup>h</sup>HPV-mediated (p16+) oropharyngeal cancer.  
<sup>i</sup>Oropharynx (p16<sup>-</sup>) and hypopharynx.  
<sup>j</sup>Ovary, fallopian tube and primary peritoneal carcinoma.  
<sup>k</sup>Plasma cell myeloma and plasma cell disorders.  
<sup>l</sup>Soft tissue sarcoma: of the abdomen and thoracic visceral organs; of the head and neck; of the retroperitoneum; of the trunk and extremities; unusual histologies and sites.  
<sup>m</sup>USPSTF A, B, or C rating.

**A cancer signal detected across > 50 cancers, including unscreened cancers such as:**

- Anus
- Corpus uteri (2 types<sup>d</sup>)
- Esophagus<sup>e</sup>
- Exocrine pancreas
- Gallbladder
- Hodgkin and non-Hodgkin lymphoma
- Bile duct (3 types<sup>f</sup>)
- Kidney
- Larynx
- Leukemia
- Liver
- Melanoma of the skin
- Malignant pleural mesothelioma
- Merkel cell carcinoma
- Nasopharynx
- Neuroendocrine (3 types<sup>g</sup>)
- Oral cavity
- Oropharyngeal<sup>h</sup>
- Oro- and hypopharynx<sup>i</sup>
- Ovary<sup>j</sup>
- Plasma cell myeloma<sup>k</sup>
- Renal pelvis and ureter
- Soft tissue sarcoma (5 types<sup>l</sup>)
- Small intestine
- Stomach
- Testis
- Urinary bladder
- Vagina
- Vulva

**Recommended screening programs**

- Breast
- Cervix uteri
- Colon and rectum
- Lung
- Prostate

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**PATHFINDER | Key Performance Features of Galleri**

**Galleri (Refined MCED Test)**
(prespecified analysis reanalyzed blood samples)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer signal detected</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Specificity</td>
<td>99.5%</td>
<td></td>
</tr>
<tr>
<td>Positive predictive value</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Accuracy of top two cancer signal</td>
<td>88%</td>
<td>origin prediction</td>
</tr>
<tr>
<td>Stage I–III (among 21 detected new</td>
<td>67%</td>
<td>cancers)</td>
</tr>
<tr>
<td>cancers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage I–II (among 21 detected new</td>
<td>38%</td>
<td>cancers)</td>
</tr>
</tbody>
</table>

26 cancers diagnosed among 25 true positives, including cancers not commonly screened

- **Distant recurrences**
  - Breast (n=5)

- **New cancers**
  - Colon or rectum (n=2)
  - Endometrium (uterus) (n=1)
  - Head and neck (n=2)
  - Liver or Bile-duct (n=2)
  - Lung (n=1)
  - Lymphoid leukemia (n=1)
  - Lymphoma (n=4)
  - Ovary, peritoneum, or fallopian tube (n=2)
  - Pancreas (n=1)
  - Plasma cell neoplasm (n=1)
  - Prostate (n=1)
  - Sarcoma (n=1)
  - Small intestine (n=1)
  - Waldenstrom macroglobulinemia (n=1)

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US-GRL-2200104
PATHFINDER 2
A prospective, multicenter, interventional study of MCED test, with returned results in North American Healthcare Systems

**Study Objectives**

**Primary Objectives**
- Evaluate the safety of the MCED test in terms of diagnostic testing triggered by the MCED test result
- Evaluate performance of the MCED test in individuals eligible for cancer screening

**Study Design**

- Participants age ≥50 years recruited from ~30 North American Institutions
- Blood drawn/processed and MCED test report generated
- Cancer signal not detected: Patient informed of MCED result; outcomes followed
  - Cancer signal detected: Patient informed of MCED result; diagnostic follow-up procedures (per protocol based on CSO)
  - No cancer identified: Cancer identified
  - Diagnostic resolution and data capture

CSO, cancer signal origin; MCED, multi-cancer early detection; PET-CT, positron-emission tomography-computerized tomography.

*aAll participants will be actively followed by enrolled institution for three years to assess cancer status and collect participant-reported outcomes.
*bClinical information including but not limited to cancer type, pathologic, imaging and clinical staging information will be captured.

US-GRL-2200068
Probability of death from breast cancer or other causes among women age 50 and older with ER+ early stage breast cancer
SEER: 1988-2001


Percent of women with early stage breast cancer and a cardiovascular risk factor


Importance of Non-Cancer Comorbidities
Percent of breast cancer survivors adherent to their statin therapy prior to and following early stage breast cancer diagnosis and treatment (Group Health 1990-2008, N=4,221 women)
Percent of breast cancer survivors adherent to their statin therapy prior to and following early stage breast cancer diagnosis and treatment (Group Health 1990-2008, N=4,221 women)

Improved adherence was associated with comorbidity management by a PCP

Nonadherence to adjuvant hormonal therapy in women with early stage breast cancer

47-year-old breast cancer survivor

- Diagnosed at age 42
- Invasive ductal carcinoma
- ER- PR- HER2+
- T2N1
- Chemotherapy
  - Docetaxel
  - Carboplatin
  - Pertuzamab
  - Trastuzumab
- 50 Gy to Right breast
* Risk-stratified by 10-year ASCVD risk < or ≥ 10%
# For individuals ≥ 60 years of age
^ At risk of HF (Stage A) including treatment with cardiotoxic cancer therapy

Abbreviations: JNC, Joint National Committee; ACC, American College of Cardiology AHA, American Heart Association; ACP, American College of Physicians; AAFP, American Academy of Family Physicians; HF, heart failure; ASCVD, atherosclerotic cardiovascular disease
Relationship of BP to Events

10 mm Hg reduction in systolic blood pressure:
- 40% lower risk of stroke death
- 30% lower risk of ischemic heart disease death

2 mm Hg reduction:
- 10% lower risk of stroke death
- 7% lower risk of ischemic heart disease death
ONE TEAM Study:
Onco-primary care networking to support TEAM-based care
(R01CA249568)

Kevin Oeffinger, MD (Director, DCI Center for Onco-Primary Care)
Leah Zullig, PhD (Associate Professor, Population Health Sciences)

Co-Investigators:
Kevin Shah, MD (DPC)
Yousuf Zafar, MD, MHS (DCI, Margolis)
Rachel Greenup, MD, MPH (DCI)
Linda Sutton, MD (Duke Cancer Network)
Rebecca Shelby, PhD (DCI, Supportive Care Program)
Michaela Dinan, PhD (Population Health Sciences)
Bryce Reeve, PhD, MA (Population Health Sciences)
Nadine Barrett, PhD, MA, MS (DCI)
Theresa Coles, PhD (Population Health Sciences)
Terry Hyslop, PhD (DCI Director of Biostatistics)
1. Determine the effectiveness of a self-guided, multi-level iGuide intervention and a tailored/targeted iGuide2 intervention vs usual care on:
   • HEDIS quality measures for blood pressure, diabetes, and statin therapy
   • Medication adherence (co-morbidity medications)
   • Patient-centered communication in cancer care

2. Secondary aims
   • Patient-centered outcomes (patient activation, care coordination, barriers to medication adherence, financial toxicity)
   • Health care use (outpatient/ED visits, hospital days)
   • Provider activation
   • Costs of care
ONE TEAM Study – Interventions

1. iGuide
   - Patient-facing
     • Video vignettes regarding the importance of managing non-cancer comorbidities
     • Patient webinars
     • Delivery by patient portal, mail, etc
   - PCP-facing
     • Automated EHR-template letter from oncology team to PCP
     • Tele-education zooms with CME (case-based, relationship building)

2. iGuide2
   - Patient-facing
     • Tailored messaging
   - PCP-facing
     • PCP-facing dashboards from the oncology team
     • e-consult
ONE TEAM Study – Interventions

1. **iGuide**
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     - PCP-facing dashboards from the oncology team
     - e-consult

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Duke Cancer Institute

Duke Primary Care
800 PATIENTS
• 18-79 Years
• Stage I
• 6 Cancer
• ≥ 1 CVI
  Comor
• Have a

2 CANCER SETTINGS
• Duke Cancer

Intervention
40 PCP Clinics

PCP clinic
meets all
yes

iGuide intervention

Impact of iGuide intervention

18 months
• A1C, lipids
• BP
• Patient surveys
• Provider surveys
• Qualitative interviews

Measurement of Impact

Intervention (Tailored / Targeted)
PCPs:
• Targeted feedback
  on adherence
  with goals
  of treatment

Figure 3. DCI Catchment Area

0-60%
75%
85%
Primary care note: a 51 y.o. with a history of favorable risk treatment naive CLL (trisomy 12, mutated IGHV at initial diagnosis) with recent progression of LAD and splenomegaly with spleen over 20cm; he presents today having recently started on the ublituximab plus TGR1202 which was discontinued after presumed treatment reaction. He had another reaction to treatment on 7/27/17 which resulted in SOB. Treatment was stopped and the patient has withdrawn from study as of 7/28/17, then transitioned to ibritinib monotherapy on 8/7/2017.
Primary care note: a 51 y.o. with a history of favorable risk treatment naive CLL (trisomy 12, mutated IGHV at initial diagnosis) with recent progression of LAD and splenomegaly with spleen over 20cm; he presents today having recently started on the ublituximab plus TGR1202 which was discontinued after presumed treatment reaction. He developed another reaction shortly after on 7/27/17, which resulted in SOB. Treatment was stopped, and the patient has withdrawn from study as of 7/28/17, then transitioned to ibrutinib monotherapy on 8/7/2017.

Oncology note: a 51 y.o. with a history of favorable risk treatment naive CLL (trisomy 12, mutated IGHV at initial diagnosis) with recent progression of LAD and splenomegaly with spleen over 20cm; he presents today having recently started on the ublituximab plus TGR1202 which was discontinued after presumed treatment reaction. He developed another reaction shortly after on 7/27/17, which resulted in SOB. Treatment was stopped, and the patient has withdrawn from study as of 7/28/17, then transitioned to ibrutinib monotherapy on 8/7/2017.

Note the cut–paste.

No one mentioned long-standing history of hypertension treated with HCTZ, metoprolol, and lisinopril.
65% with new onset or uncontrolled HTN

INDIVIDUAL
- Genetics
- Lifestyle behaviors
- Environment

Elevated blood pressure

None (n=89; 40.6%*)
Prior elevated blood pressure:
  Controlled (n=102; 46.6%*)
  Uncontrolled (n=18; 8.2%*)

CARDIOVASCULAR RISK
- Hypertension
  New (n=42; 19.2%*)
  Prior elevated blood pressure:
    Controlled (n=30; 13.7%*)
    Uncontrolled (n=100; 45.7%*)

- Atrial Fibrillation

*percentages are calculated based on total study population of n=219; Other notable comorbidities that factor into one’s lifetime cardiovascular risk factor profile and require consideration include insulin resistance that progresses to diabetes, state of being overweight/obese, and endothelial dysfunction/atherosclerosis that progresses to coronary artery disease.
Elevated BP in CLL Clinic

Dear KEVIN CHARLES OEFFINGER, MD,

Your patient,... had an elevated blood pressure in our CLL clinic.

As you know, the target blood pressure in the CLL patient population is < 140/90. Some of our therapies can cause or worsen hypertension.

Some antihypertensives have established drug-drug interactions with CLL medications. We would avoid starting diltiazem, verapamil, or carvedilol if patients are on oral CLL therapy.

Please evaluate her in clinic or manage by telephone. We are happy to help answer questions with regards to CLL or the CLL treatment.

Thank you,

The Duke Cancer Center CLL Team

Danielle Brander, MD
Andrea Sitlinger, MD
Heather Wolfe, MD
Jennifer Snyder, NP
Amy Tammenga, NP
• Monitor for recurrence of cancer
• Surveillance for second cancers and late effects
  • Early diagnosis and intervention
• Prevention
  • Tobacco use, physical activity, calcium intake
• Counseling and targeted education

Oeffinger KC. Institute of Medicine, 2003
Oeffinger KC, Hudson MM. CA Cancer J Clin 54:208-236, 2004
Risk-Stratified Shared Care Model for Cancer Survivors

Low Risk:

All of the following:
- Surgery only or chemotherapy that did not include alkylating agent, anthracycline, bleomycin, or epipodophyllotoxin
- No radiation
- Low risk of recurrence
- Mild or no persistent toxicity of therapy

Communication Points with Primary Care Physician

a. Cancer diagnosis and planned therapeutic approach, brief overview of chemotherapy, radiation therapy and/or surgery.
b. Survivorship Care Plan: cancer diagnosis, cancer therapy, surveillance recommendations, contact information.
c. Periodic update with changes in surveillance recommendations, and new information regarding potential late effects.
d. Periodic update of survivor’s health for primary care physician’s record.

Abbreviations:
Ca = cancer; Dx = diagnosis; Off Rx = completion of cancer therapy; PCP = primary care physician; LTFU = long-term follow-up (survivor) program; Onc = oncologist

Primary responsibility for cancer-related care; PCP continues to manage noncancer comorbidities and routine preventive health maintenance.

*Cancer Center or Oncologist/oncology group practice; if there is not an LTFU/Survivor Program available, care in the □ box is provided by the primary oncologist.

Oeffinger KC, McCabe MS. J Clin Oncol, 2005
McCabe MS, et al. Semin Oncol, 2013
**Moderate Risk:**

Any of the following:
- Low or moderate dose alkylating agent, anthracycline, bleomycin, or epipodophyllotoxin
- Low to moderate dose radiation
- Autologous stem cell transplant
- Moderate risk of recurrence
- Moderate persistent toxicity of therapy

**High Risk:**

Any of the following:
- High dose alkylating agent, anthracycline, bleomycin, or epipodophyllotoxin
- High dose radiation
- Allogeneic stem cell transplant
- High risk of recurrence
- Multi-organ persistent toxicity of therapy

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Oeffinger KC, McCabe MS. J Clin Oncol, 2005
McCabe MS, et al. Semin Oncol, 2013
Primary care provider time needed to provide care for average US adult panel of 2500 patients

- **26.7 hrs**
  - 14.1 hrs Preventive Care
  - 7.2 hrs Chronic Disease Care
  - 2.2 hrs Acute Care
  - 3.2 hrs Documentation

- **9.3 hrs**
  - 2.6 hrs Preventive Care
  - 3.6 hrs Chronic Disease Care
  - 1.1 hrs Acute Care
  - 2.0 hrs Documentation

Porter J, et al. JGIM, 2023
Onco-Primary Care APP Visits

- Transition from Oncology team
- 2-3 visits with APP
- Identify PCP (inside / outside of system)
- Box at top of note highlighting PCP responsibilities – 2-3 bullets
- Communicate with PCP
- Transition to PCP
- Pilot: embed APP in high volume PCP clinic
• Embedding onco-primary care APP in the highest volume Duke primary care clinic – \( \frac{1}{2} \) day per week
• Role(s)
• Metrics of success
• Second pilot site
• Addressing Primary Care Needs of Cancer Survivors – U01
• Testing PCP clinic-level and system-level interventions
  – Automated messaging, reminders, scheduling
  – Multi-directional e-communication
  – PCP clinic onco-primary care champions
  – Learning collaborative
• Quality metrics and outcomes
Working with your PCP

- Average appointment time = 18 minutes
- Priorities
- Patient portal available 365 days
- Sharing information
- 7 second rule
- Calendar reminders and sticky tabs
Lessons – So Far

• Traditions change slowly
• Multi-disciplinary approach is essential
• Partnership – not top-down approach
• Pilot, pilot, pilot – and evaluate
• Scalable and generalizable approaches
• Integrate risk-stratification
• Underpinning of research / implementation
Acknowledgements

• Leah Zullig, PhD
• Kevin Shah, MD, MBA
• Susan Dent, MD
• Mo Shahsahebi, MD
• Andrea Sitlinger, MD
• Rebecca Shelby, PhD
• Daniel George, MD
• Michel Khouri, MD
• Danielle Brander, MD
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